

OREGON AND WASHINGTON DEPARTMENTS OF FISH AND WILDLIFE

JOINT STAFF REPORT - WINTER FACT SHEET NO. 5a

Columbia River Compact/Joint State Hearing

February 23, 2022

<i>Fisheries under consideration:</i>	Mainstem recreational salmon Select Area recreational salmon Select Area commercial sturgeon
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Detailed information on stock status and management guidelines for Columbia River fisheries are presented in Joint Staff Reports, which are produced annually and available on-line. The most recent report is the 2022 Spring Chinook, Summer Chinook, Sockeye, Steelhead and Other Species Report (February 2, 2022) available at:

<https://wdfw.wa.gov/fishing/management/columbia-river/reports> and

<https://www.dfw.state.or.us/fish/OSCRP/CRM/jsmreports.asp>

RIVER CONDITIONS

- Current Columbia River water temperature at Bonneville Dam (38°F) is the same as the five-year average for this time in February. The five-day average outflow is about 173 kcfs (including 0.6 kcfs spill), which is lower than the recent 5-year average of 204 kcfs. The five-day average visibility is 5.4 feet which is higher than the five-year average of 4.4 feet.

STOCK STATUS

Upriver Spring Chinook

- The upriver spring Chinook run is defined as all spring Chinook destined for areas above Bonneville Dam plus Snake River summer Chinook. Chinook passing Bonneville Dam between January 1 and June 15 are managed as upriver spring Chinook. Snake River spring/summer Chinook and upper Columbia spring Chinook are components of this run and are federally-listed under the Endangered Species Act (ESA). Spring Chinook returning to other tributaries above Bonneville Dam are part of this run but are not ESA-listed. Based on the recent ten-year average, Bonneville Dam passage is usually 50% complete by May 11. Over the past ten years, adult returns have averaged 152,273 fish (range 73,101 to 288,994). The 2022 forecast to the Columbia River mouth is 122,900 adults (see table on page 3).

Willamette Spring Chinook

- Willamette River spring Chinook exhibit broader migration timing than upriver spring Chinook. Spring Chinook destined for areas upstream of Willamette Falls and the Clackamas River are in the upper Willamette River evolutionary significant unit (ESU) which is listed under the ESA. Over the past ten years, adult returns have averaged 49,222 fish (range 27,292 to 84,532). The 2022 forecast to the Columbia River mouth is 51,200 adults (see table on page 3).

Lower Columbia Spring Chinook

- Spring Chinook returning to the tributaries of the lower Columbia River are destined for the Cowlitz, Kalama, Lewis, and Sandy rivers (CKLS) and the Select Areas. CKLS populations are in the Lower Columbia ESU which is listed under the ESA; hatchery spring Chinook produced for Select Area fisheries are not considered part of the ESU. Over the past ten years, the combined

adult return of these lower river stocks has averaged 19,121 fish (range 7,031 to 34,323) to the tributaries and 8,083 fish (range 2,479 to 16,991) to the Select Areas. The table on page 3 for the 2022 forecasts to the Columbia River mouth.

Winter Steelhead

- The geographic range of winter steelhead includes all tributaries of the Columbia River upstream to Fifteenmile Creek on the Oregon shore and the Klickitat River on the Washington shore. Populations returning to Washington-side tributaries from the Cowlitz River upstream to the Klickitat River and Oregon-side tributaries from the Willamette River upstream to Fifteenmile Creek are in the Lower Columbia DPS and populations from areas upstream of Willamette Falls are in the Upper Willamette DPS; both of these DPSs are listed under the ESA. Over the past ten years, wild winter steelhead returns have averaged around 14,882 fish (range 9,440 to 22,379). The 2022 forecast to the Columbia River mouth is 13,400 fish (see table on page 3).

White Sturgeon – Lower Columbia River

- Abundance estimates for white sturgeon in the lower Columbia River (LCR) are derived from annual mark/recapture studies. Recent abundance estimates for the traditional legal-size slot (38-54 inches fork length (FL)) declined to a low of 72,700 in 2012 but increased steadily through 2016, reaching a peak of 224,000 fish. Since 2016, the abundance estimate of this size group has declined with a 2021 estimated abundance of 122,395. Modeling of future recruitment to this size slot indicates a flat trajectory under a no-harvest scenario and a moderate decrease under various harvest scenarios.
- Abundance metrics for other size groups of white sturgeon in the LCR remain mixed. The estimated abundance of adult-sized fish (≥ 167 cm FL) in 2021 was 6,770 fish, with the three-year average abundance ($\sim 11,064$) above the conservation status threshold (3-year average of 9,250 adults) identified in the Oregon White Sturgeon Conservation Plan (WSCP). The adult abundance status has remained above the desired level for three consecutive years.
- The continued low relative abundance of juvenile sturgeon indicates that there may still be productivity issues within the system. Stock assessment results indicate that the proportion of the population comprised of juvenile and sub-legal fish (56% in 2021) has remained below the conservation status threshold (60% juveniles) for three consecutive years indicating continued population productivity and recruitment issues.

<i>Columbia River Adult Salmon Returns: Actual and Forecasted</i>				
		2021	2021	2022
		Forecast	Return	Forecast
Spring Chinook	Upriver Total *	75,200	91,756	122,900
	Upper Columbia	13,000	17,365	21,700
	<i>Upper Columbia natural-origin</i>	2,200	3,978	2,800
	Snake River Spring/Summer **	40,000	52,274	73,400
	<i>Snake River natural-origin **</i>	11,100	9,480	13,200
	Lower River Total	68,000	60,939	74,100
	Total Spring Chinook	143,200	152,695	197,000
	<u>Area-specific detail</u>			
	Willamette River	50,000	41,308	51,200
	Sandy River	5,300	5,676	5,600
	Select Areas ***	6,300	5,754	8,800
	Cowlitz River	1,800	3,478	4,100
	Kalama River	2,200	1,883	2,000
	Lewis River	2,400	2,840	2,400
	Wind River ***	1,200	3,227	4,200
	Drano Lake/Little White Salmon River ***	3,900	3,299	3,800
	Hood River ***	n/a	n/a	n/a
	Klickitat River ***	1,500	1,821	1,800
	Deschutes River ***	n/a	2,435	n/a
	John Day River ***	n/a	1,529	n/a
	Umatilla River ***	900	1,077	3,000
	Yakima River ***	3,200	2,882	4,700
Summer Chinook	Upper Columbia *	78,800	56,800	57,500
Sockeye	Total Sockeye	155,600	152,309	198,700
	Wenatchee	27,300	41,219	19,200
	Okanogan	127,300	105,493	175,700
	Yakima	200	3,531	3,500
	Deschutes	100	n/a	100
	Snake River	700	953	200
Winter Steelhead	Wild	14,300	13,906	13,400
Summer Steelhead	Total Upriver Steelhead	101,400	69,669	99,700
(to Bonneville Dam)	Upriver Skamania Index (total)	4,600	1,917	3,100
	<i>(wild)</i>	2,100	1,119	1,600
	A-Index (total)	89,200	56,256	81,000
	<i>(wild)</i>	27,500	19,071	28,100
	B-Index (total)	7,600	11,496	15,600
	<i>(wild)</i>	1,000	1,690	1,900
* Upriver totals are developed by TAC for use in management of <i>U.S. v. OR</i> 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.				
				2/4/2022

MANAGEMENT GUIDELINES

2018-2027 U.S. v Oregon Management Agreement

- 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 managed to meet the catch balance provision in the MA for upriver spring Chinook which requires upriver mortalities in non-treaty fisheries to not exceed the total allowable catch available for treaty Indian fisheries.
- The MA also specifies non-treaty and treaty fisheries occurring prior to an in-season run size update be managed for a run size that is at least 30% less than the forecasted upriver spring Chinook run size.
- The MA includes an abundance-based sliding scale harvest rate schedule for upriver spring Chinook. Based on the buffered 2022 pre-season forecasted abundance, the harvest-rate schedule allows for an ESA impact rate of 1.6% for non-treaty fisheries occurring prior to the run update.

Endangered Species Act

- A Biological Opinion (BO) based upon the management actions outlined in the MA was issued by NMFS in 2018.
- Impacts to wild winter steelhead are limited to 2% for all mainstem Columbia River non-treaty fisheries. Impacts to wild summer steelhead in non-treaty fisheries are also limited to 2% for each management stock.
- Compliance with ESA take authorization for fisheries impacting listed lower Columbia River Chinook (spring run) is determined by the ability to perpetuate these stocks individually over time. Hatchery return expectations are reviewed annually to ensure compliance with escapement goals.

Willamette Spring Chinook Management

- The Willamette River Fisheries Management Evaluation Plan (FMEP) limits annual freshwater fishery impacts on wild Willamette River spring Chinook to $\leq 15\%$.
- 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.
- Based on FMEP guidance, an expected return of 39,090 hatchery spring Chinook, and the FMEP escapement goal of 23,000 hatchery fish, the harvestable surplus totals 16,090 hatchery fish.

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 CKLS rivers are sufficient to meet escapement goals.

2022 Spring Chinook Management

- The Oregon and Washington allocation policies for 2022 specific to commercial-recreational ESA-impact sharing and within sport sub-allocations are not concurrent. Under the WA policy, no more than 70% of the non-treaty allocation can be allocated to the recreational fisheries, and under Oregon rule, no more than 20% of the non-treaty allocation can be allocated to the commercial fisheries. Additionally, under the WA policy, no more than 70% of the recreational allocation can be allocated to the Lower Columbia River (LCR) recreational fishery, and under Oregon rule, no more than 25% of the recreational allocation can be allocated for fisheries upstream of Bonneville Dam (Bonneville to OR/WA state line, Snake River). Therefore, modeling only utilizes 90% of the non-treaty allocation and 95% of the recreational share of upriver spring Chinook impacts.
- When combined with catch balance provisions in the MA, the following guidelines are available for 2022.

Prior to an in-season run update, allocation of upriver fish (including release mortalities) for non-treaty fisheries will be:

- 636 unallocated non-treaty
 - 3,913 fish for the recreational fishery below Bonneville Dam
 - 559 fish for the recreational fishery from Bonneville Dam to the OR/WA state line
 - 542 fish for recreational fisheries in the Snake River (Washington waters)
 - 19 fish for Wanapum tribe (Upper Columbia)
 - 279 unallocated recreational
 - ≤418 fish for Select Area commercial fisheries
- The approach to 2022 fishery structure is consistent with the ESA management strategies in the Columbia River Basin – fisheries are managed to limit the impacts to ESA-listed fish while providing harvest opportunity for healthy and harvestable stocks.
 - Fisheries are also managed by time and area to reduce the potential for handling ESA-listed species or other stocks of concern.

White Sturgeon – Lower Columbia River

- For years when white sturgeon retention is allowed downstream of Bonneville Dam, current Commission guidance on white sturgeon management assumes:
 - Assign 80% of the white sturgeon available for harvest to recreational fisheries and 20% to commercial fisheries.
 - Oregon Commission guidance requires that a 10% conservation buffer be applied if the maximum harvest rate (16%) identified in the WSCP is utilized.
 - Washington Commission guidance requires that we manage with a precautionary approach due to uncertainties in population parameters.
- Staff recently provided updates on the LCR white sturgeon status to each state's Commission and also to the Columbia River Fishery Advisor groups, which expressed support for implementing limited sturgeon retention fisheries in 2022.

2022 NON-TREATY FISHERIES

Mainstem Columbia River Spring Chinook Recreational Fisheries

- The Columbia River downstream of the I-5 Bridge is currently open through March 31 for hatchery salmon under permanent regulations.
- Permanent regulations typically allow steelhead retention through March 31 from Buoy 10 line upstream to the OR/WA state line, 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.
- Spring-season fisheries were discussed with the Columbia River Recreational Advisory Group (CRRAG) on February 8, 2022.

<i>Recommendations: 2022 Mainstem Columbia River Spring Chinook Recreational Fishery</i>		
Downstream of Bonneville Dam		
Season:	Tuesday March 1 through Wednesday April 6	37 retention days
Area:	Buoy 10 line upstream to Beacon Rock (boat and bank) plus bank angling only from Beacon Rock upstream to the Bonneville Dam deadline. Legal upstream boat boundary defined as: A deadline marker on the Oregon bank (approximately four miles downstream from Bonneville Dam Powerhouse One) in a straight line through the western tip of Pierce Island to a deadline marker on the Washington bank at Beacon Rock.	
Daily Bag Limit:	Two adult hatchery salmonids (Chinook or steelhead) per day, but only one may be a Chinook. Shad may also be retained. All other permanent regulations apply.	
Bonneville Dam to Oregon/Washington Border		
Season:	Friday April 1 through Thursday May 5	35 retention days
Area:	Tower Island power lines (approximately six miles below The Dalles Dam) upstream to Oregon/Washington border, plus the Oregon and Washington banks between Bonneville Dam and the Tower Island power lines.	
Daily Bag Limit:	Two adult hatchery salmonids (Chinook or steelhead) per day, but only one may be a Chinook. All other permanent regulations apply.	

- Catch expectations are approximately 5,179 adult Chinook kept (3,896 upriver mortalities) for the fishery downstream of Bonneville Dam (99.6% of the pre-update guideline for this fishery) and 524 adult Chinook kept (538 mortalities, all upriver stock) for the fishery upstream of Bonneville Dam (96% of the pre-update guideline for this fishery).
- The CRRAG supported the proposed season for the LCR since few alternatives are available.
- The season recommendation for the fishery upstream of Bonneville Dam is based on the available pre-update allocation, estimated catch rates, and support from the CRRAG.

- Alternative season structures were considered but had limited support with several alternatives resulting in a gap between the steelhead and Chinook retention seasons and significantly fewer spring Chinook retention days.
- Fishery recommendations were developed to remain within and comply with:
 - Impact limits for species listed under the ESA.
 - ✓ The most constraining stock for both fisheries is upriver spring Chinook. Staff estimates the recommended fisheries will accrue 0.39% impacts to upriver spring Chinook for the LCR and 0.05% for above Bonneville fisheries.
 - ✓ Fishery-specific impact rate expectations for other species and stocks are expected to remain within the estimates provided in the 2022 Spring/Summer Joint Staff Report in the Winter, Spring, and Summer Season Expectations section.
 - Run-size buffer and catch balance provisions outlined in the MA.
 - Policy guidance and management objectives provided by the Commissions.
- Similar to the hand-cast bank only regulations on the Washington shore from Bonneville Dam to the Tower Island power lines, WDFW will require that only hand-cast lines may be used from Beacon Rock to the Bonneville Dam deadline.
- The use of barbless hooks is required when angling for salmon or steelhead in mainstem Columbia River waters from the mouth upstream to the OR/WA state line.
- Although a key management goal is to minimize the need for in-season emergency action, due to the dynamic nature of fisheries and fish runs, none of the seasons recommended guarantee that in-season action will not be necessary in order to remain within ESA limits and/or catch balancing requirements.
- Staff will monitor the fisheries in-season. If they are tracking within preseason expectations, the intent would be to allow the fisheries to run through the proposed end dates. After closure of each fishery, staff will review catches and determine if additional fishing opportunity is warranted.

Tributary Spring Chinook Fisheries Downstream of Bonneville Dam

- No changes to permanent regulations are recommended for spring Chinook recreational fisheries in the Sandy, Clackamas, and Willamette rivers.
- The Cowlitz, Lewis, and Kalama rivers are currently open under permanent regulations. The Cowlitz and Kalama rivers are expected to be modified with reduced daily adult limits and shortened seasons by emergency rules effective March 1.

Select Area Recreational Fisheries

- Permanent angling regulations for Oregon waters within the Select Areas of Youngs Bay and Blind Slough/Knappa Slough are listed in the 2022 Oregon Recreational Fishing Regulations booklet. These waters are open year-round to Chinook salmon (hatchery only during January 1 – July 31), hatchery steelhead, and hatchery Coho except for some seasonal tributary closures.
- Permanent Washington recreational fishing rules list waters of Deep River from the mouth to the town bridge as open to Chinook salmon (hatchery only during January 1 – July 31), hatchery steelhead, and hatchery Coho the entire year.

- Impacts to non-local Chinook and steelhead (including wild fish) are expected to be minimal since the majority of fishing effort is concentrated in upper tidewater areas or in the tributaries.
- In order to ease enforcement of co-occurring recreational fisheries in Select Areas and the mainstem Columbia River, staff recommends that daily bag limits in Select Area recreational fisheries be modified to match those of the mainstem when the fisheries are open concurrently.

<i>Recommendation: 2022 Select Area Recreational Fisheries</i>
<p>Effective March 1 – June 15:</p> <p>On days when the mainstem Columbia River recreational fishery below Bonneville Dam is open to retention of Chinook, the salmonid daily bag limit in Oregon and Washington Select Areas will be the same as mainstem Columbia River bag limits.</p> <p>On days when the mainstem Columbia River recreational fishery below Bonneville Dam is <u>closed</u> to Chinook retention, the permanent salmonid bag limit regulations for Select Areas apply.</p>

Select Area Commercial White Sturgeon Fisheries

- The 2022 commercial white sturgeon allocation is 800 fish, compared to 1,230 fish in 2021. The commercial allocation is split 50/50 between mainstem and Select Area fisheries.
- Winter/spring/summer-season fishing periods were adopted at a hearing last week and fisheries opened February 17.
- 400 white sturgeon are available for harvest in Select Area commercial fisheries this year, therefore staff recommends allowing sturgeon sales in these fisheries with a weekly landing limit.

<i>Recommendation: 2022 Select Area White Sturgeon Retention</i>
<p>Effective February 24 through July 28, a maximum of three white sturgeon with a fork length of 44-50 inches may be possessed or sold by each participating vessel during each calendar week (Sunday through Saturday). The white sturgeon possession and sales limit includes all Select Area fisheries.</p>

- The recommendation allows the retention of legal-sized white sturgeon in the on-going Select Area commercial fishery. Staff will monitor catch and take appropriate action if necessary to remain within the Select Area commercial allocation.

FUTURE MEETINGS

- The Joint Staff requests a Compact/Joint State hearing for 10 AM March 1, 2022 to consider non-treaty Eulachon commercial and Zone 6 recreational sturgeon fisheries.