

OREGON AND WASHINGTON DEPARTMENTS OF FISH AND WILDLIFE
JOINT STAFF REPORT - FALL FACT SHEET NO. 6
Columbia River Compact/Joint State Hearing
September 15, 2021

Fisheries under consideration:	Treaty commercial Non-Treaty mainstem commercial salmon Columbia River recreational salmon below Bonneville Columbia River recreational white sturgeon (upstream of the Wauna powerlines)
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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 online. The 2021 Fall Report was distributed on July 19, 2021. Links to the reports are:

<https://wdfw.wa.gov/fishing/management/columbia-river/reports> or <http://www.dfw.state.or.us/fish/OSCRP/CRM/jsmreports.asp>

RIVER CONDITIONS

- As of September 14, the five-day average outflow at Bonneville Dam is 84.5 kcfs compared to a five-year average of 99.6 kcfs. The five-day average water temperature at Bonneville Dam (scrollcase) is 68.2°F compared to a five-year average of 69.2°F. The five-day average visibility at Bonneville Dam is 7 feet compared to the five-year average of 6.8 feet.

STOCK STATUS

- Run size forecasts for 2021 and stock descriptions for salmon and steelhead were presented in Fall Fact Sheet #1.

Fall Chinook

- Through September 13, a total of 249,610 adult fall Chinook have passed Bonneville Dam. Over the last 10 years, the average 50% complete date has been September 10.
- Based on visual stock sampling, a total of 198,594 adult bright stock fish (comprised of the Upriver Bright (URB) and Pool Upriver Bright (PUB) stocks) have passed Bonneville Dam. A total of 33,981 adult tules (primarily Bonneville Pool Hatchery (BPH) stock) have also passed Bonneville Dam. Bright stock passage is typically 60% complete on September 13 based on 10-year average run timing but has been as much as 71% complete on this date within the last 10 years. Tule passage is typically 80% complete on September 13 based on 10-year average run timing but has been as much as 91% complete in the last 10 years.
- McNary Dam fall Chinook passage through September 13 totals 88,222 adults. The fall Chinook run at McNary is typically 32% complete by this date, based on 10-year average run timing.
- Lower Granite Dam adult fall chinook passage through September 13 totals 17,651 which is the largest count to date on record. The run is typically 30% complete on September 13.
- Spring Creek Hatchery reports that over 17,000 fish have entered the hatchery, but the male/female/jack composition is not available yet. Spawning began on September 14.

Upriver Summer Steelhead

- Passage of upriver summer steelhead at Bonneville Dam since July 1 totals 51,279 A/B-Index fish. The recent 10-year average 50% passage date is August 15.
- During July 1-September 10, CRITFC has sampled 302 steelhead at Bonneville Dam. For B-Index steelhead, 9 unclipped and 30 clipped have been sampled to date. All of the other steelhead sampled since July 1 have been A-Index fish (145 clipped and 118 unclipped).

Coho

- Coho counts at Bonneville Dam through September 13 total 118,878 adult early stock Coho (defined as Coho passing prior to October 1). This is the highest passage observed for this point in the run since 2001. Passage of upriver early stock Coho is typically 50% complete by September 11.

Run Size Updates

- The *U.S. vs OR* Technical Advisory Committee (TAC) met Monday, September 13 to review run size information for upriver summer steelhead, fall Chinook, and coho. Based on passage at Bonneville Dam through September 12 and projected lower Columbia River (LCR) harvest through December 31, TAC increased the Columbia River mouth run size expectation for BPH to 57,300 (121% of the preseason forecast), and decreased URB (76% of the preseason forecast) and PUB (68% of the preseason forecast) expectations to 276,300 and 42,300 respectively. These updates are based on 10-year average run timing and assumptions of the tule run being 6 days early and the bright run being 4-5 days early.
- As of September 12, the cumulative steelhead passage since July 1 at Bonneville Dam (50,516) is the lowest on record, and the cumulative unclipped steelhead passage (19,583) is the lowest since clipped/unclipped counting began in 1994. The clipped passage is 30,933 to date. Based on AFF sampling and the 5-year average run timing, the projected total A-Index clipped and unclipped steelhead passage is expected to be 52,600 (hatchery = 33,400, and wild = 19,200). It is too early in the run to update the B-Index component; however, it is likely that the total B-Index return will exceed the preseason forecast (7,600 total fish). Through September 12, the total B-Index passage at Bonneville is estimated at 5,300. TAC expects to provide an update of the B-Index return at its next meeting on September 20.

MANAGEMENT GUIDELINES

Salmon/Steelhead

- The 2018-2027 *U.S. v Oregon* Management Agreement (MA) provides specific fishery management guidelines for fall Chinook, summer steelhead, and Coho.
- The allowable impact rate for combined treaty Indian and non-treaty fisheries is 45% of the URB run based on the preseason forecast (URB stock is the surrogate for Snake River Wild (SRW) Chinook). This impact limit is allocated 30% for treaty Indian fisheries and 15% for non-treaty fisheries.
- The escapement goal at Spring Creek Hatchery is 7,000 adult fall Chinook (BPH stock).
- The management goal for adult fall Chinook passage at McNary Dam is 60,000 fish.

- The allowable non-treaty impact rates for wild summer steelhead (A-Index and B-Index) during fall fisheries is 2% each.
- Based on the pre-season forecast, treaty Indian impacts are limited to 13% of the total B-Index steelhead.
- The goal for upriver Coho passage at Bonneville Dam is 50% of the ocean abundance.
- Fisheries are managed based on preseason forecasts until in-season run size updates become available.
- The ESA impact limit to LCR wild tule fall Chinook is 38% in 2021 given the pre-season forecast. Harvest of Lower River Hatchery (LRH) stock is the surrogate for LCR wild Chinook. This exploitation rate (ER) limit includes impacts in ocean and Columbia River fisheries combined.
- In 2021, fishery impacts to Lower Columbia Natural (LCN) Coho are limited to a 30% ER for combined ocean and Columbia River fisheries.

2021 TREATY FISHERIES

Fall Season Fisheries

- Treaty platform and hook and line fisheries have been open for both subsistence and commercial purposes since August 1. The tribes initially set two 3.5-day commercial gillnet openings beginning August 23 and August 30. A 4.5 day opening was set beginning September 6. A fourth 4.5 day opening began Monday and is ongoing.
- Table 1 below shows projected 2021 fall season treaty harvest and projected catches. Table 1 shows modeled fisheries based on the updated forecasts for URB and PUB Chinook, and A-Index steelhead. Pre-season forecasts for coho were used but these may over estimate catch.
- Because TAC did not update the B-Index steelhead run but indicated the run is likely to be above forecast especially considering the B-Index passage to date, the tribes had to estimate an appropriate run size to model fisheries with. Based on 10-year average run timing for the total run, the total A/B-Index run size would be approximately 63,000. The 10-year average run timing predictor has been increasing every day and therefore may be a conservative estimate. Subtracting the TAC estimate for A-Index fish of 52,600 from 63,000, leaves 10,400 assumed B-Index steelhead. As a further precautionary estimate, the tribes used an estimate of B-Index fish based on a one-week early run timing which reduces the assumed B-index run size to 10,100 (8,600 clipped and 1,500 unclipped). The effort modeled for week 39 is also relatively high as a conservative method.
- There has been no observed treaty fishing effort downstream of Bonneville Dam. There has been no observed additional sockeye catch in the fall management period.
- The proposed fisheries are well within the allowed harvest rate limits based on a cautionary approach to estimating the B-Index steelhead run size. The modeled B-Index steelhead impacts are within the allowed harvest rate down to a run size of approximately 8,800. The URB impacts are within their allowed harvest rate down to a run size of approximately 200,000.

- Set net effort in the first three openings was less than expected although effort was slightly above expectations last week.

2021 Treaty Indian Fall Season Fisheries (preliminary and modeled)									
Week	Gillnet Fishery	Dates	Set Net Count	Total Adult Chinook	URB Chinook	Total Steelhead	B Steelhead	Coho	
31-34	Preliminary	Platform/ H&L Permit	August 1-22	na	300	172	140	0	0
34	Preliminary	Gillnet	8/27	na	76	66	5	0	12
35	Preliminary	8/23	8/26	241	6,013	3,449	225	23	666
36	Preliminary	8/30	9/2	287	19,156	12,182	459	153	2,072
37	Projected	9/6	9/10	441	20,700	13,200	530	130	4,900
				Subtotal	46,245	29,069	1,359	306	7,650
38	Preliminary	9/13	9/17	440	22,700	14,200	800	310	5,700
39	Projected	9/20	9/24	450	13,800	9,400	1,000	420	8,050
				Subtotal	82,745	52,669	3,159	1,036	21,400
		Late Fall Platforms			225	200	100	100	200
				Total	82,970	52,869	3,259	1,136	21,600
				Allowed at Pre-season URB and B run size		82,890		1,313	
				Harvest Rate as of Sept 11		10.5%		3.0%	
				Remaining after Sept 11		53,821		1,007	
				Expected Harvest Rate by Sept 18 (and reserving fish for late fall)		19.1%		11.2%	
				Remaining Available After Sept 18 (and reserving fish for late fall)		30,021		177	

- The four Columbia River treaty tribes will adopt regulations consistent with the following:

<i>2021 Treaty Indian Commercial Gillnet Fishery</i>	
Seasons:	6:00 AM Monday September 20 through 6:00 PM Friday September 24 (4.5 days)
Area:	Zone 6
Gear:	Set and Drift Gillnets with an 8-inch minimum mesh size
Allowable Sales:	Salmon (any species), steelhead, shad, yellow perch, bass, walleye, catfish, and carp may be sold or retained for subsistence. Fish landed during the open periods are allowed to be sold after the period concludes. Sturgeon from 38 to 54 inches fork length in the Bonneville Pool and sturgeon from 43 to 54 inches fork length in The Dalles and John Day Pools may be kept for subsistence purposes.
Sanctuaries:	Standard closed areas applicable to gillnet gear. The Spring Creek Hatchery Sanctuary is reduced to a 150-foot radius around the hatchery ladder.
Additional:	24-hour quick reporting required for Washington buyers, pursuant to WAC 220-352-315 except that landings must be reported within 24-hours of completing the fish ticket.

- Fisheries will be monitored, and catches reported regularly. Fisheries will be modified as needed to keep harvest impacts within allowed limits for the treaty fall season fisheries.
- Aerial flights will be conducted each week to count set nets.
- There is no Compact action needed for platform and hook and line fisheries, Yakama tributary fisheries or fisheries downstream of Bonneville Dam.
- Fall Management Period fisheries are the most valued fisheries for tribal fishers and provide substantial economic benefits for tribal communities.

2021 NON-TREATY FISHERIES

Mainstem Commercial Fall Salmon Fisheries

- Fall commercial fisheries occurred on Monday and Wednesday nights from August 9 through September 2 (eight 9-hour periods).
- Preliminary catch estimates include 21,326 Chinook (including 9,840 URB, 1,940 LRH, and 7,100 BPH adults), 2,761 coho and 295 white sturgeon. Although the adult URB mortalities were 78% of preseason expectations, SRW/URB impacts were slightly higher than expected due to the URB run-size downgrade.
- The preseason plan assumed a Late Fall Zone 4-5 fishery would be based on the in-season URB run size and begin the week of September 13, with one fishing period per week continuing into early October.
- Considering actual use in the Early Fall fishery and expected needs for Select Area and Late Fall tangle net fisheries, a balance of approximately 4,140 URBs remain available for mainstem commercial fisheries.
- Given some uncertainty around the fall Chinook run timing and run size, staff recommend a measured approach to the start of the late fall season.

Recommendation: 2021 Non-Treaty Mainstem Commercial Late Fall Fishery

Season:	8 PM Thursday September 16 to 6 AM Friday September 17 (Week 38) 10 hours 8 PM Wednesday September 22 to 6 AM Thursday September 23 (Week 39) 10 hours
Area:	Zones 4-5. The deadline at the lower end of Zone 4 is defined as a straight line projected from the Warrior Rock Lighthouse on the Oregon shore easterly through the green navigation Buoy #1 and continuing to the Washington shore.
Sanctuaries:	Washougal and Sandy rivers.
Gear:	Drift gillnets only. 8-inch minimum mesh size restriction. Multiple net rule NOT in effect, which means nets not authorized for this fishery may not be onboard. Lighted buoys required.
Allowable Sales:	Salmon (except chum), shad, and white sturgeon. A maximum of six 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). This white sturgeon possession and sales limit applies to mainstem fisheries only.
Additional:	24-hour quick reporting required for Washington buyers, pursuant to WAC 220-352-315. Oregon buyers are required to electronically submit fish receiving tickets pursuant to OAR 635-006-0210. Electronic fish tickets must be submitted within 24 hours of closure of the fishing period, or within 24 hours of landing for fishing periods lasting longer than 24 hours.

- Chinook catch is projected to include ~6,970 adults, including 3,390 URBs for the two proposed periods. The ESA impact to SRWs would be 1.23%, compared to the 1.50% available for late-fall Chinook-directed fisheries. LCR wild impacts are projected at 0.79% ER.
- Chinook catches in mid-September can be variable. A slightly more conservative approach would be to set the initial fishing period for Sunday night (9/20) rather than Thursday night (9/16).
- ESA impacts to wild upriver summer steelhead are expected to be 0.03% for A-Index and 0.24% for B-Index for the proposed fishery.
- The expected harvest of white sturgeon for the two proposed fishing periods is about 165 fish, which would bring the combined harvest in mainstem fisheries to about 460 fish, or 75% of the mainstem sub-allocation of 615 fish.
- Upon review of catches from the proposed fisheries and more information about the Chinook run size, additional commercial opportunities could be considered.
- The fishery will be managed to remain within the ESA impacts allocated; actual harvest may be more or less than modeled. Catch expectations are a reflection of the number of fish that may be harvested given the ESA constraints.

Select Area Fall Commercial Fisheries

- Fall Select Area fisheries in Oregon opened August 23 and are ongoing at this time. Preliminary landings through September 11 include approximately 3,450 Chinook, 31,720 coho, and 137 white sturgeon. Fall Deep River Select Area commercial fishery opened Monday but landings are not yet available.
- Through September 11, cumulative white sturgeon landings in 2021 Select Area commercial fisheries total 565 fish, or 92% of the Select Area sub-allocation. However, a portion of the mainstem white sturgeon sub-allocation is expected to be available for use in Select Area fisheries (up to 150 fish).

Recreational Salmon Fisheries

- Fall recreational salmon fisheries from Buoy 10 upstream to Bonneville Dam opened August 1. Chinook catches and the proportion LRH were higher than expected from Buoy 10 upstream to Warrior Rock resulting in early fishery modifications downstream of Bonneville Dam to allow staff time to assess ESA impacts to lower Columbia River natural tulle fall Chinook.
- The Buoy 10 fishery is currently open to retention of hatchery coho with a three-adult daily bag limit. The area from Warrior Rock upstream to Bonneville Dam re-opened to Chinook and hatchery coho retention effective September 11 but the area from Warrior Rock downstream to the Tongue Point/Rocky Point remains closed to salmon angling/retention at this time. Preliminary estimates of catch and effort through September 12 by area include:
 - Buoy 10: 20,630 kept and 9,590 released Chinook; 24,328 kept and 18,139 released coho; and 96 released steelhead from about 89,600 angler trips
 - Tongue Point/Rocky Point to Warrior Rock: 6,882 kept and 293 released Chinook; 1,970 kept and 768 released coho; and 268 released steelhead from about 30,400 angler trips
 - Warrior Rock to Bonneville Dam: 4,512 kept and 189 released Chinook; 512 kept and 608 released coho; and 184 released steelhead from about 25,000 angler trips
- The fall recreational fishery from Bonneville Dam upstream to Highway 395 (Pasco, WA) also opened August 1. Through September 12, an estimated 1,167 adult Chinook and 143 adult coho have been kept from approximately 5,180 angler trips. Released estimates include 187 Chinook, 42 coho, and 16 steelhead.

- A summary of impacts to ESA-listed fall Chinook in completed and on-going 2021 recreational fisheries is provided below:

Pre- and inseason impact rate expectations for ESA-listed fall Chinook in Columbia River recreational fisheries, 2021.						
Fishery	LCR natural-origin tule			Snake River Wild Fall Chinook		
	Preseason	In-season ^a	% of Pre	Preseason	In-season ^a	% of Pre
Buoy 10	5.85%	6.98%	119%	2.70%	3.14%	116%
TP-WR	0.76%	1.95%	255%	2.09%	1.24%	60%
WR-BO	0.73%	0.76%	104%	3.72%	3.87%	104%
Zone 6	0.00%	0.00%	NA	0.86%	0.86%	100%
Tributaries	0.29%	0.29%	100%	NA	NA	NA
Sum	7.64%	9.98%	131%	9.37%	9.11%	97%

^a *Projected based on actual and expected catches for currently adopted fisheries and current run size estimates.*

- Additionally, URB harvest rate in recreational fisheries is projected to be at 9.18%, or 97% of the preseason expectation (9.42%).
- Although fall recreational fisheries are projected to meet or exceed the area-specific preseason expectations for impacts to ESA-listed fall Chinook, some flexibility exists regarding how remaining impacts are used. Considering the large coho forecast and limited Chinook impacts resulting from handling and release mortality (0.12% SRW and 0.18% LRH), staff proposes re-opening hatchery coho retention in the Tongue Point/Rocky Point to Warrior Rock area as follows:

Recommendation: 2021 Tongue Point/Rocky Point to Warrior Rock Recreational Salmon Fishery

Effective 12:01 AM Friday September 17, retention of hatchery coho is allowed in the mainstem Columbia River from the Tongue Point/Rocky Point line upstream to the Warrior Rock line. The daily adult bag limit is two hatchery coho. All other previously adopted regulations remain in effect.

- Given there is an expected balance of LCR natural-origin tule impacts from ocean fisheries ($\geq 2.2\%$ ER), and the recent URB run downgrade, SRW/URB are now the most constraining fall Chinook stock for 2021 non-treaty fisheries. However, catch projections and the URB run-size will likely change moving forward. Staff will continue to monitor ongoing fisheries and subsequent run-updates, with an expectation to manage within the allowed 15% SRW/URB in-river HR and the 38% LRH total ER.

- A summary of impacts to ESA-listed fall Chinook in completed, on-going, proposed, and planned 2021 non-treaty fisheries is provided below:

Pre- and inseason impact rate expectations for ESA-listed fall Chinook in Columbia River non-treaty fisheries, 2021.								
	Lower CR natural-origin tule				Snake River Wild Fall Chinook			
Fishery	Preseason	In-season ^a	% of Pre	Shares	Preseason	In-season ^a	% of Pre	Shares
Recreational	7.64%	10.16%	131%	80%	9.37%	9.23%	97%	62%
Commercial	3.31%	2.50%	76%	20%	5.58%	5.70%	102%	38%
Sum ^b	10.95%	12.66%	116%	100%	14.95%	14.93%	100%	100%
Ocean balance ^c		2.20%				NA		
Total available		13.15%				15%		
Balance		0.48%				0.07%		

^a Projected based on actual and expected catches and current run size estimates

^b The 14.93% harvest rate on SRW fall Chinook equates to a 15% URB harvest rate

^c Minimum expected

- Cumulative impacts for A- and B-Index steelhead in completed, on-going, proposed, and planned non-treaty fall-season fisheries are expected to be 0.56% and 1.06%, respectively.

Recreational White Sturgeon Fisheries – Above Wauna powerlines

- The 2021 retention season previously adopted for above Wauna powerlines included two retention days on Saturdays in mid-September (11th and 18th) with a harvest guideline of 1,230 white sturgeon. Catches for the initial period (this past Saturday) were less than expected with an estimated 347 fish kept from approximately 3,206 angler trips, including the Cowlitz River.
- Based on the last four years when white sturgeon retention has been open in this area, catches have consistently declined from the initial period as the season progresses; therefore, additional retention opportunity could be considered given the projected guideline balance.

Recommendation: 2021 White Sturgeon Recreational Fishery for Above Wauna Powerlines

Season:	Sunday September 19, Wednesday September 22, Saturday September 25, and Wednesday September 29	4 days
Area:	Mainstem Columbia River from the Wauna powerlines upstream to Bonneville Dam, including the Cowlitz River	
Allowable Catch:	Up to 1,230 white sturgeon combined for all retention days Legal size: 44-inch minimum and 50-inch maximum fork length (Fork length is measured in a straight line from the tip of the nose to the fork in the caudal fin (tail) with the fish laying on its side on a flat surface, with the tape measure/ruler positioned flat <u>under</u> the fish) Daily bag limit: One fish Annual bag limit: Two fish	
Additional Regulations:	Retention of green sturgeon is prohibited	

- The expected kept catch for the four additional days is not expected to exceed the balance available for this fishery.

FUTURE MEETINGS

- Joint Staff request a Compact hearing on Wednesday, September 22 to consider additional non-treaty commercial fisheries, including coho tangle net and Zone 4/5 gillnet to begin the following week. Additional treaty Indian commercial gillnet fisheries may also be considered.