

**OREGON AND WASHINGTON DEPARTMENTS OF FISH AND WILDLIFE
 JOINT STAFF REPORT - FALL FACT SHEET NO. 2
 Columbia River Compact/Joint State Hearing
 August 14, 2018**

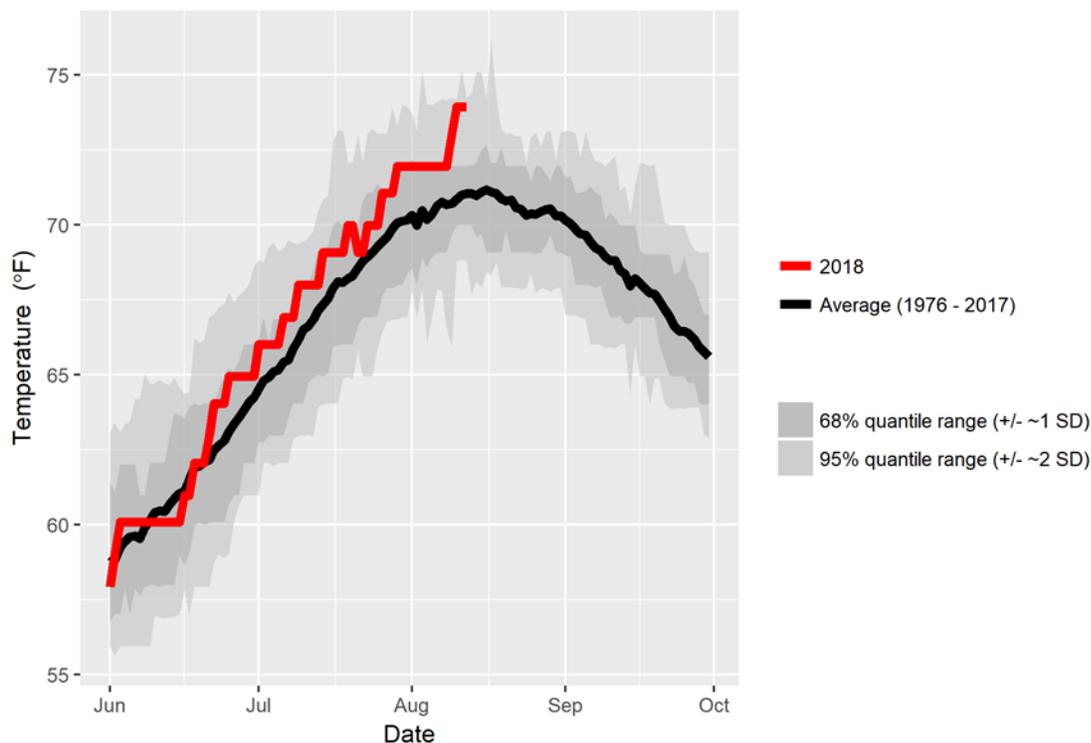
Fisheries Under Consideration:	Non-treaty mainstem commercial salmon Treaty mainstem commercial
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Detailed information on stock status and management guidelines for Columbia River fisheries are presented in Joint Staff Reports, which are produced annually and available on-line. The 2018 Fall Report was distributed on July 17, 2018. Links to the on-line reports are: <http://wdfw.wa.gov/fishing/crc/> and <http://www.dfw.state.or.us/fish/OSCRP/CRM/reports.asp>

RIVER CONDITIONS

- The Columbia River flows at Bonneville Dam are currently 125.5 kcfs, which is lower than the ten-year average of 157.6 kcfs for this date.
- Water temperature at Bonneville Dam is 73°F, which is higher than the recent ten-year average of 71.4°F. Given the warm water temperatures, a conservative approach to fisheries may be warranted.
 - Temperatures in 2018 have been near or slightly above average for much of the summer and have recently begun to increase relative to the average temperatures.
 - Peak temperature readings in the past 10 years have typically occurred on August 17.
 - During August, temperature has exceeded 1 standard deviation (sd) of the 1976–2017 average for 4 day(s) but has not exceeded 2 sd.

Scrollcase Temperature at Bonneville Dam



STOCK STATUS

Fall Chinook

- Columbia River fall Chinook are comprised of six major management components: Select Area Brights (SAB), Lower River Hatchery (LRH), Lower River Wild (LRW), Bonneville Pool Hatchery (BPH), Upriver Bright (URB), and Mid-Columbia Bright (MCB). The MCB component is comprised of Pool Upriver Bright (PUB) and Lower River Bright (LRB) stocks. The Bonneville Upriver Bright (BUB) stock was part of the MCB component but is now included in the PUB stock.
- The LRH and BPH stocks are referred to as tules and the LRW, SAB, URB, and MCB stocks are referred to as brights.
- The URB, BPH, and PUB Chinook are destined for areas upstream of Bonneville Dam, and in aggregate comprise the upriver run. Lower river components include SAB, LRH, LRW, and LRB Chinook stocks.
- The forecast for the 2018 fall Chinook adult return to the Columbia River totals 375,510 fish which would be less than (79%) the 2017 actual return of 476,463 fish and 50% of the 2008–2017 average return (753,350 fish).
- Bonneville Dam passage is expected to total nearly 253,100 upriver fall Chinook adults for the season. Passage is typically 50% complete by September 9. Through August 13, 3,163 adult fall Chinook have passed Bonneville Dam.

Upriver Summer Steelhead

- Upriver summer steelhead pass Bonneville Dam from April through October of each year. Fish passing during July through October are categorized as A-Index or B-Index based on fork length (A-Index: <78 cm, B-Index: ≥78 cm). Passage during July is mainly A-Index fish; B-Index passage normally begins around the end of August. B-Index steelhead primarily return to Snake River tributaries in Idaho, while A-Index steelhead return to tributaries throughout the Columbia and Snake river basins.
- The forecast for the combined A/B-Index steelhead return to Bonneville Dam totals 182,400 fish, including 57,700 unclipped (48,200 wild) fish. The A-Index forecast is 62% and the B-Index forecast is 60% of their respective recent 10-year averages.
- TAC met on August 13, 2018 and reviewed the A/B-Index steelhead passage at Bonneville Dam. As of August 12, 2018 there have been 40,812 total A/B-Index steelhead (of which 17,217 were unclipped) counted at Bonneville Dam. To date, both the total steelhead run and unclipped portion of the steelhead run are tracking less than forecast even with late timing such as in 2017. Based on 10-year average run timing, the unclipped passage is about 58% (10yr range 47%-71%) complete by this date and the total run is about 46% (10yr range 28%-61%) complete. TAC will be meeting weekly and will provide more precise updates as data become available.

Coho

- The 2018 Coho forecast to the Columbia River is for a return of 213,600 adults, which includes 127,200 early stock and 86,400 late stock. The forecast is 51% of the recent 10-year average of 416,100 fish.

- Bonneville Dam passage is expected to total 51,800 adult Coho, which represents 65% of the forecasted ocean abundance of Columbia River Coho destined for areas upstream of Bonneville Dam. Counts at Bonneville Dam through August 13 total 29 adults, which is not unexpected at this point in the return.

<i>Columbia River Adult Salmonid Returns: Actual and Forecasted*</i>				
		2017	2017	2018
		Forecast	Return	Forecast
Fall Chinook	Total Fall Chinook	613,840	476,463	375,510
	Lower River Hatchery - LRH	98,750	64,626	63,910
	Lower River Wild - LRW	13,610	7,855	7,860
	Bonneville Pool Hatchery - BPH	164,390	48,127	51,420
	Upriver Bright – URB	275,210	297,423	205,060
	<i>Snake River Wild - SRW</i>	<i>12,400</i>	<i>11,750</i>	<i>9,600</i>
	Bonneville Upriver Bright - BUB ****	3,470	1,353	0
	Lower River Bright - LRB	220	4,199	3,760
	Pool Upriver Bright - PUB	44,490	46,263	38,200
	Select Area Bright - SAB	13,700	6,617	5,300
Coho	Total Coho	319,300	235,656	213,600
	Early stock	196,800	151,637	127,200
	Late stock	122,500	84,019	86,400
Summer Steelhead	Total Upriver A-/B-Index Steelhead	119,400	113,350	182,400
(to Bonneville Dam)	A-Index (total)	112,100	106,776	158,000
	<i>(wild)</i>	<i>33,000</i>	<i>27,909</i>	<i>44,800</i>
	B-Index (total)	7,300	6,574	24,400
	<i>(wild)</i>	<i>1,100</i>	<i>751</i>	<i>3,400</i>
* Wild components are included in the stock total.				
**** BUB production moved to PUB – no adults expected to return in 2018				
7/9/2018				

MANAGEMENT GUIDELINES

Salmon/Steelhead

- The 2018-2027 *U.S. v Oregon* Management Agreement (MA) provides specific fishery management guidelines for fall Chinook, steelhead, and Coho.
 - The allowable impact rate for combined treaty Indian and non-treaty fisheries is 45% of the URB run based on preseason forecasts (URB stock is the surrogate for SRW Chinook). This impact limit is allocated 30% for treaty Indian fisheries and 15% for non-treaty fisheries.
 - However, for 2018 the states have opted to manage non-treaty fisheries conservatively at an 8.25% harvest rate (HR) prior to an in-season run-size update since the forecasted return is close to 200,000 (8.25% harvest rate trigger).
 - The escapement goal at Spring Creek Hatchery is 7,000 adult fall Chinook (BPH stock).
 - The management goal for adult fall Chinook 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%.
- Based on the pre-season forecast, treaty Indian impacts are limited to 15% 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 tule fall Chinook is 38% in 2018 given the pre-season forecast. Harvest of LRH stock is the surrogate for LCR Chinook. This exploitation rate (ER) limit includes impacts in ocean and Columbia River fisheries combined.
- In 2018, fishery impacts to LCN Coho are limited to an 18% ER for combined ocean and Columbia River fisheries.

Sturgeon

- The 2018 sturgeon harvest guidelines for Treaty fisheries in Zone 6 are 325 fish for the Bonneville Pool, 415 for The Dalles Pool, and 210 fish for the John Day Pool.
- The 2018 guideline for white sturgeon harvest in non-treaty commercial fisheries is 1,230 fish. The expected catch in Select Area spring-fall commercial fisheries is 560 fish, leaving a balance of 670 for mainstem commercial fisheries.

2018 NON-TREATY FALL FISHERIES

Mainstem Commercial Fall Salmon Fisheries

- Due to the conservative approach to managing 2018 fall fisheries, preseason planning for Chinook-directed mainstem commercial fisheries in Zones 4-5 was limited to the early fall season and modeled to begin sometime during August 12-19. Season expectations included 1-3 fishing periods weekly into week 35 (August 26-September 1).
- Early fall regulations typically include 9-hour periods (9 PM-6 AM) and a 9-inch minimum mesh size.
- Considering the modeled season structure for the 2018 fall commercial season and input from the CRCAG and subsequent industry communication, staff is making the following recommendation:

<i>Recommendation: 2018 Non-Treaty Mainstem Commercial Early Fall Fishery</i>	
Season:	Four 9-hour fishing periods during August 19–27
Week 34 (3 periods)	9 PM Sunday August 19 to 6 AM Monday August 20 9 PM Tuesday August 21 to 6 AM Wednesday August 22 9 PM Thursday August 23 to 6 AM Friday August 24
Week 35 (1 period)	9 PM Sunday August 26 to 6 AM Monday August 27

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. 9-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:	Chinook, Coho, Pink, and Sockeye salmon, 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 Rules:	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.

- The three proposed fishing periods in week 34 and one in week 35 are consistent with the 2018 Fall Allocation Agreement. The preseason plan included two additional fishing periods in week 33 (August 12-18), but industry comments since then have favored a later start, similar to 2017.
- Modeled kept catch expectations total 7,400 adult Chinook (75% of the 9,980 preseason catch expectation for a six-period fishery), 300 Coho, and 420 white sturgeon. Chinook catch is expected to build as the fishery progresses. Weekly catch expectations include:
 - Week 34 = 3,800 adult Chinook; Week 35 = 3,600 adult Chinook
- Staff will monitor landings for the initial two periods to determine if catch rates are tracking consistent with expectations. If catches are higher than expected, there is adequate time to modify the final period if needed. If catches are lower than expected, an additional period could be added during the last week in August (week 35) to meet harvest guidelines. Reduced time or fishing area may need to be considered as the season progresses to remain within ESA constraints.
- WDFW will conduct voluntary onboard observation to collect steelhead encounter and immediate mortality data, as well as sturgeon handle.
- Restricting the fishery to a 9-inch minimum mesh in Zones 4-5 will reduce the catch of LCR tulle Chinook and steelhead handle, and is consistent with Commission guidance.
- The proposed fishery is expected to accrue Chinook ESA impacts of 1.6% SRW and 0.9% LCR wild, respectively.
- 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.

- ESA impacts to wild upriver summer steelhead are expected to be 0.09% for A-Index and 0.06% for B-Index for the proposed fishery. Total non-treaty impacts to wild upriver summer steelhead are expected to be 1.1% for A-Index and 1.8% for B-Index, compared to the 2.0% total allowed for each during the fall season.
- Ex-vessel prices (per pound) during the 2017 early fall season averaged \$3.31 for bright Chinook, \$0.60 for tule Chinook, and \$1.77 for Coho. Chinook prices for the 2018 early fall fishery are expected to be high.
- Commercial fishing periods targeting hatchery Coho using 3.75-inch tangle nets are planned to occur in October. Any additional Chinook-directed late fall fisheries will be addressed in-season, after the fall Chinook and steelhead run size updates are available (approximately mid-September).

2018 TREATY INDIAN FALL FISHERIES

- Fall Management Period platform and hook and line fisheries began August 1. Catch updates are still being developed, but early August catches are generally low. Low levels of fishing just downstream of Bonneville Dam is expected to occur.
- Commercial gillnet fisheries typically begin in mid to late August. Given uncertainties about run sizes, the tribes have chosen to begin gillnet fisheries in late August this year.
- 2018 tribal sturgeon catches are shown in the table below. There are 224 sturgeon remaining on the Bonneville Pool harvest guideline.

	Bonneville	The Dalles	John Day	Total
Jan Setline	17	63	9	89
Winter Gillnet	64	352	159	575
June Setline	0	0	10	10
August Setline	20	0	10	30
Total	101	415	188	704
Guideline	325	415	210	950
Remaining	224	0	22	

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

<i>2018 Treaty Indian Commercial Sturgeon Setline Fishery</i>	
Season:	Extend the ongoing Sturgeon Setline fishery to 6 PM Saturday August 25
Area:	Bonneville Pool Only
Sanctuaries:	Standard river mouth and dam closed areas applicable to setline gear
Gear:	Setline Gear. Fishers are encouraged to use circle hooks and avoid J-hooks. It is unlawful to use setline gear with more than 100 hooks per set line, with hooks less than the minimum size of 9/0, with treble hooks, without visible buoys attached, and with buoys that do not specify operator and tribal identification.

Allowable Sales:	Sturgeon from 38 to 54 inches fork length in the Bonneville Pool may be sold or kept for subsistence purposes. Sturgeon within the legal size limit and caught in the platform and hook and line fishery may only be sold if caught during the open period and open area of the set line fishery. Fish landed during the open periods are allowed to be sold after the period concludes.
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. It is unlawful to sell, barter, or attempt to sell or barter sturgeon eggs that have been removed from the body cavity of a sturgeon prior to sale of the sturgeon to a wholesale dealer licensed, or to sell or barter sturgeon eggs at retail. It is unlawful to deliver to a wholesale dealer any sturgeon that are not in the round with the head and tail intact.

- The tribes expect continued low effort and moderate catch in the proposed setline fishery and anticipate that based on catch rates in the ongoing August sturgeon setline fishery, the catch to be less than the numbers the fish available in either pool’s guideline.
- Catch and effort will be monitored to ensure the tribal fisheries remains within management limits. Fisheries will be closed earlier if harvest limits are projected to be met early.

<i>2018 Treaty Indian Fall Commercial Gillnet Fishery</i>		
Season:	6 AM Monday August 27 to 6 PM Thursday August 30 6 AM Monday September 3 to 6 PM Friday September 7	(3.5 days) (4.5 days)
Area:	Zone 6	
Sanctuaries:	Standard river mouth and dam closed areas applicable to gillnet gear, including the Spring Creek Hatchery sanctuary are in effect.	
Gear:	Set and Drift gillnets with an 8-inch minimum mesh restriction	
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 may not be sold, but 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.	
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.	

- Tribal staff have modeled fisheries based on two different URB run sizes. 2018 treaty fall season catch projections based on the pre-season URB forecast are shown in the table below.

2018 Treaty Indian Fall Season Fisheries (Modeled catches based on pre-season URB forecast)					
Fishery	Expected Effort (Nets)	Total Adult Chinook	URB Chinook	Total Steelhead	B Steelhead
Platforms through 8/25	na	500	400	400	20
Aug 27-Aug 30 (3.5 days)	400	7,900	5,100	1,100	220
Sep 4-8 (4.5 days)	520	17,800	10,100	1,500	360
Total		26,200	15,600	3,000	700
Allowed at Forecast run size			61,518		3,660
Expected Harvest Rate by Sept 9			7.6%		2.9%
Remaining after Sept 9			45,918		2,960
Remaining Harvest Rate After Sept 9			22.4%		10.1%

- Tribal staff have also modeled fisheries based on an URB run sizes of 150,000 (73% of forecast) to assess fisheries if the actual URB run is less than forecast and the URB harvest rate is restricted to 23%. These projections are shown in the table below.

2018 Treaty Indian Fall Season Fisheries (Modeled catches based on URB run size of 150,000)					
Fishery	Expected Effort (Nets)	Total Adult Chinook	URB Chinook	Total Steelhead	B Steelhead
Platforms through 8/21	na	500	400	400	20
Aug 28-Sept 1 (4.5 days)	400	6,500	3,800	1,100	220
Sep 4-8 (4.5 days)	520	15,200	7,400	1,500	360
Total		22,200	11,600	3,000	600
Allowed at URB run size =150K and pre-season B			34,500		3,660
Expected Harvest Rate by Sept 9			7.7%		2.5%
Remaining after Sept 9			22,900		3,060
Remaining Harvest Rate After Sept 9			15.3%		10.5%

- Tribal staff did not model reduced B-Index steelhead run sizes because generally the B-Index steelhead harvest is very low in the early fall season fisheries.
 - Catches for the platform and hook and line fishery (including fisheries downstream of Bonneville) in weeks with commercial gillnet fisheries is included in the total catches for those weeks. The treaty fishery model does not predict coho catches so there are no coho harvest projections, but coho harvest is normally very low in the early fall season fisheries.
 - Catch and effort will be monitored to ensure the tribal fisheries remains within management limits. Set net counts will be made by air for each week of commercial gillnet fishing.

- Based on expected catches through September 9, the treaty fishery would be within its allowed limits even at lower than forecast run sizes.
- Platform and hook and line fisheries, fisheries downstream of Bonneville, and Yakama Nation tributary fisheries do not require Compact action at this time.

FUTURE MEETINGS

- No additional Compact/Joint State hearings are currently scheduled. The Joint Staff will monitor the non-Treaty commercial fishery and recommend additional hearings as needed. The Treaty tribes have requested a Compact hearing be scheduled via teleconference for either late Wednesday September 5 or any time on Thursday September 6 to consider additional treaty commercial gillnet openings.