

OREGON AND WASHINGTON DEPARTMENTS OF FISH AND WILDLIFE
JOINT STAFF REPORT - FALL FACT SHEET NO. 4b
Columbia River Compact/Joint State Hearing
September 3, 2020

<i>Fisheries under consideration:</i>	Estuary recreational white sturgeon fishery Above Wauna recreational white sturgeon fishery
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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 most recent reports pertaining to white sturgeon and fall fisheries are available at the following links to online Joint Staff Report:

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

RIVER CONDITIONS

- Current river conditions are presented in Fall Fact Sheet #4a.

STOCK STATUS

Salmon/Steelhead

- Through September 2, a total of 131,093 adult fall Chinook have passed Bonneville Dam which is higher than would be expected given the preseason forecasts and average run timing. Over the last 10 years, the average 50% complete date has been September 10.
- Passage of upriver summer steelhead at Bonneville Dam during July 1 – September 2 totals 70,462 A/B-Index fish.
- The *U.S. vs OR* Technical Advisory Committee (TAC) met on Monday August 31 to review salmon and steelhead passage at Bonneville Dam. Based on passage to date and the recent 10-year average timing, the expected total A-Index steelhead run size was downgraded to 80,300 fish from the pre-season forecast of 85,900 fish, and the expected natural-origin A-Index portion of the run was also downgraded to 30,900 from the pre-season forecast of 33,300 fish. It is too early to update the B-Index component of the run; however, passage of B-Index steelhead is tracking above expectations based on the recent 10-year average run timing for this group. Fall Chinook bright stock and tule stocks are tracking ahead of expectations based on normal run timing. It was too early in the fall Chinook run for TAC to update the run-size.
- The bright fall Chinook run is currently expected to be between 20-25% complete based on 5- or 10-year average timing curves. Since 2000, the 50% passage date at Bonneville Dam for the combined bright fall Chinook return (of which 77% are expected to be upriver bright stock this year) has ranged from September 1-12. Comparison of 2020 daily passage to date with previous timing curves shows similarity to 2008 and 2009, which were earlier timed (2008 50% was Sept. 7; 2009 50% was Sept. 4). If the 2020 bright fall Chinook passage continues to track in-line with 2009, the 2020 bright run would come in below the current forecast (and less than 200,000 URBs). Continued passage data will aid in determining if the bright run is early-timed.
- Counts at Bonneville Dam through September 2 total 19,426 adult early stock Coho (defined as Coho passing prior to October 1), which is higher than expected. Passage of upriver early stock Coho is typically 50% complete by September 11.

- Run size forecasts and stock descriptions for salmon and steelhead were presented in Fall 2020 Fact Sheet #1.

White Sturgeon

- White sturgeon stock status information was presented in Spring Fact Sheet #4a (June 8, 2020).

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 upriver bright stock (URB) return based on preseason forecasts (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.
 - However, due to non-treaty fisheries exceeding allowed harvest rates in recent years, and the breakpoint in the harvest rate schedule being well within the margin of historical forecast error, a conservative approach to preseason fishery planning is being utilized. All fisheries incorporate a split-season structure which limits the combined non-treaty URB/SRW harvest rate (HR) to 8.25% prior to an in-season run-size update. The initial URB run-size update typically occurs in mid-September. Additional fishing opportunity is planned to access the full 15% HR if the URB run size is projected to be at least 200,000 adults in-season.
 - 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% 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 lower Columbia River (LCR) tule fall Chinook is 38% in 2020 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 2020, fishery impacts to LCN Coho are limited to an 18% ER for combined ocean and Columbia River fisheries.

White Sturgeon

- For the years when white sturgeon retention is allowed downstream of Bonneville Dam, current Oregon and Washington 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 Oregon White Sturgeon Conservation Plan is utilized.
 - Washington Commission guidance requires that we manage with a precautionary approach due to uncertainties in population parameters.

2020 NON-TREATY FISHERIES

Recreational White Sturgeon Fisheries

- Due to the decline of the traditional legal-size population (38-54 inch fork length (FL)) and other indicators during 2008-2012, retention fisheries downstream of Bonneville Dam were closed during 2014-2016; however, based on the increasing trend for legal-size white sturgeon in the LCR during that timeframe, both Commissions approved limited retention fisheries in 2017-2019.
- Earlier this year, staff provided updates on the LCR white sturgeon status to each state's Commission and to the Columbia River Advisor groups, which supported implementing sturgeon retention fisheries in 2020 similar to what occurred the last three years.
- To maintain a cautious approach, staff assumed the following when initially modeling 2020 sturgeon fisheries:
 - Continued use of the standardized legal slot of 44-50 inches FL for all LCR fisheries to facilitate management and provide escapement of larger-size white sturgeon by excluding them from harvest.
 - Modeled a conservative 4.0% harvest rate using the narrower slot limit (equivalent impact to broodstock escapement of a 4.8% harvest rate on the traditional 38-54 inch FL size slot).
 - Used the previous harvest allocation distributions for recreational fisheries of 48% Estuary, 20% Above Wauna, and 12% in the lower Willamette River.
- Based on the 2020 abundance forecast of 142,400 fish (38-54 inch FL), a total of 5,720 white sturgeon (44-50 inch FL) would be available for harvest downstream of Bonneville Dam.

Estimated Abundance (38-54 inch FL)	142,400
2020 Harvest Guideline	5,720
Commercial (20%)	1,140
Recreational (80%)	4,580
Estuary	2,750
Above Wauna	1,140
Lower Willamette River	690

- Staff previously modeled a 2020 spring Estuary recreational fishery similar to what occurred in 2019. However, the two states did not agree on setting the fishery during mid-May to June timeframe due to the Covid-19 situation, and as a result there has not been an estuary fishery this year.

Below Wauna Powerlines (Estuary)

- Given the limited harvest guideline, no relevant fishery data for a September Estuary fishery (when catch rates can be decent), and anticipated interest in the fishery, staff recommends the 2020 Estuary fishery be approached thoughtfully and consistent with previous spring openings.

<i>Joint Staff Recommendation - 2020 Recreational Sturgeon Fishery for Below Wauna (Estuary)</i>		
Season:	Saturday September 12 and Saturday September 19	2 days
Area:	Mainstem Columbia River from the mouth at Buoy 10 upstream to Wauna powerlines , including Youngs Bay	
Allowable Catch:	Up to 2,750 white sturgeon 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)	
Additional Regulations	Daily bag limit: One fish Annual bag limit: Two fish Retention of green sturgeon is prohibited	

- Predicting the effort and catch for the proposed fishery below Wauna is challenging due to the lack of recent data for fall Estuary fisheries. Catch rates in early September could still be relatively good and salmonid angling opportunity may be limited, therefore the proposed fishery should provide meaningful additional recreational opportunity. However, if catches are higher than anticipated on the first retention day, there is adequate time to modify the second retention day. Alternatively, if catches are lower than expected, season extensions can be considered. If additional opportunity can be provided, some weekday opportunity should be considered.

- Although the 2020 Estuary guideline is 2,750 fish, staff recommends setting only two retention days, in alignment with the above Wauna area, and then re-evaluating after the fishery when actual catches become available. Based on the available balance, additional retention days could be considered.
- To improve enforcement of the fishery and simplify rules for anglers, staff recommends opening this area for the same open hours as the above Wauna fishery (no 2 pm closure).
- Per permanent regulations, catch and release fishing is allowed all year.
- The fishery will be sampled in a manner similar to recent years and adequate staff should be available.

Above Wauna Powerlines

- Generally, catch rates in this river section are better during the spring and late fall months. The 2019 season consisted of two late-September (21st and 28th) and three October retention days (12th, 19th, and 24th). Effort and catch were similar to expectations for the initial retention day but declined rapidly thereafter, resulting in an estimated 685 white sturgeon kept (56% of the 1,230 guideline) from ~12,100 angler trips.
- The slightly earlier timing of the 2018 Above Wauna retention fishery (September 15th and 22nd) resulted in higher catches with an estimated 1,049 white sturgeon retained from ~11,030 angler trips.
- Given results of recent Above Wauna sturgeon retention fisheries, staff believes the following fishery proposal represents a reasonable approach for 2020.

<i>Joint Staff Recommendation - 2020 Sturgeon Recreational Fishery for Above Wauna</i>		
Season:	Saturday September 12 and Saturday September 19	2 days
Area:	Mainstem Columbia River from the Wauna powerlines upstream to Bonneville Dam, including the Cowlitz River	
Allowable Catch:	Up to 1,140 white sturgeon 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)	
Additional Regulations:	Daily bag limit: One fish Annual bag limit: Two fish Retention of green sturgeon is prohibited	

- The proposed fishery is based on several modeling assumptions. If catches are higher than anticipated on the first retention day, there is adequate time to modify the second retention day. Alternatively, if catches are lower than expected, season extensions can be considered. If additional opportunity can be provided, some weekday opportunity should be considered.

- The expected kept catch for the 2-day season is approximately 1,000 fish (88% of the guideline); however, if the proposed concurrent below Wauna fishery is adopted, effort and catch may be lower than recently observed.
- Per permanent regulations, catch and release fishing is allowed for the remainder of the year.

Lower Willamette River

- Due to the limited annual harvest guideline and potential for high effort and catch during much of the year, no sturgeon retention seasons occurred in the lower Willamette River during 2017-2019. In an attempt to provide some harvest opportunity outside the peak season, two retention days occurred earlier this year (June 20 and 27), resulting in 167 white sturgeon kept from 5,091 angler trips.
- Although 523 white sturgeon remain available from the 2020 harvest guideline, sturgeon abundance in the lower Willamette River can increase rapidly during September. Due to the risk of exceeding the harvest guideline, Oregon staff is not recommending additional harvest opportunity in the lower Willamette River this fall. If 2021 retention fisheries are considered, an earlier fishery timing would likely improve catch rates.
- Per permanent regulations, catch and release fishing is allowed throughout the lower Willamette River for the remainder of the year.

Mainstem Commercial Fall Salmon Fisheries

- Landings for the early fall mainstem non-treaty commercial fishery which included six fishing periods during August 10-27 total 16,546 Chinook, 352 coho, and 405 white sturgeon.
- Adult stock composition based on coded-wire tag (CWT) recoveries indicates URB Chinook were less abundant in the catch, and BPH Chinook more abundant, than modeled preseason. Actual adult stock proportions were 14% LRH (preseason: 9%), 47% BPH (30%), 30% URB (50%), 6% PUB (11%), and 2% LRB (<1%).
- The fishery has accrued an estimated 4,765 adult URB mortalities, or 80% of the 5,970 mortalities allocated for the early fall season.

Select Area Fall Commercial Fisheries

- 2020 fall Select Area commercial fisheries began August 4 in Youngs Bay and August 24 in Tongue Point/South Channel and Blind Slough/Knappa Slough. Landings through August 27 include 475 Chinook and 368 coho but catches appear to be improving recently.

Buoy 10 Recreational Fishery

- The Buoy 10 fishery was open to Chinook and hatchery Coho retention August 14-27 as planned preseason. The fishery is currently open to retention of hatchery Coho with a one-fish daily bag limit. During the Chinook retention period, anglers kept an estimated 13,127 Chinook (12,819 adults based on CWT data) and 2,720 coho from approximately 51,400 angler trips. Through September 1, total adult Chinook mortalities are tracking at 88% of preseason expectations for the pre-update portion of the season; URB mortalities are tracking at 89% of

expectations but LRH mortalities were higher than expected. Coho catch rates are currently averaging around 0.2 kept/angler.

Mainstem Recreational Salmon Fisheries

- The lower Columbia River recreational salmon fishery from the West Puget Island line upstream to Warrior Rock was open to retention of Chinook and hatchery Coho August 1-31. The subarea between Tongue Point/Rocky Point and West Puget Island was open August 14-27. Preliminary estimates include 4,347 adult Chinook and 36 coho kept from ~24,800 angler trips. An additional 85 Chinook, 20 Coho, and 111 steelhead were released. Total adult Chinook mortalities are 85% of preseason expectations; URB mortalities are 46% of expected but LRH catch was much higher than expected.
- For the area from Warrior Rock upstream to Bonneville Dam, Chinook and hatchery Coho retention has been open on a three-day-per-week schedule (Friday-Sunday) since August 7 and is scheduled to continue through September 6. Through August 31, about 1,200 adult Chinook and 4 coho have been kept from ~11,900 angler trips. An estimated 68 Chinook, 5 coho, and 188 steelhead have been released. To date, Chinook catch is tracking slightly ahead (102%) of preseason expectations; however, 70% of the overall catch is expected to occur in the last 3 days of the season (this weekend).
- The recreational fishery from Bonneville Dam upstream to McNary Dam is ongoing and is planned to be open for Chinook and Coho retention through September 8 with a one salmonid daily bag limit. Through August 30, an estimated 263 adult Chinook have been kept (32 released) from approximately 3,650 angler trips. The vast majority of the catch (77%) is anticipated to occur during August 30-September 8. Recent sampling data indicates catch rates and effort are increasing.

Non-treaty ESA Fall Chinook Impacts

- For completed and ongoing non-treaty fisheries, projected impacts for LCR tulle and URB fall Chinook are:
 - LCR: 9.80% vs 10.06% planned preseason (97% of preseason expectations)
 - URB: 6.63% vs 8.25% planned preseason (80.4%; pre-update + SAFE)
- LCR/LRH run size is not updated in-season like the URB run. Additional LCR and URB impacts are expected to accumulate into next week.
- Considering the higher-than-expected usage of LCR tulle impacts to-date, and uncertainty in the upriver run-size including the potential for an early timed URB run, staff recommends that a decision on the potential for additional pre-update Chinook retention opportunity be delayed until next week. At that time, additional in-river harvest and passage information will be available as well as an estimate of unused LRH/LCR tulle ESA impacts available from PFMC ocean fisheries.

FUTURE MEETINGS

- No additional Compact/Joint State hearings are currently scheduled. Staff will continue to monitor the fisheries and stock status and may recommend another hearing as early as September 9. The Treaty tribes will likely request a hearing for next week (September 10) to consider additional treaty commercial gillnet openings.