# OREGON AND WASHINGTON DEPARTMENTS OF FISH AND WILDLIFE JOINT STAFF REPORT - SPRING FACT SHEET NO. 4a

Columbia River Compact/Joint State Hearing June 8, 2020

Fisheries under consideration: Estuary recreational white sturgeon fishery

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 are the 2020 Sturgeon/Smelt Report (January 17, 2020) and the 2020 spring/summer report for Chinook, sockeye, steelhead, and other species (February 7, 2020). Links to the online reports are <a href="https://wdfw.wa.gov/fishing/management/columbia-river">https://wdfw.wa.gov/fishing/management/columbia-river</a> and <a href="https://www.dfw.state.or.us/fish/OSCRP/CRM/jsmreports.asp">https://www.dfw.state.or.us/fish/OSCRP/CRM/jsmreports.asp</a>

#### RIVER CONDITIONS

• Columbia River conditions as measured at Bonneville Dam are cooler with higher flow than the recent 5-year averages for early June. Current outflow is 364 kcfs, compared to the recent 5-year average of 287 kcfs. Water temperature currently measures 58° F which is considerably cooler than the 5-year average of 62° F. Visibility is 3.0 feet, compared to the 5-year average of 4.1 feet. The river stage at Vancouver is currently about 11.0 feet and is forecasted to remain relatively stable for the next several days (Action Stage is 15.0 feet and Flood Stage is 16.0 feet).

#### STOCK STATUS

# White Sturgeon

- 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 2020 projected abundance of 142,400 (assuming a 5% harvest rate). 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 2019 was 11,900 fish, with the 2017-19 average abundance (~9,500) now above the conservation status threshold (3-year average of 9,250 adults) identified in the Oregon White Sturgeon Conservation Plan (WSCP). Sub-yearling production in the lower Willamette River was above average in 2019; however, in the LCR, sub-yearling catch rates were well below average. Stock assessment results indicate that the proportion of the population comprised of juvenile and sub-legal fish (52% in 2019) has fallen below the conservation status threshold (60% juveniles) indicating continued population productivity and recruitment issues.

#### MANAGEMENT GUIDELINES

## White Sturgeon

- 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.

## 2020 RECREATIONAL WHITE STURGEON FISHERIES

- Due to the decline of the traditional legal-size population (38-54 inch 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 this size slot during that timeframe, both Commissions approved limited retention fisheries in 2017-2019.
- Sturgeon anglers made a total of ~34,100 trips in the LCR during 2019 retention fisheries. Anglers in the Estuary retention fishery made ~22,000 trips and harvested 2,838 fish during an 11-day retention season in May and June. Anglers made ~12,100 trips during a five-day retention season above Wauna in September and October, harvesting 685 white sturgeon. No retention fishery occurred in the lower Willamette River due to the limited harvest guideline. The combined harvest on the lower Columbia River was 3,523 white sturgeon, or 84% of the 4,190 fish guideline for mainstem fisheries. Additionally, anglers reported releasing 7,703 sublegal, 45 legal, and 5,661 over-legal white sturgeon, and 22 green sturgeon during the retention fisheries.
- Earlier this year, staff provided updates on the LCR white sturgeon status to each state's Commission and the Columbia River Advisor groups, which all supported implementing sturgeon retention fisheries in 2020 similar to what occurred in 2017-2019.
- To maintain a cautious approach, staff assumed the following when initially modeling 2020 LCR sturgeon fisheries:
  - Continued use of the new 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 44-50 inch FL (equivalent impact to broodstock escapement of a 4.8% harvest rate on the traditional 38-54 inch size slot).
  - Used the previous harvest allocation distribution for recreational fisheries of 48% Estuary, 20% Above Wauna, and 12% in the lower Willamette River.

Based on the harvest-adjusted 2020 abundance projection 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 38-54 inch FL Abundance	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 Covid-19 situation precluded starting the fishery in mid-May, as has occurred since 2018.

# Below Wauna Powerlines (Estuary)

• Given the limited harvest guideline, a June fishery (due to the delayed start to the season) when catch rates are expected to be better, and anticipated high effort (based on 2017-19 observations) in a Covid-19 environment, staff recommends the 2020 Estuary fishery be approached thoughtfully.

Recommendation - 2020 Recreational Sturgeon Fishery for Below Wauna (Estuary)		
Season:	Saturday June 13	1 day
Area:	Mainstem Columbia River from the Wauna powerlines downs Buoy 10, including Youngs Bay, and all adjacent Washington	
Allowable	Up to 2,750 white sturgeon	
Catch:	Legal size: 44-inch minimum and 50-inch maximum fork leng	gth
	(Fork length is measured in a straight line from the tip of the necaudal fin (tail) with the fish laying on its side on a flat surface measure/ruler positioned flat <u>under</u> the fish)	
	Daily bag limit: One fish Annual bag limit: Two fish Retention of green sturgeon is prohibited	
Additional Regulations:	On days open to white sturgeon retention, angling for sturgeon including catch and release.	n is prohibited after 2 PM,

• Predicting the catch for the proposed fishery is complicated somewhat by issues related to Covid-19 (limited spring/summer Chinook opportunity, travel recommendations, etc.), but since the proposed fishing date is in June when fishing should be good, the fishery will likely be very popular.

- The expected kept catch is 700-1,100 fish (25-40% of the guideline) based on 2017-2019 Estuary fisheries; however, data for mid-June from these years is limited. For comparison, an estimated 788 white sturgeon were kept on June 10, 2017 (highest recent daily kept catch). During 2003-2008, the highest daily catches ranged from ~1,000-1,400 fish per day but the fisheries were longer in duration and the slot limit was wider.
- Although the 2020 Estuary guideline is 2,750 fish, staff recommends setting only one retention day at this time, and then re-evaluate after the fishery when actual catches become available. Based on the available balance, an additional spring retention day could be considered, or reserve the unused catch to provide a longer September fishery.
- Per permanent regulations, catch and release fishing is allowed all year (except as noted in the Additional Regulations section of the above recommendation).

# Above Wauna Powerlines

- Staff is not prepared to recommend a season structure for the area upstream of the Wauna Powerlines at this time.
- Generally, catch rates in this river section are better during the spring and late fall months. The three-day 2017 fishery occurred in late October, experiencing poor weather and limited catch. The 2018 season occurred in September (15<sup>th</sup> and 22<sup>nd</sup>) during which high catch rates limited the number of fishing days. In 2019, catch rates were reasonable at the start (Sept 21<sup>st</sup>) of the five-day fishery, but quickly deteriorated.
- Per permanent regulations, catch and release fishing is allowed year-round, except angling for sturgeon is prohibited May 1 through August 31 from Bonneville Dam downstream to a line crossing the Columbia River at Navigation Marker 82 on the Oregon shore westerly to a boundary marker on the Washington shore upstream of Fir Point.

## Lower Willamette River

- Similar to the Above Wauna fishery, Oregon staff is not prepared to recommend a sturgeon retention season for the lower Willamette River.
- Given the reduced quota available for this fishery, it has been challenging to design a reasonable and meaningful fishery.
- Per permanent regulations, catch and release fishing is allowed all year, except angling for sturgeon is prohibited May 1 through August 31 from the Lake Oswego-Oak Grove Railroad Bridge upstream to Willamette Falls.

#### **FUTURE MEETINGS**

• No additional Compact or Joint State hearings are scheduled at this time. The Joint Staff will monitor fisheries and recommend additional hearings as needed.