

**OREGON AND WASHINGTON DEPARTMENTS OF FISH AND WILDLIFE  
JOINT STAFF REPORT - WINTER FACT SHEET NO. 6  
Columbia River Compact/Joint State Hearing  
March 23, 2021**

<b><i>Fisheries under consideration:</i></b>	Estuary recreational white sturgeon Select Area 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 online. The most recent reports are the 2021 Sturgeon/Smelt Report (January 14, 2021) and the 2021 Spring/Summer salmon, steelhead, and other species report (February 4, 2021) available at:*

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

**RIVER CONDITIONS**

- The current five-day average outflow at Bonneville Dam is 132 kcfs compared to a five-year average outflow of 212 kcfs. The current water temperature at Bonneville Dam as reported by USACE is 44.3°F (6.8°C) compared to a five-year average temperature of 42.9°F (6.1°C). Visibility at Vancouver is 2.7 feet which is less than the five-year average of 5.1 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 legal-size fish (38-54 inches fork length (FL)) declined to a low of 72,700 fish in 2012 but increased steadily through 2016, reaching a peak of 224,000 fish. The 2018 and 2019 abundance estimates declined to 162,200 and 168,200 respectively, indicating growth of this population segment may have peaked in 2016–2017. The 2020 estimate of 199,500 38-54 inch FL fish was 19% higher than 2019 and 34% higher than the 2020 projection of 144,900 fish. However, issues related to the COVID-19 pandemic reduced tag recovery efforts, resulting in only four recaptures and a less precise abundance estimate than usual. Similar to 2016, setline and gillnet tagging catch rates did not reflect this increase in abundance.
- Abundance metrics for other size groups of white sturgeon in the LCR remain mixed. The 2018–2020 running average of adult-sized fish ( $\geq 167$  cm FL) is 10,800 fish, which exceeds the desired status threshold of 9,250 adult fish identified in the Oregon White Sturgeon Conservation Plan (WSCP). The proportion of the population comprised of juvenile and sub-legal fish remains below the conservation status threshold (60% juveniles) for the second consecutive year (52% in 2019 and 53% in 2020), indicating population productivity and recruitment issues.

***Spring Chinook***

- Adult Chinook passage at Bonneville Dam through April 1 totals 65 adult fish, compared to the

recent 10-year average of 411 fish and the recent three-year average cumulative adult count of 30 fish. It is still very early in the return; the 10-year average proportion complete at Bonneville Dam is only 0.2% by April 1.

## **MANAGEMENT GUIDELINES**

### ***White Sturgeon***

- For years when white sturgeon retention is allowed downstream of Bonneville Dam, current Commission guidance on white sturgeon management includes:
  - 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 WSCP is utilized.
  - Washington Commission guidance requires that we manage with a precautionary approach due to uncertainties in population parameters.

## **2021 NON-TREATY FISHERIES**

### ***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 2017-2020.
- In 2020, anglers made ~9,100 trips during a five-day retention season above Wauna in September and October, harvesting 843 white sturgeon on the mainstem Columbia River and an estimated 14 white sturgeon on the Cowlitz River. A two-day retention fishery occurred in the lower Willamette River in June, during which anglers made ~5100 trips, harvesting 167 white sturgeon. A recreational retention fishery did not occur in the Estuary last year. The total harvest on the lower Columbia and tributaries below Bonneville Dam in 2020 was 1,024 white sturgeon, or 22% of the combined 4,580 fish guideline.
- 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 2021 similar to what occurred in 2017-2019.
- To maintain a cautious approach, staff assumed the following when initially modeling 2021 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.

- Utilized the 2019 projected abundance estimate for 38-54 cm FL fish of 160,250 instead of basing harvest on the higher 2020 estimate (199,500) due to concern regarding potential variance in last years' estimate.
- Modeled a conservative 3.8% harvest rate using the narrower 44-50 inch FL (equivalent impact to broodstock escapement of a 4.6% 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 2019 abundance projection of 160,250 fish (38-54 inch FL), a total of 6,160 white sturgeon (44-50 inch FL) would be available for harvest downstream of Bonneville Dam.

Estimated Legal Abundance	160,250
Annual Harvest Guideline	6,160
Commercial (20%)	1,230
Recreational (80%)	4,930
Estuary	2,960
Above Wauna	1,230
Lower Willamette River	740

Below Wauna Powerlines (Estuary)

- Given the limited harvest guideline, desire for a somewhat protracted fishery, and expected high effort (based on 2017-2019 observations), staff modeling assumptions for the 2021 Estuary fishery included:
  - A mid-May start when catch rates are lower to provide for a longer retention season.
  - Continued use of the days-per-week approach and 2 PM closure to aide in increasing the length of the season and provide staff the opportunity to review fishery performance on a weekly basis.
  - Daily effort in mid-May is expected to be moderate and increase steadily into June, where catch rates are modeled at rates similar to recent years.
- Results of the 2017-2019 Estuary retention fisheries provided informative data for designing the 2021 fishery but modeling this fishery continues to remain challenging due to only three years of recent fisheries data and uncertainty in predicting effort. However, staff believes the following fishery proposal represents a reasonable approach for 2021.

<i>Recommendation - 2021 Sturgeon Recreational Fishery for Below Wauna Powerlines</i>		
<b>Season:</b>	Mondays, Wednesdays, and Saturdays May 10 through June 5	12 days
<b>Area:</b>	Mainstem Columbia River from the Wauna powerlines downstream to the mouth at Buoy 10, including Youngs Bay, and all adjacent Washington tributaries	

<b>Allowable Catch:</b>	Up to 2,960 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) Daily bag limit: One fish Annual bag limit: Two fish Retention of green sturgeon is prohibited
<b>Additional Regulations:</b>	On days open to white sturgeon retention, angling for sturgeon is prohibited after 2 PM, including catch and release.

- The proposed fishery is based on several modeling assumptions. The duration of the retention season will likely need to be adjusted if catch rates and effort are much different than projected.
- To avoid issues related to validation of kept fish, the proposed fishing dates were selected to primarily avoid free fishing weekends scheduled for June 5-6 in Oregon and June 12-13 in Washington. The exception is Saturday June 5; staff considered alternative options to avoid the free fishing date. However, the alternative options either did not match the current effort flight schedule (Wednesday and Saturday) which would compromise the ability to generate catch estimates in June, increased season complexity, or eliminated weekend opportunity in June.
- The expected kept catch for the 12-day season is 2,949 fish (99.6 % of the guideline).
- Per permanent regulations, catch and release fishing is allowed all year (except as noted in Additional Regulations).

Above Wauna Powerlines

- Generally, catch rates in this river section are better during the spring and late fall months. The 5-day 2020 fishery occurred from mid-September to early October, experiencing poor air quality from wildfire smoke and limited catch. Despite wildfires, public feedback on the 2020 fishery was generally positive.

Results of the 2017-2020 Above Wauna retention fisheries provided useful data for designing the 2021 fishery but modeling this fishery remains challenging due to limited recent September-October fishery data and uncertainty in predicting effort. However, staff believes the following fishery proposal represents a reasonable approach for 2021.

<i>Recommendation - 2021 Sturgeon Recreational Fishery for Above Wauna Powerlines</i>	
<b>Season:</b>	Saturday September 11 and Saturday September 18 <span style="float: right;">2 days</span>
<b>Area:</b>	Mainstem Columbia River from the Wauna powerlines upstream to Bonneville Dam, including the Cowlitz River

<b>Allowable Catch:</b>	Up to 1,230 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)
	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 remainder of the fishery. Alternatively, if catches are lower than expected, season extensions can be considered.
- The expected kept catch for the two-day season is approximately 1,045 fish (85% of the guideline).
- 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

- Oregon staff is not prepared to recommend a sturgeon retention season for the lower Willamette River at this time.
- During June 2020, the ODFW allowed for harvest of white sturgeon in the lower Willamette River for the first time since 2013. Fishery managers had previously been cautious about opening the fishery to harvest as past openings resulted in high catch rates and large numbers of fish harvested in short periods of time.
- The ODFW adopted a two-day retention fishery on the LWR for Saturday June 20 and Saturday June 27 based on the harvest guideline of 690 white sturgeon. Regulations included a 6 p.m. fishing closure, including catch-and-release angling, to facilitate both the sampling and enforcement of the fishery.
- Despite the low overall catch, the popularity of the 2020 white sturgeon fishery was evident by the large number of anglers participating. The catch and effort data collected confirmed the potential exists for future sturgeon harvest opportunities in the LWR during the late spring timeframe within the limited harvest guideline.
- 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.

#### *Select Area Commercial Fisheries*

- Combined Select Area winter-season landings through March 19 total 132 Chinook and 54 white sturgeon.

- Winter season fishing periods (with restricted area and time) are scheduled to continue in Oregon Select Area sites through April 15, and spring fisheries open April 19.
- Ex-vessel price for Chinook has declined since the onset of the winter season but is still averaging \$15.94 /pound. White sturgeon prices remain stable averaging \$3.23/pound.
- Through March 19, 62% of the landed spring Chinook have been sampled for visual stock identification with 93.9% being classified as lower-river origin. Approximately eight upriver spring Chinook have been landed to date.
- Given the low interception rate for upriver spring Chinook and high fish value, commercial fishers have requested a modest expansion of fishing area and time.
- Staff believes additional fishing time can be provided in these sites without exceeding expectations of upriver impacts for the winter or spring seasons.

***Recommendation: 2021 Select Area Commercial Fisheries***

**Youngs Bay (Zone 70)**

**Modify** the area for the previously adopted periods for Upper Youngs Bay as follows:

Youngs Bay (entire)

4:30 PM to 8:30 PM Thursday March 25 (4 hours)

7 PM to 11 PM Monday March 29 (4 hours)

**Tongue Point (Zone 71)**

**Adopt** the following fishing periods for Tongue Point as follows:

5:30 PM to 9:30 PM Thursday March 25 (4 hours)

8:00 PM to 12:00 AM (midnight) Monday March 29 (4 hours)

**South Channel (Zone 71)**

**Modify** the hours for the previously adopted fishing periods for South Channel as follows:

8:00 PM to 12:00 AM (midnight) Monday March 29 (4 hours)

**Knappa Slough (Zone 73)**

**Modify** the hours for the previously adopted fishing periods for Knappa Slough as follows:

7 PM Monday March 29 to 7 AM Tuesday March 30 (1 night)

7 PM Thursday April 1 to 7 AM Friday April 2 (1 night)

All other previously adopted regulations for these sites remain in effect.

- The recommendation expands the fishing area for two periods in Youngs Bay, adds two periods in Tongue Point, modifies the hours in South Channel (for concurrency with Tongue Point) and expands the hours in Knappa Slough.

## **FUTURE MEETINGS**

- A Compact hearing may be needed on Tuesday March 30 to consider Select Area commercial fisheries. The Joint Staff will monitor fisheries and recommend additional hearings as needed.