

OREGON AND WASHINGTON DEPARTMENTS OF FISH AND WILDLIFE
JOINT STAFF REPORT - WINTER FACT SHEET NO. 8
Columbia River Compact/Joint State Hearing
March 30, 2022

<i>Fisheries under consideration:</i>	Estuary recreational white sturgeon
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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 report relevant to these fisheries is the 2022 Sturgeon/Smelt Report (January 14, 2022) available at:

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

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 legal-size fish was likely inflated due to reduced tag recovery efforts because of the COVID-19 pandemic, resulting in only four recaptures and a less precise abundance estimate than usual. In 2021, the legal-size abundance was estimated at 122,395 legal-size fish (95% CI: 66,322–181,468). CPUE for legal-sized fish was consistent with mark-recapture estimates and data indicate a decreasing trend in legal-size abundance since 2016.
- Abundance metrics for other size groups of white sturgeon in the LCR remain mixed. The 2019–2021 running average of adult-sized fish (≥ 167 cm FL) is 11,064 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 third consecutive year (52% in 2019, 53% in 2020, and 56% in 2021), indicating population productivity and recruitment issues.
- Additionally, the elevated water temperatures that resulted from the heatwave in June 2021 may have had an impact on sturgeon spawning success and hatchling survival.

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 the fishery be managed with a precautionary approach due to uncertainties in population parameters.

2022 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 2017–2022.
- In 2021, short-duration sturgeon retention fisheries were opened in the mainstem Columbia and Willamette rivers. The 2021 sport fishery and harvest guidelines were planned similarly to the 2017–2020 fisheries, targeting a 3.5–4.5% harvest rate.
- In the Estuary (below Wauna), the fishery was open for 13 days (May 10–June 12). Anglers harvested 2,549 fish from approximately 19,100 angler trips, accounting for 86% of the recreational estuary fishery guideline. Upstream of Wauna to Bonneville Dam (including the Cowlitz River), the fishery was open for six retention days (September 11–29). During this fishery, anglers harvested 885 fish from approximately 10,500 angler trips, accounting for 72% of the above Wauna recreational guideline. In the Willamette River, Oregon opened a two-day fishery (June 12 and 19). Anglers harvested 87 white sturgeon from about 2,800 trips in this fishery.
- In 2021, anglers made 31,227 total trips on the lower Columbia River, including trips for catch-and-release angling, and the total harvest on the lower Columbia and tributaries below Bonneville Dam in 2021 was 3,521 white sturgeon, or 71% of the combined 4,930 fish recreational guideline.
- Earlier this year, staff provided updates on the LCR white sturgeon status to each state's Commission and the Columbia River Fishery Advisor groups. Commissioners and advisors expressed some conservation concerns about population metrics; however, sturgeon retention fisheries in 2022 were supported if prosecuted similar to recent years. While data supports the conclusion that the population is sufficiently robust to support limited harvest at this time, it will be difficult to prosecute retention fisheries in the future if the legal-size abundance continues to decline.

- To maintain a cautious approach, staff assumed the following when initially modeling 2022 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 2022 abundance projection of 100,014 fish (38–54 inch FL), a total of 4,000 white sturgeon (44–50 inch FL) would be available for harvest downstream of Bonneville Dam.

Estimated Legal Abundance	100,014
Annual Harvest Guideline	4,000
Commercial (20%)	800
Recreational (80%)	3,200
Estuary	1,920
Above Wauna	800
Lower Willamette River	480

Below Wauna Powerlines (Estuary)

- Given the limited harvest guideline, desire for a somewhat protracted fishery, and expected high effort (based on 2017–2019 and 2021 observations), staff modeling assumptions for the 2022 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 most recent three years of Estuary retention fisheries provided informative data for designing the 2022 fishery; however, modeling this fishery continues to remain challenging due to variability in effort between years and the high rate of increase in catch rates in June. Staff believes the following fishery proposal represents a reasonable approach for 2022.

<i>Recommendation - 2022 Sturgeon Recreational Fishery for Below Wauna Powerlines</i>	
Season:	Wednesdays and Saturdays, May 11 through June 4 plus Monday, May 30 9 days
Area:	Mainstem Columbia River from the Wauna powerlines downstream to the mouth at Buoy 10, including Youngs Bay, and all adjacent Washington tributaries
Allowable Catch:	Up to 1,920 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
Additional Regulations:	On days open to white sturgeon retention, angling for sturgeon is prohibited after 2 PM, including catch and release.

- The proposed fishery was designed as a balanced approach to improve fishing opportunity on days open for retention while maximizing the total number of days available for retention fishing. The recommended fishery starts the first Wednesday after Mother’s Day, is open two days per week, and includes an extra day of retention on the Memorial Day holiday. This balanced fishery proposal includes harvest opportunity during four weekend days, four weekdays, and one weekday holiday. Reducing the number of open days in May allowed for one weekend day in June under this scenario. The expected catch for this fishery is 1,725 fish (90% of the guideline).
- 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.
- Staff considered a three-day-per week option similar to previous years. However, due to the lower harvest guideline and the higher catch rates observed in June, this modeling scenario did not provide any open weekend days in June.
- Per permanent regulations, catch and release fishing is allowed all year (except as noted in Additional Regulations).
- Free fishing weekends are scheduled for June 4-5 in Oregon and June 11-12 in Washington.

Above Wauna Powerlines

- A sturgeon retention season for the Above Wauna section of the Columbia River will be considered later this year.
- Generally, catch rates in this river section are better during the spring and late fall months. Columbia River recreational advisors supported a season structure similar to recent years.
- 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 2021, ODFW allowed for harvest of white sturgeon in the lower Willamette River for the second 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.
- Despite the low overall catch, the popularity of the 2020 and 2021 Willamette River sturgeon fisheries 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 lower Willamette River 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.

FUTURE MEETINGS

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