

Lower Columbia River Sturgeon Population Status
and Management Annual Review
(Briefing)

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Fish and Wildlife Commission Presentation Summary Sheet

Meeting date:

1/29/2021

Agenda item:

Lower Columbia River Sturgeon Population Status and Management Annual Review (Briefing)

Presenter(s):

Laura Heironimus, CRMU Sturgeon, Smelt, Lamprey Lead

Background summary:

The purpose of the Lower Columbia Sturgeon Management Policy (C-3001) “is to provide guidelines for management of the Lower Columbia River white sturgeon population and fisheries” and the intent “to provide consistent management guidelines that promote a healthy population and provide sustainable fisheries.”

The Commission has adopted a precautionary approach to management based on uncertainties around several factors affecting the population. The policy calls for an annual review for the Commission, as an essential component of this precautionary approach, to include updated information on stock status, available information on pinniped predation, review of in-season management actions, summary of catch data (including handling of sturgeon in non-target fisheries, when available), recommended management changes, and other pertinent information.

Detailed information regarding stock status, predation, harvest, and by-catch is summarized in Attachment 1: “Lower Columbia River White Sturgeon – Stock Assessment and Fishery Management – 2020 Update”

Stock Status

Since 2010, setlines have been used to capture and tag sturgeon and, based on the number of recaptured tagged sturgeon, population estimates were calculated using the Petersen mark-recapture model. The Petersen model estimates the abundance of fish greater than 22 inches fork length based on the setline catch rates and gear vulnerability, both of which vary with fork length. Based on this approach, abundance of legal-size fish declined from 2006 through 2012, but increased annually from a low of 72,700 fish in 2012 to 223,960 fish in 2016. The projected abundance for 2020, based on the 2019 stock assessment model, was 148,787 legal-size fish.

In 2020, stock assessment sampling was limited as a result of the Covid-19 safety protocols. The sampling limitations impacted the quantity of data collected and the model produced higher uncertainty in abundance estimates (i.e., wider confidence intervals than previous years). Using data collected during the 2020 stock assessment, the legal-size abundance was estimated at 199,500 legal-size fish

(95% CI: 40,888-358,806) in 2020. However, the CPUE for legal-sized fish was not consistent with mark-recapture estimates and indicated a lower legal abundance, more in line with the predicted abundance from the previous year's model.

The estimated number of adult White Sturgeon, fish larger than 66 inches FL, has generally trended upwards from an estimated 3,040 fish (95% CI: 1,810-4,268) in 2015 to approximately 14,500 fish (95% CI: 2,971-26,022) in 2020. This is a particularly difficult metric to monitor since sturgeon over 66 inch FL are not easily caught with stock assessment gear. This means that only a few fish are handled annually and a single fish can make a large difference in the point estimate for a given year. The three-year average adult abundance is used to better assess increases or decreases in abundance trends through time. The three-year average adult abundance continued to increase from 6,500 in 2017 to 10,850 in 2020. In 2016, this estimate moved the adult status above the conservation threshold specified in Oregon's Lower Columbia River and Oregon Coast White Sturgeon Conservation Plan. The adult abundance status has remained above the desired level for two consecutive years.

The continued low relative abundance of juvenile sturgeon indicates that there may still be prolonged productivity issues within the system. In recent years, Oregon Department of Fish and Wildlife funded an annual sub-yearling production index in the mainstem Columbia River (2004-2019) and the Willamette River (2010-2019) using Dingell-Johnson Sportfish Restoration funds; however, due to a reallocation of these funds within ODFW, this work was not funded in 2020.

Pinniped Predation

Steller sea lion predation of White Sturgeon began around the mid-2000's in the gorge below Bonneville Dam. Numbers of Steller sea lions present in the tailrace immediately below the dam remain at high levels. Observed consumption of White Sturgeon at Bonneville Dam during the past seven years has decreased annually, to less than 5% of the peak level reached 2011, indicating few sturgeon remain in the area when sea lions are present. The predation estimates are provided by the Corps of Engineers, who observe the mile-long stretch of river below Bonneville Dam. Predation throughout the remaining 145 miles of the lower Columbia River and in tributaries of the river are unknown at this time.

Although observed predation at Bonneville Dam has decreased, White Sturgeon recruitment in the lower mainstem Columbia river still appears to be negatively impacted by the abundance of pinnipeds in the Bonneville Dam tailrace in the spring. A significant negative correlation exists between White Sturgeon catch-per-net and observed Stellar Sea Lion abundance in the Bonneville Dam tailrace. This indicates that abundance of Stellar Sea Lions is a significant predictor of weak White Sturgeon recruitment. This may indicate that the observations of predation at Bonneville are incomplete (unknown levels of predation elsewhere in the river), that the presence of adult sturgeon by pinnipeds is affecting spawning success (increased stress has been shown to induce resorption of eggs), or that adult sturgeon are selecting less optimal spawning habitat to avoid pinniped predation.

In-season Management/Harvest

Sport Fisheries

In 2020, a short-duration retention sturgeon fishery opened upstream of Wauna to Bonneville Dam for the fourth time since 2013 and in the Willamette River for the first time since 2013. The 2020 sport fishery and harvest guidelines were planned similarly to the 2017–2019 fisheries, targeting a 3.5-4.5% harvest rate. There were positive responses from anglers that participated in the fishery. While participation was still lower than pre-closure levels, overall angler trips (both retention and catch-and-release) increased when compared to the catch-and-release only seasons.

In the Estuary (below Wauna), no retention fishery was set in 2020. In the Estuary catch-and-release

fisheries, monitored only during other open sport fishing seasons, sport anglers handled 2,022 White Sturgeon and 0 Green Sturgeon in approximately 832 angler trips. Upstream of Wauna to Bonneville Dam, the fishery was open for five retention days (September 12–October 3) with a 1,140 fish guideline and a 44–50" FL harvestable size slot limit. During this fishery, sport anglers harvested 857 fish from approximately 9,094 angler trips, accounting for 75% of the Wauna-to-Bonneville sport fishing guideline, and released an additional 3,487 White Sturgeon and 0 Green Sturgeon. Additionally, in the Wauna-to-Bonneville catch-and-release fisheries, monitored only during other open sport fishing seasons, sport anglers handled 3,575 White Sturgeon and 0 Green Sturgeon in approximately 2,173 angler trips.

The 2020 white sturgeon sport fisheries had a total guideline of 4,580 fish and a total catch of 1,024 fish. This catch accounts for 22% of the overall sport fishing guideline (including the Willamette River, which did open for 2 days of retention) and 22% of the Lower Columbia sport fishing guideline (including the Columbia River Estuary (below Wauna) which did not open for retention, and the Columbia River from Wauna to Bonneville Dam, which opened for 5 days of retention).

Commercial Fisheries

The retention of sturgeon in commercial fisheries was opened again in 2020, for the fourth time since 2013. In the mainstem, commercial fisheries brought 406 White Sturgeon to market in early-fall and an additional 161 White Sturgeon in late-fall, for a total of 567 fish, or 50% of the commercial harvest guideline. In the select area, commercial fisheries brought 217 White Sturgeon to market in winter fisheries, 219 White Sturgeon in spring fisheries, and 111 White Sturgeon in summer fisheries, for a total of 547 fish, or 48% of the commercial harvest guideline. In total, the commercial fisheries brought 1,114 White Sturgeon to markets in 2020, accounting for 98% of the 1,140 fish commercial guideline.

Sturgeon harvest in areas outside of the lower Columbia River

Since 2014, retention of White Sturgeon has been prohibited in recreational and non-Indian commercial fisheries on the Oregon and Washington coasts, Puget Sound, and their tributaries. This continued through 2020.

By-Catch

The 2020 commercial fisheries were monitored at a minimal level by WDFW staff. Total sturgeon bycatch in 2020 is unknown.

During the recreational sturgeon fishery, an estimated 9,084 white sturgeon (5,239 sublegal-size, 1,558 legal-size, and 2,287 over legal-size) and 0 green sturgeon were caught and released. This represents 1.5% of the estimated 587,806 fish greater than 54 cm FL.

Staff recommendation:

Staff will work with Oregon Department of Fish and Wildlife to develop another short-duration sport retention fishery, similar to the fisheries of 2017-2020.

Policy issue(s) and expected outcome:

Briefing only. The current policy, C-3001 (Attachment 2), was adopted January 25, 2018.

Fiscal impacts of agency implementation:

A 2021 sport retention fishery, similar to recent years, would require WDFW to sample the fishery. Impacts to the agency would include employee time and salary for fish management staff and enforcement officers. The amount of fiscal impact would be affected by the length of time a fishery is

open, the time-period in which it is open (i.e., weekday, weekend, or holiday), and the intensity of the fishery (how many anglers are present).

Public involvement process used and what you learned:

Staff met with the Columbia River Recreational and Commercial advisor groups on January 13, 2021, and provided updates on the status of the Lower Columbia River White Sturgeon population. Both groups expressed some concern over the conservation status of the juvenile proportion of the population. Both groups also generally supported another retention fishery in 2021. One recreational advisor did not support a retention fishery citing conservation concerns.

Action requested and/or proposed next steps:

Briefing only.

Draft motion language:

N/A

Post decision communications plan:

N/A

Form revised 8-4-20





Lower Columbia River White Sturgeon Stock Assessment and Fishery Management 2020 Update

Summary Prepared by

**Joint Columbia River Management Staff
*Washington Department of Fish and Wildlife
Oregon Department of Fish and Wildlife***

January 13, 2020

Table 1. Dashboard of key status indicators for lower Columbia River white sturgeon, 2020. Colored circles indicate status relative to Conservation Plan metrics and/or recent trend.

Metric	N	Interpretation	Brief Summary
Abundance Trends 38" – 54" FL	199,500		Increased abundance from 2019; however, COVID-19 related sampling issues resulted in increased variability in estimates.
Adult (>66" FL)	2020: 14,500 3-yr avg.: 10,844		2020 3-yr adult abundance average is above minimum desired status level (threshold = 9,250 adults). Variability issues exist in these estimates as well.
Population Structure	~53% juvenile		Low relative abundance of juvenile and sub-legal sized fish indicates population productivity issues; Below conservation status level (threshold = 60%)
Recruitment Index (CPN)	NA		Reductions in Sport Fish Restoration funding have reduced our capacity to conduct this work.
Fisheries	Total: 17,190 angler trips		Participation still down from pre-closure levels, but interest in retention fishing opportunity remains. No Estuary fishery in 2020.

Abundance and CPUE Trends

Table 2. Estimated and projected abundance of 38–54 inch FL (96–137 cm) white sturgeon in the LCR from 2008–2020 based on mark-recapture surveys. Historic method is the number of fish present at the start of July (2008–2009) or May (2010–2012), while the setline method is the number of fish present at the start of the year. Preliminary estimates are italicized.

Year	Historic method estimate	Setline method		Harvest guideline
		Estimate (95% C.I.)	Projection	
2008	101,200	--	--	40,000
2009	95,000	--	--	40,000
2010	65,300	100,300	--	24,000
2011	72,800	80,600	77,000	17,000
2012	83,400	72,700	65,000	10,400
2013	--	113,900	74,300	10,105
2014	--	131,000 (75,500 – 186,480)	131,700	--
2015	--	143,900 (85,700 – 202,100)	138,200	--
2016	--	224,000 (118,300 – 329,600)	147,100	--
2017	--	199,800 (69,900 – 329,700)	237,900	6,235
2018	--	162,200 (93,400 – 230,950)	198,300	6,160
2019	--	168,200 (100,100-236,300)	<i>164,100</i>	6,160
2020	--	199,500 (40,100-358,100)	<i>148,800</i>	5,720
2021			<i>206,100</i>	TBD

¹ Projected abundance is based on the previous year's setline estimate. Projections do not include harvest.

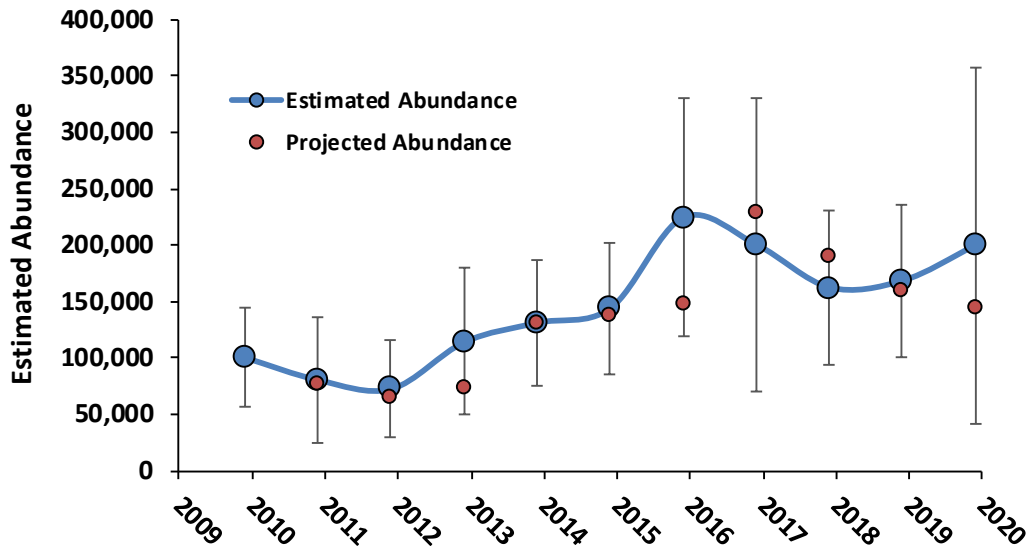


Figure 1. Estimated and projected abundance for 96–137 cm FL white sturgeon from the LCR, 2010–2020. Error bars represent 95% CIs for the estimated abundance.

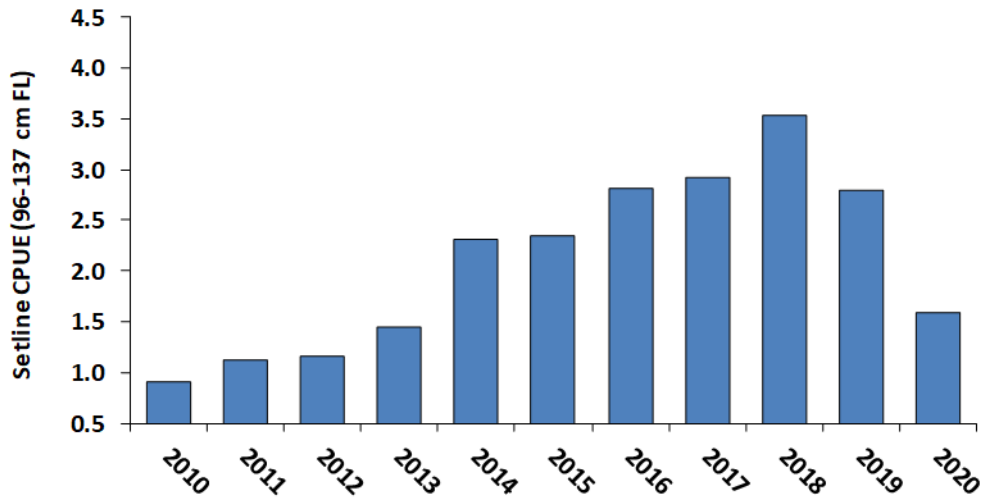


Figure 2. CPUE of 96–137 cm FL white sturgeon caught with setlines in the LCR, 2010–2020.

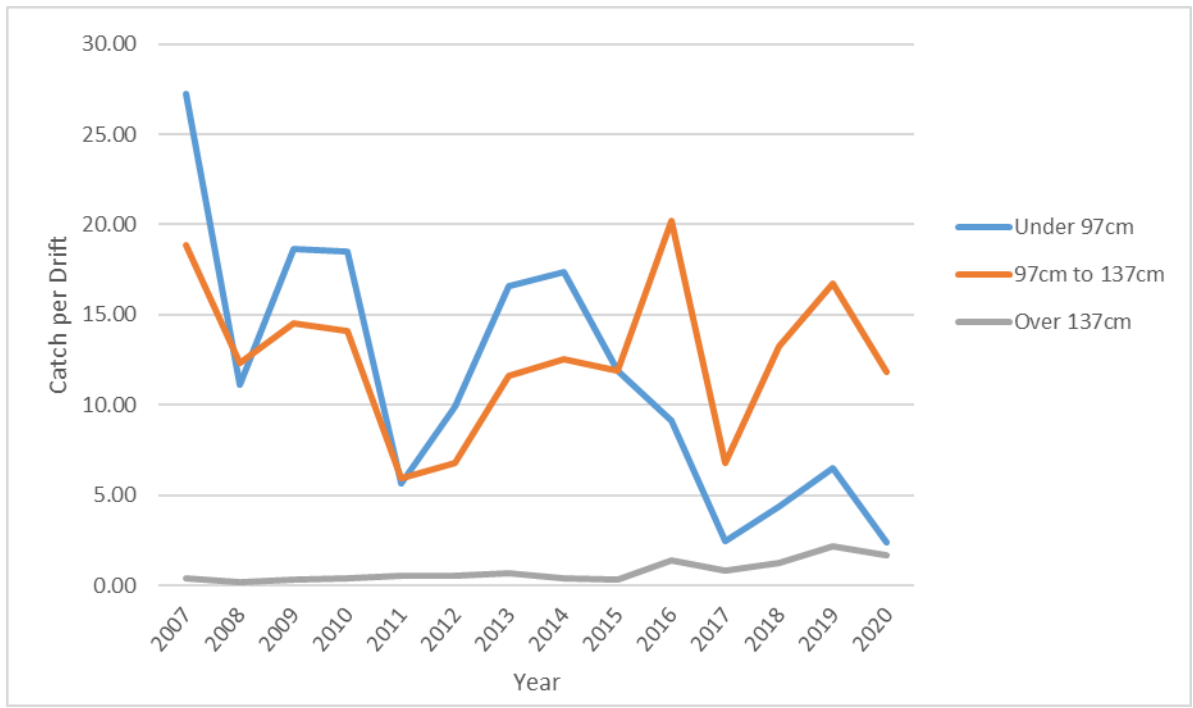


Figure 3. CPUE (catch per contract tagging gillnet drift) by size class for white sturgeon sampled in the Columbia River estuary, 2007-2020.

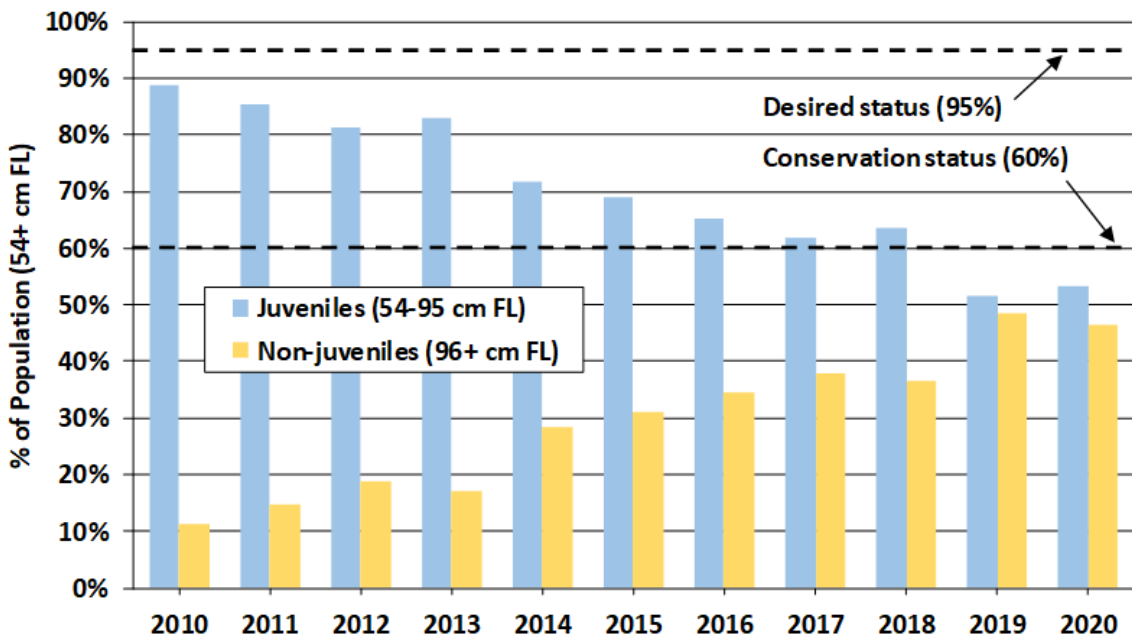


Figure 4. Annual proportion of juvenile and non-juvenile (sub-adults + adults) white sturgeon in the lower Columbia River, 2010–2020. Dashed horizontal line represents conservation status and desired status for juvenile white sturgeon.

Adult Abundance and CPUE Trends

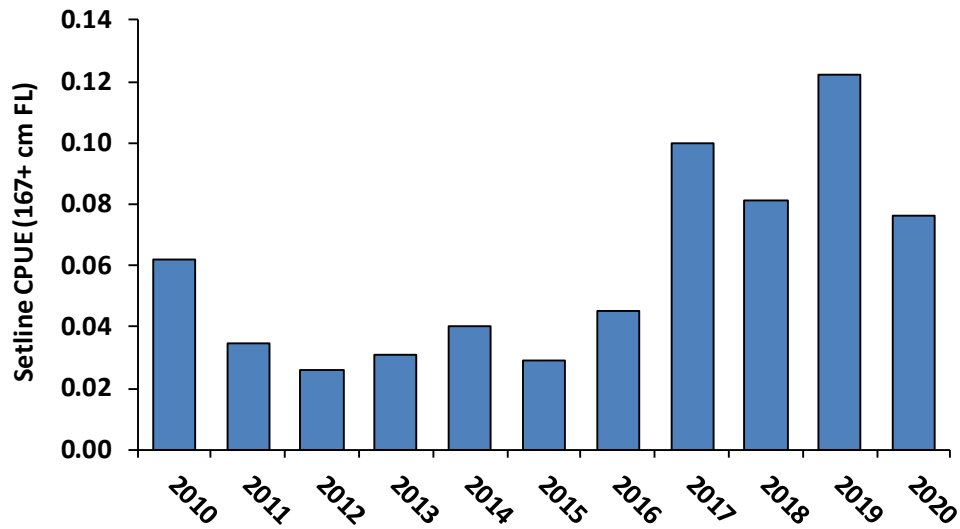


Figure 5. Setline CPUE of adult (≥ 167 cm FL or ~ 6 feet TL) white sturgeon in the LCR, 2010-2020.

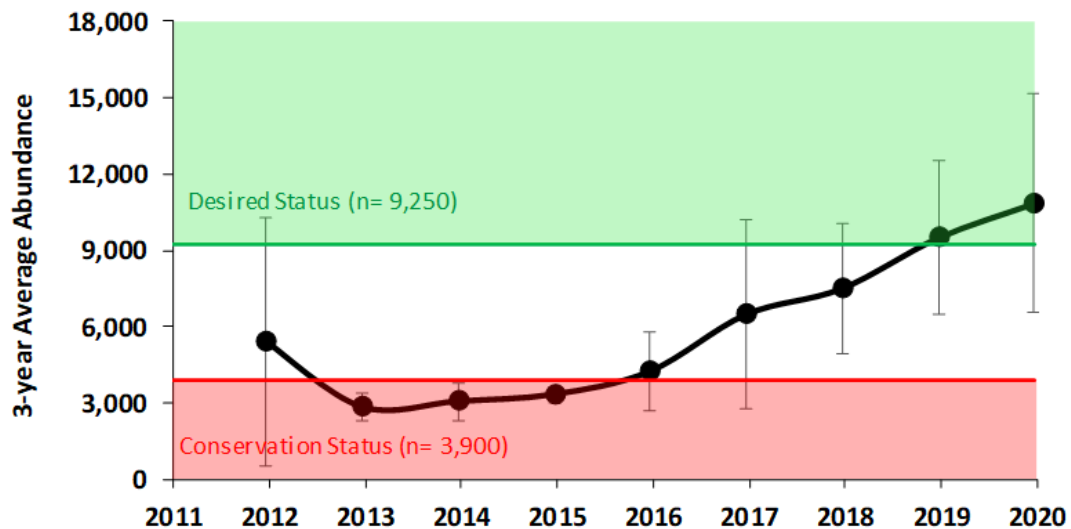


Figure 6. Three-year average estimated abundance for adult (≥ 167 cm FL) white sturgeon from the LCR, 2012–2020. Less than 3 years of data were available for 2010 and 2011 so no averages were calculated. Error bars are ± 1 standard deviation from the mean abundance estimate.

Length Frequency Trend

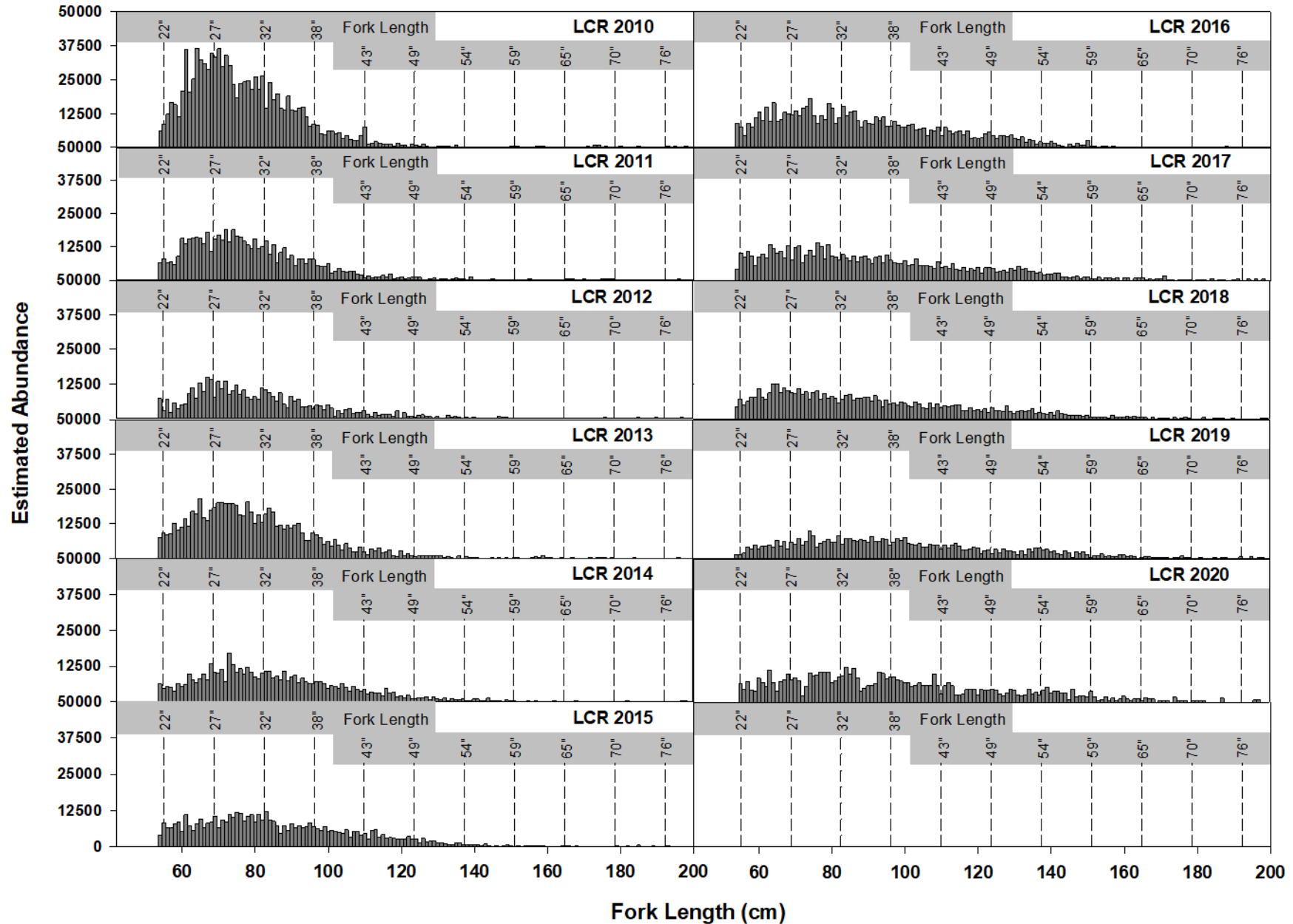
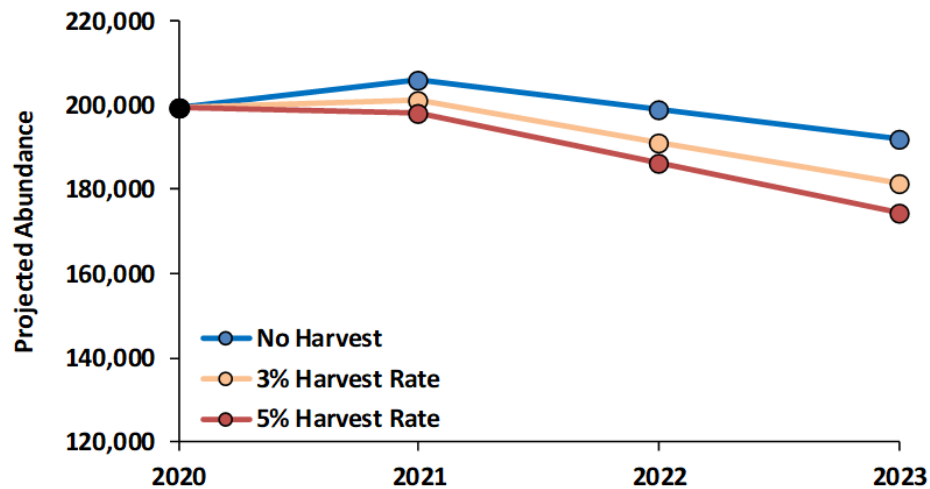


Figure 7. Estimated abundance of white sturgeon ≥ 54 cm FL in the LCR, 2010-2020.

Legal-size Abundance Forecasts

Figure 8 and Table 3. Projected abundance of 96–137cm FL white sturgeon in the LCR under various harvest rate scenarios.



Year	No Harvest	3% Harvest Rate	5% Harvest Rate
2020	199,487	199,487	199,487
2021	206,096	201,434	198,390
2022	198,933	191,292	186,417
2023	192,180	181,288	174,485

Sub-yearling (Age-0) Production

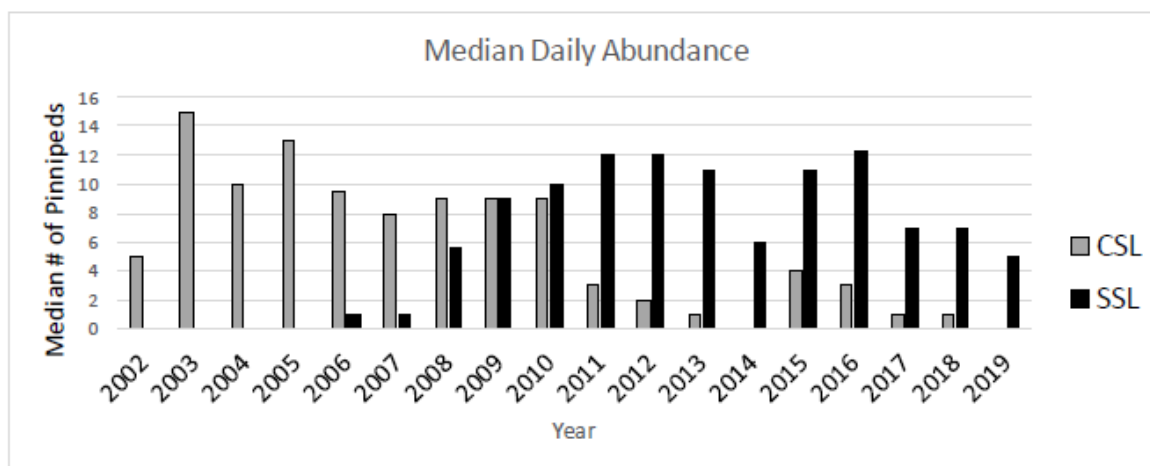
Table 4. CPN and proportion of positive sets (Ep) for YOY white sturgeon in the lower Columbia and Willamette rivers, 2004 - 2020.

Year	Lower Columbia River		Willamette River	
	CPUE	Ep	CPUE	Ep
2004	1.29	0.44	--	--
2005	1.74	0.49	--	--
2006	1.88	0.52	--	--
2007 ¹	--	--	--	--
2008	1.23	0.45	--	--
2009	5.66	0.78	--	--
2010	0.19	0.18	0.43	0.24
2011	0.58	0.34	0.06	0.06
2012	0.77	0.35	0.25	0.22
2013 ²	0.21	0.12	--	--
2014	0.56	0.31	1.38	0.38
2015	0.06	0.05	0.58	0.26
2016	0.20	0.14	0.75	0.50
2017	1.64	0.58	1.75	0.50
2018	0.43	0.27	3.96	0.83
2019	0.30	0.19	1.13	0.58
2020 ¹	--	--	--	--

¹ No sampling conducted.

² Incomplete sampling in Willamette River.

Appendix Predation and Harvest Data



Appendix Figure 1. Abundance of California sea lions (CSL) and Steller sea lions (SSL) present at Bonneville Dam between January and the end of May 2002–2019. Figure from U.S. Army Corps of Engineers (USACE) 2019 report.

Appendix Table 1. Consumption of white sturgeon by CSL and SSL observed during USACE spring monitoring of the Bonneville Dam tailrace, 2005-2019. Adjusted estimates include a proportion of the total unidentified catch.

Year	Total hours observed	Observed sturgeon catch	Sturgeon catch per hour observed	Adjusted sturgeon catch estimate
2005	1,109	1	0.001	--
2006	3,650	265	0.073	413
2007	4,433	360	0.081	664
2008	5,131	606	0.118	1,139
2009	3,455	758	0.219	1,710
2010	3,609	1,100	0.305	2,172
2011	3,315	1,353	0.408	3,003
2012	3,404	1,342	0.394	2,498
2013	3,247	314	0.097	635
2014	2,947	79	0.027	146
2015	2,995	24	0.008	44
2016	1,974	30	0.015	90
2017	1,142	6	0.005	24
2018	1,410	46	0.033	148
2019	836	22	0.026	187

Appendix Table 2. Annual recreational white sturgeon catch and harvest guidelines in the lower Columbia River, 1994–2020¹.

Year	Below Wauna ¹		Above Wauna		Combined	
	Catch	Guideline ²	Catch	Guideline ³	Catch	Guideline
1994	15,578	N/A	17,893	N/A	33,471	
1995	29,714	N/A	15,423	N/A	45,137	
1996	27,694	N/A	15,068	N/A	42,762	
1997	24,511	N/A	13,646	N/A	38,157	53,840
1998	30,303	N/A	11,293	N/A	41,596	53,840
1999	29,238	N/A	10,561	N/A	39,799	40,000
2000	24,267	N/A	16,238	N/A	40,505	40,000
2001	21,619	N/A	19,597	N/A	41,216	39,500
2002	26,234	N/A	12,045	N/A	38,279	38,300
2003	18,367	19,200	13,565	12,800	31,932	32,000
2004	15,050	16,000	10,519	12,800	25,569	28,800
2005	17,911	17,783	11,891	11,560	29,802	29,343
2006	15,726	16,000	8,545	12,800	24,271	28,800
2007	19,131	16,274	10,675	13,852	29,806	30,126
2008	13,614	13,143	7,959	12,387	21,573	25,530
2009	13,109	15,529	4,599	11,430	17,708	26,959
2010	6,491	9,600	4,831	4,835	11,322	14,435
2011	6,117	6,800	2,908	3,410	9,025	10,210
2012	4,466	4,160	1,859	2,080	6,325	6,240
2013	4,559	4,042	1,942	2,021	6,501	6,063
2014 ⁴	0	0	0	0	0	0
2015 ⁴	0	0	0	0	0	0
2016 ⁴	0	0	0	0	0	0
2017	3,235	3,000	430	1,245	3,665	4,245
2018	2,412	2,960	1,049	1,230	3,461	4,190
2019	2,838	2,960	685	1,230	3,523	4,190
2020 ⁵	0	2,750	843	1,140	843	3,890

¹ Recreational catch estimates for 1993-2002 are above and below the western tip of Puget Island (RM 38).

² The switch to a 45-inch min. (TL) size limit in 2004 required a 17% reduction in the base guideline.

³ Actual in-season guidelines were different than represented here. Beginning in 2010, the guideline for the area above Wauna does not include the Willamette guideline.

⁴ No sturgeon retention allowed during 2014-2016.

⁵ Preliminary.

Appendix Table 3. Annual recreational white sturgeon catch and harvest guidelines in the lower Willamette River, 2003–2020.

Year	Estimated annual kept catch ¹	Baseline ²	Catch in excess of baseline ³	Guideline ³	Percent of Guideline
2003	1,142	1,225	0	N/A	
2004	4,099	1,225	2,874	N/A	
2005	2,327	1,225	1,102	N/A	
2006	3,348	1,225	2,123	N/A	
2007	6,555	1,225	5,330	N/A	
2008	9,148	1,225	7,923	N/A	
2009	7,346	1,225	6,121	N/A	
2010	3,529	735	2,794	2,865	98%
2011	2,690	520	2,170	2,030	107%
2012	1,535	520	1,015	1,248	81%
2013	1,410	520	890	1,213	73%
2014-16 ⁴	0	0	0	0	N/A
2017 ⁵	0	0	0	745	0%
2018 ⁵	0	0	0	740	0%
2019 ⁵	0	0	0	740	0%
2020	167	0	0	690	24%

¹ Harvest estimates revised November 2011 based on updated punch card and existing creel information.

² Baseline harvest levels for the lower Willamette River were based on average harvest during 1986-1996 (1,225 fish). The lower Willamette River baseline decreased to 735 fish in 2010 and 520 fish in 2011 consistent with declining illegal abundance estimates. The baseline was eliminated in 2017.

³ During 2003-2009, harvest in excess of the baseline was applied to the above Wauna recreational harvest guideline. Beginning in 2010, a separate harvest guideline was established for the lower Willamette River.

⁴ No sturgeon retention allowed during 2014-2016.

⁵ The 2017-2019 allocations were 745, 740, and 740 fish respectively, but no retention fisheries occurred.

Appendix Table 4. Commercial catch of white sturgeon and harvest guidelines in the LCR, 2000-2020.

Year	Mainstem							Select Area			Grand Total	Guide-line	%
	Winter Sturgeon ¹	Winter Salmon	Summer	Early August	Late August	Late Fall	Total	Spring/Summer	Fall	Total			
2000	2,260			2,490	300	5,130	10,180	540	160	690	10,870	10,000	109%
2001	3,060			4,720	1,020	0	8,800	490	20	510	9,310	9,100	102%
2002	2,720			1,340	380	4,200	8,640	650	330	980	9,620	9,800	98%
2003	1,490	27		2,170	410	3,430	7,527	250	170	420	7,947	8,000	99%
2004	1,696	174	9	1,550	917	3,219	7,565	184	117	301	7,866	8,000	98%
2005	473	70	1,369	1,129	965	3,793	7,799	279	74	353	8,152	8,200	99%
2006	288	1,651	544	1,548	363	3,492	7,886	317	109	426	8,312	8,000	104%
2007	1,424	47	414	2,646	91	2,734	7,356	257	148	405	7,761	7,850	99%
2008	869	17	523	2,706	103	3,170	7,388	337	134	471	7,859	7,927	99%
2009	1,697	21	624	2,213	756	2,001	7,312	311	114	425	7,737	8,000	97%
2010	518	28	289	1,578	297	1,348	4,058	211	116	327	4,385	4,800	91%
2011	50	125	504	967	353	1,187	3,186	201	0	201	3,387	3,400	100%
2012	40	14	281	592	410	344	1,681	225	0	225	1,906	2,080	92%
2013	15	274	326	0	719	324	1,658	254	100	354	2,102	2,021	100%
2014-16	0	0	0	0	0	0	0	0	0	0	0	0	N/A
2017	0	0	0	0	485	239	724	266	237	503	1,227	1,245	99%
2018	0	0	0	0	413	0	413	296	117	413	826	1,230	67%
2019	0	0	0	0	509	0	509	479	212	691	1,200	1,230	98%
2020	0	0	0	0	406	161	567	547	0	547	1,114	1,140	98%

¹ Prior to 2003, values reflect all winter fisheries.

FISH AND WILDLIFE COMMISSION

POLICY DECISION

POLICY TITLE: Lower Columbia
Sturgeon Management

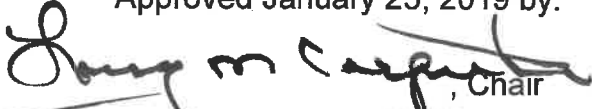
POLICY NUMBER: C-3001

Supersedes: 2014-2018 Lower Columbia
Sturgeon Management C-3001

Effective Date: January 25, 2019
Termination Date:

See Also: Policy C-3608

Approved January 25, 2019 by:


Chair
Washington Fish and Wildlife Commission

Purpose

The purpose of this policy is to provide guidelines for management of the Lower Columbia River White Sturgeon population and fisheries.

Definition and Intent

The Lower Columbia River White Sturgeon population inhabits the waters of the Columbia River and tributaries downstream of Bonneville Dam and migrates into ocean and coastal estuaries. The intent of the policy is to provide consistent management guidelines that promote a healthy population and provide sustainable fisheries.

General Policy Statement

Manage the Lower Columbia River White Sturgeon population with conservation and fishery management objectives that are consistent with a healthy population.

Policy Guidelines

Conservation Objectives:

- Provide regulatory protection to increase the abundance of the spawning population.
- Manage with a precautionary approach due to uncertainties in population parameters.
- Manage for an annual combined sport and commercial harvest of White Sturgeon to provide measurable population growth to achieve the goals of: (1) fully seeded habitats and (2) full representation of each size class within the population.
- Population Monitoring (within available resources):
 - Index young-of-the-year (YOY) to track spawning and recruitment success.
 - Estimate population abundance of all size classes.

- Evaluate methods to improve accuracy of abundance estimates.
 - Monitor sea lion predation for incorporation into stock status evaluations.
- Advocate for Columbia River flow regimes that promote successful spawning, incubation, and early rearing.

Fishery Management Objectives:

- Provide sufficient sturgeon spawning sanctuaries or other protective measures where and when appropriate.
- Quantify impacts of commercial and recreational fisheries on sublegal, legal, and over-size (including spawning adult) abundances.

When Retention Fisheries are Allowed:

- Manage Lower Columbia River sturgeon fisheries through an agreement with Oregon.
- Maintain concurrent Washington and Oregon regulations in the Columbia River.
- Manage fisheries in a manner that considers projected recruitment, with the objectives of increasing abundance of the legal size segment and increasing escapement into the spawning segment of the population. Management should consider all mortality sources, including both recreational and commercial fisheries and pinniped predation.
- Manage fisheries using an 80/20 sport/commercial harvest allocation.
- Strive for viable and diverse recreational and commercial fishing opportunities.
- Develop sport fishery regulations consistent with the following objectives:
 - Stay within approved harvest guidelines.
 - Balance catch between estuary and non-estuary fisheries.
 - Maintain fishery monitoring and management capabilities.
- Develop commercial fishery regulations consistent with the following objectives:
 - Optimize economic value (adjust to market needs).
 - Spread harvest opportunity throughout the year.
- Consideration of fisheries outside the Lower Columbia River must take into account the ability to monitor and manage those fisheries and be consistent with Lower Columbia River sturgeon conservation objectives.
- Maintain prohibition of Green Sturgeon retention until delisting occurs and retention can be re-evaluated.

Annual Review

Given the degree of uncertainty about various population parameters (e.g., recruitment success, pinniped predation, and size-class structure) of the Columbia River White Sturgeon, the Commission is adopting a precautionary approach to management. The Director will provide an annual review of the population status and fisheries for the Commission, as an essential component of this precautionary approach, to include updated information on:

- stock status;
- available information on pinniped predation;

- review of in-season management actions;
- summary of catch data, including handling of sturgeon in non-target fisheries, when available;
- recommended management changes; and
- other pertinent information.

This policy may be updated as part of any Lower Columbia sturgeon stock status review. The Director will provide the Commission a review of this Policy at least every five years.

Delegation of Authority

The Commission delegates the authority to the Director to develop and negotiate Lower Columbia Sturgeon Management Accords with Oregon Department of Fish and Wildlife that are consistent with these policies and objectives. The Director will consult with appropriate recreational and commercial advisory bodies during this process. Additionally, the Commission delegates the authority to the Director, through the Columbia River Compact, to set seasons for recreational and commercial fisheries in the Columbia River, and to adopt permanent and emergency regulations to implement these fisheries. The Director shall work with the Oregon Department of Fish and Wildlife to achieve implementation of this Commission action in a manner that results in concurrent regulations between the two states. The Director shall consult with the Commission Chair if it becomes necessary to deviate from the Commission's policy to achieve concurrent regulations with Oregon.