Lake Roosevelt White Sturgeon Fishery

Rule Making Authority Delegation to the Director

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Presentation Outline

- Why are we asking for rule delegation to the Director
- What has been done to conserve White Sturgeon in Lake Roosevelt
- How did a White Sturgeon fishery get started in Lake Roosevelt
- What is the future of the White Sturgeon fishery in Lake Roosevelt
- Conclusions and proposal for rule delegation







Why delegation for rule making to the Director

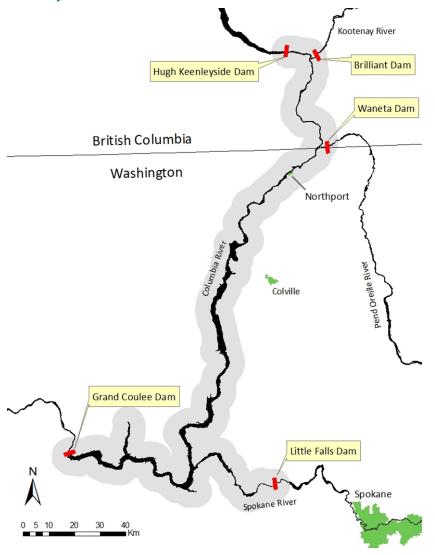
- Recreational and Tribal white sturgeon fishery has been open under emergency rule annually since 2017
- Season dates and slot limits shift to adjust for controlling angler exploitation rates and maximizing harvest of targeted cohorts of white sturgeon
- Director delegation would reduce the number of times staff would need to come before the Commission on this topic.
- Goal is to publish the rule annually in the pamphlet.



Lake Roosevelt and the Columbia River in BC, Canada (Transboundary Reach)



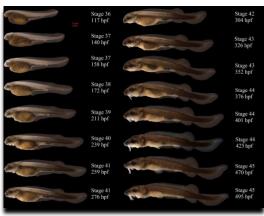






Recruitment Failure and Consequences

- Experiencing chronic recruitment failure since the early 1970's (UCWSRI 2002)
- Aging adult population with very limited recruitment over past 50 years 3400 adult wild fish in 1998
- US (WDFW):
 - Closed Lake Roosevelt harvest fishery – May 1995
 - Closed C&R fishery May 2002
- Canada (DFO): SARA listing – August 2006
- Joint Recovery Plan (2013) goals
 - CA 2000 adults by 2060
 - US 5000 adults by 2080



Border to Lake Roosevelt 1998 40 n = 204 30 20 10 100 120 140 160 180 200 220 240 260 280 Fork length (cm)



Photo Credit: Howell and McLellan 2013

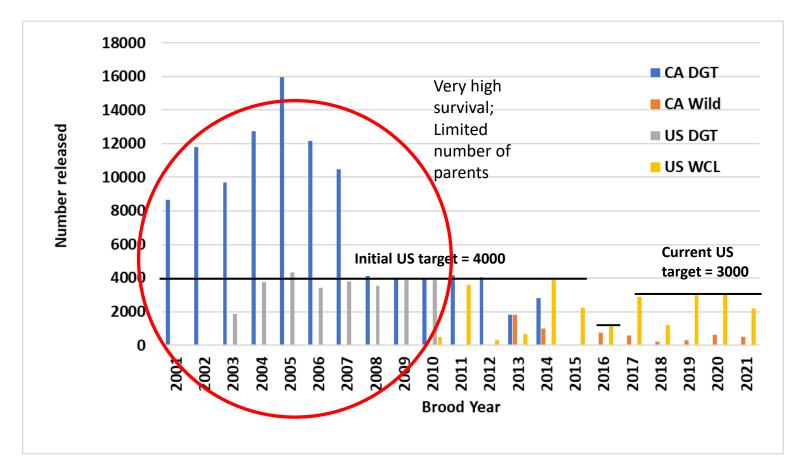
Conservation Aquaculture Program History

- Began in 2001 in BC Direct Gamete Take (DGT)
- US DGT at WDFW Sherman Creek Hatchery 2004-2010
 - Stop-gap measure to prevent extirpation of the population
 - Genetic challenges
- Transition to collection/rearing of Wild Caught Larvae (WCL) in 2011
 - Genetic diversity
 - Increased number of parents represented
 - Broodstock collection no longer necessary





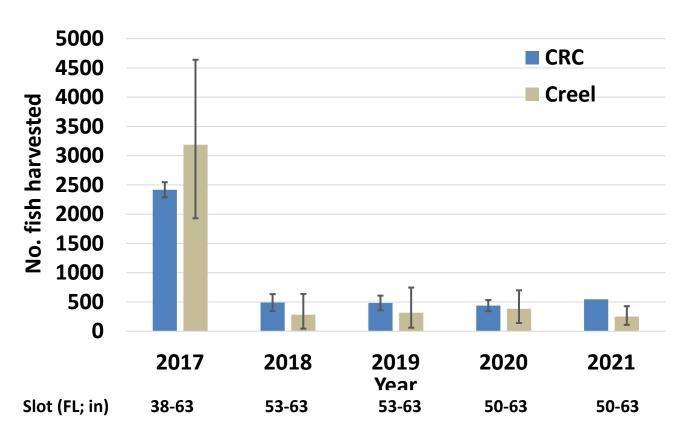
Number of sturgeon released (BY 2001-2021)







FDR sturgeon harvest (2017-2022)



≈5000 DGT sturgeon harvested in sport fishery (2017-2022).



Anticipated slot and fishing seasons (2022-2031) 10 year strategy is focused on harvesting DGT

			Spawning	
V	<u>Harvest</u>	Fishing	Sanctuary	
<u>Year</u>	slot (in)	<u>Season</u>	closure? (Y/N)	<u>Justification</u>
2022	50-63	Jun 15 - Sep 30	Y	No WCL year-classes of concern (2010-2016) were recruited to harvestable size (min 50" FL). Consistent releases of DGT fish from WA and BC at approximately 4000 apiece annually (2004-2010 year-classes) provided harvest opportunity.
2023	53-63	Sep 15 - Nov 30	N/A	WCL year-classes of concern (2010-2016) begin to recruit to the previous harvest slot (min 50" FL) but are < 53" FL. The 2004-2010 DGT year-classes continue to provide harvest opportunity.
2024	53-63	Sep 15 - Nov 30	N/A	WCL year-classes of concern (2010-2016) still predominantly < 53" FL. The 2004-2010 DGT year-classes continue to provide harvest opportunity.
2025	55-63	Sep 15 - Nov 30	N/A	WCL year-classes of concern (2010-2016) likely recruit to the previous harvest slot (min 53" FL) but are predominantly < 55" FL. The 2004-2010 DGT year-classes continue to provide harvest opportunity.
2026	55-63	Sep 15 - Nov 30	N/A	WCL from years of concern (BY's 2010-2016) still predominantly < 55 " FL. The 2004-2010 DGT year-classes continue to provide harvest opportunity.
2027	57-63	Sep 15 - Nov 30	N/A	WCL year-classes of concern (2010-2016) likely recruit to the previous harvest slot (min 55" FL) but are predominantly < 57" FL. The 2004-2010 DGT year-classes continue to provide harvest opportunity.
2028	57-63	Sep 15 - Nov 30	N/A	WCL from years of concern (BY's 2010-2016) still predominantly $<$ 57" FL. The 2004-2010 DGT year-classes continue to provide harvest opportunity.
2029	N/A	Sep 15 - Nov 30	N/A	Catch and Release only. WCL year-classes of concern cannot sustain harvest, and later WCL year-classes have not sufficiently recruited to harvestable size.
2030	N/A	Sep 15 - Nov 30	N/A	Catch and Release only. WCL year-classes of concern cannot sustain harvest, and later WCL year-classes have not sufficiently recruited to harvestable size.
2031	Unknown	Fall	N/A	WCL 2017 year-class > 45" FL on average. Beginning with the 2017 year-class, number and size at release should be sufficient to support harvest. WCL year-classes of concern expected to be predominantly > 52" FL, but slot and season contingent on stock assessment results.



An alternative approach: Wild Larval Collection



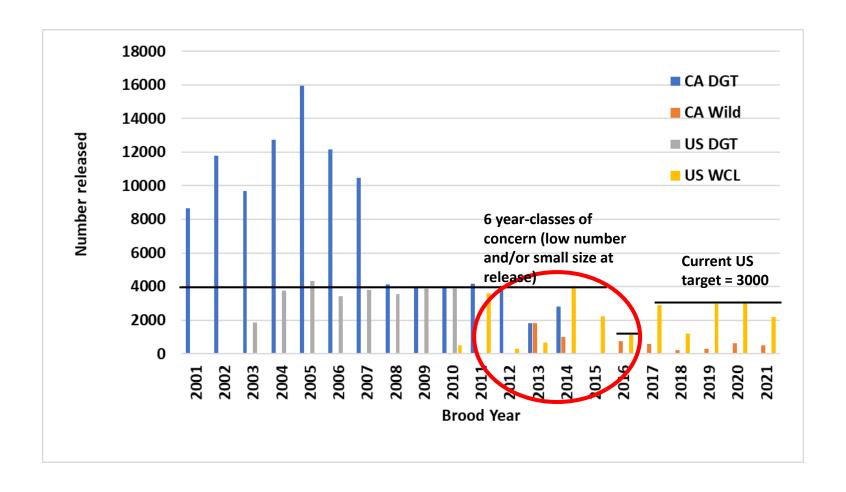








Number of sturgeon released (BY 2001-2021)





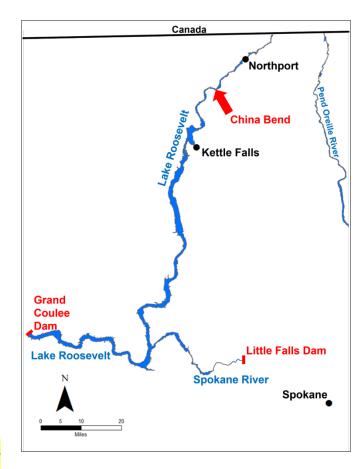
What will the Lake Roosevelt sturgeon fishery look like for the next few years?

- Additional conservation measures to protect WCL year-classes of concern and wild adults beginning in 2023, including:
 - Shortened fishing season.
 - Moving to a fall fishery (mid-Sept end of Nov). Cooler water temperatures = less stress on wild adult fish caught = better survival.
 - Gradual tightening of the slot limit followed by a period of Catch and Release fishing only.
 - May resume harvest in 2031 if the 2017 and later WCL yearclasses are of sufficient size.



Proposed 2023 Lake Roosevelt Sturgeon Regulations

- Sturgeon season: September 16 November 30
- Fish 53-63 inches (Fork Length) can be retained
- Daily limit: 1 fish
- Annual limit (statewide): 2 fish
- No C&R fishing after daily limit has been taken (same day)
- Anglers must cease fishing after the annual limit has been taken
- Catch Record Card required (CRC code 549)
- Closed to night fishing
- Other statewide rules apply
- Open from Grand Coulee Dam to Canadian border





Justification

- The Lake Roosevelt sturgeon fishery has been opened annually since 2017 by emergency regulation.
- Uncertainty in future sturgeon angling and harvest opportunity in Lake Roosevelt over the next 10 years require periodic adjustments to the fishing regulations
- Delegation of rule-making authority to the Director will reduce the administrative workload for the Commission.



Acknowledgments

Spokane Tribe of Indians

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Recreational Anglers

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