



Oregon Fish and Wildlife Commission

12 February 2021

Exhibit D



# Lower Columbia River White Sturgeon Population Status Update

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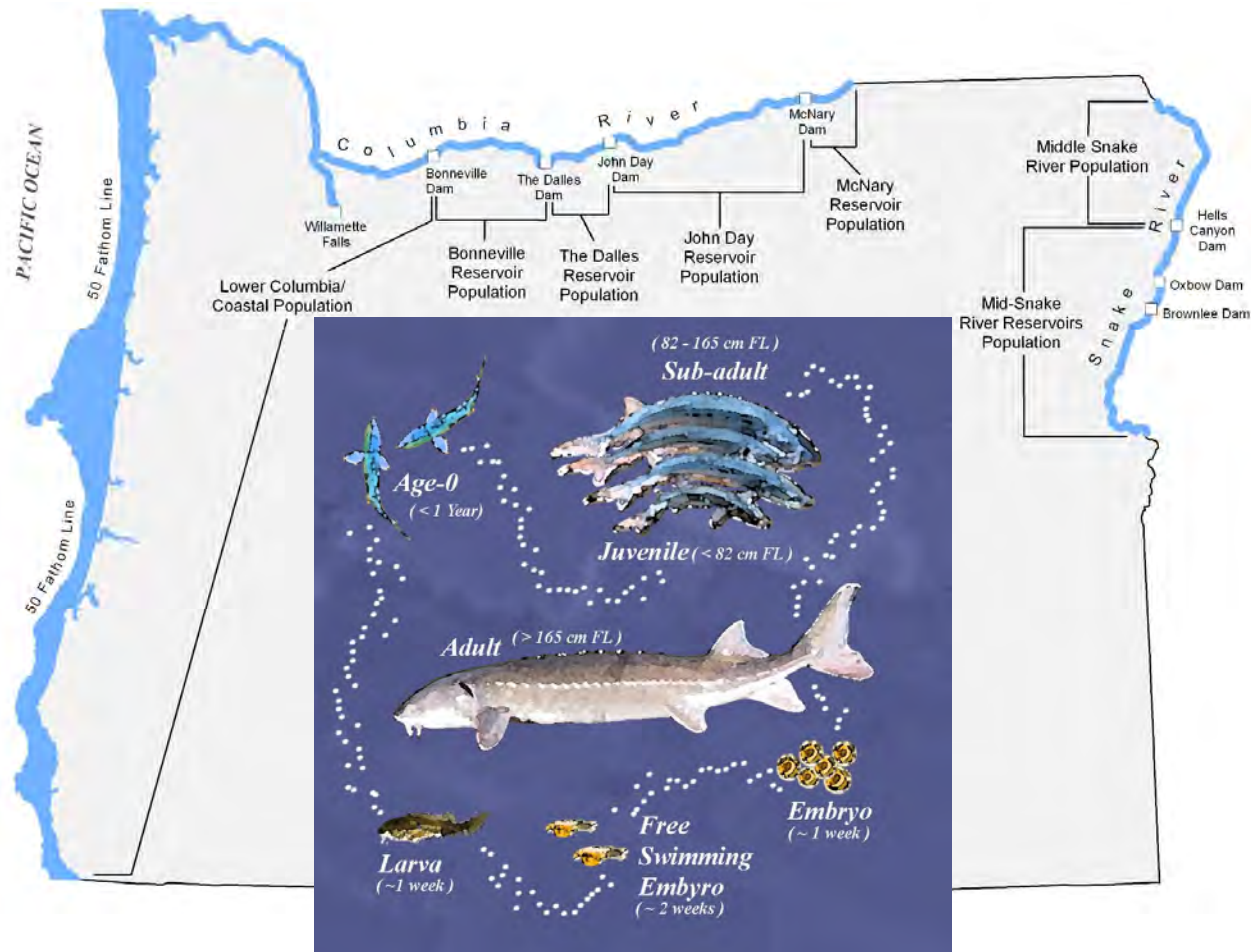


# Today's Topics

- White Sturgeon Background
- 2020 Stock Status and Fisheries
- Pinniped Predation
- 2021 Projections and Management plans



# Sturgeon in Oregon – Distribution and Biology



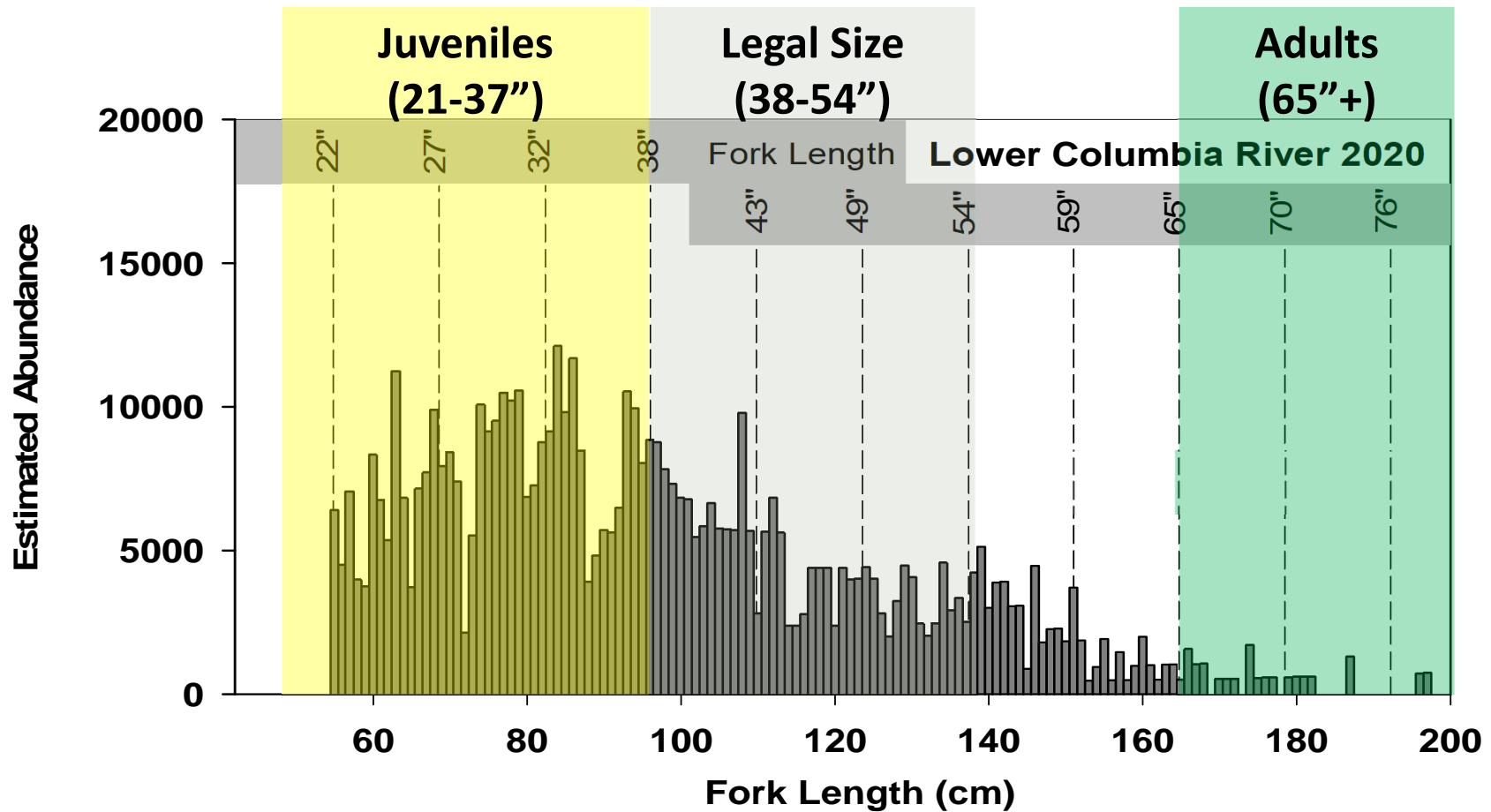
# Sturgeon in Oregon - Past Management



- Between the late 1980s and 2010 LCR sturgeon fisheries managed with exploitation rates in the 20-30% range
- With adoption of Oregon sturgeon conservation plan the rate was reduced to 15%
- Lower Columbia sturgeon population closed to harvest in 2014 due to declining sub-adult and adult population estimates
- A noted increase in sub-legal abundance was detected in 2016 and since 2017 limited retention fisheries have occurred in the lower Columbia River
- However, in recognition of ongoing productivity issues, fisheries were implemented with much reduced exploitation rates (<5%)

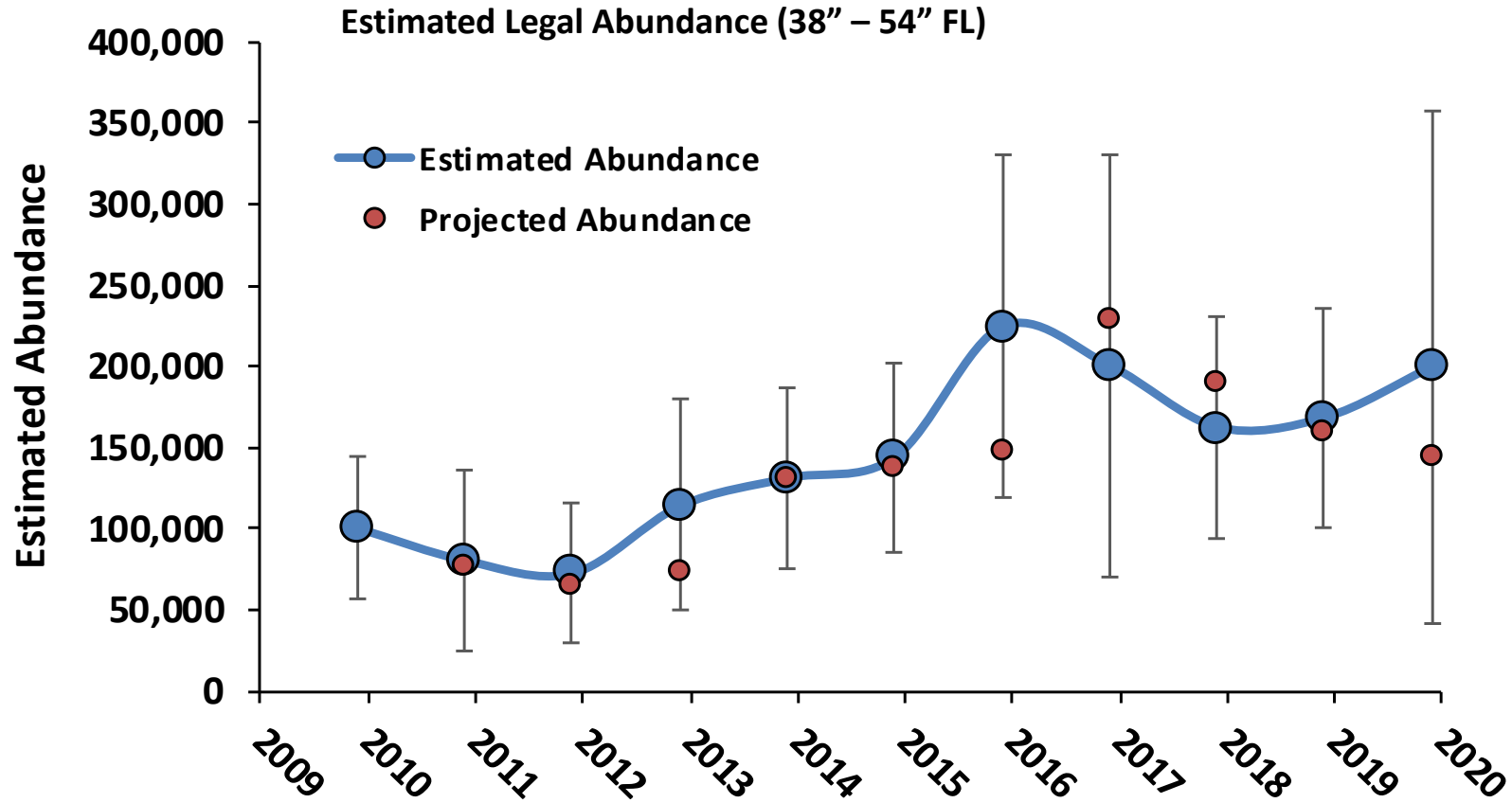


# 2020 LCR Abundance and Size Distribution

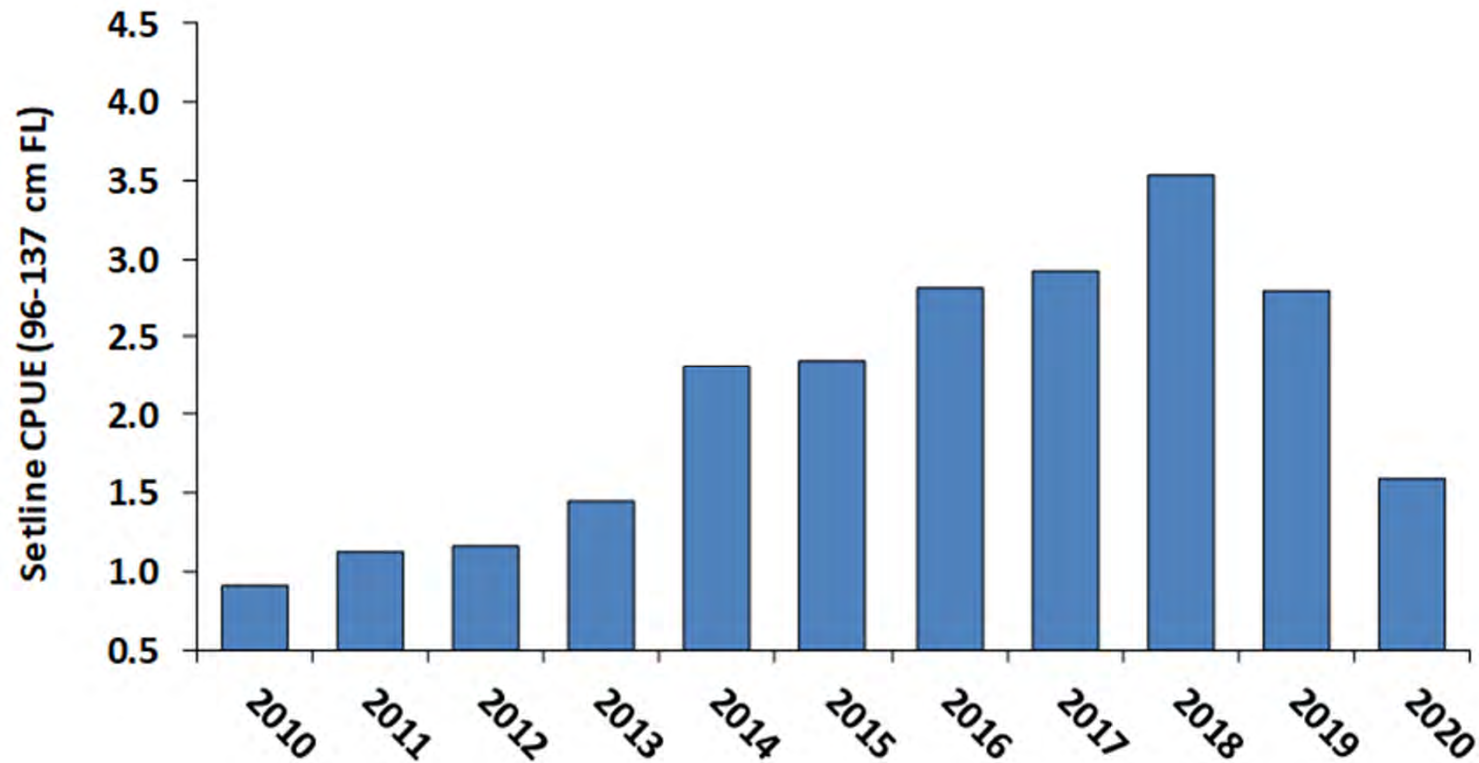




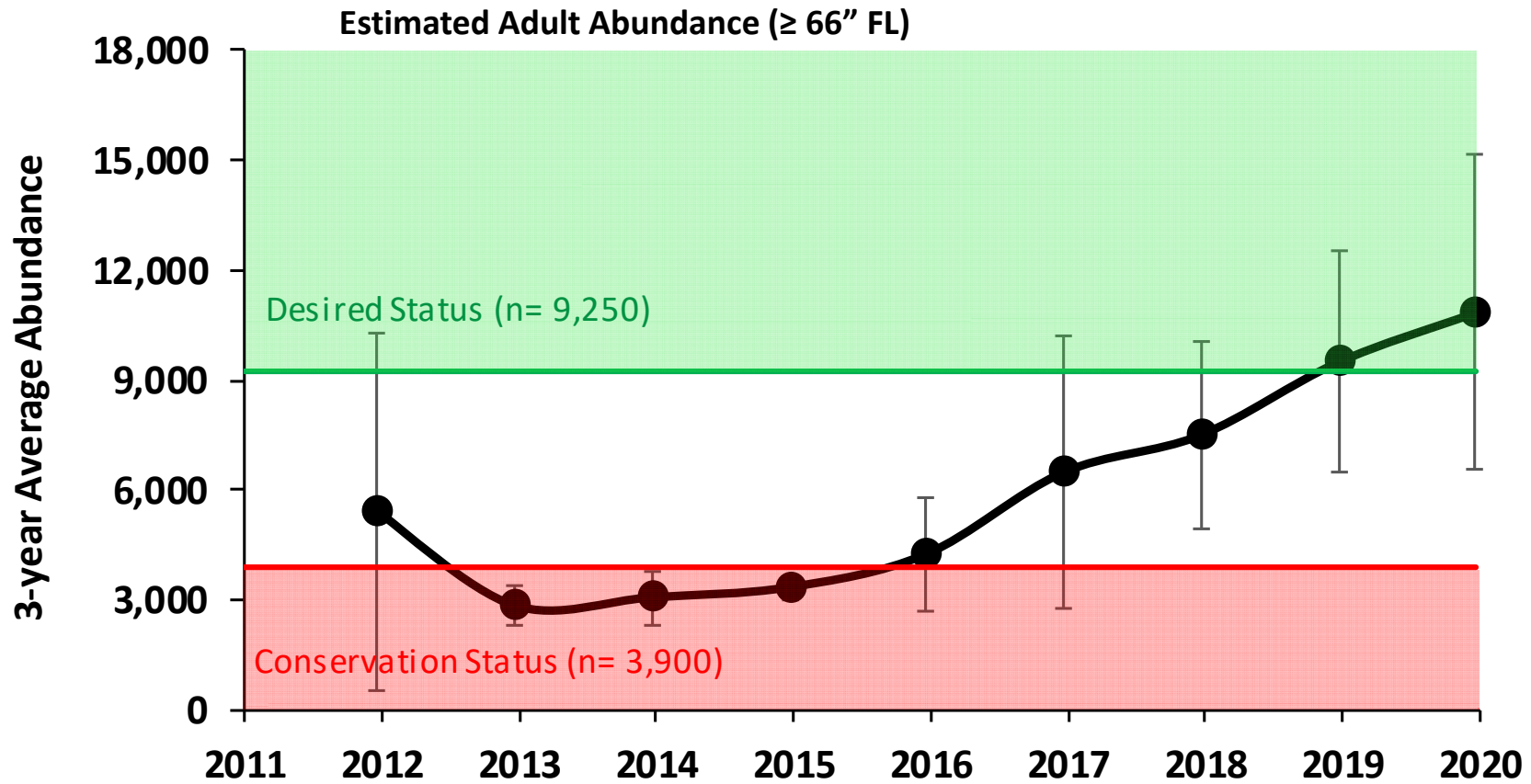
# Trends in LCR White Sturgeon Abundance



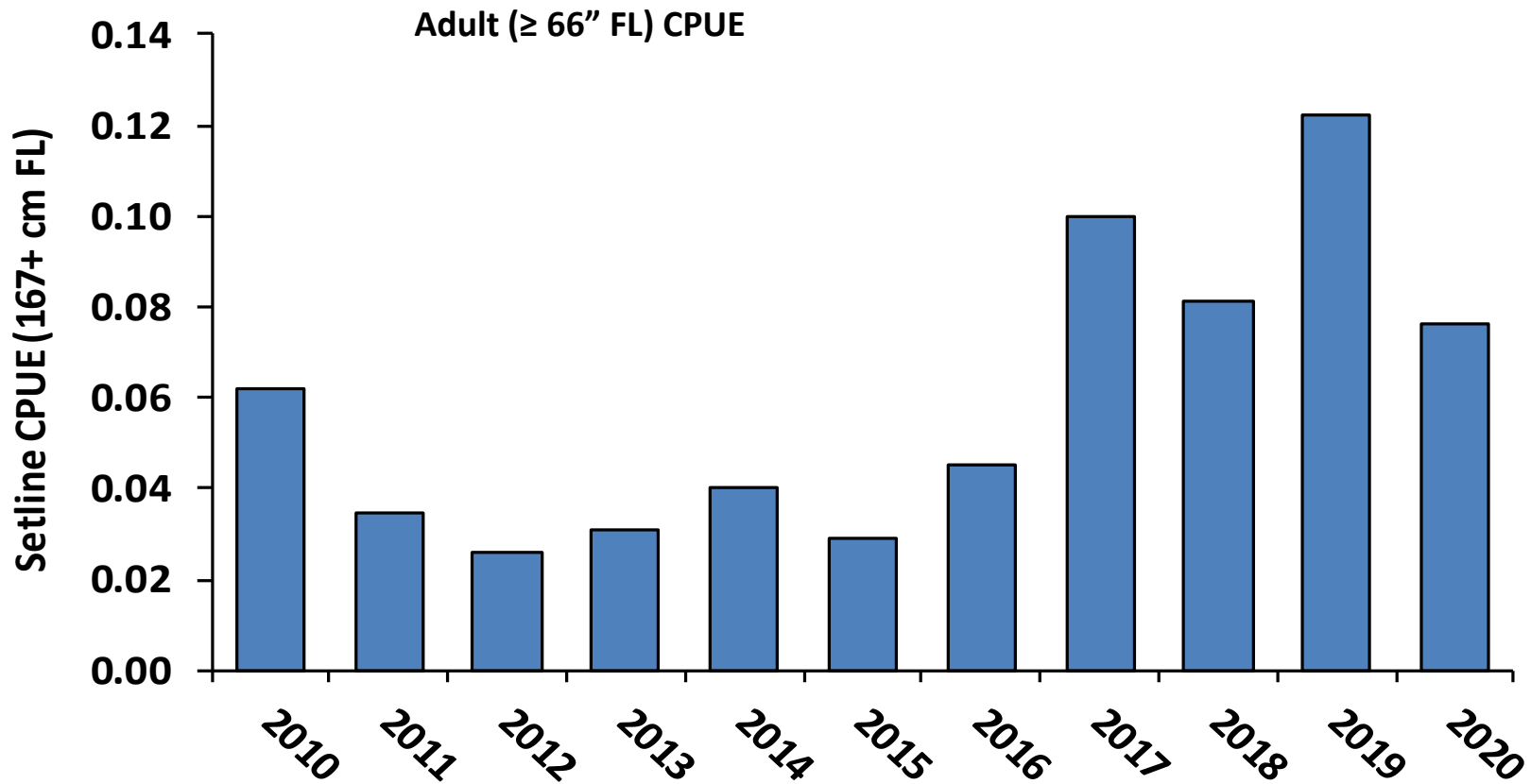
# Trends in LCR Legal-Size Sturgeon CPUE



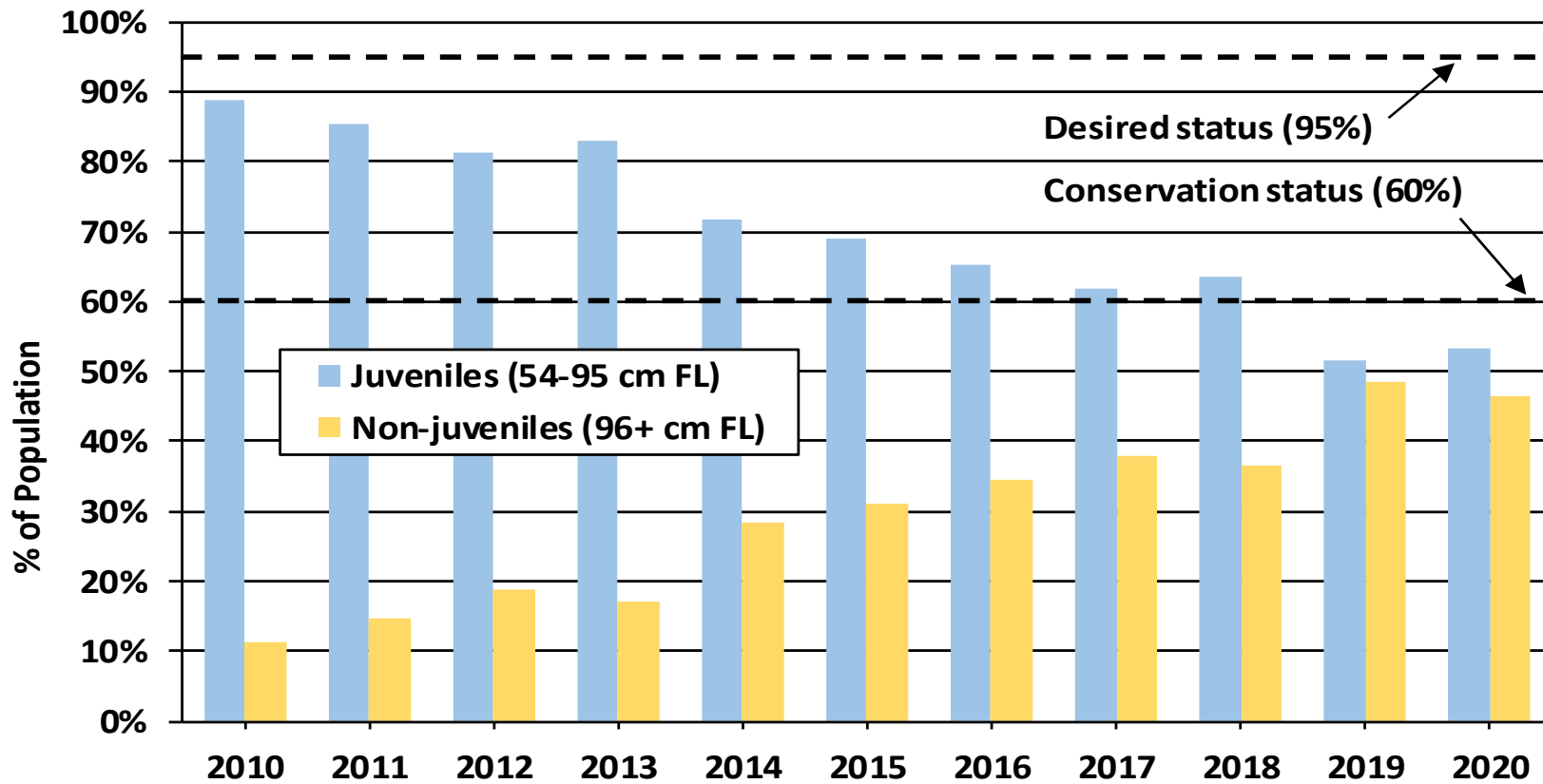
# Trends in Adult Sturgeon Abundance



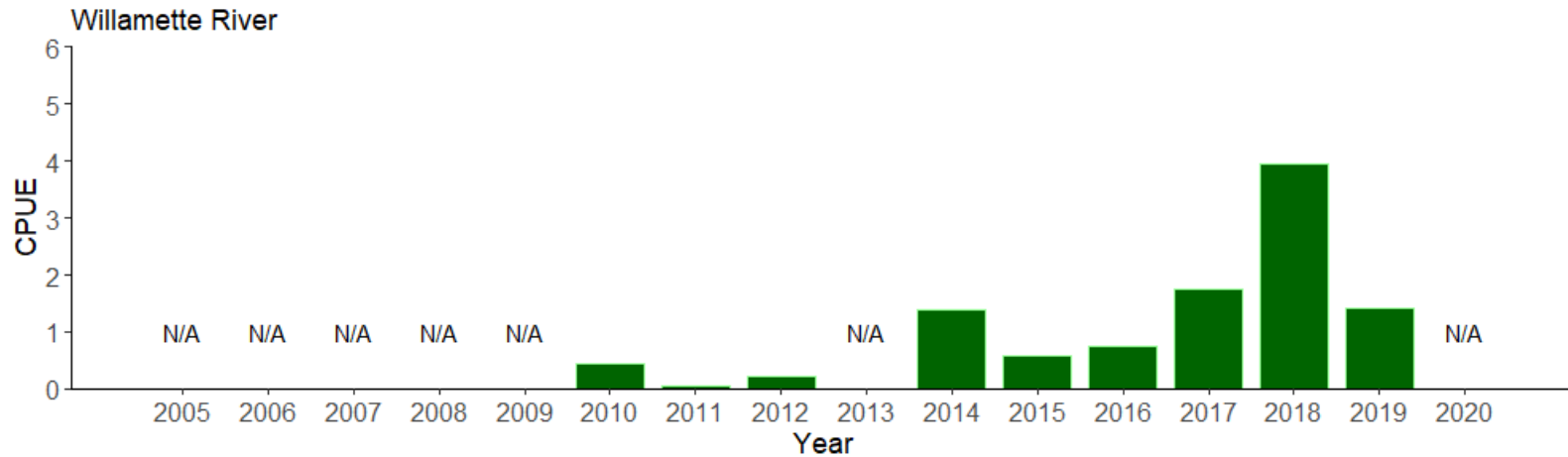
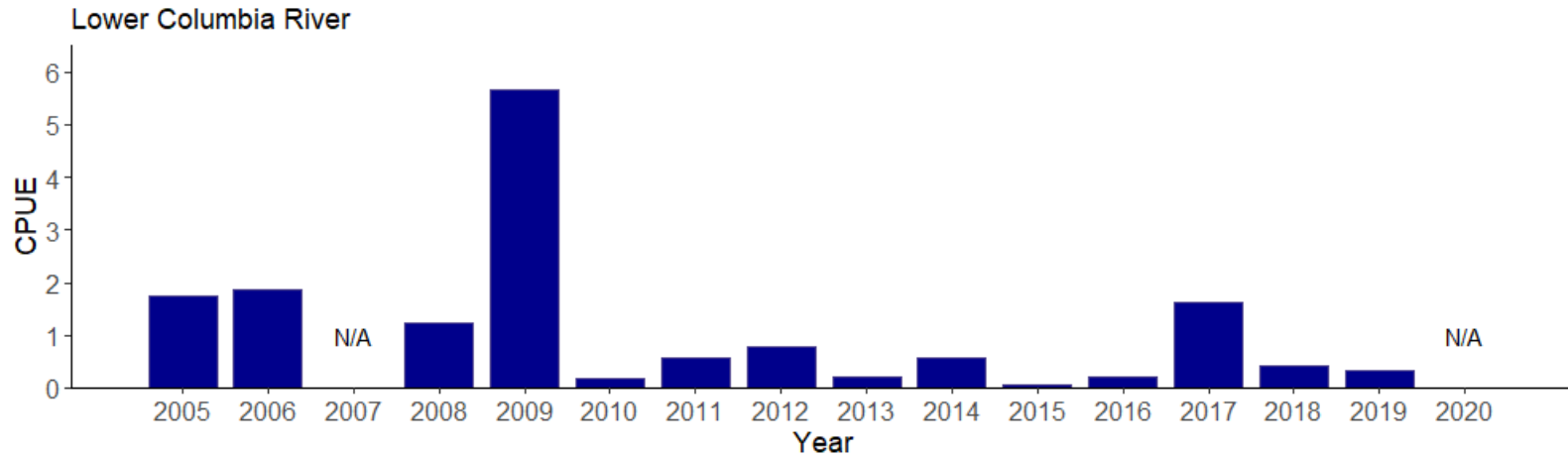
# Trends in Adult Sturgeon CPUE



# Trends in LCR Sturgeon Length Frequency



# Trends in LCR Sturgeon Age-0 Recruitment



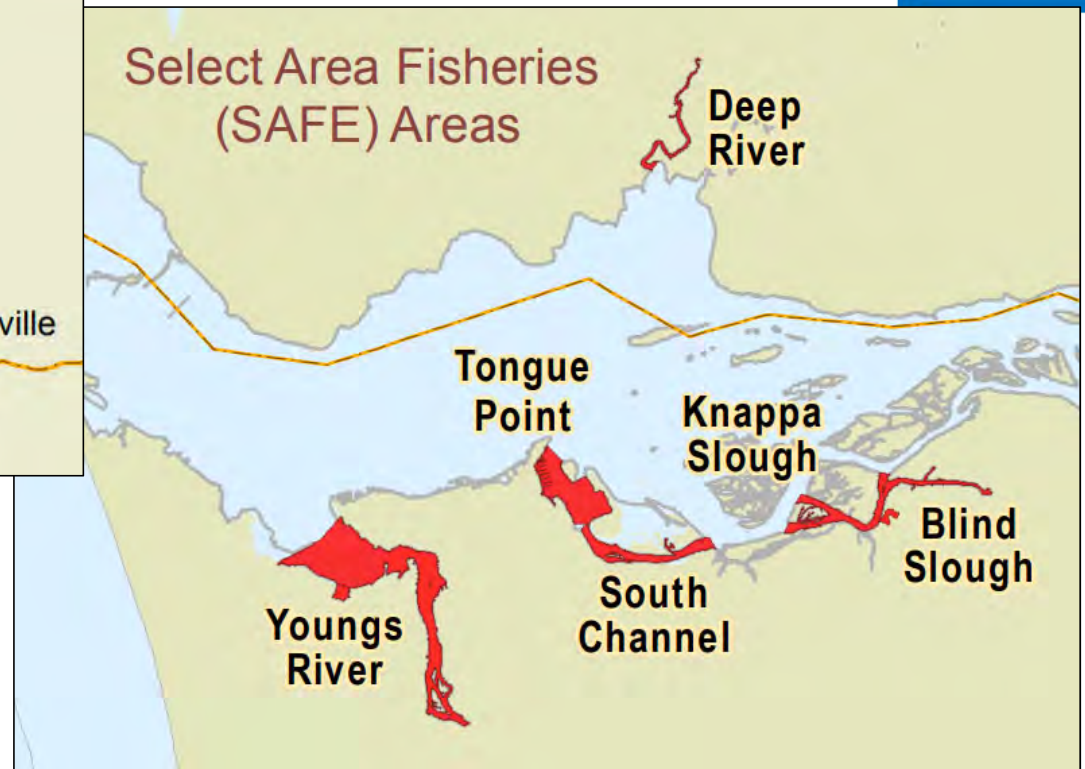
# 2020 LCR Sturgeon Fisheries Review



- Per CR policy, 2020 Total Catch Guideline (n=5,720) again split 80:20 sport and commercial
- Commercial guideline: 1,140 fish
- Recreational Guideline: 4,580 fish



# Commercial Areas and Harvest Expectations



Pre-season harvest expectations:  
Mainstem – 570 fish  
SAFE Area – 570 fish

# 2020 Commercial Harvest



## Select Area (SAFE):

- Winter: 217 fish
- Spring: 219 fish
- Summer: 111 fish
- **Total:** 547 fish (48%)

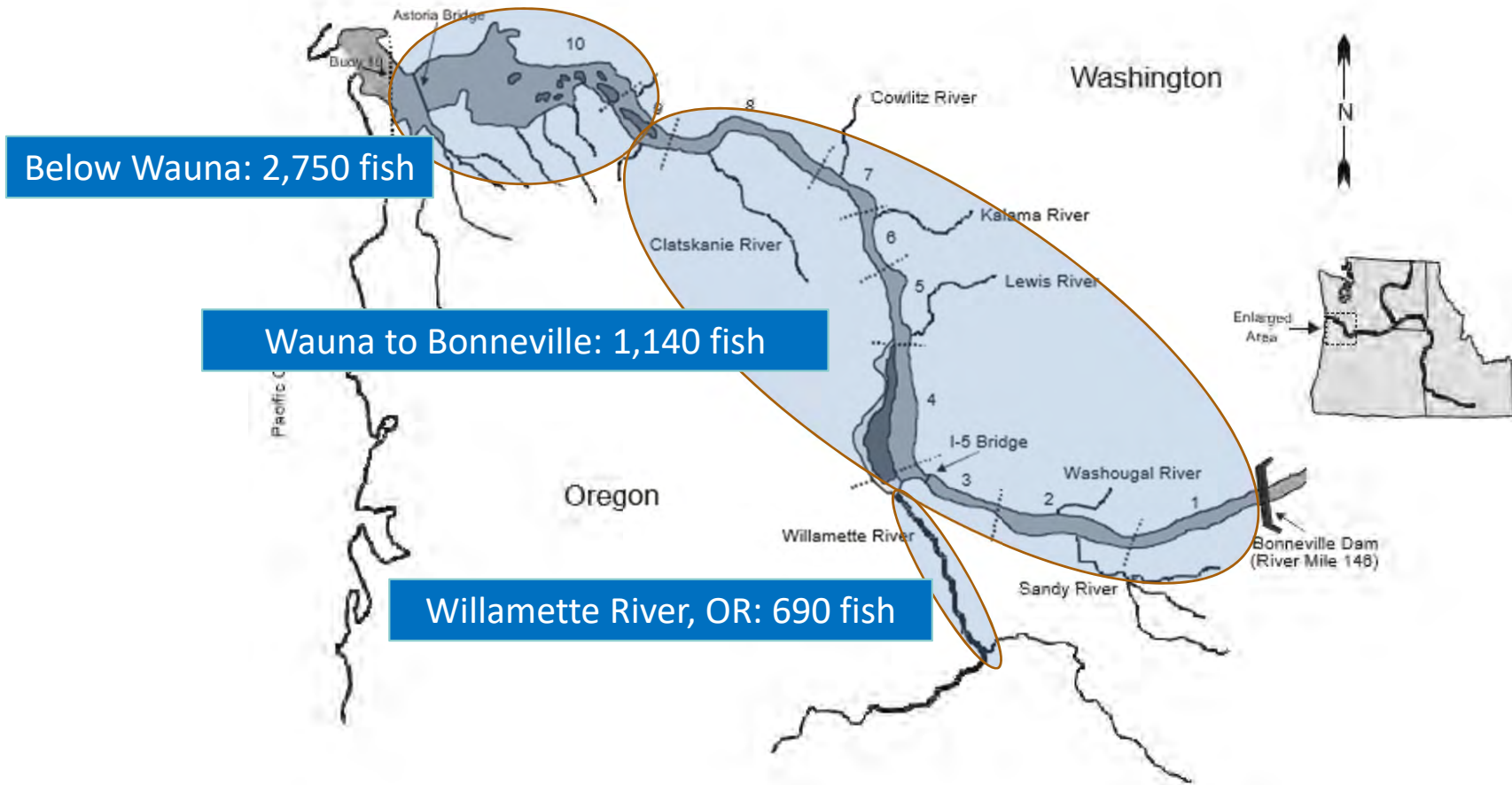
## Mainstem:

- Early Fall: 406 fish
- Late Fall: 161 fish
- **Total:** 567 fish (50%)

Total Harvest: 1,114 fish

98% of the 2020 commercial guideline

# Sport Fishing Areas and Pre-season Plans



# 2020 Sport Fishing Effort and Harvest



## Estuary (below Wauna):

- No retention fishery set in 2020.
- 832 angler trips for catch and release fishing.

## Wauna to Bonneville:

- Sept. 12–Oct. 3 (5 d)
- 9,094 angler trips
- **Total:** 857 fish (75%)

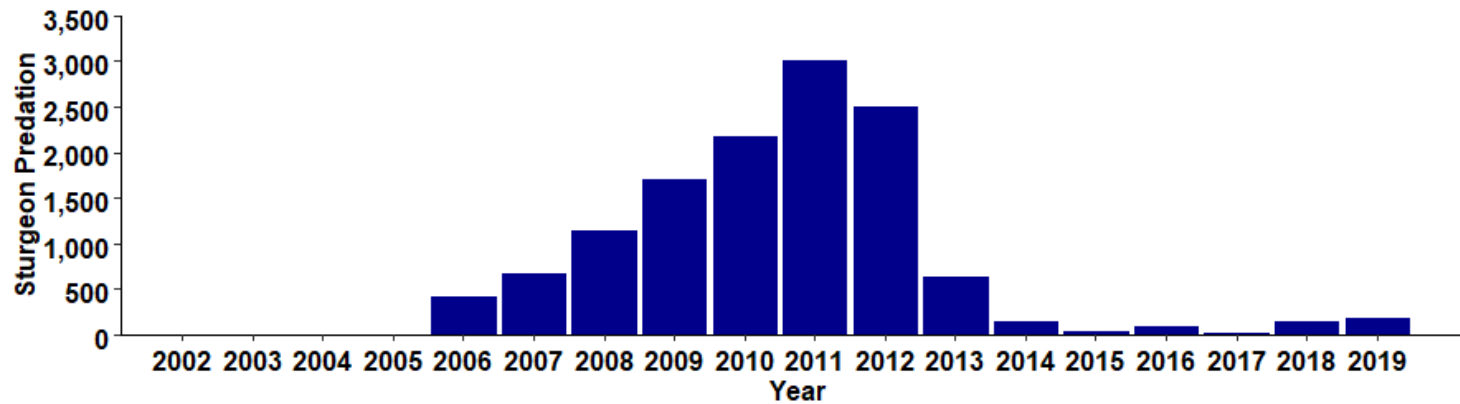
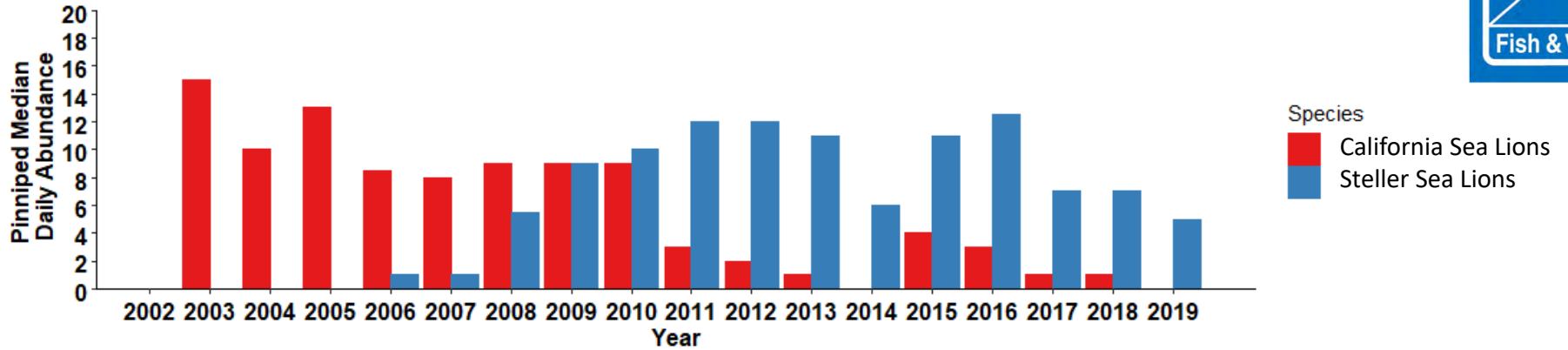
## Willamette River, OR:

- June 20 & 27 (2 d)
- 5,091 angler trips
- **Total:** 167 fish (24%)
- \* first time opened since 2013

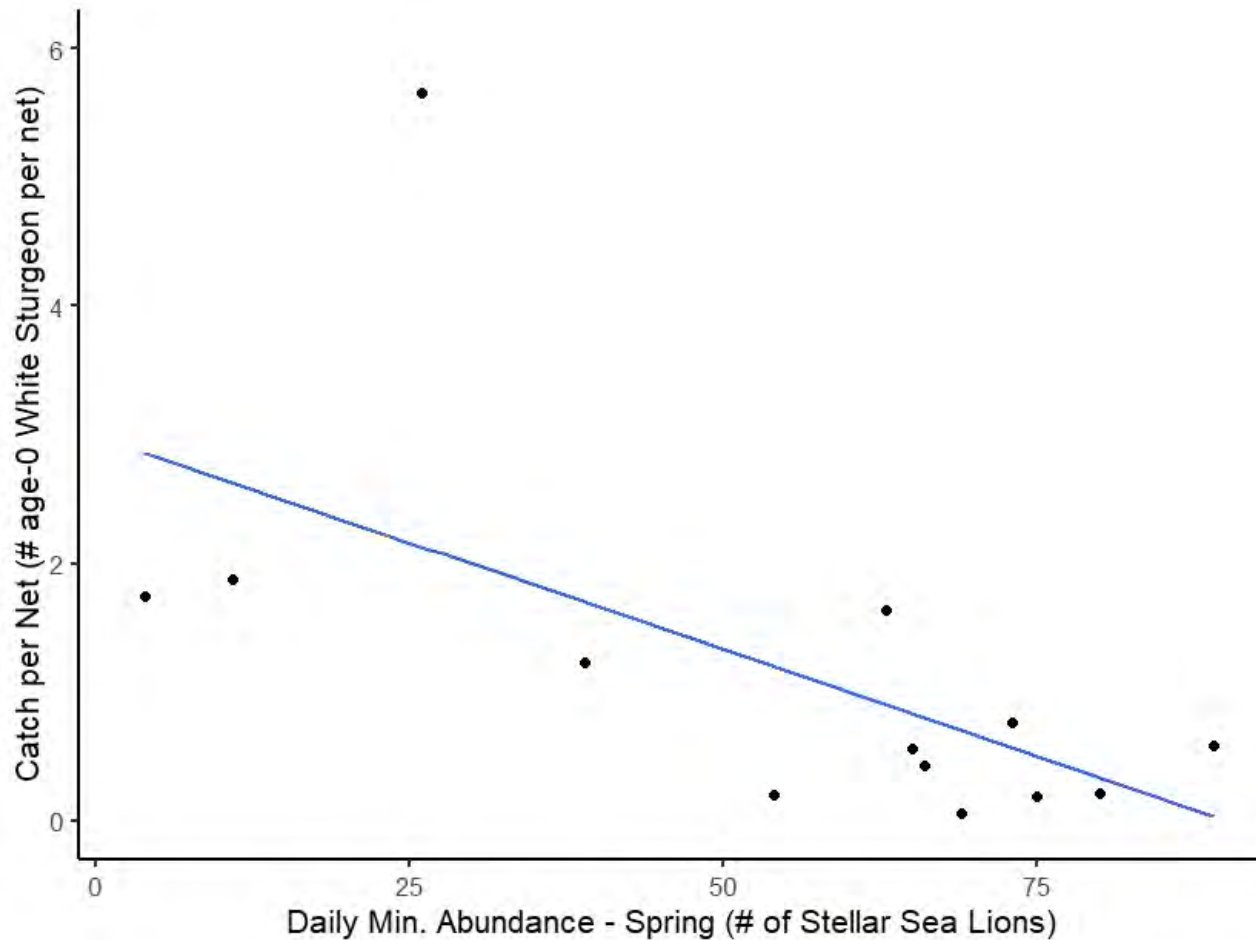
## **Total Harvest: 1,024 fish**

- 22% of the total 2020 sport guideline
- 22% of the Lower Columbia harvest guideline
- 19,631 total trips for 2021 retention and catch-and-release fisheries

# Pinniped Predation at Bonneville Dam



# Pinniped Predation vs Age-0 Catch Per Net



In 2020, NMFS approved an application allowing ODFW and partners to expand their program to manage and remove sea lions.

# Willamette River Pinniped Issues



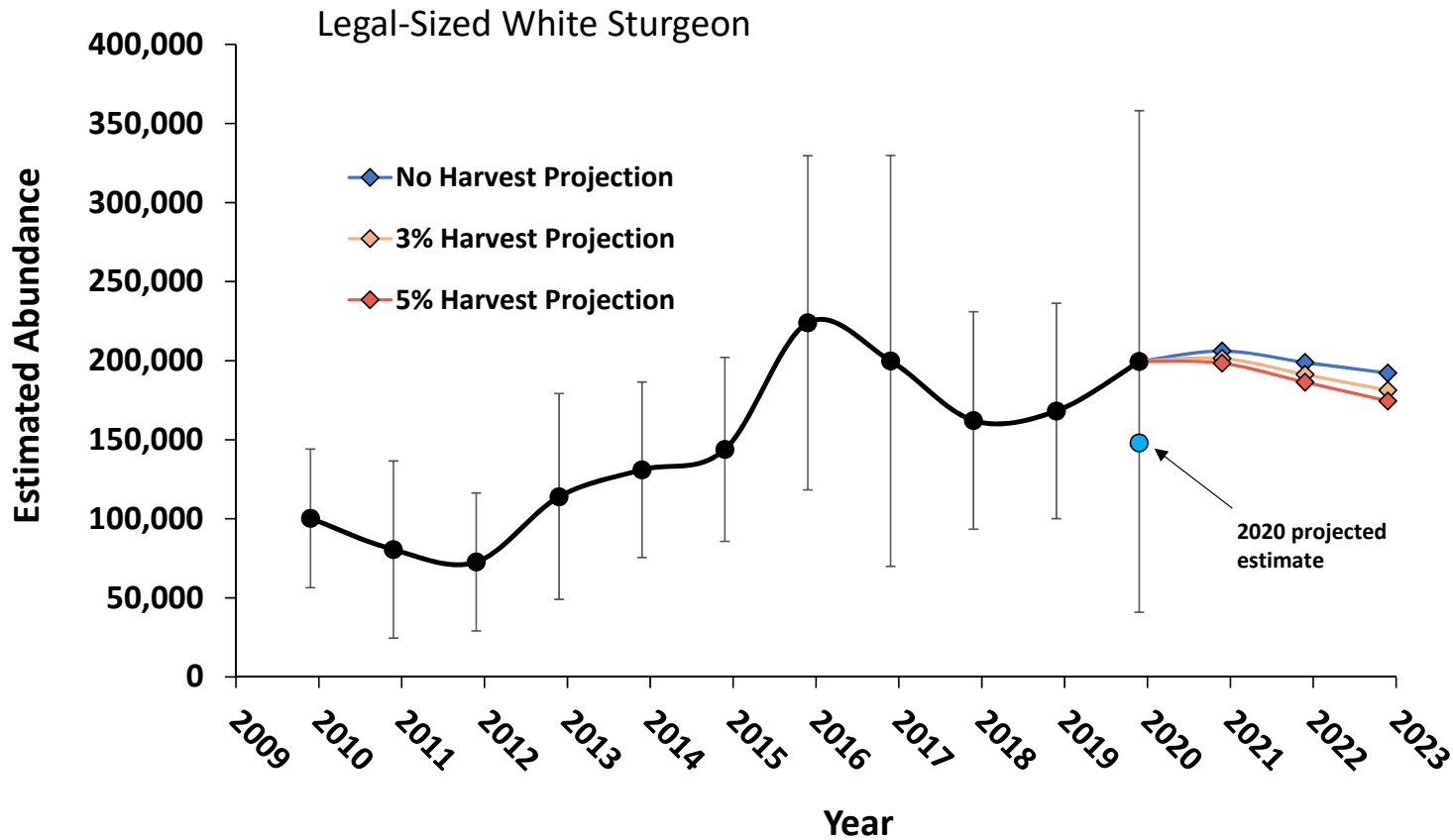
- 2020 Willamette Falls Steller sea lion abundance similar to levels seen since 2018
- 60 estimated white sturgeon predation events by SSL; similar to 2019, but down from 2018
- Only 5 individual SSLs observed in the Willamette to date in 2021
  - <https://www.dfw.state.or.us/fish/sealion/>

# Status and Fishery Summary



Metric	N	Interpretation	Brief Summary
Legal Abundance	199,500		Increased abundance from 2019, but COVID-19 related sampling issues resulted in increased variability in estimates.
Adult Abundance	14,500 3-yr Avg 10,844		2020 3-year average adult abundance estimate is above desired status level, but variability issues here too.
Population Structure	~53% Juveniles		Proportional abundance of juvenile and sub-legal fish <60% (conservation status).
Recruitment Index (CPN)	NA		Reductions in Sport Fish Restoration funding have reduced our capacity to conduct this work.
Sea Lion Abundance	High		High sea lion abundance is problematic for white sturgeon populations.
Fisheries	17,190 (Trips)		Interest in retention fisheries remains high; no estuary fishery in 2020 due to COVID related issues.

# 2021 Projections and Management Plans



# Conclusions

- Status of lower Columbia River white sturgeon, while not where we'd like it, is not in danger
  - Still nearly 500,000 fish
  - Substantial legal abundance
  - Adult population on increasing trend
  - Population structure at conservation status level, but sturgeon life history strategy guards against periods of low productivity
  - Steller sea lions are problematic, but will hopefully begin to address this in 2021
- Believe population is sufficiently robust to support limited fisheries similar to 2017 - 2019





Questions?