FRSCS Lower Fraser River White Sturgeon Monitoring and Assessment Program – 2019 Program Update



White Sturgeon are an ancient species of fish that have survived since the time of the dinosaurs. They can live for over 100 years and grow to over six meters in length. The world's last remaining wild population of White Sturgeon lives in the Fraser River of British Columbia. Unfortunately, the numbers of wild White Sturgeon in the lower Fraser River are in decline.

Since 2000, the Fraser River Sturgeon Conservation Society's stewardship-led Lower Fraser River White Sturgeon Monitoring and Assessment Program has



trained volunteers to tag, sample, and release live sturgeon. Field data from this program are used to generate annual estimates of abundance and growth rates and to forecast future abundance trends (Figure 1).

What do the data tell us?

- The abundance of age 7-55 White Sturgeon in the lower Fraser River has been declining since 2006
 - Juvenile sturgeon (age 7-12 years) abundance has declined substantially since 2005 Subadult sturgeon (age 12-22 years) abundance has been declining since 2012
 - Adult sturgeon (age 23-55 years) abundance has increased since 2000
 - If there are no improvements to the abundance of juvenile White Sturgeon, the population is forecast to continue to decline over the next 30 years

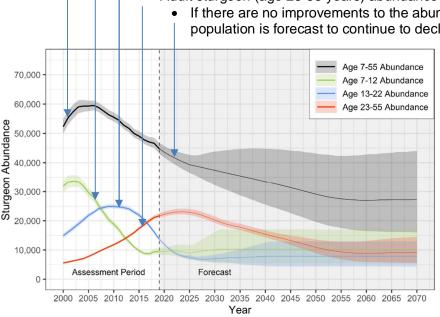


Figure 1. Abundance estimates for age 7-55 Lower Fraser River White Sturgeon 2000-2019, and abundance forecasts for 2020-2070. Abundance forecasts are generated using an assumption that future numbers of age-7 sturgeon will be similar to the abundances observed in recent years (2012-2019). Background grey shading indicates forecast years.

The average annual growth rate of White Sturgeon in the lower Fraser River in 2019 (3.6 cm/year) was 37% lower than in 2002 (5.7 cm/year). Growth is an indicator of sturgeon population health and condition; declining growth rates can result from a reduction in food supply and/or an increase in physical or physiological stress.

The future of wild Fraser River White Sturgeon – what can be done to help?

Actions that can and should be taken include:

- protection of overwintering, spawning, and juvenile rearing habitat
- restricted fishing and boating activity in known sturgeon spawning areas
- a reduction of the incidence of net interceptions from all net fisheries
- reduce the number of sturgeon caught and released by recreational anglers
- protection of prey species upon which juvenile and adult sturgeon depend (e.g., salmon and eulachon)

Detailed annual program reports that present study methods and results are available at: https://www.frasersturgeon.com/research-for-survival-reports/

