### Unit 1: Introduction to Nechako White Sturgeon

### What is a white sturgeon?

- Has lived since the age of the dinosaurs 170-290 million years ago.
- Live in northern lakes and rivers around the world.
- Largest freshwater fish in North America, and can live for over 100 years!





## What is unique about Nechako White Sturgeon?

- White sturgeon Acipenser transmontanus live in the Fraser, Columbia and Kootenay river systems in BC.
- The Nechako white sturgeon spawn only in the Nechako River
- They reach over 3m in length but are smaller than sturgeon in the Fraser River – can you think of why?





#### Why are we learning about **Nechako** White Sturgeon?



There used to be thousands of sturgeon in the Nechako, but now...

- ~650 Nechako white sturgeon adult sturgeon
- Young sturgeon are not surviving to maturity to make the next generation of sturgeon

We are working to find out WHY...



### Nechako white sturgeon are an Endangered Species

- Endangered as per the Species at Risk Act (SARA) in Canada
- Now fully protected, it is against the law to keep sturgeon or any of their parts.





#### What does Endangered mean?

- Extirpation means that the species no longer exists in a specific place.
- Nechako white sturgeon are facing imminent extinction (extirpation) from the Nechako River
- The Nechako white sturgeon may become extirpated in the next twenty years if nothing is done!





# What has happened to make the Nechako sturgeon endangered?

We do not know for sure, but what we think is:

- Habitat altered
  - Kenney Dam has changed the size and flow of the Nechako River
- Poor survival of young sturgeon
- Human impacts
  - Fishing
  - Pollution
- Climate change
- Predation





# What is being done to help the Nechako white sturgeon

- Scientific Research
  - Why are they not doing well?
- Conservation Centre
  - Genetic diversity
  - Increase population
- Juvenile release
  - Public awareness
- Protected status
  - Illegal to fish for
- Education
  - Proper way to release a sturgeon
  - School Curriculum that's you!!





#### Nechako white sturgeon curriculum

By the end of this course, you will know:

- What a sturgeon is and why it is important
- The biology and ecology of sturgeon
- About endangered status
- Where the Nechako River watershed is
- What a riparian zone is and why it is so important
- What you can do to help the Nechako white sturgeon



