

A close-up photograph of a person's hands holding a large sturgeon in a boat. The fish is partially submerged in the water, and its distinctive bony scutes along its back are visible. The background shows a calm lake and a forested shoreline under a clear sky.

# Sturgeon in Alberta

NSWA 2022

Nov 2, 2022

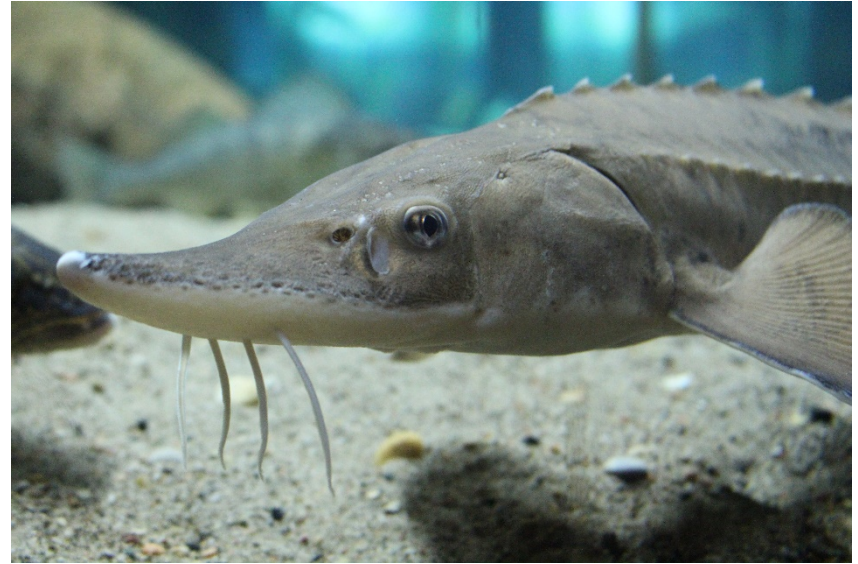
[Stephen.Spencer@gov.ab.ca](mailto:Stephen.Spencer@gov.ab.ca)

Environment and Protected Areas

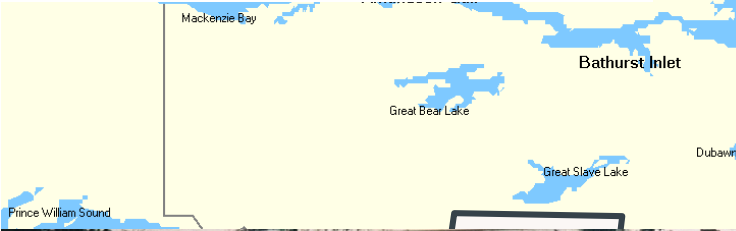
Alberta

# Outline

- Sturgeon facts
- What has happened?
- Where do they live?
- Status?
- What we are doing help



# Alberta's Situation



Abundant Resources

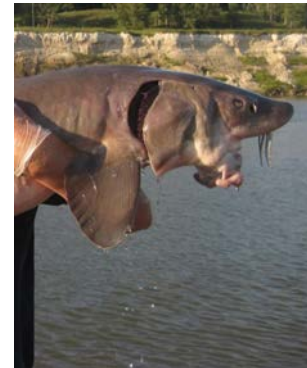


Few fish bearing waters...  
A pressure point for fisheries management!



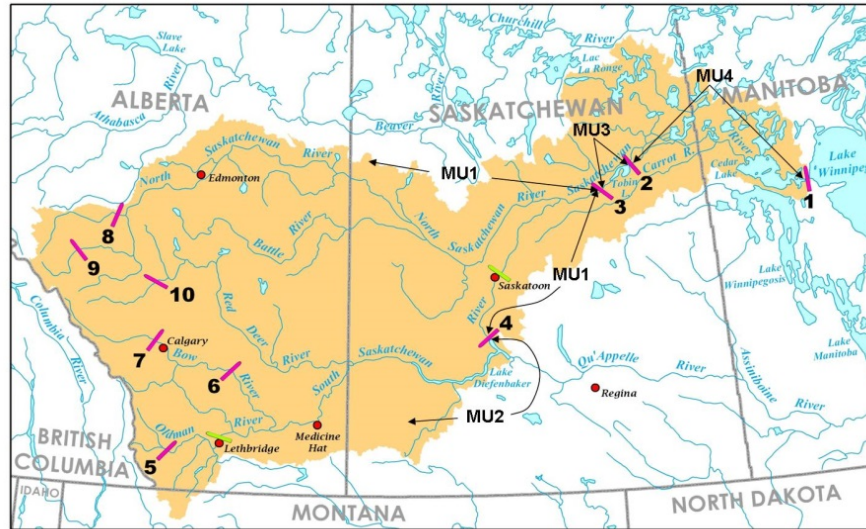
# Sturgeon facts

- Tail like a shark
- Great sense of smell
- Mouth like a vacuum
- Bony scutes like a dinosaur
- Swam with the dinosaurs!
- Leap out of the water
- Octoploids?



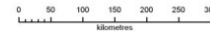
# Distribution in Western Canada

- Saskatchewan-Nelson watershed
- North Saskatchewan River
- South Saskatchewan River
- Red Deer River
- Bow River
- Old Man River



Government of Alberta

Map Data provided by the North American Atlas, Institute National de Géographie et d'Information, Natural Resources Canada, and the U.S. Geological Survey. Produced by Alberta Sustainable Resource Development, Fisheries Area, Resource Information Unit, Calgary, October 2014. The Minister and the Crown provide this information without warranty or representation as to any matter including but not limited to whether the data, information is correct, accurate or free from error, omission, change, or fraud and whether it is otherwise useful or suitable for any use the user may make of it. © 2014 Government of Alberta.



- |  |  |
|--|--|
|  Dams | 6 Bassano  |
| 1 Grand Rapids   | 7 Bears paw  |
| 2 E. B. Campbell   | 8 Brazeau  |
| 3 Francois-Finlay  | 9 Bighorn  |
| 4 Gardiner   | 10 Dickson   |
| 5 Oldman   |  Weir |

# Sturgeon facts

- Spawning in late spring
- Mature their 20's
- Spawning once every 5 to 7 years.
- Highly migratory



*'Alex Waddell caught a 184kg (406-pounds) sturgeon in the Roseau River, in 1903. The fish was about 4.6 metres (15' 2") long and estimated to be 150 years old.'*

# Lake Sturgeon History

- Over-fished
- Population collapse
- ...and harvest closed in 1940
- No harvest of sturgeon in AB

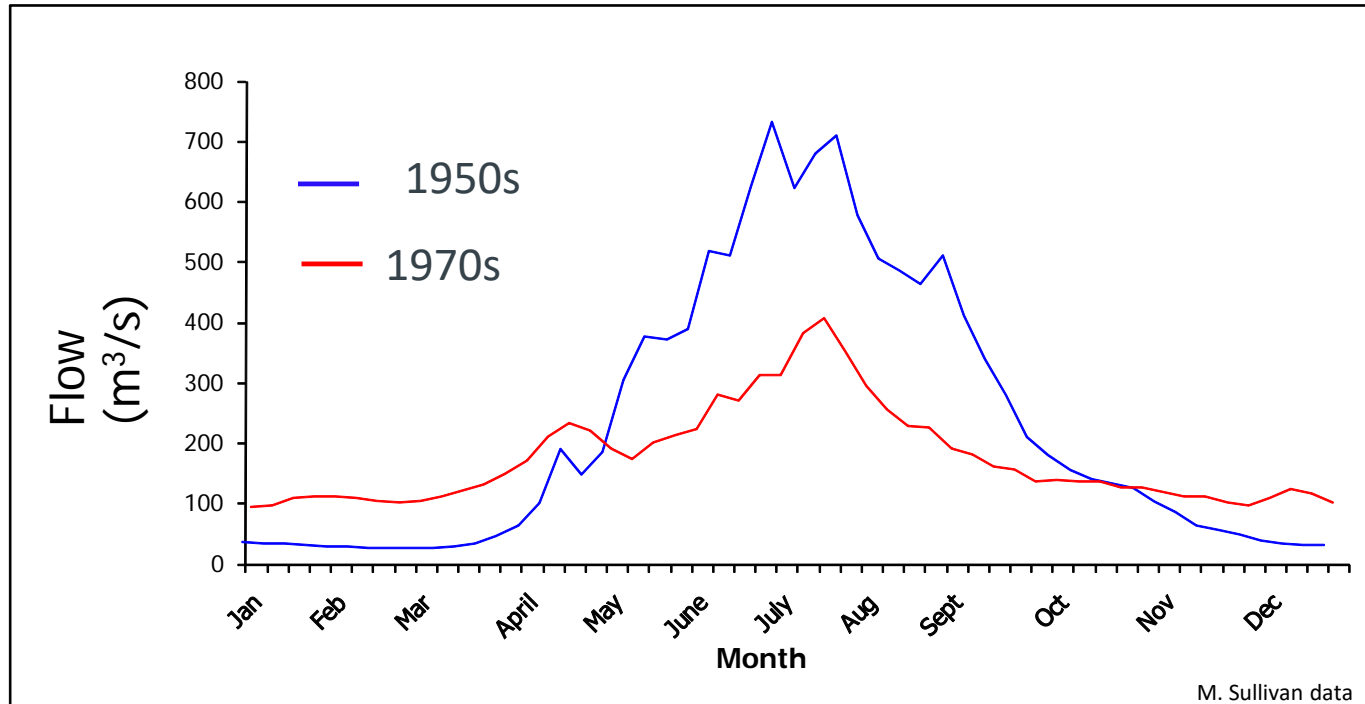
Globally – Sturgeon populations  
have collapsed





# Lake Sturgeon History

North Saskatchewan River Flow



# Lake Sturgeon Recovery

- Start of Lake Sturgeon recovery
- Lake Sturgeon angling reported as “a thing caught” in 1990 by Genesee; amazing story
- **Sturgeon biological work started that day!**



# Status of Sturgeon

- Species at risk in Alberta
  - *Threatened* (2007)
  - Recovery actions include population monitoring
  - 1990 in NSR
  - Early 2000's SSR
  
- Citizen scientists are keystone!



## Alberta Lake Sturgeon Recovery Plan 2011 – 2016



Alberta Species at Risk Recovery Plan No. 22

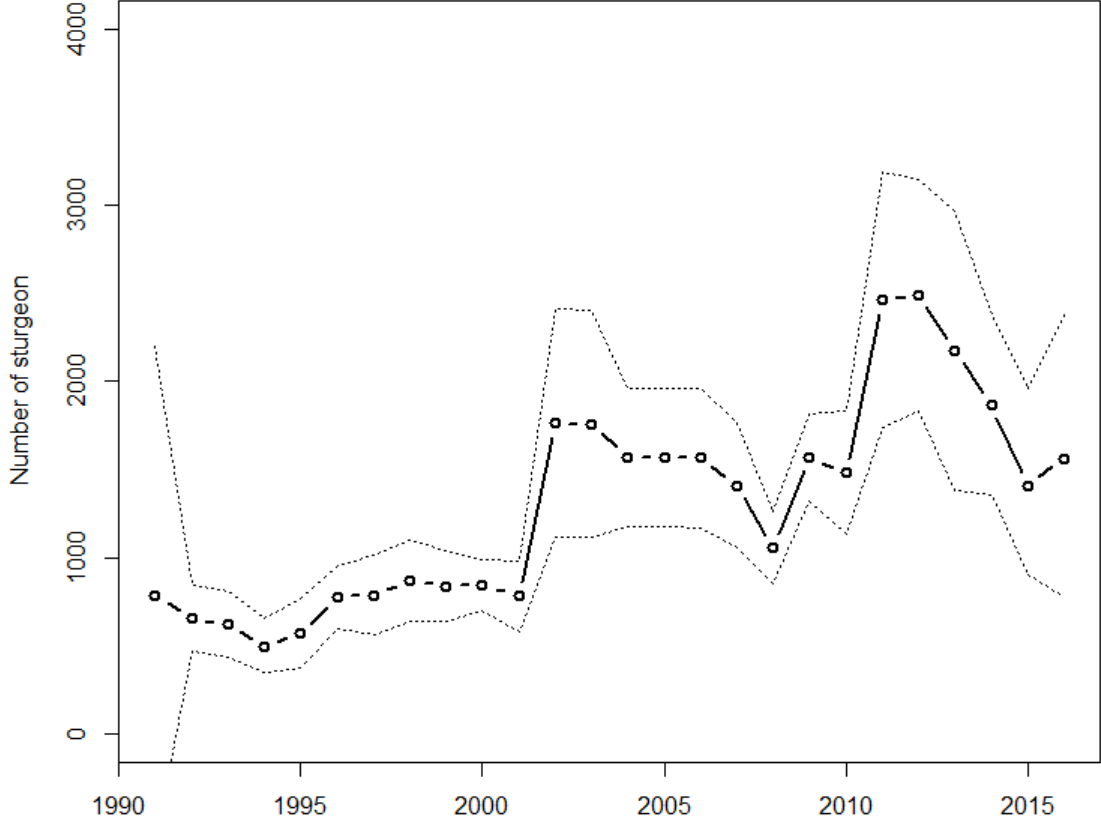
# Status of Sturgeon

- Angling
- Population Estimates
- Distribution



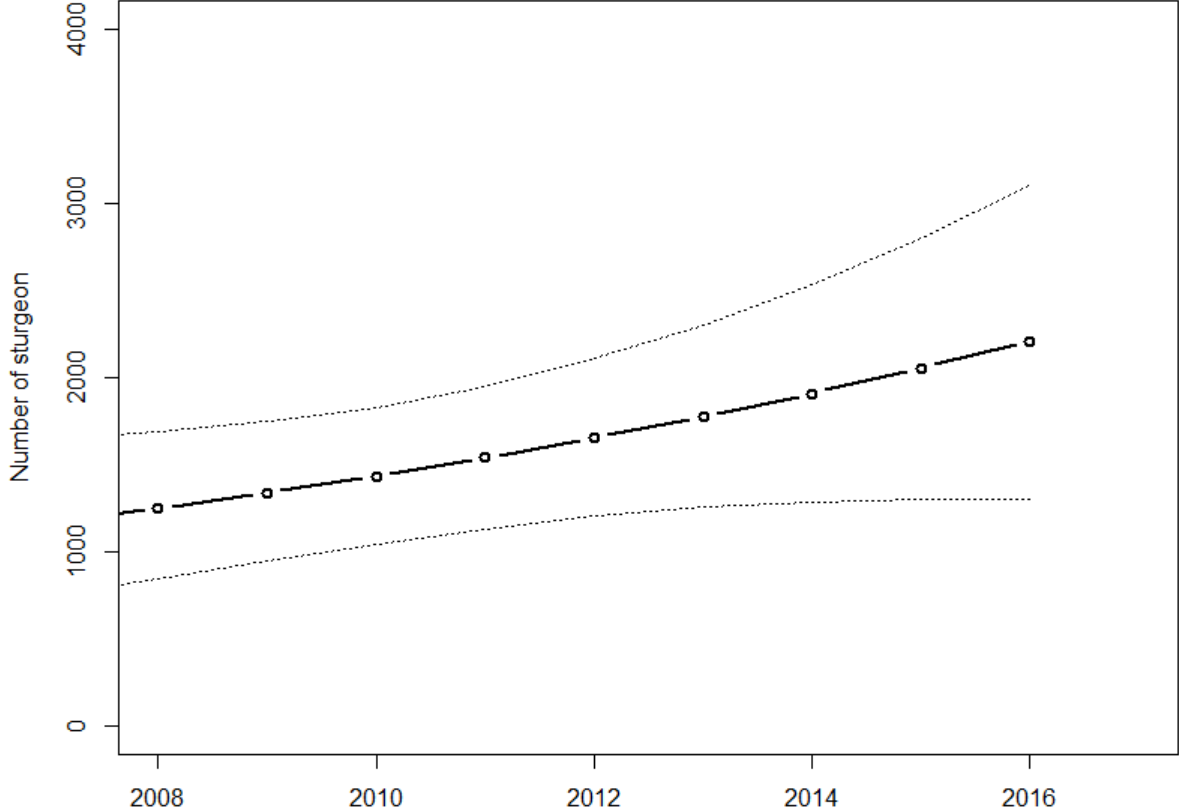


# Lake Sturgeon – North Saskatchewan River (Upper)



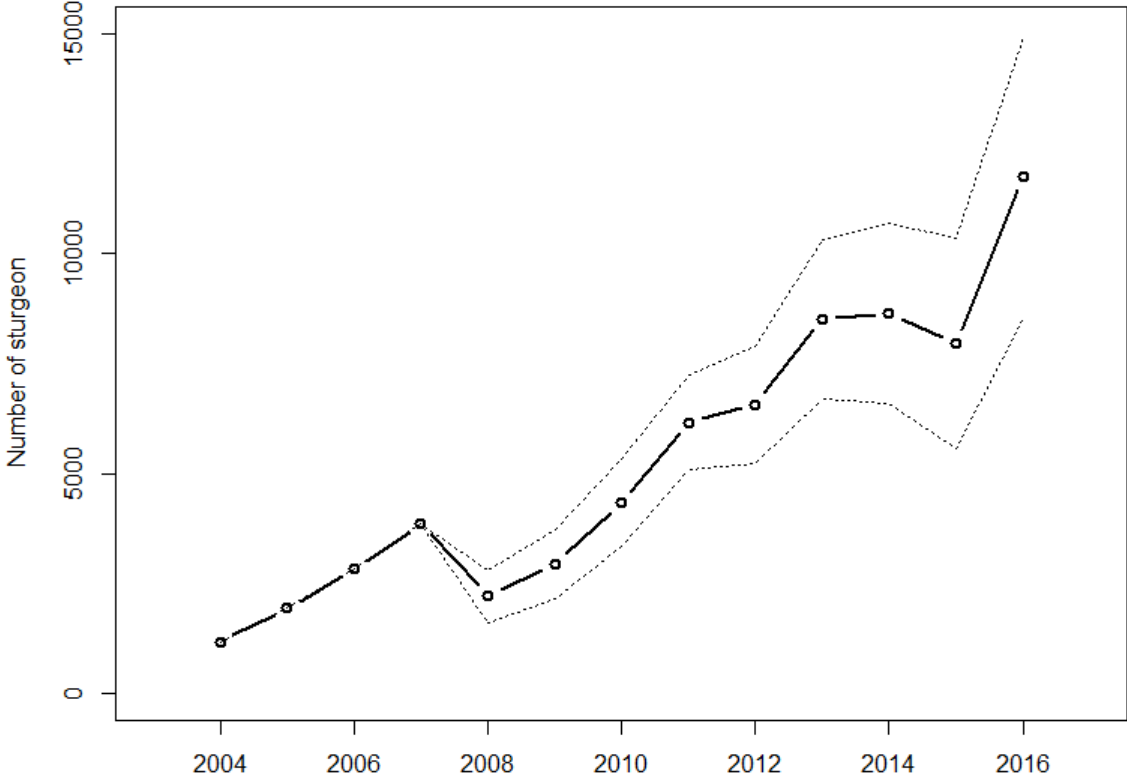
A.J. Paul 2019. Alberta Lake Sturgeon Population Estimates from the Volunteer Angling Program -2017

# Lake Sturgeon – North Saskatchewan River (Lower)



A.J. Paul 2019. Alberta Lake Sturgeon Population Estimates from the Volunteer Angling Program -2017

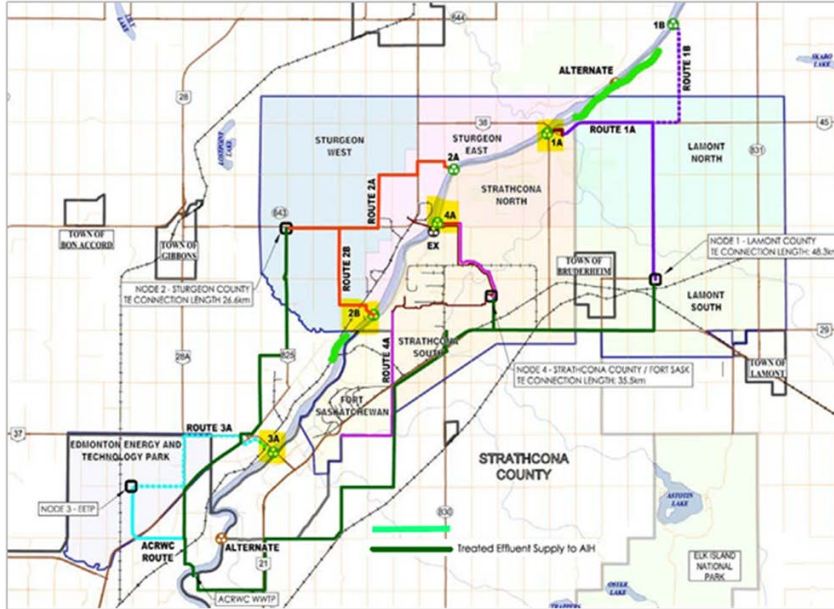
# Lake Sturgeon – South Saskatchewan River



A.J. Paul 2019. Alberta Lake Sturgeon Population Estimates from the Volunteer Angling Program -2017



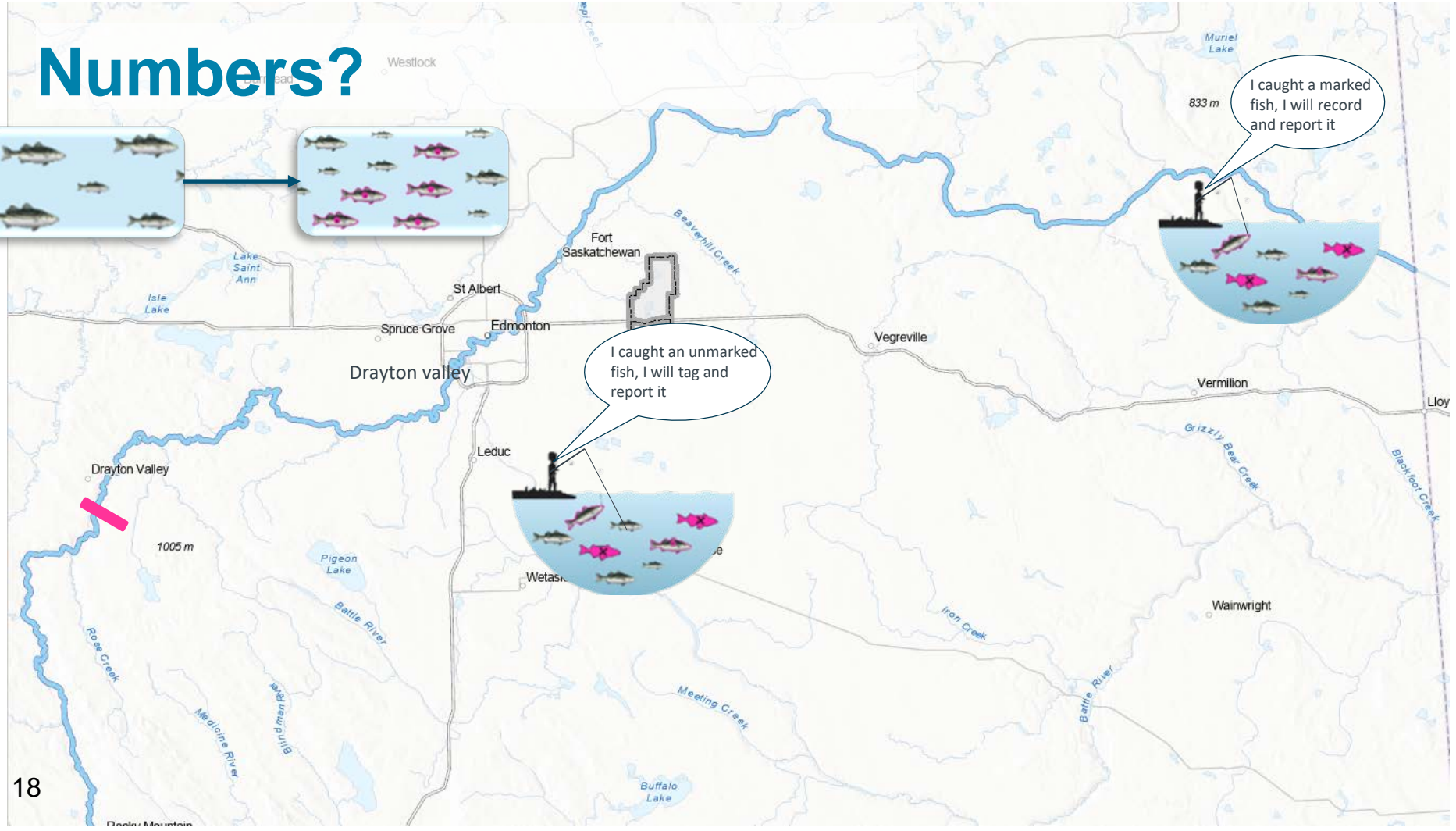
# Status of Sturgeon



- Important habitats



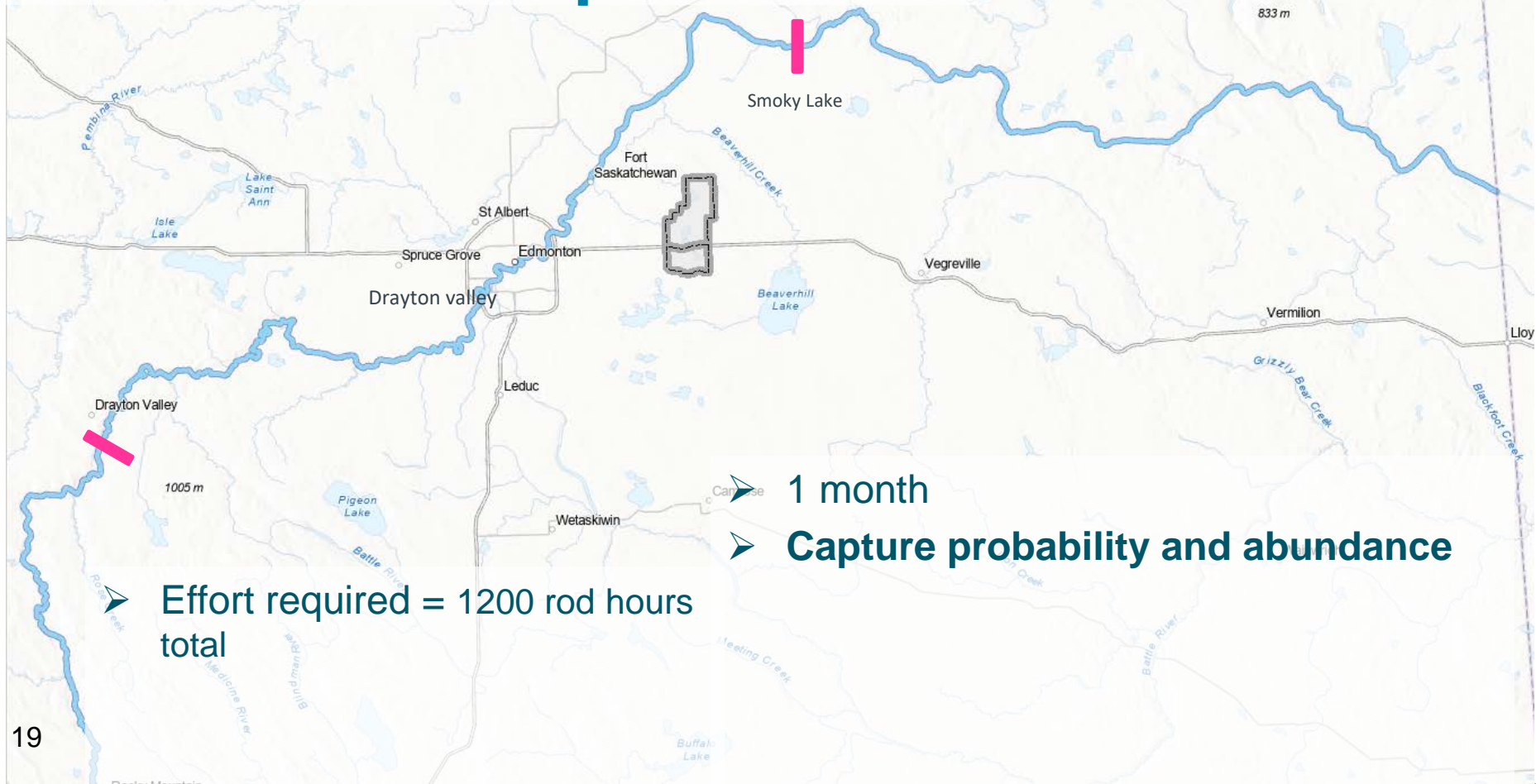
# Numbers?



I caught a marked fish, I will record and report it

I caught an unmarked fish, I will tag and report it

# Closed mark-recapture 22-23



# Sturgeon Conservation in the Alberta

1. Vulnerable species
2. Increasing trends in 2017
3. Providing habitat protection
4. Very interested in 22-23 data
5. Update 2024
6. Huge shout out to volunteers!

J. Krukowski photo credit

# Questions?

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