

Wyoming Bighorn Update 2017-2018

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Bighorn Issues Group meeting April 2018

Overview

- Bighorn System
- Managed fisheries
- Sauger
 - Monitoring
 - Research
- Sturgeon
 - Research
- Sturgeon Chub
 - Monitoring

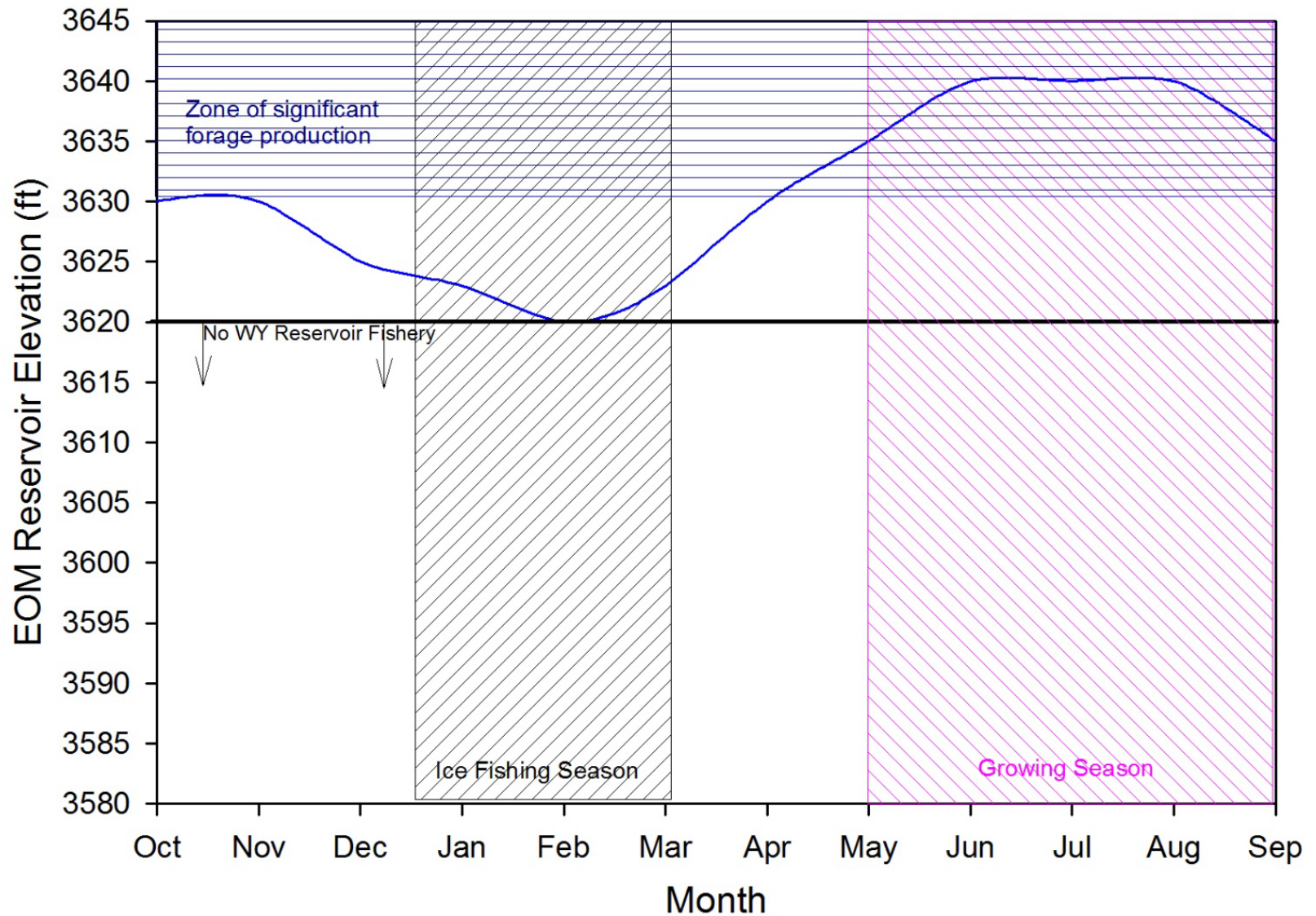
Bighorn System

- Lake and River not independent
 - Migratory native species
 - CCF, SAR, SNS, SGC
- Forage production
- Wintering habitat
- YOY sauger
- Recreation
 - 6 months

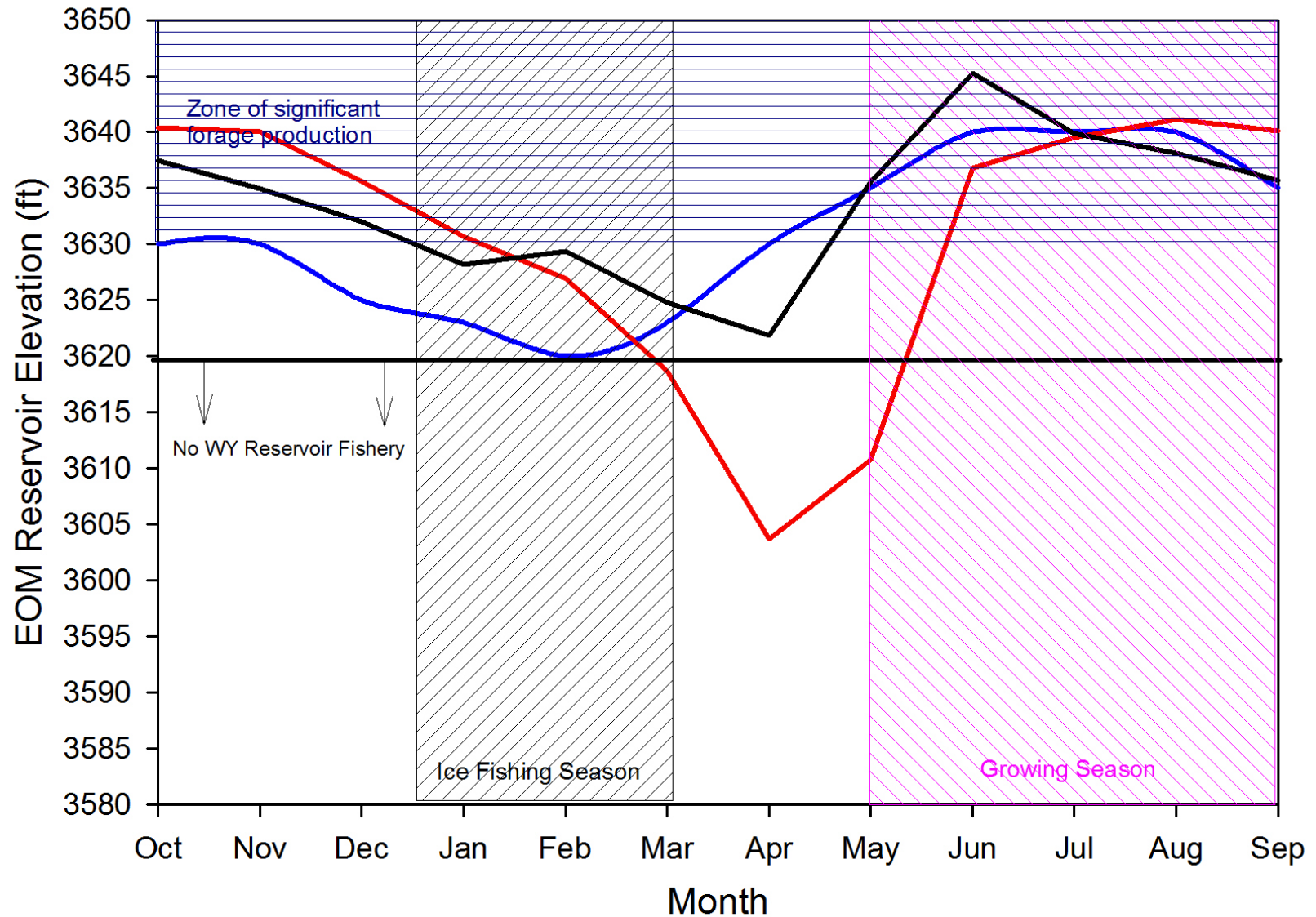




Model



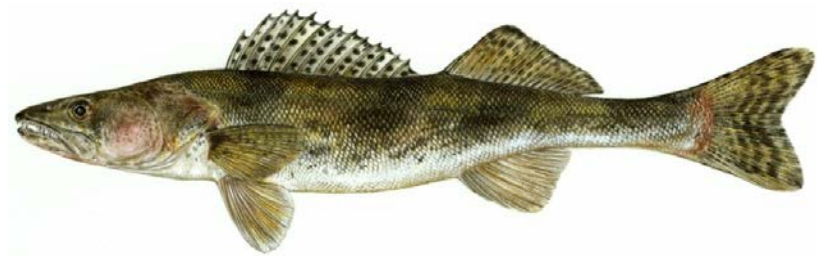
2014 and 2015





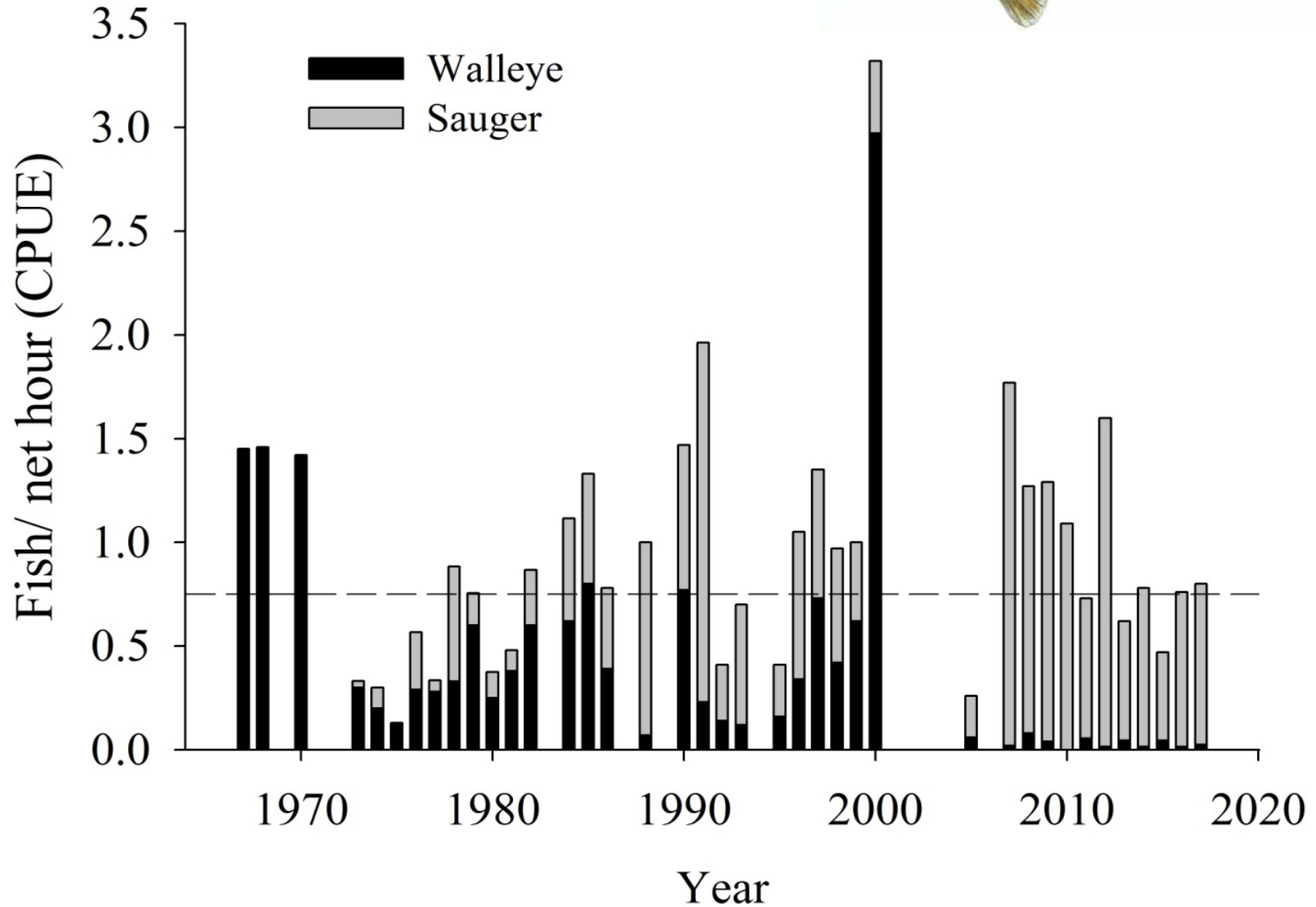
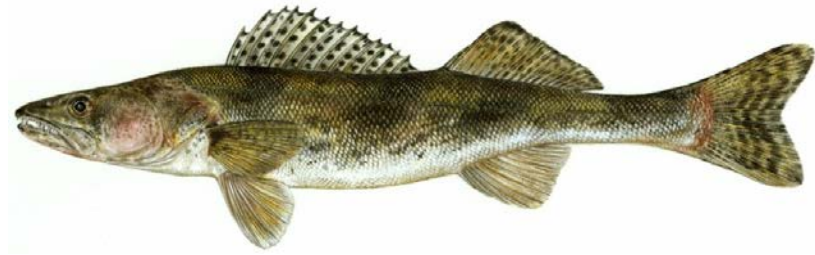
Sauger & Walleye

- Objective
 - Maintain sauger CPUE of $>0.75/h$
- Monitoring
 - Gill Nets
 - Fall



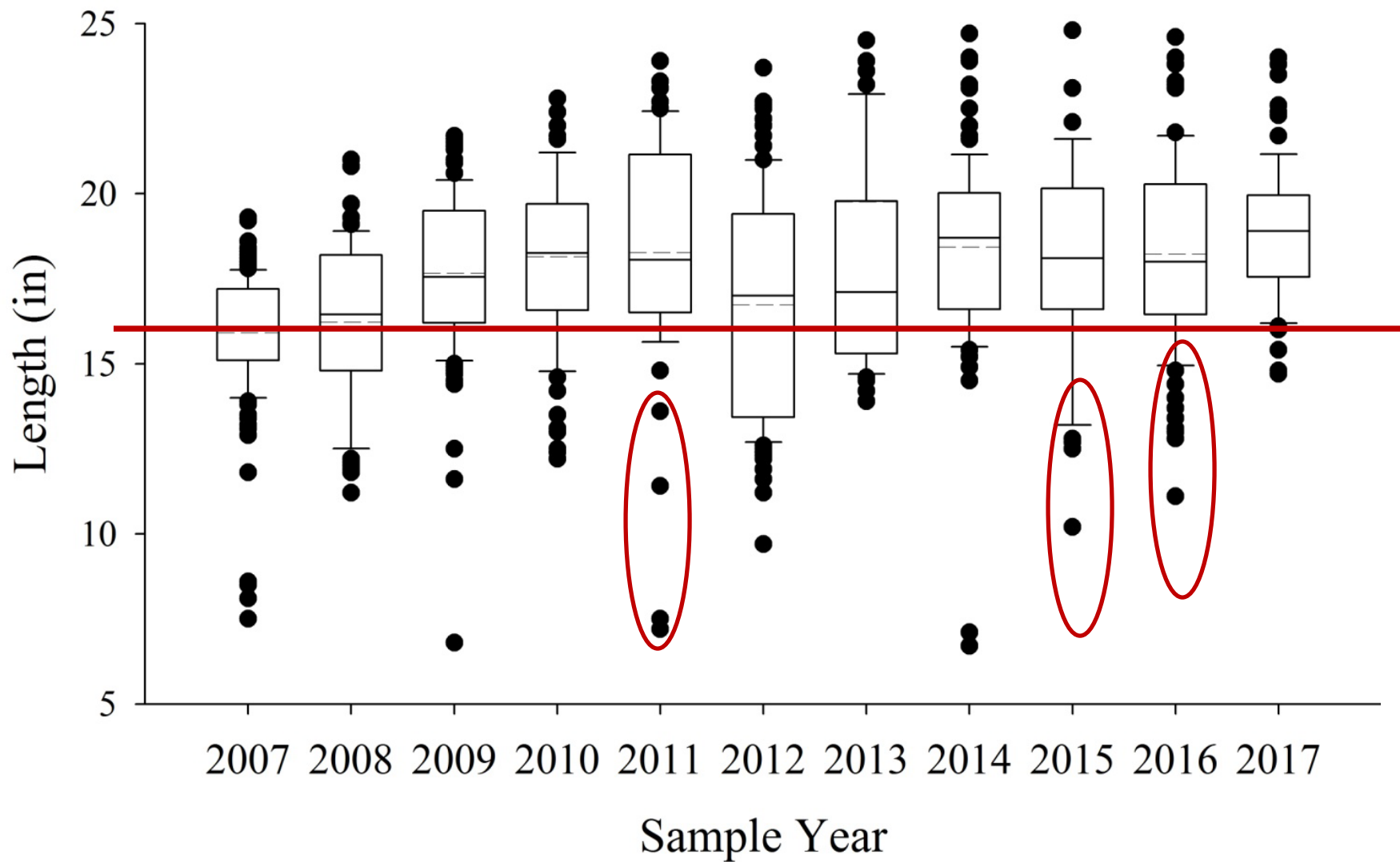
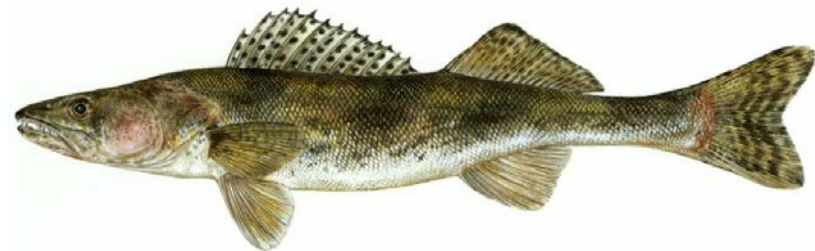


Sauger & Walleye





Sauger



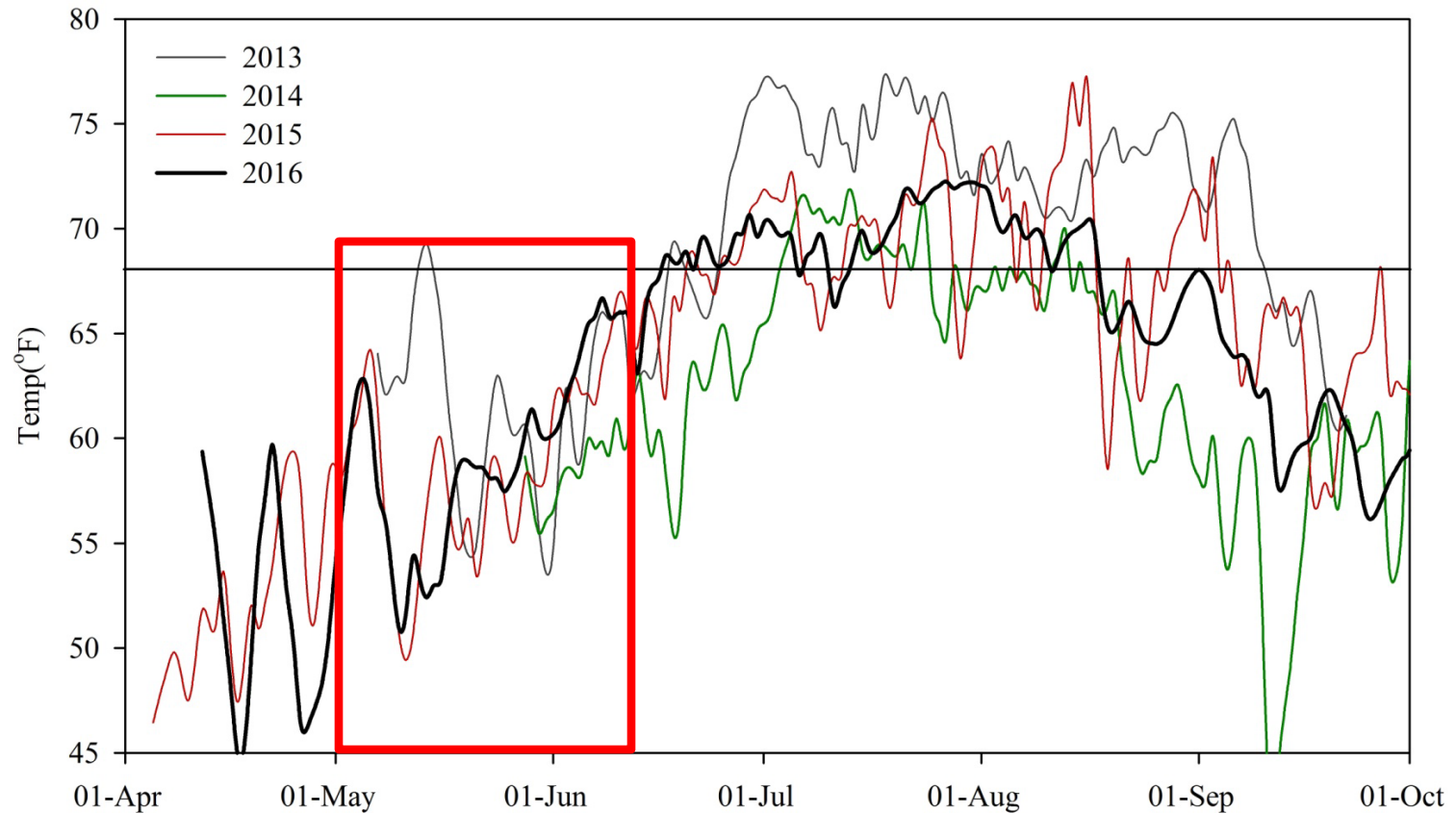
The Plus Side of Big Water Years

River flows and temperature patterns more optimal for recruitment



Sauger Graduate Project

- Objective
 - Temperature influence on egg development and survival



Sturgeon Reintroduction in the Bighorn River

Objectives

- 1) Establish a self-sustaining population of sturgeon
- 2) Provide a unique sport fishing opportunity
- 3) Increase biodiversity of Bighorn River

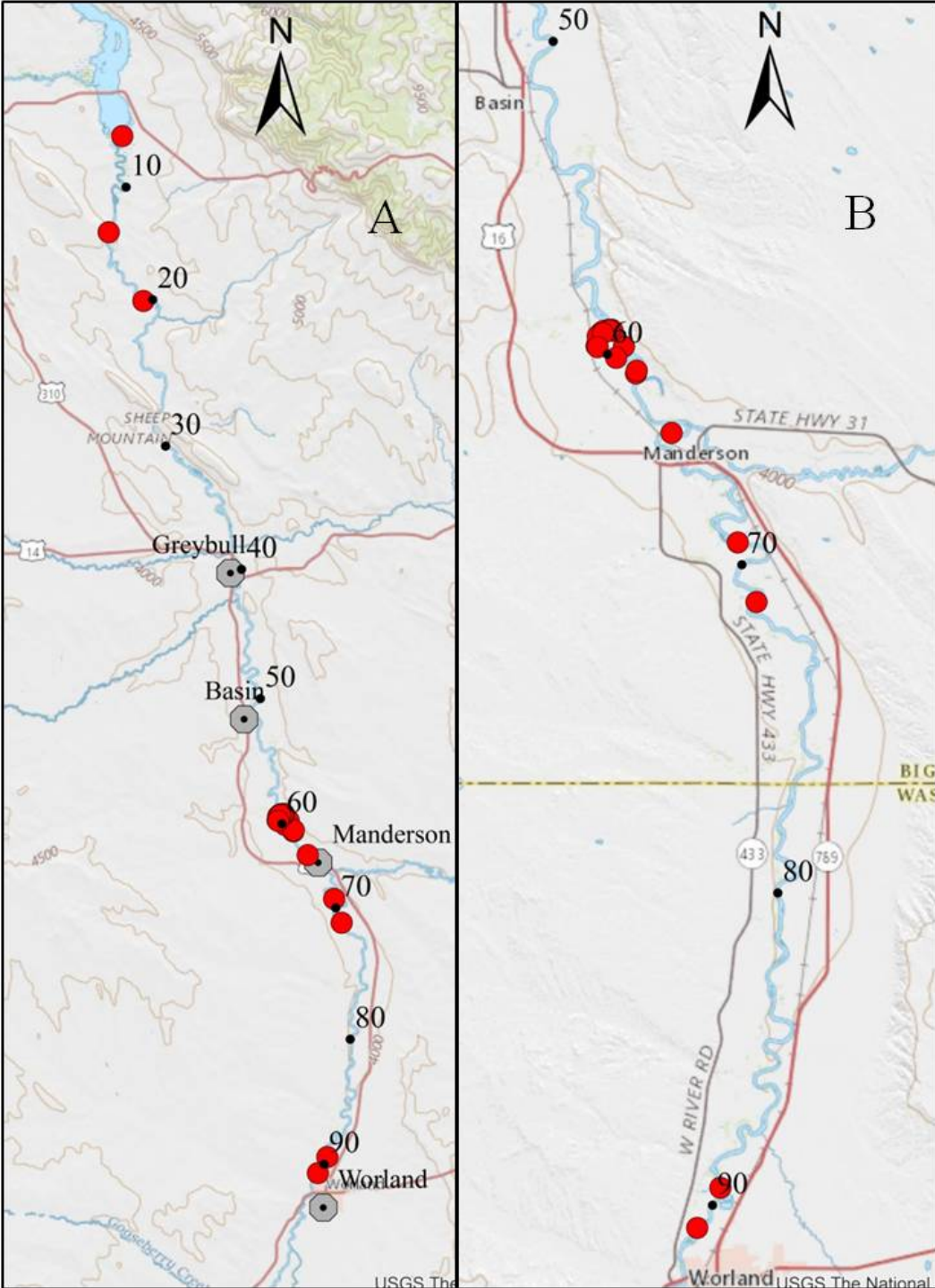


Research Project

Objectives:

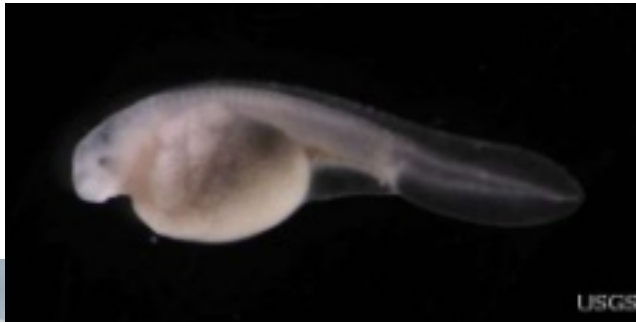
- 1) Identify spawning sites
- 2) Model embryo drift distances
- 3) Validate drift distance estimates with larval drift sampling





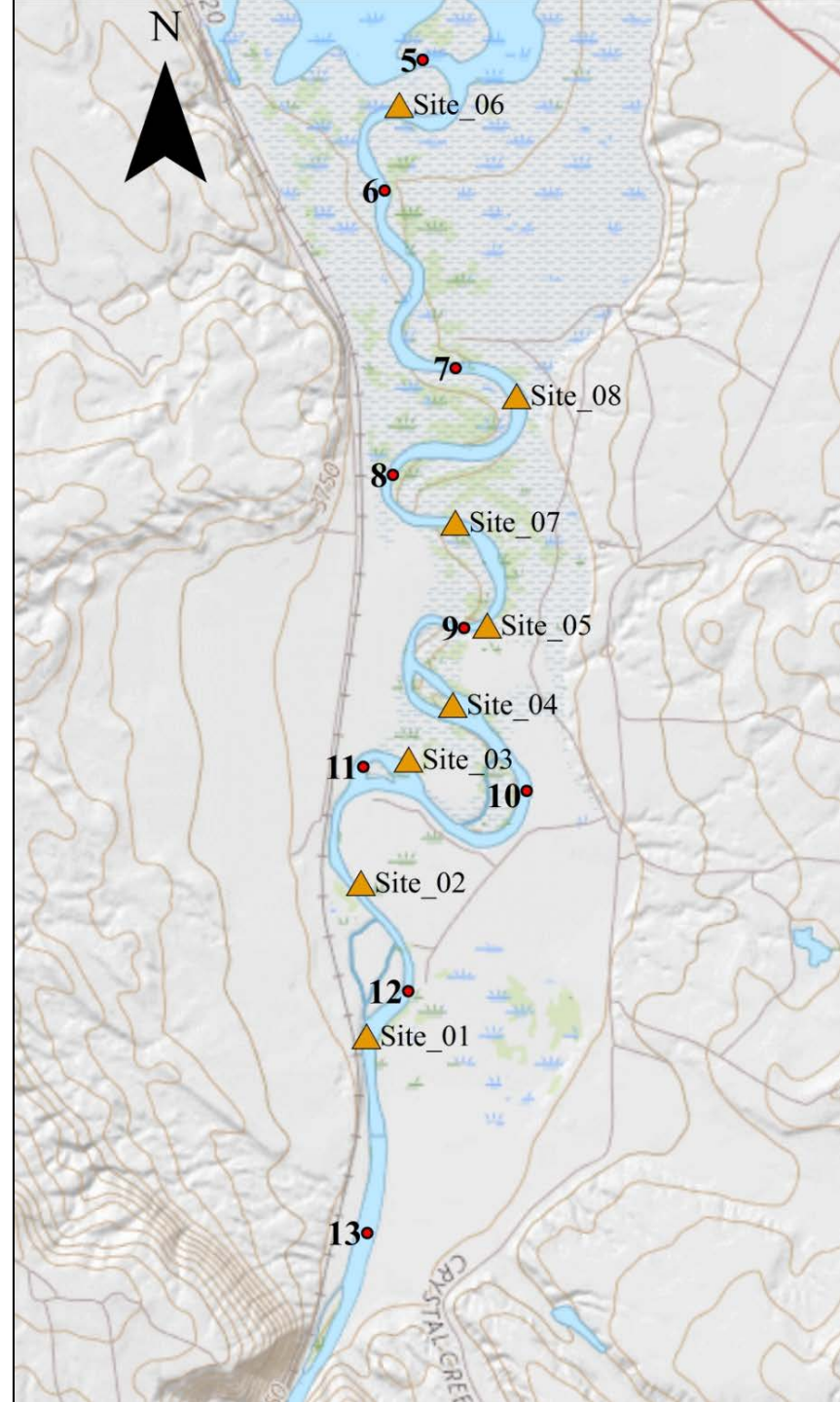
Expected Outcome

- Self-sustaining population?
 - 3 years



Sturgeon Chub

- Petitioned for listing
 - 2016
 - Warranted
 - 12 month review
- Objective
 - Present in Bighorn?
 - Where?
- eDNA
- Trawl sampling



Conclusions

- Interconnected Bighorn system
- Native fishes: Sport and small-bodied
 - CCF, SAR, SNS, SGC
- Forage production
- Wintering habitat
- YOY sauger
- Recreational opportunities
 - 6 months

Questions?

