

### Rare and native fishes of the upper Colorado River basin

### M. Tildon Jones Upper Colorado River Endangered Fish Recovery Program



# Takeaways:

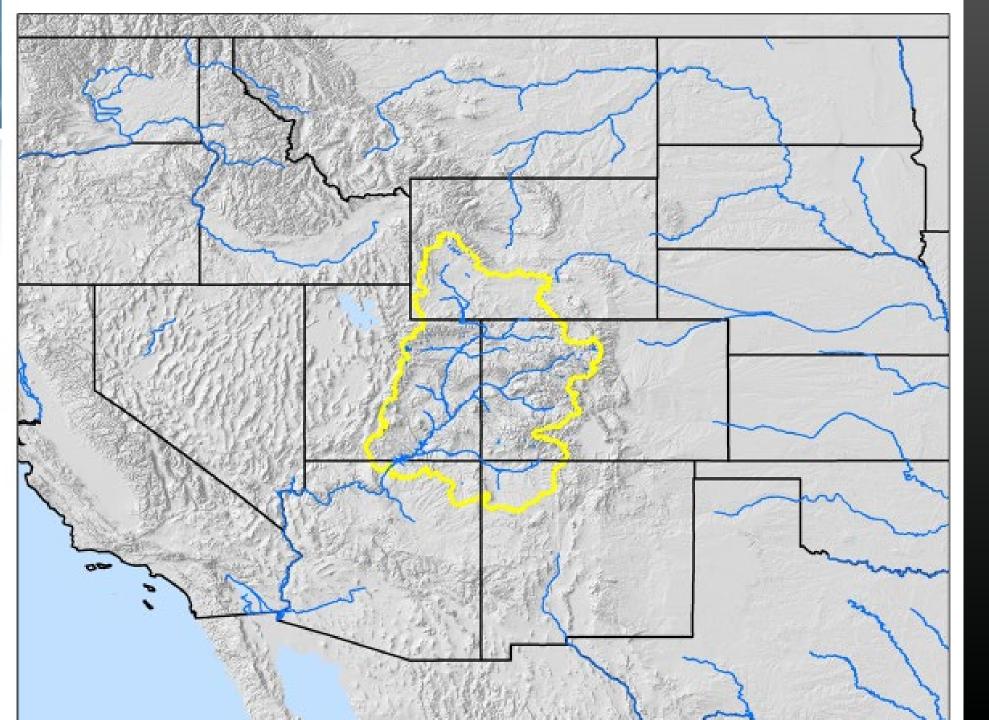
### Native fish are unique

### Threats to native fish

What we're doing

Native fish are rad!







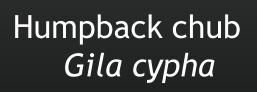
## Colorado River native fishes

- Adapted to environment with drastic variability
- Spawning cues often associated with temperature or flow
- Turbid, flash flooding
- Long distance migrations





### Colorado pikeminnow *Ptychocheilus lucius*





Bonytail Gila elegans



Jacpan Strandard

Razorback sucker *Xyrauchen texanus* 

ken opti K. Järvellant

## Humpback chub Threatened 2021



# Bonytail Endangered 1980



Colorado pikeminnow Endangered 1973



## Razorback sucker

Endangered

1991

**Proposed Threatened** 



## "Three Species"

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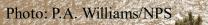


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CSU-LFL

## Important habitats



### Threats

# Water Use & Depletions

Barriers & Entrainment

#### Nonnative Fish

oto: M. Breen, UDWR

#### Large Dams & Reservoirs



Managing Flows

Research and Monitoring





Fish

## Habitat

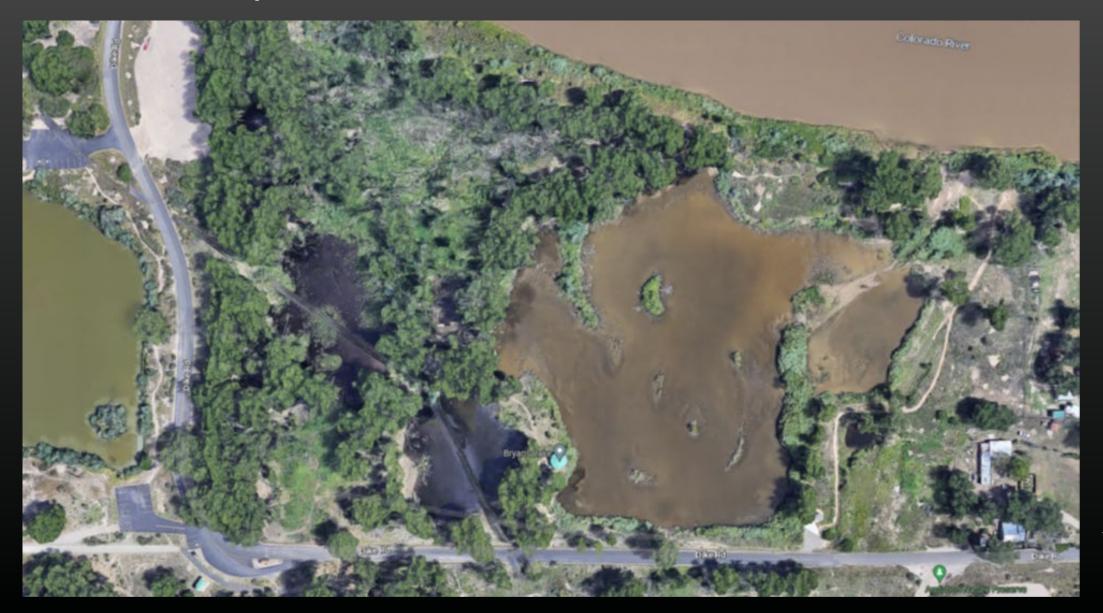
Passages

### Wetlands

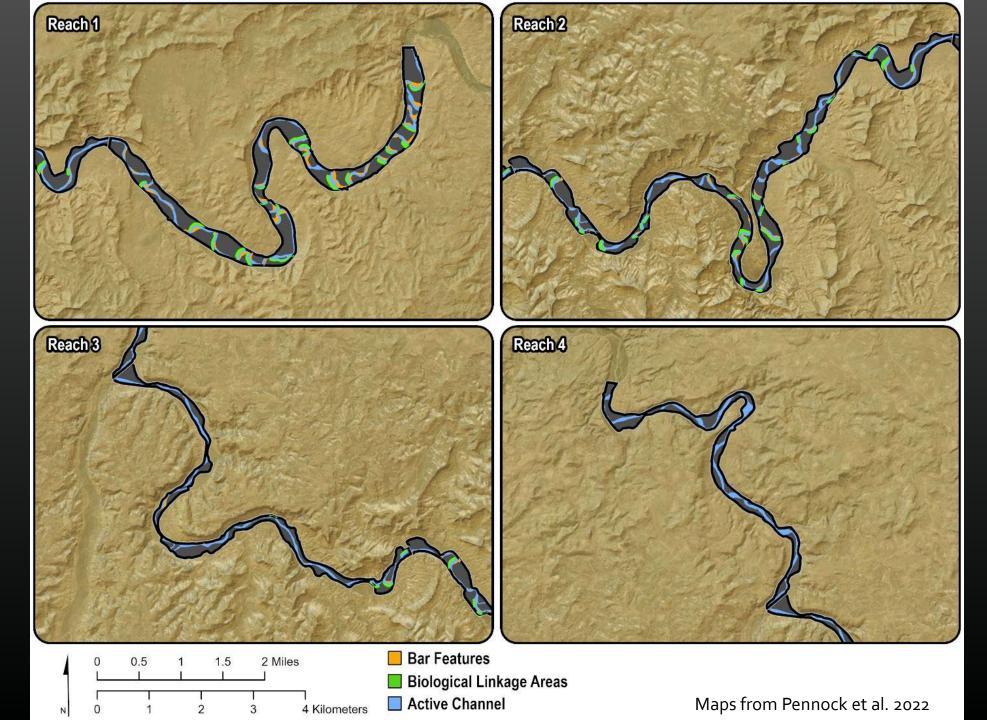
### Canal Screens



## Grand Valley Audubon site



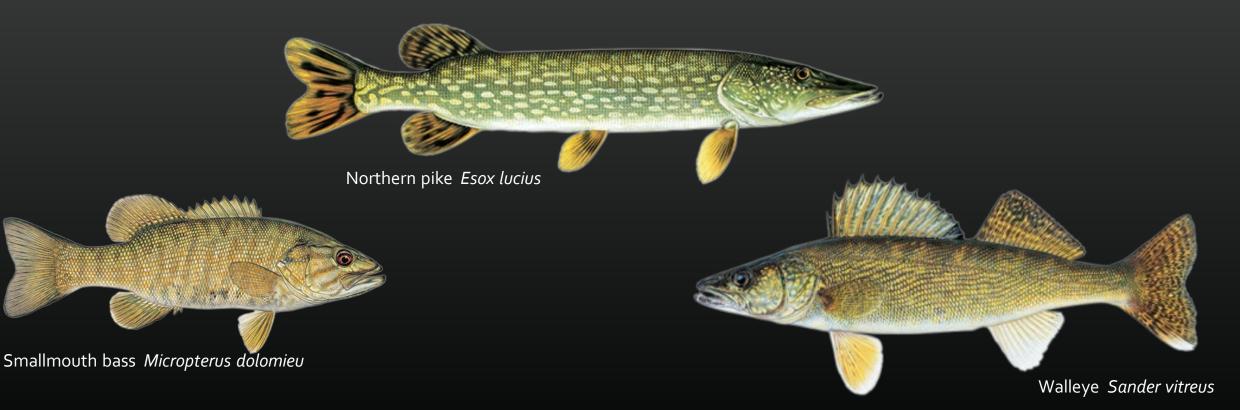






## Three Focal Nonnative Invasive Predators

These fish escaped from reservoir sources and established populations in river habitats.



Fish Illustrations copyright Joe Tomelleri

## Two-tiered Strategy

## Rivers: native fish recovery areas

• Remove smallmouth bass, northern pike, and walleye in 600+ river miles

## **Reservoirs: compatible angling**

- 6 of 7 Reservoirs are screened
  - Highline Lake
  - Rifle Gap
  - Elkead Reservoir
  - 1 in design phase: Lake Catamount



# coloradoriverrecovery.org tildon\_jones@fws.gov