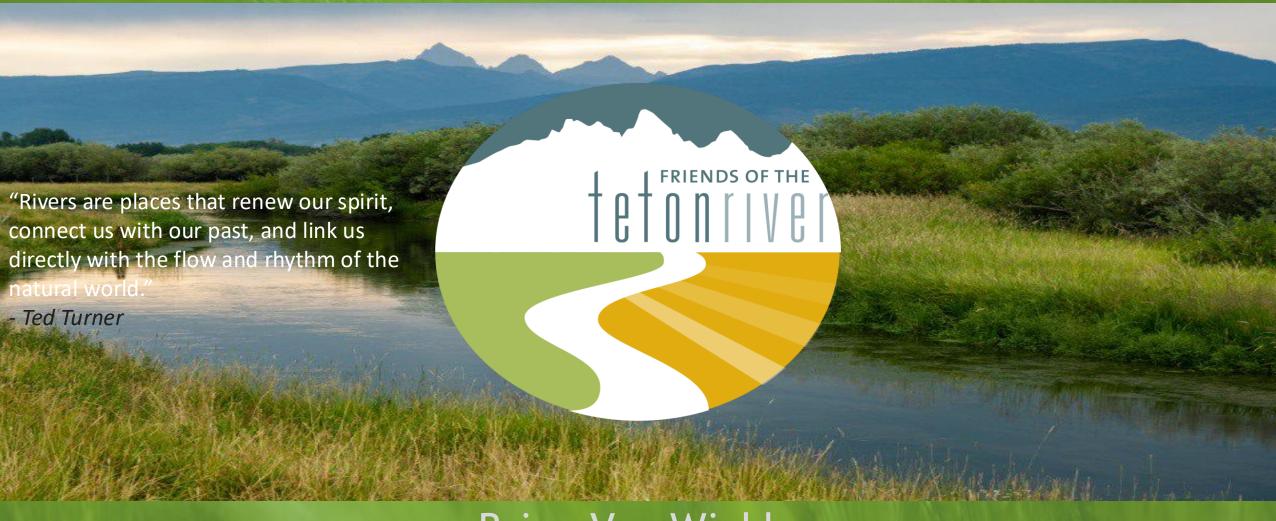
# 2024 State of the Teton River Fishery



Brian Van Winkle Fisheries Program Director

## FTR's Story

-Friends of the Teton River (FTR) is a nationally recognized leader in science and community-based watershed protection and restoration. FTR was founded in 2001 by a diverse group of stakeholders, including farmers, anglers, scientists, agency personnel, and conservation interests who were concerned by declines in water quality and the Teton River fishery.

• "Things on the river have changed radically beginning in the start of the nineties [1990's]. Numbers of fish went way down. Drought conditions did not sustain the springs and spawning creeks went dry."

#### **Our Mission:**

- ► At Friends of the Teton River our mission is to restore and conserve the Teton River Watershed, ensuring a lasting legacy of clean water, healthy streams, and a thriving wild fishery.
- ► We implement programs and projects founded on sound science, community education, and cooperation with landowners, citizens and agency partners.



# FTR's Fisheries and Monitoring Goals.

Determine long-term trout population trends.

- ► Provide the Agency's with additional data on the Teton River Watershed.
- Identify, prioritize, design, and implement YCT conservation projects.
- Monitor the efficacy of restoration projects.



## **Our Partners**































**BUREAU OF** 







Teton Conservation District Est. 1946

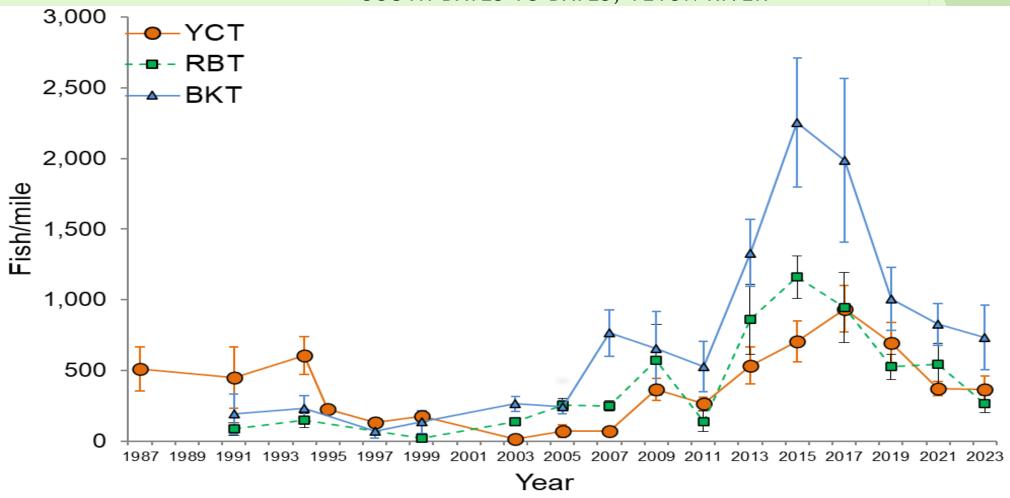




POPULATION
ESTIMATES IN
THE UPPER
TETON RIVER

#### NICKERSON REACH POPULATION ESTIMATE

SOUTH BATES TO BATES, TETON RIVER

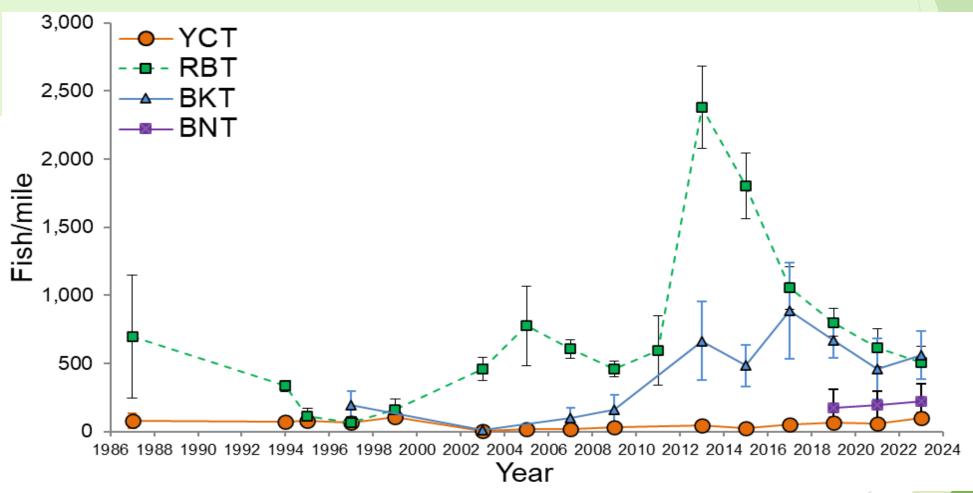


Estimated abundance (trout/mi) of Yellowstone Cutthroat Trout (YCT), Rainbow Trout (RBT), and Brook Trout (BKT) in the Teton River at the Nickerson reach from 1987 through 2023.

The data, graph, and data analysis in this graphic was created by the Idaho Fish and Game Department.

#### BRECKENRIDGE REACH POPULATION ESTIMATE

PACKSADDLE TO HARROPS BRIDGES, TETON RIVER



Estimated abundance (trout/mi) of Yellowstone Cutthroat Trout (YCT), Rainbow Trout (RBT), Brown Trout (BNT), and Brook Trout (BKT) in the Teton River at the Breckenridge reach from 1987 through 2023.

The data, graph, and data analysis in this graphic was created by the Idaho Fish and Game Department.



USFS/RMRS/NATIONAL
GENOMICS CENTER
FOR WILDIFE AND
FISH CONSERVATION
ENVIRONMENTAL DNA
(E-DNA) PROJECT



#### **OBJECTIVES**

- ▶ Objective I: Quantify the distribution, occupancy, and seasonal habitat use of both endemic and invasive salmonid fishes in the Teton River basin.
- Objective II: Identify how landscape features, geographic distance, restoration activities and environmental stressors promote or limit gene flow among the four salmonid species in the basin
- Objective III: Create a working group of stakeholders from each basin to develop scenarios of stewardship, management actions and infrastructural modifications that could be used to mitigate and eradicate invasive species in conjunction with mental modeling exercises
- ▶ Objective IV: Incorporate ecological (Obj. I), genetic (Obj. II), and social (Obj. III) results in an integrative model to make predictions and identify preventative measures for future invasions in the river basins

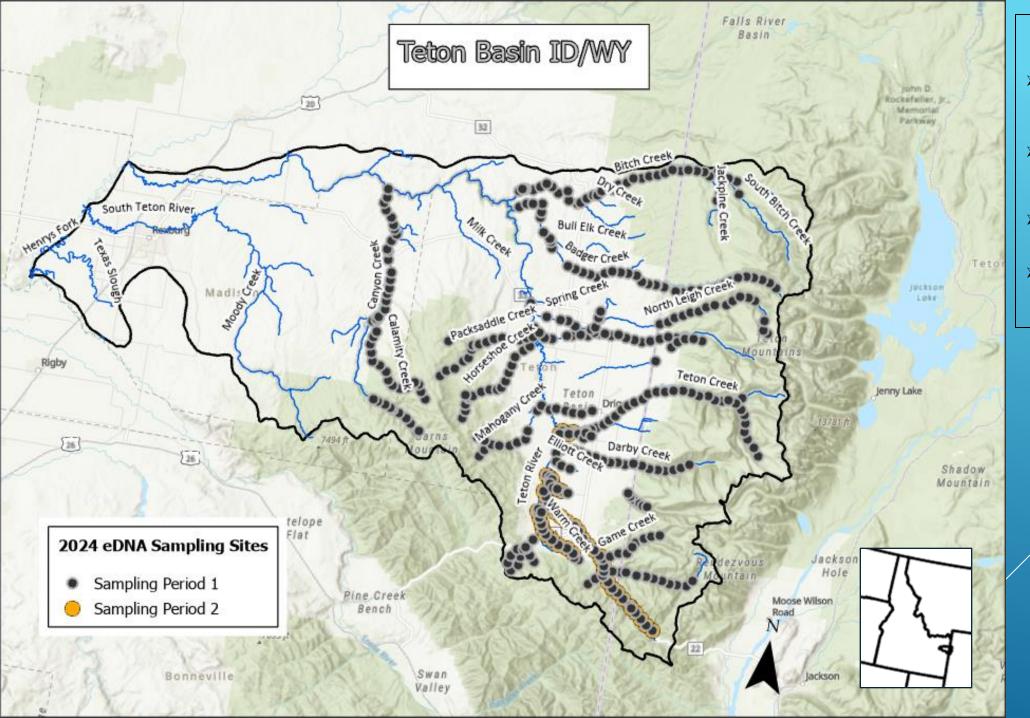
#### 2024 eDNA Sampling





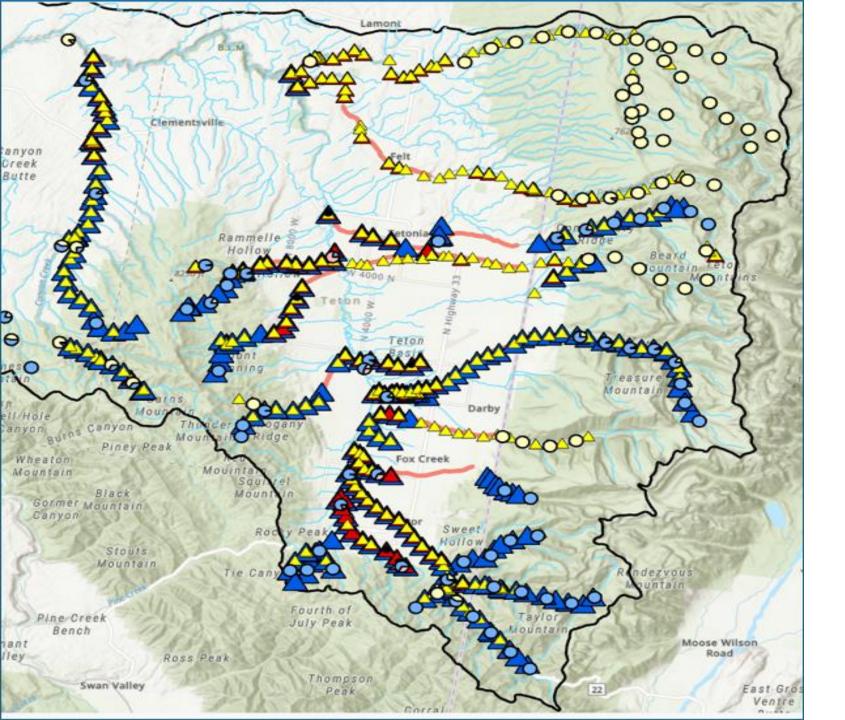


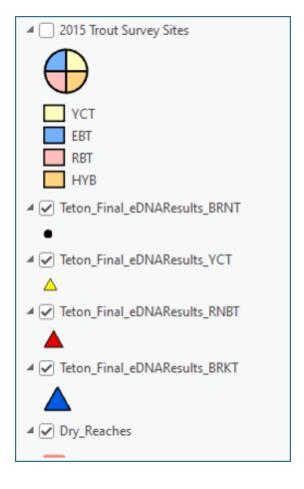




#### 2024 eDNA Sampling

- > 393 Samples for SP1
  - Spring-Summer
  - BRKT, YSCT, BRNT, RNBT
- 49 Samples for SP2
  - Fall
  - BRNT
- 52 Duplicate SamplesNRS lab
- 494 Total Samples







YELLOWSTONE CUTTHROAT DIVERGENCE GENETICS STUDY







# State of the Fishery 2025

Maria Rodriguez, MS student

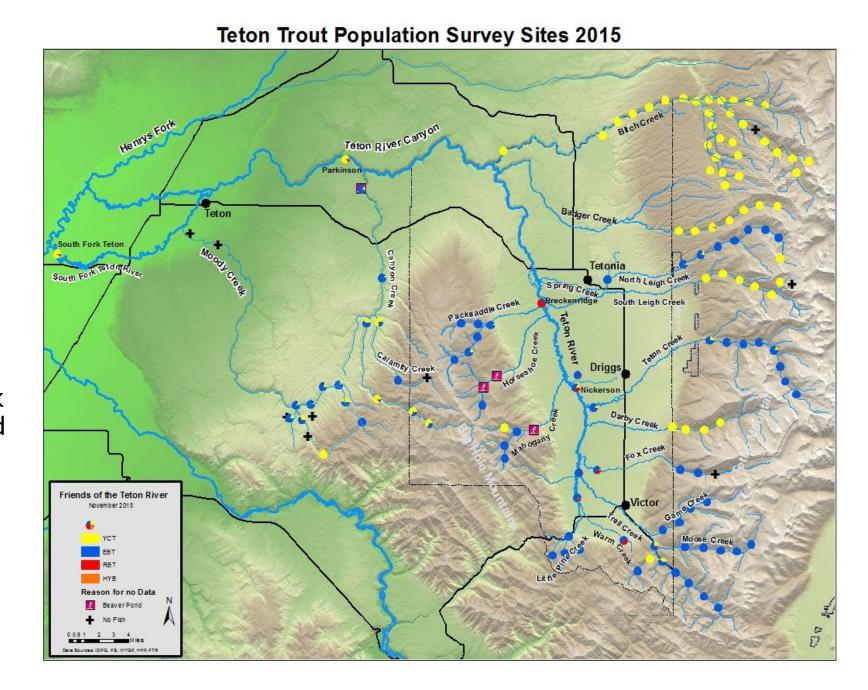


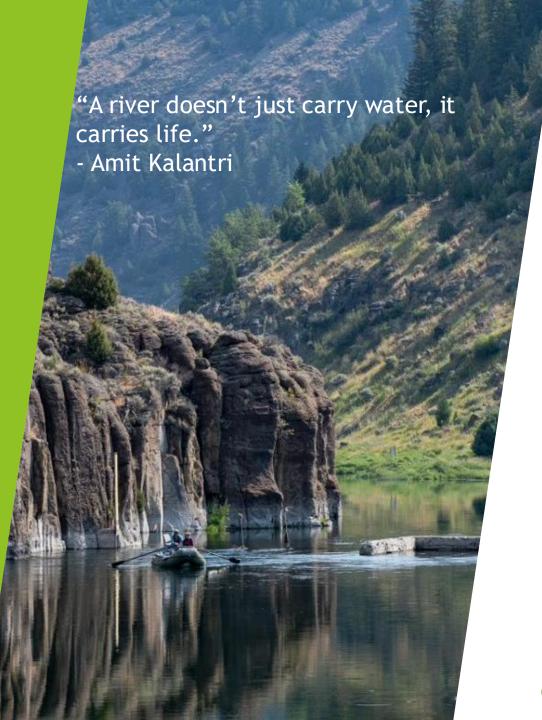


2025 TRIBUTARY
TROUT
ASSESSMENT

# Utilizing the 2025 Tributary Trout Assessment for Riverscape level Genomics Study

- Model created by Rob Van Kirk in 2005 to track species abundance and composition in all Tributaries to the Teton River.
- 112 Sample sites throughout the basin.





### Take-Home!

- FTR will continue to monitor the fishery, collect temperature and water quality data, and implement meaningful restoration projects that protect and restore healthy, functioning stream channels.
- ► There are a lot of places in this country and the world for that matter, where one can catch a Brown Trout, Brook Trout or Rainbow Trout. However, this ecosystem is the only place in the world you can still catch native Yellowstone Cutthroat Trout in significant numbers! With our ongoing collaborative research and monitoring we hope to keep it that way.
- Finally!!! Collaboration is our key to success! We can't do it without the help and partnerships we have and the ones yet to come.

Contact: brian@tetonwater.org

# Fisheries Program Field Tour

Summer 2025 June 19th 9:00am-12:00pm





Join us to explore spawning cutthroat trout redds, fisheries monitoring infrastructure, stream restoration and managed grazing at Six Springs Creek with FTR and the Teton Regional Land Trust.

Scan to RSVP and receive details



July 11th 5:00pm-8:00pm Drigg: City Center Plaza





Whether you're a long-time supporter or a new friend, this will be an evening to remember. There will be food and drinks to purchase, live music and a raffle including a fishing trip and other awesome prizes!