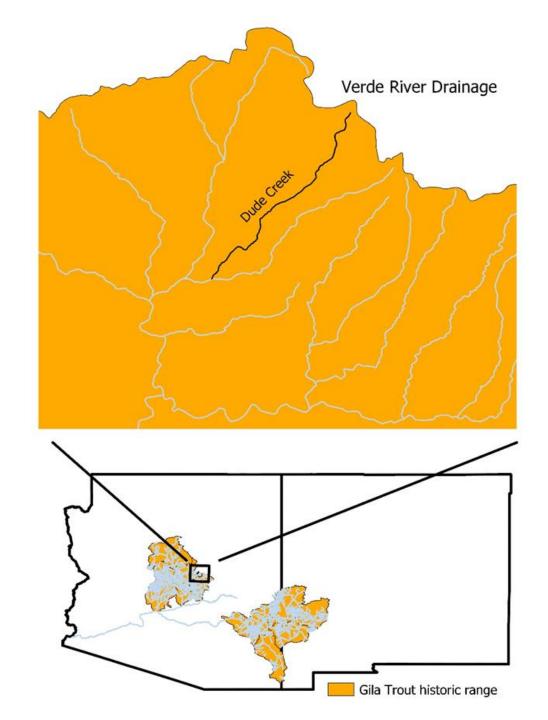


## **Dude Creek Updates**

Emily Keister
Arizona Game and Fish Department
Native Trout and Chub Specialist

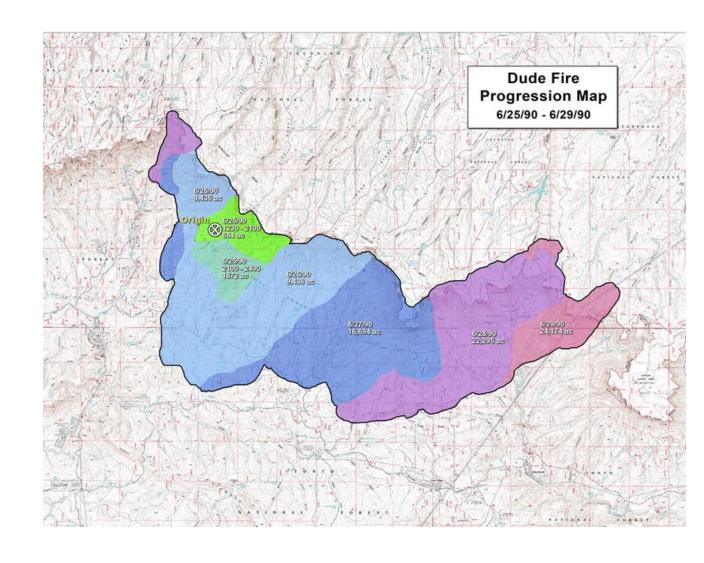
## **History and Status of Gila Trout**

- Their native range is thought to be the Agua Fria River, Verde River, Tonto Creek, Upper Gila River drainage, and the San Francisco River drainage in Arizona and New Mexico.
- Gila Trout were formally described as a species in 1950 when their distribution was estimated to be under 20 stream miles in the Gila River in New Mexico.
- First listed as endangered in 1967
   Under the Federal Endangered
   Species Preservation Act (predecessor to the Endangered Species Act of 1973).
- Due to the tremendous conservation of the first of the tremendous conservation of the first of the tremendous conservation of the first of the first



### **Background**

- Prior to 1990, Dude Creek housed a population of Brook Trout.
- The Dude Fire was a devastating fire that started near Payson, and burned 24,174 acres in 1990.





### **Background**

#### Gila Trout Stockings:

- September 1999: 126 mixed age trout stocked
- November 1999: 17 age-0 trout stocked
- May 2000: 22 adults stocked
- There was never any evidence that the Gila Trout stocked in 1999-2000 ever reproduced.

#### Fires:

 The Rodeo-Chedeski fire hit the area in 2002, and there was another small scale fire in 2005.

Flooding proceeding the fire in 2005 eliminated all remaining trout.

he habitat was surveyed annually





# Background on Stockings

- 2015: 1,030 Gila Trout, Main Diamond and South Diamond lineages, were stocked into Dude Creek in October.
  - South Diamond had their adipose fins clipped.
- 2016: Electrofishing survey in August captured 76 Gila Trout, all adults (>130mm), except for 5 that were juveniles (80-130mm).
  - 37 Main Diamond
  - 39 South Diamond
- 2017: 125 of each Main Diamond, South Diamond, Whiskey Creek, and Spruce x Whiskey lineages were stocked.
- Natural recruitment has been condocumented since 2018.

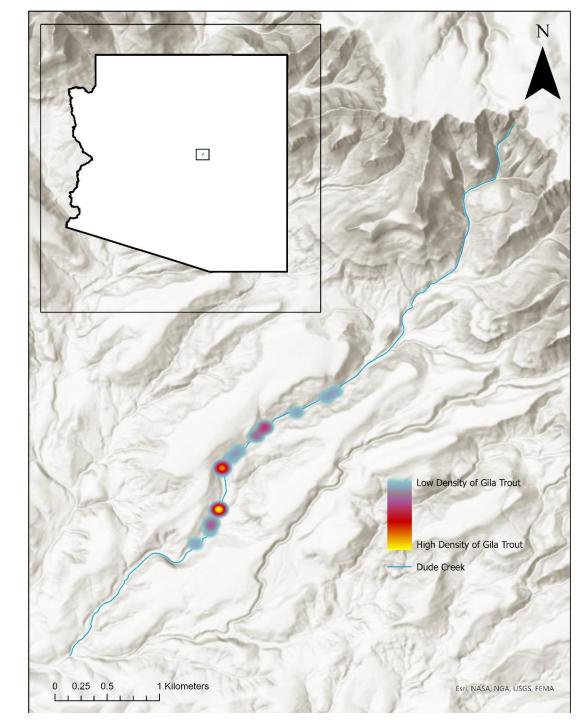


### Visual Encounter Surveys

- Visual encounter surveys were completed in the fall of 2019-2022.
- Visual surveys were not done in 2023 or 2024 because population estimates were done.

| Year | YOY | Sub-Adults | Adults |
|------|-----|------------|--------|
| 2022 | 17  | 2          | 8      |
| 2021 | 11  | 21         | 8      |
| 2020 | 140 | -          | -      |
| 2019 | 138 | 19         | 42     |

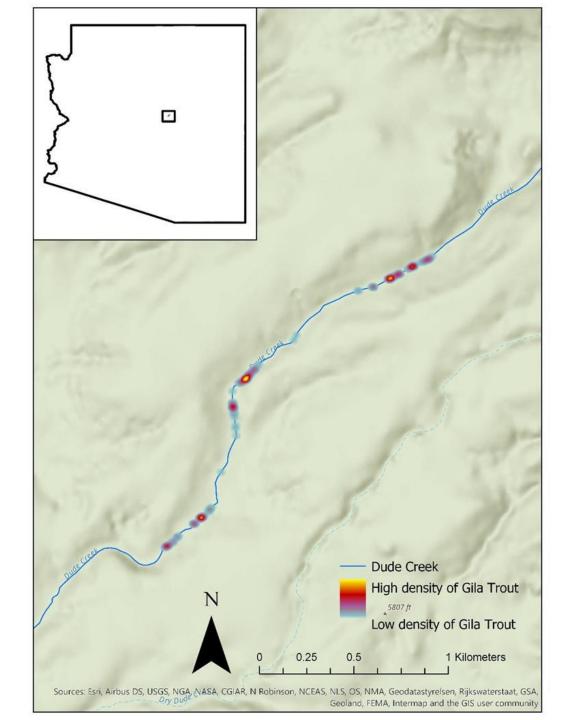




# Population Estimates: 2020 & 2023

- 2020: sampled 347 Gila Trout; 28-260mm; total population estimated at 996 Gilas; adult population estimated at 462.
- 2023: sampled 87 Gila Trout; 65-275mm; 14 adults, 49 juveniles, & 24 young-of-year; total population estimated at 253; adult population estimated at 39.





### **Regulation Changes**

 2021: New regulations for Dude Creek took effect: Closed January 1<sup>st</sup> - April 30<sup>th</sup>; Catch-and-release only; single barbless hook; artificial fly and lure only.





#### **2024 Work**

March Observations: Observed 3 large, adult Gila Trout

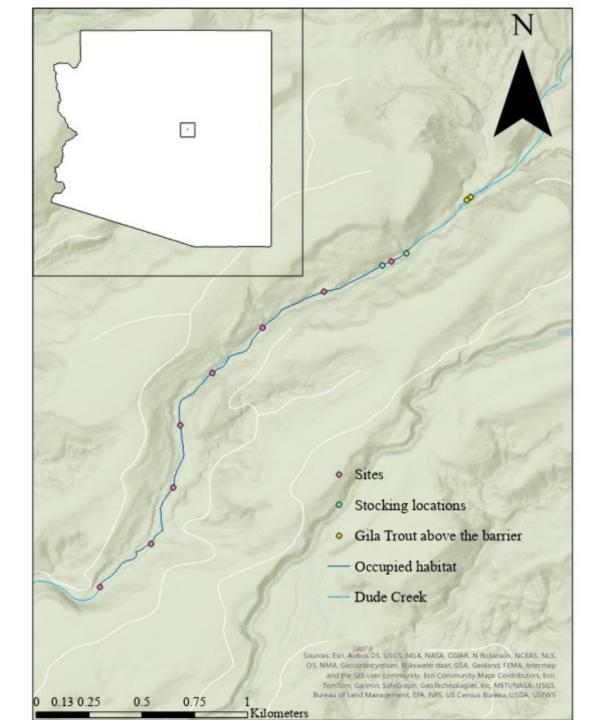
above the barrier/ the end of the "occupied reach" during a site visit.

June Stocking: 458 Whiskey Creek Gila Trout were

stocked. They were 2-10 inches in length. All trout had their

adipose fins clipped prior to stocking.

Sampled Number of Adipose Clipped October Population Esitimate: Salmipled 73 Gila Trout, Site 3 uding 28 recaptures from the June stocking. ulation was estimmeted at 256 @ila Trout. No



# 2024 Work – Continued

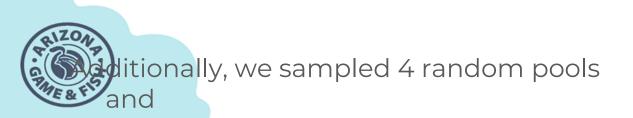
PIT tagging: All 73 Gila Trout that were captured

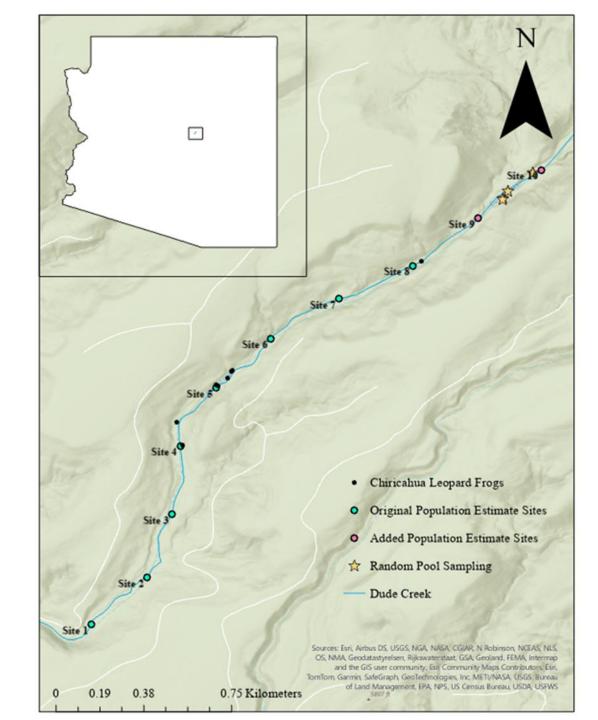
during the population estimate were PIT tagged in

additionsiteNember | Sungber of PIT trees deployed red in pools 2 1

outside the sample sites. 15

| 6  | 3  |
|----|----|
| 7  | 29 |
| 8  | 20 |
| 9  | 3  |
| 10 | 0  |





#### **Future Plans**

- Annual single pass sampling:
   monitor population,
   track tagged trout (movement and
   growth),
   and continue to tag all untagged
   Gila Trout that are captured.
- Augment the population as needed with fish from Mora.







## Was therea/fishrioti?



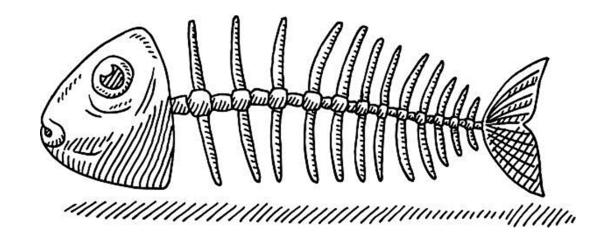
# Was There a Fish Kill?

As a general rule, social media is not a reliable source of information.

Exceptions: Official Arizona Game and Fish Department social media (Facebook, Instagram, etc.)

Please, do not repost or share unconfirmed posts about fish kills.

If you suspect a fish kill, please contact: ekeister@azgfd.gov aloubere@azgfd.gov sgsimmons@azgfd.gov







#### Thank you!

Trout Unlimited
US Forest Service (Tonto National Forest)
New Mexico Department of Game and
Fish

US Fish and Wildlife Service Backcountry Hunters & Anglers

















