

Funding the Future of Water: An NGO Perspective

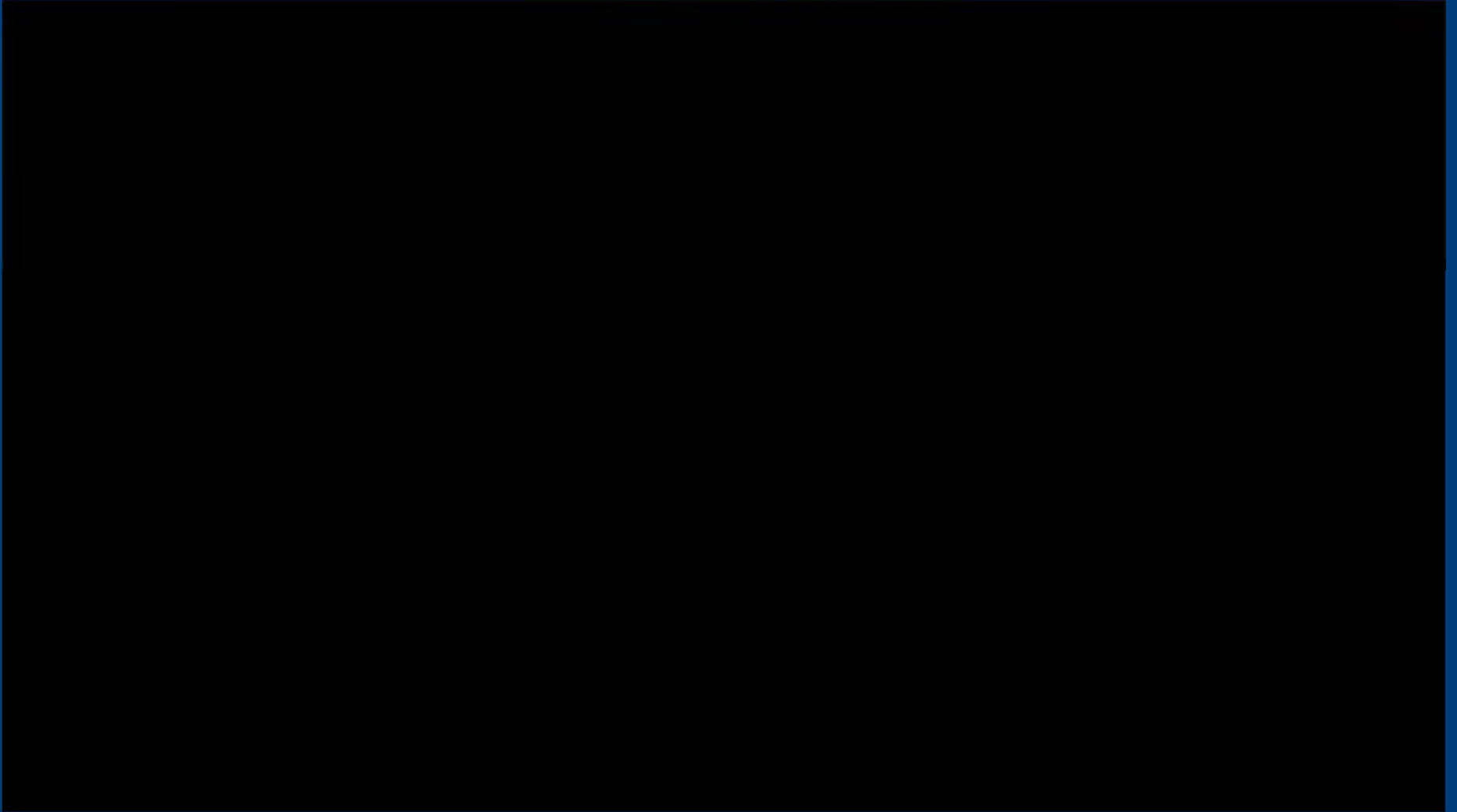
**Colorado River Water
Users Association
Las Vegas, NV
December 15, 2022**



Henry's Fork, WY
Photo Credit: Hillary Walrath

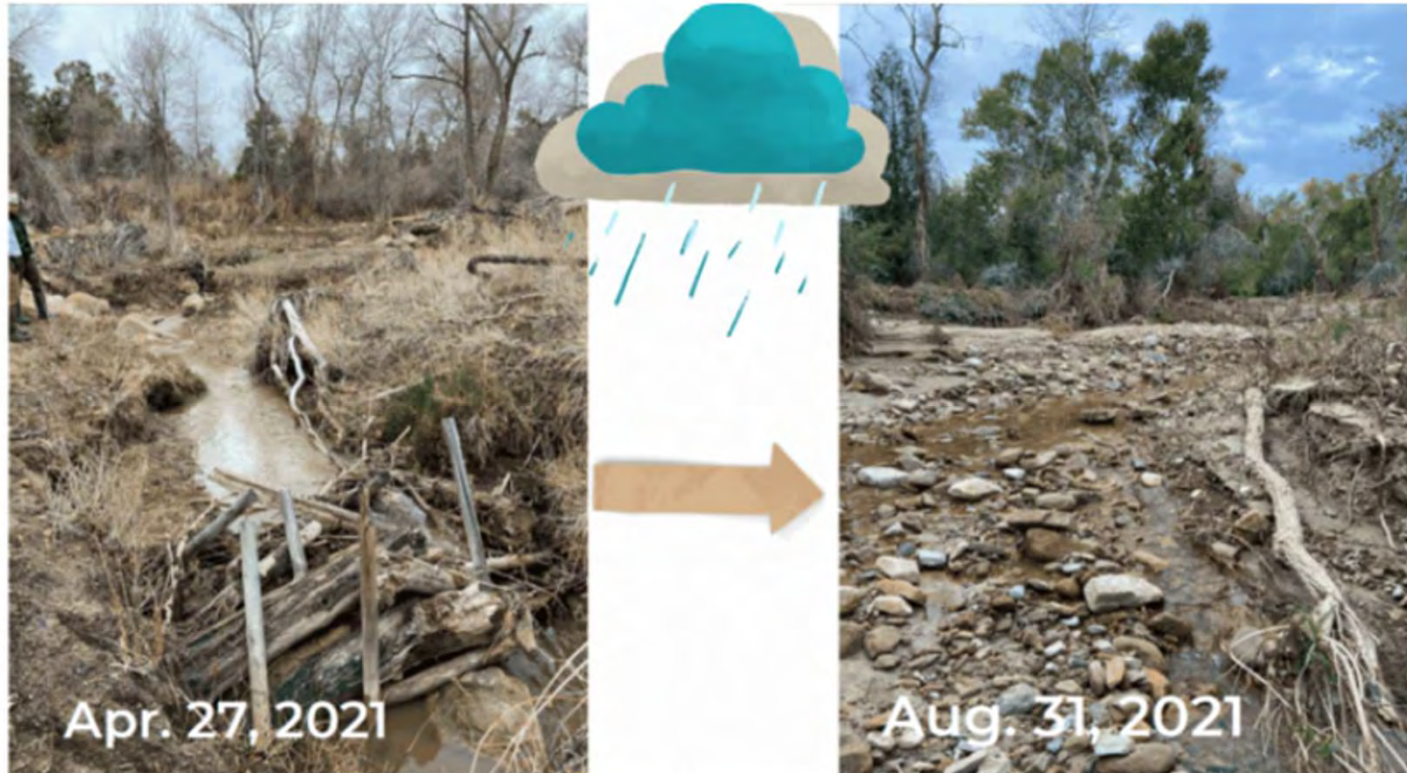
**Sara Porterfield, Western Water Policy Advisor
Trout Unlimited**

BDA Construction on Miller Creek, UT



Video
Credit:
Jordan
Nielson

BDAs at Work on Miller Creek, UT



Left: Section of Miller Creek in April, with a human-made dam structure to slow erosion.
Right: Same section of the Creek, 4 months later, with elevated floodplain and wider streambed. Photos by:
Sageland Collaborative.

Large-Scale Drought Resilience



Muddy Creek, WY

Henry's Fork, WY Fish Passage Projects



Before and after of a diversion TU completed for the ranch that is participating in the demand management study in the Henry's Fork. The photos were taken on opposite sides of the creek, but the first picture clearly shows the diversion blocking the creek and most flow going down the ditch. The second picture shows the improved diversion that allows fish passage and the new headgate, which gave the landowner better control of their irrigation and significantly reduced maintenance.

Photo Credits:
Hillary Walrath

Henry's Fork, WY Fish Passage Projects

Large-scale fish passage project involving multiple landowners & partners:

- Partners: Wyoming Game and Fish Department, Uinta County Conservation District, Utah Division of Wildlife Resources, Wyoming Wildlife and Natural Resources Trust, Wyoming Landscape Conservation Initiative, Resources Legacy Fund, Natural Resources Conservation Service
- Working with 6 large ranches to improve 12 diversions for fish passage
- Project will improve habitat for native CO cutthroat trout and flannelmouth and bluehead suckers
- Project will restore passage to >50 river miles
- Project will improve infrastructure for agricultural benefit
- Includes development of an educational program for the local school



Henry's Fork, WY
Photo Credit: Hillary Walrath

Henry's Fork, WY Demand Management

The trust built with the landowners through these, at first, small, individual fish passage projects and the ongoing, larger-scale project also led Henry's Fork landowners to participate in an ongoing Demand Management study:



Study monitoring equipment in a participating field on Fontenelle Creek, Upper Green River Basin, WY. Landowners continue to irrigate in summer 2021 & 2022 to collect baseline data to compare to fallowing in 2023-2024.

Photo Credit: Sara Porterfield

- TU is partnering with Strike Consulting Group and the University of Wyoming
- Study aims to quantify CCU when a field is fallowed and what effects there are to individual fields as well as the larger system
- The study covers multiple drainages in the Upper Green, including the Henry's Fork
- The study totals 274 acres over 6 fields over 4 years:
 - 2021-2022: baseline data collection, continued irrigation
 - 2023-2024: data collection from fallowing
- Study will improve CCU measurement and determine the ecological impacts of DM on field composition and production, local groundwater levels, return flows, and wetlands

“Auto-Tarps” & LoRa Networks on the Gunnison River



A TU project in the Upper Gunnison and the San Luis Valley was awarded an NRCS Conservation Innovation Grant (CIG) in 2021. The goals of the project are to:

- Maintain flood irrigation benefits for habitat and hydrology
- Decrease labor costs
- Increase effectiveness of flood irrigation techniques
- Incorporate monitoring data into daily operations for producer and env. benefits

TU's Upper Gunnison Basin Project Specialist Jesse Kruthaupt demonstrating the auto-tarp.
Photo Credit: Sara Porterfield

Auto-Tarp in Action
Video Credit: Jesse Kruthaupt





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