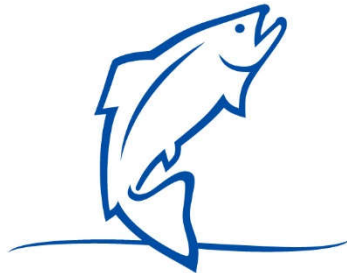
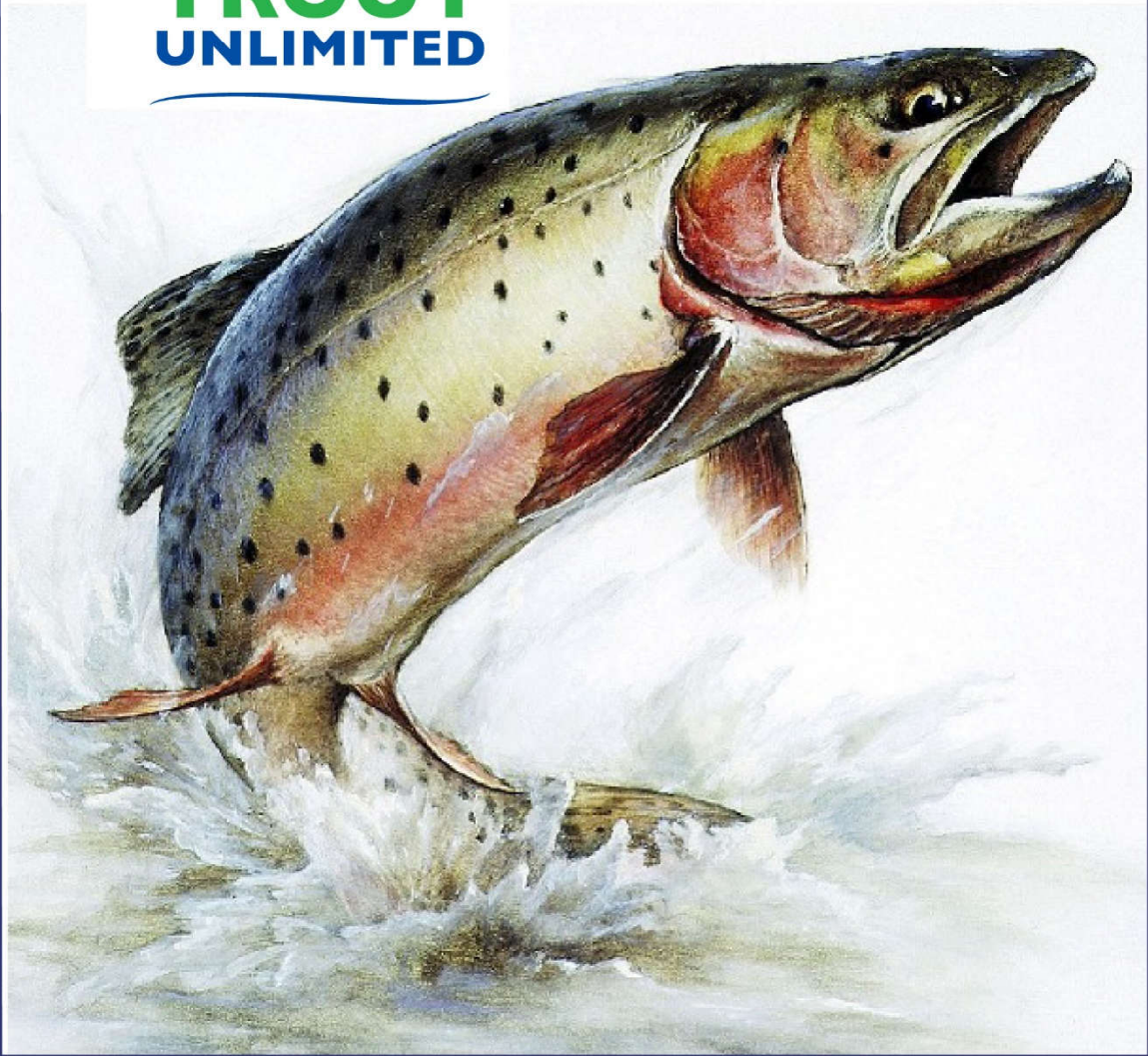


UTAH



**TROUT
UNLIMITED**

**PROTECT
RECONNECT
RESTORE
SUSTAIN**



Compiled by Jordan Nielson, Trout Unlimited



TROUT UNLIMITED STAFF

The Trout Unlimited (TU) Staff in Utah are biologists with advanced degrees that work in the State to help protect, reconnect, preserve, restore, and sustain our coldwater resources. To be successful, they work with landowners and government agencies to develop partnerships necessary to achieve their objectives and improve our fisheries. They find the financial resources for the projects from grant opportunities from state and federal government programs, corporate funding, and private philanthropies. Their activities include:

Public Land Policy

- Utah Roadless & Fire Mitigation - leading the sportsmen's voice on a working group with the USFS and a broad range of other stakeholders, from "green" environmental groups to local government and industry folks
- Legislature - working on a number of angles to rethink and possibly reshape Utah's public lands and water strategies, moving it toward a more collaborative model
- New Utah Connectivity & Migration Corridor working group - representing aquatic interests in this group that came about as a result of a bill we passed in the 2020 legislature.
- Working with Utah's congressional delegation on support for and possible co-sponsoring of critical minerals legislation.

Water Policy

Several members of our staff are working on the statewide water banking effort. Our goal is to use market-based approaches to develop instream flows in several priority basins in the State. The water banking effort has established three case studies or pilot areas where we are hoping to test the specific questions related to developing and running water banks. Areas where TU Staff are actively working toward functional water banks include:

- East Canyon Creek (Park City): East Canyon Creek is a major tributary to the Weber River. Water use in the Park City area is primarily municipal and outdoor use. The water bank in Park City will focus on ways to incentivize urban demand management. Our primary goal in this water bank will be to focus on finding ways to get water into East Canyon Creek as an instream flow. We have collected extensive data on temperatures and flow in the creek, and the literature has established a target flow of 7 cfs to sustain the coldwater fishery in East Canyon Creek.
- Price River: The purpose of this water bank will be two-fold. It will continue to build upon the unique agricultural water demand management solutions for the Colorado River that TU and our partners have been working on for several years in the Price River drainage. The water bank will also allow us to continue to build critical relationships with agricultural producers in the Price River to establish instream flows in the Lower Price River.

Water and Habitat

Weber River: We are currently engaged in three primary efforts in the Weber.

- **Riverdale Bench Diversion.** Complementary to our past barrier removal efforts on the main stem of the Weber, we are continuing with the design process of the Riverdale Bench Diversion on the Lower Weber River.



This is an irrigation diversion composed of waste concrete that is a 12-foot drop resulting in a fish passage barrier and entrainment risk. We are planning to move this irrigation diversion upstream so that it is no longer a tall structure and passes fish. We are also going to improve fish habitat throughout the reach impacted by the project. We are currently in the preliminary design phase. TU Staff will be working with engineering firms to survey and design the project.

- **Dalton Creek Culvert.** Dalton Creek is a tributary to the Weber River. Cutthroat trout have been observed attempting to move up Dalton Creek to spawn, but they are blocked by the culvert at the access road along the Gateway Canal. We have raised about \$45k and are planning to replace this culvert in August or September in cooperation with the Weber Basin Water Conservancy District.
- **South Fork Chalk Creek Watershed Restoration.** TU continues to play a leadership role in Chalk Creek. The South Fork is one of the main contributors of fine sediment and nutrients to Echo Reservoir. Our actions are mainly focused on developing ways to reduce sedimentation. This includes working with the ranchers on grazing improvements, fencing, and off-stream watering. We are also developing several Beaver Dam Analog projects throughout the South Fork to trap sediment and restore the historic floodplain. Our other efforts focus on the five irrigation diversions on the South Fork. Each diversion is a barrier to fish passage. TU is in the process of reconstructing the diversions so that they are passable to native fish. Over the past years, five diversions have been rebuilt and more are scheduled.



Riverdale Bench Canal Diversion



Wilson Canal Diversion

Uintah Basin:

- **Clayburn Bank Stabilization.** We installed 250 feet of toe wood along with two J hook vanes to stabilize a portion of the Duchesne River. This project was originally planned to be a rip rap bank but TU Staff worked with the landowner to explain that rip rap may not be the best choice when considering river health. He agreed to the use of toe wood which will create fish habitat and also stabilize an eroding bank that contributes large amounts of sediment in the river.
- **Young Living Projects.** We have had a discussion about improving a diversion structure and including a fish screen with the structure. We have also been doing bank stabilization along with some type of water savings project.



- **Little Hole Trail.** TU Staff purchased \$50K worth of decking to continue the upgrade along the trail from the Dam to Little Hole on the Green River. This money was awarded to Pat Nichols of High Desert Anglers before his passing. TU Staff helped in completing the purchase.
- **Diamond Mountain Lakes.** We have had an initial discussion with the UDWR and water rights to understand how the Diamond Mountain Lakes water rights work. We will be working with the Uintah Conservation District and others to further investigate what may be causing the Algae Blooms in the lakes and hopefully be able to resolve these blooms
- **Strawberry River.** Duchesne County is moving ahead with the Emergency Watershed Protection portion of the project. The work started in mid-July and is scheduled to be concluded this fall. We have been involved in reviewing plans for restoration and have also provided comments and suggestions during a series of meetings stating that we would prefer not to see Rip Rap installed in the stream channel. As work moves along, we will visit the construction site regularly to monitor how things are going.

Along with working with landowners, we have been heavily involved with UDWR on a variety of projects ranging from aerial stocking, cutthroat spawning activities, habitat improvement work on Lake Canyon Lake, and various surveys around the region looking at the health of fisheries. In the coming months we will be assisting with a variety of activities to restore Colorado River Cutthroat Trout.

- **Oweep Cutthroat Restoration.** TU Staff are working with DWR Staff to restore Colorado Cutthroat trout to their original range in the Oweep drainage on the South Slope of the Uinta Mountains.





Bear River Basin

- **Deadman Creek.** An onstream dam was reconstructed to serve as a non-native fish barrier on this Uinta Mountains stream. The pond behind the dam was excavated to improve a recreational fishery for the Uinta Lands subdivision. Construction began in the autumn of 2019 and was completed in June 2020. The creek supports Cutthroat Trout, Northern Leatherside Chubs, and Boreal Toads.
- **East Fork Bear River.** In the Uintas, the East Fork Hilliard Canal diversion was rebuilt to improve fish passage, stream habitat, water quality, and irrigation water management. Two earthen push-up dam structures were replaced with large-rock diversion structures. About 600' of side channel was restored. A fish screen (41 cfs maximum design) was installed in the canal. This work fully reconnected fish passage for about 22 miles of the East Fork Bear River and the mainstem Bear River. Local ranchers have had nothing but praise for TU's actions in this area.
- **Bear Lake Tributaries.** A Utah Watershed Restoration Initiative grant was received for design work on irrigation system upgrades and stream restoration on North Eden Creek and design/construction on Mil Canyon (Laketown) Creek. The goal of the North Eden Creek project is to restore fish passage for migratory Cutthroat trout from the lake to about 10 miles of the creek. On Mill Canyon, ATV road crossings of the creek will be improved to reduce erosion and sedimentation to benefit the habitat for resident populations of Cutthroat Trout.
- TU Staff will continue working on the north slope of the Uintas on Carter Creek and Mill Creek.

Raft River Basin

- **Basin Creek.** An irrigation diversion near the stream confluence will be rebuilt to improve fish passage and water management. A fish screen will be installed to eliminate fish loss to the canal. Construction will occur in October. This project is part of a larger fish passage and native species restoration effort for Cutthroat Trout and Bluehead Suckers on the South Fork Junction Creek and Upper Raft River.

Price River Basin

- **Lower Fish Creek Instream Flow.** A change application was approved in 2020 that will deliver 3.5 cfs throughout the winter months into Lower Fish Creek to prop up the fishery. Delivery of the water is problematic at those low flows so we worked with the US Bureau of Reclamation and Carbon Water Conservancy District to install a new gate in the dam to allow low flows to be safely released without causing damage to current infrastructure..
- **Miller Creek.** We have completed a multi-phase project on Miller Creek to rehab the stream and riparian area after the Seeley Fire of 2012. The focus of the work has been on Beaver Dam Analogs, but we have also done large upland treatments and large instream log structures to stabilize the watershed and aggrade the streambed. This is a highly successful project.



- **Mud Creek.** We recently completed the restoration of one mile of Mud Creek above the town of Scofield. This should help offset the phosphorus load in Scofield Reservoir and reduce the chances of harmful algal blooms.
- **Huntington Creek.** TU is working as a partner with UDWR to install habitat features in Huntington Creek to prop up sportfishing as a post-fire rehab activity from the Seeley Fire of 2012.

Provo River

- **Lower Provo River.** TU signed a power loss agreement with CUWCD and DOI in 2020 to purchase water to restore the lower Provo River for the irrigation season for ten years. The amount of water purchased will depend on the funding available each year. In 2020 we purchased 19 cfs. Other partners include DOI, UDWR, and the Mitigation Commission.

Innovative Techniques

- **Barrier assessments.** TU Staff have been working closely with the Utah Division of Wildlife Resources on developing an app that we can all use to document and measure barriers to fish movement throughout the State using our phones. This stemmed from several barrier inventories and assessments that TU completed in the Weber and Escalante Rivers, and in Otter Creek (Bear River). This comprehensive data layer is key to understanding the threats to fisheries in UT and in identifying future priority project areas.
- **Drone Imagery.** TU Staff have been flying drones and tying the imagery to GPS points on the ground to establish 3d surface models of some of our project areas. This is revolutionizing how we design some of our projects like Beaver Dam Analogs and culvert replacement projects. We are excited to continue this work!
- **Beaver Dam Analogs.** This work traps significant amounts of sediment, which improves water quality and the longevity of downstream reservoirs — in this case, Echo Reservoir. At the same time, trapped sediment rebuilds streambeds, which reconnects floodplains, modulates high water events and improves water quantity and quality during hot summer months.

For more information on any of these activities, you can contact Jordan Nielson at Jordan.Nielson@TUUtah.org

If you would like to donate to the TU fishery restoration activities in Utah, send an email to Treasurer@TUUtah.org and someone will call you.

Trout Unlimited and all of its chapters are 501(c)(3) tax-exempt entities, and your donation is tax-deductible to the extent allowed by law.