

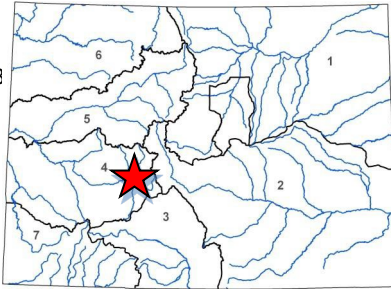


## Halo Ranch Aquatic Habitat Enhancement Trout Unlimited-Denver

March 2023 Board Meeting

### Water Plan Grant Application

Lat: 38.392022  
Long: -106.462523



#### LOCATION

County: Saguache  
Drainage Basin: Gunnison

DETAILS	
Total Project Cost:	\$358,012
Water Plan Grant Request:	\$149,500
Recommended Amount:	\$149,500
Other CWCB Funding:	\$0
Other Funding Amount:	\$197,512
Applicant Match:	\$11,000
Project Type:	Construction
Project Category:	Watershed Health & Recreation
Measurable Result:	5,300 linear ft stream restoration

Trout Unlimited staff will work with Halo Ranch LLC and Freestone Aquatics to complete stream habitat enhancement of one mile of Tomichi Creek flowing through Halo Ranch property. This reach of stream is located three miles west of Sargents and 29 miles east of Gunnison, Colorado.

The Upper Gunnison Water Conservancy District is developing an Upper Gunnison River Basin Watershed & Stream Management Plan (WMP). In 2020, Phase 1 was completed covering the Ohio, East, and Lake Fork sub-basins. Phase 2 is in progress working on assessments, outreach, and planning which includes the Tomichi, Cochetopa, Cebolla, Taylor and Gunnison mainstem sub-basins.

Assessments included outreach with the agricultural community, rapid infrastructure assessments, pre-feasibility engineering and cost estimation, and system optimization improvement planning along significant reach segments on Tomichi Creek and within all other sub-basins. During the assessments landowners are identified who are concerned about impacts to the natural stream system, loss of habitat, erosion and loss of agricultural lands, and bank stability issues. The Halo Ranch Restoration project is a result of the strong WMP outreach, assessment, and project development efforts.



This aquatic habitat enhancement project will be conducted using a variety of common stream enhancement techniques and treatments. The proposed treatments include riffle enhancement, pool excavation, riparian area enhancement and bank stabilization. The Tomichi Creek watershed is currently negatively impacted by high water temperatures and sediment load. Planned restoration work completed with this project will improve both temperature and sediment conditions in this watershed.

**Water Plan Support:** *Action Areas-* Thriving Watersheds- Rehabilitate streams to improve habitat, Resilient Planning- Healthy lands, support for natural and working lands; *Upper Gunnison Water Conservancy District Watershed Management Plan*, *Ag Projects-* Halo Ranch Restoration

#### WPG Request: 42%

Matching Funds: Trout Unlimited: \$11,000; Halo Ranch LLC (property owner): \$187,512; Upper Gunnison Water Conservancy District: \$10,000

**Funding Recommendation:** Staff recommends Board approval of \$149,500 to Trout Unlimited-Denver for the Halo Ranch Aquatic Habitat Enhancement project.

**COLORADO**Colorado Water  
Conservation Board

Department of Natural Resources

**Colorado Water Conservation Board****Water Plan****Water Project Summary**

Name of Applicant	Trout Unlimited_Denver	
Name of Water Project	Halo Ranch Aquatic Habitat Enhancement	
Grant Request Amount		<b>\$149,500.00</b>
Primary Category		\$149,500.00
<i>Watershed Health &amp; Recreation</i>		
Total Applicant Match		<b>\$11,000.00</b>
<i>Applicant Cash Match</i>		\$11,000.00
<i>Applicant In-Kind Match</i>		
Total Other Sources of Funding		<b>\$197,512.00</b>
<i>Halo Ranch LLC</i>		\$187,512.00
<i>Upper Gunnison River Water</i>		\$10,000.00
<i>Conservancy District</i>		
Total Project Cost		<b>\$358,012.00</b>

**Applicant & Grantee Information**

Name of Grantee: Trout Unlimited\_Denver  
Mailing Address: 2032 Ivanhoe St. Denver CO 80207  
FEIN: 381,612,715

Organization Contact: Jesse Kruthaupt  
Position/Title: Upper Gunnison Project Manager Email: jesse.kruthaupt@tu.org  
Phone: 9702090976

Grant Management Contact: Jesse Kruthaupt  
Position/Title: Upper Gunnison Project Manager Email: jesse.kruthaupt@tu.org  
Phone: 9702090976

**Description of Grantee/Applicant**

Trout Unlimited (TU) is the nation's largest cold-water conservation organization with approximately 150,000 volunteers and roughly 277 employees nationwide, working to protect, reconnect, restore and sustain America's fisheries. TU's volunteers and their local chapter groups work on a variety of initiatives that meet the unique needs of their watersheds.

TU's focus in the Gunnison Basin is to find win-win solutions to water supply and infrastructure issues by collaborating with water users and water managers. TU has completed numerous projects in the Gunnison basin similar to the project described herein

**Type of Eligible Entity**

- ☐ Public (Government)  
☐ Public (District)

- ☐ Public (Municipality)
- ☐ Ditch Company
- ☐ Private Incorporated
- ☐ Private Individual, Partnership, or Sole Proprietor
- ☒ Non-governmental Organization
- ☐ Covered Entity
- ☐ Other

### Category of Water Project

- ☐ Agricultural Projects  
*Developing communications materials that specifically work with and educate the agricultural community on headwater restoration, identifying the state of the science of this type of work to assist agricultural users among others.*
- ☐ Conservation & Land Use Planning  
*Activities and projects that implement long-term strategies for conservation, land use, and drought planning.*
- ☐ Engagement & Innovation Activities  
*Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website.*
- ☒ Watershed Restoration & Recreation  
*Projects that promote watershed health, environmental health, and recreation.*
- ☐ Water Storage & Supply  
*Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity and Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap.*

### Location of Water Project

Latitude	38.392022
Longitude	-106.462523
Lat Long Flag	Stream location: Coordinates based on general location on stream
Water Source	Tomichi Creek, Tributary to Gunnison River
Basins	Gunnison
Counties	Saguache
Districts	28-Tomichi Creek

### Water Project Overview

Major Water Use Type	Agricultural
Type of Water Project	Construction / Implementation
Scheduled Start Date - Design	
Scheduled Start Date - Construction	7/1/2023
Description	

Trout Unlimited (TU) staff will work with Halo Ranch LLC and Freestone Aquatics to complete stream habitat enhancement of 1 mile of Tomichi Creek flowing through Halo Ranch property. This reach of stream is located 3 miles west of Sargents and 29 miles east of Gunnison, Colorado.

This aquatic habitat enhancement project will be conducted using a variety of common stream enhancement techniques and treatments. Those techniques aim to increase aquatic functions and services within the stream-course while preserving the existing natural state. The proposed treatments include riffle enhancement, pool excavation, riparian area enhancement and bank stabilization. Work will be done moving from the top of the

project reach downstream. All treatments will be performed from both dry streambank and in-channel locations with minimal disturbance to the existing conditions to the best extent practicable.

Freestone Aquatics completed baseline analysis of the reach in the spring of 2022. Restoration design as well as permitting were completed in the fall of 2022. Construction will take place during in 2023.

### Measurable Results

	New Storage Created (acre-feet)
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
	Existing Storage Preserved or Enhanced (acre-feet)
	New Storage Created (acre-feet)
5,300	Length of Stream Restored or Protected (linear feet)
	Efficiency Savings (dollars/year)
	Efficiency Savings (acre-feet/year)
1	Area of Restored or Preserved Habitat (acres)
	Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement (acre-feet)
	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
	Number of Coloradans Impacted by Engagement Activity
Other	
	No additional measurable results provided

### Water Project Justification

This project will improve watershed health and cold water trout habitat in Tomichi Creek, Tributary to the Gunnison River and help meet two primary goals listed in the Gunnison BIP, Volume 1,

- Protecting existing water uses for agricultural land, environmental, and recreational uses
- Improving water quality while maintaining and modernizing critical water infrastructure

The second paragraph of Section 4 (pg. 29) of the Gunnison BIP Volume 2 states "Restoring headwater floodplains and adjacent wetlands is one of the best proactive ways to address both water quality and water supply, while improving recreation and habitat for aquatic and terrestrial species. It also directly addresses the Colorado Water Plan goal of "support the development of multipurpose projects and methods that benefit environmental and recreational water needs as well as water needs for communities or agriculture" by improving water quality delivered to municipal systems and reducing sedimentation of reservoirs and headgates." Section 4 of the Gunnison BIP goes on to discuss the benefits of healthy watersheds. The outcomes of this project directly align with those benefits. The stream habitat improvements planned will protect and improve environmental, and agricultural uses on properties located on headwater tributaries to the Gunnison River. Restoration efforts are intended to improve aquatic habitat for fish and macro-invertebrate by reducing water temperature, creating natural riffle/pool habitat and increasing riparian vegetation.

While not identified in the BIP, this project could qualify as a Tier one project as it has involved local planning efforts as well as organizational support from TU. Existing irrigation water rights will benefit from this project with one irrigation diversion structure and headgate located within the reach. Further, reduced stream bank erosion resulting from the work will minimize impacts to irrigated hay meadows.

The Tomichi Creek watershed currently struggles with high water temperatures and sediment load. The Gunnison and its tributaries are expected to see a 1% (in-between future conditions) and 11% (hot and dry conditions) reduction in water supply (Gunnison BIP, pg. 27). This decrease in water supply is expected to exacerbate existing water temperature issues. Planned restoration work completed with this project will help address both temperature and sediment challenges in this watershed.

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Related Studies
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Halo Ranch Water temperature monitoring 2022 Halo Ranch Macro-invertebrate sampling 2022 Upper Gunnison Watershed Management Planning
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Taxpayer Bill of Rights
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None
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