

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	38.845450
Longitude	-107.648050
Lat Long Flag	Stream location: Coordinates based on general location on stream
Water Source	North Fork Gunnison River
Basins	Gunnison
Counties	Delta
Districts	40-North Fork/Tribs.

Water Project Overview

Major Water Use Type	Agricultural
Type of Water Project	Design / Engineering
Scheduled Start Date - Design	3/15/2024
Scheduled Start Date - Construction	

Description
This watershed-scale project aims to provide 100% construction-ready packages for five diversion sites on the North Fork of the Gunnison River between Paonia and Hotchkiss, CO. Each of the five diversions are in need of efficiency improvements to conserve water for other uses and keep excess water in the river. Two of the five

diversions are currently using annual gravel push-up dams that need reliable and resilient diversion structures. Diversion structures will be analyzed in their unique river environment and projects will address individual channel stability, diversion efficiency, and maintenance needs. Improvements to the structures will have direct benefits to river function, instream flow quantities, water delivery efficiency, ease of operations and maintenance, instream navigation, and aquatic organism passage and habitat.

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)
2,000	Length of Stream Restored or Protected (linear feet)
	Length of Pipe, Canal Built or Improved (linear feet)
	Efficiency Savings (dollars/year)
3,000	Efficiency Savings (acre-feet/year)
2	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

These diversion improvements will irrigate approximately 2,000 acres of productive agricultural land and provide reliable water to approximately 100 shareholders. This engineering project will determine how many linear feet of pipe will be installed. The elimination of the gravel push-up dams will restore aquatic and riparian habitat around the diversions plus reconnect several miles of aquatic habitat for native fish species. Efficiency savings in af/yr is an estimate of the water saved by modernizing the headgates with automation and keeping more water in the river.

Water Project Justification

The Western Slope Conservation Center (WSSC) has been working with the agricultural community in the North Fork of the Gunnison (North Fork) since the early 1990's. The organization has developed and implemented several holistic action plans that considers multiple stakeholder relationships, shared purposes, and benefits and address all four action areas identified in the Colorado Water Plan. Today, with increasing water demands and increased evaporation from a warming climate, the productive agricultural economy of the North Fork is threatened. Vibrant Communities, Robust Agriculture, Thriving Watersheds, and Resilient Planning have been interconnected themes in all of our action plans. The organization's two most recent action plans, identified below under related studies, specifically identifies the priority projects this grant application intends to address. The WSSC has collaborated with the Smith-McKnight, Short, Sheppard-Wilmott, Monitor, and Vandeford ditch companies to develop a comprehensive, watershed-scale plan to modernize each one of the diversions with water measurement actuators and automated valves designed to measure water at the point of diversion, deliver a full decree to the ditch, and keep the excess in the river for other uses. Two of the ditch diversions, the Short and and Smith-McKnight ditches, will rebuild the in-stream diversion structures to eliminate annual gravel push-up dams and allow for fish passage, recreational boating and enhanced riparian habitat. This project will reduce existing conflicts between competing ditch companies for water in the river and will improve relationships among agricultural, environmental and recreational water uses. The intended outcome of this application is to deliver complete engineering plans and permitting for shovel ready projects. The WSSC will publicize and promote this comprehensive project.

Related Studies

In 2017, the Western Slope Conservation Center (WSSC) and North Fork Water Conservancy District (NFWCD) completed Phase 1 of an Integrated Water Management Plan (IWMP: Phase 1), which served to;

- 1) Synthesize all relevant and pre-existing information, inventories, and assessments of the North Fork of the Gunnison River (North Fork),
- 2) Assess current stakeholder concerns regarding environmental, agricultural, and recreation needs; and
- 3) To recommend priorities for addressing those needs according to newly developed planning segments that divided the river into eight distinct reaches.

The IWMP: Phase 1 plans can be found at the links provided below:

North Fork of the Gunnison Irrigation Management Plan

<https://westernslopeconservation.org/wp-content/uploads/2018/03/NFWCD-Irrigation-Management-Plan-Compiled/>

North Fork of the Gunnison Environmental and Recreation Assessment

<https://westernslopeconservation.org/wp-content/uploads/2018/04/Redacted-v2-North-Fork-of-the-Gunnison-Enviro>

The Irrigation Management plan is a good assessment of current North Fork ag infrastructure. Pages 75-80, is where you can find the prioritization and recommendation of river projects. The Environmental and Recreation assessment provides a great understanding of the North Fork watershed and sums up a lot of the work done by NFRIA back in the early 2000's. River recommendations for that report can be found on pages 49-51. Both reports were created in tandem and support one another in highlighting what we intend to target in the coming years.

By delineating the North Fork into 8 distinct river reaches, our project partners were able to identify multi-benefit river improvements according to prioritized river segments. Irrigation diversions within Reach 3 (Stewart Mesa and Farmers Ditch) were chosen as pilot projects as part of a IWMP: Phase 2 scope to showcase multi-benefit improvements. Building upon the success of the two pilot projects, "The North Fork Consolidated Diversion Improvement Project" described in this application, will serve to advance designs and engineering needs to make multi-benefit improvements within Reaches 5, 6, and 7. These river reaches and diversion improvements are considered "high priority" within the 2017 IWMP: Phase 1 plans.

Taxpayer Bill of Rights

We are not aware of any TABOR issues that may affect this application.