



Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Conservation Investment Germinator
Name of Water Project	Habitat Replacement Bank for the Colorado River Salinity Control Program
Grant Request Amount	\$124,647.00
Primary Category	\$124,647.00
<i>Engagement & Innovation Activities</i>	
Total Applicant Match	\$25,000.00
<i>Applicant Cash Match</i>	
<i>Applicant In-Kind Match</i>	\$25,000.00
Total Other Sources of Funding	\$21,378.00
<i>Gates Family Foundation</i>	\$21,378.00
Total Project Cost	\$171,025.00

Applicant & Grantee Information

Name of Grantee: Conservation Investment Germinator
Mailing Address: 115 Wilcox Street Castle Rock CO 80104
FEIN: 841,933,451

Organization Contact: Ben Guillon
Position/Title: Executive Director Email: ben@conservationinvestment.com
Phone: (720) 443-3879

Grant Management Contact: Ben Guillon
Position/Title: Executive Director Email: ben@conservationinvestment.com
Phone: (720) 443-3879

Description of Grantee/Applicant

The Conservation Investment Germinator is a 501c3 nonprofit organization dedicated to conservation finance innovation. In collaboration with public agencies, tribes, and local communities, we design, test, and launch new environmental markets and nature-based business models. CIG is part of a hybrid organization with Conservation Investment Management, a project developer and financial advisor for conservation finance projects. We have developed several mitigation and conservation banks across the western U.S., including the Table Top Conservation Bank in partnership with the Colorado State Land Board. This project preserves over 200 acres of Preble's meadow jumping mouse habitat in Larimer county. The credits were purchased for by Northern Water as habitat mitigation for the Glade reservoir / NISP project.

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 38.742200
 Longitude 108.069000
 Lat Long Flag Default/Proponent headquarters: If the location cannot be defined with flags above, use location of project proponent headquarters
 Water Source N/A
 Basins Gunnison; Colorado
 Counties Gunnison
 Districts 28-Tomichi Creek; 38-Roaring Fork River Basin; 40-North Fork/Tribs.; 59-East River Basin; 62-Upper Gunnison River

Water Project Overview

Major Water Use Type Agricultural
 Type of Water Project Planning
 Scheduled Start Date - Design 9/1/2023
 Scheduled Start Date - Construction
 Description
 The Conservation Investment Germinator (CIG) proposes to design a pilot for a habitat replacement bank for the Colorado River Salinity Control Program. This program implemented by the US Bureau of Reclamation aims at reducing the salt load in the Colorado River by providing grants to ditch companies to line or pipe their ditches. In order to receive the funding, ditch companies need to mitigate the loss of riparian habitat due to the reduction in water leakage. Ditch companies need to secure land, design a habitat replacement project, implement the

restoration, and maintain the project for 50 years. This onerous requirement prevents many ditch companies, especially smaller ones, from applying to the program and causes many delays and budgeting difficulties. CIG proposes make this process more efficient by providing an option (and not an obligation) for ditch companies to buy habitat replacement credits from a pre-approved property. These credits would be recognized by Reclamation for the Salinity Control Program. CIG would restore a property in advance of the impacts and secure approval from Reclamation before selling credits to ditch companies. Ditch companies that have bought credits would not be required to find and manage their own habitat replacement project.

This approach would increase the availability of funding for ditch companies, especially for smaller producers, result in more ditches being piped or lined, and therefore decrease water loss by infiltration and evaporation. In addition, by aggregating habitat replacement projects on a larger property, the project is expected to deliver better ecological benefits, including more resilient riparian areas.

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)
- Length of Stream Restored or Protected (linear feet)
- Length of Pipe, Canal Built or Improved (linear feet)
- Efficiency Savings (dollars/year)
- Efficiency Savings (acre-feet/year)
- 30 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

Area of Restored Habitat is per year and is calculated under the following assumption:

- 20% of impacts are mitigated by using habitat replacement credits
- Impacts are calculated based on the average for Colorado for FOA 2017 and 2019 (FOA are issued every other years, excepted during COVID)

Water Project Justification

The problem

Excess salt in the Colorado River reduces its water quality. The consequences are changes in downstream aquatic habitat and the fact that the Colorado River water cannot be used for some sensitive crop production. The Bureau of Reclamation (Reclamation) is implementing a program to reduce the salt leaching into the Colorado River, called the Colorado River Salinity Control Program. One of the key activities of this program is to financially support ditch companies to line or pipe the ditches in the areas of the watershed where soils contain a lot of salts and minerals. The lining or piping of ditches avoids the percolation of water that would dissolve soil minerals. An added benefit of the lining is that it reduces water waste. However, the "leaks" from the ditches provided hydrology for riparian habitat near the ditches. Ditch lining and piping often results in the loss of riparian vegetation and the program is required to mitigate those losses. The US Fish and Wildlife Service (USFWS) provides assistance to Reclamation and the Natural Resources Conservation Service (NRCS) in replacing those lost habitats through habitat enhancement, creation, and/or protection nearby. Reclamation requires the ditch companies to provide the habitat replacement as part of the ditch lining project and does not release funding until the mitigation is in place. According to the stakeholders that Conservation Investment Germinator (CIG) has

interviewed, this system is not working efficiently resulting in deficient habitat projects, delays in lining ditches, and small ditch companies being unable to apply for this federal program.

The key reason for these issues is that ditch companies are required to identify, restore, and manage riparian habitat themselves.

- Most ditch companies do not have the staff or expertise to implement such habitat replacement projects. Small ditch companies may decide not to apply to the program for those reasons.
- Larger ditch companies have successfully applied to the program. They encountered delays in securing their habitat replacement and funding only became available years after the application. In the current inflationary environment, this delay often means that the project will be over budget and may be abandoned.
- Each habitat replacement project is a one-off that is usually of small size. This results in low ecological resilience and high monitoring and maintenance costs. Reclamation, NRCS, and USFWS all acknowledge that many of the habitat replacement projects conducted to date, particularly small or isolated projects, have diminished in ecological value and quality over time.

The proposed solution

The issue of providing riparian habitat mitigation is not new. Under the Endangered Species, certain habitats are protected. Impacts to those habitats usually require a permit from the USFWS and replacement of those wetlands. Based on 30 years of experience, the USFWS' preferred method for replacing habitat is through a habitat conservation bank. Based on conversations with USFWS and Reclamation, we believe that the same concept could be adapted to the salinity control program. Ditch companies could pay into a habitat replacement bank to meet the grant requirements. The habitat replacement bank would be responsible for restoring and sustaining habitat in compliance with the salinity control program. CIG has presented the concept to Reclamation. They expressed interest and requested a pilot project to assess the concept's potential. The Notice of Funding Availability issued by Reclamation in June now includes a possibility for ditch companies to source their habitat replacement plan from third-parties. (excerpt from the NOFA: Applicants may also acquire an existing Reclamation approved plan from a third party. The acquisition of the plan must include permission to implement habitat replacement at the site described in the plan.)

Overall deliverable

This project is successful, it will deliver a cost efficient solution to ditch companies to meet their habitat replacement requirements for the Colorado River Salinity Control Program. This would result in more ditches being lined or piped, water losses being reduced, salinity in the Colorado River being lowered, and restoration of riparian habitat. Small producers and ditch companies are an important beneficiary of this project as they are often unable to meet the program's habitat replacement requirements and are therefore ineligible to this grant. Making cost effective credits available for sale is expected to alleviate this issue.

Multibenefit project and Colorado Water Plan:

This project benefits all four values expressed in the Colorado Water Plan

1/ A productive economy that supports vibrant, sustainable cities, agriculture, recreation, and tourism

This project directly benefits the ditch companies and the agriculture industry in Mesa, Delta, and Montrose County. It will allow ditch companies to access federal funding to improve the efficiency of their water infrastructure.

2/ An efficient and effective water infrastructure system

This project will allow more ditch companies to benefit from federal grants to line or pipe the ditches and reduce water loss through infiltration and evaporation.

3/ A strong environment with healthy watersheds, rivers, streams, and wildlife

This project directly results in the restoration and maintenance of riparian habitat and in the improvement of the

ecological performance of the Colorado River Salinity Control Program in Colorado

4/ An informed public with creative, forward-thinking solutions that are sustainable and resilient to changing conditions and result in strong, equitable communities that can adapt and thrive in the face of adversity. This project would result in the creation of a new environmental market for the benefit of the environment and of agricultural producers. It is an innovative approach to a problem that has been plaguing this program for several decades.

Piping of ditches will reduce the water loss due to evaporation that is expected to increase with warming temperatures.

Smaller ditch companies and producers are the most impacted by the dysfunction of this program as they do not have the resources to identify and implement their own habitat replacement projects. If they can buy cost effective credits through an efficient system, they will be in a much better position to apply to this federal program. In addition, the cost of purchasing habitat replacement credits can be subsidized by other organizations and agencies that are interested in promoting improvements in water infrastructure for small producers and ditch companies.

Related Studies

Colorado Habitat Mitigation Feasibility Study for the Salinity Control Program A Value Discovery and Opportunity Analysis Prepared for the Colorado West Land Trust Prepared by Quantified Ventures March 2021 (Funded by the Walton Family Foundation - Available at https://www.dropbox.com/s/wk2jjimsze37v61/Colorado%20Habitat%20Mitigation%20Feasibility%20Analysis_Final%20Report.pdf?dl=1)

Following the feasibility study, CIG conducted interviews with the stakeholders:

- Reclamation, NRCS, CDA, and FWS staff and regional leadership indicated interest for the concept of a habitat replacement bank and Reclamation, CDA, and FWS have offered to provide staff support.
- Representatives of ditch companies have indicated that they need a solution to this problem and would be willing to buy habitat replacement credits, if available and financially feasible.
- Several landowners have indicated preliminary interest to allowing a habitat replacement project on their land.
- Colorado West Land Trust has supported our work from the beginning and has indicated an interest in continuing their support.
- We also confirmed the availability of local restoration groups to implement a habitat replacement project.

Taxpayer Bill of Rights

N/A