COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Purgatoire Watershed Partnership
Name of Water Project	Purgatoire River Fish & Boat Passage Project
Grant Request Amount	**$1,398,567.00**
Primary Category	$1,398,567.00
Watershed Health & Recreation	
Total Applicant Match	**$164,775.00**
Applicant Cash Match	$20,000.00
Applicant In-Kind Match	$144,775.00
Total Other Sources of Funding	**$2,488,040.50**
USBOR	$2,380,748.00
Baca & Picketwire Ditch Companies	$7,487.50
Purgatoire River Anglers/Trout Unlimited Local Chapter	$17,970.00
Purgatoire River Run Company	$5,391.00
Fishers Peak Outfitters	$3,594.00
The Youth Club of Trinidad	$7,188.00
Water Plan Grant Phase 1	$65,662.00
Total Project Cost	**$4,051,382.50**

Applicant & Grantee Information

Name of Grantee: Purgatoire Watershed Partnership
Mailing Address: 3590 E Main St Trinidad CO 81082
FEIN: 461,757,863

Organization Contact: Julie Knudson
Position/Title:
Phone: 970-420-1915
Email: jknudson@purgatoirepartners.org

Grant Management Contact: Julie Knudson
Position/Title:
Phone: 970-420-1915
Email: jknudson@purgatoirepartners.org

Description of Grantee/Applicant

No description provided

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	37.172684
Longitude	-104.505664
Lat Long Flag	
Water Source	Purgatoire River
Basins	Arkansas
Counties	Las Animas
Districts	19-Purgatoire River

Water Project Overview

Major Water Use Type	Environmental
Type of Water Project	Design & Construction
Scheduled Start Date - Design	4/1/2024
Scheduled Start Date - Construction	10/16/2024

Description

The Purgatoire River Fish & Boat Passage Project is an important collaborative project addressing multiple water user needs (ecological, recreational, agricultural, municipal) through installing fish passage and boater passage into the Baca-Picketwire diversion dam on the Purgatoire River in downtown Trinidad, Colorado. This low head diversion dam serves as important agricultural infrastructure for local farmers and ranchers, but is also located at the center of community river recreation activities (e.g. boating, fishing, river play) in downtown Trinidad. For many years, this dam has blocked native and sport fish access to critical upstream aquatic habitat important for fish population survival in the face of drought and fluctuating river flows. This project will restore ecological aquatic connectivity, enhance fish population survival and resilience, improve recreational boater experience and

safety, address sediment issues, and enhance overall river recreation opportunities in downtown Trinidad for community members and visitors – all while ensuring agricultural water rights and infrastructure operations are maintained. This project will also be an important educational hub, demonstrating the multiple facets of water usage in our watershed and the power of collaboration for ecological and recreational benefit while also ensuring agricultural sustainability. This project serves as Phase 2 of the Baca-Picketwire Diversion Dam Multi-Use Restoration Project.

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)
8	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
1,900	Number of Coloradans Impacted by Engagement Activity
Other	

No additional measurable results provided

Water Project Justification

This project supports the goals of the Colorado Water Plan and the Arkansas Basin Roundtable Implementation plan by meeting the following BIP Goals (pages 14-22 in the ABRT BIP):

• Municipal Goals: Developing collaborative solutions among municipal, agricultural, and E&R users

• Agriculture Goals: (1) Support projects within and outside the Arkansas Basin that will help meet the basin's agriculture water supply gap, maintain existing supplies, better manage vulnerable supplies, and maximize use of water users' entitlements, (2) Sustain a productive agricultural economy in the Arkansas Basin that sustains viable rural, agricultural-based communities (3) Sustain recreational and environmental activities that depend on habitat and open space associated with farm and ranch land

• Environment & Recreation Goals: (1) Support projects and programs within and outside the Arkansas Basin that protect E&R water supply needs, and collaborate with municipal and ag users to enhance E&R values, (2) Maintain or improve native fish populations, restore habitat for fish species, and maintain or improve recreational fishing opportunities, (3) Maintain or improve boating opportunities, including rafting, kayaking, and other nonmotorized and motorized boating, (4) Maintain or improve aquatic, riparian, and avian habitat (including wetlands) that would support environmental features and recreational opportunities

• Watershed Health Goals: (1) Maintain, improve, or restore critical water supply watersheds that could affect Arkansas Basin water uses and E&R values (2) Improve water quality as it relates to the environment and/or recreation

We feel that we are addressing many of the current and future water-related risks identified in the Technical Update, including:

• Prioritizing conservation and efficiency

• Using the right water for the right use at the right time - this project included integrated water planning.

• Engaging all voices.

• Restoring and enhancing our environment
• Increasing recreational opportunities and waterway access
• Protecting agriculture
• Protecting and enhancing water quality through addressing sediment issues
• And together with a diverse group of water user partners, we are absolutely using the whole toolbox.

This project also directly addresses the four interconnected action areas of the Colorado Water Plan - vibrant communities, robust agriculture, thriving watersheds, and resilient planning.

The Baca-Picketwire Diversion Dam Complex Restoration Project was submitted as an IPP and is listed in the online portal, but the verbiage attached to it appears to have been sourced from an old request for a Letter of Support, so we weren't sure whether to formally select it in the portal since the verbiage was confusing.

We look forward to utilizing the Statewide Water Education Action Plan, and we feel that this project will help us further progress around Outcomes 1, 3, and 5 in particular initially, with the intent that we help further additional desired outcomes of the plan in the future.

Related Studies

The PWP previously completed a Purgatoire River Assessment Effort, including significant stakeholder engagement and participation, an assessment of river health, a hydrologic/hydraulic modeling study to assess the potential flood impacts to local infrastructure, an assessment of fish habitat/population status and potential/needs for further improvements including further development of the local trout fishery and flow recommendations, and an assessment of other needs within the river stretch including agricultural infrastructure, erosion control, recreation and safety, and jetty jack removal/mitigation needs as determined by stakeholders (funded in part by CWCB, and BOR). This assessment work and the associated community engagement, and subsequent related Stream Management Planning assessment and community engagement efforts to date are primary drivers behind the Phase 1 and Phase 2 projects. The relevant studies/assessments to come out of the Purgatoire River Assessment Effort include: (1) Policky, G. 2021. River Habitat, Hydrology/Hydraulics, and Fishery Biology Assessment. This study assessed the status of river condition and effectiveness of habitat restoration in the project area as well as upstream and downstream. This study also assessed fish biology and flow regime, and provided recommendations for future projects (including fish passage) as well as flow recommendations. (2) Storm Water Release and Municipal Infrastructure Assessment. This looked at flows and included a sediment assessment component. (3) Knudson, J. Additional Field Surveys & Assessments (particularly the Recreational Improvements & Public Safety Assessment).

PWP is also working on additional relevant assessments/studies as part of developing a Purgatoire River Integrated Water Management Plan (funded by CWCB, CDPHE, and other partners). This multi-use project rose to the top not only through previous assessment efforts but also as a priority through outreach and engagement efforts being conducted through SMP efforts. We view implementation of this project as a critically important outreach and engagement tool as part of our SMP efforts, showing what can be accomplished for multiple water users when they agree to work together. An important study tied to our native plains fishes on the Purgatoire River is Bestgen, K. 2017. A Dynamic Flow Regime Supports an Intact Great Plains Stream Fish Assemblage.

Las Animas County, working collaboratively with many partners, also just completed the Las Animas County Outdoor Recreation and Economic Impact Study 2023, which includes prioritizing development of new outdoor recreation opportunities on the Purgatoire River as a community priority.

Assessments/studies associated with low head dam safety concerns that include the Baca-Picketwire Diversion

Dam include (1) Zimmer, S. Colorado Low Head Dam Inventory Project 2019., and (2) Hotchkiss, R. 2023. The National Inventory of Low Head Dams.

Taxpayer Bill of Rights
NA