Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet Agenda Item 12a

Applicant: Purgatoire River Water Conservancy District

Water Activity Name: Trinidad/Purgatoire River Reach 4 Demonstration Project

Water Activity Purpose: Structural Activity

County: Las Animas

Drainage Basin: Arkansas

Water Source: Purgatoire River

Amount Requested: \$75,000 (Arkansas Basin Account)

Matching Funds: \$20,000 cash (Purgatoire River Water Conservancy District & Pioneer Natural

Resources), \$68,980 in-kind

Staff Recommendation

Staff recommends approval of up to \$75,000 from the Arkansas Basin Account to assist in the funding of Purgatoire River Reach 4 Demonstration Project contingent upon the resolution of the issues and additional needs identified in this summary.

Water Activity Summary:

The goal of this project is to improve the aquatic habitat and riparian areas of approximately 2,750 ft (1/2 mile) of the Purgatoire River in downtown Trinidad, Colorado.

Improvements will provide velocity shelter, cover, and quality usable habitat for resident trout during the high flow summer months through the installation of in-channel habitat features. A new handicap accessible trail will be constructed along the river to provide fishing access for persons with disabilities. Three handicap accessible river fishing sites will be constructed adjacent to newly installed habitat features in the project reach.

WSRA funds will be used for materials and equipment for construction of improvements, as listed below:

- 4 full-channel boulder cross-vanes to create new pool habitat
- 8 boulder J-Hook vanes to protect banks and provide cover
- 40 boulder clusters to provide pocket water habitat in riffles
- 3 short boulder vanes to protect existing water quality features
- 70 ft of large wood bank-full benches utilizing existing trees
- 2 large wood/boulder J-Hook vanes for habitat complexity
- Gravel breeze (or equivalent) handicap access trail
- Timbers for construction of handicap accessible areas
- Interpretive signage

Discussion:

Staff supports river reconfiguration projects designed to improve channel stability and enhance aquatic habitat. The restoration project in Trinidad should achieve these objectives while also providing improved recreation access for most of the public. The applicant is providing 54% of the total cash and services required to construct the project. This project is designed to support the non-consumptive recreational and environmental needs of the Arkansas Basin. The non-consumptive

needs of the Arkansas Basin are satisfied by increasing economic productivity while addressing social and environmental values.

This demonstration project is a piece of a larger effort to enhance the Purgatoire River from the Trinidad State Park lake dam through the town of Trinidad, to the Highway 160 Bypass, nearly 5 miles of river. Efforts to remove invasive species along this stretch of river are already underway. A planning process funded with grant dollars from Trout Unlimited's Embrace-A-Stream program, along with local and regional donations from Trout Unlimited Chapters is complete, followed by a Project Concept and Preliminary Design, which was prepared by Fin-Up Habitat Consultants, Inc.

Issues/Additional Needs:

- The project identifies riparian area improvement as an objective, but the application does not describe any re-vegetation efforts. Staff believes that riparian re-vegetation is an essential component of river improvement projects. Staff will work with the applicant to develop a riparian re-vegetation strategy for the project reach.
- Staff will work with the applicant to ensure that all applicable requirements in the CWCB Rules and Regulations for Regulatory Floodplains in Colorado are satisfied. The applicant must demonstrate that there are no adverse impacts to the regulatory floodplain resulting from the project.

Staff Recommendation:

Staff recommends approval of up to \$75,000 from the Arkansas Basin Account to assist in the funding of the Purgatoire River Reach 4 Demonstration Project contingent upon the resolution of the issues and additional needs identified in this summary.

All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and will help promote the development of a common technical platform.

In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the scope of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

Engineering: All engineering work (as defined in the Engineers Practice Act (§12-25-102(10) C.R.S.)) performed under this grant shall be performed by or under the responsible charge of professional engineer licensed by the State of Colorado to practice Engineering.