

**Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
Agenda Item 10.b**

Applicant: Arkansas Headwaters Recreation Area (AHRA)

Water Activity Name: Helena Diversion Structure/BV Boat Chute Demonstration Project

Water Activity Purpose: Study of Structural Project and Structural Project

County: Chaffee

Drainage Basin: Arkansas

Water Source: Arkansas River

Amount Requested: \$325,000

Source of Funds: \$290,000 (Statewide Account) and \$35,000 (Basin Account)

Matching Funds: \$35,000 cash (Basin Account), \$25,320 (Stakeholder match)
Total = 20.8% match for Statewide Account request

Staff Recommendation
Staff recommends approval of up to \$35,000 from the Arkansas Basin Account and \$290,000 from the Statewide Account to assist in the funding of the Helena Diversion Structure/BV Boat Chute Demonstration Project contingent upon the resolution of the issues and additional needs identified in this summary.

Water Activity Summary:

The Helena Diversion Structure at Buena Vista is owned and operated by the Colorado Department of Corrections, Mr. and Mrs. Cogan, Moltz and Diamond. The structure is currently navigated by both private and commercial boaters. It is extremely dangerous because portions of the structure have shifted over time. The shift created an unpredictable spillway that has lead to a boating fatality in the summer of 2007.

The structure also prohibits the safe passage of aquatic species both up and down the river during the spawning season. AHRA plans to use Statewide and Arkansas Basin funding to engineer and construct a new structure that will allow for safe recreational boat passage and improved fish migration. The new structure will also improve water delivery efficiency at all water levels.

Specific objectives of the project include:

- Improve Public Safety by replacing a failing diversion structure and dangerous boat chute
- Improve Water Delivery by replacing a failing diversion structure
- Improve Fishery by constructing a fish ladder
- Reduce Trespassing by constructing a beginner level boat chute (minimizes need for portage)

Discussion:

In 2008 a Water Supply Reserve Account Grant in the amount of \$57,955 was used to conduct a preliminary engineering study in the upper Arkansas River Valley on four existing diversions structures. The study developed preliminary designs and cost estimates to support future design/build activities. The Helena Diversion was included in this study. The next phase of the project involves more detailed engineering and construction of the new diversion.

Staff supports multi-objective diversion reconstruction projects. This project will allow the ditch owner/operators to more efficiently divert their decreed water rights at all levels. The new structure will provide a safer opportunity for boaters to navigate the river without the need to portage across private property. Finally the fish ladder, if constructed appropriately, will allow for fish migration both up and downstream of the structure. The Arkansas River in this section is highlighted as a brown trout fishery.

Issues/Additional Needs:

- The Colorado Department of Wildlife is not identified as a project participant. Staff recommends that the DOW participate in the design of the fish ladder to ensure proper criteria for target species.
- 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 \$35,000 from the Arkansas Basin Account and \$290,000 from the Statewide Account to assist in the funding of the Helena Diversion Structure/BV Boat Chute 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.