# Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet November 19-20, 2013 Agenda Item 22(a)

**Applicant:** Upper Arkansas Water Conservancy District

Water Activity Name: Helena Diversion Structure/BV Boat Chute Improvement Project – Phase 2

Water Activity Purpose: Agricultural

County: Chaffee

**Drainage Basin:** Arkansas

Water Source: Arkansas River

**Amount Requested:** \$43,125

Source of Funds: \$43,125 Arkansas Basin Account

Matching Funds: \$10,000 (19%) cash Helena Water Rights holders

Total Project Costs = \$51,125

# **Staff Recommendation**

Staff recommends approval of up to \$43,125 from the Arkansas Basin Account to assist in the funding of the Helena Diversion Structure/BV Boat Chute Implementation Project – Phase 2.

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. WSRA funds will be expended on the replacement and improvement of a ditch channel and bypass structure of the Helena Ditch Structure. More specifically the tasks to be performed include: removal of existing structures; construction and installation of concrete channel and bypass structure; installation of control gate; installation of rock armoring erosion protection; and engineering inspection and final review.

Studies conducted during Phase I of this project revealed the need for additional improvements to the Helena Ditch Structure. Phase I focused on improvements within the stream on the diversion structure and replacement of the head gate. The study showed that there were additional needs to update and replace the concrete structure behind the headgate and to improve the bypass structure. Phase 2 of this project is focused on the replacement and improvement of the ditch channel and bypass of the Helena Ditch Structure.

Phase 2 will enhance the overall engineering soundness of the structures and optimize delivery efficiency of water. The improvements of all these structures will create an integrated system that increases boater safety, improves fisheries and enhances the availability, efficiency and sustainability of water for irrigation. Staff supports multi-objective diversion reconstruction projects of which this phase is a component.

### **Discussion:**

The CWCB has supported the evolution of this project through the approval of two previous WSRA Grant requests. In 2008 a WSRA 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. CWCB then approved an additional \$325,000 in 2011 to accomplish the next phase of the project consisting of more detailed engineering and construction of the new diversion dam and headgate at the Helena Ditch Structure.

# **Issues/Additional Needs:**

No issues or additional needs have been identified.

Funding Overview/Matching Funds

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
WSRA Arkansas Basin Account	\$43,125	n/a	\$41,125
Helena Water Rights holders	<u>\$10,000</u>	<u>\$0</u>	\$10,000
Total Project Costs	\$53,125	\$0	\$53,125

### **Staff Recommendation:**

Staff recommends approval of up to \$43,125 from the Arkansas Basin Account to assist in the funding of the Helena Diversion Structure/BV Boat Chute Implementation Project – Phase 2.

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 and Final Deliverable:** 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. 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.

# **Project Map:**

