# Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet September 11-12, 2014 Agenda Item 13(k)

**Co-Applicants:** South Ledge Ditch Company and Meadow Ditch Company (Ditch Companies)

**Program Sponsor:** Meadow Ditch Company

Water Activity Name: Meadow and South Ledge Diversion Reconstruction and Fish Passage

**Demonstration Project** 

Water Activity Purpose: Non-consumptive, Agricultural, and Educational (multi-objective)

Structural Water Project

County: Boulder

Drainage Basin: South Platte

Water Source: South St. Vrain Creek Total Amount Requested: \$170,000

**Source of Funds:** \$4,250 Metro Account; \$4,250 South Platte Basin Account; and \$161,500

Statewide Account

**Matching Funds:** Basin Account Matches (\$8,500) = 5% of total grant request

Basin Account & Applicant Match (cash & in-kind: \$189,700) = 112% of total

grant request

Applicant Match (\$181,200) = 52% of total project costs (\$351,200)

(refer to Funding Summary/Matching Funds)

# **Staff Recommendation**

Staff recommends conditional approval (contingent upon the applicant successfully addressing concerns specified below in the *Issues/Additional Needs* section) of up to \$4,250 from the Metro Account; \$4,250 from the South Platte Basin Account; and \$161,500 from the Statewide Account to help fund the project titled: Meadow and South Ledge Diversion Reconstruction and Fish Passage Demonstration Project.

## **Water Activity Summary:**

The Meadow and South Ledge Ditch Companies on South St. Vrain Creek in Boulder County experienced significant damage as a result of the catastrophic floods of September 2013. This project proposes to rebuild both irrigation diversion structures with consideration for the aquatic environment, while delivering a full decree of irrigation water. Further, it is hoped this project design can serve as a model for other ditch companies, and demonstrate how fish passage can be constructed maximizing the efficiency of the diversion, and minimizing cost.

WSRA funds will contribute toward the costs of data collection, engineering design, permitting, construction, outreach, and monitoring. The South Platte Basin Nonconsumptive Needs Assessment (2009) identified South St. Vrain Creek as a "Recreational Focus Area." This project will also help connect South St. Vrain Creek with downstream segments identified as "Environmental and Recreational Focus Areas" containing State identified fish species of concern. This project further supports the St. Vrain Creek Watershed Master Plan objectives, promoting natural channel design, sediment transport, and fish passage.

Reconstruction of the Meadow and South Ledge ditch structures with consideration for the aquatic environment is supported by a diversity of stakeholders including: Boulder County Parks and Open Space, the

City of Longmont, St. Vrain Creek Coalition, St. Vrain Chapter of Trout Unlimited, Colorado Parks and Wildlife, and the US Fish and Wildlife Service.

The primary objectives of the project are as follows:

- Reconstruction of the Meadow and South Ledge diversion structures to provide a full decree of agricultural irrigation water;
- Support the St. Vrain Creek Watershed Master Plan objectives, promoting overall watershed health by incorporating natural channel design, improved sediment transport, and fish passage;
- Provide long-term, sustainable infrastructure improvements in a critical Recreational Focus Area as defined by the South Platte Nonconsumptive Needs Assessment (2009); and
- Act as a Statewide demonstration project to showcase how fish passage can be constructed economically and effectively.

## **Discussion:**

CWCB staff continues to encourage multi-objective design in post September 2013 flood recovery projects. This includes diversion reconstruction designed to be more flood resilient. The scope of work that CWCB developed for September 2013 flood recovery coordination included task to "develop a strategy for multi-objective diversion design and construction". The Meadow and South Ledge Diversion Reconstruction and Fish Passage Demonstration Project is a direct result of this effort.

## **Issues/Additional Needs:**

- The ditch companies should work with CWCB Staff to ensure that geomorphic monitoring conforms to CWCB Measurable Results Program criteria.
- All proposed river channel work shall conform to the CWCB <u>Rules and Regulations for Regulatory Floodplains in Colorado</u>.

### Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

# **Tier 1-3 Evaluation Criteria:**

Application satisfies Evaluation Criteria.

# **Funding Overview/Matching Funds:**

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
WSRA Statewide Account	\$161,500	n/a	\$161,500
WSRA Metro Account	\$4,250	n/a	\$4,250
WSRA South Platte Basin Account	\$4,250	n/a	\$4,250
USFWS	\$120,000	n/a	\$120,000
South Ledge Ditch Company	\$5,000	\$15,000	\$20,000
Meadow Ditch Company	\$5,000	\$15,000	\$20,000
6 Project Partners (refer to application)	<u>\$0</u>	\$21,200	\$21,200
<b>Total Project Funds Available/Costs</b>	\$300,000	\$51,200	\$351,200

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.