Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet May 20-21, 2015 Agenda Item 10(c)

Applicant & Fiscal Agent: Marcot Park Ditch and Reservoir Company

Water Activity Name: Engineering Review of Marcot Dam Outlet Structure

Water Activity Purpose: Agricultural/Municipal

County: Delta

River Basin: Gunnison

Water Source: Marcot Creek

Amount Requested/Source of Funds: \$10,000 Gunnison Basin Account

\$10,000 Total grant request

Matching Funds: Basin Account Match (\$10,000) = 100% of total grant request

Basin Account & Applicant Match (\$29,300)

Applicant Match (\$19,300) = 65.8% of total project costs (\$29,300)

(refer to Funding Summary/Matching Funds section)

Staff Recommendation:

Staff recommends approval of up to \$10,000 from the Gunnison Basin Account to help fund the project titled: Engineering Review of Marcot Dam Outlet Structure.

Water Activity Summary: Marcot Ditch and Reservoir Company is in the process of upgrading and evaluating Marcot Dam, located on the Grand Mesa. This reservoir provides agricultural water for farmland in Delta County as well as water for the Town of Orchard City's domestic water supply. After an evaluation showed that seepage was causing nearly 100 AF of stored water under certain conditions, the Company overlaid this area of the dam with clay and soil.

The outlet piping for the reservoir was installed in 1957, and consists of 175 feet of 20-inch OD, ¼ thickness steel pipe. This outlet has been examined by the Dam Safety Division of DWR. While most of the pipe is in good repair, there are small areas of corrosion and general erosion, which may cause scouring within the dam, leading to the necessity of breaching the dam for repairs.

This WSRA grant would be utilized to engage an engineering firm to examine the outlet pipe, evaluate the technologies available for in-place repairs, and prepare cost estimates for suggested improvements. The Company would like to evaluate the potential for pipe-in-place (PIP) technology, where a polymer substance is introduced into an existing pipe to seal off leakage. Because of the remote location of Marcot Reservoir, breaching and rebuilding would be prohibitively expensive, while allowing further deterioration of the pipe could lead to a no-fill order or a dam failure. The Company seeks this funding to prevent the loss of this 480 AF vessel, by proactively assessing the severity of the problem, and the cost to make repairs.

Discussion: This project was included as a priority (Tier 1) project in the Gunnison Basin Implementation Plan. The cash match for repairs was generated from a special shareholder

assessment, and shareholders have agreed that the importance of this project merits future special assessments if necessary to complete the project.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
WSRA Gunnison Basin Account	\$10,000	n/a	\$10,000
Marcot Park Ditch and Reservoir Company	\$19,300	<u>n/a</u>	\$19,300
Total	\$29,300		\$29,300

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.