

STATE OF COLORADO

Colorado Water Conservation Board Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Anna Mauss, P.E., Project Manager
Kirk Russell, P.E., Chief
Finance and Administration Section

DATE: September 13, 2013

SUBJECT: **Agenda Item 29b, September 24-25, 2013 Board Meeting**
Finance/Water Supply Planning– CWCB Loan and WSRA Grant Applications
Santa Maria Reservoir Company – Continental Dam Spillway Restoration
Project

John W. Hickenlooper
Governor

Mike King
DNR Executive Director

James Eklund
CWCB Director

Introduction

Santa Maria Reservoir Company (Company) is applying for a WSRA grant and CWCB loan to finance the Continental Dam Spillway Restoration Project (Project). The purpose of the Project is to address seepage and repair the spillway of the Continental Reservoir in order to lift a State Engineers Office (SEO) imposed dam safety storage restriction. The total Project cost is estimated to be \$4,055,000. In July of 2013, the Company was approved for a \$1,013,750 grant by the Rio Grande Basin Roundtable from the Water Supply Reserve Account. The Company is requesting a loan from the CWCB to cover the remaining 75% of Project Costs. See attached Project Data Sheet for a location map and a Project summary.

Staff Recommendation for WSRA Grant

Staff recommends approval of up to \$962,750 from the Statewide Account and \$51,000 from the Rio Grande Basin Account to the Santa Maria Reservoir Company to fund the Continental Dam Spillway Restoration Project.

Staff Recommendation for CWCB Loan

Staff recommends the Board approve a loan, from the Construction Fund, not to exceed \$3,071,663 (\$3,041,250 for project costs and \$30,413 for the 1% Loan Service Fee) to the Santa Maria Reservoir Company for the Continental Dam Spillway Restoration Project. The loan terms shall be 30 years at the agricultural rate of 1.75% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Background

The Company provides irrigation water to approximately 70,000 acres in Rio Grande, Saguache, Conejos, and Alamosa Counties, in the San Luis Valley. The Company owns and operates two reservoirs: Santa Maria and Continental. The reservoirs are located in Hinsdale and Mineral Counties, about 20 miles southwest of the Town of Creede. Santa Maria receives regulated discharges from Continental through a century old conveyance system comprised of a pipeline, siphon and an open ditch.

Santa Maria was constructed in 1910 and has a design capacity of 43,500 acre-feet (AF). It stores irrigation water, Rio Grande compact water, San Luis Valley Water Conservancy District water, Colorado Division of Parks and Wildlife water, transmountain water, and provides flood control.

Continental was also designed in 1910 and was constructed between 1925 and 1928 with a design capacity of 27,000 AF; however, due to seepage and spillway deterioration, for the past 20 years it has been limited by the SEO to a storage capacity of 15,000 AF.

In September of 2008, the Company was awarded \$191,700 in WSRA grants (\$50,000 from the Rio Grande Basin Account and \$141,700 from the Statewide Account) to conduct a Feasibility Study and final design plans and specifications of needed improvements including: Continental Reservoir, the conveyance system, and Santa Maria Reservoir. As a result of the work, the Company plans on improving its system in two phases. Phase I was the rehabilitation of the conveyance system between the reservoirs. This Project is Phase II and will address the Continental Reservoir rehabilitation.

In March of 2013, the Company was approved for a \$1,391,250 loan and \$463,750 in WSRA grants (\$23,000 from the Rio Grande Basin Account and \$440,750 from the Statewide Account) to rehabilitate the conveyance system between the reservoirs.

Loan Feasibility Study

Ed Toms, P.E. of URS Corporation prepared the Loan Feasibility Study, titled "*Phase 2 – Santa Maria Rehabilitation Initiative, Continental Dam Rehabilitation Project*" dated July 1, 2013. The Study was prepared in accordance with CWCB guidelines and includes preliminary engineering and an engineer's estimate of probable cost that were used in determination of the total Project cost.

Borrower - The Santa Maria Reservoir Company

The Company is a Mutual Reservoir Company, incorporated in 1931. It is registered with the Colorado Secretary of State as a nonprofit corporation and is in good standing. The Company is governed by a five-member board of directors. There are 250 shareholders with a total of 5,400 shares of stock. The board has the ability to take on debt and to withhold delivery of water to stockholders if assessments are unpaid. Shareholders must also approve annual assessments. If shareholders fail to set an assessment, the Board of Directors has the power to set assessments to provide for the maintenance and operation and to pay any indebtedness of the Company.

Water Rights

The Company's decreed water rights include 37,515 AF of storage in Santa Maria Reservoir (1916 priority date), 26,716 AF of storage in Continental Reservoir (1934 priority date), and 275 cfs of direct flow rights from North Clear Creek, Bennett Creek, and Bolder Creek. On average the Company diverts 6,300 AF annually.

The CWCB has filed a statement of opposition to the Company's water court application to change the use of certain storage rights in Santa Maria Reservoir. Staff intends to work with the Company's representatives to ensure that the resulting decree contains terms and conditions to prevent injury to any decreed instream flow water rights while allowing the Company's proposal to move forward.

Project Description

The objective of this Project is to rehabilitate the Continental dam and restore the full storage capacity of the reservoir.

Several options were evaluated to address the spillway project including: no action, complete replacement of the spillway, and rehabilitation of the existing spillway. Rehabilitating the existing spillway was selected as it had the lowest cost while still safely passing the required design flood.

Several options were also evaluated to address the seepage from the embankment. These alternatives included grouting the left abutment, grouting the dam embankment, and constructing an internal seepage collection system along the downstream dam face. Because of unknowns with grouting, the Company selected the internal seepage collection system as the preferred alternative.

Final engineering documents have been prepared and were used for estimating the total project cost.

TABLE 1: TOTAL PROJECT COST SUMMARY

Task	Cost
Construction (with 12% contingency)	\$3,584,000
Construction Engineering Support	\$431,000
Admin	\$40,000
Total	\$4,055,000

Schedule: The Project schedule is as follows: bid the Project in spring of 2014; construction in the summer/fall of 2014.

TABLE 2: PROJECT FUNDING SUMMARY

WSRA Grant	
Rio Grande River Basin (5% of WSRA Grant Request)	\$51,000
Statewide (95% of WSRA Grant Request)	<u>\$962,750</u>
TOTAL(25% of the Total Project Cost)	\$1,031,750
CWCB Construction Fund Loan (75% of Total Project Cost)	\$3,041,250
Total Project Cost	\$4,055,000

The CWCB will disburse funds at a rate of 75% loan to 25% grant of each invoice amount for Project related expenses, up to the approved grant and loan limits.

Water Supply Reserve Account Grant

At the July 2013 Rio Grande Basin Roundtable meeting, the Roundtable granted approval of the Continental Dam Spillway Restoration Project application request for \$51,000 in Basin Funds and recommended approval of \$962,750 of Statewide Funds.

Source of Funds: \$962,750 Statewide Funds, \$51,000 Rio Grande Basin Funds

Matching Funds: \$3,041,250 CWCB Loan

Threshold and Evaluation Criteria: The application articulates how the project satisfies the Threshold and Evaluation Criteria as summarized below:

Tier 1: Promoting Collaboration/Cooperation & Meeting Water Management Goals & Identified Needs:

This Project restores the full capacity of a major reservoir in the Rio Grande basin. It is the second phase of a larger project to restore both the conveyance system and reservoir to benefit water users of the Rio Grande Canal and the Monte Vista Canal. This includes irrigators in a 70,000-acre agricultural area as well as local governments in three counties.

Continental Reservoir has been used primarily to store irrigation water for agricultural producers spread throughout five counties of the San Luis Valley of Colorado. Continental also stores Colorado Division of Parks and Wildlife (CPW) water, Rio Grande Compact water, San Luis Valley Water Conservancy District water, and water for Groundwater Management Subdistrict #1. The CPW has water rights to three transmountain diversions that it hopes to be able to store, by mutual agreement, in Santa Maria to allow for beneficial use to wildlife, increasing habitat in critical winter range lands. This will allow for a productive fishery; sustained and increased riparian habitat; irrigation of lands for wildlife nesting, shelter and forage; and for well augmentation.

Tier 2: Facilitating Water Activity Implementation: The Company has committed to funding 75% of the Project costs through a CWCB loan.

Tier 3: The Water Activity Addresses Issues of Statewide Value and Maximizes Benefits: This Project directly improves the ability of Company shareholders to irrigate 70,000 acres of farm and ranch land in the San Luis Valley. It also increases the ability to release and manage Rio Grande Compact entitled waters by upgrading and making critical repairs to the conveyance system's siphon and canal, enabling future phases of the Project to move forward.

Discussion:

As identified in the SWSI findings, agricultural water users often lack the financial ability to adequately address infrastructure needs without financial aid. The Company does not possess the financial resources to make the improvements to efficiently and safely utilize its existing water rights without the loan and grant funding. Additionally, the SWSI Phase II Report: Addressing the Water Supply Gap Technical Roundtable includes the goal to "sustainably meet agricultural demands," which is directly met through this activity. The proposed Project effectively meets the consumptive needs of the Rio Grande Basin by rehabilitating existing infrastructure to preserve agricultural water use.

Issues/Additional Needs:

No additional issues or needs were identified.

Reporting and Deliverables: All products, data and information developed as a result of this grant must be provided to 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 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.

CWCB Loan Program

Financial Analysis

The Company qualifies for the agricultural interest rate of 1.75% for a 30-year term. Table 3 provides a financial summary of the loan request.

TABLE 3: LOAN FINANCIAL SUMMARY

Total Project Cost	\$4,055,000
WSRA Grant Request (25% of total Project cost)	\$1,013,750
CWCB Loan Amount (75% of total Project cost)	\$3,041,250
CWCB Loan Amount (including 1% Service Fee)	\$3,071,633
CWCB Annual Loan Payment	\$132,480
CWCB Annual Loan Obligation (including reserve account)	\$145,728
Number of Shareholders	250
Number of Shares	5,400
Current Annual Assessment (per Share)	\$40
Annual Cost per share for loan repayment	\$27
Total Cost of Project per AF of Storage Recovered (12,000 AF)	\$338

Creditworthiness:

The Company has an existing \$1,405,163 CWCB loan approval (2012 contract number C150350) with annual payments set at \$60,604 for the Conveyance System Project. The loan terms are 30 years at the agricultural interest rate of 1.75%. Additionally, the Company paid off a \$454,000 CWCB loan in 2003. The loan terms were 20 years at 5% per annum. The Company deferred a payment in 1994 but ultimately paid off the loan early, making it a 13-year term.

In addition to assessment revenues, the Company also receives \$5,000 annually from a fishing club lease.

TABLE 4: FINANCIAL RATIOS

Financial Ratio	2010-2012	Future w/ Project
Operating Ratio (operating revenues/operating expenses) weak: <100% - average: 100% - 120% - strong: >120%	139% (strong) \$230K/\$165K	105% (average) \$388K/\$371K
Debt Service Coverage Ratio (total eligible revenues-operating expenses)/total debt service weak: <100% - average: 100% - 120% - strong: >120%	N/A*	108% (average) (\$388K-\$165K)/\$206K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	283% (strong) \$467K/\$165K	126% (strong) \$467K/\$371K
Annual Operating Cost per Acre-Foot (based on 6,300 AF) weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$26.19 (weak) \$165K/6,300	\$58.89 (weak) \$371K/6,300

*Note: The Conveyance System Project was delayed due to wildfires in the area. Construction will begin in 2014; therefore, the project is not yet in repayment and the debt service was only included in the Future w/ Project ratios.

Collateral: As security for the loan, the Company will pledge assessment revenues backed by a rate covenant and the Project itself including: Continental Reservoir and associated storage rights. This is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Jay Yeager, Manager, Santa Maria Reservoir Company
Susan Schneider/Jennifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program – Project Data Sheet

**Water Project Loan Program
Project Data Sheet**

Borrower:	Santa Maria Reservoir Company	County:	Hinsdale & Mineral		
Project Name:	Continental Dam Spillway Restoration Project	Project Type:	Dam Rehabilitation		
Drainage Basin:	Rio Grande / District 20	Water Source:	North Clear Creek		
Total Project Cost:	\$4,055,000	Funding Source:	Construction Fund and Water Supply Reserve Account Grants		
Type of Borrower:	Agricultural	Avg. Annual Diversion:	6,300 AF		
		Recovered Storage:	12,000 AF		
CWCB Loan:	\$3,071,633 (w/ 1% service fee)	Interest Rate:	1.75%	Term:	30 years

Santa Maria Reservoir Company owns and operates Continental Reservoir (27,000 AF) and Santa Maria Reservoir (43,500 AF), located in the Rio Grande River Basin near Creede, Colorado. Santa Maria and Continental operate in conjunction with each other via a conveyance system made up of a pipeline, siphon, and open ditch. For the past 20 years, Continental has been under a storage restriction due to seepage issues, limiting the storage to 15,000 AF. The purpose of this Project is to address seepage issues and repair the spillway Continental Reservoir in order to lift the storage restriction. Construction is expected to occur in the 2014 construction season.

