



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

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John Hickenlooper, Governor

Robert Randall, DNR Executive Director

Lauren Ris, CWCB Acting Director

TO: Colorado Water Conservation Board Members

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

DATE: May 17-18, 2017 Board Meeting

AGENDA ITEM: 28b. Change to Existing Loans
Grand Mesa Water Conservancy District - Peak Reservoir and Blanche Park
Reservoir Rehabilitation Project

Introduction

The Grand Mesa Water Conservancy District (District), acting by and through its water activity enterprise, received approval of a \$227,250 loan Contract No. CT2015-061 (C150354) for the Peak Reservoir and Blanche Park Reservoir Rehabilitation Project (Project) at the May 2013 Board meeting. The original loan was for 35% of the total Project cost. The original estimated cost was \$640,000. As a result of permitting delays, the current cost estimate is \$723,471. The District is requesting a loan increase of \$75,750 (including the loan service fee) which will cover approximately 47% of Project costs. See attached Project Data Sheet for a location map and a Project summary.

Staff Recommendation

Staff recommends the Board approve a loan increase not to exceed \$75,750 (\$75,000 for Project costs and \$750 for the 1% service fee) to the Grand Mesa Water Conservancy District, acting by and through its water activity enterprise, for costs related to the Peak Reservoir and Blanche Park Reservoir Rehabilitation Project, from the Construction Fund. The total loan amount will become \$303,000 (\$300,000 for Project costs and \$3,000 for the 1% service fee). The loan terms shall remain 20 years at a blended interest rate of 1.55% per annum. Security for the loan shall remain a pledge of water activity enterprise revenues backed by a rate covenant, in compliance with CWCB Financial Policy #5.



Background

The District is located on the Grand Mesa in western Colorado. The District's boundary is approximately 500 square miles upon which there are roughly 100 reservoirs. The District owns several of these reservoirs including Skinned Horse Reservoir, Arch Slough Reservoir, and Upper Eggleston Reservoir totaling 562 acre-feet (AF) of storage. These reservoirs are operated by a network of ditches that deliver water to District users, including agricultural users as well as approximately 6,400 municipal taps.

The District funded several studies over the past decade evaluating a large storage project known as the Grand Mesa Project, only to conclude that a large storage project was economically unfeasible. As a result, the District opted to rehabilitate smaller, existing reservoirs. Included in that effort are two breached reservoirs, Peak and Blanche Park. These reservoirs will add 155 AF of storage to the District's water rights portfolio.

These reservoirs are located in Delta County about 25 miles north of the Town of Cedaredge. Peak Reservoir is a 30 AF reservoir that was built between 1903 and 1905. The dam was 12 feet tall and 200 feet long and was never permitted with the State. By 1950 the dam fell into disrepair and was abandoned. The District acquired the reservoir in 2001.

Blanche Park Reservoir is a 125 AF reservoir that was constructed in 1895 by a group of local farmers. It also was not permitted and was breached in 1946. The District acquired this reservoir site in 2010.

In 2009 when the District began work on the Project, it believed it could cash fund the construction on both dams based on its engineers opinion of probable cost. However, as the Project progressed the estimates were revised and the District applied for a WSRF Grant in 2011 and a CWCB Loan in 2013 to fund the balance.

Project Update

The District was able to complete the work at Peak reservoir in 2015. Approximately \$124,000 in loan funds were used for the final permitting and construction.

Blanche Park Reservoir construction was delayed due to engineering and permitting issues. In December of 2016, the Office of the State Engineer (SEO) approved the construction drawings for Blanche Park Reservoir. In April 2017, the District received notice that the United States Fish and Wildlife Service approved the Environmental Assessment. The District anticipates having all permits in place for construction in the summer of 2017.

TABLE 1: COST ESTIMATES

	Original Estimate	Cost to Date	Estimated Cost to Complete	Total
Total Project Cost	\$640,000	\$295,666	\$347,840	\$723,471
Peak Reservoir (Total)	\$260,000	\$234,990		\$234,990
Engineering		\$61,978	-	\$61,978
Permitting		\$22,979	-	\$22,979
Construction		\$150,033	-	\$150,033
Blanche Park Reservoir (Total)	\$380,000	\$140,641	\$347,840	\$488,481
Engineering		\$113,942	\$44,240	\$158,182
Permitting		\$26,699	\$5,000	\$31,699
Construction		\$0	\$267,000	\$267,000
Contingency			\$31,600	\$31,600

Financial Analysis

The District's blended interest rate will remain 1.55% for a 20-year term. See Table 2 for an updated financial summary.

TABLE 2: FINANCIAL SUMMARY

	Original Approval	Current Request
Total Project Cost	\$640,000	\$723,471
Borrower Contribution	\$352,500	\$348,471
WSRF Gunnison Basin Grant (Approved in March 2011)	\$75,000	-
CWCB Loan Amount	\$225,000	\$300,000
CWCB Loan Amount (with Service Fee)	\$227,250	\$303,000
CWCB Annual Loan Payment	\$13,300	\$17,736
CWCB Annual Loan Obligation (1 st Ten Years)	\$14,630	\$19,509
Project Cost per AF (based on 155 AF of added storage)	\$4,129	\$4,668

Creditworthiness: The District has no other existing debt.

TABLE 3: FINANCIAL RATIOS

Financial Ratio	Past 3 Years (Original Approval)	2015 - 2016	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	143% (Strong) \$57K/\$40K	176% (Strong) \$64.4K/\$36.6K	115% (Average) \$64.4K/\$56.1K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	N/A	N/A	143% (Strong) (\$64.4K-\$36.6K)/ \$19.5K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	80% (Average) \$32K /\$40K	382% (Strong) \$139.8K/\$36.6K	3% (Weak) \$2.0K/\$56.1K

Note: These financial ratios show District and enterprise revenues and expenses combined.

Collateral: Security for this loan will remain a pledge of the District's water activity enterprise revenues backed by a rate covenant and annual financial reporting. This is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Austin Keiser, President, Grand Mesa Water Conservancy District
Jennifer Mele, Colorado Attorney General's Office

Attachments: Water Project Loan Program - Project Data Sheet
Original Board Memo (updated May 16, 2013)

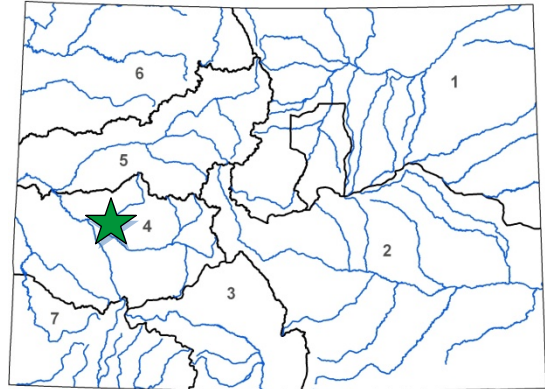


Peak Reservoir and Blanche Park Reservoir Rehabilitation

Grand Mesa Water Conservancy District
May 2017 Board Meeting

(Loan Increase)

L O A N D E T A I L S	
Project Cost:	\$721,471
CWCB Loan (with Service Fee):	\$303,300
Loan Term and Interest Rate:	20 Years @ 1.55%
Funding Source:	Construction Fund
B O R R O W E R T Y P E	
Agriculture	Municipal
90%	10% Low - 0% Mid - 0% High
	Commercial
	0%
P R O J E C T D E T A I L S	
Project Type:	Reservoir Rehabilitation
Average Annual Delivery:	400AF
New Storage :	155 AF



L O C A T I O N	
County:	Delta
Water Source:	Surface Creek
Drainage Basin:	Gunnison
Division:	4
District:	40

The Grand Mesa Water Conservancy District owns several reservoirs and a network of ditches to service agricultural users and municipal users including the Town of Orchard City and Cedaredge. It is requesting a loan to rehabilitate Peak Reservoir and Blanche Park. Both reservoirs are located in the Grand Mesa National Forest and have not been used in nearly 50 years. The District was awarded \$75,000 in Water Supply Reserve Fund (WSRF) Gunnison Basin Roundtable grant funds in March 2011. Peak Reservoir construction involved earthwork on the dam and new outlook works and was completed in 2015. Blanche Park reservoir work will be a complete rebuilding of the dam. Construction is expected to occur in the summer of 2017.



STATE OF COLORADO

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Department of Natural Resources

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John W. Hickenlooper
Governor

Mike King
DNR Executive Director

Jennifer L. Gimbel
CWCB Director

TO: Colorado Water Conservation Board Members

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

DATE: May 3, 2013 (**Updated May 16, 2013**)

SUBJECT: **Agenda Item 16d, May 14-15, 2013 Board Meeting**
Finance – New Water Project Loans
Grand Mesa Water Conservancy District – Peak Reservoir and Blanche Park
Reservoir Rehabilitation Project

Introduction

The Grand Mesa Water Conservancy District (District), acting by and through its Water Enterprise, is requesting a loan for the Peak Reservoir and Blanche Park Reservoir Rehabilitation Project (Project). Both reservoirs are located in the Grand Mesa National Forest and have not been used in nearly 50 years. The District is in the process of rehabilitating the reservoirs to provide water for agricultural use, domestic use, and augmentation purposes. The total Project cost is estimated to be \$640,000. The District has already contributed \$352,500 towards Project costs and has also been awarded \$75,000 in Water Supply Reserve Account (WSRA) Gunnison Basin Roundtable grant funds. The District is requesting a loan from the CWCB for approximately 35% of Project costs. See attached Project Data Sheet for a location map and a project summary.

Staff Recommendation (Board approved staff recommendation May 14, 2013)

Staff recommends the Board approve a loan not to exceed \$227,250 (\$225,000 for project costs and \$2,250 for the 1% Loan Service Fee) to the Grand Mesa Water Conservancy District, acting by and through its Water Enterprise, for the Peak Reservoir and Blanche Park Reservoir Rehabilitation Project from the Construction Fund. The loan terms shall be 20 years at a blended interest rate of 1.55% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Background

The District is located on the Grand Mesa in western Colorado. The District's boundary is approximately 500 square miles upon which there are roughly 100 reservoirs. The District owns several of these reservoirs including Skinned Horse Reservoir, Arch Slough Reservoir, and Upper Eggleston Reservoir totaling 562 acre-feet (AF) of storage. These reservoirs are operated by a network of ditches that deliver water to District users, including agricultural users as well as approximately 6,400 municipal taps.

The District funded several studies over the past decade evaluating a large storage project known as the Grand Mesa Project, only to conclude that a large storage project was economically unfeasible. As a result, the District opted to rehabilitate smaller, existing reservoirs. Included in that effort are two breached reservoirs, Peak and Blanche Park. These reservoirs will add another 155 AF of storage to the District's water rights portfolio.

These reservoirs are located in Delta County about 25 miles north of the Town of Cedaredge. Peak Reservoir is a 30 AF reservoir that was built between 1903 and 1905. The dam was 12 feet tall and 200 feet long and was never permitted with the State. By 1950 the dam fell into disrepair and was abandoned. The District acquired the reservoir in 2001.

Blanche Park Reservoir is a 125 AF reservoir that was constructed in 1895 by a group of local farmers. It was also unpermitted and was breached in 1946. The District acquired this reservoir site in 2010.

Loan Feasibility Study

Austin Keiser, the District president, prepared the Loan Feasibility Study titled "*Rehabilitation of Two Reservoirs on Grand Mesa*," dated March 2013, with engineering support from William Miller, P.E. of MM&D Engineering in Castle Rock, Colorado. The Study was prepared in accordance with the CWCB guidelines and includes an alternative analysis, engineering design and cost estimates.

Grand Mesa Water Conservancy District

In 1949 the District was organized pursuant to the Water Conservancy Act by District Court in Cedaredge, Colorado. The District includes the Town of Orchard City and the Town of Cedaredge. These municipalities use approximately 10% of the District's water. The remaining 90% is delivered to agricultural users.

Revenue to the District consists of a current ad valorem tax of 0.643 mills and income from augmentation water sales and water leases. The District facilitates its augmentation plan and water leases through a Water Enterprise, established in 2003.

Water Rights

On average, the District delivers 400 AF to its users. In 1961 the District filed for a 60,000 AF storage right for the Grand Mesa Project. Because this project was never built, the water rights were transferred to smaller rehabilitated reservoirs. The District has a conditional storage decree for 25,000 AF of water from the Grand Mesa Project.

Table 1 – District’s Storage Rights on the Grand Mesa

Decree Case No.	Reservoir	Storage (AF)
02CW009	Skinned Horse Reservoir	93
01CW23	Arch Slough Reservoir	97
01CW23	Upper Eggleston Reservoir	376
09CW170	Peak Reservoir (under construction)	30
Pending	Blanche Park Reservoir	125
Total		721

Project Description

The purpose of this Project is to rehabilitate two breached reservoirs in the Grand Mesa National Forest.

Peak Reservoir – In 2009 the District began the permitting process on Peak Reservoir with the Forest Service (USFS), the Environmental Protection Agency (EPA), State of Colorado Division of Water Resources Dam Safety Branch (SEO), and engineering and environmental consultants. The USFS required a tree removal permit, a dredging and mining permit, and an access permit. The EPA required a wetland and environmental study. The SEO required an approved set of plans for demolition and construction.

By August of 2011, all permits were in place and construction began on the rehabilitation of the dam at Peak Reservoir. The District intended to cash fund this project; however, once the contractor began the earthwork it was determined that the existing embankment material onsite was inadequate. This required the mining of material from another location and transporting of suitable material to the site. In addition, multiple underground springs were uncovered near the dam requiring interception of the water including drains and cutoff walls and additional excavation.

The initial engineer’s estimate of the Peak Reservoir project was \$144,000. The revised engineer’s estimate is \$362,200. To date, the District has spent \$290,900 to complete a new embankment and outlet pipe. The remaining tasks on Peak Reservoir include outlet gate works installation, emergency spillway construction, riprap installation on the face of the dam, reseeding and wetland mitigation. The District expects to complete the construction in the summer of 2013 with the ability to store water in the winter of 2013-2014.

Blanche Park Reservoir – The Blanch Park Reservoir project requires complete reconstruction of the dam. The District has been in contact with all of the agencies involved in the Peak Reservoir project and permits are pending.

The engineer’s estimate to rebuild the Blanche Park Reservoir is \$231,600 for construction costs. The District has already spent \$61,600 on engineering and permitting. Construction is expected to occur over two summer construction seasons, 2013 and 2014, with the ability to store water by the winter of 2014-2015.

Financial Analysis

Table 2 shows a summary of the financial aspects of the Project. Based on the delivery of water to 90% agricultural users and 10% to low income municipal users, the District’s blended interest rate becomes 1.8% for a 30 year term. The District is applying for a 20 year term; therefore the interest rate is reduced by 0.25% to 1.55% per CWC Loan Policy #7.

To date, the District has contributed \$352,500 towards the Project. It was approved for a \$75,000 WSRA grant from the Gunnison Basin Roundtable in March of 2011 for the rehabilitation of Blanche Park Reservoir. (The grant contract has not been executed.)

Table 2. Project Financial Summary

PROJECT/LOAN	
Total Project Cost	\$640,000
Borrower Contribution to Date	\$352,500
WSRA Gunnison Basin Grant (Approved in March 2011)	\$75,000
CWCB Loan	\$225,000
CWCB Loan (Including 1% Service Fee)	\$227,250
CWCB Annual Loan Payment	\$13,300
CWCB Loan Obligation (including 10% debt reserve funding)	\$14,630
Total Project Cost per AF based on 155 AF of added storage	\$4,129

Creditworthiness: The District has an existing \$55,000 bridge loan to C. Ward Armstrong. The loan by Mr. Armstrong, a District board member, was a temporary loan to help the District finish the 2012 construction work. The loan is due in full by January 1, 2014 and will be paid off with proceeds from the CWCB loan.

Table 3. Financial Ratios

Financial Ratio	Past 3 Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	143% (Strong) \$57K ⁽¹⁾ /\$40K	104% (Average) \$57K/\$55K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	N/A	113% (Average) (\$57K-\$40K)/ \$15K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	80% (Average) \$32K/\$40K	58% (Average) \$32K/\$55K
Annual Operating Cost per Acre-Foot ⁽²⁾ weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$100 (Weak) \$40K/400AF	\$99 (Weak) \$55K/555AF

(1) Revenues include District tax revenue and Enterprise Revenues combined.

(2) This ratio is usually used for agricultural financial analysis and may not apply here.

Collateral - Security for this loan will be a pledge of Water Enterprise revenues backed by a rate covenant and annual financial reporting. This security is in compliance with CWCB Loan Policy #5 (Collateral).

cc: Austin Keiser, President, Grand Mesa Water Conservancy District
Susan Schneider, AGO

Attachment: Water Project Loan Program – Project Data Sheet