

STATE OF COLORADO

Colorado Water Conservation Board

Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Ryan Edwards, P.E., Project Manager *RM*
Kirk Russell, P.E., Chief *KGR*
Finance Section

DATE: January 13, 2012

SUBJECT: **Agenda Item 26a, January 23-24, 2012 Board Meeting**
Finance Section – Construction Fund - New Loan
Town of La Veta – North Lake Dam Rehabilitation Project

Introduction

The Town of La Veta (Town) is applying for a loan for the North Lake Dam Rehabilitation Project (Project). The purpose of the Project is to rehabilitate the Town's North Lake Reservoir (North Lake), to remove the 2.5-foot restriction imposed by the State Engineer's Office (SEO). The loan request is for 90% of the estimated \$410,000 total cost of the Project. See attached Project Data Sheet for a location map and project summary.

Staff Recommendation

Staff recommends the Board approve a loan, from the Construction Fund, not to exceed \$372,690 (\$369,000 for project costs and \$3,690 for the 1% Loan Service Fee) to the Town of La Veta, acting by and through its Water Enterprise, for the North Lake Dam Rehabilitation Project. The loan terms shall be 30 years at the low-income municipal restricted reservoir interest rate of 3.00% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Background

The Town is located in Huerfano County, along the Cucharas River (River) and the foothills of the Sangre De Cristo mountain range in southeastern Colorado. Raw water diverted from the River is the primary source for the Town's municipal water supply. North Lake is one of two reservoirs the Town utilizes for raw water storage. The Town is dependent on storage to supplement river flows during drought conditions and periods of low flow in the River.

On March 4, 2011, growing concerns over the safety of the North Lake dam resulted in the SEO issuing the Town a restriction order to lower the North Lake water level 2.5-feet below its normal storage elevation. The primary concerns were outlet pipe deterioration, seepage on the downstream

toe of the dam, lack of access to the intake tower and inoperable intake valves controlling flow to the outlet works. The restriction has reduced the storage capacity by an estimated 17 AF (from 86 to 69 AF).

After recently performing an assessment of its raw water system, the Town identified three additional projects that would improve its raw water storage system. Most notable is the rehabilitation of South Lake Reservoir (South Lake), which is beginning to show signs of seepage and outlet control issues. The Town wants to remove the restriction on North Lake as quickly as possible, while being proactive in addressing the needs of South Lake in an attempt to prevent a future restriction order.

The Town, which qualifies as a low-income municipal borrower, has formally requested a restricted reservoir interest rate reduction of 1%, in accordance with CWCB Financial Policy #7. Currently, the average municipal water bill for the Town is 125% of the state average according to 2006 Department of Local Affairs (DOLA) statistics. The rate reduction will reduce the Town's debt obligation; thereby, strengthening its position to address future water storage improvement projects.

Loan Feasibility Study

The loan feasibility study titled "Storage Feasibility Report" and dated October 25, 2011, was prepared by Chris Manera, P.E. from Colorado River Engineering, Inc. in Rifle, Colorado, with assistance from the Town of La Veta. Legal assistance was provided by Hank Worley of McDougall, Woldridge & Worley. The study was prepared in accordance with CWCB guidelines and includes preliminary engineering and an engineer's estimate of probable cost which was used to estimate total project cost.

Town of La Veta

The Town, situated near the western limits of the Arkansas River Basin (Colorado Water District 16), was established in 1886. It operates its water service through a Water Enterprise, established in 2008. Revenue is generated from water sales and development fees. The water service area is limited to the Town boundaries, and includes a population of approximately 800, with 415 households and a total of 580 equivalent residential units (EQRs).

The Town's water system includes a one million gallon-per-day water treatment plant (WTP), two storage reservoirs (North Lake and South Lake), a pipe distribution network, and a 15-inch steel supply pipeline with a diversion headgate located along the River. The supply pipe delivers raw water to the Town, where a network of valves is used to fill the lakes or convey raw water directly to the WTP. When not under restriction, the Town has a combined storage capacity of 313 AF between North Lake (86 AF) and South Lake (227 AF). The Town delivers an average of 209 AF annually.

Water Rights

The Town has an interest in four direct flow water rights with appropriation dates dating as far back as 1863. The Town utilizes these direct flow rights, in conjunction with its two storage rights, as the supply source for treating and delivering municipal water to its customers. The Town's water rights are decreed for irrigation, municipal, domestic, fire and augmentation. Table 1 provides a summary of the Town's water rights.

TABLE 1: LA VETA WATER RIGHTS

DIRECT FLOW RIGHTS					
Name	Approp. Date	Adjud. Date	Amount (cfs)	La Veta Interest (cfs) (%)	
Francisco & Daigre Mill #1	5-30-1863	6-12-1889	0.8	0.1	12.5
Francisco & Daigre Mill #3	6-30-1864	6-12-1889	11.2	1.4	12.5
Mexican Ditch #14	4-8-1869	6-12-1889	4.9	2.0	41.0
La Veta Pipeline #35	6-1-1873	6-12-1889	1.48	1.48	100
STORAGE RIGHTS					
Name	Approp. Date	Adjud. Date	Amount (cfs)	La Veta Interest (cfs) (%)	
La Veta Town Reservoir #228	4-10-1901	10-3-1921	256	256	100
La Veta Town Reservoir 00CW149	12-19-2000	12-31-2000	150	150	100
TOTAL			406	406	100

Historically, the Town's interest in the number one priority Francisco & Daigre Mill water right provides the only reliable direct flow yield during drought conditions, and is significantly less than the Town's demand. During these times, or seasonal periods of low flow in the River, the Town relies on water stored in the lakes to supplement its demand for raw water.

Project Description

The objective of this Project is to rehabilitate the North Lake dam; thereby removing the restriction imposed by the SEO. The following alternatives were considered.

Alternative No. 1 – No Action: Raw water storage is essential for meeting the Town's municipal water supply demand. North Lake dam is currently under restriction and South Lake dam is showing signs of distress, and faces the possibility of a restriction in the near future; therefore, the alternative has been dismissed.

Alternative No. 2 – North Lake Dam Rehabilitation: The alternative involves breaching of the dam to allow for reconstruction of the outlet works and installation of a toe drain filter system, restoring the 17 AF of storage lost under the restriction. This alternative was selected for its ability to restore the Town's raw water storage capacity in the most economical and environmentally sensitive fashion.

This alternative requires SEO approval of construction documents, specifications, hydrology report and a geotechnical stability analysis. The only permit anticipated is a storm water discharge permit. It will be the responsibility of the contractor to secure the permit prior to beginning construction. Existing site access is adequate to accommodate the proposed construction activities; therefore, no easement acquisitions are planned.

The initial submittal of engineering documents to the SEO is scheduled for January 2012. Approval is expected by July 2012, with contracting and bidding to follow. Construction is scheduled to commence in the fall of 2012 or spring of 2013, and should take three months to complete. The total project cost is estimated at \$410,000, and is summarized in the following table.

TABLE 2: TOTAL PROJECT COST SUMMARY

Task	Cost
Engineering	\$119,600
Construction	\$246,400
Contingency (12%)	\$44,000
Total	\$410,000

Engineering expenses include the initial feasibility analysis, preliminary geotechnical analysis, engineering design, coordinating SEO approvals, construction inspection, As-Built record drawings, and development of an emergency action plan.

Financial Analysis

The Town qualifies for an interest rate of 3.00% based on the low-income municipal base rate of 4.00%, for a 30-year term, and a 1% restricted reservoir rate reduction in accordance with CWCB Financial Policy #7. Table 3 provides a summary of the financial criteria of the loan request.

TABLE 3: PROJECT FINANCIAL SUMMARY

Total Project Cost	\$410,000
Borrower Contribution	\$41,000
CWCB Loan Amount (90% of total Project cost)	\$369,000
CWCB Loan Amount (including 1% Service Fee)	\$372,690
CWCB Annual Loan Payment	\$19,014
CWCB Loan Obligation (including 10% debt reserve funding)	\$20,916
Number of EQRs	580
Annual Cost of Project (average increase in monthly water bill)	\$3.01
Total Cost of Project (per EQR)	\$707

Creditworthiness:

The Town operates its water services through a Water Enterprise, generating revenues through water sales and development fees. The Enterprise has sufficient cash reserves on hand to fund its portion of the Project. Its annual surplus of revenues after paying operational, maintenance and debt service expenses has averaged \$79,000 from 2009-2010.

The Town has one outstanding loan with the Colorado Water Resources and Power Development Authority (CWRPDA) for water system improvements and to upgrade the main line extension through Main Street. The loan has a remaining balance of \$1,102,604 and an annual payment of \$50,117. The loan is in good standing and has a maturity date of May 1, 2039.

TABLE 4: FINANCIAL RATIOS

Financial Ratio	2009 - 2010	Future w/ Project
Operating Ratio (operating revenues/operating expenses) weak: <100% - average: 100% - 120% - strong: >120%	135% (strong) \$309K/\$229K	124% (strong) \$309K/\$250K
Debt Service Coverage Ratio (total eligible revenues-operating expenses)/total debt service weak: <100% - average: 100% - 120% - strong: >120%	260% (strong) \$(309K-179K)/\$50K	183% (strong) \$(309K-179K)/\$71K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	247% (strong) \$566K/\$229K	210% (strong) \$525K/\$250K
Average Residential Water Bill (monthly) weak: >\$60 - average: \$30 - \$60 - strong: <\$30	\$41.54 (average)	\$44.55 (average)
Debt Per Tap (based on 580 taps) weak: >\$5,000 - average: \$2,500 - \$5,000 - strong: <\$2,500	\$1,897 (strong) \$1.10M/580	\$2,534 (average) \$1.47M/580

Collateral: As security for the loan, the Town's Enterprise will pledge its assessment revenues backed by a rate covenant. This is in compliance with the CWCB Financial Policy #5 (Collateral).

The pledge and covenant are contractual provisions requiring the Town to pay its CWCB debt obligation from Enterprise revenues; and requires the Town to set its water usage rates sufficient to fund its debt obligation, in addition to operation and maintenance expenses.

cc: Donald Keairns, Mayor, Town of La Veta
Susan Schneider, AGO
Peter Johnson, AGO

Attachment: Water Project Loan Program – Project Data Sheet

Water Project Loan Program – Project Data Sheet

Borrower: Town of La Veta

County: Huerfano

Project Name: La Veta Dam Rehabilitation

Project Type: Dam Rehabilitation

Drainage Basin: Arkansas River, District 16

Water Source: Cucharas River

Total Project Cost: \$410,000

Funding Source: Construction Fund

Type of Borrower: Low-Income Municipal
(with request for a Restricted Reservoir reduction)

Avg. Annual Delivery: 209 AF

CWCB Loan: \$372,690 (w/ 1% service fee)

Interest Rate: 3.00% **Term:** 30 years

The Town of La Veta is responsible for supplying its residents with potable water. The primary water source for La Veta is from a diversion on the Cucharas River. The town stores raw water in two reservoirs (North Lake and South Lake) to supplement the river diversions in times of low flow and in periods of drought. North Lake reservoir has exhibited growing signs of distress over the years and the SEO issued a 2.5-foot restriction on the dam in March 2011. The restriction cost the Town 17 AF of storage capacity. The La Veta Dam Rehabilitation Project is intended to repair the dam and outlet works, restoring the capacity lost from the restriction.

Location Map

