

STATE OF COLORADO

Colorado Water Conservation Board

Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Kirk Russell, PE
Mike Serlet, PE, Chief
Water Supply Planning & Finance Section

DATE: May 12, 2009

SUBJECT: **Agenda Item 17f, May 19-20, 2009 Board Meeting**
Water Supply Planning and Finance Section – New Project Loans
Snowmass Water & Sanitation District – Ziegler Reservoir Water Management System

Bill Ritter, Jr.
Governor

Harris D. Sherman
DNR Executive Director

Jennifer L. Gimbel
CWCB Director

Dan McAuliffe
CWCB Deputy Director

Introduction

The Snowmass Water & Sanitation District (District), acting by and through its water activity enterprise, is applying for a \$1,933,470 loan for the Ziegler Reservoir Water Management System (Project). The Project includes a new pump house, 16 inch bidirectional pipeline, and a flow control building. The total cost estimate for the Project is \$2,149,000. The Project is necessary in order to utilize the recently purchased Ziegler Reservoir (Reservoir) and provide much needed storage for drought and natural disaster protection. The loan request is for approximately 90% of the Project costs. See attached Project Data Sheet.

Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$1,952,805 (\$1,933,470 for project costs and \$19,335 for the 1% Loan Service Fee) to the Snowmass Water & Sanitation District, acting by and through its water activity enterprise, for the Ziegler Reservoir Water Management System from the Construction Fund Account. The loan terms shall be an interest rate of 4.25% per annum for 20 years. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Background

In 2008 the District purchased Ziegler Reservoir to improve the water system reliability by enabling the District to respond to a catastrophic event that would render its direct flow sources untreatable or unavailable. The Reservoir will assist the District in accomplishing its Stream Flow Stewardship Goal of 7 cfs bypassing the District's Snowmass Creek Pump Station diversion. The District

currently has no raw water storage facility and an interruption in direct flows could significantly impair the District in meeting its municipal demands. The District currently serves approximately 3,500 full time residents and an additional 10,000 to 12,000 residents during ski season.

The District provides potable water service for customers within the District boundaries, which includes the Town of Snowmass Village. The District diverts water for treatment from East Snowmass Creek, East Snowmass Creek Spring, Brush Creek and Snowmass Creek. The District purchased the Reservoir (aka Lake Deborah) in 2008 to improve system reliability and plans to expand the Reservoir from its current 57 AF to approximately 225 AF in the near future. The District's system to divert water and pump water to and from the Reservoir will help regulate flows and provide a supply during times of diminished stream flows.

Loan Feasibility Study

The Loan Feasibility Study, titled "Feasibility of Construction of the Ziegler Reservoir Water Management System", dated March 2009, was prepared by McLaughlin Water Engineers, Ltd with assistance from Kit Hamby, District Manager. The study includes a report by W. W. Wheeler and Associates titled "Dry Year Yield Analysis for Snowmass Creek Water Supplies and Evaluation of Raw Water Storage Requirements" dated October 20, 2006. The Feasibility Study includes an engineer's cost estimate and financial statements. The study was prepared in accordance with the CWCB guidelines.

The Snowmass Water & Sanitation District

The Snowmass Water and Sanitation District is a Colorado Special District, created in 1964. As a quasi municipal entity, the District primarily derives income from property taxes, service fees and system development fees. The District utilizes a tiered rate structure for water billings.

The District services a population equivalent of approximately 3,500 full time residents. Due to the areas resort based economy, the demand for water varies significantly throughout the year as the District's population occasionally soars to over 16,000 during the ski season. District water facilities include three diversions, a 5.2 MGD water treatment plant, 12 potable water storage tanks and approximately 44 miles of distribution pipelines. The district serves 5,000 EQR (Equivalent Residential) units and delivers an average of approximately 1,800 AF to its service area..

The District is approximately 3,900 acres in size and includes the Town of Snowmass Village. The District provides potable water/sanitation service within its boundaries and potable water service outside its service area to Brush Creek Metropolitan District.

Water Rights

The Project does not require additional water rights or water supplies. As part of the 2008 Ziegler Reservoir purchase, the District acquired the 1969 Ziegler Reservoir fill and storage right decree. The supply for the reservoir is from East Snowmass Creek by means of the East Snowmass Creek and Brush Creek Ditch and the Ziegler Pipeline Extension. This is an absolute water right to divert 1 cfs of water and store 57 AF in the reservoir. The rights have an appropriation date of 7/11/1962 and an adjudication date of 11/5/1971. The storage rights in the Reservoir are decreed for

“irrigation, domestic, recreational, piscatorial” use. The District has additional water rights as part of an extensive inventory of water rights necessary to meet its municipal needs.

Project Description

The District’s purchase of the Ziegler Reservoir requires a delivery system to connect the reservoir to the District’s river diversion points. The District considered several alternatives:

Alternative 1 - No Immediate Action – Delay construction until expansion of the reservoir. This alternative was rejected. Until a pump station is constructed, the reservoir is of no benefit to the District.

Alternative 2 – Install temporary improvements until reservoir expansion is complete – Install portable generators and temporary pumps and construct the Divide Flow Control Building. This alternative was rejected and conceptual designs were not considered. The existing reservoir is currently supplied by an 8 inch ductile/cast iron supply line but does not have a power supply or pump station at the reservoir to pump water to the Districts raw water delivery system. Expending money on pumps, power generators, and constructing a temporary pump house, all of which wouldn’t be usable as part of the Ziegler Reservoir expansion, was an impractical and wasteful approach.

Alternative 3 (SELECTED) – Install permanent improvements to utilize the reservoir – Install a pump house, provide a new electric service and telemetry, install a new supply line and construct a divide/flow control building. This Project will connect the District’s existing raw water delivery system located at the existing flow control building to the new Ziegler pump house adjacent to the reservoir. The reservoir is approximately 1,400 ft from the Divide Flow Control Building and the connecting water line will be installed in the available easement.

The project consists of three separate features:

- Divide flow control building – This controls meters, pumping and valves which will allow the District to supply the water treatment plant using any combination of sources, including Ziegler Reservoir.
- Connecting Pipeline - The 16 inch connecting pipeline will augment and run parallel to the existing 8 inch pipe.
- Ziegler Reservoir Pump Station - The Pump Station will contain the valves and pumping capabilities to allow the Reservoir to be filled and/or pumped back to the treatment facilities. The capacity of the pumping station will be 3,000 gpm, approximately the maximum District daily demand. The District owns the land where the pump station will be constructed and all easements and right-of-ways have already been acquired.

Project Cost Estimate

1400 ft of 16 inch Pipe	\$690,000
3,000 GPM Pump Station	\$365,000
Flow Control Building	\$276,000
Old Divide Box	\$25,000
Power Supply & WTP Modifications	<u>\$435,000</u>
Sub Total	\$1,791,000
20% Contingency	<u>\$358,000</u>
Total	\$2,149,000

Final design is near complete and construction is scheduled to begin this summer and completed by the end of 2010.

Financial Analysis

Table 1 shows a summary of the financial aspects of the loan request. The interest rate for the Town is based on Municipal - High Income interest rate for a 30 year loan of 4.5% and reduced to 4.25% for a 20 year loan. (Financial Policy #7).

Table 1. Financial Summary

PROJECT/LOAN	
Project Cost	\$2,149,000
CWCB Loan	\$1,933,470
CWCB Loan (Including 1% Service Fee)	\$1,952,805
CWCB Annual Loan Payment	\$122,300
CWCB Loan Obligation (including 10% debt reserve funding)	\$134,600
Number of EQR's or Taps	5,000 EQRs
Annual Loan Payment per EQRs or Taps	\$27/EQR

Creditworthiness: The District operates its enterprise (water and wastewater) as self supporting. Revenues received from user fees and other general fund sources are sufficient to cover operating expenses, as well as assist in the funding of capital improvements.

The District will repay the loan from funds available through a collection of service fees and system development fees. If that funding source is not adequate, the District will increase water service rates to provide funds sufficient to meet the CWCB loan debt service. The District maintains an emergency reserve fund of at least 3% of the fiscal year spending per TABOR requirements.

The District has one long-term debt with a balance of \$2.6 million with annual payments of \$600,000 and a maturity date of 2013. This is a General Obligation Bond and is not included in debt service calculations since property tax revenues are specifically dedicated to repayment of this loan and revenues are not likely to continue after the bond is paid off.

Table 2 shows the Financial Ratios for the District.

Table 2. Financial Ratios

Financial Ratio	Past Years	Future (2012)
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	104% (Average) \$2.98M/2.87M	102% (Average) \$3.32M/3.24M
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	No Debt	159% (Strong) \$3.3-3.1M/0.14M
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	219% (Strong) \$6.3M/2.87M	62%* (Average) \$2.0M/3.24M
Average Monthly Residential Water Bill (1 EQR= 3BR) weak: >\$60 - average: \$60 - \$30 - strong: <\$30	\$25/Month (Strong)	\$25/Month (Strong)

* \$5 million needed to enlarge Ziegler Reservoir and future capital improvement projects

Collateral - Security for the CWCB loan will be a pledge of its water activity enterprise revenues backed by a rate covenant and annual financial reporting. This is in compliance with CWCB Financial Policy #5 (Collateral).

Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$1,952,805 (\$1,933,470 for project costs and \$19,335 for the 1% Loan Service Fee) to the Snowmass Water & Sanitation District, acting by and through its water activity enterprise, for the Ziegler Reservoir Water Management System from the Construction Fund Account. The loan terms shall be an interest rate of 4.25% per annum for 20 years. Security for the loan shall be in compliance with CWCB Financial Policy #5.

cc: Kit Hamby, District Manager
Susan Schneider, AGO

Attachment: Water Project Loan Program – Project Data Sheet

CWCB Construction Loan Program Project Data Sheet

Borrower: Snowmass Water & Sanitation Dist.

County: Pitkin

Project Name: Ziegler Reservoir Water
Management System

Project Type: Supply System Improvements

Drainage Basin: Colorado River

Water Source: Snowmass Creek

Total Project Cost: \$2,149,000

Funding Sources: Construction Fund

Type of Borrower: High Income Municipal

Average Delivery: 1,800 AF

Loan Amount: \$1,952,805 (Including 1% fee)

Interest Rate: 4.25% **Term:** 20 years

Reduced from: 4.5% at 30-yr

The District is requesting a loan to construct a new delivery system which includes the construction of a pump house, approximately 1,400 ft of pipe, construction of a flow control building, installation of telemetry and electric power. The District diverts water for treatment from East Snowmass Creek and East Snowmass Creek Spring, Brush Creek and Snowmass Creek. The District presently does not have a useable raw water storage facility, but purchased Ziegler Reservoir (aka Lake Deborah) in 2008 for the express purpose of improving system reliability by expanding the reservoir from its current 57 AF to approximately 225 AF. The District currently serves approximately 3,500 full time residents and during the winter ski season an additional 10,000 to 12,000 residents. To regulate flows and provide a supply during times of diminished stream flows, a system to divert water to and pump water from the reservoir is required. This Project will help the District to deliver water to utilize Ziegler reservoir as well as serve for the planned expansion of the reservoir. Final Design is near complete and construction is scheduled to begin in this summer and completed by the end of 2010.

