



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Rachel Pittinger, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: July 17-18, 2019 Board Meeting

AGENDA ITEM: 10b. Water Project Loans
Hidden Valley Water District – Master Water Meter Connection

Introduction

The Hidden Valley Water District (District) is applying for a loan for the Master Water Meter Connection (Project). The Project is located in the South Platte Basin, in Jefferson County approximately 7 miles north of Evergreen near Interstate 70 and Evergreen Parkway. The purpose of the Project is to provide a reliable, safe, and water-quality compliant alternative drinking water source to the current community well system. The current drinking water supply does not meet water service demands and water quality is poor containing high levels of radionuclides, necessitating hauling in supplemental water to meet the community's drinking water demands. The Project cost is estimated at \$1,908,000. The Company is requesting a loan for approximately 90% of Project costs. The remainder of the construction costs will be provided by a CDPHE grant. See attached Project Data Sheet for a location map and Project summary.

Staff Recommendation for CWCB Loan

Staff recommends the Board approve a loan not to exceed \$1,737,200 (\$1,720,000 for the Project costs and \$17,200 for the 1% service fee) to the Hidden Valley Water District for costs related to the Master Water Meter Connection Project, from the Construction Fund. The loan terms shall be 30 years at a high-income municipal interest rate of 3.0% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.



Borrower - Hidden Valley Water District

Hidden Valley Water District (District) is a special district, a quasi-municipal entity organized under Title 32 of the Colorado Revised Statutes. Currently, the Hidden Valley Mutual Water Company (Company), a non-profit corporation, provides the domestic, potable water service to the Hidden Valley community. The Company has negotiated with nearby water districts in an effort to identify a possible connection to an alternative water supply source. In doing so, the Company found that the nearby water districts could only contract with and provide bulk water to another governmental agency, which is why the District was formed. The Company is in the process of transferring its existing assets to the District in order for the District to own, operate and maintain the water supply system for the Hidden Valley community. This conveyance of assets is anticipated to occur by fall 2019. The District's revenues are from a combination of property tax assessments and monthly fees.

The District is governed by a five member board of directors. Directors are elected by the residents of the District. The District has no employees and its bookkeeping, administrative, legal and engineering services are performed by independent contractors and consultants. The District also retains an independent contractor to conduct the normal day-to-day operations of the District's water facilities. The Board of Directors has certain duties and responsibilities, which include the power to incur indebtedness and to enforce the payment of all assessments.

Following the conveyance of assets from the Company, the District will own and operate a water supply system serving potable water to 64 single-family residences and consisting of three community wells, two storage tanks with the storage capacity of 48,000 and 62,000 gallons, a water treatment building, and a water distribution system. The District boundaries include approximately 92 acres south of Interstate 70 and west of Evergreen Parkway in Jefferson County. Water quality results are reported to the Colorado Department of Public Health and Environment (CDPHE) on a regular basis.

Background

Currently, groundwater wells provide the raw water for the Hidden Valley community. All three existing wells are connected to underground water flows encased in granite schist and are contaminated with radionuclides, primarily uranium and alpha particles. The CDPHE issued several enforcement orders because the water supplied by the wells exceed the maximum contaminant level for the radionuclides resulting in non-compliance. An interim solution to treat the water from the wells uses an ion-exchange system, however the current 9,730 gallons per day water demand has increased and exceeded the current treatment system's ability to supply potable water. Recently, the Company hauled water to the community storage tanks to meet drinking water demands. The District would like to provide long-term, safe and reliable drinking water to its residents.

Loan Feasibility Study

Laurie Laos, P.E., with JVA Consulting Engineers prepared the Loan Feasibility Study titled, "Feasibility Study for the Hidden Valley Water District Master Meter Connection to the Evergreen Metropolitan District," dated May 31, 2019. The feasibility study was prepared in accordance with CWCB guidelines and includes an analysis of alternatives, preliminary engineering, and estimated engineering costs. Financial statements were provided by Simonson & Associates, Inc.

Water Rights

Currently, the Hidden Valley community's water originates from three wells located within the District. These three wells have decreed water rights, as summarized in Table 1 below, and well permits. Under the Case No. 98CW384 augmentation plan, the well depletions are replaced.

TABLE 1: WATER RIGHTS

Name	Amount	Appropriation Date	Adjudication Date	Water Court Case No.
Well No. 1-12898	0.011 cfs	5/1/1968	1/19/1976	W-6377
Well No. 2-47366-FR	0.033 cfs	9/15/1955	1/19/1976	W-6377
Well No. 3-41628-FR	0.055 cfs	8/7/1956	1/19/1976	W-6377

The District has 12 shares in the Harriman Ditch Company in anticipation of a connection to a neighboring water district.

Project Description

The purpose of this project is to provide a reliable, safe, and water-quality compliant alternative drinking water source to the Hidden Valley community. The following alternatives were analyzed:

Alternative 1 - No Action: Currently, water is blended from the existing wells. Degrading groundwater quality, water demand exceeding well production, hauling water to storage tanks, and operation and maintenance of the ion-exchange treatment system has become cost prohibitive. The USDA loan funded the ion-exchange water filtration process that is currently being used to treat the Hidden Valley community. The filtration system has not been as successful as anticipated and a more permanent solution is needed. The CDPHE issued an enforcement order requiring a potable system that will provide long-term compliance. This alternative is not viable.

Alternative 2 - Lookout Mountain Water District (LMWD) Master Meter Connection: This alternative includes a water purchase from LMWD. Based on engineering analysis, LMWD concluded they do not have sufficient water availability and reserves to service the District. A booster pump station would be required to connect the District to LMWD and there was no guarantee the District’s water demand would be met. CDPHE awarded the Hidden Valley community an \$840,000 grant to help fund the connection to nearby alternative water supply sources. Grant funds have been used to explore the connection alternatives as well as to form the District. Ultimately, the cost of this alternative was estimated at \$1,346,100 with additional operation and maintenance assessments. This alternative was not selected.

Selected Alternative 3 - Evergreen Metropolitan District (EMD) Master Meter Connection: This alternative includes the District’s construction of a transmission line from the 110,000 gallon water storage tanks to EMD main. This alternative also includes an IGA with EMD for a master meter agreement for potable water service, construction of a 2,800 lineal foot main transmission line, backflow preventer, and flow control valves. EMD guarantees that its new service connection will meet the District’s water demand. This alternative will improve the water quality of the community’s system and will also provide long-term compliance with the CDPHE enforcement requirements.

The 12 Harriman ditch shares will be dedicated to EMD for integration into EMD’s system under the Intergovernmental Agreement (IGA) between the District and EMD. It is anticipated the IGA will be finalized July 2019. The Harriman Ditch Company shares will be changed in water court by EMD to allow for their use. No additional dry-up is anticipated for the water rights change case. Additionally, the District will acquire approximately 10 acre-feet of storage capacity in order to firm the yield of the Harriman Ditch Company shares that it will dedicate to EMD. The District does not intend to purchase separate storage water rights that would require a change of water rights or dry-up.

The total cost associated with the Project is \$1,908,000 as shown in Table 2.

TABLE 2: ESTIMATED PROJECT COST

Task	Total
EMD Water Distribution Connection	\$795,000
Distribution & Service Line Upgrades	\$310,000
Construction Contingency (15%)	\$166,000
Contractor Overhead (10%)	\$127,000
Bidding, Construction Admin.	\$50,000
Subtotal	\$1,448,000
EMD Capital Participation Fee	\$360,000
Water Storage Rights Purchase	\$100,000
TOTAL	\$1,908,000

Permitting: The District anticipates a construction phase stormwater management plan will be required and a Colorado Department of Transportation (CDOT) utility crossing permit is required to connect across Evergreen Parkway to EMD’s water main. Temporary staging is proposed on a property that will require special use permit from CDOT.

Schedule: The District anticipates construction in late 2019 and Project completion by the end of 2020.

Financial Analysis

Table 3 provides a summary of the Project’s financial aspects. The District qualifies for a high-income municipal interest rate of 3.00% for a 30-year term.

TABLE 3: FINANCIAL SUMMARY

Total Project Cost	\$1,908,000
CDPHE Grant	\$188,000
CWCB Loan Amount	\$1,720,000
CWCB Loan Amount (Including 1% Service Fee)	\$1,737,200
CWCB Annual Loan Payment	\$88,631
CWCB Annual Loan Obligation (1 st Ten Years)	\$97,494
Approx. Monthly Cost of CWCB Loan per Tap (64 Taps)	\$127

Creditworthiness: The District will assume the Company’s USDA loan shown in Table 4. The current source of repayment of the USDA loan is the Company’s water user fees. The collateral for the USDA loan is the Company’s real estate and personal property within the subdivision. The District’s attorneys have provided the USDA their legal opinion that the USDA collateral does not, cannot, and will not include the District’s mill levy, both now and after the transfer of the USDA loan and the assets from the Company to the District. This CWCB loan will be secured by a pledge of revenues from the District’s Debt Service Mill Levy and those revenues will not be subordinate to, or payable from the same sources as the USDA loan.

Voters approved the District to take out a maximum of \$3,000,000 debt and approved an ad valorem property tax without limitation of rate to finance the debt at the November 2017 election. The Board of County Commissioners approved District’s Service Plan which limits the District’s maximum mill levy to 75 mills for debt service and 50 mills for administration and operation. Based on the 2018 District assessed valuation of \$1,932,469, a 50.46 mill levy will be required to pay the CWCB annual loan obligation. The District will pay the USDA’s existing loan from a \$23 per month surcharge to the District’s water customers. The average monthly water bill is currently \$100, which includes a surcharge for the USDA loan.

TABLE 4: WATER DISTRICT’S ASSUMED DEBT

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
USDA (Rural Development)	\$388,000	\$344,523	\$17,693	2052	Real Estate and Water User Fees

TABLE 5: FINANCIAL RATIOS

Financial Ratio	2019 Budget	Future w/ Project
Operating Ratio (revenues/expenses) Weak: <100% - average: 100% - 120% - strong: >120%	182% (strong) \$158K/\$87K	105% (average) \$202K/\$192K
Debt Service Coverage Ratio (revenues-expenses)/debt service Weak: <100% - average: 100% - 120% - strong: >120%	503% (strong) (\$158K-\$69K) \$17.7K	109% (average) (\$202K-\$77K) \$115K
Cash Reserves to Current Expenses Weak: <50% - average: 50% - 100% - strong: >100%	4% (weak) \$3K/\$69K	38% (weak) \$74K/\$192K
Debt per Tap (64 taps) Weak: >\$5,000 - average: \$2,500 - \$5,000 - strong: <\$2,500	\$5,469 (weak)	\$32,613 (weak)
Effective Average Monthly Cost of Water Weak: >\$60 - average: \$30 - \$60 - strong: <\$30	\$100 (weak)	\$227 ¹ (weak)

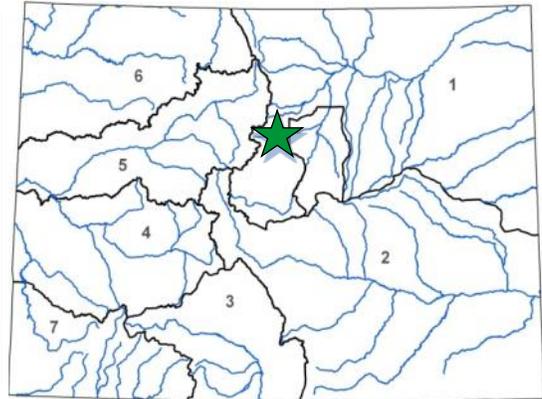
¹ This includes monthly water bill charges and annual District taxes.

Collateral: Security for this loan will be a pledge of revenues from the ad valorem property tax debt service mill levy authorized by voters in November 2017 election. This security is in compliance with CWCB Financial Policy #5 (Collateral).

cc: Ms. Sue Harley, Secretary/Treasurer, Hidden Valley Water District
 Ms. Judy Simonson, District Manager, Hidden Valley Water District
 Ms. Jennifer Mele, Colorado Attorney General’s Office

Attachment: Water Project Loan Program - Project Data Sheet

L O A N D E T A I L S	
Project Cost:	\$1,908,000
CWCB Loan (with 1% Service Fee):	\$1,737,200
Loan Term and Interest Rate:	30 years @ 3.0%
Funding Source:	Construction Fund
B O R R O W E R T Y P E	
Agriculture	Municipal
0%	0% Low - 0% Mid - 100% High
Commercial	0%
P R O J E C T D E T A I L S	
Project Type:	Municipal System Rehabilitation
Average Annual Delivery:	11 AF



The Hidden Valley Water District (District) is located in Jefferson County, southwest of Interstate 70 and Evergreen Parkway intersection. The District's service area is approximately 92 acres and includes 64 single-family residences. The current drinking water supply does not meet water service demands and water quality is poor with high levels of radionuclides. The purpose of this project is to provide a reliable, safe, and water-quality compliant alternative drinking water source to the current community well system. The District agreed to enter into an intergovernmental agreement with Evergreen Metropolitan District (EMD) for a master meter connection for potable water service.

L O C A T I O N	
County:	Jefferson
Water Source:	Bear Creek
Drainage Basin:	South Platte
Division:	1 District: 9

The District evaluated several connection paths to EMD and determined 2,800 lineal feet of 6-inch transmission main with a master meter, backflow preventer, flow control valves and other equipment could connect EMD's water main to the District's water tanks. Colorado Department of Public Health and Environment issued a service of drinking water enforcement order requiring action to implement a system that will provide long-term compliance. The master water meter connection to EMD meets the enforcement requirements. The District anticipates construction to begin late 2019.

