



**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:** January 24-25, 2022 Board Meeting

**AGENDA ITEM:** 6a. Water Project Loans  
Town of Dove Creek - Reservoir No. 2

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**Staff Recommendation for Loan:**

Staff recommends the Board approve a loan not to exceed \$808,000 (\$800,000 for Project costs and \$8,000 for the 1% service fee) to the Town of Dove Creek, acting by and through its water activity enterprise, for costs related to the design and construction of Reservoir No. 2, from the Construction Fund. The loan term will be 30 years at an interest rate of 1.55% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

**Introduction:**

The Town of Dove Creek (Town) has a contract with the Dolores Water Conservancy District to deliver water to the Town via the Dove Creek Canal. The Town faces water shortages and lacks storage capacity to store the water it has available. The Town is applying for a loan to design and construct Reservoir No. 2 (Project) that will increase their reservoir storage. The Project will add 100 AF of water storage and will increase the Town's ability to deliver water to its customers from May through October. The total Project cost is estimated to be \$1,600,000. The Town is requesting a loan to fund 50% of the Project costs. The Town was approved for a CWCB Water Plan Grant in September 2021 for \$800,000 from the Storage and Supply program contingent upon a CWCB loan application. See attached Project Data Sheet for the Loan and the Water Plan Grant that includes a location map and Project summary.



### **Borrower - Town of Dove Creek**

The Town is a municipality servicing drinking water to residents in Dolores County and is located approximately 9 miles east of the Colorado/Utah Stateline. The Town has a current population of 630 and it was incorporated in 1939. It is the county seat for Dolores County and maintains the water system that supports residential, commercial, and industrial users. Revenue to operate and maintain the water system is generated primarily from water service fees through the water activity enterprise fund. The Town does not deliver more than 2,000 AF of water and therefore a Water Efficiency Plan is not required for this loan.

### **Background**

The Town's water supply facilities include an existing 95 AF raw water storage reservoir supplied by the Dove Creek Canal, a water treatment facility, two water storage tanks, unusable wells and a pump station. Currently, water supplied to the existing raw water reservoir from the canal is controlled by an agreement with the Dolores Water Conservancy District for a dedicated 280 AF of water from the Dove Creek Canal. The Dolores Conservancy District owns and maintains a separate irrigation water infrastructure to the Town. The Town is storage limited and during water-short years, the availability of water does not meet the Town's water demand. As a result, the Town prepared an agreement with the Montezuma Water Company for emergency access to water. Last year, a single release of water, late in the season, from the Dolores Water Conservancy District in Dove Creek Canal occurred to help meet the Town's demand. The average annual water demand over the past five years has ranged from 104 AF-140 AF. Water use restrictions have been voluntary to-date. Additional storage will significantly reduce this water supply deficiency.

### **Loan Feasibility Study**

Tim Halper, P.E., with Jones and DeMille Engineering, prepared the Loan Feasibility Study titled, "Dove Creek Town Loan Feasibility Study" dated September 30, 2021. The feasibility study was prepared in accordance with CWCB guidelines and includes an analysis of alternatives, preliminary engineering, and estimated construction costs. The Town received a feasibility study grant from CWCB to help develop the feasibility study report. The audited financial statements were provided by Majors and Haley, PC, Certified Public Accountants.

### **Water Rights**

The water rights owned by the Town are shown in Table 1. The Town's water rights are located on the Dolores River as identified in Case No. C-2220. The Town will use water provided by a Dolores Water Conservancy District agreement for this Project, dated June 23, 1997, and in the amount of 280 AF.

**TABLE 1: Town of Dove Creek Water Rights**

Name	Amount	Appropriation Date	Adjudication Date	Water Court Case No.
Dolores River	0.21 cfs (conditional) 0.87 cfs (absolute)	2/16/1951	6/11/1968	C-2220 16CW3004

### **Project Description**

The purpose of the Project is to design and construct a new reservoir to meet water demand of the Town's users during drought and during times when Dove Creek Canal is unable to convey water. With this Project, the Town will be able to increase and improve the reliability of the water it has available and deliver it to the treatment facility and its customers.

**Alternative 1 - No Action:** This alternative requires the Town to continue to rely on the existing water storage capacity and purchasing water from the Montezuma Water Company on an annual basis. The purchased water is expensive and exceeds what the Town has the ability to sustain long-term. The cost of the emergency water is roughly three times per 1,000 gallons the already contracted water from Dolores Water Conservancy District. This option is not economically feasible for the Town.

**Alternative 2 - Rehabilitation of Pump Station from Dolores River:** This alternative includes replacement and installation of new pumps and includes the addition of a booster pump station mid-pipeline. Both stations would include two duty pumps and one spare pump as per design standard guidelines. The proposed alignment follows the existing pipeline to remain in the existing easements. The cost of this alternative is approximately \$2,127,500.

**Selected Alternative 3 - Design and Construction of Reservoir No. 2:** This alternative includes the addition of Reservoir No. 2 adjacent to the Town’s current raw water storage reservoir, Reservoir No. 1. The new reservoir would be constructed with similar attributes to the existing reservoir and include a geomembrane or High Density Polyethylene (HDPE) liner. This alternative will have minimal impact on the Town’s existing infrastructure and is located on existing Town property. Design will include a transfer pipe and gate valves interconnecting the new reservoir, embankments, liner and riprap cover, realignment of the pipeline to connect both reservoirs, and a dam equipped with a spillway sized to meet the Colorado Dam Safety requirements. The estimated cost for this alternative is \$1,600,000 and is shown in Table 2.

**TABLE 2: ESTIMATED PROJECT COST**

Tasks	Cost
Mobilization	\$100,000
Construction	\$900,000
Construction contingency (20%)	\$209,000
Design, Engineering, Project Management	\$391,000
<b>TOTAL</b>	<b>\$1,600,000</b>

**Permitting:** The Town will submit and receive approval of Review of Plans and Specifications for the Alteration, Modification, or Repair of a Dam to the State Engineer’s Office Dam Safety prior to construction. Environmental surveys will be completed. The Town will coordinate and obtain any necessary environmental permits, but does not anticipate additional reviews or permits from other agencies.

**Schedule:** Preliminary design drawings for the reservoir are underway. Final design drawing preparation and bidding is anticipated during the spring of 2022. Construction is planned to begin November 2022 and the Project completion is anticipated by December 2023.

**Financial Analysis**

Table 3 provides the Project’s financial summary. The Town qualifies for a Low-Income Municipal interest rate of 1.55% for a 30-year term. This was the interest rate in place at the time of loan application, October 2021.

**TABLE 3: FINANCIAL SUMMARY**

Project Cost	\$1,600,000
CWCB Water Plan Grant	\$800,000
CWCB Loan Amount	\$800,000
CWCB Loan Amount (Including 1% Service Fee)	\$808,000
CWCB Annual Loan Payment	\$33,883
CWCB Annual Loan Obligation (1 <sup>st</sup> Ten Years)	\$37,272
Number of Taps	501
Monthly Loan Obligation per Tap (501 taps)	\$6.20

**Creditworthiness:** The Town has no existing debt. Effective January 1, 2022, rates were raised to accommodate the CWCB loan obligation prior to the start of construction. Rates have remained steady for the last 12 years. The Town anticipates another review of its rates prior to the completion of construction.

**TABLE 4: FINANCIAL RATIOS**

Financial Ratio	Past Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100%   average: 100% - 120%   strong: >120%	86% (weak) \$225K/\$263K	100% (average) \$301K/\$300K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100%   average: 100% - 120%   strong: >120%	N/A	101% (average) (\$301K-\$263K) 37K
Cash Reserves to Current Expenses weak: <50%   average: 50% - 100%   strong: >100%	133% (strong) \$350K/\$263K	117% (strong) \$350K/\$300K
Debt per Tap (501 taps) weak: >\$5,000   average: \$2,500 - \$5,000   strong: <\$2,500	N/A	\$1,613 (strong) \$808K/501taps
Average Monthly Water Bill weak: >\$60   average: \$30 - \$60   strong: <\$30	\$44 <sup>1</sup> (average)	\$50 (average)

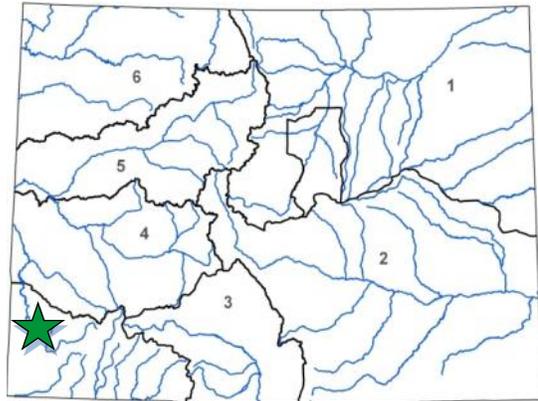
<sup>1</sup>Indoor residential use up to 5,000 gallons, within the Town limits are \$34/month and outside Town limits are \$51/month. Commercial use for use up to 5,000 gallons, within Town limits are \$37/month and outside Town limits are \$55.50/month.

**Collateral:** Security for this loan will be a pledge of water enterprise fund revenues backed by a rate covenant as evidenced by annual financial reporting. This security is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Brett Martin, Mayor, Town of Dove Creek  
 Jennifer Mele, Colorado Attorney General's Office

Attachments: Water Project Loan Program - Project Data Sheet  
 Water Plan Grant Program - September 2021 Project Data Sheet

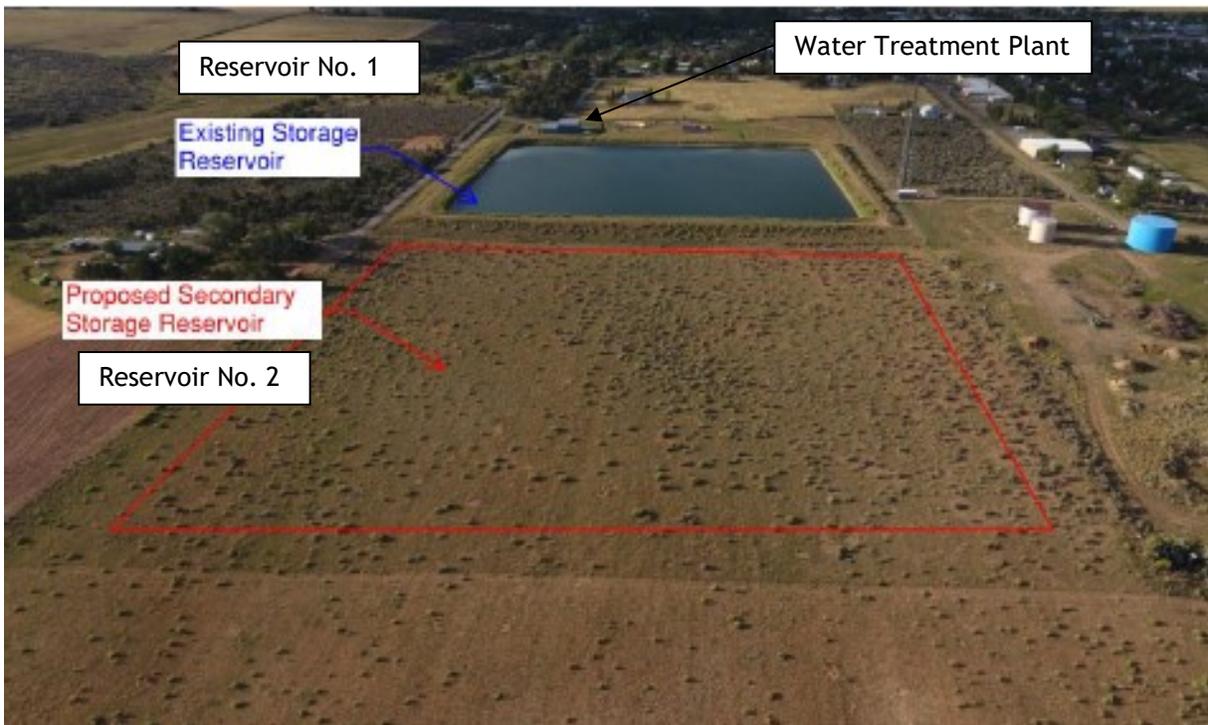
L O A N   D E T A I L S	
Project Cost:	\$1,600,000
Water Plan Grant	\$800,000
CWCB Loan (with 1% Service Fee):	\$808,000
Loan Term and Interest Rate:	30 Yrs @ 1.55%
Funding Source:	Construction Fund
B O R R O W E R   T Y P E	
Agriculture	Municipal
0%	100% Low - 0% Mid - 0% High
Commercial	0%
P R O J E C T   D E T A I L S	
Project Type:	Reservoir Storage
Average Annual Storage:	95 AF
New Storage Created:	100 AF



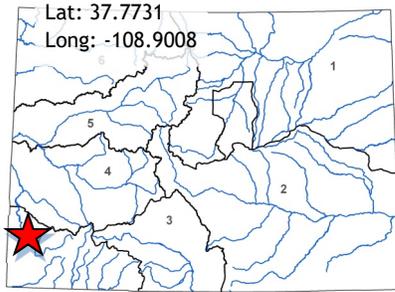
L O C A T I O N	
County:	Dolores
Water Source:	Dolores River
Drainage Basin:	Southwest
Division:	7
District:	32

The Town of Dove Creek (Town) provides domestic water to approximately 501 households and 200 additional users of water from a permanent water fill station in the Town’s service area. Over the last several years, annual water use for the Town has averaged 125 AF. The Town’s water is supplied by the Dolores Water Conservancy District via an open canal, Dove Creek Canal, to the Town’s water treatment plant. Water is stored in an existing 95 AF reservoir adjacent to the treatment plant (Reservoir No. 1).

The Project will design and construct an additional 100 AF reservoir, Reservoir No. 2, adjacent to the existing reservoir on the Town’s property. This additional storage space will allow the Town to store more of their already contracted water and will help meet the Town’s water demand. The Project will be funded in conjunction with a Water Plan Grant approved at the September 2021 CWCB meeting in the amount of \$800,000. Construction is expected to begin in late 2022, and will be completed by December 2023.



**Water Plan Grant Application**



D E T A I L S	
Total Project Cost:	\$1,612,400
Water Plan Grant Request:	\$800,000
Other CWCB Funding:	\$800,000 (Loan)
Other Funding Amount:	\$100,000
Applicant Match:	\$12,400
Project Type(s):	Construction
Project Category(Categories):	Water Storage & Storage
Measurable Result:	100 acre-feet created

L O C A T I O N	
County/Countries:	Dolores
Drainage Basin:	Southwest

The Town of Dove Creek provides more than 450 households with domestic water, and 176 bulk water users with water for household use at a water dock that it also operates. On average, the Town’s annual water use is 125 AF/year; however, the Town currently has a contract for 280 AF of water from the Dolores Water Conservancy District. This water is delivered through an irrigation canal between May and October each year. Currently, the Town utilizes an existing 100 AF reservoir at their water treatment plant as the storage for the District’s deliveries.

The Town is planning for the needs of the community considering the unforeseen drought conditions. By expanding the storage capacity, the Town will be able to store more of the water that it pays for annually, providing sufficient water during extreme conditions. This project will provide final design and engineering, as well as construction, of a new 100 AF reservoir. The reservoir will be located adjacent to the existing reservoir on land owned by the Town.

Funding Recommendation: Staff is recommending a conditional approval of the full request in the amount of \$800,000 for up to 50% of project costs from the Water Storage and Supply category. Approval is conditioned upon the Town submitting a CWCB loan application for the remaining costs of the project by the February 2022 loan application deadline. This project aligns with the Water Plan’s measurable goal of creating 400,000 AF of water storage by 2050 by providing new storage in the Southwest basin.

