COLORADO
Colorado Water Conservation Board
Department of Natural Resources

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Jared Polis, Governor

Dan Gibbs, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Cole Bedford, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: November 18-19, 2020 Board Meeting

AGENDA ITEM: 6a. Water Project Loans
City of Glenwood Springs – System Redundancy and Pre-Treatment Improvements (Wildfire Impact Emergency)

Staff Recommendation:
Staff recommends the Board approve a loan not to exceed $8,080,000 ($8,000,000 for Project costs and $80,000 for the 1% service fee) to the City of Glenwood Springs acting by and through its water and sewer enterprise fund for costs related to the System Redundancy and Pre-Treatment Improvements Project, from the Severance Tax Perpetual Base Fund. The loan terms shall be 3 years of no interest followed by 27 years at the middle-income municipal rate of 1.80% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Introduction:
On September 9, 2020 Governor Jared Polis issued Executive Order D 2020 187 declaring a Disaster Emergency due to the Grizzly Creek Fire in Garfield and Eagle Counties and related damage to Interstate 70 thereby enabling State agencies to coordinate and make resources available for fire suppression, response, consequence management, and recovery efforts. At the subsequent September meeting of the Colorado Water Conservation Board, the Board established the 2020 Wildfire Impact Loans which are available to eligible applicants serving or receiving water from areas under a Governor's Emergency Declaration.

The City of Glenwood Springs (City) is applying for a loan for the System Redundancy and Pre-Treatment Improvements (Project). This Project is in direct response to the Grizzly Creek Fire which burned an area encompassing much of the City's primary water supply watersheds and is expected to affect its supply with heavy sediment in the coming years. The Project will install pre-treatment infrastructure to remove sediment, and upgrades to an existing emergency supply system to create overall system redundancy. The total cost of the Project is estimated at $8,000,000. See attached Project Data Sheet for a location map and Project summary.

Borrower – The City of Glenwood Springs
The City of Glenwood Springs' Public Works Department is responsible for operation and maintenance of the City's water supply, treatment, and distribution system. This system serves a popluation of about 10,000 residents. Operations, expenses, and capital projects associated with the system are funded by the Water and Sewer Enterprise Fund, the revenues for which include water service charges and tap fees. The City's average annual water diversion is about 2,200 acre-feet.

Background:
The Grizzly Creek Fire started on August 10, 2020 and has since burned more than 32,000 acres in the area of Glenwood Canyon in western Colorado. The fire response required evacuating the communities of No Name, Lookout Mountain, and Coulter Creek and caused a two week closure of I-70 between Glenwood Springs and Gypsum. Critically for Glenwood Springs, the fire burn scar encompasses much of the watersheds of No Name Creek and Grizzly Creek which are the City's primary water sources. Early projections by NRCS suggest that No Name Creek and Grizzly Creek will experience 3–10 years of elevated sediment loading due to soil erosion in the watersheds. Without some improvements of the City's raw water collection and transmission infrastructure, this elevated sediment loading will overload the City's water treatment plant.

Loan Feasibility Study:
Staff of the City's Public Works Department prepared a Wildfire Impact Emergency Loan Feasibility Study and Application under the direction of Debra Figueroa, City Manager, and Matthew Langhorst, Director of Public Works. The study is in accordance with CWCB guidelines. It includes an analysis of alternatives, preliminary engineering, and construction cost estimates provided by Carollo Engineers, Inc. Also submitted were recent years' Comprehensive Annual Financial Reports prepared by the Finance Department of the City of Glenwood Springs.

Water Rights:
The City's primary water supply is from Grizzly Creek and No Name Creek east of the city. The City operates a diversion on Grizzly Creek which transfers water from that watershed into No Name Creek's. A second diversion transfers the combined creeks' water into a tunnel and pipeline which supplies the water treatment plant. A secondary supply is provided by the Roaring Fork River, the supply from which is pumped via the Roaring Fork Pump Station to the water treatment plant. The current configuration of the pipelines does not allow for simultaneous use of the No Name/Grizzly Creek supply and Roaring Fork supply. These rights are detailed in Table 1.

TABLE 1: WATER RIGHTS

Source Name	Rate or Volume	Appropriation Date	Adjudication Date	Water Court Case or Contract No.
Direct Diversion Rights				
No Name Creek	12 cfs	6/15/1887	12/9/1907	CA0420
Grizzly Creek	8 cfs	5/15/1887	12/9/1907	CA0466
Storage Rights				
Roaring Fork River/Ruedi Reservoir	500 AF	-	-	6-07-60-W0503
Grizzly Creek Reservoir	3,879.8 AF	7/9/1960	9/13/1967	CA1416

Project Description:
The Purpose of the Project is to ensure the City's continued ability to deliver treatable water to the Water Treatment Plant. The following alternatives were analyzed:

Alternative 1 – No Action: This alternative would continue to supply the water treatment plant with water from the City's existing sources with no upgrades or improvements. It would likely result in long, frequent periods of shutdown at the plant to remove excess sediment. It was considered unacceptable because the City would be unable to maintain adequate water supply during these shutdowns.

Alternative 2 – Full Project Without Mixing Basin: This alternative would exclude the construction of the mixing basin from the Project. This alternative would reduce the project cost by more than $1 million and would meet the City's needs in the near term. In the longer term, however, the mixing basin would still need to be constructed to provide pre-treatment protection for the water treatment plant and the work to do so would require remobilization of equipment. This alternative was not selected because it would require the same long-term effort as the Full Project Alternative, but would not provide full pre-treatment protection for the water treatment plant in the near term.

Selected Alternative 3 – Full Project: The Full Project Alternative will take a two-pronged approach to addressing elevated sediment loading. First, new pumps will be installed at Roaring Fork Pump Station and a new supply line constructed to the City's water treatment plant. This pump station was originally installed as an emergency supply to be used only in the event that the No Name/Grizzly Creek supply were cut off for a short period, but the Project will allow the Roaring Fork supply to operate regularly and in conjunction with the No Name/Grizzly Creek supply for increased redundancy. Second, a sediment removal basin will be installed at the site of the No Name/Grizzly Creek diversion and a concrete mixing basin installed above the treatment plant which will mix both the No Name/Grizzly Creek supply and the Roaring Fork supply. The operation of this pre-treatment infrastructure will ensure that the water treatment plant receives water requiring as little sediment removal as possible.

The cost estimate of this alternative is $8,000,000 as shown in Table 2.

TABLE 2: ESTIMATED PROJECT COST

Task	Total
Roaring Fork System Redundancy Direct Costs	$2,975,000
No Name/Grizzly Creek Sediment Removal Basin Direct Costs	$285,000
Mixing Basin Direct Costs	$1,065,000
Construction Costs (Structural, Mechanical, Electrical, Installation)	$2,450,000
Project Contingency (15%)	$1,225,000
TOTAL	**$8,000,000**

Permitting: All of the work envisioned by the Project will take place on City property or rights-of-way and no new permits will be required from the County, State, or Federal governments. The Public Works Department will coordinate with the City's Engineering Department for a City Grading Permit.

Schedule: Engineering, permitting, and design efforts are currently underway. Because of the emergency nature of the project, all project efforts are being expedited. Before spring runoff 2021, the City intends to have constructed the sediment removal basin and to have replaced the Roaring Fork Pump Station pumps with new pumps with variable frequency drives. The remainder of the Project will

be undertaken during the 2021 calendar year including the Roaring Fork pipeline and the mixing basin. All work is expected to be complete prior to spring runoff in 2022.

Financial Analysis: Table 3 provides a summary of the Project's financial aspects and Table 4 details the City's current existing debt. The City qualifies for the Wildfire Impact Emergency Loan terms of 3 years with no interest followed by 27 years at the middle income municipal rate of 1.80%. The Roaring Fork supply line is currently under consideration for a $1 million Energy/Mineral Impact Assistance Fund Grant through the Department of Local Affairs and the City intends to pursue other grant funds to offset Project costs as well. However, the recommended loan amount is for the full project cost should these other grants not be secured. The following analysis conservatively assumes the full project cost will be covered by the loan.

TABLE 3: FINANCIAL SUMMARY

Total Project Cost	$8,000,000
CWCB Loan Amount	$8,000,000
CWCB Loan Amount (Including 1% Service Fee)	$8,080,000
CWCB Annual Loan Payment	$380,481
CWCB Annual Loan Obligation (1st Ten Years)	$418,529
Number of Taps	3,750
Monthly Loan Obligation per Tap	$9.30

Creditworthiness: The City has one existing loan tied to its Water and Sewer Enterprise Fund revenue from the Colorado Water Resources and Power Development Authority. The loan funded the construction of a new wastewater treatment plant in 2010. The payments on this loan are up-to-date and the City is in good standing with the Authority.

TABLE 4: EXISTING DEBT

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
CWRPDA 2010	$31,460,100	$19,717,950	$1,960,000	2032	Water/Sewer revenues

TABLE 5: FINANCIAL RATIOS[1]

Financial Ratio	Prior Years	Future w/ Project
Operating Ratio (revenues/expenses)[2] weak: <100% - average: 100% - 120% - strong: >120%	88% (weak) $6.60M/$7.50M	100% (average) $7.92M/7.92M
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	54% (weak) $6.60M-$5.54M $1.96M	100% (average) $7.92M-$5.54M $2.38M
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	123% (strong) $9.26M/$7.50M	117% (strong) $9.26M/$7.92M
Debt per Water Tap (Based on 3,750 Taps)[3] weak: >$5,000 - average: $2,500 - $5,000 - strong: <$2,500	$5,259 (weak) $19.72M/3,750	$7,413 (weak) $27.80M/3,750
Average Monthly Water Bill weak: >$60 - average: $30 - $60 - strong: <$30	$42.00 (average)	$51.30 (average)

1. These ratios consider revenues, expenses, and debt associated with both water and sewer costs which are combined in the City's Water and Sewer Enterprise Fund including those related to the construction of a new wastewater treatment plant in 2010.
2. Future w/ Project ratio includes future revenue from sewer service in addition to water service.
3. The Water and Sewer Enterprise Fund also receives revenues from sewer service connections.

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

cc: Debra Figueroa, City Manager, City of Glenwood Springs
Matthew Langhorst, Director of Public Works, City of Glenwood Springs
Jennifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program – Project Data Sheet

COLORADO
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Department of Natural Resources

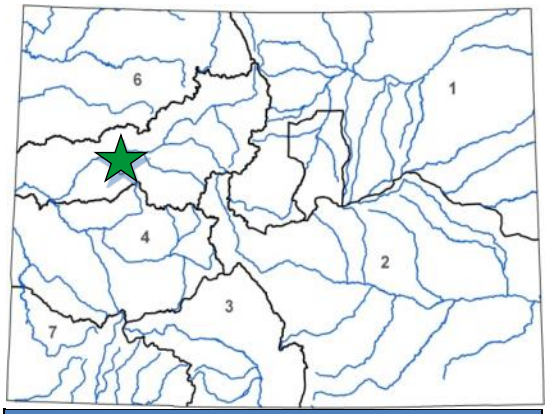
System Redundancy and Pre-Treatment Improvements

City of Glenwood Springs
November 2020 Board Meeting

LOAN DETAILS	
Project Cost:	$8,000,000
CWCB Loan (with 1% Service Fee):	$8,080,000
Loan Term and Interest Rate:	3-yrs @ 0%, 27-yrs 1.80%
Funding Source:	Severance Tax Perpetual Base Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	0% Low - 100% Mid - 0% High	0%

PROJECT DETAILS	
Project Type:	Rehabilitation
Average Annual Diversions:	2200 AF

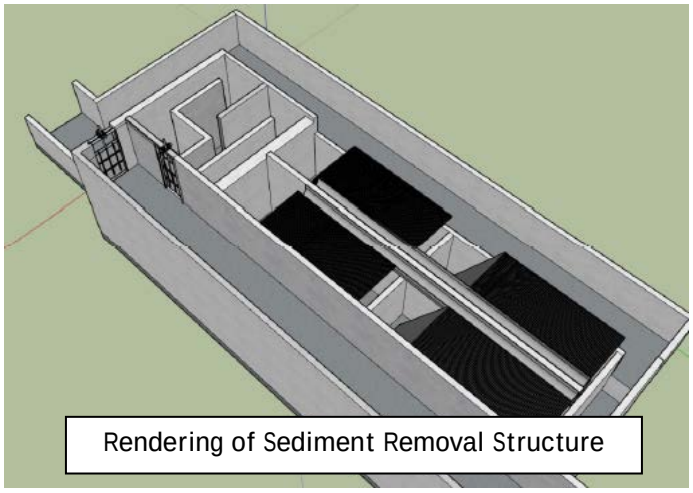


LOCATION			
County:			Garfield
Water Source:			No Name Creek; Grizzly Creek; Roaring Fork River
Drainage Basin:			Colorado
Division:	5	*District:*	53, 38

During the unprecedented fire season of 2020, the primary source water watersheds for the City of Glenwood Springs were damaged by the Grizzly Creek Fire. The City is in need of immediate funding to construct raw water collection and transmission system improvements to ensure that the City can reliably provide domestic water despite spring runoff from these burn scar areas.

This project will include construction of a redundant pumpline from the primary source watersheds, and sediment removal infrastructure throughout the raw water collection and transmission system. The loan will be structured to provide needed funding for design and construction, while allowing for incorporation of future grant funds from state and federal sources to reduce the final loan amount. Construction will begin in November of 2020, with completion anticipated in the spring of 2022.

Grizzly Creek Fire Burned Area



Rendering of Sediment Removal Structure