



# COLORADO

## Colorado Water Conservation Board

Department of Natural Resources  
1313 Sherman Street, Room 718  
Denver, CO 80203

March 17, 2020

Mr. Brad Wind, General Manager  
Northern Colorado Water Conservancy District  
220 Water Ave  
Berthoud, CO 80513

Re: Windy Gap Firing Project - Lending Rate Update Approval

Dear Mr. Wind:

I am pleased to inform you that on March 11, 2020, the Board approved a lending interest rate update for the Windy Gap Firing Project. The updated interest rate shall be 2.08% per annum for a 30-year term. All other loan terms and approval conditions shall remain.

The following condition will be added to the loan contract:

The loan contract's Time of Performance shall be one year. If during this one-year period the Borrower has secured Revenue Bonds, the Time of Performance shall be extended to encompass the entire project construction period. If at the end of the one-year period, the Revenue Bonds have not been issued, the loan contract shall be substantially completed (closed out) and the disbursed amount (plus the 1% service fee) will be amortized for repayment. The loan funds not disbursed will remain eligible for a new and separate loan contact at an updated CWCB Board approved interest rate.

I have attached a copy of the updated Board memo dated March 11, 2020, that includes the Board's approval. Peg Mason, Loan Contracts Manager, will continue to work with the District on the loan contracting process. She can be reached at (303) 866-3441 x3227. Cole Bedford, P.E., will be the Project Manager and will work with you on the disbursements of your loan funds. He can be reached at (303) 866-3441 x3234.

On behalf of the Board, I would like to thank you for your interest in a loan from the CWCB.

Sincerely,

Kirk Russell, P.E., Chief  
Finance Section

Attachment: Updated Board Memo





**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

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Denver, CO 80203

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Jared Polis, Governor

Dan Gibbs, DNR Executive Director

Rebecca Mitchell, CWCB Director

**TO:** Colorado Water Conservation Board Members

**FROM:** Kirk Russell, P.E., Finance Section Chief *KGR*

**DATE:** March 11-12, 2020, Board Meeting (Updated March 11, 2020)

**AGENDA ITEM:** 7b. Change to Existing Water Project Loans  
Municipal Subdistrict of the Northern Colorado Water Conservancy District  
- Windy Gap Firing Project

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**Staff Recommendation: (Board approved Staff Recommendation March 11, 2020)**

Staff recommends the Board approve a lending rate update for the Municipal Subdistrict, Northern Colorado Water Conservancy District - Windy Gap Firing Project. The interest rate shall be 2.08% per annum for a 30-year term. All other loan terms and approval conditions shall remain.

Additionally, staff recommends the following condition be added to the loan contract:

The loan contract's Time of Performance shall be one year. If during this one-year period the Borrower has secured Revenue Bonds, the Time of Performance shall be extended to encompass the entire project construction period. If at the end of the one-year period, the Revenue Bonds have not been issued, the loan contract shall be substantially completed (closed out) and the disbursed amount (plus the 1% service fee) will be amortized for repayment. The loan funds not disbursed will remain eligible for a new and separate loan contact at an updated CWCB Board approved interest rate. The interest rate will be based on the market rate for a AA rated Bond at the time of the subsequent request.

**Introduction:**

The Municipal Subdistrict, Northern Colorado Water Conservancy District (Municipal Subdistrict) acting by and through the Windy Gap Firing Project Water Activity Enterprise (Firing Enterprise) received approval of a loan for the Windy Gap Firing Project (Project) at the CWCB November 2017 Board Meeting. The Project received legislative approval in the 2017 Projects Bill (HB17-1248), which authorized the CWCB to loan up to \$90,000,000. The purpose of the Project is to increase the firm yield from the existing Windy Gap project to approximately 30,000 (AF) by constructing the Chimney Hollow Reservoir, a new 90,000 AF reservoir to be located in Larimer County.

The Board approved the loan interest rate based on the AA Bond market rate as a variance to the CWCB's Policy #7 - Lending Rate Determination. The rate at the time of application was 3.10% for a 30-year term. A loan contract was not executed due to several factors delaying the Project including a lawsuit filed against the Bureau of Reclamation and the U.S. Army Corps of Engineers.

In an attempt to maintain the original intent of the CWCB subordinate loan, the Municipal Subdistrict has requested the Board consider updating the approved lending rate. The proposed 2.08% interest rate is representative of the current market conditions.



**Project Update:**

At the time of the original CWCB loan approval in November 2017, the Project had just received its final federal permit and plans for construction were being developed. The Project schedule included final design and contractor selection in July 2018. It was anticipated that soon afterwards solicitation of Revenue Bonds would take place for the portion of the Project cost not funded by the CWCB.

This Project schedule has been delayed primarily due to a lawsuit against the federal agencies permitting the Project. Despite this external delay, the Firming Enterprise has been diligently preparing for construction. This includes initiating a thorough and comprehensive design review and contractor procurement.

*Design Overview:* Since the original loan approval in November 2017, the design of the Chimney Hollow dam has received final approval from the Dam Safety Branch of the State Engineer's Office (SEO), ending an approximately 3.5-year design process. At the SEO's request, a Project Review Board (PRB) was assembled by the Firming Enterprise to support the successful execution of the Project. The PRB is an independent technical review board comprised of subject matter experts. A summary of major design milestones is provided below:

**TABLE 1: DESIGN MILESTONES**

Milestone	Date
Design Notice to Proceed	August 2016
Alternatives Analysis	April 2017
Intermediate Design	August 2017
Test Quarry and Test Fill	December 2017
Pre-Final Design	March 2018
Prepare Bid Documents	January 2019
Final Design Complete	April 2019
Final SEO Approval	February 2020

It has been noted that although the SEO revised its Rules and Regulations for Dam Safety and Dam Construction effective January 1, 2020, due to coordination with all members of the design team, PRB, and SEO, the Project was able to incorporate all design updates to ensure the Project could be approved in accordance with the new Rules and Regulations. This included incorporation of the new Colorado-New Mexico Regional Extreme Precipitation Study.

*Procurement Overview:* The procurement process for the General Contractor was completed in the summer of 2019 using a multi-step Best Value process. The selection and evaluation committee's process involved a review of qualifications including experience completing two \$200 million plus heavy-civil projects in the last 5 years, and the ability to bond for amounts greater than \$500 million. Five companies were prequalified and invited to submit proposals. Selection was narrowed to two companies that were asked to submit price proposals. The committee ultimately selected Barnard Construction Company for the Project.

The total construction contract price is \$485,365,000 which includes a 5-month preconstruction period followed by a 48-month construction period. The Firming Enterprise issued the Administrative Notice to Proceed in December 2019 to start the preconstruction period. Preconstruction activities include construction permitting; 3rd party agreements; project risk workshops; value engineering workshops;

partnering sessions; meetings with the SEO, Reclamation, Larimer County, and Project participants; Failure Modes Analysis workshop; and select submittal review.

*Construction Overview:* Primary elements of the construction work for the Project are as follows:

- *Main Dam* - The new Chimney Hollow Dam will be an approximately 355-feet tall, zoned, rockfill dam with a hydraulic asphalt concrete core.
- *Saddle Dam* - A 40-foot high saddle dam will be constructed near the southern end of the reservoir. It will be a zoned rockfill dam with a clay core.
- *Combined Inlet/Outlet* - The inlet and outlet will consist of a 65 ft tall single-level structure and lined tunnel.
- *Spillway* - The proposed 3,700-foot long spillway will convey a peak discharge of 850 cfs.
- *Conveyance Structures* - The conveyance includes an interconnection to the existing conduit.
- *Valve House* - The valve house construction will include a prefabricated steel building to house a control room and valves.
- *Access Roads* - A new gravel public access road from Larimer County Road 18E (Pole Hill Road) will be constructed. The roadwork will include turning lanes on Pole Hill Road and a bridge over the existing Flatiron Penstocks. Additionally, a new maintenance gravel road will be constructed along the steep terrain on the west side of the reservoir to the saddle dam.

When complete, not only will Chimney Hollow dam be the largest non-federal dam in Colorado, it will also be the largest embankment dam in Colorado. It will be the first jurisdictional hydraulic asphalt core dam constructed in the United States and largest dam built in the United States in the last 25 years. Additionally, during construction, the onsite quarry operation will be the largest mining operation in Colorado.

#### Updated Project Cost

Due to several design changes and documentation of cost allocation, a direct comparison to the May 2017 project cost used for the original loan approval is difficult. However, including all spending to-date (approximately \$74 million), the total Project cost is currently estimated at \$660 million as shown in Table 2. The current estimate to complete the Project is \$586 million.

TABLE 2: ESTIMATED PROJECT COST

Task	Cost (millions)
Construction (Contractor Bid)	\$485.4
Property & Easements	\$6.5
Planning & Permitting	\$13.5
Mitigation & Enhancements	\$29.5
Engineering Design	\$22.0
Relocation of Transmission Line	\$4.0
Engineering Services During Construction	\$12.5
Construction Management	\$30.5
Owner's Cost for Construction	\$8.0
<b>SUBTOTAL</b>	<b>\$126.5</b>
Contingency	\$48.0
<b>Total Project Cost</b>	<b>\$660.0</b>

### Updated Schedule

Final design is complete and a contractor has been selected. Given the status of the litigation and language in the construction contract, November 2020 is likely to be the construction start date. The firming Enterprise will continue to evaluate the timing of the sale of the Revenue Bonds but it anticipates it will occur prior to the end of the proposed one-year Time of Performance window so that an extension can be made to the loan contract. Participant Allotment Contracts are expected to be finalized in April 2020 and the CWCB loan will follow. It is also possible the Firming Enterprise will need access to CWCB loan funds prior to the issuance of the senior Revenue bonds in order to maintain the construction schedule.

### Financial Analysis

Table 3 provides a summary of the Project's financial aspects. In November 2017, the CWCB the Board approved a CWCB loan in a subordinate position to the future Revenue Bonds for the Project. This was meant to benefit the pooled financing participants by attracting buyers of the Revenue Bonds at a more favorable interest rate and reducing the overall project cost. In consideration of CWCB taking a subordinate position, the loan interest rate was set at the AA Bond market rate at that time. This is a variance from CWCB Policy #7.

Since the original loan approval, market rates have dropped significantly and as such, the CWCB loan no longer serves the intended purpose for the pooled financing participants. Staff has determined the AA Bond interest rate for a 30-year term as of February 3, 2020 to be 2.08%.

The Firming Enterprise's anticipated bond rating is between A+ and AA-. An interest rate of 2.00% was used for the anticipated 30-year Revenue Bonds in Table 3.

TABLE 3: FINANCIAL SUMMARY

Project Cost	\$660,000,000
Participant Cash Contribution (paid-to-date)	\$74,000,000
Participant Cash Contribution (future)	\$150,000,000
Estimated Revenue Bond	\$346,000,000
Estimated Revenue Bond's Annual Debt Service	\$21,160,224
CWCB Loan Amount	\$90,000,000
CWCB Annual Loan Payment	\$4,062,831
CWCB Annual Loan Obligation (1 <sup>st</sup> Ten Years)	\$4,469,114

*Creditworthiness:* The Firming Enterprise has no existing debt. All funding to-date has been provided by Project participants through interim annual agreements, of which the Firming Enterprise has never had a failure to collect.

Table 4 presents the financial ratios of the Firming Enterprise. Activities of the Firming Enterprise have thus far consisted of permitting, design engineering activities, and property acquisitions for the reservoir site. The 'Future w/ Project' ratios analyzes the Firming Enterprise after construction is finished. Expenses of the Firming Enterprise post construction will only include O&M of Chimney Hollow Reservoir, power interference charges assessed by Reclamation, and debt service payments. For purposes of financial review, annual O&M and power interference charges are estimated to be \$1.0 million.



TABLE 4: FINANCIAL RATIOS

Financial Ratio	Prior Years	Future w/ Project
Operating Ratio (Revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	82% (weak) <sup>1</sup> \$10.0M/\$12.2M	100% (average) \$20.9M/\$20.9M
Debt Service Coverage Ratio (Revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	N/A	100% (average) (\$20.9M-\$1.0M) \$19.9M
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	51% (average) \$6.2M/\$12.2M	103% <sup>2</sup> (strong) \$21.5M/\$20.9M

<sup>1</sup>The Firming Enterprise intentionally set assessments over the last three years such that excess cash remains low.

<sup>2</sup>Cash Reserves based on 2 years of O&M and 1 year of debt service in reserves.

*Collateral:* Security for this loan will remain a pledge of the Revenues due to the Firming Enterprise from the Project participants under the Storage Allotment Contracts, provided that such pledge will be subordinate to the payment of the Revenue bonds issued for constructing the Windy Gap Firming Project. This security is a variance from CWCB Financial Policy #5 (Collateral)

cc: John Budde, Financial Services Manager, Northern Colorado Water Conservancy District  
 Jenifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program - Project Data Sheet

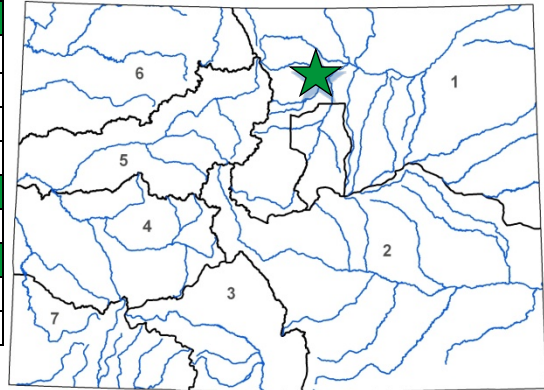


## Windy Gap FIRMING Project

Municipal Subdistrict, Northern Colorado WCD  
Windy Gap FIRMING Project Water Activity Enterprise  
March 2020 Board Meeting

(Project Update)

L O A N   D E T A I L S	
Project Cost:	\$660,000,000
CWCB Loan (with Service Fee):	\$90,000,000
Loan Term and Interest Rate:	30 years @ 2.08%
Funding Source:	Revenue Bonds & Construction Fund
B O R R O W E R   T Y P E	
Municipal	
P R O J E C T   D E T A I L S	
Project Type:	New Reservoir
New Storage Capacity:	90,000 AF



In 1970, six Northern Colorado cities formed the Municipal Subdistrict to plan, finance, and build the Windy Gap project. That project was completed in 1985. The annual delivery of Windy Gap water is not reliable because in dry years the junior water rights may not come into priority, and in wet years, there may not be room in Lake Granby to store Windy Gap water.

L O C A T I O N	
County:	Larimer, Boulder, Broomfield, Weld
Water Source:	Colorado River
Drainage Basin:	South Platte
Division:	1      District: 2,3,4,5,6

In 1999, the Subdistrict formed the Windy Gap FIRMING Water Activity Enterprise with the purpose of pursuing activities that would lead to firming the yield of Windy Gap water. Participants identified 30,000 AF as a goal for total firm yield. After a review of over 170 alternatives, the Bureau of Reclamation and project participants identified the construction of a 90,000 AF Chimney Hollow Reservoir as the preferred alternative. This Project consists of the construction of the Reservoir and associated pipelines to deliver water from the existing C-BT infrastructure, as well as environmental mitigation/enhancements. Construction is anticipated to begin in fall of 2020 and be complete in 2026.

