



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

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**TO:** Colorado Water Conservation Board Members

**FROM:** Jonathan Hernandez, P.E., Project Manager  
Kirk Russell, P.E., Finance Section Chief

**DATE:** March 20-21, 2019 Board Meeting

**AGENDA ITEM:** 10c. Water Project Loans  
Dominion Water & Sanitation District - Chatfield Reallocation Project

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### Introduction

The Dominion Water & Sanitation District (District), acting by and through its water activity enterprise, is requesting a loan for its participation in the Chatfield Reallocation Project (Reallocation Project). The purpose of the Reallocation Project is to make additional water supply storage in Chatfield Reservoir by reallocating 20,600 AF from the flood control pool into a multipurpose pool. The District is purchasing 500 units of the reallocated storage and will be proportionally responsible for all Reallocation Project costs. One unit of Chatfield reallocated storage is equal to one AF. For the purpose of this loan, the District's participation in the Reallocation Project is defined as the Project.

The current Reallocation Project cost estimate is \$8,300.97 per AF. The District's proportional Project cost for 500 AF is therefore \$4,150,485. The District is requesting a loan from the CWCB for 100% of its Project costs. 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 \$4,191,989.85 (\$4,150,485 for Project costs and \$41,504.85 for the 1% service fee) to the Dominion Water & Sanitation District, acting by and through its water activity enterprise, for its participation in the Chatfield Reallocation Project, from the Severance Tax Perpetual Base Fund. The loan terms shall be 30 years at the high-income municipal interest rate of 3.3% per annum. Security for the loan shall be the storage space in Chatfield Reservoir purchased with the loan proceeds.

Additionally, staff recommends the following contract condition:

1. Loan funds will not be disbursed until the District successfully enters into a Water Purchase Agreement with the Colorado Department of Natural Resources for the use of storage space at Chatfield Reservoir.



### **Background**

The District is a wholesale water district located in Northwest Douglas County with a service area of approximately 33,000 acres. The District was established, in part, in direct response to Douglas County's vision for residents to shift away from non-renewable water supplies. Developments that are within the District's service area include Sterling Ranch, Chatfield Valley Framework Entities, and multiple other retail water and wastewater providers servicing existing residents and businesses within the District's service area.

The District's service area is approximately 18% developed from a demand perspective and annual potable water demands have averaged 1,127 AF in recent years. At full build-out its projected average annual potable water demand is 6,204 AF. As a part of the District's long-term water supply plan, it is seeking to purchase 500 AF of reallocated storage space within Chatfield Reservoir from the CWCB.

### **Loan Feasibility Study**

Sarah Stone, Business Operations Manager with Dominion Water & Sanitation District, prepared the Loan Feasibility Study titled, "Dominion Water and Sanitation District's Participation in the Chatfield Reservoir Reallocation Project," dated January 23, 2019. The feasibility study was prepared in accordance with CWCB guidelines. Water right analysis relied on data from Greg Roush, P.E. with Leonard Rice Engineers. Audited financial statements were provided by Haynie & Company. The feasibility study relies on the final Feasibility Report/Environmental Impact Statement (FR/EIS) prepared by the U.S. Army Corps of Engineers (USACE), and the Fish, Wildlife and Recreation Mitigation Plan prepared by the Reallocation Participants in accordance with § 37-60-122.2, C.R.S.

### **Borrower - Dominion Water & Sanitation District**

The District is a quasi-municipal corporation governed pursuant to the provisions of the Colorado Special District Act. The District was formed under § 32-1-305(6), C.R.S. by election in 2004 and is governed by a five-member board of directors. The board has the authority to authorize the District to contract and incur debt, and to set wholesale water and sewer service rates and tap fees as required to fund operating and capital expenditures.

As a Title 32 Special District, the District has taxing authority. To be in compliance with TABOR, the District will incur this debt through its water activity enterprise, and will not pledge tax revenue for the repayment of debt. In February 2014, the District established a water activity enterprise to pursue and continue all of the District's activities relating to the provision of wholesale water, wastewater, and stormwater services to the Sterling Ranch development. Enterprise revenues consist of wholesale water service, wholesale sewer service, tap fees, and developer advances.

### **Water Rights**

The District has water rights with an average annual yield of 1,867 AF consisting of renewable water, non-tributary ground water, and the reuse of fully consumable return flows. This includes two intergovernmental agreements with the City of Aurora for 480 AF per year, a renewable water supply from the Hock Hocking mine for 62.5 AF per year, and a renewable water supply from the regional Water Infrastructure and Supply Efficiency (WISE) Partnership for 1,325 AF per year.

### **Reallocation Project Background**

Chatfield Dam and Lake (Chatfield) is an on-stream multi-purpose reservoir built between 1967 to 1975 and is located at the confluence of the South Platte River and Plum Creek. The dam and reservoir are owned and operated by the USACE. Chatfield's primary purpose is flood control but some of its storage

space is used as a multipurpose pool for water supply. Denver Water is the sole user of Chatfield’s originally allocated storage space for water supply.

In the mid-1990s, the Colorado Department of Natural Resources (DNR), acting through CWCB and on behalf of numerous local water providers, requested the USACE to reallocate a portion of Chatfield’s flood control storage for water supply storage. The USACE ultimately determined Chatfield can accommodate a reallocation of 20,600 AF from the flood control pool to a multipurpose pool for water supply without compromising Chatfield’s primary flood control function. Storing the additional 20,600 AF in Chatfield will raise operational water levels 12 feet from the historical operational high level of 5,432 feet to 5,444 feet. Construction cost of the Reallocation Project is to mitigate both the environmental and recreational impacts a 12-foot rise will have at the reservoir site. Improvements to the dam or spillway are not required.

Table 1 lists the current project participants. CWCB remains in active conversations with various entities about the purchase of CWCB owned storage units.

**TABLE 1: CHATFIELD REALLOCATION PROJECT PARTICIPANTS AS OF FEBRUARY 2019**

Participant	Storage Amount	Percentage
Centennial Water and Sanitation District	6,922 AF	33.60 %
Colorado Water Conservation Board	6,796 AF	32.99 %
Central Colorado Water Conservancy District	4,274 AF	20.75 %
Castle Pines North Metro District	1,006 AF	4.88 %
Colorado Parks and Wildlife	1,000 AF	4.85 %
Castle Rock	461 AF	2.24 %
Center of Colorado Water Conservancy District	131 AF	0.64 %
Castle Pines Metro District	10 AF	0.05 %
<b>TOTAL</b>	<b>20,600 AF</b>	<b>100 %</b>

**Reallocation Project Update**

The USACE issued the FR/EIS and Record of Decision for the Reallocation Project on May 29, 2014. The Chatfield Reservoir Mitigation Company (CRMC) was formed in 2015 to implement the Reallocation Project.

**Environmental Modification Projects:** The Reallocation Project’s environmental modifications will address impacts that a 12-foot rise will have on the existing environment. The ecological impact of the Reallocation Project is measured in “Ecological Function Units” (EFUs). On-site mitigation is preferred but due to limited on-site opportunities, off-site mitigation is needed to fully mitigate impacted resources and lost Cottonwood trees. The FR/EIS assumed the vast majority of environmental mitigation would need to occur off-site, estimating that up to 711 off-site EFUs would be required. However, due to expanded on-site mitigation along both Plum Creek and the South Platte River, off-site mitigation needs have been reduced to only 108 EFUs.

**Recreational Modification Projects:** The Reallocation Project’s recreational modifications will address impacts that a 12-foot rise will have on existing facilities at Chatfield State Park. Construction activities are occurring at the Marina, North Boat Ramp, Swim Beach, various trails and roadways, and eleven day-use areas.

**Construction Contracting:** After bidding various projects, CRMC awarded Concrete Express, Inc. with the environmental mitigation projects of Plum Creek, South Platte, and Marcy Gulch as well as the recreational modification projects of North Boat Ramp, Massey Draw Day Use Area, and Eagle Cove Day Use Area. CRMC awarded M.A. Mortenson Company with the recreational modification projects of the marina’s landside improvements, Swim Beach, South Platte Bridge, and the following Day Use Areas: Jamison, Deer Creek, Catfish Flats, Fox Run, King Fisher, Gravel Ponds, Roxborough Cove, and Plum Creek. The design-build contractor for the marina’s waterside improvements is Bellingham Marine Inc.

**TABLE 2: ESTIMATED PROJECT COST (Updated October 2017)**

Item	Estimated Cost
First Cost of Storage	\$16,285,400
Concrete Express, Inc Guaranteed Maximum Price Contract Env. Mitigation: Plum Creek. Rec. Mitigation: North Boat Ramp, Massey Draw Day Use, Eagle Cove Day Use.	\$30,384,100
M.A. Mortenson Company Guaranteed Maximum Price Contract Rec. Mitigation: Marina Land side; Swim Beach; South Platte Bridge. Day Use Areas: Jamison, Deer Creek, Catfish Flats, Fox Run, King Fisher, Gravel Ponds, Roxborough Cove, and Plum Creek.	\$46,480,400
Bellingham Marine Inc Rec. Mitigation: Marina Water side	\$10,000,000
Remaining Environmental Mitigation Projects South Platte, Marcy Gulch, Sugar Creek, Upper Plum Creek, Shoreline Stabilization Plan, Upstream and Downstream Enhancement, Fluctuation Zone and Tree Inventory and Removal, Off-Site EFUs	\$36,250,300
Water Quality Modeling & Monitoring	\$1,300,000
Xcel Energy Gas Line Relocation	\$4,000,000
Vegetation, Weed Treatment, & Appraisals	\$1,461,000
Denver Water Temporary Pump Stations	\$330,000
Revenue Agreements for Park Concessionaires	\$1,000,000
USACE Bulkhead Gate	\$500,000
Legal Services and Insurance	\$454,600
Design / Engineering	\$12,000,000
Program Management	\$4,785,000
Construction Management	\$5,759,500
<b>TOTAL</b>	<b>\$170,990,300</b>
<b>ESCROW AMOUNT REQUIRED</b>	<b>\$171,000,000</b>
<b>ESCROW AMOUNT REQUIRED PER AF</b>	<b>\$8,300.97</b>

**Schedule:** Construction began in fall 2017. A majority of the Day-Use areas are completed and reopened to the Public. The Plum Creek Environmental Mitigation construction is complete. The bulk of construction activity is at the Marina and South Platte Environmental Mitigation areas. All on-site environmental mitigation is projected to be completed by fall 2019. CRMC anticipates receiving final letters of acceptance from the USACE such that use of the reallocated storage space will be allowed starting spring 2020. Originally estimated to be completed in 2028, all off-site mitigation is now projected to be completed and approved by the USACE as early as April 2020.

**District’s Participation in the Reallocation Project**

The District is participating in the Reallocation Project with a goal of maximizing the dependable yield of its water rights portfolio by capturing in-priority water, reusable return flow credits, and regulate

yield of other water supplies when deliveries exceed ability to divert and store in on-site storage. The District has a 2,200 AF junior storage water right in Chatfield Reservoir pending adjudication in Case No. 18CW3039.

Aside from the environmental and recreation work being completed under the Reallocation Project the District will need to construct a pump station in order to physically get water out of the reservoir and into its water system. The pump station or other infrastructure improvements are not a part of this Project or loan request. Until the pump station is constructed and online, the District would rely on exchanges to make use of its reallocated storage space.

Of the 20,600 AF of storage to be reallocated, the District will purchase 500 AF which are currently owned by the CWCB. This represents approximately 2.4% of the total Reallocation Project. The Project is expected to develop an average yield of 239 AF per year for the District from a preliminary and conservative yield analysis of the 2018 junior storage water right with a 500 AF storage capacity. Successful completion of the Reallocation Project would result in the District securing renewable water rights that on average would supply 21% of its current average annual water demand and 4% of its projected maximum annual water demand for the full build-out of the Sterling Ranch development.

#### Financial Analysis

Table 3 provides a summary of the Project's financial aspects. The District qualifies for a high-income municipal interest rate of 3.30% for a 30-year term. The District will be securing the loan with the purchased reallocated storage units in place of pledging its water activity enterprise revenues.

**TABLE 3: FINANCIAL SUMMARY**

Reallocation Project Cost per AF	\$8,300.97
Borrower's Participation Cost (500 AF)	\$4,150,485.00
CWCB Loan Amount	\$4,150,485.00
CWCB Loan Amount (Including 1% Service Fee)	\$4,191,989.85
CWCB Annual Loan Payment	\$222,249
CWCB Annual Loan Obligation (1 <sup>st</sup> Ten Years)	\$244,474

**Creditworthiness:** As of December 31, 2017, the District's water activity enterprise had approximately \$126.2 million of outstanding debt consisting of revenue bonds and loans. The 2019 annual debt service obligation is \$5.3 million and in future years will increase to an average of \$7.8 million through the remainder of the District's outstanding bond terms. The CWCB's standard requirement of a rate covenant with parity is not obtainable on the District's existing or future debt because the District's future financials are heavily dependent on growth. As there is not a pledge or revenues for this loan, financial ratios of the District or its enterprise are not included.

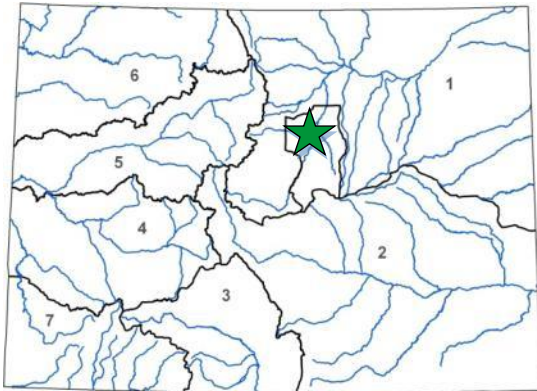
**Collateral:** Security for this loan will be the storage space in Chatfield Reservoir purchased with this loan represented by an encumbrance on the Water Provider Agreement between DNR and the District for the use of storage space at Chatfield Reservoir. Taking assets as collateral is in compliance with Policy #5 (Collateral) but is not consistent with the loan program's standard provision of requiring a pledge of revenues and a rate covenant in loan contracts.

cc: Mary Kay Provaznik, General Manager, Dominion Water & Sanitation District  
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:	\$4,150,485
CWCB Loan (with Service Fee):	\$4,191,989.85
Loan Term and Interest Rate:	30 years @ 3.30%
Funding Source:	Severance Tax PBF
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:	Reservoir Enlargement
New Storage:	500 AF



L O C A T I O N	
County:	Douglas
Water Source:	S. Platte River & Plum Creek
Drainage Basin:	South Platte
Division:	1      District: 2

The Dominion Water & Sanitation District is a wholesale water district that was formed in 2004 and provides water, wastewater, and stormwater services to Northwest Douglas County. The District is participating in the Chatfield Reallocation Project in order to increase the permanence and reliability of its water supply. Successful completion of the Project will provide the opportunity to maximize the dependable yield of Dominion’s water rights portfolio. Of the 20,600 AF of storage space being reallocated, the District is purchasing 500 AF from the CWCB. The District will store Chatfield water in accordance with pending water court Case No. 18CW3039.

The US Army Corps of Engineers issued the Project’s final Feasibility Report and Environmental Impact Statement (FR/EIS) and the Record of Decision on May 29, 2014. The Selected Alternative recommended in the FR/EIS will provide 20,600 acre-feet of storage in Chatfield between the elevations 5432 and 5444 msl for M&I water supply and other purposes including agriculture, environmental restoration, and recreation and fishery habitat protection and enhancement. The current overall Reallocation Project cost estimate is \$8,300.97 per AF (\$171 million total). It is anticipated participants in the Reallocation Project will be able to store water by Spring 2020.

