



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: January 22-23, 2018 Board Meeting

AGENDA ITEM: 10c. Change to Existing Loans
Centennial Water and Sanitation District - Chatfield Reallocation Project

Introduction

The Centennial Water and Sanitation District (District) received approval of a \$44,440,000 loan for its participation in the Chatfield Reallocation Project at the May 2014 Board Meeting. 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 6,922 AF of the reallocated storage and is proportionally responsible for all Reallocation Project costs. For the purpose of this loan, the District's participation in the Reallocation Project is defined as the Project.

The original loan amount was based on a total Reallocation Project cost estimate of \$145.5 million, which included a 10% contingency. On October 13, 2017 the Department of Natural Resources (DNR) notified all project participants that the total Reallocation Project cost estimate increased to \$171 million. The District is seeking an increase to its CWCB loan for 100% of its share of the Reallocation Project cost increase. See attached Project Data Sheet for a location map and Project summary.

Staff Recommendation

Staff recommends the Board request the General Assembly to authorize a loan increase not to exceed \$9,046,267 (\$8,956,700 for Project costs and \$89,567 for the 1% service fee) to the Centennial Water and Sanitation District for its participation in the Chatfield Reallocation Project, from the Severance Tax Perpetual Base Fund. This increase will be reflected in the 2018 CWCB Projects Bill. The total loan amount will become \$53,486,267 (\$52,956,700 for Project costs and \$529,567 for the 1% service fee). The loan terms shall remain 30 years at the high-income municipal interest rate of 3.0% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.



(INFORMATION IN SMALL CAPS IS COMMON TO ALL CHATFIELD REALLOCATION INCREASE REQUEST)

CHATFIELD REALLOCATION 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 U.S. ARMY CORPS OF ENGINEERS (COE). 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 CURRENTLY THE SOLE USER OF CHATFIELD'S STORAGE SPACE FOR WATER SUPPLY.

IN THE MID-1990S, DNR, ACTING THROUGH CWCB AND ON BEHALF OF NUMEROUS LOCAL WATER PROVIDERS, REQUESTED THE COE TO REALLOCATE A PORTION OF CHATFIELD'S FLOOD CONTROL STORAGE FOR WATER SUPPLY STORAGE. THE COE 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 HISTORIC 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 WILL NOT BE REQUIRED.

TABLE 1 LISTS THE CURRENT PROJECT PARTICIPANTS.

TABLE 1: CHATFIELD REALLOCATION PROJECT PARTICIPANTS

PARTICIPANT	STORAGE AMOUNT	PERCENTAGE
CENTENNIAL WATER AND SANITATION DISTRICT	6,922 AF	33.60 %
COLORADO WATER CONSERVATION BOARD ¹	6,883 AF	33.41 %
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	374 AF	1.82 %
CENTER OF COLORADO WATER CONSERVANCY DISTRICT	131 AF	0.64 %
CASTLE PINES METRO DISTRICT	10 AF	0.05 %
TOTAL	20,600 AF	100 %

¹CWCB REMAINS IN ACTIVE CONSERVATIONS WITH VARIOUS ENTITIES ABOUT THE PURCHASE CWCB SHARES.

PROJECT UPDATE

THE COE ISSUED THE FINAL FEASIBILITY REPORT/ENVIRONMENTAL IMPACT STATEMENT (FR/EIS) FOR THE REALLOCATION PROJECT AND THE RECORD OF DECISION ON MAY 29, 2014. THE CHATFIELD RESERVOIR MITIGATION COMPANY (CRMC) WAS FORMED IN 2015 TO IMPLEMENT THE REALLOCATION PROJECT. CDM SMITH IS THE ENGINEERING FIRM COORDINATING FINAL DESIGN. CONSTRUCTION STARTED IN FALL 2017.

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 WILL ALSO BE 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 WILL OCCUR 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 PROJECT OF PLUM CREEK AND THE RECREATIONAL MODIFICATION PROJECTS OF NORTH BOAT RAMP, MASSEY DRAW DAY USE AREA, AND EAGLE COVE DAY USE AREA. ADDITIONALLY, CRMC IS IN THE PROCESS OF AWARDED CONCRETE EXPRESS, INC. WITH THE ENVIRONMENTAL MITIGATION PROJECTS OF SOUTH PLATTE AND MARCY GULCH. CRMC IS IN THE PROCESS OF AWARDED M.A. MORTENSON COMPANY FOR 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.

WATER PROVIDER AGREEMENTS AND PROJECT COSTS: EACH PROJECT PARTICIPANT ENTERED INTO A WATER PROVIDER AGREEMENT (WPA) WITH DNR IN OCTOBER 2015 FOR THE USE OF STORAGE SPACE AT CHATFIELD. THE WPA SET THE REQUIRED CASH EACH PARTICIPANT MUST PLACE INTO ESCROW AT \$6,504.85/AF (\$134 MILLION TOTAL COST) WHICH WAS BASED ON THE REALLOCATION PROJECT COST ESTIMATE AT THAT TIME. THE WPA ALLOWS NON-STATE PARTICIPANTS WHO RECEIVED A CWCB LOAN FOR THE REALLOCATION PROJECT TO USE THE LOAN'S PROMISSORY NOTE IN PLACE OF UPFRONT CASH IN AN ESCROW ACCOUNT.

A PROVISION IN EACH WPA PROVIDED PARTICIPANTS AN "OFF-RAMP" WHERE IF AFTER TWO YEARS, PROJECT COSTS INCREASED BY MORE THAN 10%, THEN PARTICIPANTS WOULD HAVE THE OPTION TO DROP OUT OF THE PROJECT. IN OCTOBER 2017 DNR NOTIFIED EACH PARTICIPANT THAT THE COST ESTIMATE INCREASED BY 27.6% TO \$8,300.97/AF (\$171 MILLION). EACH PARTICIPANT HAS OFFICIALLY NOTIFIED DNR THAT THEY ELECTED TO REMAIN IN THE PROJECT AND THEY NOW HAVE UNTIL JUNE 2018 TO FULLY CASH FUND ITS ESCROW ACCOUNT OR TO INCREASE ITS CWCB LOAN AMOUNT TO COVER THE PRORATED COST INCREASE.

SEE TABLE 2 FOR A DESCRIPTION OF THE CURRENT ESTIMATED REALLOCATION PROJECT COSTS.

TABLE 2: ESTIMATED PROJECT COST

ITEM	OCTOBER 2017 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
TOTAL	\$170,990,300
ESCROW AMOUNT REQUIRED	\$171,000,000
ESCROW AMOUNT REQUIRED PER AF	\$8,300.97

SCHEDULE: CONSTRUCTION BEGAN IN FALL 2017 AND ALL AFFECTED DAY USE AREAS ARE NOW CLOSED. CONSTRUCTION OF ALL DAY USE AREAS ARE PROJECTED TO BE COMPLETED BY JULY 2018. THE MARINA WILL BE CLOSED FOR CONSTRUCTION BETWEEN LABOR DAY 2018 AND MAY 1, 2019. ALL ON-SITE ENVIRONMENTAL MITIGATION IS PROJECTED TO BE COMPLETED BY FALL 2019. CRMC ANTICIPATES RECEIVING FINAL LETTERS OF ACCEPTANCE FROM THE COE 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 COE AS EARLY AS APRIL 2020.

Financial Analysis

Table 3 provides a summary of the Project's financial aspects. The District qualifies for a high-income municipal interest rate, which was set in 2014, and will remain, at 3.0% for a 30-year term. The original loan was approved with a borrower match of 10% in accordance with the CWCB Policy # 11 which was in place at that time. That policy # 11 has since been modified to allow the CWCB to lend up to 100% of project costs for agricultural and municipal borrowers. Accordingly, this loan increase will cover 100% of the increased Project costs. The additional debt burden will be offset by a projected \$0.30/1,000 gallon increase in water use fees phased in over the projected 3-5 year construction window of the Project.

TABLE 3: FINANCIAL SUMMARY

	October 2015 Cost	October 2017 Cost
Reallocation Project Cost per AF	\$6,504.85	\$8,300.97
Borrower's Participation Cost (6,922 AF)	\$45,026,571.70	\$57,459,314.34
Borrower's Escrowed Cash (10% of 2015 Costs)	\$4,502,657.17	\$4,502,657.17
CWCB Loan Amount	\$44,000,000 ¹	\$52,956,700
CWCB Loan Amount (Including 1% Service Fee)	\$44,440,000	\$53,486,267
CWCB Annual Loan Payment	\$2,267,296	\$2,728,830
CWCB Annual Loan Obligation (1 st Ten Years)	\$2,494,025	\$3,001,713
Monthly Cost of Loan Obligation per Tap (43,025 EQR taps)	\$4.83	\$5.81

¹Original Loan provided for a contingency of approximately 10%

CONTRACTING: THE BORROWER'S TOTAL ORIGINAL LOAN APPROVAL AMOUNT WAS DISTRIBUTED ACROSS THREE CONTRACTS: CONTRACT A COVERING THE FIRST COST OF STORAGE CHARGE, CONTRACT B COVERING ALL WORK REQUIRED TO ALLOW PARTICIPANTS TO USE THE REALLOCATED STORAGE (I.E. RECREATIONAL, ON-SITE ENVIRONMENTAL, AND OFF-SITE ENVIRONMENTAL MITIGATION), AND CONTRACT C COVERING ALL REMAINING OFF-SITE ENVIRONMENTAL MITIGATION WORK REQUIRED AFTER PARTICIPANTS ARE ALLOWED TO USE THE REALLOCATED STORAGE. THIS LOAN INCREASE WILL BE APPLIED TO CONTRACT B. THE THREE CONTRACTS MAY BE AMENDED TO REDISTRIBUTE FUNDS AS MAY BE NEEDED BUT IN NO CASE WILL THE COMBINED CONTRACT AMOUNTS BE ALLOWED TO EXCEED THE OVERALL LOAN APPROVAL AMOUNT.

Creditworthiness: The District has \$40,245,000 in existing debt made up the Series 2012 A & B bonds as shown in Table 2. Since the original loan approval in 2014, the District has paid off its Series 2005 and 2008 Bonds which carried a combined original balance of \$35,135,000.

TABLE 4: EXISTING DEBT

Name	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
Series 2012 A & B	\$49,240,000	\$40,245,000	\$6,813,000	2024	Net Operating Revenues

TABLE 5: FINANCIAL RATIOS

Financial Ratio	Past 3 Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	115% (average) \$34.3M/\$29.9M	109% (average) \$35.7M/\$32.9M
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	165% (strong) (\$34.3M-\$23.1M) \$6.8M	129% (strong) (\$35.7M-\$23.1M) \$9.8M
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	163% (strong) \$48.6M/\$29.9M	148% (strong) \$48.6M/\$32.9M
Debt per Tap (43,025 EQR Taps) weak: >\$5,000 - average: \$2,500 - \$5,000 - strong: <\$2,500	\$935 (strong) \$40.2M/\$43,025	\$2,178 (strong) \$93.7M/\$43,025
Average Monthly Water Bill weak: >\$60 - average: \$30 - \$60 - strong: <\$30	\$47 (average)	\$49 (average)

Collateral: Security for this loan will remain a pledge of the District's operating revenues backed by a rate covenant as evidenced by annual financial reporting. Parity status will be required with the existing Series 2012 A & B Bonds. This security is in compliance with CWCB Financial Policy #5 (Collateral).

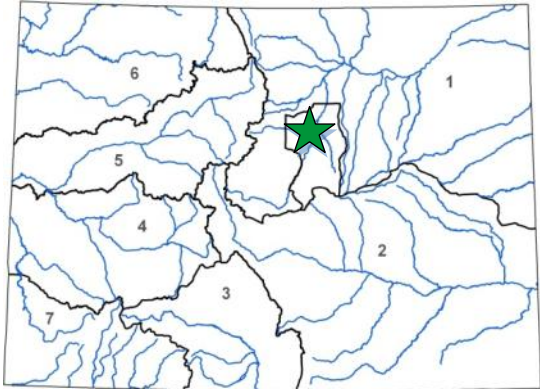
cc: Stephanie Stanley, Director, Finance & Administration, Centennial Water & Sanitation District
Jennifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program - Project Data Sheet



(Loan Increase)

L O A N D E T A I L S	
Project Cost:	\$57,459,314
CWCB Loan (with Service Fee):	\$53,486,267
Loan Term and Interest Rate:	30 years @ 3%
Funding Source:	Severance Tax Perpetual Base 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:	Reservoir Storage
New Storage:	6,922 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 Centennial Water & Sanitation District provides water and wastewater services to the residents and businesses of Highlands Ranch in 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 would result in the District securing renewable water rights that on average would supply 16% of its average annual water demand. Of the 20,600 acre-feet proposed to be reallocated, the District would receive 6,922 acre-feet of storage, or 33.6% of the total reallocation. The District will store Chatfield water in accordance with water court Case Nos. 83CW184, 84CW411, and 85CW314.

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. Construction cost in October 2015 estimated the overall Reallocation Project to cost to \$134 million. An October 2017 cost estimate revised this cost to be \$171 million. The District is seeking an increase to its Chatfield loan to cover its share of the cost difference.

