



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: 10a. Change to Existing Loans
Central Colorado Water Conservancy District – Chatfield Reallocation Project

Introduction

The Central Colorado Water Conservancy District (District) received approval of a \$28,451,700 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 4,274 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 to cover a portion its share of the Reallocation Project cost increase. See attached Project Data Sheet for a location map and Project summary.

CWCB and the District negotiated the District's purchase of 1,425 AF orphan shares originally owned by the Western Mutual Ditch Company, to include a grant from CWCB to cover 20% of the purchase cost. The contracted grant amount was \$1,853,882.25 which was 20% of the Water Provider Agreement estimated cost of \$6,504.85/AF (\$134 million). Extending the 20% discount to the October 2017 revised cost of \$8,300.97/AF (\$171 million) would result in a grant increase of \$511,894.20.

Staff Recommendation for Loan

Staff recommends the Board request the General Assembly to authorize a loan increase not to exceed \$1,548,229 (\$1,532,900 for Project costs and \$15,329 for the 1% service fee) to the Central Colorado Water Conservancy 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 \$29,999,929 (\$29,702,900 for Project costs and \$297,029 for the 1% service fee). The loan terms shall remain 30 years at the agricultural interest rate of 1.75% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Staff Recommendation for Grant

Staff recommends the Board request the General Assembly to authorize a grant in the amount of \$511,894.20 to the Central Colorado Water Conservancy District to assist with the purchase of the 1,425 Western Mutual Ditch Company Shares. This increase will be reflected in the 2018 CWCB Projects Bill.



(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 an agricultural interest rate, which was set in 2014, and will remain, at 1.75% for a 30-year term.

The District's WPA is for a total of 4,274 AF. Of that amount, 1,425 AF came from the purchase of Western Mutual Ditch Company's (WMDC) shares, which were being held by CWCB as orphan shares when WMDC dropped out of the Project. In 2014, CWCB negotiated the sale of those WMDC Shares to the District which included a grant from CWCB for 20% of the purchase cost. With these negotiations, the District agreed to use water associated with the 1,425 AF storage allotment downstream to the District's boundaries; thereby improving stream flows downstream of Chatfield when the District makes releases. A grant contract was signed between the District and CWCB for \$1,853,882.25 (1,425 AF x \$6,504.85/AF x 20%). That grant was fully disbursed and closed out. Should the CWCB Board decide to apply the 20% purchase grant to the revised October 2017 cost estimate, then the total grant would equal \$2,365,776.45 (1,425 AF x \$8,300.85/AF x 20%), which is an increase of \$511,894.20.

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 (4,274 AF) | \$27,801,728.90 | \$35,478,345.78 |
| 20% Grant for Western Mutual's Shares (1,425 Shares) | \$1,853,882.25 | \$2,365,776.45 |
| Borrower's Escrowed Cash | \$0 | \$3,409,669.33 |
| CWCB Loan Amount | \$28,170,000 ¹ | \$29,702,900 |
| CWCB Loan Amount (Including 1% Service Fee) | \$28,451,700 | \$29,999,929 |
| CWCB Annual Loan Payment | \$1,227,115 | \$1,293,890 |
| CWCB Annual Loan Obligation (1 st Ten Years) | \$1,349,826 | \$1,423,279 |

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 \$26,925,000 in existing debt, not including this original CWCB loan for the Reallocation Project. In 2012, the District received voter approval for debt up to \$60 million. The original Chatfield loan was taken out of that authorization as was the 2013 \$30 million bond. Of the \$60 million voter approved debt limit, a balance of \$1,548,300 remains for new debt. This loan increase will take the remaining debt authorization and the District will use cash on hand to make up the remaining shortfall.

TABLE 4: EXISTING DEBT

| Lender | Original Balance | Current Balance | Annual Payment | Maturity Date | Collateral |
|-----------|------------------|-----------------|----------------|---------------|-----------------|
| 2013 Bond | \$30,000,000 | \$26,925,000 | \$1,968,762 | 2035 | 3 Mill Tax Levy |

TABLE 5: DEBT SERVICE FUND FINANCIAL RATIOS¹

| Financial Ratio | Past 2 Years | Future w/ Project |
|---|--|---|
| Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120% | 196% (strong) \$3.98M/\$2.03M | 115% (average) \$3.98M/\$3.45M |
| Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120% | 199% (strong) (\$3.98M-\$0.06M) \$1.97M | 116% (average) (\$3.98M-\$0.06M) \$3.39M |
| Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100% | 443% (strong) \$9.00M/\$2.03M | 162% ² (strong) \$5.60M/\$3.45M |

¹ Ratio's are restricted to only that revenue which is legally available to pay the debt service (2012 Ballot Question CCWCD Question 4A 3 Mill tax levy), and the expenses that can legally be paid by said revenue (2013 Bond and this CWCB loan debt service).

²District's cash for project will come from unrestricted general funds and not from its Debt Service Fund.

Collateral: Security for this loan will remain the voter approved tax levy issued pursuant to the 2012 ballot question CCWCD Question 4A, and annual financial reporting. Parity status will be required with the existing 2013 Bond. This security is in compliance with CWCB Financial Policy #5 (Collateral).

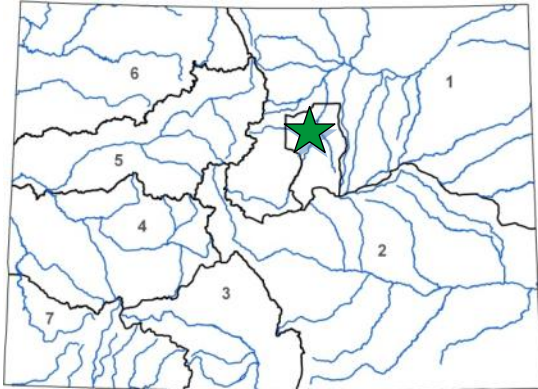
cc: Randy Ray, Executive Director, Central Colorado Water Conservancy District
Jennifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program - Project Data Sheet



(Loan Increase)

| L O A N D E T A I L S | |
|-------------------------------|------------------------------------|
| Project Cost: | \$35,478,346 |
| CWCB Loan (with Service Fee): | \$29,999,929 |
| Loan Term and Interest Rate: | 30 years @ 1.75% |
| Funding Source: | Severance Tax Perpetual Base Fund |
| B O R R O W E R T Y P E | |
| Agriculture | Municipal Commercial |
| 100% | 0 % Low - 0% Mid - 0% High 0% |
| P R O J E C T D E T A I L S | |
| Project Type: | Reservoir Storage |
| New Storage: | 4,274 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 Central Colorado Water Conservancy District is located in the South Platte River basin between Denver and Fort Morgan including Beebe Draw, and the lower portions of the Box Elder Creek and Lost Creek drainages. Approximately 210,000 acres of irrigated agricultural lands are served by the District. The District is participating in the Chatfield Reallocation Project to increase the availability of augmentation water for users within its District. Of the 20,600 acre-feet proposed to be reallocated, the District would receive 4,274 acre-feet of storage, or 20.75% of the total reallocation. The location of Chatfield provides the ability to replace well depletions to all locations within the District.

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.

