



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: 10d. Change to Existing Loans
Colorado Parks and Wildlife – Chatfield Reallocation Project

Introduction

Colorado Parks and Wildlife (CPW) received approval of a \$7,000,000 loan for its participation in the Chatfield Reallocation Project at the September 2015 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. CPW is purchasing 1,000 AF of the reallocated storage and is proportionally responsible for all Reallocation Project costs. For the purpose of this loan, CPW's participation in the Reallocation Project is defined as the Project.

The Interagency Agreement (IAA) between CWCB and CWP was executed on October 16, 2017 for \$6,504,850 which was based on the Reallocation Project cost at the time the Water Provider Agreement was executed (\$134 million or \$6,504.85/AF). 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. CPW is seeking an increase to its CWCB loan for 100% of its share of the Reallocation Project cost increase. Because CPW has already started repayment on the 2014 IAA, the loan increase will be through a new separate IAA. See attached Project Data Sheet for a location map and Project summary.

Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$1,796,120 to the Colorado Parks and Wildlife for its participation in the Chatfield Reallocation Project, from the Construction Fund. The terms shall be 30 years at an interest rate of 0% per annum. CPW, in coordination with the Department Controller, will encumber from its Wildlife Cash Fund or other legally available fund, an amount of \$59,871, to be transferred annually to CWCB's Construction Fund, until such time as its debt obligation is paid in full.



(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 AWARDING CONCRETE EXPRESS, INC. WITH THE ENVIRONMENTAL MITIGATION PROJECTS OF SOUTH PLATTE AND MARCY GULCH. CRMC IS IN THE PROCESS OF AWARDING 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.

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 (1,000AF)	\$6,504,850	\$8,300,970
Borrower's Escrowed Cash	\$0	\$0
Original 2014 IAA Loan Amount	\$6,504,850	\$6,504,850
Original 2014 IAA Annual Loan Payment	\$216,828	\$216,828
New IAA Loan Amount	-	\$1,796,120
New IAA Annual Loan Payment	-	\$59,871
Combined Annual Loan Payment	-	\$276,699

Contracting: CPW's original 2014 IAA loan was fully disbursed into CPW's project escrow account. Upon execution of the new IAA, the funds will be similarly disbursed into CPW's project escrow account.

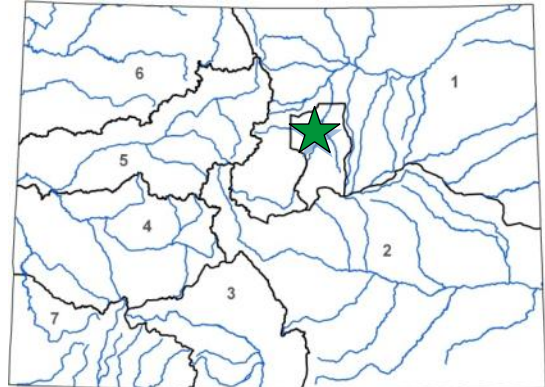
cc: Justin Rutter, CFO, Colorado Parks and Wildlife
Jennifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program - Project Data Sheet



(Loan Increase)

L O A N D E T A I L S	
Project Cost:	\$8,000,970
CWCB Loan:	\$8,000,970
Loan Term and Interest Rate:	30 years @ 0%
Funding Source:	Construction Fund
B O R R O W E R T Y P E	
State Government - DNR Agency	
P R O J E C T D E T A I L S	
Project Type:	Reservoir Storage
New Storage:	1,000 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

Colorado Parks and Wildlife (CPW) is working cooperatively with CWCB to arrange for financing related to the Chatfield Reallocation Project. CPW purchased 1,000 AF of Project storage space CWCB was holding within a larger "orphan share" pool.

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. CPW and CWCB signed an Interagency Agreement (IAA) in 2015 for a loan amount of \$6,504,850 based on the October 2015 estimated Project cost. This increase will be executed through a new IAA in the amount of \$1,796,120.

