

COLORADO Colorado Water Conservation Board Department of Natural Resources 1313 Sherman Street Denver, CO 80203

P (303) 866-3441 F (303) 866-4474 John Hickenlooper, Governor

Robert Randall, DNR Executive Director

James Eklund, CWCB Director

TO:	Colorado Water Conservation Board Members
FROM:	Chris Sturm, Watershed and Flood Protection Section
DATE:	July 21, 2016
AGENDA ITEM:	23. Fish and Wildlife Resources Grant - Chatfield Mitigation

Background: In a letter submitted June 29, 2016 the Chatfield Reservoir Mitigation Company, Inc. (CRMC) requests the Colorado Water Conservation Board (CWCB) to consider a grant from the CWCB Fish and Wildlife Resources Fund pursuant to C.R.S. Section 37-60-122.2 and Board Policy 20 (both attached). The subject of Board Policy 20 is the consideration and approval of fish and wildlife resources fund grant applications pursuant to sub-sections 2-4 of section 37-60-122.2, C.R.S. Pursuant to the policy, the Board accepts applications throughout the year for grants from the Fish and Wildlife Resources Fund. The Chatfield Mitigation application will address impacts from the Chatfield Reservoir Storage Project (CSRP). In accordance with C.R.S. Section 37-60-122.2, a Fish and Wildlife Mitigation Plan was prepared for the Colorado Parks and Wildlife Commission. The Mitigation Plan was approved by the Commission in November 2013 and the CWCB approved the final Mitigation Plan at its January 2014 Board meeting. The letter requests a Mitigation Grant to reduce, minimize, or avoid undesirable impacts on fish and wildlife resources.

Discussion

The CWCB Fish and Wildlife Resources Fund, created under C.R.S. Section 37-60-122.2 was developed to assist in offsetting impacts associated with the construction of storage facilities that require federal permitting. CSRP qualifies for a mitigation grant. The applicant is requesting \$814,270, an amount equal to 5% of the construction costs associated with the project. This meets the criteria in Board Policy 20. The total mitigation costs associated with the Mitigation Plan are \$7,439,300. This amount is in addition to mitigation work required as part of the federal permitting process. The federal process (Feasibility Report and Environmental Impact Statement) for the CRSP identified \$58,500,000 in environmental mitigation work and \$47,300,000 in recreation mitigation work.

Staff will work with the applicant to ensure that all designs for mitigation plans align with CWCB's objectives in stream restoration (where applicable) and comply with CWCB's Rules and Regulations for Regulatory Floodplains in Colorado. The majority of the work associated with the Mitigation Plan is on Plum Creek upstream of Chatfield Reservoir.

Staff recommendation

Staff recommends a Fish and Wildlife Resource Fund grant to the Chatfield Mitigation Company, Inc. in the amount of \$814,270 to cover eligible design and construction costs required in the Fish and Wildlife Mitigation Plan approved by the Board in January 2014.



POLICY NUMBER: 20

SUBJECT: CONSIDERATION AND APPROVAL OF FISH AND WILDLIFE RESOURCES FUND GRANT APPLICATIONS PURSUANT TO SUB-SECTIONS 2-4 OF SECTION 37-60-122.2, C.R.S.

EFFECTIVE DATE: May 17, 2011

POLICY: The Colorado Water Conservation Board (CWCB) will accept applications throughout the year for grants from the Fish and Wildlife Resources Fund for design plans, engineering, and construction projects to: (1) address impacts from the construction of water diversion, delivery, and storage facilities that require a permit, license, or other approval from the United States; and (2) respond to needs of declining native species and to those species protected under the federal "Endangered Species Act of 1973", 16 U.S.C. sec. 1531, et seq., as amended, in a manner that will carry out the state water policy.

Applications for grants from the Fish and Wildlife Resources Fund will be accepted in the following categories:

- 1. Mitigation Grants to reduce, minimize, or avoid undesirable impacts on fish and wildlife resources as outlined in the official state recommendation, i.e. the State Fish and Wildlife Mitigation Plan (Mitigation Plan).
- 2. Enhancement Grants to improve the habitat of fish and wildlife resources beyond existing conditions in the vicinity of the project.
- 3. Species Recovery Grants for the purpose of responding to needs of declining native species and to those species protected under the federal "Endangered Species Act of 1973", 16 U.S.C. sec. 1531, et seq., as amended, in a manner that will carry out the state water policy.

The Board shall make Mitigation Grants only if the applicant funds mitigation costs for the first 5 percent of the project's design, engineering, and physical construction costs (construction costs). The Board shall make Mitigation Grants for the costs of mitigation for the impacts to fish and wildlife resources from the construction, operation, or maintenance of water diversion, delivery, and storage facilities up to an additional 5 percent of a project's construction costs. Mitigation Grant disbursements shall not exceed 70 percent of the amount of the grant during any fiscal year. Mitigation grants shall be made only for recommendations in the Mitigation Plan. The Board does not intend to make Mitigation Grants for mitigation required outside of the Mitigation Plan. Mitigation should not include that already required by a Federal Record of Decision, County 1041 permit, or other permitting entity. The Mitigation Plan may be adopted as part of a Federal Record of Decision or other permit. If so, the Board shall fund only those components of the adopted Mitigation Plan that are not included as part of the permitting entity mitigation requirement. Mitigation grants shall only be awarded for a project after that project has received a permit, license, or other approval from the United States and/or other permitting entities.

The Board shall consider applications for Enhancement Grants after receiving a recommendation from the Wildlife Commission. The Board may award an Enhancement Grant with the concurrence of the Wildlife Commission.

Enhancement Grant costs will be shared equally by the CWCB and the Division of Wildlife.

The Board shall consider applications for Species Recovery Grants when funding is not available from the Native Species Conservation Trust Fund.

The CWCB may, in any year, approve Enhancement and Species Conservation Grants that the Board deems worthy of funding through the Fish and Wildlife Resources Fund. Mitigation Grants shall be funded and will take precedence over Enhancement and Species Recovery Grants. The CWCB will manage the Fish and Wildlife Resources Fund in a manner that, over time, distributes grants evenly between east and west slope applicants.

In the event that funds in the Fish and Wildlife Resources Fund are insufficient to fully fund a Mitigation Grant request, the applicant will receive disbursements of the grant as the General Assembly allocates such money for such purposes. The CWCB may determine that full funding is not available based on the number of Mitigation Grant applications and the distribution between east and west slope applicants.

Fish and Wildlife Resources Fund allocations will be made for both Board Polices 15 and 20 in the order that applications are received and approved.

The project applicant must have completed a fully executed funding contract with the CWCB within 2 years of the grant authorization by the CWCB or the Board will consider de-authorization of the grant.

- PURPOSE: To establish an approval process for grants from the Fish and Wildlife Resources Fund.
- APPLICABILITY: This policy and procedure applies to applications for grants from the Fish and Wildlife Resources Fund.
- PROCEDURE: Prior to a Board meeting, the CWCB staff will prepare for the Board's consideration a summary of the technical, financial, and institutional characteristics of each proposed design plan or construction project. Each application will be reviewed for conformity with the goals and objectives of the CWCB Strategic Plan. Grant applications for Mitigation Grants shall be funded if the funds are available, and Enhancement and Species Recovery Grants will be considered after Mitigation Grants are fully funded.

The Board will consider and CWCB staff will evaluate and recommend to the Board Enhancement and Species Recovery Grant applications based on the following:

- Soundness of the project design, work plan or plan of study;
- Promotion of the goals and objectives of the Board's Strategic Plan;
- The need for the proposed project;
- The need for financial assistance; and
- Financial, technical, or administrative participation or coordination by all affected local governmental or other entities (in-kind or cost-share funding).
- NOTE: Recognizing that future needs and responses to those needs cannot be predicted with certainty, the Colorado Water Conservation Board reserves the right to recommend for funding any design plan, engineering, or construction project that

it determines would: (1) address the fish and wildlife impacts from the construction of water diversion, delivery, and storage facilities that require a permit, license, or other approval from the United States; or (2) respond to needs of declining native species and to those species protected under the federal "Endangered Species Act of 1973",16 U.S.C. sec. 1531, et seq., as amended, in a manner that will carry out the state water policy.

Approved by the CWCB Date May 17, 2011 Agenda Item 10

37-60-122.2. Fish and wildlife resources - legislative declaration - fish and wildlife resources fund - authorization.

(1) (a) The general assembly hereby recognizes the responsibility of the state for fish and wildlife resources found in and around state waters which are affected by the construction, operation, or maintenance of water diversion, delivery, or storage facilities. The general assembly hereby declares that such fish and wildlife resources are a matter of statewide concern and that impacts on such resources should be mitigated by the project applicants in a reasonable manner. It is the intent of the general assembly that fish and wildlife resources that are affected by the construction, operation, or maintenance of water diversion, delivery, or storage facilities should be mitigated to the extent, and in a manner, that is economically reasonable and maintains a balance between the development of the state's water resources and the protection of the state's fish and wildlife resources.

(b) Except as provided in this paragraph (b), the applicant for any water diversion, delivery, or storage facility which requires an application for a permit, license, or other approval from the United States shall inform the Colorado water conservation board, wildlife commission, and division of wildlife of its application and submit a mitigation proposal pursuant to this section. Exempted from such requirement are the Animas-La Plata project, the Two Forks dam and reservoir project, and the Homestake water project for which definite plan reports and final environmental impact statements have been approved or which are awaiting approval of the same, applicants for site specific dredge and fill permits for operations not requiring construction of a reservoir, and applicants for section 404 federal nationwide permits. If an applicant that is subject to the provisions of this section and the commission agree upon a mitigation plan for the facility, the commission shall forward such agreement to the Colorado water conservation board, and the board shall adopt such agreement at its next meeting as the official state position on the mitigation actions required of the applicant. In all cases the commission shall proceed expeditiously and, no later than sixty days from the applicant's notice, unless extended in writing by the applicant, make its evaluation regarding the probable impact of the proposed facility on fish and wildlife resources and their habitat and to make its recommendation regarding such reasonable mitigation actions as may be needed.

(c) The commission's evaluation and proposed mitigation recommendation shall be transmitted to the Colorado water conservation board. The board within sixty days, unless extended in writing by the applicant, shall either affirm the mitigation recommendation of the commission as the official state position or shall make modifications or additions thereto supported by a memorandum that sets out the basis for any changes made. Whenever modifications or additions are made by the board in the commission's mitigation recommendation, the governor, within sixty days, shall affirm or modify the mitigation recommendation which shall then be the official state position with respect to mitigation. The official state position, established pursuant to this subsection (1) shall be communicated to each federal, state, or other governmental agency from which the applicant must obtain a permit, license, or other approval.

(2) (a) Moneys transferred to the fish and wildlife resources fund pursuant to the provisions of section 37-60-121 (6) are hereby continuously appropriated to the Colorado water conservation board for the purpose of making grants pursuant to this subsection (2) and for offsetting the direct and indirect costs of the board for administering the grants. The interest earned from the investment of the moneys in the fund shall be credited to the fund.

(b) To the extent that the cost of implementing the mitigation recommendation made pursuant to subsection (1) of this section exceeds five percent of the costs of a water diversion, delivery, or storage facility, the board shall, upon the application of the applicant, make a mitigation grant to the applicant. The amount of the grant shall be sufficient to pay for the mitigation recommendation as determined by this section to the extent required above the applicant's five percent share. Any additional enhancement shall be at the discretion and within the means of the board. Under no circumstance shall the total amount of the grant exceed five percent of the construction costs of the project, or be disbursed in installments that exceed seventy percent of the amount of the grant during any fiscal year. Any mitigation cost in excess of ten percent of the construction costs of a project shall be borne by the applicant.

(c) An applicant may apply for an enhancement grant by submitting to the commission and the board an enhancement proposal for enhancing fish and wildlife resources over and above the levels existing without such facilities. The commission shall submit its recommendations on the proposal to the board for its consideration. The board, with the concurrence of the commission, may award a grant for fish and wildlife enhancement. Any such enhancement grant will be shared equally by the Colorado water conservation board's fish and wildlife resources fund and the division of wildlife's wildlife cash funds and other funds available to the division.

(d) For the purpose of this subsection (2), construction costs means the best estimate of the physical construction costs as fixed by the Colorado water conservation board as of the date of the grant application. Costs should be limited to design, engineering and physical construction and will not include the costs of planning, financing, and environmental documentation, mitigation costs, legal expenses, site acquisition or water rights.

(e) Species recovery grants from the fish and wildlife resources fund may be made for the purpose of responding to needs of declining native species and to those species protected under the federal "Endangered Species Act of 1973", 16 U.S.C. sec. 1531, et seq., as amended, in a manner that will carry out the state water policy.

(f) (Deleted by amendment, L. 2001, p. 692, § 28, effective May 30, 2001.)

(3) Decisions relating to the official state mitigation position made pursuant to paragraph (c) of subsection (1) of this section shall not be subject to judicial review.

(4) The board shall distribute mitigation and enhancement grants reasonably and equitably among water basins toward the end that those projects sponsored by beneficiaries east of the continental divide receive fifty percent of the money granted and those projects sponsored by beneficiaries west of the continental divide receive fifty percent of the money granted under this section.

(5) The general assembly hereby recognizes the role instream flows and river restoration projects play in mitigating the effects of the construction, operation, and maintenance of water diversion, delivery, and storage facilities. Therefore, the Colorado water conservation board and the operators of existing water diversion, delivery, or storage facilities projects are hereby authorized to apply directly to the board for moneys for projects to carry out the purposes of this section. The board is authorized to grant such moneys if it finds that such projects will further the purposes of this section.

Source: L. 87: Entire section added, p. 1297, § 5, effective July 13. L. 97: (1)(a) and (2)(a) amended and (2)(e) added, p. 1600, § 1, effective June 4. L. 98: (2)(f) added, p. 1004, § 5, effective May 27. L. 99: (2)(a) amended, p. 628, § 36, effective August 4. L. 2001: (2)(a), (2)(c), (2)(e), and (2)(f) amended, p. 692, § 28, effective May 30. L. 2002: (5) added, p. 456, § 28, effective May 23.



June 29, 2016

Mr. Kevin Houck Chief, Flood and Drought Section Colorado Water Conservation Board 1313 Sherman Street, Room 721 Denver, Colorado 80203

Re: Application for a Fish and Wildlife Water Resource Fund Project Mitigation Grant, under C.R.S., Section 37-60-122.2 for the Chatfield Reservoir Storage Project.

Dear Mr. Houck:

On behalf of the Chatfield Reservoir Mitigation Company, Inc. (CRMC), this letter requests the Colorado Water Conservation Board (CWCB) to consider at its July Board meeting approval of a grant from the CWCB Fish and Wildlife Resources Fund pursuant to C.R.S. Section 37-60-122.2. CRMC believes that its ongoing implementation of a fish and wildlife mitigation plan in conjunction with the Chatfield Reservoir Storage Project (CRSP) meets the statutory requirements and CWCB policy guidelines for grant approval.

Background

The CRSP was authorized in Section 808 of the Water Resources Development Act (WRDA) of 1986, as amended by Section 3042 of WRDA 2007, authorizing the Secretary of the Army to reallocate existing storage space at Chatfield Reservoir, to include additional storage for municipal and industrial water supply, agriculture, environmental restoration, recreation, fishery habitat protection, and enhancement. CRMC is undertaking the Chatfield Reservoir Storage Project (CRSP) in close cooperation with the U.S. Army Corps of Engineers (USACE).

In 1996, the Colorado Department of Natural Resources (CDNR), on the behalf of fifteen water providers, requested the USACE to evaluate the use of Chatfield Reservoir for additional water supply purposes. In 1999, the Chatfield Reservoir Storage Reallocation Final Integrated Feasibility Report and Environmental Impact Statement (FR/EIS) process was initiated to conduct an analyses required by the USACE, Chief of Engineers' (ER 1105-2-100, Chapter 4).

On March 29, 2014, Jo-Ellen Darcy, Assistant Secretary of the Army (Civil Works), by memorandum to the Deputy Commanding General for Civil and Emergency Operation, concurred that the proposed CRSP to be technically sound, environmentally acceptable and economically justified, and approved the FI/EIS, dated July 2013, with Addendum 1. Concurrently, the Assistant Secretary of the Army signed the Record of the Decision (ROD) for the CRSP, signifying that it was in compliance with the National Environmental Policy Act. A copy of the memorandum and ROD are attached.

The approved and selected plan in the FR/EIS (Alternative 3) provides for the development of 20,600 acre-feet of storage for expanded uses. The storage is provided through a reallocation of the exclusive flood control pool to a joint conservation/flood control pool. The 20,600 in additional storage raises the conservation pool elevation level 12 feet and provides an average annual yield of 8,539 acre-feet per year. The identified environmental and recreational impacts identified in the FR/EIS are a direct result of impacts associated with raising the reservoir pool height 12 feet.

In accordance with C.R.S. Section 37-60-122.2, a Fish and Wildlife 122.2 Mitigation Plan was prepared for the Colorado Parks and Wildlife Commission (Commission). That Plan was approved by the Commission in November 2013 and the CWCB approved the final 122.2 Mitigation Plan, at its January 2014 Board meeting. A copy of the 122.2 Mitigation Plan is attached

The FR/EIS for the CRSP identified \$58,500,000 in environmental mitigation work and \$47,300,000 in recreation mitigation work. In addition to that, the Fish and Wildlife 122.2 Mitigation Plan included \$7,439,300 of additional environmental mitigation that includes \$6,088,600 in additional mitigation work along Plum Creek, \$369,600 for aquatic habitat enhancements on the South Platte River upstream of the Reservoir, \$265,000 for aquatic habitat enhancements downstream of the Reservoir Though Chatfield Reservoir is an existing facility, the USACE has calculated the cost of construction for the new storage (20,600 AF), to be \$16,285,392, as summarized in the Water Storage Agreement, Exhibit C.II, accepted by CRMC. The storage cost was based on the design and construction cost of the original facility, converted to present day value.

Discussion

The CWCB Fish and Wildlife Resources Fund, created under C.R.S. Section 37-60-122.2 was developed to assist in offsetting impacts associated from the construction of storage facilities that require federal permitting. It is the CRMC's opinion that the CRSP qualifies for \$814,270 (\$16,285,392 x 0.05) Fish and Wildlife Resource Fund - Mitigation Grant, based on review of Section 37-60-122.2 and CWCB's Policy No. 20, as summarized as follows:

- Mitigation grants funds can only be used for mitigation work identified in the 122.2 Mitigation Plan and that are in addition to the mitigation work identified in the FR/EIS; (An additional \$7,439,300 in mitigation work has been identified in the 122.2 Mitigation Plan, beyond the mitigation work identified in the FR/EIS)
- 2) Mitigation grants fund can only be used for projects that have a federal permitting component. (*FR/EIS complete and ROD issued by USACE.*)
- 3) The applicant must first cover the initial mitigation work in an amount up to 5% of the design, engineering, and physical construction cost of the Project; (*CRMC to cover initial* 5%, leaving a remaining mitigation work balance of \$6,625,030 to be covered by CRMC, less any grant funds).

- 4) The maximum mitigation grant issued by the Board will be an additional 5% of the Project's construction costs for any remaining mitigation work; and (*Remaining mitigation work greatly exceeds maximum grant of 5% of the construction costs*)
- 5) The grant request cannot exceed 70% of the total monies available in the Fund.

The CRMC, in partnership with the USACE, CDNR and others, are actively moving forward in implementing the requirements outlined in the FR/EIS. Considerable progress has already been made since CRMC was formed in October 2015 moving environmental mitigation and recreational modification design plans forward, with construction anticipated to commence in summer of 2017. The requested grant funds will greatly assist CRMC is meeting its operational budget needs during the design and construction phase for the mitigation efforts identified in the 122.2 Mitigation Plan.

The CRMC looks forward to the CWCB Board's favorable consideration of the \$814,270 Mitigation Grant request. Enclosed are letters from various entities involved in the CRCP expressing their support for this grant application. I plan to attend your July Board meeting in person to discuss this application and the CRSP, as may be appropriate, but please don't hesitate to contact me or CRMC's General Manager, Tim Feehan, if you should have any questions in the meantime.

Sincerely,

Barbara Biggs Program Manager for CRMC

c: James Eklund, Director CWCB Chris Sturm, CWCB Kirk Russell, CWCB Tim Feehan, CRMC General Manager Chris Thorne, Holland & Hart LLP

Enclosures:

- 1) Memorandum to the Deputy Commanding General for Civil and Emergency Operation.
- 2) Record of Decision
- 3) Water Storage Agreement, Exhibit C II
- 4) CRMC Letters of Support



DEPARTMENT OF THE ARMY OFFICE OF THE ASSISTANT SECRETARY CIVIL WORKS 108 ARMY PENTAGON WASHINGTON DC 20310-0108

MAY 29 2014

MEMORANDUM FOR DEPUTY COMMANDING GENERAL FOR CIVIL AND EMERGENCY OPERATIONS

SUBJECT: Chatfield Reservoir, Colorado, Storage Reallocation Project

I am responding to the memorandum dated April 11, 2014 from the Director of Civil Works, which requested approval of the Feasibility Report and Environmental Impact Statement (FR/EIS) dated July 2013, with Addendum Number 1 dated March 2014, for the Chatfield Reservoir, Colorado, Storage Reallocation Project. The FR/EIS was prepared in response to a request from the Colorado Department of Natural Resources (CDNR) to evaluate the use of Chatfield Reservoir for water supply. The CDNR, acting through the Colorado Water Conservation Board, is the non-Federal sponsor for the FR/EIS study, and will be the sponsor for implementation of the reallocation project.

The storage reallocation project was authorized in Section 808 of the Water Resources Development Act (WRDA) of 1986, as amended by Section 3042 of WRDA 2007 (P.L. 110-114), which authorizes the Secretary of the Army to reassign existing storage at Chatfield Reservoir to joint flood control/conservation purposes, including storage for municipal and industrial (M&I) water supply, agriculture, environmental restoration, and recreation and fishery habitat protection and enhancement. Additionally, Section 116 of Division C, of the Omnibus Appropriations Act of 2009 authorizes the CDNR to perform facility modifications and mitigation for the project, and directs the Secretary of the Army to collaborate with the CDNR and local interests to determine storage cost repayments that reflect the limited reliability of the reallocated storage space.

The FR/EIS states that the selected plan is the least cost alternative, the National Economic Development (NED) plan and the sponsor-supported plan. It provides 20,600 Acre Feet (AF) of storage in Chatfield Reservoir for M&I water supply and other purposes including agriculture, environmental restoration, and recreation and fishery habitat protection and enhancement. The storage will be provided through a reallocation from the exclusive flood control pool to a joint conservation/flood control pool. This raises the conservation pool level 12 feet and provides an average year yield of 8,539 AF/year of M&I water supply at less cost than other alternatives for water supply. The plan meets all federal NED and Corps planning goals along with the Corps Environmental Operating Principles. In addition to water supply benefits, the report states that the project does not reduce the flood control capabilities at Chatfield and the Tri-Lakes system. Due to the pool raise and more frequent fluctuations in pool elevation, significant modifications to relocate and replace existing recreation facilities, resources, and project roads will be implemented as part of the project.



The plan includes environmental mitigation that will replace or compensate for the loss of habitat on Chatfield project lands inundated by the pool raise, including wetlands, bird habitat and habitat (including designated critical habitat) of the federally-threatened Preble's meadow jumping mouse. The selected plan includes monitoring for up to five years of the environmental mitigation features and adaptive management to ensure mitigation success.

Guidance issued by this office on January 22, 2009 granted an exception to the standard Corps policy for calculating the updated cost of storage (UCS). The waiver granted a one-time reduction in the estimated UCS equal to 41 percent of the total UCS. This reduction more equitably reflected the reliability of inflows and fluctuations in yield that limit the availability of water that is stored in the reservoir and withdrawn by the M&I water users. At Fiscal Year 2014 (FY14) price levels, the cost of this storage when the reduction is applied is \$16,285,400. This amount may be paid in one up-front lump sum, or amortized over 30 years for an annual cost of \$844,350 at FY14 price levels using the federal water supply discount rate of 3.125 percent (Economic Guidance Memorandum 14-01).

In addition to the cost of storage and in accordance with the authorization, costs allocated to reallocated storage are funded at 100 percent non-federal expense. This includes costs of the water supply infrastructure, recreation modifications, and environmental mitigation. At FY14 price levels, the total first costs to implement the selected plan is \$124,152,700, of which \$59,335,900 are environmental mitigation costs, \$47,736,100 are recreation modifications, \$795,300 are modifications to the reservoir and infrastructure, and the aforementioned \$16,285,400 represents the cost of storage over 30 years. In addition to these costs, the present value of operations, maintenance, repair, rehabilitation, and replacement (OMRR&R) over 50 years is estimated to be \$59,262,600 making the present value of all project implementation costs to be \$183,415,400. At FY14 price levels and federal FY14 discount rate of 3.5 percent over a 50-year period of analysis, annual costs are estimated to be \$7,800,000, annual benefits are estimated at \$8,400,000, net benefits are \$600,000 and the project benefit cost ratio is 1.08.

In reviewing the report and supplemental materials, including the Director's Report, our office, in conjunction with Army General Counsel, has identified the attached concerns (Attachment A) that need to be addressed by the Corps in an updated report addendum that will clarify each of these issues. This should be completed prior to the Corps submitting the water supply agreement for review and approval.

Based on the information provided in the Corps submittal package, and subject to the aforementioned revisions, I concur with your finding that the proposed reallocation project is technically sound, environmentally acceptable and economically justified. Additionally, I have determined that the facility modifications and mitigation work proposed to be performed by the non-federal sponsor under the authority of Section 116 of Division C of the Omnibus Appropriations Act of 2009 (P .L. 111-8) are integral to the project. I approve the Feasibility Report and Environmental Impact Statement (FR/EIS)

dated July 2013, with Addendum Number 1 dated March 2014, for the Chatfield Reservoir, Colorado, Storage Reallocation Project. I am signing the Record of Decision (enclosed) to signify that this project is compliant with the National Environmental Policy Act. I will review the water storage agreement for approval in a separate action, following the review and official transmittal by Corps Headquarters.

B-uler denry Jo-Ellen Darcy Assistant Secretary of the Army (Civil Works)

Enclosures

2 Enclosures

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- Record of Decision, dated May 29, 2014
 Attachment A, May 28, 2014

RECORD OF DECISION

CHATFIELD RESERVOIR, COLORADO STORAGE REALLOCATION PROJECT

The Chatfield Reservoir Storage Reallocation Final Integrated Feasibility Report and Environmental Impact Statement (FR/EIS), dated July 2013, with Addendum No. 1, dated March 2014, addresses the increasing water demand in the Denver, Colorado metropolitan area. The report recommends increasing the availability of water through the reallocation of existing storage in the Chatfield Reservoir to municipal and industrial (M&I) water supply and other purposes to help meet a portion of existing and future water needs. Based on the FR/EIS, the reviews of other federal, state, and local agencies, input from the public and the review by my staff, I find the plan recommended by the U.S. Army Corps of Engineers to be technically feasible, economically justified, environmentally acceptable and in the public interest. Thus, I approve the Chatfield Reservoir Storage Reallocation Project for implementation.

The recommended plan is Alternative 3, the reallocation of 20,600 acre-feet (AF) of Chatfield Reservoir storage to provide an average year yield of approximately 8,539 AF of water. It is the national economic development plan and the environmentally preferable alternative. The plan consists of the following features:

a. Alternative 3 provides 20,600 AF of storage in Chatfield Reservoir between the elevations 5,432 above mean sea level (msl) and 5,444 msl through a reallocation from the exclusive flood control pool to a joint conservation/flood control pool for M&I water supply and other purposes including agriculture, environmental restoration, recreation, and fishery habitat protection and enhancement. The reallocation raises the conservation pool level 12 feet. Implementation of the pool rise and use of the reallocated storage space would occur in increments as the recreation modifications and the environmental mitigation features are completed. The reservoir operations plan would be modified.

b. The existing recreation facilities, resources and roads that would be affected by the raising of the pool would be replaced.

c. A mitigation plan would compensate for the loss of habitat inundated by the raising of the pool. Mitigation features would be located on 165 acres of Chatfield Project lands; off-site on 888 acres along the West Plum Creek Critical Habitat Unit (CHU) for Preble's mouse; and off-site along 4.5 stream miles of Sugar Creek in the Pike National Forest within the Upper South Platte CHU. A monitoring and adaptive management plan has been included to ensure the adequacy of the mitigation plan.

d. Under the authority of Section 116 of Division C of the Omnibus Appropriations Act of 2009 (Public Law 111-8), the State of Colorado, would implement the recreation modifications and the environmental mitigation features under the oversight of the Corps.

The FR/EIS evaluated various alternatives to increase availability of water in the greater Denver, Colorado area. In addition to Alternative 3, the recommended plan, three other alternatives, all providing an average year yield of 8,539 AF, were identified and evaluated in detail in the FR/EIS, which is incorporated by reference. Alternative 1, the "no action plan" or the "most likely without project condition", included construction of a new Penley Reservoir combined with gravel pit storage, and did not include reallocation of the Chatfield Reservoir. Alternative 2 included non-tributary ground water (NTGW) combined with gravel pit storage, and no reallocation of the Chatfield reservoir of 7,700 acre-feet at the Chatfield reservoir combined with NTGW and gravel pit storage.

The draft FR/EIS was circulated for public review between June 8, 2012, and September 6, 2012. A total of 903 comment letters were received on the draft report. All substantive draft FR/EIS comments were responded to in the final FR/EIS. Two hundred and one comments were received on the final FR/EIS during the public comment period from August 2, 2013 to September 3, 2013. All final FR/EIS comments were reviewed and considered.

The recommended plan incorporates all practicable means to avoid or minimize adverse environmental effects, and the unavoidable impacts are mitigated. The U.S. Fish and Wildlife Service provided final biological opinions on impacts to Preble's meadow jumping mouse and to other federally listed species in Colorado and downstream in the central and lower Platte River basin. Terms and Conditions to implement the Reasonable and Prudent Measures for Preble's mouse include that the Corps will ensure the formal adoption and implementation of the proposed conservation measures, provide annual monitoring reports, and report encounters (dead, injured, or hibernating) with the Preble's mouse.

Technical and economic criteria used in the formulation of alternative plans were those specified in the Water Resource Council's <u>Economic and Environmental</u> <u>Principles and Guidelines for Water and Related Land Resources Implementation</u> <u>Studies.</u> All applicable laws, executive orders, regulations and state and local government plans were considered in the evaluation of alternatives. Based on review of these evaluations, I find that the benefits of the Chatfield Storage Reallocation Project outweigh the costs and any adverse effects. This Record of Decision completes the National Environmental Policy Act compliance process for the project.

Date

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Jo-Ellen Darcy Assistant Secretary of the Army (Civil Works)

EXHIBIT C: COST COMPUTATIONS I - LAKE STORAGE

Storage Pool (Column 1)	Elevation Range (feet, NGVD) (Column 2)	Usable Storage (acre-feet) <u>1</u> / <u>2</u> / (Column 3)	Percent of Total Usable Storage 2/ (Column 4)
Flood Control maximum surcharge/spillway design flood	5,500 - 5,520.9		
Exclusive Flood Control	5,444 - 5,500	186,179 AF	81.20%
Joint-Use Flood Control-Conservation	5,432 - 5,444	20,600 AF	8.99%
CDNR (Chatfield Water Providers)		20,600 AF	8.99%
Multipurpose-Conservation	5,385 - 5,432	22,483 AF	9.81%
CDNR (Denver Water <u>3</u> /)	5,423 - 5,432	11,134 AF	4.86%
Inactive Pool	5,377 - 5,385		
Total Usable Storage		229,262 AF	100.00

Source: Reallocation Report Table 2-5, Section 5.3.1.2, Table 5-5, and Appendix B Section 7.09.

NOTES:

- 1/ Storage remaining after 100 years of sedimentation from the date the project is operational and does not include dead storage and/or storage set aside for hydropower head.
- 2/ Used to compute CDNR's cost (see Exhibits C-II and C-III).
- <u>3</u>/ Denver's storage rights were established by the April 1979 contract between Denver Water and the State of Colorado for Denver Water to provide water to meet the State's obligation to provide a pool for recreation and fish and wildlife use under the March 1979 contract between the Corps and the State, and to provide water for recreation under the September 1976 contract between the State and the U.S. Department of the Interior to construct recreation facilities under the Land and Water Conservation Act of 1965.

II - *FIRST COST OF STORAGE* TO BE REPAID BY CDNR FOR THE REALLOCATED STORAGE SPACE

The amount to be repaid by CDNR for the first cost of the reallocated storage is calculated using the updated cost of storage method using the use of facilities cost allocation procedure (Source: *Reallocation Report* Section 5.3.1.2). Due to the unique circumstances for this reallocation, the updated cost of storage amount is then adjusted to 41% in accordance with the exemption to policy granted by the Assistant Secretary of the Army for Civil Works, dated January 22, 2009.

- Total *joint-use Chatfield Project* cost updated to FY 2014 = \$441,829,459 1/
- Total reallocated storage space from Article 2.B.1 = 20,600 AF
- Percent of CDNR's share of total usable storage = 8.99%
- Initial calculation of cost for 20,600 AF of water supply storage =

8.99% x \$441,829,459 = \$39,720,468

• Final calculation of first cost of storage applying ASA(CW) policy exemption = $$39,720,468 \times 41\% = $16,285,392 \frac{2}{2}$

NOTES:

- 1/ See Updated Project Cost Estimate Table attached to and made a part of this agreement. Costs are based on FY 2014 updated costs.
- 2/ CDNR's share of the updated joint use Chatfield Project costs, as adjusted for ASA(CW) policy exemption ...

Chatfield Reservoir Mitigation Company 62 West Plaza Drive Highland Ranch, CO 80129

June 27, 2016

Mr. Kevin Houck Chief, Flood and Drought Section Colorado Water Conservation Board 1313 Sherman Street, Room 721 Denver, Colorado 80203

Dear Kevin:

We are writing to support the grant application of the Chatfield Reservoir Mitigation Company (CRMC) for assistance with meeting its obligations under the approved Fish, Wildlife and Recreation Mitigation Plan (FWRMP) (re C.R.S. 37-60-122.2). As you know, this plan includes a listing of the primary responsibilities laid out in the Feasibility Report/Environmental Impact Statement approved by the U.S. Army Corps of Engineers.

Ever since the 122.2 plan was approved in January 2014, we and the other water providers have been hoping there would be funding available in the Fish and Wildlife Resources Fund to help us meet the financial challenges this project presents. We are pleased to learn that there is funding available, and CRMC qualifies for a portion of that funding (\$814,270). We hope that the Colorado Water Conservation Board (CWCB) will be able to allocate the full amount requested.

The funding for which the CRMC has applied will be extremely helpful to the CRMC as they work to accelerate (and complete) the design, engineering – and construction – of the mitigation efforts.

CWCB has been our partner every step of the way, and we look forward to continuing this partnership for many years to come.

Sincerely,

Dan Drucker

Center of Colorado Water Conservancy District

John Kilrow Centennial Water and Sanitation District

Castle Pines North Metropolitan District

Randy Ray Central Colorado Water Conservancy District

Scott Roush Chatfield State Park/Colorado Parks and Wildlife

CENTENNIAL WATER AND SANITATION DISTRICT

June 27, 2016

Mr. Kevin Houck Chief, Flood and Drought Section Colorado Water Conservation Board 1313 Sherman Street, Room 721 Denver, Colorado 80203

RE: Application for a Fish and Wildlife Water Resource Fund Project Mitigation Grant, under CRS 37-60-122.2, for the Chatfield Reservoir Storage Project

Dear Mr. Houck:

Please know that Centennial Water and Sanitation District hereby supports the grant application from the Chatfield Reservoir Mitigation Company to the Colorado Water Conservation Board requesting a grant of \$814,270 from the Fish and Wildlife Resource Fund. Centennial, which provides water service to the 100,000 population community of Highlands Ranch south of Denver, is one of eight participants in the Chatfield Reservoir Storage Project, in partnership with the state of Colorado and others.

The CWCB has been a tremendous supporter through the years of the Chatfield Reservoir Storage Project and this grant will help the project to move forward with the implementation phase of the project. As you know, the project makes use of an existing reservoir to develop additional surface water supplies for use in the South Platte River basin, consistent with the recently finalized Colorado Water Plan.

Thank you for your assistance with our project.

Sincerely,

John M. Kaufmån General Manager



62 West Plaza Drive Highlands Ranch, Colorado 80129 www.centennialwater.org

303-791-0430 Telephone 303-791-0437 Engineering Fax 303-791-3290 Financial Services Fax