

## CHATFIELD RESERVOIR MANAGEMENT AGREEMENT

THIS AGREEMENT ("Chatfield Management Agreement") is made and entered into this 15th day of October, 2015, by and between the State of Colorado by and through the Department of Natural Resources ("CDNR") for the use and benefit of Colorado Parks and Wildlife ("CPW") (successor to Colorado Division of Parks and Outdoor Recreation) and the Colorado Water Conservation Board ("CWCB") hereinafter collectively referred to as the "State," the City and County of Denver, acting by and through its Board of Water Commissioners, a municipal corporation of the state of Colorado ("Denver"); Centennial Water and Sanitation District; Castle Pines Metropolitan District, Castle Pines North Metropolitan District, Center of Colorado Water Conservancy District, Central Colorado Water Conservancy District, and the Town of Castle Rock. The entities listed in this paragraph are referred to as "Parties" or "Party."

WHEREAS, the United States Army Corp of Engineers Omaha District ("Corps"), owns and operates Chatfield Reservoir and Dam. By Contract dated March 1, 1979 ("1979 USA-State Contract"), the Corps provided storage space to the State to control and manage the use of water stored in the space including and below elevation 5432 feet. (All references to elevations in this Agreement are to National Geodetic Vertical Datum.)

WHEREAS, the State and Denver entered into a contract dated April 3, 1979 ("1979 State-Denver Contract") and an Addendum dated October 24, 1980, concerning, in part, the use of storage space in Chatfield Reservoir for the regulation and re-regulation of water

flows occurring at Chatfield Dam in accordance with the terms and conditions under that contract.

WHEREAS, the Corps completed a Final Integrated Feasibility Report and Environmental Impact Statement dated July 2013 to evaluate the feasibility of converting storage pool space from flood control to multi-use and water supply purposes (“Chatfield Reservoir Reallocation Project”).

WHEREAS, by letter of approval and record of decision dated May 29, 2014 (“ROD”), the Corps authorized the reallocation of an additional 20,600 acre feet of storage space, as determined by the volume between elevation 5,432 feet and elevation 5,444 feet, from the exclusive flood control pool to joint use flood control-conservation purposes, including storage for municipal and industrial water supply, agriculture, environmental restoration, and recreation and fishery habitat protection and enhancement (“Reallocation Pool”).

WHEREAS, the State has entered into an “Agreement Between the Department of the Army and the Colorado Department of Natural Resources for Reallocation of Water Storage Space, Recreation Modifications, and Compensatory Mitigation Features at the Chatfield Dam and Reservoir, Colorado” dated October 9, 2014, (“Corps-CDNR WSA”) by which CDNR acquired the right to use for water storage purposes the 20,600 acre feet of additional storage space referenced above, subject to the terms stated therein.

WHEREAS, the State has entered into a number of Water Provider Agreements by which the right to store water in the Reallocation Pool, as well as the costs of construction

and mitigation associated therewith, are allocated to water providers located in the South Platte River Basin. Those water providers are: CWCB, CPW, Centennial Water and Sanitation District, Castle Pines Metropolitan District, Castle Pines North Metropolitan District, Center of Colorado Water Conservancy District, Central Colorado Water Conservancy District, and the Town of Castle Rock (collectively “Reallocation Pool Participants” or individually “Reallocation Pool Participant”).

WHEREAS, the State and the Reallocation Pool Participants negotiated and agreed upon a Fish, Wildlife, and Recreation Mitigation Plan for the Chatfield Reallocation Project, approved by the Colorado Parks and Wildlife Commission on January 9, 2014, pursuant to Section 37-60-122.2, C. R. S., and subsequently approved by CWCB on January 28, 2014 (the “122.2 Mitigation Plan”) defining the mitigation actions required by the State of Colorado in connection with the Chatfield Storage Reallocation Project.

WHEREAS, paragraph 7 of the 1979 State-Denver Contract provides in part:

If [Denver] determines that it will not acquire additional storage capacity under the foregoing provisions, or determines that the additional capacity could be available for joint utilization with other water users without impairment of [Denver’s] full use of the Chatfield facilities for the storage of its water as provided in [the 1979 State-Denver Contract], [Denver] shall become the management authority for such additional storage capacity, subject to such reasonable terms and conditions as may be imposed by the State, acting through the Colorado Water Conservation Board.

WHEREAS, this Chatfield Management Agreement provides for the management and operational terms and conditions for the utilization of the additional storage capacity without impairment of Denver's use of the Chatfield facilities for the storage of its water as provided for in the 1979 State-Denver Contract and without impairment of the Reallocation Pool Participants' use of the Chatfield facilities for the storage of their water.

NOW, THEREFORE, the Parties agree as follows:

1. Management of Storage and Releases. The State, acting through the Colorado State Engineer, shall cause the Corps to operate the outlet facilities of Chatfield Reservoir so as to store water, in priority or by exchange, and to make releases of stored water at the call of Denver and/or each Reallocation Pool Participant. Denver and the Reallocation Pool Participants shall account for and manage storage in their respective pools in Chatfield Reservoir in accordance with applicable decrees and pursuant to paragraph 7 below.

2. Use of Denver/Recreational Pool. Storage space in Chatfield Reservoir located below elevation 5,423 feet is referred to herein as the "Recreational Pool." Storage space in Chatfield Reservoir located between the lower limit of elevation 5,423 feet and the upper limit of elevation 5,432 feet is referred to herein as "Denver's Pool." All Chatfield Reservoir storage capacity at and below elevation 5,432 feet is referred to collectively herein as the "Denver/Recreational Pool." Under the 1979 State-Denver Contract, Denver has the sole and exclusive right to regulate for its own uses and purposes the amount of water stored in Denver's Pool. Nevertheless, Reallocation Pool Participant's water stored in the Reallocation Pool ("Participant Water") may be stored in the Denver/Recreational Pool when

water in Denver's Pool drops below elevation 5,432 feet, and may be stored in the Recreational Pool when and if Denver's Pool is empty and the Recreational Pool is drawn down below 5,423 feet subject to the following terms, conditions and limitations.

2.1. Each Reallocation Pool Participant shall keep track of its Participant Water stored and released each day in and from the Reallocation Pool in accordance with paragraph 7.

2.2. When Denver desires to store water in the space below elevation 5,432 feet at times when Participant Water is occupying space below elevation 5,432 feet pursuant to this paragraph 2, such additions to storage will be accounted for as follows:

2.3.1. Denver's water shall be deemed to be added below all Participant Water. However, Denver's water residing in the reservoir must be stored at or below elevation 5,432 feet, except as otherwise provided in paragraph 4.

2.3.2 Any Participant Water stored in the Denver/Recreational Pool shall retain its character as Participant Water and shall not limit or restrict Denver's ability to store up to the volume defined by elevation 5,432 feet, as such volume is periodically adjusted by the Corps, from any source that Denver may lawfully store in Chatfield Reservoir. Similarly, nothing in this Agreement shall restrict the Reallocation Pool Participants' ability to store up to the volume between elevation 5,432 feet and 5,444 feet, as such volume is periodically adjusted by the Corps, from any source that Reallocation Pool Participants may lawfully store in Chatfield

Reservoir. Participant Water residing in the reservoir cannot exceed the volume of the capacity of elevation 5,432 to 5,444 feet.

3. Management of Environmental Pool. Under the 122.2 Mitigation Plan, the Reallocation Pool Participants agreed to collaborate with the State to create environmental storage space in the Reallocation Pool (“Environmental Pool”) for the primary purpose of subsequent timed releases to alleviate low flow conditions downstream of Chatfield Reservoir. CPW shall manage the Environmental Pool in accordance with the terms of the 122.2 Mitigation Plan. The Parties shall not exchange upon flows released from the Environmental Pool and the Environmental Pool shall have a maximum volume of 2,100 acre feet unless the Environmental Pool is enlarged above 2,100 acre feet by the mutual consent of all parties hereto.

4. Denver’s Use of its Chatfield Water Rights in the Reallocation Pool Space.

The first 1,600 acre feet of the Environmental Pool shall be filled in accordance with the 122.2 Mitigation Plan. If Denver agrees to the use of its water or water rights to fill the Environmental Pool, Denver shall not use any of its storage water rights decreed in Case Nos. W-7997-75, or W-8783-77 (“Chatfield Storage Rights”) to fill the Environmental Pool until after the Chatfield Reservoir water storage rights of the other Reallocation Pool Participants have filled in that water year. If Denver acquires storage capacity in the Reallocation Pool for its own use, or as part of a coalition to add up to 500 acre feet of space to the initial 1,600 acre foot Environmental Pool, Denver shall not exercise its Chatfield Storage Rights to fill any space in the Reallocation Pool in any water year until after the

Chatfield Reservoir water storage rights of the other Reallocation Pool Participants have filled in that water year. Denver shall not use its exchange water rights decreed in Case Nos. W-8783-77 or C.A. 3635 to fill the Environmental Pool. Denver's Chatfield Storage Rights stored in the Environmental Pool and released from storage may be used for recreation, fish culture, and the maintenance and preservation of wildlife through the CWCB instream flow program.

5. Determination of Carryover Storage and Fill. Water stored pursuant to a storage water right decreed to Chatfield Reservoir in the previous water year that remains in storage in Chatfield Reservoir at the beginning of the new water year shall be considered carryover storage and shall be counted toward the fill of such decree in the new water year. Unless a refill right has specifically been decreed, a Party's storage space in Chatfield Reservoir can be filled (including physical and paper fill) once in any water year, less carryover storage determined pursuant to this paragraph 4. Physical and paper fill shall be based upon the allocated space of Denver pursuant to the 1979 State-Denver Contract and each Reallocation Pool Participant pursuant to its Water Provider Agreement and not by the amount of their respective decrees. For accounting purposes under this Chatfield Management Agreement, Denver and the Reallocation Pool Participants shall use a water year of April 1 through March 31, unless provided otherwise by applicable decree confirming water storage rights in Chatfield Reservoir for Denver or a Reallocation Pool Participant.

6. Determination of Evaporation from the Denver/Recreational Pool and the Reallocation Pool. For purposes of determining evaporation in accordance with Paragraph 1.b.(3) of the 1979 State-Denver Contract, the following methodology shall be used unless the Division Engineer for Water Division 1, after consultation with Denver and the Reallocation Pool Participants, requires otherwise:

6.1. Compute Total Surface Area of the reservoir daily based on the 8AM water surface elevation of the reservoir as shown on the Colorado Division of Water Resources surface water conditions website or other applicable information source acceptable to the Division Engineer and the then current relationship between elevation and surface area.

6.2. Compute Gross Evaporation by multiplying the Total Surface Area by the evaporation rate for the previous day (midnight to midnight) calculated using an energy balance methodology with data obtained from a weather station located at the Marcy Gulch Treatment Plant ("New Chatfield Weather Station") to obtain daily gross reservoir evaporation in feet. The initial energy balance methodology to be used is shown on the attached Exhibit A and will only be changed using the procedure described in paragraph 6. If the New Chatfield Weather Station is not operable, whether temporarily or permanently, and until data again become available from the New Chatfield Weather Station then Denver shall apply the following values for gross pan evaporation:



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Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.10	0.09	0.16	0.30	0.52	0.70	0.78	0.78	0.63	0.41	0.20	0.11

[Default pan evaporation rates were developed from Cherry Creek Reservoir data.]

6.3. Compute the Precipitation by multiplying the measured daily precipitation, at the New Chatfield Weather Station or other weather station(s) acceptable to the Division Engineer, by the Total Surface Area.

6.4. For purposes of C.R.S. §37-84-117(5), compute the Precipitation Credit (“Effective Precipitation”) by multiplying the Precipitation by an effective precipitation credit factor of 0.7. The Precipitation Credit shall be limited to the Gross Evaporation.

6.5. Compute Total Net Evaporation by subtracting Precipitation Credit from the total Gross Evaporation.

6.6. Calculate Denver Surface Area based on the 8AM volume of water in storage in the Denver/Recreational Pool and the then current relationship between volume and surface area.

6.7. Compute Denver’s Percentage of Total Net Evaporation by dividing Denver’s Surface Area as determined in subsection 6.6 by the Total Surface Area of the reservoir as determined in subsection 6.1; then multiplying the Total Net Evaporation by Denver’s Percentage of Evaporation to determine Denver’s portion of Total Net Evaporation (“Denver Net Evaporation”).

6.8. Compute Reallocation Pool Participants' portion of Total Net Evaporation (Reallocation Pool Net Evaporation) by subtracting Denver Net Evaporation computed in subsection 6.7 from the Total Net Evaporation computed in subsection 6.5.

6.9. Compute each individual Reallocation Pool Participant's portion of Net Evaporation by multiplying Reallocation Pool Net Evaporation determined in subsection 6.8 by each Reallocation Pool Participant's percentage of water in storage in the Reallocation Pool.

6.10. Denver and the Reallocation Pool Participants may use water rights that are in priority and have not yet filled in that water year to fill space made available in their respective individual storage capacities because of evaporation loss.

6.11 Denver and Reallocation Pool Participants shall share all costs associated with the acquisition, construction and readings of instruments located at the New Chatfield Weather Station that are needed to determine daily evaporation including costs for billing. The costs shall be shared based upon Reallocation Pool Participants' and Denver's portions of Chatfield storage capacity. Because Centennial Water and Sanitation District is the owner of the Marcy Gulch site for the New Chatfield Weather Station, Centennial shall prepare an annual invoice and submit to the representatives of Denver and the Reallocation Pool Participants for payment. Invoices shall be paid within 45 days of receipt.

7. Management of the Chatfield Check Sheet. Denver and Reallocation Pool Participants shall report and provide requested daily water storage and releases to the Division Engineer or his designee on the form known as the Chatfield Check Sheet, unless otherwise agreed by Denver, the Reallocation Pool Participants and the Division Engineer. The check sheet, as depicted in Exhibit B, is an administrative tool developed and used by the Division Engineer to track flows into Chatfield Reservoir and for determining the daily amount of water that may be stored and/or must be released to the river. It may change from time to time. The basic information that must be provided is described below in paragraph 7.3.

7.1 Responsibilities of the Reallocation Pool Participants. The Reallocation Pool Participants shall designate a representative to serve as the main point of communication between the Denver Representative, the Division Engineer and the Reallocation Pool Participants and to coordinate the accounting and operations for the Reallocation Pool Participants. The Reallocation Pool Participants shall be responsible for accounting for their individual reallocation volumes. The representative must report information to Denver and the Division Engineer by 8:30 AM each day, except weekends and holidays after September 30 and before May 1, or as otherwise directed by the Division Engineer. The information reported shall include at least the following information, but which may not be necessary for the check sheet:

(1) the total water stored in the Reallocation Pool for the preceding 8AM – 8AM 24 hour period,

(2) each water right under which the water was stored,

(3) the storage accounts to which the Reallocation Pool Participants have assigned their respective portions of Net Evaporation from the previous day, and

(4) the total amount of water remaining in each of the Reallocation Pool Participants' storage accounts after any releases and the assignment of evaporative loss.

The Parties recognize that volumes of water in the various storage accounts cannot be precisely known until evaporation is calculated, distributed to the parties, and allocated by them among their respective storage accounts.

7.2 Responsibilities of Denver. Denver shall designate a representative to serve as the main point of communication between Denver, the Division Engineer and the Reallocation Pool Representative and to coordinate the accounting and operations for the Reallocation Pool. Denver shall compile the daily accounting for the Chatfield Check Sheet and shall include accounting information described in paragraph 7.3 and Denver and Reallocation Pool evaporation for each day. The goal is to provide the Chatfield Check Sheet accounting, to the extent possible, to the Division Engineer by 10:30 AM each day after May 1 and before September 30, and by 12:00 PM each day from October 1 through April 30. Denver will provide the Chatfield Check Sheet

accounting on the next business day following weekends and holidays after September 30 and before May 1 unless otherwise directed by the Division Engineer.

7.3 Basic Checksheet Information. The following basic information shall be provided by Denver and the Reallocation Pool Participants to the Division Engineer:

- (1) the total water stored in the Denver/Recreational Pool and the Reallocation Pool for the preceding 8AM – 8AM 24 hour period,
- (2) each water right under which the water was stored,
- (3) Denver's water and Reallocation Participants water entering Chatfield from the South Platte mainstem and tributaries to the mainstem,
- (4) the total water released from the Denver/Recreational Pool, and the Reallocation Pool to City Ditch, Last Chance Ditch, Nevada Ditch,
- (5) the total water released from Denver's Pool and the Reallocation Pool to the South Platte River,
- (6) the total water released from the Environmental Pool to the River,
- (7) the respective portions of Net Evaporation from the previous day assigned to Denver/Recreational Pool and the Reallocation Pool, and
- (8) the total amount of water remaining in storage in Denver/Recreational Pool and the Reallocation Pool after any releases and the assignment of evaporative loss.

The Parties recognize that volumes of water in the various storage accounts cannot be precisely known until evaporation is calculated, distributed to the parties, and allocated by them among their respective storage accounts.

7.4 Use of Ditch Capacity. Nothing in this agreement creates or establishes any rights to use capacity in the City Ditch, the Last Chance Ditch or the Nevada Ditch.

7.5 Responsibilities of the Division Engineer. The Division Engineer shall prepare, complete and distribute to Denver and the Reallocation Pool Participants the final version of the Chatfield Check Sheet including any changes made to Denver's Chatfield Check Sheet accounting. The Division Engineer shall request releases of the water by the Corps of Engineers to effectuate releases under the Chatfield Check Sheet.

7.6 Denver Held Harmless. The State and Reallocation Pool Participants agree to hold Denver harmless for delays in receiving of daily accounting information, failure of the Corps to make timely releases, or inadvertent mistakes made by the State, Denver, the Reallocation Pool Participants, Division Engineer or the Corps. Upon discovery, any mistakes shall be corrected promptly. To the extent applicable, the parties are relying upon, and have not waived, the monetary limitations, and all other rights, immunities and protections provided by the Colorado Governmental Immunity Act, C.R.S. §24-10-101, et seq., as it may be amended from time to time.

8. Effect of this Agreement. This Chatfield Management Agreement is intended to implement and coordinate operations among the parties that will store water in Chatfield Reservoir. Nothing herein alters or modifies the 1979 State-Denver Contract or the Corps-

CDNR WSA. In the event of conflict, the terms and conditions of the 1979 State-Denver Contract and the Corps-CDNR WSA shall control over this Chatfield Management Agreement, and in that event, the Parties shall use best efforts to promptly reform this Agreement to reflect the intent of the Parties at the time of its original execution, and in a manner consistent with each contract or agreement.

9. Effective Date. This Agreement shall not become effective until it is signed by all required signatories below. Upon signing of all required signatories, the Effective Date of this Agreement shall be the date it is signed by Denver's representative who shall be the last required signatory.

10. Amendment and Modification. This Agreement may be altered, amended, or terminated only by a duly executed written instrument approved by all Parties hereto.

11. Binding Effect. This Agreement and the rights and obligations created hereby shall be binding upon and shall inure to the benefit of the Parties hereto as well as their respective successors and assigns, if any.

12. Venue and Governing Law. The sole venue for any dispute resulting in litigation shall be in the Water Division 1 Water Court. This Agreement shall be governed by and construed under the laws of the State of Colorado.

13. Force Majeure. The parties shall not be responsible for any failure or delay in the performance of any obligations under this Agreement caused by acts of God, flood, fire, war or public enemy. Any declared force majeure that remains in effect for longer than ninety (90) days entitles any party to unilaterally terminate this Agreement.

IN WITNESS WHEREOF, the parties have executed this Chatfield Management  
Agreement as of the day and year first above written.

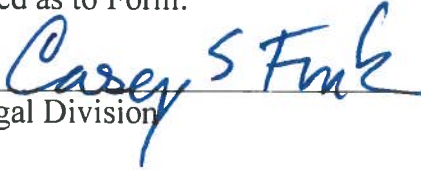
APPROVED:



By: Director of Planning

ACTING

Approved as to Form:



By: Legal Division

CITY AND COUNTY OF DENVER,  
acting by and through ITS BOARD OF  
WATER COMMISSIONERS



By: CEO-Manager

Date: 10/17/15

REGISTERED AND COUNTERSIGNED  
AUDITOR CITY AND COUNTY OF  
DENVER

By:   
Auditor



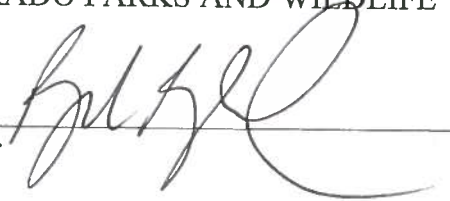
Chatfield Reservoir  
Management Agreement

STATE OF COLORADO  
JOHN HICKENLOOPER, GOVERNOR

  
\_\_\_\_\_  
Executive Director, Department of Natural  
Resources

COLORADO PARKS AND WILDLIFE

By: \_\_\_\_\_  
Director



COLORADO WATER  
CONSERVATION BOARD

By: \_\_\_\_\_  
Director



CENTENNIAL WATER AND  
SANITATION DISTRICT

By:   
John Kaufman  
General Manager

THE CENTRAL COLORADO WATER  
CONSERVANCY DISTRICT

By:   
Director

ATTEST:

By:   
Secretary



TOWN OF CASTLE ROCK

By: \_\_\_\_\_  
Manager


CASTLE PINES METROPOLITAN  
DISTRICT

By:   
Manager

CASTLE PINES NORTH  
METROPOLITAN DISTRICT

By:   
Manager Kern Dodd, President

CENTER OF COLORADO WATER  
CONSERVANCY DISTRICT

By:   
Director  
Elizabeth R. Melvick

CENTENNIAL WATER AND  
SANITATION DISTRICT

By: \_\_\_\_\_  
John Kaufman  
General Manager


THE CENTRAL COLORADO WATER  
CONSERVANCY DISTRICT

By: \_\_\_\_\_  
Director

ATTEST:

By: \_\_\_\_\_  
Secretary

TOWN OF CASTLE ROCK

By:   
Mark Marlowe, Utilities Director

CASTLE PINES METROPOLITAN  
DISTRICT

By: \_\_\_\_\_  
Manager

Approved as to form:

  
Robert J. Stentz, Town Attorney

CASTLE PINES NORTH  
METROPOLITAN DISTRICT

By: \_\_\_\_\_  
Manager

CENTER OF COLORADO WATER  
CONSERVANCY DISTRICT

By: \_\_\_\_\_  
Director