

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

Rebecca Mitchell, CWCB Director

TO:	Colorado Water Conservation Board Members
FROM:	Linda Bassi, Section Chief Kaylea White, Senior Water Resource Specialist Stream and Lake Protection Section
DATE:	July 18-19, 2018 Board Meeting
AGENDA ITEM:	12. Northern Colorado Water Conservancy District Dedication of Mitigation Releases for Instream Flow Use in the Cache Ia Poudre River (Water Div. 1)

The Northern Colorado Water Conservancy District ("Northern") has offered the Colorado Water Conservation Board a donation of a contractual interest in "Protected Mitigation Releases," as defined in 37-92-102(8), C.R.S. for instream flow use in a segment of the Cache Ia Poudre River ("Poudre River"). This type of donation is guided by the recently enacted Senate Bill 18-170, codified at section 37-92-102(8), C.R.S. Northern obtained an approved mitigation and enhancement plan entitled Northern Integrated Supply Project ("NISP") Fish and Wildlife Mitigation and Enhancement Plan ("FWMEP") referred to herein as ("Mitigation Plan"). The "Intergovernmental Agreement to Implement the Fish and Wildlife Mitigation and Enhancement Plan For the Northern Integrated Supply Project" between the State of Colorado and the NISP Water Activity Enterprise ("IGA") was executed on July 3, 2018. The water donated to CWCB is part of the Mitigation Plan's reservoir release commitments. Northern's draft dedication agreement is attached as Exhibit 1. The CWCB will use the water to preserve and improve the natural environment to a reasonable degree in a segment of the Cache Ia Poudre River. See Vicinity Map attached as Exhibit 2.

Staff recommendation: Pursuant to Rule 6b of the Rules Concerning the Colorado Instream Flow and Natural Lake Level Program ("ISF Rules"), the Board's consideration of this proposal at this meeting will initiate the 120-day period for Board review. No formal action is required at this time. The initial presentation of this proposal provides an opportunity for the Board and the public to identify questions or concerns that Staff will address at this or a subsequent meeting.

1. The Board's Water Acquisition Procedures

ISF Rule 6 governs the Board's procedures for acquiring water for ISF use. Section 37-92-102(3), C.R.S. (2017) provides 120 days for the Board to determine what terms and conditions it will accept in an acquisition agreement for water, water rights, or interests in water to preserve or improve the natural environment. ISF Rule 6 requires a minimum of two Board meetings to allow for public input prior to taking final action on a proposed acquisition. The Board's initial consideration of this proposal at its July 2018 meeting initiates the 120-day time period for the Board to consider the terms and conditions of the proposed acquisition. Final action on the proposal could occur at



the September 2018 Board meeting. ISF Rule 6m(4) provides that any person may request the Board to hold a hearing on the proposed acquisition, and that such request must be filed within twenty days of this Board meeting. ISF Rule 6e requires the Board to evaluate the appropriateness of the acquisition and to determine how best to utilize the acquired water to preserve or improve the natural environment. ISF Rule 6 lists several factors the Board may consider in its evaluation of the acquisition that are addressed in this memo.

As required by statute, CWCB staff has requested recommendations from the Colorado Division of Parks and Wildlife (CPW), the U.S. Department of Agriculture, and the U.S. Department of Interior. Pursuant to ISF Rule 6m(1), CWCB staff has provided notice of the proposed acquisition to all persons on the appropriate ISF Subscription Mailing Lists and provided notice to the State Engineer's Substitute Supply Plan Notification List for Water Division 1.

1. Background

Pursuant to the Mitigation Plan, Northern committed to make releases and to assure no diversion of those releases through a segment of the Poudre River. Colorado's then existing legal water rights tools made it difficult, if not impossible, for Northern to meet this commitment. Therefore, Northern worked with water users, professionals, and lawmakers to obtain a new statutory ability to protect mitigation releases from new reservoir storage, so long as conditions of the statute are met. SB 18-170 is attached as **Exhibit 4**. One condition of the legislation is for CWCB to join Northern as a Co-Applicant in water court to obtain water court approval of the Protected Mitigation Releases.

In the Mitigation Plan and the IGA, Northern Water committed to making Mitigation Releases of between 18 and 25 cfs of water, up to 14,350 acre-feet per year, into the Poudre River for ultimate delivery to NISP Participants. The IGA is attached as **Exhibit 3**; the Mitigation Plan executive summary is attached as **Exhibit 5**. The full document for the Mitigation Plan can be found at http://www.northernwater.org/docs/NISP/MapsDocuments/2017FWMEPFinal.pdf.

The Mitigation Releases described in the Mitigation Plan are intended to enhance water quality and avoid and minimize negative impacts to the aquatic and riparian environments within the Qualifying Stream Reach. Pursuant to 37-92-102(8), C.R.S., Northern wishes to dedicate to the CWCB, at no cost and for instream flow use, Mitigation Releases of the Subject Water Rights through the Qualifying Stream Reach. The Qualifying Stream Reach for the NISP FWMEP Mitigation Releases shall be that part of the Poudre River extending downstream from the Poudre River Delivery Pipeline (the point where releases from Glade Reservoir enter the Poudre River) to the Poudre River Intake Diversion as depicted on the map attached as **Exhibit 2**. CWCB will use and protect the water for instream flow use to preserve and improve the natural environment to a reasonable decree through this stream segment.

2. Water Proposed for Acquisition

The water rights proposed to be donated to the CWCB would be up to 14,350 acre-feet per year of water available to Northern in the to-be-constructed Glade Reservoir and Glade Forebay in Larimer County. Based upon discussions with Northern Water, and Colorado Parks and Wildlife ("CPW") regarding the need for and use of the donated water, Staff recommends that the CWCB acquire a contractual interest in the mitigation release water up to 14,350 acre-feet.

3. Reach of Stream Proposed for Use of the Acquired Water Rights

The reach of stream proposed for use of Northern's Mitigation Release water is the Poudre River extending downstream from the Poudre River Delivery Pipeline (the point where releases from Glade Reservoir enter the Poudre River) to the Poudre River Intake Diversion. The segment extends from near the mouth of the canyon through the City of Ft. Collins for approximately 13 river miles.

4. Existing and Future ISF Water Rights

The CWCB does not currently hold an ISF water right within this reach of the Poudre River. Colorado Parks and Wildlife ("CPW") and others have been studying and collecting field data in this segment of the Poudre River for over 10 years. CPW evaluated the studies and data by means including R2CROSS and PHABSIM modeling techniques to develop target flow rates for this section of the Poudre River. CPW's preliminary target flow recommendations for this stream segment are as follows:

	Preserve ISF target rates	Improve ISF target rates
Winter (approx. November- April)	Up to 55 cfs	Between 55 and 85 cfs
Summer (approx. May- October)	Up to 85 cfs	Between 85 and 130 cfs

6. Natural Flow Regime

The Cache Ia Poudre River originates in the northern portions of Rocky Mountain National Park. The mainstem and South Fork flow north and east out of Rocky Mountain National Park onto the Roosevelt National Forest. The North Fork drains western portions on the Laramie Foothills to its confluence with the mainstem just below Poudre Park. Within the Poudre Canyon, the river is heavily forested, high gradient, and confined by canyon walls and Highway 14. Beyond the canyon mouth, the river transitions to a plains watershed, flowing through an urban zone surrounding the City of Fort Collins and rural lands further east bordered by gravel pits and irrigated agriculture. The Poudre River travels eastward approximately 126 miles from its headwaters to its confluence with the South Platte River near Greeley. The watershed's drainage area is approximately 1,880 square miles.

Streamflow in the upper Poudre River is primarily driven by snowmelt with contributions from local precipitation. The hydrology below the canyon mouth is influenced predominantly by upstream reservoir releases and some local precipitation. Peak flows are snowmelt-driven and typically occur in mid-May to June and diminish down to baseflows in mid-summer. Late season flows are supplemented by releases from upstream reservoirs and upstream transbasin imports - Colorado Big Thompson Project and Laramie River water. Hydrology below the mouth of the canyon is significantly depleted as a result of water management activities and dry up is common on the river. Direct flow diversions are common throughout the irrigation season, while diversions to off-channel storage reservoirs are common in the winter. The entire Poudre River system is a heavily managed system controlled by reservoir releases, trans-basin imports, and diversions and exchanges in the lower watershed. Peak flows are diminished and baseflows are impacted as a result of these water management activities. The NISP Mitigation Releases will boost flows year-round from the canyon mouth down to the

Mulberry Street bridge.

7. Existing Natural Environment

The natural environment in the Poudre River is a somewhat diverse fishery consisting of both native and non-native species. The upper reaches of the Poudre River as it emerges from Poudre Canyon are typical of a cold water trout fishery, containing both rainbow and brown trout. As the river flows to the east through Fort Collins onto the plains, the slope decreases, diversions out of the channel are more significant, and water temperatures rise. Here the fishery transitions from a cold water fishery to a mixed cold water/cool water/warm water fishery. Trout persist in the watershed down to approximately Interstate 25 but are challenged by low flows, reduced habitat, and higher water temperatures. Other species have been observed in this reach – namely carp, fathead minnows, suckers, and dace. The Interstate is roughly the lower boundary of the cold water habitat. The NISP Mitigation Releases will benefit the fishery as described above from the canyon mouth down to the Mulberry Street bridge.

8. Proposed Method of Acquisition

Under this proposal, the CWCB would acquire a contractual interest in up to 14,350 acre-feet of Mitigation Releases from Glade Reservoir. Northern and the CWCB are in the process of negotiating the terms of the dedication agreement. (See draft agreement at **Exhibit 1**). Following such agreement and upon the Board's approval, pursuant to 37-92-102(8)(d)(III), C.R.S., CWCB and Northern will file a water court application to "seek approval of the proposed protected mitigation releases," as required by SB 18-170.

Under the Water Delivery Agreement and Water Court decree, Northern Water will release and deliver water stored in Glade Reservoir as necessary to satisfy the measures for Mitigation Releases identified in the Mitigation Plan, for exclusive use by the CWCB as Protected Mitigation Releases. When Northern Water notifies the CWCB that such releases are being made, the CWCB shall protect the delivered Protected Mitigation Releases through the Qualifying Stream Reach from diversion or exchange by other water users by, when necessary, requesting administration by the Colorado State and Division Engineers to prevent diversion of or exchange upon the water within the Qualifying Stream Reach by other water users.

9. Proposed Use of the Acquired Water

The acquired water would be used to preserve and improve the natural environment in the Poudre River to a reasonable decree by protecting Mitigation Releases up to 18-25 cfs to meet the Mitigation Plan targets and CPW's recommended flows in the Poudre River. The CWCB shall use the Protected Mitigation Releases to help maintain stream flows in the Poudre River to preserve and improve the natural environment to a reasonable degree within the Qualifying Stream Reach in amounts up to the target rates of (a) winter flows of up to 55 cfs to preserve, and flows from 55 cfs to 85 cfs to improve, the natural environment to a reasonable degree, and (b) summer flows of up to 85 cfs to preserve, and flows from 85 to 130 cfs to improve, the natural environment to a reasonable degree.

CPW has reviewed this proposal, has collaborated on this memo, and will provide a final recommendation letter at the next board meeting. CPW staff will be available to answer questions at this board meeting in support of the project. CPW has accepted the 122.2 Mitigation Plan submitted by Northern and thus agrees that the Mitigation Releases will incrementally preserve and improve the natural environment.

CPW has relied on PHABSIM data (collected for the NISP Common Technical Platform) and R2Cross data collected by CPW when preparing final recommendations related to the proposal. In general, these data show that aquatic habitat can be incrementally preserved and improved by flows up to 85 cfs in the winter and 130 cfs in the summer.

10. Historical Use and Historical Return Flows

Because this is a release of stored water and does not involve a change of water right, or other mechanism through which return flows would be owed, the Board does not need to consider this factor.

11. Location of Other Water Rights

There are many other water rights located on the Poudre River; however, they will not be affected by this release and protection of water stored in priority.

12. Material Injury to Existing Rights

There will be no injury to existing rights. The statue guiding this acquisition requires that the owner of the water prove no injury "to vested water rights, decreed conditional water rights, ...or other water users' uses or exchanges of water being made pursuant to appropriation or practices in existence on the date of the filing" of the water court application. See 37-92-102(8)(f)(I)(B) C.R.S. Pursuant to 37-92-102(8) C.R.S., and under the Water Delivery Agreement, water previously stored in priority under the Glade Reservoir water rights would be released as required in the Mitigation Plan and protected by CWCB up to the target flow rates in the identified stream segment. Any other necessary terms and conditions to prevent injury to other water rights will be included in the final water court decree.

13. Stacking Evaluation

When water is available under this lease for ISF use in the Poudre River, it can be used in additional to any other acquired water rights that CWCB may use for instream flow in this segment of the Poudre River to achieve a greater level of protection for the natural environment and to meet the CPW flow recommendations as approved by the Board.

14. Effect of Proposed Acquisition on Any Relevant Interstate Compact Issue

The proposed acquisition does not negatively affect any interstate compact. The reservoir release will be used for instream flow purposes and also other beneficial uses at the lower terminus of the instream flow stream segment.

15. Effect on Maximum Utilization of Waters of the State

This proposed acquisition will promote maximum utilization of waters of the State by delivering the water to the NISP participants downstream, while at the same time supporting the natural environment along the delivery path of the Poudre River with additional beneficial uses for instream flow to preserve and improve the natural environment to a reasonable degree.

16. Availability for Downstream Use

The Mitigation Releases will be used downstream of the Qualifying Stream Reach by the NISP participants.

17. Administrability

CWCB Staff will discuss this project with the Division 1 Division Engineer. It is anticipated that once the water court case is closed and a final decree is issued, the Mitigation Release water from Glade Reservoir through the Poudre River will be administrable, after some needed modification of diversion structures.

18. Potential Benefits of This Proposed Acquisition

The proposed acquisition will increase stream flows in the Poudre River, provide water to current dry up points in the river below headgate diversions, and will provide benefits to the fish species that live in this reach.

19. Cost to Complete Transaction

Northern will donate the water to CWCB, so no direct costs will be incurred. However, as part of the normal work load, CWCB Staff will need to work on the acquisition documents, maintain records of the water use, and participate as a Co-Applicant in water court. The Attorney General's Office will support such application. However, physical modification to any existing diversion structures on the stream and any additional consultant costs will be incurred by Northern.

Exhibits

Exhibit 1 - Water Dedication and Delivery Agreement (Draft) Exhibit 2 - Vicinity Map Exhibit 3 - IGA with DNR Exhibit 4 - SB 18-170 (signed by Governor 4/12/2018)) Exhibit 5 - FWMEP Executive Summary. Full Mitigation plan can be found at: http://www.northernwater.org/docs/NISP/MapsDocuments/2017FWMEPFinal.pdf.

DRAFT WATER DEDICATION AND DELIVERY AGREEMENT

The Colorado Water Conservation Board ("CWCB"), an agency of the State of Colorado, and the Northern Colorado Water Conservancy District ("Northern Water"), a quasi-municipal entity and political subdivision of the State of Colorado, in consideration of the mutual promises contained herein, agree as follows:

RECITALS

- A. The CWCB is an agency of the State of Colorado created to aid in the protection and development of the waters of the state for the benefit of its present and future inhabitants. In 1973, the General Assembly vested the CWCB with the exclusive authority to appropriate waters of the natural stream for minimum stream flows between specific points on a stream to preserve the natural environment to a reasonable degree.
- B. Pursuant to section 37-92-102(3), C.R.S., the General Assembly has also vested the CWCB with the ability to acquire water, water rights, or interests in water that are not on the division engineer's abandonment list in such amount as the board determines is appropriate for stream flows to preserve or improve the natural environment to a reasonable degree.
- C. Pursuant to enacted Colorado Senate Bill 18-170 (codified at section 37-92-102(8), C.R.S.), the owner of a water storage right to be stored in New Reservoir Capacity may acquire the decreed right to make Protected Mitigation Releases¹ of water from that New Reservoir Capacity into a Qualifying Stream Reach to reasonably avoid, minimize, or mitigate the impacts of the New Reservoir Capacity on fish and wildlife resources within the Qualifying Stream Reach in accordance with a fish and wildlife mitigation plan approved under section 37-60-122.2, C.R.S. To make such Protected Mitigation Releases, the owner is required to: (1) dedicate the proposed Protected Mitigation Releases to the CWCB; (2) agree to make the proposed Protected Mitigation Releases available for use by the CWCB within the Qualifying Stream Reach; (3) with the CWCB as a co-applicant, file an application in water court seeking approval of the proposed Protected Mitigation Releases; and (4) obtain a final decree approving the Protected Mitigation Releases. Except as set forth in section 37-92-102(8)(e), C.R.S., the dedication to the CWCB is subject to section 37-92-102(3), C.R.S., including the requirement that the CWCB find that the proposed Protected Mitigation Releases are appropriate to preserve and improve the natural environment to a reasonable degree within the Qualifying Stream Reach.
- D. Pursuant to the decree entered in Case No. 03CW405, Water Division No. 1, Northern Water is the owner of an undivided 7/8 interest in a conditional water right decreed for storage in Grey Mountain Reservoir or Glade Reservoir and a conditional water right

¹ This Water Dedication and Delivery Agreement uses terms as defined in SB18-170, codified in section 37-92-102(8), C.R.S.

decreed for storage in the Cache la Poudre Forebay or the Glade Forebay.² The most recent diligence decree for these conditional water rights was entered in Case No. 11CW242, Water Division No. 1.

- E. In Consolidated Case No. 92CW130, Water Division No. 1, Northern Water obtained a decree for conditional surface water rights, water storage rights, and appropriative rights of exchange that form the basis of an integrated project known as the South Platte Water Conservation Project ("SPWCP"). The SPWCP will divert unappropriated water from the Cache la Poudre River ("Poudre River") and South Platte River and reposition that water by substitution and exchange to, among other structures, the to-be-constructed Glade Reservoir. The most recent diligence decree for the SPWCP was entered in Case No. 11CW241, Water Division No. 1.
- F. The water rights described in Paragraphs D and E are referred to collectively herein as the Subject Water Rights.
- G. The Northern Integrated Supply Project ("NISP") is a regional water supply project proposed by Northern Water on behalf of numerous cities, towns, and water districts ("NISP Participants") that will use the Subject Water Rights (and other water rights not subject to this Agreement) to provide approximately 40,000 acre-feet of reliable water supply per year to the NISP Participants.
- H. The Northern Integrated Supply Project Water Activity Enterprise ("NISP Water Activity Enterprise") is a government-owned business within the meaning of Article X, Section 20(2)(d) of the Colorado Constitution organized pursuant to §§ 37-45.1-101 *et seq.*, C.R.S., and owned by Northern Water. The NISP Water Activity Enterprise was created to finance the planning, permitting, and construction of NISP.
- I. Northern Water was required under section 37-60-122.2, C.R.S., to submit a Fish and Wildlife Mitigation and Enhancement Plan for NISP ("NISP FWMEP") and obtain approval of the NISP FWMEP from the Colorado Parks and Wildlife Commission and Division of Parks and Wildlife, the CWCB, and the Governor as the official state position on mitigation.
- J. The final NISP FWMEP, as approved and adopted as the official state position, includes among other things a "Conveyance Refinement," NISP FWMEP § 5.2.2.4, that involves Mitigation Releases of water from Glade Reservoir into the Poudre River and the rediversion of that water at or downstream of the planned Poudre River Intake Diversion. The NISP FWMEP is attached hereto as Exhibit A. In the NISP FWMEP and the "Intergovernmental Agreement to Implement the Fish and Wildlife Mitigation and Enhancement Plan For the Northern Integrated Supply Project" between the State of Colorado and the NISP Water Activity Enterprise dated ______, 2018, Northern Water committed to making Mitigation Releases of between 18 and 25 cfs of water,

² Both Glade Reservoir and the Glade Forebay qualify as "New Reservoir Capacity" as defined in section 37-92-102(8), C.R.S.

depending on time of year as further described in Paragraph 4 herein, into the Poudre River for delivery to NISP Participants. The Mitigation Releases described in the NISP FWMEP are intended to avoid and minimize negative impacts to water quality and the aquatic and riparian environments within the Qualifying Stream Reach, and to enhance the same.

- K. The Qualifying Stream Reach for the NISP FWMEP Mitigation Releases shall be that part of the Poudre River extending downstream from the Poudre River Delivery Pipeline (the point where releases from Glade Reservoir enter the Poudre River) to the Poudre River Intake Diversion, as depicted on the map attached as Exhibit B. The approximate coordinates of the upstream and downstream termini of the Qualifying Stream Reach are as follows:
 - i. **Poudre River Delivery Pipeline (Upstream Terminus):** Within 200 feet upstream and 200 feet downstream of Lat. 40°39'47.04" N, Long. 105°12'46.29"W.
 - ii. **Poudre River Intake Diversion (Downstream Terminus):** Within 200 feet upstream and 200 feet downstream of Lat. 40°34'58.59"N, Long. 105°3'32.83W.
- Northern Water wishes to dedicate to the CWCB, at no cost and for instream flow use, L. Mitigation Releases of the Subject Water Rights through the Qualifying Stream Reach. At two regularly scheduled public meetings of the CWCB held on 2018, and 2018, the CWCB considered Northern Water's proposed dedication of Mitigation Releases to the CWCB in accordance with section 37-92-102(3) & (8), C.R.S., and Rules 6 and 11 of the Rules Concerning the Colorado Instream Flow and Natural Lake Level Program, 2 CCR 408-2. At its regularly scheduled Board meeting on , 2018, the CWCB: (1) found that in the Qualifying Stream Reach (a) winter flows of up to 55 cfs are appropriate to preserve, and flows from 55 cfs to 85 cfs are appropriate to improve, the natural environment to a reasonable degree, and (b) summer flows of up to 85 cfs are appropriate to preserve, and flows from 85 to 130 cfs appropriate to improve, the natural environment to a reasonable degree; (2) found that deliveries of the Mitigation Releases under this Agreement are appropriate to preserve and improve the natural environment to a reasonable degree within the Qualifying Stream Reach at rates up to the aforementioned flow rates found appropriate by the CWCB; and (3) authorized the CWCB Director to execute this Agreement.
- M. The CWCB and Northern Water wish to cooperate as contemplated by section 37-92-102(8), C.R.S., to protect the Mitigation Releases identified in the NISP FWMEP as Protected Mitigation Releases and to benefit stream flows in the Qualifying Stream Reach of the Poudre River in a manner consistent with the terms of the NISP FWMEP.

NOW THEREFORE, the CWCB and Northern Water agree as follows:

DELIVERY

- 1. Subject to the terms of this Agreement and the Water Court decree that is to be entered pursuant to section 37-92-102(8), C.R.S., adjudicating the Protected Mitigation Releases, Northern Water will release and deliver water stored in Glade Reservoir under its Subject Water Rights, in the manner and volumes and at rates of flow and times to be determined at the sole discretion of Northern Water to be necessary to satisfy the measures for Mitigation Releases identified in the NISP FWMEP, for exclusive use by the CWCB as Protected Mitigation Releases.
- 2. Delivery of water in accordance with this Agreement is subject to availability under the Subject Water Rights. Northern Water is under no obligation to deliver water to the CWCB pursuant to this Agreement when water yielded from the Subject Water Rights is not in storage and available at Glade Reservoir for release and delivery, or in the event that Protected Mitigation Releases are not necessary or are not being made to satisfy the measures for Mitigation Releases identified in the NISP FWMEP.
- 3. The making of Protected Mitigation Releases and delivery of water to the CWCB in accordance with this Agreement is subject to the circumstances described in § 5.2.2.4 of the NISP FWMEP under which the Conveyance Refinement cannot be operated or rediversion at or downstream of the Downstream Terminus of the Qualifying Stream Reach cannot be made, including when water quality within the Poudre River prevents diversions and delivery of water to the NISP Participants, when insufficient demand from the Participants exists, or when an interim delivery schedule is in effect while NISP is brought on line. As provided in the NISP FWMEP, before full buildout of NISP occurs, Northern Water commits to conveying no less than 36 percent of total NISP deliveries via the Poudre River, through the Qualifying Stream Reach, and into the Poudre River Intake Diversion.
- 4. When Northern Water notifies the CWCB that such releases are being made, the CWCB shall protect the delivered Protected Mitigation Releases through the Qualifying Stream Reach from diversion or exchange by other water users by, when necessary, requesting administration by the Colorado State and Division Engineers to prevent diversion of or exchange upon the water within the Qualifying Stream Reach by other water users. In the event that the CWCB does not or cannot protect the full amount of the Protected Mitigation Releases in accordance with the terms of this Agreement, nothing in this Agreement shall prevent Northern Water from exercising the Subject Water Rights in accordance with their respective decrees but without protection by the CWCB within the Qualifying Stream Reach.

CONDITIONS OF THE CWCB'S USE OF THE SUBJECT WATER RIGHTS

5. The CWCB shall use the Protected Mitigation Releases to help maintain stream flows in the Poudre River to preserve and improve the natural environment to a reasonable degree within the Qualifying Stream Reach in amounts up to the target rates the CWCB determines are necessary to preserve or improve the natural environment. Water made available for Protected Mitigation Releases under the Subject Water Rights will be delivered by Northern Water from New Reservoir Capacity to the Poudre River for instream use by the CWCB at the Upstream Terminus of the Qualifying Stream Reach. Subject to Paragraphs 2 and 3 above, releases under this Agreement would range from 18 cfs during the winter months to 25 cfs during the summer months, with a maximum of 14,350 AF released annually. The Poudre River Intake would be located at or downstream of the Downstream Terminus and constructed to divert water released from Glade Reservoir for delivery for decreed beneficial use. The amount of storage water in Glade Reservoir or the Glade Reservoir Forebay designated for Mitigation Releases and the rates of the Mitigation Releases established by the NISP FWMEP are set forth below:

Protected Mitigation Releases Through Qualifying Stream Reach				
	(acre-feet)	(cfs)		
November	1,100	18		
December	1,100	18		
January	1,100	18		
February	1,050	18		
March	1,100	18		
April	1,100	18		
May	1,100	18		
June	1,200	20		
July	1,550	25		
August	1,550	25		
September	1,300	22		
October	1,100	18		
Total	14,350			

- 6. Northern Water's release and delivery of water from Glade Reservoir under the Subject Water Rights for the CWCB's use for instream flows in accordance with this Agreement in no way provides the CWCB an operating or ownership interest in any of Northern Water's NISP or other facilities or water rights as they exist now or may exist in the future.
- 7. The CWCB's exclusive rights to water delivered to the Qualifying Stream Reach as Protected Mitigation Releases under this Agreement extends to and terminates at the Downstream Terminus of the Qualifying Stream Reach.

USE OF THE SUBJECT WATER RIGHTS DOWNSTREAM OF THE QUALIFYING STREAM REACH

8. In accordance with section 37-92-102(3) & (8), C.R.S., section 37-87-102(4), C.R.S., the decree that is to be entered pursuant to section 37-92-102(8), C.R.S., adjudicating the Protected Mitigation Releases, and the decrees for the Subject Water Rights, Northern Water shall redivert the Protected Mitigation Releases at or downstream of the

Downstream Terminus of the Qualifying Stream Reach, either directly at a surface point of diversion or by a decreed exchange, and bring about the decreed beneficial use of the rediverted water.

WATER COURT PROCEEDINGS

- 9. The CWCB and Northern Water agree to act as co-applicants as contemplated by section 37-92-102(8)(d)(III) & (IV), C.R.S., to file an application in water court seeking approval of the proposed Protected Mitigation Releases and to cooperate in obtaining a final water court decree approving the Protected Mitigation Releases.
 - a. Northern Water has the burden of satisfying the required elements of the water court application, including proving no injury and defending against any claim of injury to uses or exchanges of water being made pursuant to appropriation or practices in existence on the date of the filing of the application for the proposed Protected Mitigation Releases under section 37-92-102(8), if necessary. However, in accordance with section 37-92-102(8)(f)(I)(A), CWCB has the burden of demonstrating to the water court that it duly determined that the proposed Protected Mitigation Releases are appropriate for streamflows to preserve or improve the natural environment to a reasonable degree within the Qualifying Stream Reach.
 - b. Except for its own attorney and court filing fees, the CWCB is not responsible for paying costs of prosecuting the application, including the costs of hiring a consulting engineer or other witness or any attorney fees of other parties.

RECORDS AND ACCOUNTING

- 10. Northern Water shall be responsible for maintaining all records and accounting necessary for the implementation of this Agreement, using forms mutually agreeable to the parties, and all records required by the Division Engineer and water court decrees for administration of the Protected Mitigation Releases.
- 11. Northern Water will provide accounting related to the operation of this Agreement to the CWCB.

MISCELLANEOUS PROVISIONS

- 12. The term of this Agreement is perpetual unless terminated under the provisions of this paragraph. This Agreement may only be amended or terminated by the written agreement of the parties.
- 13. The CWCB is not responsible for modification of any structures that may be necessary for use of the Mitigation Releases to preserve or improve the natural environment, including, but not limited to, modification of the Watson, New Mercer, Larimer & Weld or Lake Canal Diversion Structures.

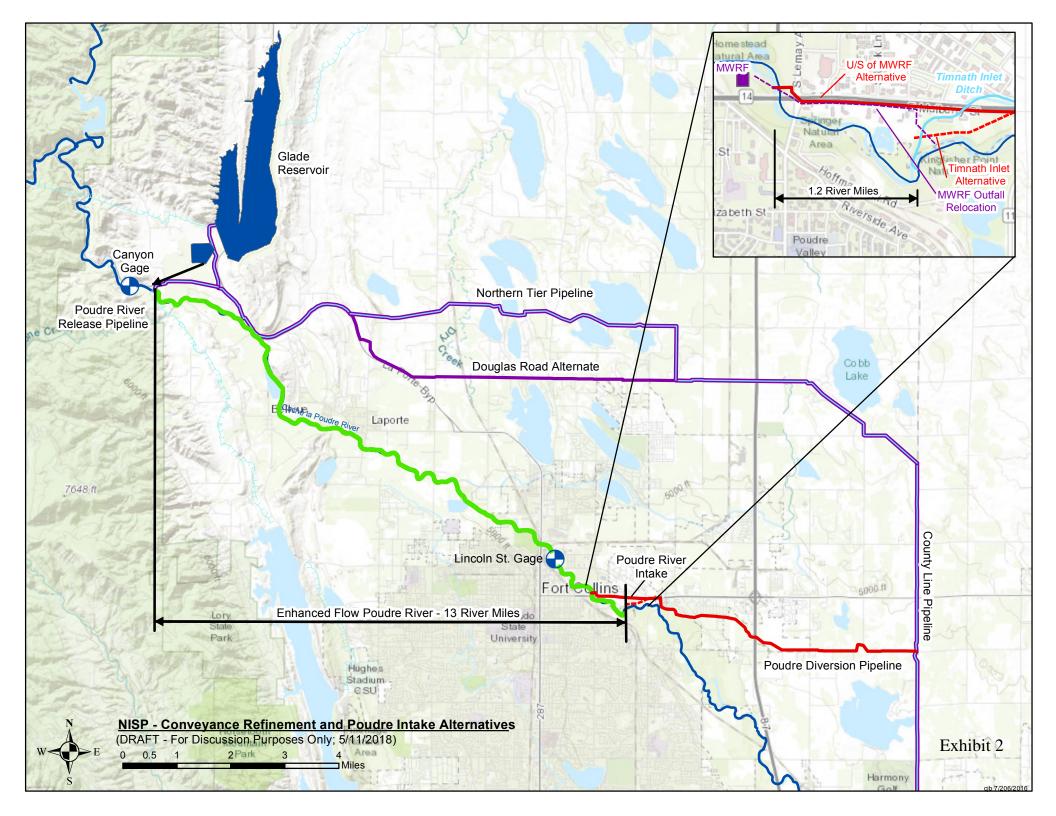
- 14. This Agreement shall not be assignable by any party without the written consent of the other, except that Northern Water may, as it deems necessary in its sole discretion and without seeking or securing consent from the CWCB, assign its interests in this Agreement to the NISP Water Activity Enterprise, who shall assume all of Northern Water's rights and responsibilities under this Agreement.
- 15. Pursuant to section 37-92-102(3), C.R.S., the terms of this Agreement shall be enforceable by each party as a water matter in the District Court for Water Division No. 1; provided, however, that before commencing any action for enforcement of this Agreement, the party alleging the violation shall notify the other party in writing of the alleged violation and the parties shall make a good faith effort to resolve their differences through informal consultation.
- 16. Specific performance of this Agreement shall be the exclusive remedy for failure of any party to comply with any provision of this Agreement.
- 17. Enforcement of this Agreement and all rights and obligations hereunder are reserved solely to the CWCB and Northern Water (and their assigns, if any, pursuant to Paragraph 12) and not to any third party. Any services or benefits which third parties may receive as a result of this Agreement are incidental to the Agreement and do not create any rights for such third parties.
- 18. This Agreement shall be construed in accordance with the laws of the State of Colorado and shall be interpreted broadly to effect its purposes.
- 19. Nothing in this Agreement shall preclude or limit Northern Water from making releases or deliveries of water yielded by the Subject Water Rights for any purposes allowed by law.
- 20. Any notice or request required or allowed to be given under this Agreement shall be in writing and considered effective when delivered by email or certified or registered mail addressed to the parties as follows:

If to the CWCB:	Colorado Water Conservation Board Stream and Lake Protection Section 1313 Sherman Street, Room 721 Denver, CO 80203 DNR_CWCB ISF@state.co.us
If to Northern Water:	Northern Colorado Water Conservancy District c/o NISP Project Manager 220 Water Avenue Berthoud, CO 80513 @northernwater.org

IN WITNESS WHEREOF, the CWCB and Northern Water have executed this Agreement as of the last date of execution.

COLORADO WATER CONSERVATION BOARD

	By:
	By: Rebecca Mitchell, Director
	Date:
ATTEST:	NORTHERN COLORADO WATER CONSERVANCY DISTRICT
BY:	By:
	By: Brad Wind, General Manager
	Date:



INTERGOVERNMENTAL AGREEMENT TO IMPLEMENT THE FISH AND WILDLIFE MITIGATION AND ENHANCEMENT PLAN FOR THE NORTHERN INTEGRATED SUPPLY PROJECT

This intergovernmental agreement ("IGA") is entered into this day of day of 2018, by and between the Northern Integrated Supply Project Water Activity Enterprise (NISPWAE), a government-owned business within the meaning of Article X, Section 20(2)(d) of the Colorado Constitution, that is organized pursuant to C.R.S. §§ 37-45.1-101 *et seq.* and owned by the Northern Colorado Water Conservancy District, and the State of Colorado, acting through the Department of Natural Resources, for the use and benefit of the Colorado Division of Parks and Wildlife (CPW). NISPWAE and CPW are hereinafter referred to collectively as the "IGA Parties" or individually as a "Party."

RECITALS

WHEREAS, C.R.S. § 37-60-122.2 declares that fish and wildlife resources are a matter of statewide concern and requires that an applicant for any water diversion, delivery, or storage facility which requires an application for a permit, license, or other approval from the United States must submit a fish and wildlife mitigation proposal to the Colorado Parks and Wildlife Commission and the Colorado Water Conservation Board; and

WHEREAS, the Northern Integrated Supply Project ("NISP") is a proposed water storage and distribution project that will supply fifteen (15) towns, municipalities, and rural domestic water providers on the Eastern Slope of the continental divide with 40,000 acre feet of new, reliable water supplies, and will consist of two new reservoirs, forebay reservoirs, and pumping plants to deliver water from the Cache La Poudre and South Platte rivers to the reservoirs; pipelines to deliver water for exchange with irrigation companies and to deliver water to water users; and improvements to existing canals that divert water from the Cache La Poudre River; and

WHEREAS, NISPWAE has applied for a Clean Water Act Section 404 Permit ("404 Permit") from the U.S. Army Corps of Engineers ("Corps") as part of federal regulatory compliance for NISP, and in conjunction with that application, the Corps is required to comply with the National Environmental Policy Act ("NEPA") by preparing an Environmental Impact Statement ("EIS"). The EIS being developed as the result of this effort, and the Record of Decision ("ROD") will be issued by the Corps regarding whether to approve the 404 Permit. If a favorable decision is made, the ROD is expected to refer to the completion of the mitigation process outlined in C.R.S. § 37-60-122.2; and the ROD will provide the Corps' conditions of approval for the 404 Permit, which the Corps will ensure are met; and

WHEREAS, NISPWAE will also be subject to environmental mitigation requirements as part of the Clean Water Act Section 404 Permit process and other permits and permissions required for NISP; and

WHEREAS, pursuant to C.R.S. § 37-60-122.2, NISPWAE worked with CPW to develop mitigation measures to address impacts to fish and wildlife resources for NISP, and NISPWAE

documented these mitigation measures in a Fish and Wildlife Mitigation and Enhancement Plan ("FWMEP"); and

WHEREAS, in addition to the above-referenced mitigation measures, NISPWAE has voluntarily agreed to additional enhancement measures, which are not otherwise required as part of federal or state permitting or approvals for NISP, to improve existing aquatic habitat in the Cache La Poudre River and wildlife habitat in the Cache La Poudre River corridor; these additional enhancement measures are also included in the FWMEP; and

WHEREAS, the Colorado Parks and Wildlife Commission recommended that the FWMEP become the official state position regarding fish and wildlife mitigation for NISP on September 7, 2017; and

WHEREAS, the Colorado Water Conservation Board recommended the FWMEP on September 20, 2017, thereby making this plan the official state position on mitigation of impacts to fish and wildlife resources; and

WHEREAS, the final version of the FWMEP referred to herein is dated October 10, 2017; and

WHEREAS, the FWMEP was developed in accordance with C.R.S. § 37-60-122.2, which statutory requirements are separate from and in addition to any requirements contained in the ROD, the 404 Permit, and the other permits and permissions for NISP;

NOW THEREFORE, the IGA Parties agree as follows:

AGREEMENTS AND COMMITMENTS

1. The purpose of this IGA is to implement the FWMEP dated October 10, 2017, which by this reference is incorporated herein as if fully set forth.

2. As provided in the final FWMEP submitted to the Department of Natural Resources and dated October 10, 2017, NISPWAE agrees to be contractually bound upon the signing of this IGA to implement the FWMEP as approved.

3. CPW and NISPWAE agree that compliance with the FWMEP, including the specific actions and timeline set forth therein, will constitute adequate fish and wildlife mitigation necessary to satisfy any requirements imposed by C.R.S. § 37-60-122.2 upon NISPWAE for the life of the NISP project. CPW and NISPWAE agree that the FWMEP addresses the anticipated impacts of NISP at full build-out and, in the absence of additional actions agreed to in writing, material changes to the final configuration, infrastructure or operations of NISP itself which directly and materially affect the FWMEP the agreed upon mitigation will satisfy mitigation requirements for the life of NISP.

4. It is anticipated that NISPWAE will agree to utilize an adaptive management plan to address many impacts arising from NISP as part of the ROD. This is a different concept than

established in C.R.S. § 37-60-122.2. The FWMEP outlines adaptive management processes related to three specific areas of mitigation and enhancement: a.) the U.S. 287 Big Game Movement Adaptive Management Plan, as fully set forth in Section 5.3.2.2, b.) the Poudre River Adaptive Management Program, as fully set forth in Section 6.1.1.1, and c.) the Glade Reservoir Recreation and Wildlife Adaptive Management Plan, as fully set forth in Section 6.1.3.3. The Poudre River Adaptive Management Program and Glade Reservoir Recreation and Wildlife Adaptive Management Program and Glade Reservoir Recreation and Wildlife Adaptive Management Program and Glade Reservoir Recreation and Wildlife Adaptive Management Program and Glade Reservoir Recreation and Wildlife Adaptive Management Program and Glade Reservoir Recreation and Wildlife Adaptive Management Program and Glade Reservoir Recreation and Wildlife Adaptive Management Program and Glade Reservoir Recreation and Wildlife Adaptive Management Program included in the FWMEP as enhancement measures. The IGA Parties agree to implement these adaptive management processes in good faith and to develop means to reasonably address impacts covered by these processes, including the potential sources of funding for those mitigation actions that cannot be covered by the funding committed to these adaptive management processes by the NISPWAE as described in the FWMEP. No other mitigation or enhancement measures in the FWMEP are subject to adaptive management.

5. NISPWAE acknowledges that the FWMEP was completed prior to the issuance of the ROD, the 404 Permit, and several other permits and permissions for NISP and agrees that it is obligated to comply with such other environmental mitigation requirements contained in those permits and permissions, if such permits and permissions are accepted by NISPWAE.

6. The State of Colorado, as provided in C.R.S. § 37-60-122.2(c), shall communicate to each federal, state, or other government from which NISPWAE must obtain a permit, license, or other approval that the FWMEP constitutes the official state position on mitigation of fish and wildlife resources required of NISP.

7. CPW, having studied the potential impacts of NISP on the state's fish and wildlife resources, agrees, accepts, and commits to participate in this mitigation and enhancement plan at the level and in the manner described in this IGA.

8. As more fully set forth in Section 6.1.3.1 of the FWMEP, CPW has developed an annual fish stocking plan and will maintain and manage a cool water fishery in Glade Reservoir as follows:

a. Implementation of the fish stocking plan will require CPW to expand certain existing fish hatcheries and fish units to accommodate increased production rates and therefore, as set forth in Section 6.1.3.1 of the FWMEP, NISPWAE will provide \$3.0 million for the expansion of such existing fish hatchery and fish unit facilities. NISPWAE will also provide CPW an amount of \$50,000 per year for annual expenses related to CPW's implementation of the Glade Reservoir fish stocking plan and management of the cool water fishery in Glade Reservoir. The implementation of the fish stocking plan and timing of NISPWAE funds will be worked out in a separate agreement pursuant to Paragraph (Miscellaneous) 4, below. The Parties agree that CPW's stocking commitment shall be dependent upon NISPWAE's payment of the funds described herein.

b. The IGA Parties' commitments under this paragraph 8 will extend for a period of 30 years, subject to renewal by the IGA Parties. However, if CPW determines in the future that stocking fish in the reservoir is no longer required or beneficial, CPW and NISPWAE will enter into a separate agreement that specifies the terms and conditions for

discontinuing the fish stocking plan and discontinuing NISPWAE's financial commitments set forth in Section 6.1.3.1 of the FWMEP.

c. The IGA Parties agree that NISPWAE's \$50,000 annual commitment is not subject to escalation for ten years after the initial payment of \$50,000 ("Initial Payment"). In the 10th year following the Initial Payment, the IGA Parties will evaluate the fish stocking plan and costs set forth in the FWMEP. If the IGA Parties determine that escalation is needed to achieve the intent of the Glade Reservoir fish stocking and management plan as outlined in the FWMEP, then the IGA Parties will mutually consider and implement an appropriate escalation rate to be applied to NISPWAE's prospective annual financial commitment through amendment of this IGA.

As more fully set forth in Section 6.1.1.2 of the FWMEP, NISPWAE shall fund, in 9. part or in whole, retrofits to four existing diversion points on the Poudre River with multi-objective diversion structure facilities. NISPWAE may complete some retrofits prior to receiving a final ROD in accordance with Paragraph (Miscellaneous) 2. CPW is currently developing plans to retrofit the diversion structure for the Watson Fish Hatchery ("Watson Fishway") ("Watson Fishway Project"), one of the structures identified for retrofit in the FWMEP. The Parties agree that NISPWAE can satisfy its obligation to retrofit one of the four structures through contribution to CPW for the Watson Fishway Project. The parties have agreed to a 60% design concept for the Watson Fishway that provides bypass of conveyance flows for NISPWAE. NISPWAE shall be responsible for the following: 1) payment of half the Watson Fishway Project cost, up to \$500,000; 2) payment of the full costs of designing, installing and maintaining measuring devices and automated gates needed to administer the bypass of NISPWAE conveyance flows, as agreed to in advance by the Parties; and 3) payment of all costs of any design modifications requested by NISPWAE, as agreed to by CPW. Upon signing this IGA, NISPWAE agrees funds will be available and that CPW will bill NISPWAE's portion of construction expenses quarterly as expenses are incurred by CPW. The IGA Parties agree that they will develop an implementation, operating and maintenance plan for the Watson Fishway before completion of construction of the Watson Fishway Project.

10. As more fully set forth in Sections 5.2.2.4 and 5.2.2.5 of the FWMEP, NISPWAE developed a Conveyance Refinement Concept to maintain certain flows in the Poudre River ("Conveyance Flows"). The Parties acknowledge that Colorado Senate Bill 18-170 was signed into law on April 6, 2018 and provides a mechanism for NISPWAE to pursue legal protection for Conveyance Flows. NISPWAE commits to seeking legal protection of the Conveyance Flows from diversion, exchange, or use by other water rights holders under SB 18-170.

11. In the event that management programs concerning fish and wildlife will be required by the 404 Permit, NISPWAE agrees to request and support CPW's participation in those management programs. If CPW is not permitted to participate in such program development, NISPWAE will consult with and seek input from CPW and otherwise keep CPW informed of the progress of any such program development.

12. The FWMEP and this IGA describe mitigation and enhancement commitments for the NISP configuration, infrastructure and operations as described in the FWMEP. If there are

material changes in the final configuration, infrastructure or operations of NISP, the IGA Parties agree to reopen only those portions of the FWMEP that are directly and materially affected by those changes and the IGA Parties agree to negotiate in good faith to modify the FWMEP, if necessary, to address those portions of the FWMEP accordingly.

13. NISPWAE and Colorado Division of Water Resources have developed an Administrative Protocol (attached hereto as Exhibit 1) for administration of the Peak Flow Operations Program (FWMEP section 5.2.2.6). The IGA Parties agree to administration of NISP water rights according to this Administrative Protocol.

14. The IGA Parties acknowledge and agree that the mitigation and enhancement commitments with "Cost Note" "b" in Table 11 and Table 13 of the approved FWMEP are outcome-based commitments meaning that the NISPWAE commits to meeting these obligations and that NISPWAE may seek alternative funding to implement those commitments. If the outcome-based commitments are fulfilled with substantive involvement and funding from the NISPWAE using alternative funding mechanisms, NISPWAE is not obligated to expend all or a portion of the funds identified as "Cost Note" "b" in Section 5.4 of the FWMEP.

MISCELLANEOUS

1. If a dispute arises between the IGA Parties relating to this IGA, the following procedure shall be followed:

- a. The IGA Parties shall hold a meeting attended by persons with decision-making authority regarding the dispute to attempt in good faith to negotiate a resolution. The meeting shall be held promptly but in no event later than thirty (30) calendar days from initial written notice of the dispute. Such meeting shall not be deemed to reduce or eliminate the obligations and liabilities of the parties under this IGA or be deemed a waiver by a Party of any remedies to which such party would otherwise be entitled, unless otherwise agreed to by the IGA Parties in writing.
- b. If, within thirty (30) days after such meeting, the IGA Parties have not succeeded in negotiating a resolution of the dispute, they agree to submit the dispute to non-binding mediation and to bear equally the costs of such mediation.
- c. The IGA Parties will jointly appoint a mutually acceptable mediator. If they shall fail to do so within twenty (20) days from the conclusion of the negotiation period, they shall each select a mediator. The two mediators will then appoint, within ten (10) days of their selection, a third mediator who shall, as the sole mediator, conduct mediation for the parties.
- d. The IGA Parties agree to participate in good faith in mediation and related negotiations for a thirty (30) day period. The substantive and procedural law of the State of Colorado shall apply to the proceedings. If the IGA Parties are not

successful in resolving the dispute through mediation, then the IGA Parties shall be free to litigate the matter.

e. In the event that a dispute arises pursuant to paragraphs 8 or 9 of this Agreement, NISPWAE's remedy, if any, shall be limited to money damages not to exceed the amount of money already provided to CPW pursuant to this Agreement.

2. With respect to NISPWAE's commitments relating to the Watson Fishway Project described in Paragraph (Agreements and Commitments) 9 above and any provisions herein that are necessary for its implementation, this IGA shall become effective upon signature of this document. With respect to all other provisions and mitigation and enhancement commitments described herein, this IGA shall become effective when NISPWAE receives an acceptable final ROD and acceptable 404 Permit for NISP. NISPWAE may implement any portion of the mitigation and enhancement measures outlined in the FWMEP before the effective date of the subject measure in cooperation and consultation with CPW. In the event that the NISPWAE elects to implement a mitigation and enhancement measure before the effective date of the subject measure, upon completion of the measure, the NISPWAE will be deemed to have satisfied its obligations under this IGA and the FWMEP to implement such measure in the same manner as if it implemented it after the effective date of the subject measure. In the event the NISPWAE Board determines that NISPWAE will not construct NISP, NISPWAE's obligations to perform these mitigation activities shall cease, and NISPWAE will not be required to pay any unpaid obligations under this IGA.

3. Nothing herein shall limit NISPWAE from prepaying all or a portion of its obligations related to this IGA.

4. Within six (6) months of an acceptable ROD and 404 Permit being issued for NISP, CPW and NISPWAE shall develop and agree to a detailed FWMEP implementation schedule that will be designed to match any mitigation implementation schedule required by the 404 Permit. Except for adaptive management measures, mitigation obligations that require physical changes to the Poudre River will be complete prior to NISPWAE diverting any Poudre River native flows into Glade Reservoir. The Parties further agree that any agreement related to NISPWAE's funding for fish stocking, described in Paragraph 8 above, shall include the following guidelines: NISPWAE shall pay the \$3.0 million to CPW by the time construction of Glade Reservoir begins, and the \$50,000 per year payment will start the first year Glade Reservoir starts filling.

5. Any and all obligations of NISPWAE under this IGA, whether financial or otherwise, shall be payable solely from the revenues, income, rents, and receipts earned by NISPWAE. Nothing herein shall be deemed to prevent NISPWAE from making any payments from any other legally available source. In no event shall NISPWAE be required to spend any money from taxes in violation of Section 20(4) of Article X of the Colorado Constitution in the performance of its obligations under this IGA or which would cause NISPWAE to lose its enterprise status as such status is defined in the Colorado Constitution. In addition, NISPWAE shall not be required to expend any funds or impair any assets of Northern Colorado Water Conservancy District in the performance of its obligations under this obligations under this IGA.

NISPWAE under this IGA do not constitute a debt or indebtedness of Northern Colorado Water Conservancy District within the meaning of any constitutional, charter, or statutory provision or limitation, and shall not be considered or held to be a general obligation of Northern Colorado Water Conservancy District.

6. The respective financial obligations of CPW and the NISPWAE under this IGA that are payable after the current fiscal year are contingent upon funds for that purpose being appropriated, budgeted, and otherwise made available. All future CPW expenditures are subject to the State of Colorado Fiscal Rules.

7. This IGA shall remain in effect for so long as all permits and approvals for NISP remain in effect, unless terminated earlier by an executed written instrument.

8. This IGA represents the complete integration of all understandings between the IGA Parties, and all prior representations and understandings, oral and written, including the FWMEP of October 10, 2017, are merged herein. Prior or contemporaneous additions, deletions, or other amendments hereto shall not have any force or effect whatsoever, unless embodied herein.

9. This IGA may be modified by the IGA Parties only by an executed written instrument. The Parties anticipate that they will implement portions of the FWMEP and this IGA through additional implementation and operating agreements, which shall be attached hereto and incorporated to this IGA by addendum.

10. Venue for any dispute resulting in litigation shall be in the District Court in and for the City and County of Denver. This IGA shall be governed by and construed under the laws of the State of Colorado.

11. All notices required to be given hereunder shall be sent by certified or registered mail to such Party's principal representative at the address set forth below. In addition to hardcopy notice, notice also may be sent by e-mail to the e-mail addresses, if any, set forth below. Either Party may from time to time designate by written notice substitute addresses or persons to whom such notices shall be sent. Unless otherwise provided herein, all notices shall be effective upon receipt. The individuals listed below are the principal representatives of the respective Parties. For the purposes of this IGA, the official representative(s) and addresses of the Parties are:

For NISPWAE:

Northern Integrated Supply Project Water Activity Enterprise, Northern Colorado Water Conservancy District 220 Water Ave. Berthoud, CO 80513 Attention: General Manager

7

For Colorado Division of Parks and Wildlife: Colorado Parks and Wildlife 6060 Broadway Denver, CO 80216 Attention: Aquatic Section Manager

12. The IGA Parties' rights and obligations hereunder are personal and may not be transferred, assigned or subcontracted without the prior, written consent of the other Party. Any attempt at assignment, transfer, or subcontracting without such consent shall be void.

13. Unless otherwise provided herein, all provisions herein contained, including the benefits and burdens, shall extend to and be binding upon the IGA Parties' respective legal representatives, successors, and assigns.

14. The captions and headings in this IGA are for convenience of reference only, and shall not be used to interpret, define, or limit the provisions of this IGA.

15. This IGA may be executed in multiple identical original counterparts, all of which shall constitute one IGA.

16. A Party shall be excused from performing its obligations under this IGA during the time and to the extent that it is prevented from performing by a cause beyond its control, provided that such nonperformance is beyond the reasonable control of and is not due to the fault or negligence of the Party not performing.

17. Nothing in this IGA shall be deemed or construed as granting or creating any property right or servitude whatsoever on any Party's water rights or facilities; nor shall this IGA be deemed or construed as creating any obligation on any Party to operate its water system or water rights in any particular manner beyond those commitments made in the FWMEP.

18. Notwithstanding anything herein to the contrary, provisions of this IGA requiring continued performance, compliance, or effect after termination hereof, shall survive such termination and shall be enforceable by the Parties.

19. Enforcement of this IGA and all rights and obligations hereunder are reserved solely to the IGA Parties and not to any third party. Any services or benefits which third parties receive as a result of this IGA are incidental to the IGA, and do not create any rights for such third parties.

20. Waiver of any breach of a term, provision, or requirement of this IGA or any right or remedy hereunder, whether explicitly or by lack of enforcement, shall not be construed or deemed as a waiver of any subsequent breach of such term, provision or requirement.

21. No term or condition of this IGA shall be construed or interpreted as a waiver, expressed or implied, of any of the immunities, rights, benefits, protections, or other provisions of the Colorado Constitution including TABOR, Colorado Constitution, Article X, § 20; the

Governmental Immunity Act, C.R.S. § 24-10-101 *et seq.*; or the Federal Tort Claims Act, 28 U.S.C. §§ 1346(b) and 2671 *et seq.*, as applicable now and hereafter amended.

22. The signatories to this IGA warrant that each has the authority to enter into this IGA on behalf of the party represented

Northern Integrated Supply Project Water Activity Enterprise, NORTHERN COLORADO WATER CONSERVANCY DISTRICT

By: Mike Applegate, Presiden

6/28/2013 Date:

COLORADO DIVISION OF PARKS AND WILDLIFE Margaret Taylor- Veach tast By: For : Bob Broscheid, Director Colorado Parks and Wildlife

Date: _



May 24, 2018

Douglas M. Sinor Trout Raley Montano, Freeman, Sinor,& Thompson 1120 Lincoln Street, Suite 1600 Denver, Colorado 80203

RE: NISP Peak Flow Operations Protocol Approval

Dear Doug,

Through this letter, the Division of Water Resources provides an executed copy of the "<u>Protocol for</u> <u>Administration of Grey Mountain Water Rights Under Poudre River Coordinated Peak Flow Operations</u> <u>Program Northern Integrated Supply Project</u>" (Protocol) dated May 17, 2018. We want to expressly acknowledge the work of you and the staff at Northern Colorado Water Conservancy District (NCWCD) over the past year to cooperatively arrive at a final document.

Operation under this Protocol is intended to assist NCWCD in meeting some of the requirements of the Fish and Wildlife Mitigation and Enhancement Plan (FWMEP) for the Grey Mountain water right and support the Division of Water Resources in meeting our mandate of maximizing beneficial use of water within the priority system. To this end, we will recognize, operate and account for the Gray Mountain water rights peak flow operations consistent with and subject to the terms and limitations of the attached Protocol.

Please let us know if you have any questions.

Regards,

Norin St. Lein

Kevin G. Rein, P.E. State Engineer

Ec: Mark Simpson, District 3 Water Commissioner Laserfiche Filing (WDID 0303900)

avid & Nettley

David L. Nettles, P.E. Division Engineer



Protocol for Administration of Grey Mountain Water Rights Under Poudre River Coordinated Peak Flow Operations Program Northern Integrated Supply Project

1. Purpose

The purpose of this Protocol is to provide a reference document for use by the State Engineer and Division Engineer for Water Division 1 (collectively "Engineers") when administering the Grey Mountain Water Rights pursuant to their exclusive authority under § 37-92-501, C.R.S., at times when Glade Reservoir is operated for NISP in accordance with a Fish and Wildlife Mitigation and Enhancement Plan (FWMEP) proposed by the NISP Water Activity Enterprise and approved by the Colorado Parks and Wildlife Commission and the Colorado Water Conservation Board to satisfy the requirements of Colorado Revised Statute 37-60-122.2 and Section 5 of Chapter 266, Session Laws of Colorado 1987.

This Protocol describes how the Engineers will administer and account for operation of the Grey Mountain Water Rights under the applicable decrees, with consideration of the requirements for operation of Glade Reservoir under the FWMEP. This Protocol is intended only to assist the Engineers in meeting their statutory administrative duties and is not intended to, nor does it, create any right, benefit, claim, duty of obligation, implied or otherwise, enforceable at law or equity by any person. Further, if this Protocol is determined to be contrary to any applicable statutes, rules, or court rulings, the requirements of such statutes, rules, or court rulings shall control.

2. Background

The FWMEP includes a Peak Flow Operations Program to mitigate the impacts that NISP operations might have on fish and wildlife resources associated with reduced annual peak flows in the Poudre River resulting from NISP diversions at the Poudre Valley Canal. The Peak Flow Operations Program is designed and intended, as part of the FWMEP, to avoid and minimize the impacts of NISP operations on annual peak flows in the Poudre River, with minimal effects on NISP Firm Yield.

- 3. Definitions. The following definitions apply for purposes of this Administrative Protocol ("Protocol"). In addition, terms defined elsewhere in this Protocol shall have the meanings there provided.
 - 3.1.1. Bypass: A reduction in the amount of water diverted by NISP at the NISP Diversion Location for the specific purposes of the Peak Flow Operations Program and the FWMEP. The amount of water Bypassed shall be calculated as the difference between the Storable Inflow and the measured amount of water diverted.

- 3.1.2. Fish and Wildlife Mitigation and Enhancement Plan (FWMEP): A Plan proposed by the NISP Water Activity Enterprise and approved by the Colorado Parks and Wildlife Commission and the Colorado Water Conservation Board for NISP, which includes the Peak Flow Operations Program, to satisfy the requirements of Colorado Revised Statute 37-60-122.2 and Section 5 of Chapter 266, Session Laws of Colorado 1987. The laws direct the Wildlife Commission (now the Parks and Wildlife Commission) and the Colorado Water Conservation Board or the Governor to determine an official State position on a wildlife mitigation plan submitted by an applicant proposing to construct, operate or maintain a water diversion, delivery or storage facility requiring federal approval.
- **3.1.3. Grey Mountain Water Rights:** Northern Water's 7/8 interest in the original Grey Mountain Dam and Reservoir water right (Case No. 80CW355), Glade Reservoir alternate place of storage (Case No. 03CW405), findings of reasonable diligence (consolidated Case Nos. 85CW206, 85CW207, 85CW208, 85CW209, 85CW210, and 89CW122; consolidated Case No. 01CW197; Case No. 11CW204) and numerous stipulations. The water rights have an appropriation date of May 2, 1980. The Grey Mountain Dam and Reservoir, and Glade Reservoir alternate place of storage, has a total decreed storage capacity of 220,000 acrefeet (Northern Water's 7/8 interest is 192,500 acre-feet). The Cache la Poudre Forebay Dam and Reservoir, and alternate place of storage Glade Forebay, have a total decreed storage capacity of 5,400 acre-feet. The total combined decreed rate of diversion for all decreed places of storage and points of diversion is 3,000 cubic feet per second (cfs).
- **3.1.4. Grey Mountain Diversion Location**: The existing location of the Poudre Valley Canal diversion structure on the Poudre River that will be used to divert water under the Grey Mountain Water Rights to Glade Reservoir and the Glade Reservoir Forebay. The Grey Mountain Water Rights describe the original point of diversion at the Grey Mountain Dam and Reservoir location, and alternate points of diversion at the Poudre Valley Canal Diversion, and the North Poudre Supply Canal Diversion Works (also known as the Munroe Canal). Through the FWMEP, NISP has stated that it will not divert the Grey Mountain Water Rights using the North Poudre Supply Canal.
- **3.1.5.** NISP Firm Yield: The ability to deliver 40,000 acre-feet of water annually to the NISP Participants under design drought conditions (1950-2005 historical hydrology).
- **3.1.6.** Northern Integrated Supply Project (NISP): A proposed water storage and distribution project that will supply 15 Northern Front Range water providers (Participants) with 40,000 acre feet of new, reliable water supplies. NISP would consist of two new reservoirs (including but not limited to Glade Reservoir); forebay reservoirs (including but not limited to Glade Reservoir); forebay reservoirs (including but not limited to Glade Reservoir); forebay reservoirs (including but not limited to the Glade Reservoir Forebay) and pumping plants to deliver water from the Cache la Poudre (Poudre) and South Platte rivers to the reservoirs; pipelines to deliver water for exchange with irrigation companies and to deliver water to water users; and improvements to existing canals that divert water from the Poudre River near the canyon mouth west of Fort Collins.

- **3.1.7.** The NISP Water Activity Enterprise (NISPWAE): NISPWAE, is a business owned by Northern Colorado Water Conservancy District (Northern Water) in accordance with Article X § 20 of the Colorado Constitution and Colorado statutes, which will manage the Northern Integrated Supply Project on behalf of the NISP participants.
- **3.1.8. Paper Fill:** Consistent with the Reservoir Guidelines , an accounting mechanism utilized by the Engineers for purposes of administration whereby water that is determined to be storable pursuant to a decreed water storage priority is charged against a storage water right either because the reservoir owner elected not to physically divert or store water under that right or a junior upstream reservoir diverted that water out-of-priority.
- 3.1.9. Peak Flow Operational Period: As described in the FWMEP, is up to a 72-hour consecutive period, and any additional time, which additional time shall be kept to the minimum amount reasonably possible, required to ramp or transition diversions so as to not exceed the maximum rates of change described in the FWMEP within which NISPWAE would Bypass Storable Inflows for purposes of the Program. NISPWAE desires to time operations under the Program with actual annual peak flow occurrences at the Peak Flow Target Location to the extent possible.
- **3.1.10.** Peak Flow Operations Program (Program): As described more fully in the FWMEP, a program whereby Bypass operations may occur for up to 72 hours under certain conditions, to meet the Target Peak Flow Rate, as specified in the FWMEP. The Program will be based upon Peak Flow Operational Tiers, which are described in the FWMEP.
- 3.1.11. Reservoir Guidelines: The Colorado Division of Water Resources General Administration Guidelines for Reservoirs, dated October 2011 and Amended February 2016.
- **3.1.12. Storable Inflow:** The amount of water that is determined by the Engineers for purposes of administration to be divertible in Glade Reservoir and the Glade Reservoir Forebay under the Grey Mountain Water Rights decrees, without consideration of the purpose and requirements of the Program and the FWMEP.
- **3.1.13. Target Peak Flow Flowrate:** As described in the FWMEP, the rate of flow in the Cache la Poudre River that is intended to be met when possible, during the Peak Flow Operational Period, by operation of Bypasses at the NISP Diversion Location, not by releases of water from Glade Reservoir or the Glade Reservoir Forebay.

4. Administrative Protocol

- 4.1. Determinations and Notification Prior to the Peak Flow Operational Period
 - 4.1.1. Within two weeks from the first day of the Seasonal Year, NISPWAE shall use the definitions described in this Protocol to define the initial applicable Peak Flow Operational Tier. If it is unclear which operational tier will be applicable to the current year, NISPWAE

Page 3

shall define all potential Peak Flow Operational Tiers. NISPWAE shall submit an Initial Operating Report describing current conditions and its determination of the Peak Flow Operational Tier(s) to the Adaptive Management Committee and the Division Engineer.

- **4.1.2.** No later than May 15, NISPWAE shall determine the Peak Flow Operational Tier, proposed operations for the selected Tier, and the estimated dates for the Peak Flow Operational Period in accordance with the FWMEP, and shall submit an Interim Operating Report documenting these decisions and proposed operations to the Division Engineer.
- **4.1.3.** If at any time hydrologic or other conditions warrant modification of the Peak Flow Operational Tier or proposed operations for the selected Tier as provided in the FWMEP, NISPWAE shall submit a Modified Interim Operating Report documenting these changes and proposed operations to the Division Engineer.
- **4.1.4.** NISPWAE shall notify the Division Engineer and Poudre River Water Commissioner, at least 24 hours in advance, the dates and times in that the Peak Flow Operational Period shall begin, and the dates and times during the Peak Flow Operational Period in which NISPWAE will Bypass Storable Inflows for purposes of the Program, and the date and time when Bypass operations for purpose of the Program will cease.

4.2. Measurement

- 4.2.1. NISPWAE will maintain streamflow gaging equipment that record and store data at a minimum 15-minute interval to be used for accounting purposes described herein. NISPWAE shall provide real-time monitoring capabilities on this equipment that can be viewed by the Division Engineer and the public.
- **4.2.2.** The Target Peak Flow will be measured at the current location of the Cache la Poudre at Canyon Mouth near Fort Collins (CLAFTCCO) streamflow gage as currently administered by the Colorado Division of Water Resources, using gaging equipment operated and maintained by the Colorado Division of Water Resources, U.S. Geological Survey, or Northern Water.
- **4.2.3.** The rate of Storable Inflow Bypassed at the NISP Diversion will be determined by the Division Engineer in accordance with the Reservoir Guidelines and based on streamflow data recorded at the Canyon Mouth gage location and information available to the Division Engineer regarding operation of other water rights.
- **4.2.4.** During operations of the Program, NISPWAE shall coordinate with the Division Engineer and Poudre River Water Commissioner to maintain hourly accounting showing Storable Inflows, the amount of water diverted by NISP, the amount of Storable Inflows Bypassed for purposes of the Program, and streamflow at the Target Peak Flow Location. NISPWAE shall provide this accounting to the Division Engineer and Poudre River Water

Commissioner within 7 days following the completion of the Program through a Final Operating Report.

- 4.3. Administration and Accounting for one fill and paper fill of the Grey Mountain Water Rights
 - **4.3.1.** Water storage accounting year. The water storage year, for purposes of defining the one fill and accounting, for the Grey Mountain Water Rights and the Glade Reservoir fill accounting shall begin on May 1.
 - **4.3.2.** Diversions to alleviate flooding. If during any time when Storable Inflow is being Bypassed at the Grey Mountain Diversion Location, NISPWAE or the Division Engineer receives a request from any governmental or emergency agency to divert water at the Grey Mountain Diversion Location to assist in alleviating flooding conditions that have the ability to or are actively damaging life or property, and NISPWAE consents and water can be safely and legally diverted at the NISP Diversion Location, Bypass operations under the Program may cease.
 - **4.3.3.** Exercise of other water rights. During the Peak Flow Operational Period, the Division Engineer and Poudre River Water Commissioner shall not prevent other water users from exercising decreed water rights or from diverting unappropriated flows.
 - **4.3.4.** One fill. By virtue of its 7/8th ownership interest in the Grey Mountain Water Rights and the Grey Mountain Water Rights decrees, Northern Water is entitled to one annual fill of Glade Reservoir in combination with the Glade Reservoir Forebay, of 192,500 acre-feet. The Glade Reservoir Forebay may be filled and refilled without limitation, subject to the aggregate and cumulative annual fill limit described above.
 - **4.3.5. Paper fill.** The Grey Mountain Water Rights will be paper filled—i.e., the Engineers will count Storable Inflow that is not diverted to storage by NISPWAE against the aggregate one fill volume of 192,500 acre-feet for Glade Reservoir and the Glade Reservoir Forebay at times when Storable Inflow is not diverted to storage, except as provided in paragraph 4.3.6 below.
 - **4.3.6.** Accounting for Bypassed water. The Engineers will not count Bypassed water against Northern Water's aggregate one fill volume of 192,500 acre-feet for Glade Reservoir and the Glade Reservoir Forebay during the Peak Flow Operational Period for purposes of the Program, or when Storable Inflow is not diverted for other legitimate reasons consistent with the Reservoir Guidelines as determined by the Engineers. As provided in the Reservoir Guidelines, the Engineers may use discretion to not impose a paper fill for accounting and administrative purposes during times when conditions do not allow storage of water for a variety of reasons, including when necessary to accommodate other necessary activities.

NOTE: This bill has been prepared for the signatures of the appropriate legislative officers and the Governor. To determine whether the Governor has signed the bill or taken other action on it, please consult the legislative status sheet, the legislative history, or the Session Laws. Governor Signed 4/12/2018

SENATE BILL 18-170

BY SENATOR(S) Sonnenberg, Baumgardner, Cooke, Coram, Crowder, Gardner, Lambert, Lundberg, Marble, Neville T., Priola, Scott, Smallwood, Tate;

also REPRESENTATIVE(S) Hansen and McKean, Rankin, Rosenthal, Saine, Valdez, Winkler, Young.

CONCERNING A WATER COURT PROCESS BY WHICH AN OWNER OF A STORAGE WATER RIGHT ALLOWING WATER TO BE STORED IN NEW RESERVOIR CAPACITY MAY RELEASE WATER INTO AN IDENTIFIED STREAM REACH IN A MANNER THAT PROTECTS THE WATER RELEASES WHILE COMPLYING WITH MITIGATION MEASURES IDENTIFIED IN A FISH AND WILDLIFE MITIGATION PLAN APPROVED BY THE COLORADO WATER CONSERVATION BOARD.

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. In Colorado Revised Statutes, 37-92-102, **add** (8) as follows:

37-92-102. Legislative declaration - basic tenets of Colorado water law. (8) Reservoir releases for fish and wildlife mitigation - definitions. (a) THE GENERAL ASSEMBLY HEREBY FINDS, DETERMINES, AND DECLARES THAT:

Exhibit 4

Capital letters or bold & italic numbers indicate new material added to existing statutes; dashes through words indicate deletions from existing statutes and such material not part of act.

(I) ALLOWING THE OWNER OF A WATER STORAGE RIGHT THAT ALLOWS WATER TO BE STORED IN NEW RESERVOIR CAPACITY TO CONTRACT WITH THE BOARD TO DEDICATE TO THE BOARD WATER STORED UNDER THE WATER STORAGE RIGHT FOR RELEASE FROM THE NEW RESERVOIR CAPACITY TO REASONABLY AVOID, MINIMIZE, OR MITIGATE IMPACTS OF THE NEW RESERVOIR CAPACITY ON FISH AND WILDLIFE RESOURCES WITHIN AN IDENTIFIED STREAM REACH MAY ENABLE THE OWNER OF THE WATER STORAGE RIGHT TO COMPLY WITH MITIGATION MEASURES IDENTIFIED IN A FISH AND WILDLIFE MITIGATION PLAN APPROVED UNDER SECTION 37-60-122.2;

(II) ACCORDINGLY, FOR THE LIMITED PURPOSE OF PROVIDING ADDITIONAL METHODS TO COMPLY WITH A FISH AND WILDLIFE MITIGATION PLAN APPROVED UNDER SECTION 37-60-122.2, IT IS APPROPRIATE TO CREATE A WATER COURT PROCESS TO ALLOW THE OWNER OF A WATER STORAGE RIGHT THAT ALLOWS WATER TO BE STORED IN NEW RESERVOIR CAPACITY, A PORTION OF WHICH WATER WILL THEN BE DEDICATED TO THE BOARD, TO:

(A) OBTAIN PROTECTION FOR WATER TO BE RELEASED FROM THE NEW RESERVOIR CAPACITY, UP TO THE AMOUNT OF WATER THAT IS APPROPRIATE FOR STREAM FLOWS TO PRESERVE OR IMPROVE THE NATURAL ENVIRONMENT TO A REASONABLE DEGREE WITHIN THE QUALIFYING STREAM REACH; AND

(B) MAINTAIN DOMINION AND CONTROL OVER THE RELEASED WATER THROUGH A QUALIFYING STREAM REACH;

(III) THE RELEASED WATER SUBJECT TO A PROTECTED MITIGATION RELEASE AUTHORIZED UNDER THIS SUBSECTION (8) MUST BE REDIVERTED AT OR BELOW THE DOWNSTREAM TERMINATION POINT OF THE QUALIFYING STREAM REACH, EITHER DIRECTLY AT A SURFACE POINT OF DIVERSION OR BY A DECREED EXCHANGE AS PERMITTED IN THIS SUBSECTION (8) FOR USE BY AN OWNER FOR THE DECREED BENEFICIAL USES OF THAT WATER STORAGE RIGHT;

(IV) EXCEPT AS OTHERWISE PROVIDED IN THIS SUBSECTION (8), THE CONTRACTUAL DEDICATION TO THE BOARD MUST COMPLY WITH THE PROCEDURES AND PROTECTIONS FOR OTHER WATER RIGHTS SPECIFIED IN SUBSECTION (3) OF THIS SECTION;

PAGE 2-SENATE BILL 18-170

 $(\mathrm{V})~$ The water court process and resulting decree must ensure that:

(A) PROTECTED MITIGATION RELEASES DO NOT EXPAND THE WATER STORAGE RIGHT THAT IS TO PROVIDE THE WATER FOR THE PROTECTED MITIGATION RELEASES OR INJURE OTHER WATER RIGHTS;

(B) THE PROTECTED MITIGATION RELEASES WILL BE PROTECTED THROUGH THE QUALIFYING STREAM REACH UP TO THE AMOUNT OF WATER THAT IS APPROPRIATE FOR STREAM FLOWS TO PRESERVE OR IMPROVE THE NATURAL ENVIRONMENT TO A REASONABLE DEGREE WITHIN THE QUALIFYING STREAM REACH; AND

(C) DIVERSIONS OF THE PROTECTED MITIGATION RELEASES WITHIN THE QUALIFYING STREAM REACH BY EXCHANGES, SUBSTITUTION PLANS, AUGMENTATION PLANS, OR OTHER MEANS THAT CAUSE A REDUCTION IN THE PROTECTED MITIGATION RELEASES WITHIN THE QUALIFYING STREAM REACH, OTHER THAN REDUCTIONS CAUSED BY EVAPORATION, TRANSPORTATION, AND OTHER LOSSES, WILL BE PREVENTED; AND

(VI) THROUGH THE DEDICATION OF THE PROTECTED MITIGATION RELEASES TO THE BOARD UNDER THE PROCEDURES SET FORTH IN SUBSECTION (3) OF THIS SECTION, EXCEPT AS OTHERWISE PROVIDED IN THIS SUBSECTION (8), AND THROUGH THE WATER COURT DECREE APPROVING THE PROTECTED MITIGATION RELEASES, THE PROTECTED MITIGATION RELEASES WILL SERVE A SECONDARY INSTREAM BENEFICIAL USE, SPECIFICALLY THE PRESERVATION OR IMPROVEMENT OF THE NATURAL ENVIRONMENT TO A REASONABLE DEGREE WITHIN THE QUALIFYING STREAM REACH.

(b) AS USED IN THIS SUBSECTION (8):

(I) "BOARD" MEANS THE COLORADO WATER CONSERVATION BOARD CREATED IN SECTION 37-60-102.

(II) "MITIGATION RELEASE" MEANS:

(A) THE RELEASE OF WATER FROM A WATER STORAGE RIGHT STORED IN NEW RESERVOIR CAPACITY INTO A QUALIFYING STREAM REACH TO REASONABLY AVOID, MINIMIZE, OR MITIGATE THE IMPACTS OF THE NEW RESERVOIR CAPACITY ON FISH AND WILDLIFE RESOURCES WITHIN THE

PAGE 3-SENATE BILL 18-170

QUALIFYING STREAM REACH IN ACCORDANCE WITH A FISH AND WILDLIFE MITIGATION PLAN APPROVED UNDER SECTION 37-60-122.2; AND

(B) THE REDIVERSION OF THE RELEASED WATER AT OR BELOW THE DOWNSTREAM TERMINATION POINT OF THE QUALIFYING STREAM REACH, EITHER DIRECTLY AT A SURFACE POINT OF DIVERSION OR BY A DECREED IN-PRIORITY EXCHANGE TO AN EXCHANGE-TO POINT IDENTIFIED IN THE DECREED IN-PRIORITY EXCHANGE THAT IS OUTSIDE OF THE QUALIFYING STREAM REACH, FOR USE BY AN OWNER FOR THE DECREED BENEFICIAL USES OF THAT WATER STORAGE RIGHT.

(III) "NEW RESERVOIR CAPACITY" MEANS ADDITIONAL WATER STORAGE CAPACITY RESULTING FROM THE CONSTRUCTION OF A NEW RESERVOIR OR A PHYSICAL ENLARGEMENT OF AN EXISTING RESERVOIR IF THE CONSTRUCTION OR PHYSICAL ENLARGEMENT IS COMPLETED ON OR AFTER THE EFFECTIVE DATE OF THIS SUBSECTION (8).

(IV) "OWNER" MEANS THE PERSON THAT OWNS THE WATER STORAGE RIGHT THAT IS TO PROVIDE THE WATER FOR A PROTECTED MITIGATION RELEASE, AND, IN THE CASE OF A WATER STORAGE RIGHT OWNED BY A WATER CONSERVANCY DISTRICT, WATER CONSERVATION DISTRICT, MUNICIPALITY, SPECIAL DISTRICT, OR MUTUAL DITCH COMPANY, INCLUDES THE RESIDENTS, ALLOTTEES, MEMBERS, CUSTOMERS, SHAREHOLDERS, OR MEMBER DITCH COMPANIES OF THAT ENTITY; AND, IN THE CASE OF A WATER STORAGE RIGHT OWNED BY AN IRRIGATION DISTRICT, INCLUDES THE LANDOWNERS WITHIN THE DISTRICT.

(V) "PROTECTED MITIGATION RELEASE" MEANS THE AMOUNT OF WATER TO BE RELEASED FOR A MITIGATION RELEASE THAT:

(A) THE BOARD DETERMINES IS APPROPRIATE FOR STREAM FLOWS TO PRESERVE OR IMPROVE THE NATURAL ENVIRONMENT TO A REASONABLE DEGREE WITHIN AN IDENTIFIED QUALIFYING STREAM REACH;

(B) IS APPROVED BY A WATER COURT DECREE PURSUANT TO THIS SUBSECTION (8); AND

(C) IS PROTECTED FROM DIVERSION, EXCHANGE, OR USE BY HOLDERS OF CONDITIONAL OR VESTED WATER RIGHTS OR OTHER PERSONS THAT CAUSE A REDUCTION IN THE PROTECTED MITIGATION RELEASE AT ANY LOCATION

PAGE 4-SENATE BILL 18-170

WITHIN THE QUALIFYING STREAM REACH, OTHER THAN ANY REDUCTIONS CAUSED BY EVAPORATION, TRANSPORTATION, AND OTHER LOSSES.

(VI) "QUALIFYING STREAM REACH" MEANS ALL OR A PORTION OF A NATURAL STREAM OF THE STATE THAT IS IDENTIFIED IN A FISH AND WILDLIFE MITIGATION PLAN APPROVED UNDER SECTION 37-60-122.2 AND WITHIN WHICH THE BOARD DETERMINES, AND THE WATER COURT DECREE APPROVES IN ACCORDANCE WITH THIS SUBSECTION (8), THAT WATER FROM A PROTECTED MITIGATION RELEASE IS APPROPRIATE FOR STREAM FLOWS TO PRESERVE OR IMPROVE THE NATURAL ENVIRONMENT TO A REASONABLE DEGREE. A QUALIFYING STREAM REACH MUST BE IDENTIFIED BY AN UPSTREAM POINT AT WHICH THE PROTECTED MITIGATION RELEASE ENTERS THE NATURAL STREAM AND A DOWNSTREAM TERMINATION POINT.

(VII) "SURFACE POINT OF DIVERSION" MEANS A STRUCTURE THAT DIVERTS SURFACE WATER ONLY. "SURFACE POINT OF DIVERSION" DOES NOT INCLUDE:

(A) A STRUCTURE THAT DIVERTS GROUNDWATER, WHETHER THROUGH A WELL, INFILTRATION GALLERY, OR OTHER TYPE OF GROUNDWATER DIVERSION STRUCTURE; OR

(B) DELIVERY INTO A FACILITY USED TO RECHARGE AN ALLUVIAL AQUIFER.

(c) (I) AN OWNER MAY, IN ACCORDANCE WITH AND AFTER COMPLYING WITH THE REQUIREMENTS OF THIS SUBSECTION (8), MAKE A PROTECTED MITIGATION RELEASE.

(II) HOLDERS OF CONDITIONAL OR VESTED WATER RIGHTS OR OTHER PERSONS SHALL NOT DIVERT, EXCHANGE UPON, OR USE A PROTECTED MITIGATION RELEASE WITHIN THE QUALIFYING STREAM REACH UNLESS THE DIVERSION, EXCHANGE, OR USE IS FULLY AUGMENTED SO THAT THERE IS NO REDUCTION IN THE PROTECTED MITIGATION RELEASE AT ANY LOCATION WITHIN THE QUALIFYING STREAM REACH, OTHER THAN REDUCTIONS CAUSED BY EVAPORATION, TRANSPORTATION, AND OTHER LOSSES.

(III) THE STATE ENGINEER SHALL ADMINISTER PROTECTED MITIGATION RELEASES MADE IN ACCORDANCE WITH THIS SUBSECTION (8) AND THE TERMS AND CONDITIONS OF DECREES APPROVING PROTECTED

PAGE 5-SENATE BILL 18-170

MITIGATION RELEASES.

(IV) (A) EXCEPT FOR REDUCTIONS CAUSED BY EVAPORATION, TRANSPORTATION, AND OTHER LOSSES, AND SUBJECT TO SUBSECTIONS (8)(c)(IV)(B) AND (8)(c)(IV)(C) OF THIS SECTION, AN OWNER SHALL: REDIVERT ALL PROTECTED MITIGATION RELEASES AT OR BELOW THE DOWNSTREAM TERMINATION POINT OF THE QUALIFYING STREAM REACH, EITHER DIRECTLY AT A SURFACE POINT OF DIVERSION OR BY A DECREED IN-PRIORITY EXCHANGE TO AN EXCHANGE-TO POINT IDENTIFIED IN THE DECREED IN-PRIORITY EXCHANGE THAT IS OUTSIDE OF THE QUALIFYING STREAM REACH; AND APPLY THE WATER TO THE DECREED BENEFICIAL USES OF THE WATER STORAGE RIGHT THAT PROVIDES THE WATER FOR THE PROTECTED MITIGATION RELEASE.

(B) EXCEPT AS PROVIDED IN SUBSECTION (8)(c)(IV)(C) of this section, an owner may redivert water associated with protected mitigation releases in accordance with subsection (8)(c)(IV)(A) of this section by exchange into storage, which exchange shall be administered with a priority date no earlier than the date of approval of the fish and wildlife mitigation and enhancement plan pursuant to section 37-60-122.2, and subsequently apply the water to the decreed beneficial uses of the water storage right that provides the water for the protected mitigation release.

(C) AN OWNER SHALL NOT REDIVERT WATER ASSOCIATED WITH PROTECTED MITIGATION RELEASES BY EXCHANGE THROUGH ALL OR A PORTION OF THE QUALIFYING STREAM REACH OR TO THE RESERVOIR OF ORIGIN.

(V) WATER PRESENT IN THE QUALIFYING STREAM REACH, OTHER THAN THE PROTECTED MITIGATION RELEASES, REMAINS AVAILABLE TO OTHER WATER USERS FOR BENEFICIAL USES AND MAY BE DIVERTED AND BENEFICIALLY USED BY OTHER WATER USERS IN ACCORDANCE WITH THE PRIORITY SYSTEM AND ANY RELEVANT DECREE.

(VI) THE PROCEDURES SET FORTH IN THIS SUBSECTION (8) APPLY ONLY TO THE ADJUDICATION OF PROPOSED PROTECTED MITIGATION RELEASES FROM NEW RESERVOIR CAPACITY AND DO NOT ALTER THE PROCEDURES OR LEGAL STANDARDS APPLICABLE TO ANY OTHER TYPE OF WATER COURT APPLICATION.

PAGE 6-SENATE BILL 18-170

(VII) AN APPLICATION FOR APPROVAL OF A PROPOSED PROTECTED MITIGATION RELEASE FILED IN ACCORDANCE WITH THIS SUBSECTION (8) MUST NOT INCLUDE, AND SHALL NOT BE CONSOLIDATED OR JOINED WITH, ANY OTHER WATER COURT APPLICATION.

(d) AN OWNER THAT INTENDS TO MAKE PROTECTED MITIGATION RELEASES IN ACCORDANCE WITH THIS SUBSECTION (8) SHALL, BEFORE ANY SUCH RELEASES MAY BE ADMINISTERED AS PROTECTED MITIGATION RELEASES:

(I) DEDICATE THE PROPOSED PROTECTED MITIGATION RELEASES TO THE BOARD BY GRANT, DONATION, OR OTHER CONTRACTUAL AGREEMENT IN ACCORDANCE WITH SUBSECTIONS (3) AND (8)(e) OF THIS SECTION;

(II) AGREE TO MAKE THE PROPOSED PROTECTED MITIGATION RELEASES AVAILABLE TO THE BOARD WITHIN THE QUALIFYING STREAM REACH;

(III) WITH THE BOARD AS A CO-APPLICANT, FILE AN APPLICATION IN WATER COURT IN THE WATER DIVISION IN WHICH THE NEW RESERVOIR CAPACITY IS LOCATED, SEEKING APPROVAL OF THE PROPOSED PROTECTED MITIGATION RELEASES, BY THE LAST DAY OF THE TWELFTH MONTH FOLLOWING THE MONTH IN WHICH THE NEW RESERVOIR CAPACITY IS CERTIFIED FOR STORAGE BY THE STATE ENGINEER; EXCEPT THAT AN APPLICATION MUST NOT INCLUDE ANY OTHER CLAIM FOR RELIEF; AND

(IV) OBTAIN A FINAL WATER COURT DECREE APPROVING THE PROTECTED MITIGATION RELEASES.

(e) (I) EXCEPT AS OTHERWISE PROVIDED IN THIS SUBSECTION (8)(e), A DEDICATION TO THE BOARD PURSUANT TO SUBSECTION (8)(d)(I) OF THIS SECTION OF AN INTEREST IN WATER YIELDED FROM A WATER STORAGE RIGHT THAT WILL BE STORED IN NEW RESERVOIR CAPACITY IS SUBJECT TO SUBSECTION (3) OF THIS SECTION FOR THE DEDICATION OF AN INTEREST IN WATER TO THE BOARD, INCLUDING THE REQUIREMENT IN SUBSECTION (3) OF THIS SECTION THAT THE BOARD MAKE A DETERMINATION THAT THE PROPOSED PROTECTED MITIGATION RELEASES ARE APPROPRIATE FOR STREAM FLOWS TO PRESERVE OR IMPROVE THE NATURAL ENVIRONMENT TO A REASONABLE DEGREE WITHIN THE QUALIFYING STREAM REACH. (II) THE BOARD'S CONTRACTUAL INTEREST IN WATER ACQUIRED IN ACCORDANCE WITH THIS SUBSECTION (8) MAY BE YIELDED FROM A WATER RIGHT THAT IS EITHER ABSOLUTE OR CONDITIONAL AT THE TIME OF ACQUISITION.

(III) TO OBTAIN A DECREED RIGHT TO USE PROPOSED PROTECTED MITIGATION RELEASES FOR INSTREAM FLOW PURPOSES, THE OWNER AND THE BOARD NEED NOT FILE AN APPLICATION WITH THE WATER COURT TO CHANGE THE WATER STORAGE RIGHT FROM WHICH THE PROPOSED PROTECTED MITIGATION RELEASES ARE TO BE MADE.

(IV) THE BOARD NEED NOT HOLD A DECREED APPROPRIATION FOR INSTREAM FLOWS WITHIN THE QUALIFYING STREAM REACH AS A PREREQUISITE FOR AN OWNER TO DEDICATE PROPOSED PROTECTED MITIGATION RELEASES TO THE BOARD IN ACCORDANCE WITH THIS SUBSECTION (8).

(f) (I) TO SATISFY THE REQUIREMENTS OF SUBSECTIONS (8)(d)(III)AND (8)(d)(IV) of this section, the board and the owner must file a Water court application as co-applicants pursuant to subsection (8)(d)(III). The water court shall enter a decree approving the PROPOSED PROTECTED MITIGATION RELEASES IF:

(A) THE BOARD DEMONSTRATES THAT IT HAS DULY DETERMINED IN ACCORDANCE WITH THIS SUBSECTION (8) AND WITH SUBSECTION (3) OF THIS SECTION THAT THE PROPOSED PROTECTED MITIGATION RELEASES ARE APPROPRIATE FOR STREAM FLOWS TO PRESERVE OR IMPROVE THE NATURAL ENVIRONMENT TO A REASONABLE DEGREE WITHIN THE QUALIFYING STREAM REACH. IF A PARTY CHALLENGES THE BOARD'S DETERMINATION IN THE WATER COURT PROCEEDING, THE BOARD SHALL ASSEMBLE AND SUBMIT TO THE COURT THE COMPLETE ADMINISTRATIVE RECORD UPON WHICH THE BOARD MADE THE DETERMINATION. THE COURT SHALL BASE ITS REVIEW OF THE BOARD'S DETERMINATION ON THE ADMINISTRATIVE RECORD, USING THE CRITERIA SET FORTH IN SECTION 24-4-106 (6) AND (7).

(B) THE OWNER PROVES THAT THE PROPOSED PROTECTED MITIGATION RELEASES: WILL NOT CAUSE AN EXPANSION OF USE BEYOND THE LIMITS OF USE OF THE DECREED WATER STORAGE RIGHT FROM WHICH THE MITIGATION RELEASES ARE TO BE MADE; WILL NOT CAUSE INJURY TO VESTED WATER RIGHTS, DECREED CONDITIONAL WATER RIGHTS, SUBSEQUENTLY

PAGE 8-SENATE BILL 18-170

ADJUDICATED WATER RIGHTS THAT ARE THE SUBJECT OF A PENDING WATER COURT APPLICATION FILED BEFORE THE EFFECTIVE DATE OF THIS SUBSECTION (8), OR OTHER WATER USERS' USES OR EXCHANGES OF WATER BEING MADE PURSUANT TO APPROPRIATION OR PRACTICES IN EXISTENCE ON THE DATE OF THE FILING OF THE APPLICATION FOR APPROVAL OF THE PROPOSED PROTECTED MITIGATION RELEASES; ARE ADMINISTRABLE BY THE DIVISION ENGINEER; AND HAVE BEEN DEDICATED TO AND APPROVED BY THE BOARD IN COMPLIANCE WITH THE REQUIREMENTS AND PROCEDURES OF SUBSECTION (8)(e) OF THIS SECTION.

(II) FOR PURPOSES OF DETERMINING INJURY PURSUANT TO SUBSECTION (8)(f)(I)(B) of this section, the inability of other water users to divert, exchange upon, or use the proposed protected mitigation releases within the qualifying stream reach shall not be considered injury.

(III) THE WATER COURT SHALL NOT REQUANTIFY THE WATER STORAGE RIGHT FROM WHICH THE PROTECTED MITIGATION RELEASES ARE PROPOSED TO BE MADE.

(IV) A DECREE APPROVING A PROTECTED MITIGATION RELEASE MUST CONTAIN THE TERMS AND CONDITIONS NECESSARY TO PREVENT INJURY TO OTHER WATER RIGHTS, PREVENT THE EXPANSION OF USE OF THE DECREED WATER STORAGE RIGHT FROM WHICH THE PROTECTED MITIGATION RELEASE IS TO BE MADE, AND ENSURE THAT THE PROTECTED MITIGATION RELEASES ARE ADMINISTRABLE BY THE DIVISION ENGINEER, INCLUDING, IF NECESSARY, TO PREVENT INJURY OR EXPANSION OF USE OF THE DECREED WATER STORAGE RIGHT FROM WHICH THE PROTECTED MITIGATION RELEASE IS TO BE MADE, TERMS REJECTING OR DECREASING THE PROPOSED FLOW RATE OF THE PROTECTED MITIGATION RELEASES OR THE QUALIFYING STREAM REACH. ALL SUCH DECREES MUST ALSO SPECIFICALLY IDENTIFY THE TIMING AND RATE OF THE PROTECTED MITIGATION RELEASES, THE QUALIFYING STREAM REACH, AND THE FLOW RATE THAT IS APPROPRIATE TO PRESERVE OR IMPROVE THE NATURAL ENVIRONMENT TO A REASONABLE DEGREE WITHIN THE OUALIFYING STREAM REACH. FOR PROTECTED MITIGATION RELEASES THAT ARE TO BE EXCHANGED INTO STORAGE IN ACCORDANCE WITH SUBSECTION (8)(c)(IV)(B) OF THIS SECTION, THE DECREE MUST SPECIFY THAT THE EXCHANGE TO STORAGE BE ADMINISTERED WITH A PRIORITY DATE THAT IS NO EARLIER THAN THE DATE OF THE APPROVAL OF THE FISH AND WILDLIFE MITIGATION AND ENHANCEMENT PLAN PURSUANT TO SECTION 37-60-122.2.

PAGE 9-SENATE BILL 18-170

(V) AN OWNER SHALL ERECT, MAINTAIN, AND REPAIR SUITABLE AND PROPER MEASURING DEVICES AS REQUIRED BY SECTION 37-84-113 AND BY THE DECREE APPROVING THE PROTECTED MITIGATION RELEASES AND AS ORDERED BY THE STATE OR DIVISION ENGINEER. ADDITIONALLY, THE OWNER SHALL MAINTAIN RECORDS OF THE QUANTITY AND RATE OF RELEASE OF THE PROTECTED MITIGATION RELEASES AND THE QUANTITY AND RATE OF DIVERSION OF THE PROTECTED MITIGATION RELEASES THAT ARE REDIVERTED FOR SUBSEQUENT APPLICATION TO BENEFICIAL USE.

(g) IF OPERATION OF A PROTECTED MITIGATION RELEASE UNDER THIS SUBSECTION (8) REQUIRES THE MAKING OF PHYSICAL MODIFICATIONS TO AN EXISTING WATER DIVERSION STRUCTURE WITHIN THE QUALIFYING STREAM REACH TO ALLOW THE PROTECTED MITIGATION RELEASE TO BYPASS THE EXISTING WATER DIVERSION STRUCTURE, THE OWNER OF THE WATER STORAGE RIGHT USED TO MAKE THE PROTECTED MITIGATION RELEASE SHALL BEAR ALL REASONABLE CONSTRUCTION COSTS ASSOCIATED WITH THE PHYSICAL MODIFICATIONS AND ALL REASONABLE OPERATIONAL AND MAINTENANCE COSTS INCURRED BY THE OWNER OF THE EXISTING WATER DIVERSION STRUCTURE THAT WOULD NOT HAVE BEEN INCURRED IN THE ABSENCE OF THE PHYSICAL MODIFICATIONS TO THE STRUCTURE.

(h) A DETERMINATION UNDER SECTION 37-60-122.2 THAT RELEASES OF WATER FROM NEW RESERVOIR CAPACITY WILL HELP TO REASONABLY AVOID, MINIMIZE, OR MITIGATE THE IMPACTS OF THE NEW RESERVOIR CAPACITY ON FISH AND WILDLIFE RESOURCES WITHIN THE QUALIFYING STREAM REACH IS EVIDENCE OF THE APPROPRIATENESS OF A PROTECTED MITIGATION RELEASE WITHIN THE QUALIFYING STREAM REACH.

(i) A MITIGATION RELEASE SHALL NOT BE PROTECTED OR ADMINISTERED AS A PROTECTED MITIGATION RELEASE:

(I) WHEN THE AMOUNT OF THE EXISTING FLOW IN THE QUALIFYING STREAM REACH IS SUCH THAT ADDITION OF THE PROTECTED MITIGATION RELEASE WOULD EXCEED THE STREAM FLOW RATE SET FORTH IN THE DECREE TO BE APPROPRIATE TO PRESERVE OR IMPROVE THE NATURAL ENVIRONMENT TO A REASONABLE DEGREE WITHIN THE QUALIFYING STREAM REACH;

(II) UNLESS THE OWNER IS IN COMPLIANCE WITH:

(A) THE MEASURING REQUIREMENTS OF SECTION 37-84-113;

PAGE 10-SENATE BILL 18-170

(B) THE TERMS AND CONDITIONS IN THE DECREE APPROVING THE PROTECTED MITIGATION RELEASE REGARDING THE OPERATION, MAINTENANCE, OR REPAIR OF PROPER MEASURING DEVICES; AND

(C) AN ORDER BY THE STATE OR DIVISION ENGINEER REGARDING THE OPERATION, MAINTENANCE, OR REPAIR OF PROPER MEASURING DEVICES;

(III) WHEN THE OWNER IS INCAPABLE OF REDIVERTING THE PROTECTED MITIGATION RELEASE AT OR BELOW THE DOWNSTREAM TERMINATION POINT OF THE QUALIFYING STREAM REACH FOR APPLICATION TO A DECREED BENEFICIAL USE OF THE WATER STORAGE RIGHT THAT IS TO PROVIDE THE WATER FOR THE PROTECTED MITIGATION RELEASE;

(IV) WHEN THE RELEASED WATER IS WITHIN THE NATURAL STREAM AT A LOCATION OUTSIDE OF THE QUALIFYING STREAM REACH, INCLUDING WHEN THE RELEASED WATER IS BETWEEN THE DOWNSTREAM TERMINATION POINT OF THE QUALIFYING STREAM REACH AND THE POINT OF REDIVERSION; OR

(V) WHEN THE OWNER IS NOT OTHERWISE IN COMPLIANCE WITH THE TERMS OF THE DECREE APPROVING THE PROTECTED MITIGATION RELEASE.

(j) THIS SUBSECTION (8):

(I) DOES NOT IMPAIR OR IN ANY WAY AFFECT ANY WATER COURT DECREE, ADMINISTRATIVE AUTHORIZATION, OR AGREEMENT THAT ALLOWS WATER TO BE STORED, RELEASED, AND ADMINISTERED FOR ENVIRONMENTAL, PISCATORIAL, WATER QUALITY, RECREATIONAL, MUNICIPAL, OR OTHER IN-CHANNEL PURPOSES, INCLUDING THE MAINTENANCE OF DOMINION AND CONTROL OVER THE WATER RELEASES FROM A SPECIFIED RESERVOIR;

(II) IS NOT INTENDED TO BE THE EXCLUSIVE MEANS OF AUTHORIZING WATER TO BE STORED, RELEASED, AND ADMINISTERED FOR ENVIRONMENTAL, PISCATORIAL, WATER QUALITY, RECREATIONAL, MUNICIPAL, OR OTHER IN-CHANNEL PURPOSES, INCLUDING THE MAINTENANCE OF DOMINION AND CONTROL OVER THE WATER RELEASED FROM A SPECIFIC RESERVOIR; AND

(III) DOES NOT AUTHORIZE, RESTRICT, OR PRECLUDE FUTURE WATER RIGHTS, APPROPRIATIONS, ADMINISTRATIVE AUTHORIZATIONS, OR OTHER AGREEMENTS FOR THE PURPOSES LISTED IN SUBSECTION (8)(j)(I) OF THIS

PAGE 11-SENATE BILL 18-170

SECTION.

SECTION 2. Act subject to petition - effective date applicability. (1) This act takes effect at 12:01 a.m. on the day following the expiration of the ninety-day period after final adjournment of the general assembly (August 8, 2018, if adjournment sine die is on May 9, 2018); except that, if a referendum petition is filed pursuant to section 1 (3) of article V of the state constitution against this act or an item, section, or part of this act within such period, then the act, item, section, or part will not take effect unless approved by the people at the general election to be held in November 2018 and, in such case, will take effect on the date of the official declaration of the vote thereon by the governor. (2) This act applies to reservoir release dedication applications filed in the water court on or after the applicable effective date of this act.

Kevin J. Grantham PRESIDENT OF THE SENATE Crisanta Duran SPEAKER OF THE HOUSE OF REPRESENTATIVES

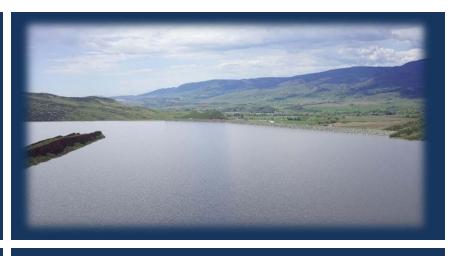
Effie Ameen SECRETARY OF THE SENATE Marilyn Eddins CHIEF CLERK OF THE HOUSE OF REPRESENTATIVES

APPROVED_____

John W. Hickenlooper GOVERNOR OF THE STATE OF COLORADO

PAGE 13-SENATE BILL 18-170







FISH AND WILDLIFE MITIGATION AND ENHANCEMENT PLAN

Prepared for: The Colorado Parks and Wildlife Commission in accordance with C.R.S. 37-60-122.2

> Applicant: Northern Water

acting by and through

Northern Integrated Supply Project Water Activity Enterprise Northern Colorado Water Conservancy District

October 10, 2017



Exhibit 5

NORTHERN INTEGRATED SUPPLY PROJECT

FISH AND WILDLIFE MITIGATION AND ENHANCEMENT PLAN

Prepared for: The Colorado Parks and Wildlife Commission in accordance with C.R.S. 37-60-122.2

> Applicant: Northern Water

acting by and through

Northern Integrated Supply Project Water Activity Enterprise Northern Colorado Water Conservancy District

October 10, 2017

CONTENTS

CONTEN	TS	iii
LIST OF T	ABLES	vi
LIST OF F	IGURES	vii
EXECUTI	VE SUMMARY	1
NORTHE	RN INTEGRATED SUPPLY PROJECT FISH AND WILDLIFE MITIGATION AND ENHANCEMENT PLA	∖ N 4
1.0	INTRODUCTION	4
2.0	NISP BACKGROUND	5
2.1.	Glade Reservoir Complex	5
2.2.	South Platte Water Conservation Project	7
2.3.	Water Supplies	7
2.4.	Conveyance to NISP Participants	8
2.5.	Estimated Project Cost	10
2.6.	Conservation	10
2.7.	Supplemental Draft EIS Conceptual Mitigation Plan	12
2.8.	Adaptive Management	14
3.0	OTHER CONCURRENT OR RELATED ACTIVITIES	16
3.1.	Halligan and Seaman Water Supply Projects	16
3.2.	Poudre Runs Through It Flows Committee	16
3	.2.1. Flows	17
3	.2.2. Funding	
3	.2.3. Poudre River Forum	
3.3.	, ,	
	.3.1. Poudre River Downtown Master Plan	
-	.3.2. Natural Areas Master Plan	
	.3.3. Ecosystem Response Model	
	.3.4. Poudre River Health Assessment Framework	
	.3.5. McMurry Natural Area Restoration Project	
3.4.		
3.5.	Cache La Poudre River at Greeley Flood Risk Mitigation and Ecosystem Restoration	20
4.0	REGULATORY PROCESS	
4.1.		
4.2.	,	
4.3.		
4.4.	Colorado Fish and Wildlife Mitigation Plan	24

4.4.1	L. N	/litigation and Enhancement Plans	24
4.4.2	2. 0	Consultation, Coordination and Public Input	25
5.0 PR	ROPOS	ED FISH AND WILDLIFE MITIGATION PLAN	27
5.1.	NISP F	Project Area	27
5.2.	Avoid	ance and Minimization	29
5.2.1	L. C	Design Commitments	29
5.2	2.1.1.	NISP Configuration	30
5.2	2.1.2.	Poudre Valley Canal Diversion Structure (AG-04)	30
5.2	2.1.3.	SPWCP Diversion Design (AG-07)	32
5.2	2.1.4.	Multi-Level Outlet Tower for Glade Reservoir Releases (WQ-01)	32
5.2	2.1.5.	Glade Reservoir Release Structure (WQ-02)	35
5.2.2	2. 0	Operational Commitments	36
5.2	2.2.1.	Avoid Munroe Canal Diversions (FW-01)	37
5.2	2.2.2.	Curtail Diversions for Non-Consumptive Water Rights (FW-02)	37
5.2	2.2.3.	Summer and Winter Diversion Curtailments (FW-03)	39
5.2	2.2.4.	Conveyance Refinement (FW-04)	39
5.2	2.2.5.	Poudre River Flow Augmentation Protection (FW-05)	46
5.2	2.2.6.	Peak Flow Operations Program (FW-08)	46
5.2	2.2.7.	Temperature Mitigation (WQ-06)	53
5.2	2.2.8.	Ramp NISP Diversions at PVC (FW-09)	57
5.2.3	B. C	Construction BMP Commitments	57
5.2	2.3.1.	Noxious Weed Control Plan (NW-01)	57
5.2	2.3.2.	Migrating Birds and Raptors (TW-03, TW-04, TW-05)	59
5.3.	•	ensatory Mitigation	
5.3.1	L. A	quatic Resource and Water Quality Mitigation	59
5.3	3.1.1.	Stream Channel and Habitat Improvement Plan (AG-01)	
5.3	3.1.2.	Channel and Habitat Improvements (AG-02)	61
5.3	3.1.3.	Riparian Vegetation (RV-01, RV-02)	
5.3	3.1.4.	Eaton Draw Water Quality Wetlands (WQ-03)	
5.3	3.1.5.	Streamflow and Water Quality Monitoring (WQ-04)	
5.3	3.1.6.	Mercury Bioaccumulation Mitigation (WQ-07)	
5.3.2	2. T	errestrial Wildlife Mitigation	
5.3	3.2.1.	U.S. Highway 287 Realignment Design for Wildlife Protection (TW-01)	
5.3	3.2.2.	U.S. Highway 287 Realignment Big Game Movement Adaptive Management Prog	-
		(TW-02)	
5.3	3.2.3.	Wildlife Habitat – Glade Reservoir Conservation Mitigation (TW-06)	
5.3.3	3. S	pecial Status Species Mitigation	
	3.3.1.	Bald Eagle (SS-02)	
	3.3.2.	Colorado Butterfly Plant (SS-03)	
	3.3.3.	Ute Ladies Tresses Orchid (SS-04)	
5.3	3.3.4.	Platte River Target Species (SS-05)	85

5.3.3.5	. Black-footed Ferret (SS-06)	
5.3.3.6	. Black-tailed Prairie Dog (SS-07)	
5.3.3.7	. Swift Fox (SS-08)	
5.3.3.8	. Burrowing Owl (SS-09)	
5.3.3.9	. Other Riparian Species (SS-10)	
5.3.3.1	0. Bell's Twinpod (SS-11)	
5.3.3.1	1. Townsend's Big-Eared Bat (SS-12)	
5.3.4.	Recreation and Public Access Mitigation	
5.3.4.1	. Glade Reservoir and State Land Hunting Access (RC-02)	
5.3.4.2	. Mitani-Tokuyasu State Wildlife Area and Confluence Area (RC-04, RC-05)	
5.3.4.3	. Glade Reservoir Poudre River Recreator Parking (RC-06)	
5.3.4.4	. Glade Reservoir Visitor's Center (RC-07)	
5.4. Miti	gation Costs and Schedule	
6.0 PROPO	SED FISH AND WILDLIFE ENHANCEMENT PLAN	
6.1. Enha	ancement	
6.1.1.	Aquatic Resource Enhancement	
6.1.1.1	. Poudre River Adaptive Management Program (AG-03)	
6.1.1.2	. Multi-Objective Diversion Structure Retrofits (AG-05)	
6.1.1.3	. Galeton Reservoir Native Fish Rearing (AG-08)	104
6.1.1.4	. Ramp Hansen Supply Canal Releases (FW-07)	104
6.1.1.5	. Coalition for the Poudre River Watershed (WQ-05)	105
6.1.2.	Terrestrial Resource Enhancement	106
6.1.2.1	. Wildlife Habitat – Glade Reservoir Conservation Enhancement (TW-07)	107
6.1.3.	Recreation and Public Access Enhancement	107
6.1.3.1	. Glade Reservoir Fishery (AG-06)	107
6.1.3.2	. Glade Reservoir Recreation (RC-01)	108
6.1.3.3	. Glade Reservoir Recreation and Wildlife Adaptive Management Program (RC	-03) 111
6.2. Enha	ancement Costs and Schedule	112
REFERENCES		115
APPENDIX A – FIS	SH AND WILDLIFE MITIGATION AND ENHANCEMENT PLAN SUMMARY TABLES	1

LIST OF TABLES

Table 1. E	stimated NISP Project Cost (2017 Dollars)	10
Table 2. A	Approximate Demarcation of Resource Study Reaches of the Cache la Poudre	28
Table 3. D	Decreed and Stipulated Flow Commitments by NISP for Non-Consumptive Water Rights	39
Table 4. N	Aonthly Poudre River Intake Diversions	40
Table 5. S	Summary of Key Flow Criteria and Metrics	42
Table 6. P	Peak Flow Operations Program by Peak Flow Operational Year	48
Table 7. P	Peak Flow Recurrence Intervals with Peak Flow Operations Program	51
Table 8. E	xisting Acute and Chronic Temperature Standards for the Poudre River	56
Table 9. Li	ist of Potential Water Quality Monitoring Parameters for Initial Data Collection	73
Table 10.	Summary of National Bald Eagle Management Guidelines (Activity Specific) (FHWA 2017)	83
Table 11.	NISP Mitigation Plan Schedule and Cost Summary	92
Table 12.	Glade Reservoir Cool Water Fishery Management Plan1	08
Table 13.	NISP Enhancement Plan Schedule and Cost Summary1	14

LIST OF FIGURES

Figure 1. N	NISP Infrastructure and Features	. 6
Figure 2. A	Annual Weighted Gallons Per Capita per Day of Combined NISP Participants (Harvey	
	Economics 2017)1	11
Figure 3. N	NISP Participant GPCD as Compared with Other Similar Colorado and Western U.S. Water	
	Providers (Harvey Economics 2017)	12
Figure 4. A	Adaptive Management Cycle Adopted for NISP Fish and Wildlife Mitigation Plan (Tasmania	
	2016)	L5
Figure 5. L	ine Diagram of Poudre River from Munroe Canal to Fossil Creek Reservoir Outlet (Northern	
	Water 1996)	29
Figure 6. E	xisting Poudre Valley Canal Diversion on Poudre River near Canyon Mouth	31
Figure 7. G	ilade Reservoir Release Point to Poudre River	34
Figure 8. N	Multi-Level Outlet Tower at Carter Lake	35
Figure 9. H	Hansen Supply Canal Discharge Structure to Poudre River	36
Figure 10.	Poudre River Fish Hatchery and Recreational Minimum Flow Points (CDM Smith 2014)	38
Figure 11.	NISP Conveyance Refinement – Regional Facilities	11
Figure 12.	Shields Street - Conveyance Refinement Monthly Hydrologic Analysis	13
•	Lincoln Street Gage - Conveyance Refinement Monthly Hydrologic Analysis	
Figure 14.	Peak Flow Operations Program Decision Tree	19
Figure 15.	Tier Classification Using CTP Model Run 3a2 (Current Conditions with NISP)	50
Figure 16.	Poudre River at Canyon Gage Average Daily Peak Flow	51
Figure 17.	Poudre River at Canyon Gage 3-Day Average Daily Peak Flow	52
Figure 18.	Poudre River Average Daily Peak Flow at Canyon, Lincoln Street and Greeley Gages	53
Figure 19.	CLAFTCCO (Canyon Gage, Upstream of Hansen Canal) Temperature Gage Maximum Weekly	
	Average Temperature Results Compared to Relevant Standards (Hydros 2014a)	54
Figure 20.	HSC-PRU (Below Hansen Canal) Temperature Gage Maximum Weekly Average Temperature	
	Results Compared to Relevant Standards (Hydros 2014a)	54
Figure 21.	Poudre Valley Canal Mitigation Reach	52
Figure 22.	Watson Lake Mitigation Reach	53
Figure 23.	Frank State Wildlife Area Proposed Mitigation Activities	56
Figure 24.	Eastman Park Proposed Mitigation Activities	57
Figure 25.	Eaton Draw Constructed Wetlands General Location	59
Figure 26.	Potential Water Quality Monitoring Sites for Initial Data Collection	72
Figure 27.	Movement of Mule Deer, Moose, Elk and Pronghorn Through a Wildlife Underpass in Nugge	t
	Canyon on U.S. Highway 30 west of Kemmerer, WY (Western EcoSystems 2011)	76
Figure 28.	Potential Location and Alternate Locations for Wildlife Underpass	77
Figure 29.	Habitat Conservation Area	30
Figure 30.	SPWCP Diversion Facilities (GEI 2006) and Mitani-Tokuyasu SWA	39
-	Existing Watson Lake Fish Hatchery Diversion10	
Figure 32.	Existing Larimer-Weld Diversion Structure)0
Figure 33.	Existing Whitney Ditch Diversion Structure)2

Figure 34.	Existing B.H. Eaton Ditch Diversion Structure with Whitney Diversion in Background102
Figure 35.	Whitney and B.H. Eaton Diversions103
Figure 36.	CPRW Watershed Map (CPRW 2017)106
Figure 37.	Habitat Conservation Area Trail Buffer

EXECUTIVE SUMMARY

The Northern Colorado Water Conservancy District (Northern Water), acting by and through the Northern Integrated Supply Project (NISP) Water Activity Enterprise), on behalf of 15 East Slope towns, municipalities and rural domestic water providers (Participants), is pursuing NISP to provide 40,000 acre feet of new, reliable water supplies. NISP would deliver water from the Cache la Poudre (Poudre) and South Platte rivers to two new reservoirs, and deliver that water via pipelines and the Poudre River for Participants' use. The purpose of this Fish and Wildlife Mitigation and Enhancement Plan (FWMEP) is to comply with the requirements of Colorado State law (C.R.S. 37-60-122.2), including the Procedural Rules for the Wildlife Commission (Chapter 16), for NISP.

Northern Water is the applicant for a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers (Corps) as part of federal regulatory compliance for NISP. In conjunction with that, the Corps is required to comply with the National Environmental Policy Act (NEPA) by preparing a Final Environmental Impact Statement (EIS) and with Section 404(b) (1) of the Clean Water Act. As part of the 404 permit process, a 401 water quality certification from the Colorado Department of Public Health and Environment is also required and is being pursued.

The FWMEP includes both a Mitigation Plan, which mitigates fish and wildlife related impacts of NISP, as well as an Enhancement Plan, which outlines fish and wildlife related environmental commitments that go above and beyond direct mitigation of project effects. The Participants are committed to comply with the mitigation measures developed as part of this FWMEP, as well as those identified in the 401 certification and the Corps' 404 permit and associated Record of Decision. It is anticipated that the compensatory mitigation measures developed through these processes will be incorporated into the Record of Decision and 404 permit issued by the Corps as conditions of the permit. It is currently envisioned that compliance with the Mitigation Plan portion of this FWMEP will be attached as permit conditions by the Corps on the Record of Decision and 404 permit, while the Enhancement Plan portion of this FWMEP will be covered under an Intergovernmental Agreement between Northern Water, on behalf of the Participants, and Colorado Parks and Wildlife (CPW).

The goal of Northern Water and the Participants through this FWMEP is to mitigate the fish and wildlife related environmental impacts identified in the Draft EIS (Corps 2008), Supplemental Draft EIS (Corps 2015) and subsequent investigations, and to improve the aquatic and riparian habitat of the Poudre River, regional wildlife habitat, and regional recreational opportunities with measures identified in the enhancement plan, while at the same time meeting the water supply needs of the Participants.

Effects on the Poudre and South Platte rivers primarily occur due to diversions and operations of the proposed Glade Reservoir, a new 170,000 acre-foot reservoir located off-channel north of Ted's Place near the mouth of the Poudre Canyon, and operations of the South Platte Water Conservation Project (SPWCP), which diverts water to a new reservoir located northeast of Greeley and exchanges this water into Glade Reservoir through two existing irrigation systems. Fish and wildlife impacts from

infrastructure construction and project operations primarily occur at and near the Glade Reservoir site, which is adjacent to state lands that provide big game and small game hunting opportunities, and at the SPWCP diversion site near the confluence of the Poudre and South Platte rivers, which is located on the existing Mitani-Tokuyasu State Wildlife Area.

Key avoidance and minimization mitigation measures described in the Mitigation Plan include NISP design commitments that avoid and minimize aquatic habitat and water quality effects; flow commitments that result in establishment of a year-round base flow in the Poudre River at all points upstream and through the City of Fort Collins (which currently experiences numerous "dry-up" points) as well as a peak flow operations program that results in no effects on peak flows or peak flow bypasses during 90 percent of years to avoid impacts that could result from diversions of those peak flows; and construction best management practices that avoid and minimize effects on wildlife and plant communities.

The compensatory mitigation portion of the Mitigation Plan includes development of a stream channel and habitat improvement plan for the Poudre River; implementing stream channel, habitat, and riparian vegetation improvements in certain reaches of the Poudre River; commitments to avoid diversions when stream water temperatures approach or exceed standards that are designed to protect fish; implementing wildlife protection measures into the design and construction of the U.S. Highway 287 realignment; conserving land around Glade Reservoir for wildlife habitat; protection of special status wildlife species during and after construction; replacing existing recreation and public access facilities at Glade Reservoir and the SPWCP forebay; and constructing new wetlands to improve water quality.

The proposed Enhancement Plan was developed in response to discussions with CPW staff, discussions with other regional governmental and non-governmental agencies, and review of comments on the Draft EIS and Supplemental Draft EIS. Key components of the Enhancement Plan include developing and funding a recreational cool water fishery at Glade Reservoir, commitments to adaptive management programs for the Poudre River and recreation surrounding Glade Reservoir, multi-objective diversion structure retrofits at existing diversion structures on the Poudre River (i.e. installation of facilities that allow fish passage and measure bypassed flow), protecting additional lands west of Glade Reservoir for wildlife habitat, and participation in the Coalition for the Poudre River Watershed.

The total project cost for NISP, including costs for mitigation and enhancement commitments in this plan and those required outside of this plan, is estimated at \$857 million. The total estimated capitalized costs of commitments in the Mitigation Plan are approximately \$40.2 million, while total estimated capitalized costs of commitments in the Enhancement Plan are approximately \$13.1 million. Capitalized costs are the sum of the capital cost plus any annual operations and maintenance costs capitalized over the life of the commitment, or 50 years for those commitments that are perpetual. The mitigation costs are exclusive of costs for other mitigation requirements that will be developed for and required by the Final EIS, 401 certification, and 404 permit.

The FWMEP was approved by the Colorado Parks and Wildlife Commission at its regularly scheduled meeting on September 7, 2017, and approved by the Colorado Water Conservation Board at its regularly

scheduled meeting on September 20, 2017. This final version of the FWMEP is identical to the Draft Final version of the FWMEP (dated August 22, 2017) approved by both the Commission and Board, with modifications made to the Consultation, Coordination and Public Input section to reflect final approvals and submittal of this final plan, and to costs for the Poudre River Adaptive Management Program shown in Table 13 consistent with verbal testimony provided to the Commission during the September 7 meeting. Minor formatting changes were also made in certain areas.