

COLORADO

Colorado Water Conservation Board John W. Hickenlooper Governor

Robert Randall DNR Executive Director

Rebecca Mitchell CWCB Director

Department of Natural Resources

July 18 - 19, 2018 Board Meeting Agenda

A meeting of the CWCB will be held on Wednesday, July 18, 2018 commencing at 8:30 AM and continuing through Thursday, July 19, 2018. The meeting will be held at the Morgridge Commons Building, located at 815 Cooper Ave, Glenwood Springs, CO 81601.

The CWCB posts notice 30 days in advance of each regularly scheduled meeting. Notices for special meetings are posted on the website typically within five business days and not less than 24 hours of such a meeting. Notices of regular and special meetings may also be received by email. To receive notices by email please visit: https://dnrweb.state.co.us/DNR/DNRPortal/Login.aspx.

Although dates and times are indicated in this notice and in the following agenda, the CWCB may address and take action on noticed items in any order. Any known changes to the agenda will be announced at the beginning of the meeting. This notice, any late notice(s) of additional items, and briefing memos prepared for the CWCB will be posted at 1313 Sherman Street, Suite 721, Denver, CO 80203, and on our website at www.cwcb.state.co.us.

The CWCB's meetings are made available through live audio streaming on YouTube, although Board workshops are not. To listen to the proceedings, click the "Listen to the meeting LIVE!" link on the CWCB website homepage and select the link for the proper day and time. The link will be posted just prior to the start of the meeting.

The CWCB encourages citizens to express their views and provide feedback to the Board on the agenda items. This can be done by sending an email to <u>andrew.rickert@state.co.us</u>, by sending a letter to a Board member or to the Chair of the Board, or by attending the meeting. If you attend a meeting, simply fill out a comment sheet and give it to the Board Coordinator at the recording station. The Board will appreciate hearing your views when it reaches that agenda item. If you have any questions, need special accommodations as a result of a disability, or require further information on any CWCB activity, please contact Andrew Rickert at 303-866-3441, ext. 3249. All programs, services, and activities of the CWCB are operated in compliance with the Federal Americans with Disabilities Act (ADA).



Wednesday, July 18, 2018

8:30 - 8:32	CWCB Call to Order and Pledge of Allegiance
8:32 - 8:35	1. Review and Approve Agenda
8:35 - 8:37	2. Review and Approve May 23 - 24, 2018 Board Meeting Minutes
8:37 - 8:40	3. Approve and/or Remove Consent Agenda Items
8:40 - 8:45	 4. Board Meeting Dates in 2018 a. September 18 - 20 b. November 14 & 15 b. November 14 & 15
8:45 - 9:30	 5. Directors' Reports a. DNR Executive Director b. IBCC Director c. Agriculture Commissioner d. CWCB Director e. State Engineer f. Division of Parks and Wildlife Director g. Water Resource and Power Development Authority
9:30 - 9:50	6. Platte River Recovery Implementation Program Update Interstate, Federal & Water Information Section
9:50 - 10:05	7. Technical Assistance for Federal Cost-Share Program Interstate, Federal & Water Information Section
10:05 - 10:20	8. Damaging High Groundwater Grant Application and Guidelines Interstate, Federal & Water Information Section
10:20 - 10:30	BREAK
10:30 - 10:40	9. Emergency Dam Response Funding Finance Section
10:40 - 10:55	10. Renewal of Ute Water Conservancy District Lease of Ruedi Water for Instream Flow Use in the 15 Mile Reach (Water Div. 5) Interstate, Federal & Water Information Section & Stream and Lake Protection Section
10:55 - 11:10	11.Colorado River Water Conservation District Lease of Ruedi Water for Winter Instream Flow Use in the Fryingpan River (Water Div. 5)

11:10 - 11:30	12. Northern Colorado Water Conservancy District Dedication of Mitigation Releases for Instream Flow Use in the Cache la Poudre River (Water Div. 1) Stream and Lake Protection Section
11:30 - 11:45	13. Proposed Expenditures for Costs of Water Acquisitions for Instream Flow Use Stream and Lake Protection Section
11:45 - 12:45	LUNCH
12:45 - 1:15	14. Statewide Water Supply Initiative Update Water Supply Planning Section
1:15 - 1:45	15. Colorado River Basin Fund Memorandum of Understanding (MOA) Interstate, Federal & Water Information Section
1:45 - 1:50	16. Attorney General's Report, Legal Briefing, and Executive Session
1:50 - 2:00	BREAK
2:00 - 3:45	 17. Executive Session a. Instream Flow Acquisitions on the Cache la Poudre River b. Administrative Process to Recognize Claimed Stockwatering Uses Pursuant to Section 37-92-102(3)(b), C.R.S. (2018) c. Colorado River Issues 1. Colorado River Basin Drought Contingency Planning 2. Upper Colorado River Basin Fund MOA 3. Upper Colorado River Basin Fund Monies 4. System Conservation Pilot Program d. Republican River Compact Compliance Discussions e. Rio Grande Issues 1. Texas v. New Mexico and Colorado, Orig. No. 141, Update f. Hill v. Warsewa, 18-cv-300069, Fremont County District Court, Colorado
3:45 - 3:50	18. Report from Executive Session
3:50 - 4:05	 19. Financial Matters - Construction Fund and Severance Tax Perpetual Base Fund Finance Section a. Financial Projections and Cash Management Report b. Two Rivers Water & Farming Company and Two Rivers Farms F-2

Inc Loan Payment Delinquency				
4:05 - 4:50	 20. Water Project Loans Finance Section a. Chilcott Ditch Company - Chilcott Augmentation Station b. Missouri Heights Mountain Meadow Irrigation Company - Ditch Piping Phase B c. Roxborough Water and Sanitation District - Ravenna Development Interconnect 			
4:50	RECESS			

Thursday, July 19, 2018

8:30 - 10:00	21. Basin Directors' Reports
	a. Colorado River (Mainstem) Basin Director's Report
	b. San Juan/San Miguel-Dolores River Basin Director's Report
	c. Gunnison River Basin Director's Report
	d. North Platte River Basin Director's Report
	e. South Platte River Basin Director's Report
	f. Arkansas River Basin Director's Report
	g. City and County of Denver Director's Report
	h. Rio Grande River Basin Director's Report
	i. Yampa-White River Basin Director's Report
10:00 - 10:30	BREAK (AM SNACK)
10:30 - 10:45	22. Colorado Water Plan Implementation Update
	Water Supply Planning Section
10:45 - 11:30	23. Floodplain Designation - Colorado Hazard Mapping Program (CHAMP) Data (Unincorporated Areas of Boulder and Larimer Counties) Including:
	Boulder County (excluding the 2D draft floodway reaches for
	Boulder Creek from Kenosha Rd/115th Street to the Weld
	County Line)
	 Colorado Hazard Mapping Program Hydraulic Analysis, Tochnical Support Data potobook (TSDN) for the Big
	Thompson Watershed (HIIC-8 10190006) by
	CWCB/AECOM, submitted March 21, 2017; and,
	o Colorado Hazard Mapping Program Hydraulic Analysis,
	Technical Support Data notebook (TSDN) for the St.
	Vrain Watershed (HUC-8 10190005), by CWCB/AECOM,
	Submitted April 2018; and,

	 Volume 2, Technical Support Data notebook (TSDN) for the St. Vrain Watershed (HUC-8 10190005), by CWCB/AECOM, submitted June 2018. Larimer County CHAMP Colorado Hazard Mapping Program Hydrology Technical Support Data notebook (TSDN) for the Big Thompson Watershed (HUC-8 10190006), by CWCB/AECOM, submitted March 2016; and CHAMP Colorado Hazard Mapping Program Year 1 and Year 2 Draft Hydraulics for the Big Thompson Watershed (HUC-8 10190006), excluding Year 2, 2-D draft hydraulics model for the Big Thompson River and its tributaries through the City of Loveland and surrounding portions of unincorporated Larimer County, by CWCB/AECOM, submitted March 2017 for Year 1 and March 2018 for Year 2.
11:30 - 11:45	24. New Policy - Temporary Designation of Best Available Floodplain Data Watershed and Flood Protection Section
11:45 - 12:00	25. State Flood Mitigation Plan Update Watershed and Flood Protection Section
12:00 - 12:10	26.SW Temporary Mobile Radar System Watershed and Flood Protection Section
12:10 - 12:20	27.Water Supply Reserve Fund (WSRF)

Water Supply Planning Section

Water Supply Reserve Fund Applications for Consideration at the July 2018 CWCB Board Meeting				
Agenda Item	Basin	Applicant	Name of Water Activity	
a	North Platte	Spicer Ranches, Ltd.	Coyte Reservoir Outlet Repair	
b	Rio Grande	Special Improvement District Number One	Rio Grande Water Conservation District Groundwater Level Telemetry	

12:20 ADJOURN



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CWCB Consent Agenda July 18 - 19, 2018

Matters may be placed on the Consent Agenda when the recommended action follows established policy or precedent, there has been a negotiated settlement, or the matter is uncontested and non-controversial. Staff provides memos to CWCB members explaining the matters on the Consent Agenda. Matters on the Consent Agenda are noticed for hearing in the same manner as other agenda items. If a member of the CWCB requests further consideration of an item on the Consent Agenda, the item will be withdrawn from the Consent Agenda and discussed at the end of the meeting or at the next meeting. The Consent Agenda may be voted on without reading or discussing individual items. Any CWCB member may request clarification about any matter on the Consent Agenda.

1. Statements of Opposition

Stream & Lake Protection Section

The Board will be asked to ratify Statements of Opposition that have been filed by staff to protect instream flow and natural lake level water rights and to protect CWCB's exclusive authority to hold instream flow water rights in the following water court cases:

- a. Case No. 18CW3076 (Water Division 1) : Application of East Larimer County Water District
- b. Case No. 18CW0002 (Water Division 2) : Application of RP on TC, LLC d/b/a Eden West Ranch
- c. Case No. 18CW3033 (Water Division 2) : Application of Sheep Camp Holdings, LLC
- d. Case No. 18CW3046 (Water Division 5) : Application of Highland Ranch Ltd.





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DRAFT Summary Minutes and Record of Decisions May 23 - 24, 2018 Board Meeting

A regular meeting of the Colorado Water Conservation Board (CWCB) convened at the Salida Steam Plant Theater, located at 220 West Sackett Ave, Salida, CO 81201. The meeting was called to order by Chair Jim Yahn. Eight voting members were present at the call to order, so a quorum was present (at least 6 required). Voting members present were: Jay Gallagher, Russell George, Jim Yahn, Jack Goble, Heather Dutton, Celene Hawkins (attended via phone), Steven Anderson, Curran Trick, and Patti Wells. Ex-officio voting member Robert Randall, Executive Director of the Department of Natural Resources, was present. Non-voting ex officio members present or represented were Don Brown, Commissioner of the Department of Agriculture; John Stulp, Director of the IBCC was absent on Wednesday, March 21; Laura Chartrand, Deputy Attorney General, Colorado Department of Natural Resources and Environment Section; Bob Broscheid; Colorado Parks and Wildlife Director; Kevin Rein, State Engineer; and Rebecca Mitchell, Colorado Water Conservation Board Director.

On the second day, the meeting was called to order by Chair Jim Yahn. Eight voting members were present at the call to order, so a quorum was present (at least 6 required). The voting members present were: Jay Gallagher, Russell George, Patti Wells, Steven Anderson, Curran Trick, Jim Yahn, Jack Goble, Heather Dutton, and Celene Hawkins (attended via phone). Ex-officio voting member Robert Randall, Executive Director of the Department of Natural Resources, was present. Non-voting ex officio members present or represented were Laura Chartrand, Deputy Attorney General, Colorado Department of Natural Resources and Environment Section; John Stulp, Director of the IBCC; Kevin Rein, State Engineer; Bob Broscheid; Colorado Parks and Wildlife Director (was absent); and Rebecca Mitchell, Colorado Water Conservation Board Director.



Note: While the Board's consideration of agenda items does not always follow the sequence indicated by the agenda numbers, these minutes are listed in agenda item order for easier reference.

1. Board Appointments

Action: Report by Laura Chartrand. This was an informational item only. No Board action was required.

2. Review and Approve Agenda

Action: A motion to approve the May agenda was made by Jay Gallagher, which was seconded by Patti Wells. The motion was approved unanimously (10-0).

3. Review and Approve March 21 - 22, 2018 Board Meeting Minutes

Action: A motion to approve the March 2018 minutes was made by Patti Wells, which was seconded by Heather Dutton. The motion was approved unanimously (10-0).

4. Approve and/or Remove Consent Agenda Items

Action: A motion to approve the Consent Agenda was made by Patti Wells, which was seconded by Jack Goble. The motion was approved unanimously (10-0).

1. Statements of Opposition

Stream & Lake Protection Section

The Board will be asked to ratify Statements of Opposition that have been filed by staff to protect instream flow and natural lake level water rights and to protect CWCB's exclusive authority to hold instream flow water rights in the following water court cases:

- a. Case No. 16CW17 (Water Division 2): Application of Randall L. Hancock and Renate L. Hancock
- b. Case No. 16CW3062 (Water Division 2): Application of Riverside Ditch and Extention Company*
- c. Case No. 18CW3014 (Water Division 2): Application of John Hightower and Melissa Hightower
- d. Case No. 18CW3062 (Water Division 5): Application of Oldcastle SW Group Inc.

*Motion to Intervene and Statement of Opposition Filed

2. New Prequalification Loans

Finance Section

a. Bullseye Holdings, LLC - Water Rights Purchase

3. Water Plan Grant Modifications

a. Change of Fiscal Agent for Water Plan Grant, TAP-IN, from Open Water Foundation to Bonneville Environmental Foundation

5. Proposed Board Meeting Dates in 2018

- a. July 18 & 19 Colorado Mainstem Basin
- b. September 18 20 Steamboat
- c. November 14 & 15 South Platte Basin

Action: This was an informational item only. No Board action was required.

6. Directors' Reports

a. Department of Natural Resources Executive Director

Action: Report by Robert Randall. This was an informational item only. No Board action was required.

b. Interbasin Compact Committee Director

Action: Report by John Stulp. This was an informational item only. No Board action was required.

c. Agriculture Commissioner

Action: Report by Jen Yezak, standing in for Don Brown. This was an informational item only. No Board action was required.

d. Colorado Water Conservation Board Director

Action: Report by Rebecca Mitchell. This was an informational item only. No Board action was required.

e. State Engineer

Action: Report by Kevin Rein. Steve Witte addressed the Board. This was an informational item only. No Board action was required.

f. Division of Parks and Wildlife

Action: Report by Brett Ackerman, standing in for Bob Broscheid. This was an informational item only. No Board action was required.

g. Water Resource and Power Development Authority

Action: No report.

- 7. Financial Matters Construction Fund and Severance Tax Perpetual Base Fund Finance Section
 - a. Financial Projections and Cash Management Report

Action: Report by CWCB staff member Kirk Russell. This was an informational Item only. No Board action was taken.

8. Water Project Loans/Grants

Finance Section

a. Ogilvy Irrigating and Land Company - Seeley Reservoir Dredging

Action (Loan and Grant): Report by CWCB staff member Rachel Pittinger. Doug Seeley, with NOCO Engineering, Inc., addressed the Board. A motion to approve the staff recommendation was made by Patti Wells, which was seconded by Steven Anderson. The motion was approved unanimously (10-0).

Staff Recommendation for a CWCB Loan: Staff recommends the Board approve a loan not to exceed \$2,274,520 (\$2,252,000 for Project costs and \$22,520 for the 1% service fee) to the Ogilvy Irrigating and Land Company for costs related to the Seeley Reservoir Dredging Project, from the Severance Tax Perpetual Base Fund. The loan terms shall be 30 years at a blended interest rate of 1.70% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Staff Recommendation for Water Plan Grant: Staff recommends the Board approve a grant of up to \$1,415,740 from the Water Plan Grant - Storage category to the Ogilvy Irrigating and Land Company for costs related to the Seeley Reservoir Dredging Project.

9. Water Project Loans

Finance Section

a. San Luis Valley Canal Company - San Luis Valley Canal Headgate Construction

Action: Report by CWCB staff member Jonathan Hernandez. Terry Chiles, President of the San Luis Valley Canal Company, addressed the Board. A motion to approve the staff recommendation was made by Heather Dutton, which was seconded by Patti Wells. The motion was approved unanimously (10-0).

Staff Recommendation: Staff recommends the Board approve a loan not to exceed \$303,000 (\$300,000 for Project costs and \$3,000 for the 1% service fee) to the San Luis Valley Canal Company for costs related to the San Luis Valley Canal Headgate Construction Project, from the Severance Tax Perpetual Base Fund. The loan terms shall be 20 years at a reduced agricultural interest rate of 1.45% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

b. Julesburg Irrigation District - Diversion Structure Rehabilitation

Action: Report by CWCB staff member Rachel Pittinger. Larry Frame, Superintendent of the Julesburg Irrigation District, addressed the Board. A motion to approve the staff recommendation was made by Patti Wells, which was seconded by Jack Goble. The motion was approved unanimously (10-0).

Staff Recommendation: Staff recommends the Board approve a loan not to exceed \$3,341,080 (\$3,308,000 for Project costs and \$33,080 for the 1% service fee) to the Julesburg Irrigation District for costs related to the Diversion Structure Rehabilitation Project, from the Severance Tax Perpetual Base Fund. The loan terms shall be 30 years at the blended interest rate of 1.70% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

10. Severance Tax Operational Fund Grants

Finance Section

Action: Report by CWCB staff member Steve Biondo. A motion to approve the staff recommendation was made by Steven Anderson, which was seconded by Jay Gallagher. The motion was approved unanimously (10-0).

Staff Recommendation: Staff recommends that the Board approve the proposed funding for each of the projects from the Severance Tax Operational Fund as summarized as Table 1 to this memo. Recommended projects are numbered 1 - 25 and projects not recommended are numbered 26 - 30.

11. Wild and Scenic Rivers Fund Annual Review

Interstate, Federal & Water Information Section

Action: Report by CWCB staff member Carlee Brown. A motion to approve the staff recommendation was made by Heather Dutton, which was seconded by Jay Gallagher. The motion was approved unanimously (10-0).

Staff Recommendation: Staff recommends that the Board:

1) Affirm that the need and purpose of the Wild and Scenic Rivers Fund still exists and is expected to continue in the future; and

2) Affirm that the existing Terms and Conditions for the Allocation of Funds from the Wild and Scenic Rivers Fund are adequate without revisions.

12. Alternative Transfer Method Grant

Water Supply Planning Section

ATM Grant Program Applications for Consideration at the May 2018 CWCB Board Meeting			
Applicant	Name of Water Activity		
Rio Grande Headwaters Land Trust	Cactus Hill/Alamosa ATM Conservation Easement		

Action: Report by CWCB staff member Alex Funk. Allen Law, Conservation Director for the Rio Grande Headwaters Land Trust, addressed the Board. A motion to approve the staff recommendation was made by Heather Dutton, which was seconded by Jack Goble. The motion was approved unanimously (10-0).

Staff Recommendation: Staff recommends approval of up to \$150,000 from the Alternative Agricultural Water Transfer Methods Grant Program to help fund the "Cactus Hill/Alamosa ATM Conservation Easement" project.

13. Invansive Phreatophyte Control Program Update

Interstate, Federal & Water Information Section

Action: Report by CWCB staff member Erik Skeie. This was an informational item only. No Board action was required.

14. Uncontested 2018 Instream Flow Appropriations in Water Division 3, 4, and 6 Stream and Lake Protection Section Action: Report by CWCB staff member Rob Viehl. A motion to approve the staff recommendation was made by Patti Wells, which was seconded by Jay Gallagher. The motion was approved unanimously (10-0).

Staff Recommendation: Staff requests that the Board make the following determinations and take the following actions on each of the appropriations identified in the attached tables, based on the information contained in staff's memo as well as the information presented by staff both in writing and orally at the January 22, 2018 Board meeting.

(1) Determine, pursuant to section 37-92-102(3), C.R.S. (2017), and based upon the recommendations of BLM, CPW, HCCA, and WRA addressing biological needs, flow rates, reaches and time periods, and a review of the data and other information presented by Staff in this memo and orally, that for each ISF appropriation at the flow rates identified in the attached table:

(a) There is a natural environment that can be preserved to a reasonable degree with the recommended water rights, if granted;

(b) The natural environment will be preserved to a reasonable degree by the water available for the recommended appropriations; and

(c) Such natural environment can exist without material injury to water rights.

(2) Pursuant to ISF Rule 5f., establish January 22, 2018 as the appropriation date for these water rights.

15. Colorado Water Plan Implementation Update - TAP-IN and Gutter Bin Stream and Lake Protection Section

Action: Report by CWCB staff member Mara Hardy. Devon Buckels, with the Greenway Foundation, addressed the Board. This was an informational item only. No Board action was required.

16. Contested 2018 Instream Flow Appropriations in Water Division 5

Stream and Lake Protection Section

Action: Report by CWCB staff member Rob Viehl. A motion to approve the staff recommendation was made by Jay Gallgher, which was seconded by Steven Anderson. The motion was approved unanimously (10-0).

Staff Recommendation: Staff recommends that the Board designate a Hearing Officer (Laura Chartrand, Deputy Attorney General for the Natural Resources and Environment Section) for this contested instream flow appropriation. Staff further recommends that the Board set the hearing date for this appropriation to be held in conjunction with the Board's November 14-15, 2018 meeting.

17. Update on Himes Creek Instream Flow Recommendation in Water Division 7 Stream and Lake Protection Section

Action: Report by CWCB staff member Rob Viehl. This was an informational item only. No Board action was required.

18. Lease of Water for Instream Flow Use on Fryingpan River (Water Division 5)

Stream and Lake Protection Section Section

Action: Report by CWCB staff member Linda Bassi. This was an informational item only. No Board action was required.

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.

19. Statewide Water Supply Initiative Update

Water Supply Planning Section

Action: Report by CWCB staff member Greg Johnson and Russ Sands. This was an informational item only. No Board action was required.

20. Colorado Water Conservation Board - Youth Corps Partnership

Action: Report by CWCB staff member Erik Skeie. Scott Segerstrom, Executive Director of the Colorado Youth Corps Association, addressed the Board. This was an informational item only. No Board action was required.

21. Attorney General's Report, Legal Briefing, and Executive Session

Action: Report by Laura Chartrand, Deputy Attorney General for Natural Resources. This was an informational item only. No Board action was required.

22. Executive Session

Action: Under the Colorado Open Meetings Act, C.R.S. Section 24-6-402(3)(a)(II), a motion was made by Heather Dutton for the Board to go into executive session for the discussion of agenda items 15.a. through 15.h. The motion was seconded by Patti Wells. The motion was approved unanimously (10-0).

- a. Colorado River Issues
 - 1. Drought Contingency Planning
 - 2. Basin Fund MOA
 - 3. Aspinall Unit
- b. Rio Grande Issues
- c. Texas v. New Mexico and Colorado
- d. Republican River
- e. Platte River Recovery Implementation Program
- f. Case No. 15CW3111, Water Division 4 (Application of Colorado Water Conservation Board on Dolores River)

23. Report From Executive Session

Action: Patti Wells made a motion for the Board to leave Executive Session, which was seconded by Jack Goble. The motion was approved unanimously (10-0).

Action: John McClow made a motion to authorize the Board's legal staff to take whatever actions staff deems necessary to contest the provisions of the current Aspinall Record of Decision including litigation if necessary, which was seconded by Russ George. The motion was approved unanimously (9-0).

24. Litigation Fund

Interstate, Federal & Water Information Section a. Annual Report to the General Assembly

Action: Report by CWCB staff member Carlee Brown. A motion to approve the staff recommendation was made by Patti Wells, which was seconded by Heather Dutton. The motion was approved unanimously (10-0).

Staff recommendation: CWCB Staff recommends that the Board approve the attached report for submittal to the General Assembly.

b. Requests for Authorization

Action: Report by CWCB staff member Carlee Brown. A motion to approve the staff recommendation was made by Patti Wells, which was seconded by Jack Goble. The motion was approved unanimously (10-0).

Staff recommendation: CWCB Staff recommends that the Board authorize the expenditure of a total of \$1,294,300 for litigation-related activities in FY2018-19 as follows:

- 1) Colorado River Basin: \$643,000
- 2) Republican River Basin: \$118,000
- 3) Rio Grande Basin: \$533,300

Staff also recommends that the Board:

1) Direct the CWCB Director and Staff to expend these funds consistent with the request by the Office of the Attorney General; and,

2) Direct the CWCB Director, CWCB Staff, and Office of the Attorney General to comply with the annual reporting requirements as specifically provided for in Section 37-60-121(2.5).

25. Basin Directors' Reports

a. Colorado River (Mainstem) Basin Director's Report

Action: Report by Russell George. This was an informational item only. No Board action was required.

b. San Juan/San Miguel-Dolores River Basin Director's Report

Action: Report by Celene Hawkins. This was an informational item only. No Board action was required.

c. Gunnison River Basin Director's Report

Action: Report by Steven Anderson. This was an informational item only. No Board action was required.

d. North Platte River Basin Director's Report

Action: Report by Curran Trick. This was an informational item only. No Board action was required.

e. South Platte River Basin Director's Report

Action: Report by Jim Yahn. This was an informational item only. No Board action was required.

f. Arkansas River Basin Director's Report

Action: Report by Jack Goble. This was an informational item only. No Board action was required.

g. City and County of Denver Director's Report

Action: Report by Patti Wells. This was an informational item only. No Board action was required.

h. Rio Grande River Basin Director's Report

Action: Report by Heather Dutton. This was an informational item only. No Board action was required.

i. Yampa-White River Basin Director's Report

Action: Report by Jay Gallagher. This was an informational item only. No Board action was required.

26. Aquatic Nuisance Species Update

Interstate, Federal & Water Information Section

Action: Report by CWCB staff member Michelle Garrison. Robert Walters, with Colorado Parks and Wildlife, addressed the Board. This was an informational item only. No Board action was required.

27. System Conservation Pilot Program

Interstate, Federal & Water Information Section

Action: Report by CWCB staff member Michelle Garrison. A motion to approve the staff recommendation was made by Patti Wells, which was seconded by Jay Gallagher. The motion was approved unanimously (10-0).

Staff recommendation: Staff recommends that the Board affirm the Pilot Program as an approved water conservation program through the following approval: "The Colorado Water Conservation Board approves the Upper Colorado River Commission's System Conservation Pilot Program as a water conservation program subject to C.R.S. 37-92-103(2) and 37-92-305."

28. Upper Colorado Recovery Implementation Program Update

Interstate, Federal & Water Information Section

Action: Report by CWCB staff member Michelle Garrison. This was an informational item only. No Board action was required.

29. Water Supply Reserve Fund (WSRF)

Water Supply and Planning Section

Water Supply Reserve Fund Applications for Consideration at the CWCB January 2018 Board Meeting				
ltem	Basin(s)	Applicant	Name of Water Activity	
a.	Gunnison	Keh-Land Company	Kehmeier Reservoir Dam Riprap	
Actio Land Steve (10-0 Staff	n: Report by CWCB staff r Company, addressed the en Anderson, which was se). recommendation: Staff re	nember Craig Godbout. Paul Kehmeie Board. A motion to approve the staff conded by Jack Goble. The motion w ecommends approval of up to \$5,000 f	r, Vice-president of Keh- recommendation made by as approved unanimously from the Gunnison Basin	
b.	Gunnison	Lake Fork Valley Conservancy	Nellie Creek Toilet Retrofit	
Servio Ander 0). Staff Accou	recommendation: Staff r unt to help fund the proje	A motion to approve the staff recomm by Heather Dutton. The motion was recommends approval of up to \$11,00 for titled: Nellie Creek Toilet Retrofit	nendation made by Steven approved unanimously (10- 0 from the Gunnison Basin	
с.	North Platte	Jackson County Water Conservancy District	North Platte Basin Airborne Cloud Seeding Project	
Action: Report by CWCB staff member Craig Godbout. Ty Wattenberg, with Jackson County Water Conservancy District, addressed the Board. A motion to approve the staff recommendation made by Curran Trick, which was seconded by Jay Gallagher. The motion was approved unanimously (10-0). Staff recommendation: Staff recommends approval of up to \$150,000 from the North Platte Basin Account to belp fund the project titled: North Platte Basin Airborne Cloud Seeding				
Proje	ct.	, ,	5	
d.	Rio Grande	Terrace Irrigation Company Inc	Terrace Reservoir, Outlet Works Inspection and Repair Analysis, Phase I	
Actio	n: Report by CWCB staff r	nember Megan Holcomb. A motion to	approve the staff	

recommendation made by Heather Dutton, which was seconded by Jack Goble. The motion was approved unanimously (10-0).

Staff recommendation: Staff recommends approval of up to \$15,000 from the Rio Grande Basin Account to fund the project titled: Terrace Reservoir, Outlet Works Inspection and Repair Analysis, Phase I.

e.	Colorado	Jerry Eller	Antelope Reservoir Rehabilitation
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Action: Report by CWCB staff member Megan Holcomb. A motion to approve the staff recommendation made by Russell George, which was seconded by Heather Dutton. The motion was approved unanimously (10-0).

Staff recommendation: Staff recommends approval of up to \$30,000 from the Colorado Basin Account to help fund the project titled: Antelope Reservoir Rehabilitation.

f	Colorado	Book Cliff, Southside and Mount	Agriculture Water Plan for
1.	Colorado	Sopris Conservation Districts	Garfield County

Action: Report by CWCB staff member Megan Holcomb. Peter Dodd, with Southside and Mount Sopris Conservation District, addressed the Board. A motion to approve the staff recommendation made by Russell George, which was seconded by Jack Goble. The motion was approved unanimously (10-0).

Staff recommendation: Staff recommends approval of up to \$100,000 from the Colorado Basin Account to help fund the project titled: Agriculture Water Plan for Garfield County...

Ø.	Colorado	Roaring Fork Conservancy	Roaring Fork Watershed Interactive Information System

Action: Report by CWCB staff member Megan Holcomb. A motion to approve the staff recommendation made by Russell George, which was seconded by Patti Wells. The motion was approved unanimously (10-0).

Staff recommendation: Staff recommends approval of up to \$37,500 from the Colorado Basin Account to help fund the project titled: Roaring Fork Watershed Plan Interactive Information System.

30. Water Education Colorado - Annual Scope of Work

Water Supply Planning Section

Action: Report by CWCB staff member Greg Johnson. Jayla Poppleton, Executive Director of Water Education Colorado, addressed the Board. A motion to approve the staff recommendation made by Jack Goble, which was seconded by Steven Anderson. The motion was approved unanimously (10-0).

Staff recommendation: Staff recommends the Board approve the Fiscal Year 2019 Scope of Work for Water Education Colorado (WEco), formerly known as the Colorado Foundation for Water Education.

31. Water Plan Grants - Overview

Action: Report by CWCB staff member Lauren Ris. This was an informational item only. No Board action was required.

32. Water Plan Grants - Engagement & Innovation (FINAL)

- a. The Greenway Foundation Clean River Design Challenge
- **b.** Water Education Colorado Design and Build Statewide, Data-Based Strategic Water Education Action Plan and Associated Tools
- c. Left Hand Watershed Oversight Group Stewardship Through Community Science
- d. Denver South Transportation Management Association InfraRed Plant Stress Monitoring Pilot
- e. Sangre de Cristo Acequia Association Preserving the Hispano Water Culture Curriculum
- f. Metro State University of Denver OWOW Center Activating CO Water Plan with Student Innovation

Action: Report by CWCB staff member Ben Wade. A motion to approve the staff recommendation made by Patti Wells, which was seconded by Jay Gallagher. The motion was approved unanimously (10-0).

Staff recommendation: Staff recommends Board approval of the projects/activities listed in the following table for the Water Plan Grant funding:

Applicant	Project Name	Request	% of	Staff
			Project	Support
a. The Greenway Foundation	Clean River Design Challenge	\$24,500	50%	\$24,500
b. Water Education Colorado	Build Statewide, Data-Based Education Action Plan & Associated Tools	\$47,000	56%	\$47,000
c. Left Hand Watershed Oversight Group	Stewardship Through Community Science	\$36,000	27%	\$36,000
d. Denver South Transportation Management Association	Infra-Red Plant Stress Monitoring Pilot	\$19,350	50%	\$19,350
e. Sangre de Cristo Acequia Association	Preserving the Hispano Water Culture Curriculum Design &	\$7,500	20%	\$7,500
f. One World One Water Center at Metro State University of Denver	Activating Colorado's Water Plan with Student Driven Innovation	\$35,000	77%	\$35,000

33. Water Plan Grants - Agriculture (FINAL)

a. Fire Mountain Canal & Reservoir Company - Automation, Remote Monitoring, & SCADA to improve System Efficiency

Action: Report by CWCB staff member Brent Newman and Alex Funk. A motion to approve the staff recommendation made by Patti Wells, which was seconded by Steven Anderson. The motion was approved unanimously (10-0).

b. Florida Consolidated Ditch Company - Florida Canal Structure Rehabilitation Project: Phase 2

Action: Report by CWCB staff member Brent Newman and Alex Funk. A motion to approve the staff recommendation made by Patti Wells, which was seconded by Jack Goble (Celene Hawkins disclosed that The Nature Conservancy is providing cash match for this project). The motion was approved unanimously (10-0).

c. San Luis Valley Water Conservancy District - Rio Grande Basin Soil Moisture Pilot Project

Action: Report by CWCB staff member Brent Newman and Alex Funk. A motion to approve the staff recommendation made by Patti Wells, which was seconded by Steven Anderson (Heather Dutton recused herself from the vote). The motion was approved unanimously (9-0).

d. Arkansas River Watershed Collaborative - Arkansas Basin Project Implementation Guide to Watershed Health

Action: Report by CWCB staff member Brent Newman and Alex Funk. A motion to approve the staff recommendation made by Patti Wells, which was seconded by Heather Dutton (Jack Goble recused himself from the vote). The motion was approved unanimously (9-0).

Staff recommendation: Staff recommends Board approval of the projects/activities listed in the following table for the Water Plan Grant funding:

Applicant	Project Name	% of Eligible	Grant
		Project Costs	Amount
a. Fire Mountain Canal & Reservoir Company	Automation, Remote Monitoring, & SCADA to improve System Efficiency	44%	\$26,055
b. Florida Consolidated Ditch Company	Florida Canal Structure Rehabilitation Project: Phase 2	7%	\$125,000
c. San Luis Valley Water Conservancy District	Rio Grande Basin Soil Moisture Pilot Project	46%	\$20,000
d. Arkansas River Watershed Collaborative	Arkansas Basin Project Implementation Guide to Watershed Health	72%	\$90,903
		Total	\$256,958

34. Water Plan Grants - Storage (FINAL)

- a. Ogilvy Irrigating and Land Company Seeley Reservoir Dredging
- b. City of Walsenburg City Lake Dam Enlargement Reauthorization

Action: Report by CWCB staff member Anna Mauss. A motion to approve the staff recommendation made by Patti Wells, which was seconded by Steven Anderson. The motion was approved unanimously (10-0).

Staff recommendation: Staff recommends the Board accept the IGA signed on May 2, 2018 by the City of Walsenburg, the Town of La Veta, the Cucharas Sanitation & Water District, and the Huerfano County Water Conservancy District and award the City with the \$804,000 Water Plan Grant for City Lake Dam Enlargement.

35. Water Plan Grants - Supply Demand/Gap (FINAL)

- a. Town of Castle Rock Plum Creek Water Purification Facility Advanced Treatment Project
- b. Pikes Peak Regional Water Authority El Paso County Groundwater Depletions: Project Implementation Strategies to Meet the Supply & Demand Gap

Action: Report by CWCB staff member Greg Johnson. A motion to approve the staff recommendation made by Jack Goble, which was seconded by Steven Anderson. The motion was approved unanimously (10-0).

Staff recommendation: Staff recommends Board approval of the projects/activities listed in the following table for the Water Plan Grant funding:

Applicant	Project Name	Request	% of	Staff
Applicant	roject Name	Request	Project	Support
a. Town of Castle Rock	Plum Creek Water Purification Facility Advanced Treatment	\$200,000	11%	\$200,000
	Project			
b. Pikes Peak Regional Water Authority	El Paso County Groundwater Depletions: Project Implementation Strategies to Meet the Supply & Demand Gap	\$112,500	50%	\$112,500

36. Water Plan Grants - Environmental & Recreation (FINAL)

- a. Mountain Studies Institute Animas River Removal and Replacement of Invasive Phreatophytes, Phase II
- **b.** Rio Grande Watershed Emergency Action Coordination Team (RWEACT) Upper Rio Grande Environmental Restoration and Recreation Infrastructure Improvements
- c. City of Steamboat Springs Fish Creek Critical Community Watershed Wildfire Protection Plan
- d. Florida Consolidated Ditch Florida Canal Diversion Structure Rehabilitation Project: Phase 2

Action: Report by CWCB staff member Linda Bassi. A motion to approve the staff recommendation made by Heather Dutton, which was seconded by Jack Goble (Celene Hawkins disclosed that The Nature Conservancy is providing cash match for this project and Heather Dutton disclosed that she is a volunteer Board member of REACT). The motion was approved unanimously (10-0).

Staff recommendation: Staff recommends Board approval of the projects/activities listed in the following table for the Water Plan Grant funding:

Applicant	Project Name	Request	% of	Staff
			Project	Support
a. Mountain Studies	Animas River Removal and	\$60,764	40%	\$48,714
Institute	Replacement of Invasive			
	Phreatophytes, Phase II			
b. Rio Grande Watershed	Upper Rio Grande	\$55,000	32%	\$55,000
Emergency Action	Environmental Restoration			
Coordination Team	and Recreation			
(RWEACT)	Infrastructure Improvements			
c. City of Steamboat Springs	Fish Creek Critical	\$50,000	33%	\$50,000
	Community Watershed			
		ĆEO 000	20/	ĆEO 000
d. Florida Consolidated	Florida Canal Diversion	\$50,000	3%	\$50,000
Ditch Company	Structure Rehabilitation			
	Project: Phase 2			
	•	·	Total	\$203,714

37. Water Plan Grants - Water Conservation and Land Use (FINAL)

- Babbitt Center for Land & Water Policy, Getches-Wilkinson Center for Natural Resources - Guidance to Covered Entities for Land Use Planning Components of Water Efficiency Plans
- b. Green Mountain Water & Sanitation District Customer Engagement & Analytics Tool
- c. The Meadows Neighborhood Company Targeted, Integrated Irrigation Efficiency Improvements and Mgmt and Turf Conversion for Reduced Water Use
- d. Year One, Inc. dba Mile High Youth Corps Energy and Water Conservation Program
- e. Sonoran Institute Colorado Growing Water Smart
- f. Western Resource Advocates (WRA) Best Practices for Water Meter Retrofit Projects Financed by State Performance Contracts in CO
- g. Western Resource Advocates (WRA) Conservation Oriented Tap Fees: Guide and Workshop

Action: Report by CWCB staff member Kevin Reidy. A motion to approve the staff recommendation made by Jack Goble, which was seconded by Jay Gallagher. The motion was approved unanimously (10-0).

Staff recommendation: Staff recommends Board approval of the projects/activities listed in the following table for the Water Plan Grant funding:

	Applicant	Project Name	Request	% of	Staff Support
				Project	
a.	Babbitt Center for Land	Guidance to Covered Entities	35,000	41%	35,000
	& Water Policy, Getches-	for Land Use Planning			
	Wilkinson Center for	Components of Water Efficiency			
	Natural Resources	Plans			

b.	Green Mountain Water & Sanitation District	Customer Engagement & Analytics Tool	72,000	50%	72,000
С.	The Meadows Neighborhood Company	Targeted, Integrated Irrigation Efficiency Improvements and Mgmt and Turf Conversion for Reduced Water Use	66,700	41%	66,700
d.	Year One, Inc. dba Mile High Youth Corps	Energy and Water Conservation Program	99,964	80.5%	99,964
e.	Sonoran Institute	Colorado Growing Water Smart	398,000	44%	398,000
f.	Western Resource Advocates (WRA)	Best Practices for Water Meter Retrofit Projects Financed by State Performance Contracts in CO	52,500	34%	52,500
g.	Western Resource Advocates (WRA)	Conservation Oriented Tap Fees: Guide and Workshop	19,090	44%	19,090

38. Water Plan Grant Process for FY 18-19

Action: Report by CWCB staff member Lauren Ris. A motion to approve the staff recommendation was made by Patti Wells, which was seconded by Steven Anderson. The motion was approved unanimously (10-0).

Staff Recommendation: In order to streamline the process and to clarify the application requirements, staff recommends the following changes to the WPGrant application process and schedule:

Reduce the number of grant funding rounds to two with August 1, 2018 and February 1, 2019 application deadlines.

Post the grant applications on CWCB's Web site on September 1 and March 1 after initial staff review.

Bring grants to the Board for final review and approval at the November 2018 and May 2019 Board meetings. At this time, if the Board needs additional information or decides that a project needs further consideration, the Board could move final approval of individual projects to the following Board meetings (in January and July).

In the grant guidelines, clarify that letters from Basin Roundtables that provide information about how the project aligns with the applicable BIP and Water Plan goals are welcome. Any letters received will be included in the packet of information reviewed by the staff and Board.

Meeting Adjourned

A motion to adjourn the March 2018 Board meeting was made by Bob Randall, which was seconded by Heather Dutton. The motion was approved unanimously (10-0).

Consent Agenda Item 1.d

July 18-19, 2018 Board Meeting Case No. 18CW3046 (Water Division 5); Highland Ranch Ltd.

Summary of Water Court Application

Applicant seeks an underground water right with an appropriation date senior to CWCB's instream flow water right. Applicant further seeks an alternate point of diversion to a second well under the same claim.

Staff Recommendation

Staff recommends that the Board ratify the filing of a Statement of Opposition that was filed on behalf of the Board in May 2018 to protect CWCB's instream flow water rights.

CWCB Instream Flow Water Rights

The CWCB holds water rights, including the following instream flow water rights in Water Division 5 in the Roaring Fork Watershed, that could be injured by this application:

Case		Upper			
Number	Stream	Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
76W2947	Castle Creek	headwaters	confl Roaring Fork River	12 (1/1 - 12/31)	01/14/1976
76W2948	Roaring Fork River	confl Difficult Creek	confl Maroon Creek	32 (1/1 - 12/31)	01/14/1976
85CW0646	Roaring Fork River	confl Maroon Creek	confl Fryingpan River	30 (10/1 - 3/31) 55 (4/1 - 9/30)	11/08/1985
85CW0639	Roaring Fork River	confl Fryingpan River	confl Crystal River	75 (10/1 - 3/31) 145 (4/1 - 9/30)	11/08/1985

Potential for Injury

- The well is claimed with a senior appropriation date. The instream flow water right might be subject to the claimed water right under C.R.S. 37-92-102(3)(b), C.R.S., if the claimed water right is sufficiently documented.
- No plan for augmentation has been proposed to replace out-of-priority depletions in the proper time, place and amount, which could injure the CWCB's instream flow water rights.
- Applicant claims an alternate point of diversion for the well. A claim for an alternate point of diversion is a change of water right § 37-92-103(5)(a). C. R. S. Applicant's apparent change of water right could cause and expansion of use, which could injure the CWCB's instream flow water rights.

Other Objectors

No other Statements of Opposition were filed.

Attorney Representing CWCB

Andrew B. Nicewicz, Assistant Attorney General, is assigned to this case and can be contacted at andy.nicewicz@coag.gov, or 720-508-6259.



Consent Agenda Item 1.c

July 18-19, 2018 Board Meeting Case No. 18CW3033 (Water Division 2); Sheep Camp Holdings, LLC

Summary of Water Court Application

Application for change of water right and approval of plan of augmentation.

Staff Recommendation

Staff recommends that the Board ratify the filing of a Statement of Opposition that was filed on behalf of the Board in June 2018 to protect CWCB's instream flow water rights.

CWCB Instream Flow Water Rights

The CWCB holds water rights, including the following instream flow water rights in Water Division 2 in the Purgatoire Watershed, that could be injured by this application:

Case		Upper	Lower		
Number	Stream	Terminus	Terminus	CFS Rate (Dates)	Approp. Date
09CW0090	Purgatoire River	confl M/N Fork Purgatoire River	confl Lopez Canyon	21 (5/15 - 8/15) 15 (8/16 - 9/15) 8.4 (9/16 - 11/30) 7 (12/1 - 4/14) 8.4 (4/15 - 5/14)	01/27/2009
09CW0088	South Fork Purgatoire River	confl unnamed tributary	confl Torres Canyon	18 (6/1 - 6/30) 13 (7/1 - 8/15) 5 (8/16 - 10/15) 3 (10/16 - 4/30) 9.6 (5/1 - 5/31)	01/27/2009

Potential for Injury

- The proposed plan for augmentation and exchange may not replace depletions in the proper time, place and amount, which could injure the CWCB's instream flow water rights.
- The proposed change of water rights could cause an expansion of use and could alter the time, place and amount of historical return flows, which could injure the CWCB's instream flow water rights.
- The proposed change in places of storage and points of diversion to upstream locations could injure the CWCB's instream flow water rights.

Other Objectors

Statements of Opposition were also filed by Hill Ranch and River Canyon Ranch, Pioneer Natural Resources USA, Inc., Timber Creek Energy LLC., and Stonewall Mountain Ranch, LLC.

Attorney Representing CWCB

Patrick E. Kowaleski, Senior Assistant Attorney General, is assigned to this case and can be contacted at patrick.kowaleski@coag.gov, or 720-508-6297.



Consent Agenda Item 1.b

July 18-19, 2018 Board Meeting Case No. 18CW0002 (Water Division 2); RP on TC, LLC d/b/a Eden West Ranch

Summary of Water Court Application

Pro Se Applicant claims a change of water rights by requesting modifications to its predecessor's previously decreed terms. CWCB participated in the previous Case No. 98CW0082 filed by Children of the Son involving a change for 3 ditches and an augmentation plan.

Staff Recommendation

Staff recommends that the Board ratify the filing of a Statement of Opposition that was filed on behalf of the Board in May 2018 to protect CWCB's instream flow water rights.

CWCB Instream Flow Water Rights

The CWCB holds water rights, including the following instream flow water right in Water Division 2 in the Arkansas Headwaters Watershed, that could be injured by this application:

Case		Upper	Lower		
Number	Stream	Terminus	Terminus	CFS Rate (Dates)	Approp. Date
98CW0149	Texas Creek	confl Lake	confl Arkansas	3.5 (11/1 - 4/30)	01/29/1998
		Creek	River	7.75 (5/1 - 10/31)	

Potential for Injury

- Modification or deletion of the plan for augmentation may injure the CWCB's instream flow water right.
- The proposed change of water rights could cause an expansion of use and could alter the time, place and amount of historical return flows, which could injure the CWCB's instream flow water right.
- A claim to "constantly pass creek water" when no use is being made could injure the CWCB's instream flow water right because it is potentially fully depletive to a segment of the intervening instream flow reach.
- CWCB was a party to Case No. 98CW82, and Applicant now seeks to remove a number of protective provisions from the decree entered in that case. In particular, Applicant proposes to delete paragraph 12 from the 98CW82 decree. That provision was specifically agreed to by Applicant's predecessor-in-interest in a stipulation with CWCB, which is binding upon Applicant as a successor in interest. *Without agreement by all parties*, Applicant should not be allowed to violate the stipulation with CWCB or the terms and conditions decreed in Case No. 98CW82.

Other Objectors

Statements of Opposition were also filed by IHR LLC, Lake Creek Users Association, State Engineers Office, Trail's End Ranch LLC, and The Ranch on Texas Creek LLC.

Attorney Representing CWCB

Andrew B. Nicewicz, Assistant Attorney General, is assigned to this case and can be contacted at andy.nicewicz@coag.gov, or 720-508-6259.



Consent Agenda Item 1.a

July 18-19, 2018 Board Meeting Case No. 18CW3076 (Water Division 1); East Larimer County Water District

Summary of Water Court Application

Application for change of water rights, alternate points of diversion, alternate places of storage and exchange.

Staff Recommendation

Staff recommends that the Board ratify the filing of a Statement of Opposition that was filed on behalf of the Board in June 2018 to protect CWCB's instream flow water rights.

CWCB Instream Flow Water Rights

The CWCB holds several water rights in Water Division 1 in the Cache La Poudre Watershed that could be injured by this application:

Potential for Injury

- The proposed change of water rights could cause an expansion of use and could alter the time, place and amount of historical return flows, which could injure the CWCB's instream flow water rights.
- The apparent extraterritorial use for the changed water rights cannot be evaluated because the type of use and the place of use are undefined. These uses could injure the CWCB's instream flow water rights.
- The proposed change in places of storage and points of diversion to upstream locations could injure the CWCB's instream flow water rights.

Other Objectors

Statements of Opposition were also filed by the City of Fort Collins, City of Thornton, Larimer & Weld Irrigation Company, WRCC and Larimer & Weld Reservoir Company, North Poudre Irrigation Company, Northern Colorado Water Conservancy District, The Water Supply and Storage Company, The City of Greeley, acting by and through its Water and Sewer Board, and Colorado Division of Parks and Wildlife and the Parks and Wildlife Commission.

Attorney Representing CWCB

Christopher R. Stork, Assistant Attorney General, is assigned to this case and can be contacted at christopher.stork@coag.gov, or 720-508-6311.





COLORADO

Colorado Water Conservation Board

Department of Natural Resources

DIRECTOR'S REPORT

July 2018

Interstate Compact Compliance • Watershed Protection • Flood Planning & Mitigation • Stream & Lake Protection Water Project Loans & Grants • Water Modeling • Conservation & Drought Planning • Water Supply Planning

	COLORADO Colorado Water Conservation Board Department of Natural Resources
TO:	Colorado Water Conservation Board Members
FROM:	Rebecca Mitchell Erik Skeie
DATE:	July 18-19, 2018
SUBJECT:	Agenda Item 5d, July 2018 CWCB Board Meeting Director's Report

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~STATEWIDE~

CWCB SMALL FEASIBILITY STUDY GRANT FUND UPDATE—

New grant applications approved:

1. Town of Empire - Guanella Storage Purchase (\$2,910.50)

Previously approved grants in FY17/18:

- 1. Redmesa Reservoir and Ditch Company Redmesa Reservoir Enlargement (\$25,000)
- 2. Blue Lake Reservoir Comopany Upper Black Creek Reservoir (\$47,947)
- 3. Amity Mutual Ditch Company Queens Reservoir Feasibility Study (\$42,500.00)
- 4. Town of Georgetown Georgetown Reservoir Dredging Feasibility Study (\$32,395.50)
- 5. Central Colorado Water Conservancy District- Klug Lake Storage Feasibility Study (\$16,500)

Total funds approved for feasibility study grants in FY17/18: \$167,253.00 (Anna Mauss)

~COLORADO RIVER BASIN~

COLORADO RIVER BASIN SALINITY CONTROL FORUM— The Colorado River Basin Salinity Control Forum met in St. George, Utah on May 16-17, 2018. The Forum heard updates from partner Federal agencies on implementation of the salinity program throughout the basin. The Bureau of Reclamation provided updates on the Environmental Impact Statement process regarding the Paradox Valley Unit in southwestern Colorado, and the evaluation of new technologies which could be utilized for that project. The Forum also discussed and approved language regarding "strategic importance" of potential project funding under the Natural Resources Conservation Service's Environmental Quality Incentives Program (EQIP). The Forum also heard a series of updates regarding program funding, ongoing project implementation under the Bureau of Reclamation's Basinwide program, future opportunities for the Basin States' Program, and funding recommendations for a series of "Studies, Investigations, and Research" (SIR) projects. The Forum's Work Group will be meeting in Salt Lake City on July 18-19, and the Forum will meet again in Santa Fe in October. (*Brent Newman*)

UPPER COLORADO RIVER COMMISSION— The Upper Colorado River Commission held its summer meeting in Santa Fe, New Mexico on June 20th. The Commission heard an update on the 2018 System Conservation Pilot Program (SCPP), and a proposal for Colorado River augmentation from GEI Consultants and Michael Clinton Consulting. The UCRC adopted a resolution suspending the administration by the Commission of the Upper Basin System Conservation Pilot Program after CY 2018 to commence investigation of a potential large-scale, operational demand management program.More information about the UCRC's resolution is available here: https://www.aspenjournalism.org/2018/06/22/upper-colorado-river-pilot-program-paying-farmers-to-leavewater-for-lake-powell-will-end-after-2018/. The UCRC commissioners also took this opportunity to meet with principals of the Lower Basin states and Bureau of Reclamation leadership regarding ongoing Drought Contingency Planning (DCP) efforts. After recent encouragement from the Reclamation Commissioner, the Basin States are reaffirming their commitment to complete DCP efforts in both Lower and Upper Basins by the end of 2018. (*Brent Newman*) **UPPER COLORADO WILD AND SCENIC STAKEHOLDER GROUP UPDATE**— The Upper Colorado Wild and Scenic Stakeholder Group held its quarterly meeting on June 7, 2018. Proposed indicators for Outstandingly Remarkable Values (ORVs) related to fishing and floatboating were presented for the group's consideration. There is insufficient data available to assign numerical values to the fishing and all water year-type floatboating ORV indicators. At this time, the parameters for those indicators have been proposed and the Stakeholder Group is determining what additional information is needed before finalizing those indicators. The proposed floatboating ORV indicator would be determined by surveys of river rafters in which respondents are asked if they are "not likely to return." The group is also taking steps to develop further scientific analysis regarding other resource guides, including temperature and water quality parameters, which serve as a source of information to inform Stakeholder Group discussions. These proposals are currently being deliberated by Stakeholder Group members in advance of the next meeting, scheduled for August 13. (*Carlee Brown*)

GLEN CANYON DAM ADAPTIVE MANAGEMENT WORK GROUP— The next meeting of the Glen Canyon Dam (GCD) Adaptive Management Work Group (AMWG) will be held on August 22-23 in Flagstaff, Arizona. Colorado remains actively engaged on several AMWG-related issues, including monitoring of experimental Macroinvertebrate Production Flows (Bug Flows) at Glen Canyon Dam. Bug Flows consist of steady weekend releases from GCD that provide favorable conditions for insects to lay eggs on rocks on the edge of the water. Normal hydropower operations subject insect eggs to drying out due to an artificial tide caused by dam releases that ramp up or down depending on power demand. The Bug Flow experiment is designed to "give the bugs the weekend off" to increase egg viability. Initial informal reports from scientists and river guides indicate that the Bug Flows are working – the canyon seems "buggier" than normal, and bug eggs are visible and pervasive in and around Lees Ferry. The experiment will continue through August 31, 2018. The first official scientific analysis of the Bug Flows will be presented at the next AMWG meeting.

Recent fish surveys have determined that the populations of Humpback Chub – the endangered species of primary focus to the GCD Adaptive Management Program – have increased over the past few years, particularly in the Western Grand Canyon. This is encouraging news, especially as the U.S. Fish and Wildlife Service is in the middle of a process considering whether or not to downlist the Humpback Chub to threatened. (*Carlee Brown*)

UPPER COLORADO RIVER ENDANGERED FISH RECOVERY PROGRAM – ELKHEAD AND RIDGWAY FISHING

TOURNAMENTS— The annual Colorado Parks and Wildlife fishing tournaments were held in June at Elkhead Reservoir and in July at Ridgway Reservoir. These fishing tournaments are jointly funded by Colorado Parks and Wildlife and the Colorado Water Conservation Board. Additionally, this year the Colorado Water Conservation Board hosted the awards ceremony at Elkhead Reservoir providing food and staff for the event. The objective of these tournaments is to have anglers assist in the harvest of non-native fish species, which are not compatible with recovery of the native endangered fish. This year, 322 northern pike and 540 small mouth bass were caught at the Elkhead fishing tournament. Colorado Parks and Wildlife is replacing these non-compatible species at Elkhead Reservoir with warmwater species that are compatible with native fish recovery and conservation efforts. (*Jojo La*)

COLORADO RIVER WATER USE-

2018 Colorado River Storage as of July 3rd, 2018				
	Elevation (feet above mean sea level)	Storage (MAF)	Percent of Capacity	
Lake Mead	1,076.88	9.754	37%	
Lake Powell	3,609.81	12.711	52%	
Total System Active Storage		30.373	51%	
2017 Total Active Storage		30.720	57%	
		Flow (MAF)	Percent of Average	
Forecasted Unregulated Inflow into Powell		5.113	47%	

Forecasted CY 2018 Lower Basin Consumptive Use				
State	Us	e (MAF)	Total (MAF)	
Arizona		2.642		
California				
California Agricultural	3.532	1 096	7 006	
Metro. Water District	0.540	4.000	7.000	
Other	0.015			
Nevada		0.278		

*Note MAF = million acre-feet

~SAN JUAN/DOLORES RIVER BASIN~

HIMES CREEK INSTREAM FLOW RECOMMENDATION— At the January 2016 Instream Flow (ISF) workshop, the U.S. Forest Service (USFS) submitted a recommendation to the CWCB for ISF water rights on Himes Creek. This recommendation was part of a pilot process for the USFS to evaluate whether the ISF Program can meet the USFS' non-consumptive water right needs on the San Juan National Forest. Staff has spent the past two and a half years collecting, reviewing, and analyzing data while collaboratively working with the USFS, CPW, and other interested stakeholders to address issues related to the natural environment and flow quantification on this stream. Staff continues to work with interested stakeholders and requires additional time to address their concerns.

~YAMPA/WHITE RIVER BASIN~

IMPLEMENTATION OF TEMPORARY LOAN OF WATER FROM COLORADO PARKS AND WILDLIFE FOR INSTREAM FLOW USE (WATER DIVISION 6) — On July 23, 2012, Colorado Parks and Wildlife ("CPW") and the CWCB entered into an Intergovernmental Agreement ("IGA") for a temporary loan of a portion of CPW's storage right in Lake Avery Reservoir (a/k/a Big Beaver Creek Reservoir) for instream flow use on Big Beaver Creek and the White River in Water Division 6.The Division of Water Resources approved that loan of water on July 17, 2012, effective through July 12, 2022. CWCB and CPW may exercise the loan for up to 120 days in each year, not to exceed 3years during the 10-year period ending in 2022.
CWCB Case No.	Stream	Amount (cfs)	Approp. Date	Watershed	County
6-77W3752E	Big Beaver Ck	2.0 (1/1–12/31)	11/15/1977	Upper White	Rio Blanco
6-77W3752C	White River	200 (1/1–12/31)	11/15/1977	Upper White	Rio Blanco

The ISF water rights that benefit from this loan of water are described below:

Starting in late August 2012, CPW released approximately 1,250 acre-feet from storage for ISF use over a period of 34 days, addressing temperature issues and low flows. CWCB and CPW did not exercise this loan of water in 2013-2017. In mid-June 2018, CPW contacted CWCB staff about implementing this loan of water, based upon anticipated low flow conditions, high temperatures, and algae accumulation on the White River. On June 22, 2018, CWCB staff sent a written request to CPW, with a copy to the Division Engineer for Water Division 6, requesting releases of loaned water from Lake Avery for instream flow use on Big Beaver Creek and the White River. CPW has scheduled a public meeting in Meeker to discuss White River flows, temperatures, and the upcoming implementation of this loan of water. CWCB staff intends to participate in that meeting.

~ WATER CONSERVATION AND DROUGHT PLANNING UPDATES ~

CWCB WATER EFFICIENCY GRANT FUND PROGRAM (WEGP) UPDATE—

Three grant applications have been received since the May 2018 Director's Report

- City of Thornton –Drought Management Plan
- San Juan County/Town of Silverton- Drought Management Plan
- City of Fort Lupton– Water Efficiency Plan Update

Four grants have been approved since the March 2018 Director's Report:

- Town of Wellington Water Efficiency Plan (\$30,000)
- City of Aspen Professional Landscape Certification Program (\$48,923)
- City of Thornton Drought Management Plan (\$30,000)
- San Juan County/Town of Silverton– Drought Management Plan (\$19,940)

The following are deliverables sent to the CWCB since the last Director's Report:

- Eagle River Water & Sanitation District Regional Water Efficiency Plan 75% Progress Report& Final Plan
- City of Monte Vista– Water Efficiency Plan Update– 75% Progress Report
- South Metro Water Supply Authority Regional Landscape Certification Program Final Report
- Town of Castle Rock Drought Management Plan 95% Progress Report
- City of Thornton –Drought Management Plan 25% Progress Report
- East Cherry Creek Valley Water & Sanitation District Water Efficiency Plan Update 75% Progress Report (Ben Wade)

WATER EFFICIENCY & DROUGHT PLANS UPDATE—

Colorado Drought Mitigation and Response Plan: Per FEMA requirements this plan is in the process of being updated. CWCB has worked with a stakeholder advisory committee to help guide this process and will hold a public comment period from July 16th through August 17th. All comment will be addressed prior to the final plan being presented to the CWCB Board in September.

The Office of Water Conservation & Drought Planning (OWCDP) continues to work with the following providers to approve their Water Efficiency and Drought Management Plans:

DROUGHT MANAGEMENT PLANS:

Approved Plans

• No new plans approved since last board meeting

Drought Management Plans In Review:

• Town of Castle Rock

WATER EFFICIENCY PLANS:

Approved Plans:

- City of Brighton
- City of Fountain
- City of Longmont
- Morgan County Quality Water District

The following plans have been given conditional approval. CWCB staff will continue to work with these entities until their respective Water Efficiency Plans achieve approval status.

- Thornton
- City of Monte Vista
- Town of Severance
- Lafayette
- Eagle River Regional Water Efficiency Plan
- Blue River Regional Water Efficiency Plan (Individual plans from Frisco, Copper Mt., Breckenridge, Dillon)

Water Efficiency Plans in Review:

- Widefield Water & Sanitation District
- North Weld County Water District
- Evans

(Kevin Reidy & Ben Wade)

GOVERNOR'S WATER AVAILABILITY TASK FORCE— There will be a Water Availability& FloodTask Forcemeeting will be on July24th from9:00am-11:30am at the Durango Recreational Center, 2700Main Avenue, Durango, CO. Please check the website (<u>http://cwcb.state.co.us/public-information/flood-water-availability-task-forces/Pages/main.aspx</u>) for additional information. (*Ben Wade*)

DROUGHT UPDATE— As a result of the persistent drought conditions throughout parts of Colorado, the Governor activated the State Drought Response Plan on May 2, 2018 for the agricultural sector. This activation is in effect for Montezuma, La Plata, Archuleta, Conejos, Costilla, Las Animas, Baca, Prowers, Bent, Otero, Huerfano, Alamosa, Rio Grande, Mineral, Hinsdale, San Juan, Dolores, San Miguel, Ouray, Montrose, Saguache, Custer, Pueblo, Crowley, Kiowa, Cheyenne, Lincoln, El Paso, Elbert, Gunnison, Mesa, Delta, Garfield, Rio Blanco counties.

The USDA has issued primary secretarial drought designations for 40 counties in the state, and contiguous designations for an addition 14 counties.

The month of May was, on average, the second warmest on record and the warmest since 1934. While daytime highs were above normal, night time highs were also well above normal, which may have contributed to early snowmelt across much of Colorado. June has continued to see well above average temperatures with most of the state experiencing temperatures 4-10 degrees above normal. Precipitation for both May and June to-date has largely been well below average statewide, these conditions contribute to fire danger.

The 416 fire north of Durango started on June 1st and is now 35K acres and 36% contained. The week of June 25th has hot and dry conditions forecast to continue throughout the week. The San Juan National forest has been closed due to high fire danger resulting from prolonged drought, a waiver has been granted to allow some grazing to continue but with strict rules for entry.

Some parts of SW Colorado received roughly 2 inches of rain in mid-June-- an uncommon occurrence for this area at this time of the year- however conditions still remain dry and large precipitation deficits still exist and while this will help alleviate drought and fire potential, it also introduces the potential for floods near burn scars.

As of June 26, exceptional drought, D4, continues to affect southwest Colorado and the Sangre de Cristo mountains, covering nine percent of the state. Extreme drought, D3, covers 28 percent of the state; severe drought 16 percent and 15 percent is classified as moderate drought. An additional 12 percent of the state is currently experiencing abnormally dry conditions.

Cattle sell off and failed and prevented planting of some acreage has been reported. High hay prices make purchasing adequate supplies to maintain livestock a challenge. Unless conditions improve we anticipate continued cattle sell off, and additional prevented and failed crop acres are likely.

Monsoon season is forecast to be strong this year, but doesn't typically begin until mid to late July. (*Taryn Finnessey*)

CLIMATE CHANGE— On June 19, Governor Hickenlooper signed an executive order that calls for the state to adopt air quality standards that will protect our quality of life in Colorado. Governor Hickenlooper said "Low emissions vehicles are increasingly popular with consumers and are better for our air. Every move we make to safeguard our environment is a move in the right direction."

The executive order instructs the Colorado Department of Public Health and Environment to

- develop a rule to establish a Colorado LEV program, which incorporates the requirements of the California LEV program; and
- propose that rule to the Colorado Air Quality Control Commission during its August 2018 meeting for possible adoption into the Colorado Code of Regulations by December 30, 2018.

(Taryn Finnessey)

WATER AND GROWTH DIALOGUE— Through a Water Efficiency Grant, the Keystone Center is facilitating a dialogue to quantify water use through different land use patterns as well as bringing together land use and water managers to discuss where integration can occur. Staff is on the technical advisory group as well as the steering committee. The steering committee has released a final report for dissemination with all the results to date. At present, a larger meeting with the working group is scheduled for July 24 in Denver to go through the final report

and assess how best to disseminate the information. Kevin is also presenting on the Dialogue to the Metro Mayor's Caucus on August 1, 2018. (*Kevin Reidy*)

CO WATER LOSS INITIATIVE— CWCB Staff has started the CO Water Loss Initiative which will culminate in a 2-year training and technical assistance water loss control program for water providers across Colorado. Kevin convened a small advisory group to weigh in on the scope of work and to assist with the development of the programming. The contract was awarded to the Cavanaugh and Associates/Water Systems Optimization team in early June. As of now the contract is being worked out but the hope is that work will start in mid-July with a soft kick off meeting and an in person kick off meeting in mid-August. (*Kevin Reidy*)

LAND/WATER PLANNING NEXUS— CWCB Staff is working with counterparts from DOLA to create trainings and other related projects specified in SB 15-008 (AKA the land use bill). This bill stated that the CWCB and DOLA would create trainings for land use and water planning professionals in order to incorporate water conservation and demand management best practices into land use planning. Additional work is as follows:

- CWCB and DOLA are working with the Babbitt Water Center, out of AZ, to develop more guidance on integrating land and water use planning in CO and to assess which communities are doing this already.
- CWCB and DOLA convened a third meeting for the Water and Land Use Planning Alliance on June 28 to check in and monitor progress on various projects as well as solidify a charter for the group.
- Anne Castle, Getches Wilkinson Center, is creating a guidance addendum to the CWCB Water Efficiency Guidance Document that will assist water providers in integrating water efficiency into land use planning. Kevin is on the advisory group and the project is funded through a CWCB grant.
- Sonoran Institute, through a CWCB water plan grant, has extended their Colorado Growing Smart initiative to carry out 3 more additional workshops over the nest 18-24 months. Kevin is on the advisory group for these trainings.

(Kevin Reidy)

CONFERENCES AND WORKSHOPS/OUTREACH—

AAAS How We Respond Initiative: Staff has been asked to serve on an advisory committee for the American Association for the Advancement of Science initiative aimed at communicating how communities are responding to climate change. The "How We Respond" initiative builds on AAAS's 2014 <u>What We Know</u> project and will take that work further, providing tangible examples of how scientists and communities are working together to develop and implement responses to climate change. The ultimate goal is to help communities and decision-makers focus on solutions and take action on climate issues, grounded in both science and local needs. She will participate in a workshop in DC July 9-11.

Southwestern Colorado Drought Impacts Tour: A Drought Tour will be held in SW Colorado on July 23; A WATF meeting will be held in Durango on the 24th of July.

Water and Planning Connect Conference:

Staff has been asked to present on CWCB's work in integrating water planning into land use planning. This is the inaugural conference is being organized by the American Planning Association with input from the American Water Works Association and water planners from across the country. The Water and Planning Connect conference is in Kansas City on September 11-12.

~WATERSHED AND FLOOD UPDATES~

MAPPING UPDATE—

FY17 Activities: The CWCB received a \$212,558 grant from FEMA to provide an updated hydrologic and hydraulic engineering and floodplain mapping for the Roaring Fork River and floodplain mapping services for the Colorado River within Garfield County. A kick off meeting was held on April 5, 2018 and the project is now underway.

The CWCB was able to leverage \$929,729 from FEMA to continue CHAMP through the FEMA regulatory process. This study involves analyzing streams across seven counties in northeast Colorado and will include 233 FIRM panel updates. The counties include Boulder, Logan, Larimer, Morgan, Weld, Washington, and Sedgwick Counties. The State Task order is finalized and work will begin in Summer 2018.

The CWCB previously funded a Discovery project in the Animas River Watershed. From that effort, the local communities were able to identify several mapping needs. FEMA has awarded CWCB \$654,717 to fund the proposed projects that identified from the Discovery effort. This includes updated hydrologic and hydraulic engineering, (including post-fire conditions for Junction Creek), updated floodplain mapping, and sediment-bulked flooding along the Animas River, and an evaluation of ice jamming conditions in Silverton. Field survey work is underway and additional scope will be added at the request of local communities due to the local wild fires occurring recently.

The CWCB is funding a regional hydrology update for the Arkansas River from the headwaters near Leadville, Colorado to the Kansas State line. The CWCB is working with Wood (formerly Amec Foster Wheeler) on this analysis. Preliminary results will be ready in summer 2018.

FY16 Activities: Upper White Watershed Risk Map Phase II is on track. The preliminary map distribution is scheduled for the Fall 2017. St. Vrain Risk Map Phase III is also well under way. The hydraulic tasks and floodplain mapping tasks have been submitted to FEMA.

CWCB received \$3.4 million FEMA grant for LiDAR acquisition in Colorado for future floodplain mapping projects. CWCB has selected the vendors and the first flight for data collection will occur in the Fall 2017. A State task order was recently approved to fund a regional hydrology study update on the Colorado River near Granby to the border with Utah. Preliminary results are now available. This data will be submitted to FEMA for review and approval.

FY15 Activities: The Cache La Poudre Phase III project will begin shortly after the hydraulic and floodplain mapping tasks are completed. The hydraulic analysis will be reviewed a second time by FEMA, but the project is delayed until the levee issues in Fort Collins is resolved. The purchase of the IFSAR data is in progress and the data should be delivered in May 2017. This purchase was delayed due to contracting language revisions and additional approval processes. The Middle South Platte Watershed delineation project will begin shortly after we receive the IFSAR data. Upper Gunnison Risk Map Project schedule was revised due to a slight delay in locating topographic data near Crested Butte.

FY14 Activities: The erosion zone study for the Salt Creek Wash near the Town of Collbran in Mesa County has been completed and approved by FEMA. This report is now available on the Risk Map website.

A Flood Risk Review meeting was held in early April with the community officials to provide a sneak preview of the draft floodplain maps. This project will continue through post processing tasks with a new FEMA grant which was awarded in FY 16.

FEMA has provided funding to conduct a countywide approximate floodplain mapping for El Paso County, referred to as a Base Level Engineering (BLE) study. A part of this grant funding will be rescoped to fund the revised preliminary project for the El Paso County DFIRM project.

Other non-mapping projects funded by FEMA this year included an inventory of the ongoing studies and other data in the post flood areas, developing a technical evaluation of flood forecasting methods using Risk Map products, and developing a model management system to store all available hydrologic and hydraulic models in the post-flood areas. All of these projects have been completed and approved by FEMA.

FY13 Activities: The El Paso County as a partial Countywide DFIRM project is now in the post appeal period and will be completed as a revised preliminary project due to the number of issues found in the mapping. Purgatoire Watershed Risk Map project has gone through the preliminary phase and the preliminary maps have been sent to communities for review. The next step will be to schedule a meeting with the local officials to review maps and obtain any comments from the community officials. This project includes Las Animas County and the City of Trinidad.

The Pueblo County DFIRM is now in the post-preliminary phase. The appeal period started on January 17, 2017. Thus far no appeals have been received by the communities.

FY12 Activities: The grant for Purgatoire Watershed was funded through floodplain mapping and all tasks have been completed under the 2012 grant. A new grant was approved in 2013 to complete the Purgatoire Risk Map project to effective and the progress report is found under FY 13 Activities. The Cache La Poudre Risk Map project was funded in FY 2012 and the hydraulic and floodplain mapping tasks are almost complete. A new FEMA grant was awarded in FY 2015 to complete the Cache La Poudre Risk Map project under Phase III.

FY11 Activities: Hydrology tasks for St. Vrain and Clear Creek watersheds have been completed and approved. The scope of work for the St. Vrain watershed was revised to include areas that were impacted by the flood. All tasks under this grant have been completed through to floodplain mapping. The FEMA grant for this project has expired and a new grant was approved in 2016 to complete additional tasks to finalize the maps as FEMA effective products. Updates for the St. Vrain Risk Map project will be provided under FY 2016 activities. Some streams updated through the Colorado Hazard Mapping Project will be included in the St. Vrain map update.

Clear Creek Risk Map preliminary maps were distributed on February 8, 2017. The community review meeting was held on March 30, 2017. Documents are currently being finalized to request Federal Register and the next step will be the local newspaper publications and appeal period.

FY10 Activities: Chaffee and Pitkin Counties are now in the post preliminary phase. The appeal period has ended for both of these projects and there were several appeals that were received. The appeal resolution and community response letters are being finalized. Pitkin County may be extended into a revised preliminary project due to the number and scale of appeals that were received. Chaffee County DFIRM is moving forward toward effective and the Letter of Final Determination (LFD) will be determined in the next few weeks, depending on FEMA HQ approval.

FY09 Activities: The Morgan County DFIRM appeal period started on February 22, 2017. There has been some local questions and concerns about the updated mapping and CWCB and FEMA are working with the local constituents and community officials.

The Prowers County DFIRM appeal period has ended and the LFD letters were distributed on October 19, 2015. The maps became effective on April 19, 2016. (*Thuy Patton*)

FLUVIAL HAZARD MAPPING UPDATE— The floods of September 2013 reminded Coloradans how quickly rivers and streams in their state can change and morph into extreme storm events. Approximately half of the private structure damages and losses experienced in the 2013 flood were located outside of the regulatory floodplain, or Special Flood Hazard Area (SFHA), designated by the Federal Emergency Management Agency (FEMA). These flood-related risks associated with erosion, deposition, degradation, lateral migration, and avulsion created disastrous outcomes in 2013, and those outcomes may occur again in future flood events in Colorado.

The identification of fluvial hazard zones has become a high priority as Colorado recovers from the September 2013 floods and transitions toward long-term river corridor planning. Planning for erosion hazards is an essential component of effective river corridor management and the prevention of future flood damages.

Broadly defined, the Fluvial Hazard Zone (FHZ) is the area a stream has occupied in recent history, could occupy, or could physically influence as it stores and transports sediment and debris during flood events. In early 2015, Colorado's Legislature passed a funding bill for the Colorado Hazard Mapping Program, which aims to provide a mitigation and land use framework in areas likely to be affected by future flooding, erosion, and debris flow events. The fluvial hazard mapping component of the project began in January 2017. The engineering firm Amec Foster Wheeler has been contracted to do the work. The program will refine mapping methodology and perform a series of pilot studies on fluvial hazards throughout the State. Communities interested in participating in the pilot studies submitted applications to the CWCB and selections were made in May of 2017. Community selections were based on physio-geographic location, geomorphic setting, existing data availability, and other technical elements, as well as community support, budget, and time constraints. Communities selected include Boulder, Eagle, Saguache, and San Miguel Counties, and the Town of Castle Rock, City of Delta, Town of Estes Park and Town of Nederland. Fluvial/erosion hazard mapping in these communities is current underway, and map products and a model land use code will be available for voluntary adoption by communities by the end of June 2019. (*Stephanie DiBetitto*)

FLOODPLAIN RULES AND REGULATIONS UPDATE— The State of Colorado, through CWCB action in November 2010, adopted increased standards for floodplain management, which are contained in the Rules and Regulations for Regulatory Floodplains in Colorado (Rules), effective January 14, 2011. Communities were provided with a three-year transition period to adopt local regulations consistent with the

Rules. Through sound floodplain management practices, these standards support enhanced public health, safety and welfare and will help communities reduce future flood risk to people and property.

Staff has been working very collaboratively with communities to assist them with technical questions, model ordinance templates, and transition support. CWCB staff has contacted each community that has not yet provided documentation of adoption of the Rules via phone or email to offer assistance. Staff has also met with several communities to answer questions and review the process for updating floodplain regulations. Most communities have made adopting the Rules into local floodplain regulations a priority.

However, a few communities have not completed the adoption or provided documentation to CWCB. There are 5 out of 252 total communities that participate in the National Flood Insurance Program and have Special Flood Hazard Areas identified that have not yet provided documentation of adopting the Rules. A three-year transition period was provided and all Colorado communities had until January 14, 2014 to adopt floodplain regulations consistent with the Rules. Therefore, the five remaining communities are considered to be non-compliant. Non-compliance is taken into consideration by CWCB staff when awarding grant funding, and can prevent a community from receiving CWCB funds.

In accordance with the procedure outlined in Rule 16, staff is continuing to provide outreach and technical assistance to these communities and all five of the remaining communities are working with the CWCB to adopt the Rules. These communities are the Town of Dove Creek, Town of Hayden, Town of Minturn, Town of Holyoke, and City of Wray. All non-compliant communities have provided the CWCB with an update of their progress to date and have completed a first reading of their updated ordinances and are working towards final adoption at the local level, with the exception of the Town of Holyoke. (*Stephanie DiBetitto*)

FLOODPLAIN HAZARD MAPPING UPDATE— The Colorado Hazard Mapping Program (CHAMP), funded under Senate Bill 15-245, is making significant progress with approximately one year remaining. Phases 1 and 2 have acquired all necessary funding. Phase 1 of CHAMP involves conducting new flood hazard analyses and floodplain delineations for streams particularly affected by the September 2013 flood event. Streams in Boulder, Larimer, and Weld County and small portions of Jefferson and Gilpin County. CHAMP Phase 2 focuses streams excluded from Year 1 in the Big Thompson and St. Vrain Hydrologic Unit Code 8 (HUC8) Watersheds and updating of the South Platte River from the Weld-Adams County line to the Colorado-Nebraska State line. Since many aspects of the project take multiple months to complete, many projects are in same phases of work as described in the last report.

All streams studied under CHAMP were scoped for a regulatory update through the Physical Map Revisions (PMR) process. This regulatory update is awaiting FEMA's final approval of floodplain mapping. Preliminary Flood Insurance Rate Maps (FIRMs) are anticipated in 2019 with neweffective FIRMs by 2020 or 2021. The CHAMP team will work through FEMA's Floodplain Mapping comments for Y1 streams. Hydraulics for Y2 streams are also being reviewed by FEMA. After approval, FEMA will review Y2 Floodplain Mapping. The process of updating the regulatory FIRMs for CHAMP streams has been initiated and will be completed after FEMA approval of the Floodplain Mapping.

Phase 3 of CHAMP focuses on counties and communities that are still utilizing paper FEMA floodplain maps. This scope includes digitizing existing Flood Insurance Rate Maps (FIRM) panels in select communities and jurisdictions, and wherever topographic data is available, updated flood risk information will be provided as best available information for local communities to utilize.

We have completed the hydrologic analysis of the 12 studied counties with the last of the initial hydrologic submittals completed in 2017. Stream modeling began in January 2018, and the Southwest Hydraulic Kick-off is ongoing this spring. We plan on starting floodplain mapping by summer 2018 and begin flood risk review meeting in fall 2018. Funding for Phase 3 is limited, and therefore, the communities have selected and prioritized areas based on interest level, local mapping needs, and available topography data. Check out the revamped CHAMP website, which was expanded to host all Colorado Risk MAP projects. It has a new look and capabilities including all ongoing project information and documentation. Please visit <u>www.coloradohazardmapping.com</u> for all the latest updates. (*Thuy Patton*)

COLORADO FLOOD HAZARD MITIGATION PLAN UPDATE— The CWCB is working to update the Colorado Flood Mitigation Plan, which was last updated in 2013. The Plan will reassess the State's flood risk and mitigation strategies. The Flood Mitigation Plan will be incorporated into Colorado's Enhanced State Hazard Mitigation Plan as an appendix. Multiple state agencies are included in the plan preparation process and it will ultimately be adopted by the Governor by its affiliation with the Enhanced State Hazard Mitigation Plan. The final draft is now complete and undergoing a 30-day public comment period. CWCB staff intends to bring the Plan to the CWCB Board at the September Board meeting for adoption. (*Stephanie DiBetitto*)

SHORT-TERM RECOVERY TASK FORCE FOR FIRE AFFECTED AREAS— A task force is being formed to address shortterm needs associated with eventual fire recovery actions associated with the 2018 wildfires currently burning in Colorado. This Task Force is led by the Directors of the Colorado Office of Emergency Management (Department of Public Safety) and the Division of Local Government (Department of Local Affairs) and is facilitated by the Colorado Resiliency Office (Department of Local Affairs).

As currently drawn up, the Task Force will consist of five "Recovery Support Functions" (RSF). One of these functions is Natural Resources, which has been tasked to the CWCB Flood Section and its partners. The purview of the Natural Resource RSF is to address technical issues regarding post-wildfire debris flows, early warning, floodplain management, and flood insurance, watershed restoration, and agriculture impacts. (*Kevin Houck*)

WEATHER MODIFICATION UPDATE—

New Colorado cloud seeding interest --- The last dry winter has spurred interest in cloud seeding. There are three new partnerships developing. Jackson WCD is working with the state of Wyoming on an aerial seeding program that will be based out of Wyoming seeding the Medicine Bow/Sierra Madre ranges with additional flight time for the Never Summer range in Colorado. Wyoming has an RFP out for bid right now. The Winning contractor will need a Colorado weather modification permit. Another potential new program sponsor may be the Left Hand Water Conservation District based in Longmont. They have requested a proposal from the Desert Research Institute to get a state seeding permit and site one or two generators near Grand Lake that would seed both the Upper Colorado and South Platte Basins. A third new interested party is the City of Aspen and Aspen Ski area. Currently Aspen is just outside a permitted program called the Central Rocky Mountains Basin Program administered by the Colorado River Water Conservation District and operated by Western Weather Consultants of Durango. These three potential target areas and partners are in the formulation stages.

New Remote Operated Cloud Seeding Ice Nucleus Generators – Colorado River funding with CWCB agency Severance Tax funds funded the purchased of two satellite communication ice nucleus generators from the Idaho Power company by the Colorado River WCD. Installation will happen in fall of 2018 somewhere in the Summit County area. This is part of the ongoing effort of the CWCB to help Colorado's contractors and local sponsors used high elevation high output industry standard cloud seeding machines.

Colorado River Basin Weather Modification Technical Advisory Committee - A new nine-year agreement that budgets up to \$500,000 per upper basin state (UT, CO, WY) from the Lower Basin was signed this summer by all the Seven Colorado River States. This is a continuation of an effort that started in 2007 and ended in 2018. The

collaboration in its previous form was individual contracts between each upper basin State and the Southern Nevada Water Authority, California Six Agency committee, and the Central Arizona Water Conservation District. The first meeting of this Colorado River Weather Modification Technical Committee was June 26th at Denver International Airport. It was a forum for Wyoming, Utah, and Colorado to present and defend their funding requests to the Lower Basin that will provide funding and assistance to Colorado's cloud seeding programs. (*Brent Newman and Joe Busto*)

WATER SUPPLY FORECASTING UPDATE—

Rio Grande Permanent Radar – The CWCB has been working with Alamosa County on the purchase and deployment of a permanent weather radar at the Alamosa airport funding comes from the Rio Grande Watershed Emergency Action Team (RWEACT) funded under a Governor's Disaster Recovery Executive Order, CWCB, CDOT, and a State Capitol Development Committee grant. Contracting, construction management, and tight time lines make this project complex so Kirk Russell has joined the team. Board member Heather Dutton has been instrumental in all the progress to date. All sources of funding will be available after July 1. The San Luis Valley is in a well-documented black hole for radar data with the NWS Pueblo radar being beam blocked by the Sangre de Cristo Mountains. Mobile radar data in winter was used to feed hydrologic models to demonstrate that a weather radar can provide valuable data for water supply forecasts. Radar has a multitude of uses and that is why a broad based coalition has gotten behind the project. Using rented radars for the winters for water supply forecast modeling help document the utility to get the water community behind this project. We will be pushing forward towards the deployment of a locally owned and operated weather radar with a goal of the end of 2018 or early 2019. (*Kirk Russell and Joe Busto*)

SNODAS training – The CWCB conducted webinars with forty total attendees in May to unveil a new snowpack monitoring tool developed by the Open Water Foundation. The Snow Data Assimilation System (SNODAS) is a national operational snowpack modeling system that went live in 2004. The Open Water Foundation was hired to organize the data and clip it by all of Colorado's smaller watersheds and provide online volumetric snowpack SWE data and graphing capability of the current and historical data now at 14 years. The Project lives on the Colorado DSS website and also on the Open Water



Foundation website. This 1km gridded snowpack model provides 100,000 new data points to supplement Colorado's existing 120 SNOTEL sites. The NRCS Snow Survey Program in Portland was impressed with

theColorado SNODAS project and has asked for help from the CWCB and Open Water Foundation in the form of follow on work to also make it useful to the NRCS in their decisions for water supply forecasting. The video demonstration of the snowpack monitoring project can be found on the CWCB youtube channel or by simply searching for SNODAS in youtube. (Carolyn Kemp and Joe Busto)



SNOlitestations installed in the Conejos Basin – As part of the

ongoing R&D work in the Conejos to help out with water management the National Center for Atmospheric Research funded by the CWCB designed a five new robust low impact snow measurement stations similar to the

data from a NRCS SNOTEL site. This was helpful in USFS permitting as no forest clearing is needed. The goal is to better characterize snowpack, for water modeling, for water forecasting. This will lead to greater certainty and better water allocation. It will also help the Division 2 DWR with more data to meet in state and downstream river compact obligations. The new in progress permanent radar will help with precipitation estimates in wilderness areas. But where we can get more ground data stations we will. Five new SNOLite stations are slated to be installed and managed by the Conejos WCD. Three were installed in June and two more will be installed in late summer.

Red Mountain SNOTEL purchase – The CWCB teamed up with the Colorado River WCD, Ridgway Water Users Association, Upper Gunnison River WCD, and Southwestern WCD to purchase the 10 Acre plot that was private land but also housed Colorado's first and oldest SNOTEL site. The goal was to preserve the period of record and ensure there were two forecasts for Ridgway dam not just one. The Red Mountain SNOTEL is important for water forecasts in several watersheds. Most all of Colorado's SNOTEL sites are permitted and on USFS lands. Colorado's first one was not. Due to its long term record, strategic location, climate change predictions, and ongoing dry periods in the Southwest a coalition was built to preserve this data point. Thanks to former CWCB Member April Montgomery for introducing all the water districts to the Ouray Trust for Land Restoration. The Trust brought this project to fruition and completion.

NASA ASO Flights in Gunnison – The CWCB contracted with NASA Aerial Snow Observatory to conduct a peak snowpack and late in melt flights for the Gunnison, Crested Butte, and Taylor River Basin area to for the Upper Gunnison River Water Conservation District. This will give an uppresented look at Gunnison's snowpack. The NASA

data will help assess the current snow data, compare its totals to official water supply forecasts and help us for smart expansion of the existing snow data network. The NASA data will be provided to the Colorado Basin River Forecast Center to provide a look back as last winter/spring and hopefully provide some additional understanding for their forecast processes. The CWCB spent around \$360,000 in contracts with NASA for a snow off and two snow on flights (April and May) for the Gunnison in 2018.

The US Department of Energy (DOE) announced funding for snow science and snow hydrology research in the upper Gunnison basin to complement the NASA ASO data collection project. These projects supplement ongoing research by Berkeley Lab's Watershed Function Science Focus Area project, which seeks to understand how mountainous systems retain and release water, nutrients, and metals as a function of drought and early snowmelt. According to Kenneth Hurst-Williams of Berkeley Lab, "the collective DOE funding for three projects exceeds \$1M". The first DOE funded project will utilize multi-scale, seasonal snowpack observations and modeling to more accurately account for water and solute storage and fluxes within the upper Gunnison. The second project will better constrain our physical understanding of aerosol loading, biogeochemistry, and snowmelt hydrology from hillslope to watershed scale within the East River watershed. Both projects will rely heavily on NASA's ASO data. The third project will advance our ability to accurately predict the spatiotemporal distribution of snow cover and



NASA ASO data for April 1 and May 25, 2018 above Crested Butte

water content across multiple scales by combining land-atmosphere models with operational multi-satellite remote sensing data. Collectively these three projects were designed to complement CWCB funded NASA ASO work that is primarily focused on better understanding our snowpack and improving seasonal water forecasting.

The CWCB, Upper Gunnison River WCD, National Center for Atmospheric Research and the NRCS Snow Survey program are working together to deploy four new SNOlites in the Taylor River basin where there are only two NRCS SNOTEL sites. This will triple the snow data in the Taylor River Basin. According to Frank Kugel, "The reason the Upper Gunnison WCD is interested in new snow data and NASA ASO is we need better data to improve the accuracy of the water supply forecasts. The current SNOTEL network does not adequately address high elevation snowpack. The Taylor River basin forecast early in the season dropped by 18% late in the season (18% less river run off volume than forecasted) providing severe challenges for water managers and river users. The rafting outfitters and irrigators were forced to dramatically adjust their operations. More accurate forecasts would help us better divide water among the competing interests."

Durango Mobile Radar Project – The CWCB Flood and Drought Response Fund and the Department of Homeland Security and Emergency Management will fund a proposal from Oklahoma University to deploy a mobile radar (likely on missionary ridge) from July 1 – October 1. In the past CWCB helped the Rio Grande Watershed Emergency Action Team finds radars so they could fund three mobile



radar campaigns to help the Pueblo NWS have eyes on the area. This new mobile radar project will help the Grand Junction NWS better have eyes on the burn scar for the summer monsoon. The radar will also help give a quicker response time for emergency operations plans for public safety. Pictured is the Oklahoma University Advanced Radar Research Corporation's PX 1000 previously on Wolf Creek Pass after the West Fork Complex Fire in the Rio Grande. This radar will now be in Durango on Missionary Ridge from July 1 through October 1. It is an X-Band dual polarized research radar that is set up for real time communication and display of data. Real time displays of radar data will be helpful to help the NWS make more timely and accurate flash flood forecasts and local emergency managers more time to act when there is rain on the burn scars from the 416 fire above Durango. (*Kevin Houck and Joe Busto*)

COLORADO EMERGENCY WATERSHED PROTECTION

PROGRAM UPDATE— As the Statewide sponsor for the Natural Resource Conservation Service 2013 Phase II Emergency Watershed Protection (EWP) Program, the Colorado Water Conservation Board (CWCB) was tasked with overseeing and implementing over \$63 million in stream recovery work. Following the 2013 floods, CWCB executed its mission by developing comprehensive watershed and stream master plans to unify stakeholders around a common vision that emphasized natural stream function and ecosystem health along with property and infrastructure protection. The vision was not singularly flood mitigation, but also systemic stream resiliency. The EWP Program was a critical component in Colorado's flood recovery accomplishing extensive protection and restoration for Colorado's communities, economies, and river systems.

To deliver on the State's goals of overall stream resiliency while also meeting the EWP program goals of protecting life and safety, a comprehensive team of experts was assembled. This team was carefully crafted to directly support resilient stream design and also coordinated the needs of local sponsors, landowners, and construction contractors. Successful implementation of the EWP Program to deliver long-term stream resiliency and health was achieved by thoughtful, wellplanned, and intentional interactions, team structure, comprehensive technical resources, innovative thinking, and design processes.

In total, 67 flood recovery projects were completed under the EWP program in nine flood-affected watersheds and 13 major

Program Highlights

- Timeline: March 2015 May 2018
- 67 projects completed in 9 flood-affected watersheds (13 major waterways)
- Over 40 miles of stream (211,200 linear feet) of river improvements implemented
- Total construction costs of nearly \$50 million (program under budget and met NRCS schedule requirements)
- Worked with over 500 private property
 owners
- Near-term damage reduction as a result of implemented projects of \$270 million (both public infrastructure and private property).
- Program coordinated the growing of native plants through the Colorado State Forest Service to fully meet the supply demands of all 67 EWP projects.
- In total, CWCB coordinated project implementation through 18 different project sponsors, including watershed coalitions and local governments.
- A total of 70 species are included. 66% woody; 6% herbaceous; 29% graminoid (grasses and grasslikes).
- Approximately 60,588 cuttings; 143,090 large containers (D40/D60); and 83,290 plugs were planted
- Approximately 986 lbs of native seed was used to reclaim and revegetate project sites.





streams and their associated tributaries. As a result of this program, more than 40 miles (>200,000 linear feet) of streams were improved, rehabilitated, and

restored providing flood protection that reduce future flood damage by approximately \$270 million. (*Chris Sturm and Jeff Sickles, EWP Consulting Program Manager*)

~AGENCY UPDATES~

WEBSITE REVISION UPDATE— CWCB is planning to redesign its website in early 2019. This schedule has been pushed back from the original plan due to technical delays on the part of our web hosting provider. CWCB staff plan to prepare for the redesign this summer by soliciting user input and suggestions. A survey requesting user input will be postedon our website soon.

The website that houses Colorado's Decision Support System (CDSS) is currently in the middle of an upgrade. The look and feel of the site will be more modern and streamlined; the site functionality will remain the same. The new site will go live in early August. Feedback on the new site is welcome; Board Members and all site users are asked to contact Carolyn Kemp at carolyn.kemp@state.co.us to provide input. (*Carolyn Kemp*)

STAFFING— Erik Skeie receives promotion within the Interstate, Federal and Water Information Section Erik Skeie has been promoted to the role of Special Projects Coordinator in the Interstate, Federal, and Water Information Section. Erik will continue his work on high groundwater issues in the South Platte Basin and overseeing tamarisk management grants. He has taken on additional roles and responsibilities in assisting with interstate programs including the Platte River Recovery Implementation Program and Glen Canyon Dam Adaptive Management Program; helping coordinate outreach and engagement of users of Colorado's Decision Support System; and monitoring Recreational In-Channel Diversion issues. Congratulations, Erik! (*Carlee Brown*)

RECENTLY DECREED ISF WATER RIGHTS— On June 2, 2018, the Division 6 Water Court decreed instream flow water rights to the CWCB on a reach of North Fork ElkheadCreek in Case No. 17CW3029 for 1.8 cfs (12/01 - 03/31), 5.4 cfs (04/01 - 06/30), 1.2 cfs (07/01 - 07/31), 0.57 cfs (08/01 - 09/17), and 1.4 cfs (09/18 - 11/30), with an appropriation date of January 24, 2017. The headwaters of North Fork Elkhead Creek is the upstream terminus, and the lower terminus is the confluence with Elkhead Creek. This ISF reach is approximately 9.39 miles long and it flows in a southerly direction through parts of Routt County. Colorado Parks and Wildlife recommended this reach of North Fork Elkhead Creek to help protect its Colorado River cutthroat trout and mountain sucker populations.

On June 2, 2018, the Division 6 Water Court decreed instream flow water rights to the CWCB on a reach ofSlater Creek in Case No. 17CW3030 for 16 cfs (10/16 - 03/15), 25 cfs (03/16 - 04/15), 74 cfs (04/16 - 06/30), 25 cfs (07/01 - 07/15), 10 cfs (07/16 - 07/31), 6.5 cfs (08/01 - 09/15), and 8.5 cfs (09/16 - 10/15), with an appropriation date of January 24, 2017. The confluence with Beaver Creek is the upstream terminus, and the lower terminus is at the location of USGS gage # 09255000. This ISF reach is approximately 12.58 miles long and it flows in a northwesterly direction through parts of Moffat County. The Bureau of Land Management recommended this reach of Slater Creekto protect its bluehead sucker population.

On June 6, 2018, the Division 1 Water Court decreed natural lake level water rights to the CWCB Square Top Lake (Upper) and Square Top Lake (lower) in Case No. 17CW3189 for 113.14 acre-feet (Upper), and 26.79 acre-feet (Lower), both with an appropriation date of January 24, 2017. Colorado Parks and Wildlife recommended these lakes because they are ideal water bodies for conservation activities in the recovery of greenback cutthroat trout.

On June 13, 2018, the Division 7 Water Court decreed instream flow water rights to the CWCB on a reach of Little Sand Creek in Case No. 17CW3046 for 1.5 cfs (12/01 - 02/29), 1.9 cfs (03/01 - 03/31), 3.6 cfs (04/01 - 04/15), 6.6 cfs (04/16 - 07/31), 3 cfs (08/01 - 09/15), 2.2 cfs (09/16 - 09/30), and 3 cfs (10/01 - 11/30), with an appropriation date of March 23, 2017. The headwaters of Little Sand Creek is the upstream terminus, and the lower terminus is the confluence with WeminucheCreek. This ISF reach is approximately 8.07 miles long and it flows in a

southeasterly direction through parts of Hinsdale County. The U.S. Forest Service recommended this reach of Little Sand Creek to protect its Colorado River cutthroat trout and brook trout populations.

On June 29, 2018, the Division 1 Water Court decreed instream flow water rights to the CWCB on a reach of Rock Creek in Case No. 17CW3180 for 0.9 cfs (09/01 - 04/30), and 3.8 cfs (05/01 - 08/31), with an appropriation date of January 24, 2017. The headwaters of Rock Creek is the upstream terminus, and the lower terminus is located at the natural falls just upstream of the U.S. Forest Service property boundary. This ISF reach is approximately 4.66 miles long and it flows in a southwesterly direction through parts of ParkCounty. Colorado Parks and Wildlife recommended this reach of Rock Creek to help protect its greenback cutthroat population.

On June 29, 2018, the Division 6 Water Court decreed instream flow water rights to the CWCB on two reaches of Elkhead Creek in Case No. 17CW3031. Flow amounts for the upper reach are4.4 cfs (10/16 - 03/31), 14 cfs (04/01 - 07/15), 7 cfs (07/16 - 07/31), and 3 cfs (08/01 - 10/15); for the lower reach the flow amounts are 6.4 cfs (10/01 - 02/29), 10 cfs (03/01 - 03/15), 24 cfs (03/16 - 06/30), 10 cfs (07/01 - 07/15) and 2.5 cfs (07/16 - 09/30), both having an appropriation date of January 24, 2017. The upstream terminus for the upper reach is the confluence with First Creek, and the lower terminus is the confluence with North Fork Elkhead Creek, being a distance of approximately 10.94 miles. The upstream terminus for the lower reach is the confluence with North Fork Elkhead Creek, and the lower terminus is the location of USGS gage # 09246200, being a distance of approximately 15.83 miles. Both reaches flow in a southwesterly direction through parts of Routt County. Colorado Parks and Wildlife recommended these reaches of Elkhead Creek to protect its Colorado River cutthroat trout and mountain sucker populations. (*Rob Viehl*)

~GENERAL ATTACHMENTS~

- 01 Instream Flow and Natural Lake Level Program Summary of Resolved Opposition Cases
- 02 Stream and Lake Protection Section De Minimis Cases

~LOAN PROGRAM ATTACHMENTS~

- 01 Water Project Loan Program Interest Rates
- 02 Prequalified Project List and Loan Prospect Summary
- 03 Design and Construction Status Report
- 04 Loan Repayment Delinquency Report

July 18-19, 2018 Board Meeting Instream Flow and Natural Lake Level Program Summary of Resolved Opposition Cases

The Board's Instream Flow ("ISF") Rule 8i(1) states:

In the event the pretrial resolution includes terms and conditions preventing injury or interference and does not involve a modification, or acceptance of injury or interference with mitigation, the Board is not required to review and ratify the pretrial resolution. Staff may authorize its counsel to sign any court documents necessary to finalize this type of pretrial resolution without Board ratification.

Staff has resolved issues of potential injury in the following water court cases; the Director has authorized the Attorney General's Office to enter into stipulations that protect the CWCB's water right(s).

A. STATEMENTS OF OPPOSITION

(1) Case No. 15CW3145 (Water Division 1) - Application of Winding River Ranch LLC

The Board ratified this Statement of Opposition at its January 2016 meeting. The Board's main objective in filing the Statement of Opposition in this case was to ensure that the Applicant's proposed change of water rights and augmentation plan does not injure the Board's instream flow water right on South Fork South Platte River by expansion of use or not replacing depletions in the proper time, place and amount. In addition, Applicant's claim for piscatorial direct flow rights may not be valid given the recent ruling in St. Jude's Co. v. Roaring Fork Club, L.L.C., 2015CO51, 351 P.3d 442 (Colo. 2015). Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured. This case has been set for trial on the Division 1 Court's October 2018 trailing docket.

The CWCB holds instream flow water rights, including the following, in Water Division 1 in the South Platte Headwaters watershed that could be injured by this application:

Case	Stream	Upper	Lower	CFS Rate	Approp.
Number		Terminus	Terminus	(Dates)	Date
02CW0373	South Fork South Platte River	US Highway 285	S section line S13 T12S R77W 6PM	10 (4/15 - 10/31) 4.4 (11/1 - 4/14)	01/23/2002

In addition to standard terms regarding measuring devices, accounting and retained jurisdiction, the Applicant has agreed to the following additional protective terms and conditions:

- Applicant agreed and clarified a few items in its decree describing the plan of augmentation, such as confirmation that piscatorial use will occur only in the reservoirs, and that irrigation use from stored water will not be augmented by this plan.
- Applicant assured CWCB that the reservoir inflow and outflow are via monitored and gauged pipelines.

- Applicant confirmed that return flows owed to the stream system from the previous change of water rights are owed by Aurora pursuant to the previous decree.
- Evaporation tables now reflect potential evaporation for each month. Frozen periods will be assessed as they occur.
- To address a downstream ISF call the following term is included in the decree:
 - "When the CWCB's instream flow right is calling and the applicant does not have adequate augmentation water to replace evaporation, especially including in those months in which applicant has no augmentation water in its plan decreed herein, applicant will curtail all consumptive diversions into Burlingame Reservoir No. 2 and Chapelle Reservoir. Because the non-consumptive portions are piped, however, and the only losses are evaporation in-reservoir, these nonconsumptive diversions shall not be curtailed so long as they are, at all times, metered and released at the same rate that they are diverted into the reservoirs. During such instream flow right call, water levels in the reservoirs will drop commensurate with evaporation."

(2) Case No. 16CW3101 (Water Division 2) - Application of Town of Buena Vista

The Board ratified this Statement of Opposition at its March 2017 meeting. The Board's main objective in filing the Statement of Opposition in this case was to ensure that the claimed appropriation date senior to the instream flow does not cause injury. The instream flow water right might be subject to the claimed water rights under C.R.S. 37-92-102(3)(b) if the new water rights are sufficiently documented and verified. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water right will not be injured. The case remains pending before the water court referee.

The CWCB holds instream flow water rights, including the following, in Water Division 2 in the Arkansas Headwaters watershed that could be injured by this application:

Case	Stream	Upper	Lower	CFS Rate	Approp.
Number		Terminus	Terminus	(Dates)	Date
79CW0115	Cottonwood Creek	confl M&S Cottonwood Creeks	confl Arkansas River	20 (1/1 - 12/31)	03/14/1979

In addition to standard terms regarding measuring devices, accounting and retained jurisdiction, the Applicant has agreed to the following additional protective terms and conditions:

- "Municipal uses, including, without limitation, domestic, commercial, industrial, fire
 protection, and for augmentation within the Town's service area as it now exists and as it
 may exist in the future, or extraterritorially by contract with the Town." However, "[a]ny
 out-of-pond uses upstream of McPhelemy Pond, including augmentation of diversions that
 occur upstream, shall only be pursuant to a separate decree or administrative approval,
 subject to public notice on the SWSP notification list, authorizing such upstream use."
- Pursuant to C.R.S. § 37-92-102(3)(b), CWCB and Applicant recognize that:

a. Applicant's in-pond municipal uses, specifically recreation, fishery, piscatorial, and aesthetic, were being made pursuant to appropriation or practices in existence at the time of the CWCB's appropriations of instream flow rights on Cottonwood Creek decreed in Case No. 79CW115. The instream flows decreed in 79CW115 are therefore subordinate to those in-pond uses, except for aesthetic uses. The subordination shall apply only to storage up to 6.1 acre-feet per year for purposes of the first fill of the pond (4.16 acre-feet) for in-pond uses and to replace out of priority evaporation associated therewith (1.94 acre-feet). The instream flows decreed in 79CW115 are not subordinated to any out-of-pond uses further described in [decree] paragraph 7.c.ii.

b. The subordination of the instream flow water right to the Applicant's in-pond uses described in subparagraph 19.a. above and decreed herein pursuant to C.R.S. § 37-92-102(3)(b) in this case shall not interfere with the administration of the storage right in priority as against other water rights, and shall not result in general subordination of the CWCB's Cottonwood Creek instream flow rights decreed in Case No. 79CW115, to any other water rights junior to that instream flow water right, including Applicant's conditional municipal uses described in [decree] paragraph 7.c.ii.

c. While the CWCB's decreed instream flow water rights described herein are subject to the Applicant's in-pond uses described in subparagraph 19.a. above, except for aesthetic uses, pursuant to C.R.S. § 37-92-102(3)(b), the water right decreed herein will be administered subject to the prior appropriation system in relation to all other water rights.

(3) Case No. 17CW3022 (Water Division 2) - Application of Town of Buena Vista

The Board ratified this Statement of Opposition at its July 2017 meeting. The Board's main objective in filing the Statement of Opposition in this case was to ensure that the Applicant's proposed plan for augmentation and exchange does not injure the Board's instream flow water right on Cottonwood Creek by not replacing depletions in the proper time, place and amount. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured. The case remains pending before the water court referee.

The CWCB holds instream flow water rights, including the following, in Water Division 2 in the Arkansas Headwaters watershed that could be injured by this application:

Case	Stream	Upper	Lower	CFS Rate	Approp.
Number		Terminus	Terminus	(Dates)	Date
79CW0115	Cottonwood Creek	confl M&S Cottonwood Creeks	confl Arkansas River	20 (1/1 - 12/31)	03/14/1979

In addition to standard terms regarding measuring devices, accounting and retained jurisdiction, the Applicant has agreed to the following additional protective terms and conditions:

• Evaporation tables now reflect potential evaporation for each month. Frozen periods will be assessed as they occur.

- If the calling water right is on Cottonwood Creek, including a call by CWCB for its decreed instream flow rights on Cottonwood Creek, the Town will augment the depletions by releases of Project Water stored in Cottonwood Lake; except that, if CWCB's instream flow water right on Cottonwood Creek is the calling water right, then the Town is only required to augment out-of-priority depletions in excess of 6.1 acre-feet for the first fill of the pond for in-pond uses (but not aesthetic) and evaporation associated therewith, to which CWCB's instream flow right is subordinated pursuant to the terms of the 16CW3101 decree. If the Town's Project Water is unavailable to augment McPhelemy Pond out-of-priority depletions, the Town will release water previously stored in priority for augmentation purposes under the McPhelemy Pond storage right decreed herein or previously stored by the exchange described below in paragraphs 9-16. During the time period of May 1 - October 31, if the CWCB's instream flow right is the calling right and is not subordinated to the uses described above, depletions shall be replaced daily or as otherwise directed by the water commissioner. For all other calls during the time period of May 1 - October 31 and for all calls during the time period of November 1 - April 30, depletions may be aggregated and replaced as directed by the water commissioner.
- If and to the extent out-of-priority depletions cannot be augmented as provided above, on-channel impoundment at McPhelemy Pond will be curtailed and the Division Engineer shall require Applicant to install an outlet pipe at the bottom of the dam or some other mechanism capable of draining the reservoir completely as necessary to protect material injury to vested water rights.

(4) Case No. 16CW3076 (Water Division 2) - Application of Southeastern Colorado Water Conservancy District

The Board ratified this Statement of Opposition at its March 2017 meeting. The Board's main objective in filing the Statement of Opposition in this case was to ensure that the Applicant's proposed change of water rights does not injure the Board's instream flow water right on Lake Creek and Lake Fork in Division 2 or any existing Division 5 water rights by expansion of use or altering the time, place and amount of the contemplated draft. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured. This case has been set for a 10-day trial beginning on July 22, 2018.

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
75W4271	Lake Creek	Twin Lakes Res outlet	confl Arkansas River	15 (1/1 - 12/31)	05/01/1975
77W4654	Lake Fork	outlet Turquoise Res	confl Willow Creek	15 (1/1 - 12/31)	01/19/1977
77W4655	Lake Fork	confl Willow Creek	confl Arkansas River	20 (1/1 - 12/31)	01/19/1977

The CWCB holds instream flow water rights, including the following, in Water Division 2 in the Arkansas Headwaters watershed that could be injured by this application:

In addition to standard terms regarding measuring devices, accounting and retained jurisdiction, the Applicant has agreed to the following additional protective terms and conditions:

• Applicant listed not only its division 2 water rights, but also its division 5 water rights in the water court application. CWCB's opposition and negotiation was mainly to obtain decree clarification that the claims only pertained to the division 2 water rights.

(5) Case No. 16CW3079 (Water Division 2) - Application of Southeastern Colorado Water Conservancy District

The Board ratified this Statement of Opposition at its March 2017 meeting. The Board filed a Statement of Opposition to Applicant's Application for Finding Due Diligence. The CWCB holds numerous instream flow water rights in Water Divisions 2 and 5 that may be adversely affected if the application is granted without necessary protective terms and conditions. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured. This case has been consolidated with 16CW3076 and is set for a 10-day trial beginning on July 22, 2018.

• Applicant listed not only its division 2 water rights, but also its division 5 water rights in the water court application. CWCB's opposition and negotiation was mainly to obtain decree clarification that the claims only pertained to the division 2 water rights.

(6) Case No. 14CW3179 (Water Division 5) - Application of Maroon Creek Limited Liability Company

The Board ratified this Statement of Opposition at its March 2015 meeting. The Board's main objective in filing the Statement of Opposition in this case was to ensure that the Applicant's proposed plan for augmentation and exchange does not injure the CWCB's instream flow water rights by not replacing depletions in time, place, and amount that they occur. The proposed appropriative rights of exchange should be defined clearly with a reference to intervening instream flow water rights so that the CWCB's instream flow water rights are not injured. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured. This case was stayed pending resolution of 16CW3063. CWCB has settled both cases and the proposed decrees have been filed with the court. While the cases have been re-referred to the Judge, no trial has been set in either matter.

The CWCB holds instream flow water rights, including the following, in Water Division 5 in the Roaring Fork River watershed that could be injured by this application:

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
76W2945	Maroon Creek	confl E & W Maroon Creeks	confl Roaring Fork River	14 (1/1 - 12/31)	01/14/1976
10CW0184^	Maroon Creek	hdgt Stapleton Bros Ditch	confl Roaring Fork River	3.83 (5/1 - 10/31)	06/30/1904
85CW0646	Roaring Fork	confl Maroon	confl	30 (10/1 - 3/31)	11/08/1985

	River	Creek	Fryingpan River	55 (4/1 - 9/30)	
10CW0184^	Roaring Fork River	confl Maroon Creek	confl Owl Creek	3.54 (5/1 - 10/31)	06/30/1904
10CW0184^	Roaring Fork River	confl Owl Creek	confl Fryingpan River	0.89 (5/1 - 5/31) 0.59 (6/1 - 6/30) 0.64 (7/1 - 7/31) 0.5 (8/1 - 8/31) 0.4 (9/1 - 9/30) 0.15 (10/1 - 10/31)	06/30/1904
85CW0639	Roaring Fork River	confl Fryingpan River	confl Crystal River	75 (10/1 - 3/31) 145 (4/1 - 9/30)	11/08/1985

^ Donated/Acquired Water Right

In addition to standard terms regarding measuring devices, accounting and retained jurisdiction, the Applicant has agreed to the following additional protective terms and conditions:

"The plan for augmentation operates directly and/or by exchange. When the plan operates by exchange, should the exchange be out-of-priority due to a valid call for water within the applicable exchange reach that: (i) is senior to the 2014 exchange priority decreed herein; (ii) is recognized and administered by the Division Engineer; and (iii) is not capable of augmentation under the plan (including a valid senior call placed by the CWCB and administered by the Division Engineer within the applicable exchange reach that is not capable of augmentation under the plan), then the Division Engineer shall curtail out-of-priority diversions made to replace evaporation from the reservoirs and administer the reservoirs so that the reservoir levels will be allowed to drop commensurate with the rate of evaporation during the period of the call."

(7) Case No. 16CW3063 (Water Division 5) - Application of Maroon Creek Limited Liability Company

The Board ratified this Statement of Opposition at its November 2016 meeting. The Board's main objective in filing the Statement of Opposition in this case was to ensure that the Applicant's apparent proposed change of water rights does not injure the Board's instream flow water right on Colorado River, Maroon Creek and Roaring Fork River by expansion of use or altering the time, place and amount of historical return flows. The Applicant seeks an order from the Court declaring that the Judgment and Decree entered in Case No. 89CW282 includes a right to refill four reservoirs (Maroon Creek Development Corporation Reservoir Nos. 1, 2, 3, and 4) under the decree's 1989 adjudication. The CWCB holds instream flow water rights in Water Division 5 on Maroon Creek, the Roaring Fork River, and the Colorado River, that are decreed in Case Nos. 76- W-2945, 85CW0639, 85CW0646, 10CW0184, 92CW286 and 94CW330. The CWCB is an opposing party in Applicant's pending application for an augmentation plan in Case No. 14CW3149, Water Division 5, where the CWCB has asserted that the Applicant's decree in Case No. 89CW282 did not include refill rights for the four reservoirs. The CWCB files this Statement of Opposition to ensure that its water rights are not injured by the Application, and to ensure that the relief granted by the Court in this case is in

accordance with the law concerning the adjudication and administration of decreed storage rights. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured. Case No. 14CW3179 was stayed pending resolution of this Case No. 16CW3063. CWCB has settled both cases and the proposed decrees have been filed with the court. While the cases have been re-referred to the Judge, no trial has been set in either matter.

The CWCB holds instream flow water rights, including the following, in Water Division 5 in the Colorado Headwaters-Plateau and Roaring Fork watersheds that could be injured by this application:

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
92CW0286	Colorado River	tailrace Grand Valley Irr Co div	confl Gunnison River	581 (7/1 - 9/30)	03/05/1992
94CW0330*	Colorado River	27.5 Road Gage	confl Gunnison River	300 (7/1 - 9/30)	11/04/1994
76W2945	Maroon Creek	confl E & W Maroon Creeks	confl Roaring Fork River	14 (1/1 - 12/31)	01/14/1976
10CW0184^	Maroon Creek	hdgt Stapleton Bros Ditch	confl Roaring Fork River	3.83 (5/1 - 10/31)	06/30/1904
85CW0646	Roaring Fork River	confl Maroon Creek	confl Fryingpan River	30 (10/1 - 3/31) 55 (4/1 - 9/30)	11/08/1985
10CW0184^	Roaring Fork River	confl Maroon Creek	confl Owl Creek	3.54 (5/1 - 10/31)	06/30/1904
10CW0184^	Roaring Fork River	confl Owl Creek	confl Fryingpan River	0.89 (5/1 - 5/31) 0.59 (6/1 - 6/30) 0.64 (7/1 - 7/31) 0.5 (8/1 - 8/31) 0.4 (9/1 - 9/30) 0.15 (10/1 - 10/31)	06/30/1904
85CW0639	Roaring Fork River	confl Fryingpan River	confl Crystal River	75 (10/1 - 3/31) 145 (4/1 - 9/30)	11/08/1985

* Increased

^ Donated/Acquired Water Right

In addition to standard terms regarding measuring devices, accounting and retained jurisdiction, the Applicant has agreed to the following additional protective terms and conditions:

• "The parties hereto acknowledge and agree that the Application, Amended Application, and other court records in Case No. 89CW282 included a claim for refill of the Maroon Creek Development Corporation Reservoir Nos. 1, 2, 3, and 4 (collectively, the "Ponds") but, due to oversight, express language regarding refill was not mentioned in the decree in Case No. 89CW282."

- "In consideration of the CWCB's stipulation and agreement for entry of a decree confirming refill for the Ponds as claimed in this case, Applicant agrees as follows:
 - A. Applicant shall limit its volume of refill under the right and priority decreed in Case No. 89CW282 to only the amount needed to replace evaporative losses from the Ponds for recreation and fish and wildlife purposes, which amount equates to an annual average of 16.59up to 18.93 acre-feet per year. The foregoing refill limitation applies only to the rights adjudicated in Case No. 89CW282 and shall not apply to any other water rights that Applicant may own or use in conjunction with the Ponds.
 - B. At times when the bypass and/or release of augmentation water are not otherwise required by a senior calling right against Applicant's Pond refill and the CWCB places a valid call for water under the terms of the Colorado River instream flow decree in Case No. 92CW286 that is recognized and administered by the Division Engineer, then, notwithstanding the junior priority date of such instream flow call vis-à-vis Applicant's Pond refill, Applicant will provide replacement water in the form of bypass of Applicant's historical consumptive use credits in the Stapleton Brothers Ditch, supplemented by releases of reservoir storage water pursuant to Applicant's contract with the Colorado River Water Conservation District as needed, in an amount equivalent to Applicant's evaporative losses from the Ponds during the period of such instream flow call."

General Attachment 02 -July 18-19, 2018CWCB Meeting Stream and Lake Protection Section De Minimis Cases

The following table summarizes applications that have the potential to injure the Board's instream flow water rights, but the impact is considered de minimis. In these cases, the cumulative impact to the Board's right is less than 1%. Pursuant to ISF Rule 8(e) (the de minimis rule), staff has not filed a Statement of Opposition in these cases and has provided the required notification to the Division Engineers and applicants.

Case No.	Applicant	Stream Name/ ISF Case No.	ISF Amount	Individual Injury (%)	Cumulative Injury (%)	Count
18CW3027	Douglas L. Zook	Colorado River/ 90CW0300	40 (5/1 - 8/31) 20 (9/1 - 4/30)	0.00110 0.00050	0.37642 0.39162	26



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:	Kirk Russell, P.E., Finance Section Chief
Board Meeting:	July 18-19, 2018 Board Meeting
Directors Report:	Water Project Loans Interest Rates

Introduction

The CWCB establishes interest rates bi-monthly for the Water Project Loan Program (per Financial Policy #7).

The current rates for a 30-year term are as follows: 1.75% - Agricultural 2.45% - Low-income Municipal 2.80% - Middle-income Municipal 3.15% - High-income Municipal

6.00% - Commercial

2.00% - Hydroelectric

The standard loan term is 30 years. Rates are reduced by 0.25% for 20-year loans, and by 0.60% for 10-year loans. Rates are increased by 0.25% for 40-year loans.

The rates can also be found on the CWCB web site under the "Loans and Grants" tab. These rates will be applicable for loans presented at this Board meeting.





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Robert Randall, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO:	Colorado Water Conservation Board Members
FROM:	Anna Mauss, P.E., Marketing Finance Section
DATE:	July 18-19, 2018 Board Meeting
DIRECTORS REPORT:	Water Project Loan Program Prequalified Project List and Loan Prospect Summary

The Finance Section compiles a list of prequalified projects for the Water Project Loan Program. In order to be included on this list, potential borrowers must submit a Loan Application and three years of financial statements to the CWCB staff. In addition, Borrowers requesting to be placed on the Prequalification Project List have a defined project, have performed preliminary engineering, and have a reasonable estimate of the project costs.

Projects on this list fit the initial criteria of the Water Project Loan Program; however, the list does not constitute loan approval. In order to receive a loan, borrowers must additionally submit a completed Loan Feasibility Study for review by CWCB staff. Staff will then prepare a recommendation to the Board for approval at a future CWCB meeting. Projects will remain on this list for one year from the date of the application or until Board approval of a loan.



Interstate Compact Compliance • Watershed Protection • Flood Planning & Mitigation • Stream & Lake Protection

Prequalified Project List

BORROWER	PROJECT NAME	APPLICATION DATE	BASIN	PROJECT DESCRIPTION	PROJECT COST/LOAN AMOUNT		
Previously Approved Applications							
Bullseye Holdings, LLC	Water Rights Purchase	May 1, 2018	South Platte	Bullseye Holding plans to purchase augmentation credits from the Town of Wiggins to offset well depletions.	\$517,500		
Fire Mountain Canal & Reservoir Company	Fire Mountain Canal Phase II Salinity	Jan 1, 2018	Gunnison	The Company is applying for a Bureau of Rec. salinity control grant to replace a siphon and pipe approximately 4,000 feet of canal. The total project cost is estimated to be \$1.9M.	\$185,000		
Webber Ditch Company	Webber Ditch Pipeline Project	Jan 1, 2018	Southwest	The Company is applying for a Bureau of Rec. salinity control grant to pipe approximately 26,000 feet of canal. The total project cost is estimated to be \$3.9M.	\$500,000		
Total					\$1,202,500		

The Finance Section also compiles a list of potential borrowers/projects for the Water Project Loan Program. This list represents borrowers that have contacted the CWCB about a potential need for funding but have not submitted a loan application and loan feasibility study.

	South Platte River Basin			
	 Borrower NISP Participants Central CO WCD Parker Water & Sanitation District Henrylyn Irrigation District Bijou Irrigation District Upper Platte & Beaver Irrigating Co. Woods Lake Mutual Ditch Co. Town of Kersey Tunnel Water Company Riverside Reservoir and Land Co. Town of Bennett Town of Empire Subtotal 	Project P NISP Pipeline Project Water Meter Project Reservoir Rehabilitation Reservoir Rehabilitation Diversion Structure Culvert Replacement Raw Water Line Ditch Rehabilitation Ditch Rehabilitation Raw Water Tank Water Rights Purchase	Potentia	al Loan Amount \$100,000,000 \$4,000,000 \$5,000,000 \$600,000 \$7,000,000 \$150,000 \$TBD \$5,000,000 \$250,000 \$500,000 \$100,000 \$139,600,000
_	Arkansas River Basin			
	 Oxford Ditch Town of Manitou Springs City of Woodland Park Fort Lyon Canal Company Amity Mutual Irrigating Co. Arkansas Groundwater Users Assoc. Deweese Ditch and Reservoir Co. Holbrook Ditch Company Lake County Subtotal 	Siphon Repair Raw Water Pipeline Storage Project Adobe Creek Enlargemen Reservoir Rehabilitation Gravel Pit Purchase Reservoir Enlargement Reservoir Enlargement New Reservoir	nt	\$1,800,000 \$3,000,000 \$1,000,000 \$8,000,000 \$TBD \$3,000,000 \$TBD \$TBD \$TBD \$16,800,000
	San Miguel/San Juan River Basir	۱		
	 Town of Bayfield Redmesa Reservoir and Ditch Co. Subtotal 	Ditch Piping Reservoir Enlargement		\$500,000 \$5,000,000 \$5,500,000
	Colorado River Basin			
	 Town of Breckenridge Orchard Mesa Irr. Dist. Subtotal 	Goose Pasture Tarn Dam Lateral Piping		\$18,000,000 \$300,000 \$18,300,000
	Gunnison River Basin			
	•Gunnison County Electric	Hydroelectric Project		\$1,000,000





North Platte Basin
 No projects at this time



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Rebecca Mitchell, Director

TO:	Colorado Water Conservation Board Members
FROM:	Kirk Russell, P.E., Finance Section Chief Jessica Halvorsen, Program Assistant
Board Meeting:	July 18-19, 2018 Board Meeting
Directors Report:	Water Project Loan Program Design & Construction Status Report

The CWCB Loan Program has Substantially Completed ten (10) projects in Fiscal Year 2017-2018 as shown in Table 1. There are currently fifty three (53) projects authorized to receive loan funding totaling \$386 million. There are forty three (43) projects currently under contract and in the Design and Construction phase totaling \$221 million.

The attached spreadsheet summarizes the status of the projects. A detailed description about each project is provided in the digital version of the Director's Report.

	TABLE 1							
	Borrower	Project	County	Loan Amount	Complete			
1	West Reservoir & Ditch Company	Repair of West Reservoir No. 1 Outlet Works	Delta	\$313,018	7/1/2017 (a)			
2	North Poudre Irrigation Co	Rehabilitation Livermore Irrigation Tunnel	Larimer	\$1,451,673	7/1/2017			
3	Upper Arkansas Water Conservancy District	North Fork Reservoir Rehabilitation	Chaffee/Custer	\$902,642	10/1/2017 (b)			
4	Thunderbird W&S Dist	Lambert Ranch Water Rights Purchase	Douglas	\$318,150	11/1/2017			
5	Chilcott Ditch Company	Jimmy Camp Creek Siphon Reconstruction	El Paso	\$459,991	11/1/2017			
6	Riverside Ditch and Allen Extension Company	Phased Canal Improvements	Chafee	\$159,574	1/1/2018			
7	Lookout Mountain Water District	Upper Beaver Brook Dam Spillway	Clear Creek	\$2,746,062	1/1/2018 (c)			
8	Supply Irrigating Ditch Company	Emergency Supply Irrigating Ditch Repair Project	Boulder	\$324,210	3/1/2018			
9	Georgetown, Town of	Outlet Works Modification Project	Clear Creek	\$2,976,975	4/1/2018(d)			
10	Lake McIntosh Reservoir Company	Lake McIntosh Outlet Works Repair	Boulder	\$1,727,100	5/1/2018 (e)			
			Total	\$11,379,395				

Fiscal Year 2017-2018 has added or preserved 4669 acre-feet of reservoir storage (a) 455; (b) 1095; (c) 257; (d) 386; (e) 2,476





Repair of West Reservoir No. 1 Outlet Works

West Reservoir and Ditch Company Substantially Complete July 1, 2017



Project Description

The West Reservoir and Ditch Company operates West Reservoir No. 1, providing water seven miles eastward via Wakefield Ditch to Wakefield Mesa. The water is available for livestock as it traverses east Oak Mesa, and irrigates approximately 600 acres of hay and pasture. The current landowners use the Oak Mesa Reservoir and Ditch water for spring irrigation, and, when those flows are exhausted, use the West Reservoir flows for mid-summer to fall irrigation. The West Reservoir was improved in the early 1950s, but came to be under a storage restriction order from the Office of the State Engineer due to deterioration of the outlet pipe. The reconstruction of the dam project included a low-level outlet sized to meet SEO release requirements, an outlet stilling basin structure downstream of the dam for energy dissipation, an intake structure for a manually-operated slide gate and trash racks, and new riprap armoring on the upstream face of the dam.

Р	R O J E C	T D A T	А			
Sponsor: West Reservoir and	County: Dolta		Water Source: Jay Crock			
Ditch Company	county. Dena		Water Source. Jay Creek			
Type of Loan: Reservoir Rehabil	Type of Loan: Reservoir Rehabilitation Board Approval Date: November 2014					
Terms of Loan: \$248,378.00 (Original) \$313,018.19 (Final) at 2.0% for 30 years						
Design Engineer: RJH Engineers						
Contractor: Rundle Construction						



Livermore Irrigation Tunnel Rehabilitation

North Poudre Irrigation Company Substantially Complete July 1, 2017



Project Description

The North Poudre Irrigation Company service area encompasses approximately 300 square miles, including 160 square miles of service area under the North Poudre Canal (36 square miles of irrigated acreage), as well as additional service areas covering 14 communities and municipal water providers that own NPIC shares.

The Livermore Tunnel carries water diverted from the North Poudre Canal headgate, located on the north side of the North Fork Cache la Poudre River, for approximately 4, 900 feet before it is discharges into an earth-lined open canal and flows on toward the Buckeye Lateral, Park Creek Reservoir, and the Company's downstream delivery infrastructure. The Livermore Tunnel consists of two tunnels connected by a short section of open channel. The tunnels are approximately 8. 5 feet high and 8 feet wide with a concrete invert along the entire tunnel length. The tunnels are considered generally stable with the exception of six collapse zones where large piles of rock and debris had accumulated in the base of the tunnel, ponding up to three feet of water and restricting the overall flow capacity. Construction activities consisted of repairing those six collapse zones, and installing a concrete liner plate base, overhead and side liner plates, and filling in the voids between the wall and new liner plates.

Р	R O J E C	T D A T	E			
Sponsor: North Poudre Irrigation	County: Larime	r	Water Source:	Cache La Poudre		
Company	2					
Type of Project: Ditch Rehabilitation Board Approval Date: July 2016						
Loan Terms: 2.25% for 30 years (Original) \$1,451,673 (Final) \$1,451,673						
Design Engineer: AECOM						
Contractor: Rock Solid Solutions						



Project Description

The Upper Arkansas Water Conservancy District is located in Salida, Colorado, and serves to protect and develop water supplies in Chaffee, Western Fremont and Custer Counties. The District has operated the North Fork Reservoir since 1979 for domestic, municipal, industrial, recreational and augmentation purposes. The reservoir is located in the San Isabel National Forest near the headwaters of the North Fork of the South Arkansas River at elevation 11,400 feet. The project repaired the outlet pipe/gate structure and improved the access for construction. After repairs were complete, access to an additional 67 acre-feet of storage was made available.

The enlargement phase of the loan was planned to increase the Reservoir capacity from 500 acre-feet to 1095 acre-feet. This required an increase in the dam height by 15 feet. After several years of permitting efforts the District decided not to continue the enlargement effort under this loan authorization.

Р	R O J E C	T D A	ТА			
Sponsor: Upper Arkansas Water	Country Chaffo	0	Water Source: North Fork of			
Conservancy District	County. Charles	e	the South Arkansas River			
Type of Loan: Reservoir Rehabil	Type of Loan: Reservoir Rehabilitation Board Approval Date: November 2004					
Terms of Loan: 3.0% for 30 years (Original) \$3,009,800 (Final) \$902,642.40						
Design Engineer: Colorado River Engineering						
Contractor: ASI Constructors, Inc.						





Project Description

The Thunderbird Water and Sanitation District (District) provides potable water service for the Indian Creek Ranch subdivision, consisting of 2,420 acres and 175 customers. On average, the District delivers approximately 55 AF annually. The District used Ioan funds to purchase Denver Basin decreed ground water rights with a total average annual acre-foot amount of 895.9 AF. This water right underlies the property known as Lambert Ranch. The easement acquisition for a well site is ongoing. The increase would enable the District to enlarge its available supply; thereby increasing system reliability, providing the redundancy necessary to allow for system maintenance and protect against aquifer depletions.

Р	R O J E C	T DAT	А		
Sponsor: Thunderbird Water	County: Douglas		Water Source: Denver Basin		
and Sanitation District			Aquifer		
Type of Loan: Water Rights Purchase Board Approval Date: July 2011					
Terms of Loan: 4.25% for 20 years (Original) \$318,150 (Final) \$318,150					
Design Engineer: Leonard Rice Engineers, Inc.					
Contractor: NA					



Jimmy Camp Creek Siphon Reconstruction

Chilcott Ditch Company

Substantially Complete November 1, 2017



Project Description

The Chilcott Ditch Company, located in El Paso County, operates Chilcott Ditch for the benefit of its shareholders by providing direct flow irrigation water. The ditch diverts from Fountain creek, just north of the Town of Fountain, and water deliveries are made through the Company's eight mile ditch to service historically irrigated areas under the ditch, as well as to an augmentation station that measures direct flow water returning back to Fountain creek on behalf of shareholders. The original 42-inch diameter 1,300 foot long siphon conveyed ditch water flows under Jimmy Camp Creek to historically irrigated farmland to the south of the City of Fountain. During the 1940's the siphon was constructed from asphalt dipped corrugated steel pipe and served for nearly 76 years. In reviewing the siphon's age, maintenance history and number of failures, the Company rebuilt the siphon with new 42-inch PVC piping.

Р	R O J E C	T D A T	Α		
Sponsor: The Chilcott Ditch	County: El Daso		Water Source: Fountain Creek		
Company	County. El Paso		Water Source. Foundain creek		
Type of Loan: Ditch Rehabilitation	Type of Loan: Ditch Rehabilitation Board Approval Date: January 2017				
Terms of Loan: (Original) \$580,750 at 2.20% for 20 years (Final) \$459,991.12 at 2.20% for 20 years					
Design Engineer: JPS Engineering					
Contractor: Backhoe Services, LL	5				



Phased Canal Improvements Project Riverside Ditch and Allen Extension Company

Substantially Complete January 1, 2018



Project Description

The Riverside Ditch and Allen Extension Company (Company), located near Buena Vista, owns and operates the Riverside Ditch that provides irrigation water to a 450 acre service area within Chaffee County. Through this loan the Company completed a number of phased improvements to the canal, including: repairs to the river diversion and lining of portions of the canal to reduce seepage.

Р	ROJE	С	Γ D) A	Т	А
<i>Sponsor:</i> Riverside Ditch & Allen Extension Company	County: Cha	ffee				Water Source: Arkansas River
Type of Project: Ditch Rehabilita	Type of Project: Ditch Rehabilitation Board Approval Date: November 2009					
Terms of Loan: 2.75% for 30 years (Original) \$186,345.00 (Final) \$159,574.01						
Design Engineer: NRCS and Tessara Water, LLC						
Contractor: Custom Linings, Inc., Bugling Bulls, and K&S Inc.						


Upper Beaver Brook Dam Spillway

Lookout Mountain Water District Substantially Complete January 1, 2018



Project Description

The Lookout Mountain Water District came to the CWCB for a loan to perform repairs and improvements to its Upper Beaver Brook Dam spillway in November of 2015, receiving approval for a loan of \$ 3,099,690 in support of anticipated construction costs of \$3,410,000. The project included improvements to the existing rock-cut spillway with a new concrete labyrinth weir spillway, constructed to a level such that reservoir volume will increase by 134 acre-feet for a total storage of 391 acre-feet. Additional components included relocation of the access road due to the higher water level, installation of a new measurement flume, removal of trees in the inundation zone, replacement of the outlet works gate valve stem and staff gauge, and associated grading, monumentation, armoring, and record documentation.

These improvements will help the District provide a reliable supply of drinking water to current customers, with increased reliability for future demand and during times of drought.

Р	R O J E C	Т	D A T A					
<i>Sponsor:</i> The Lookout Mountain Water District	County: Clear Cr	eek	Water Source: South Fork Beaver Brook					
Type of Loan: Reservoir Enlargen	nent	Board Approval Date: November 2015						
Terms of Loan: at 3.25% for 30 ye	0 (Final) \$2,746,062.16							
Design Engineer: GEI Consultants								
Contractor: SEMA Construction	Contractor: SEMA Construction							





Project Description

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the Company's ditch system. Floodwaters destroyed the diversion dam, caused heavy sedimentation in the ditch, and damaged 750 LF of ditch. Temporary repairs were completed in order to allow the Company to divert a portion of its water rights during the 2014 irrigation season. This loan provided construction funds for the permanent repairs to the diversion dam. The historic at-grade concrete dam washed out by the flood was replaced with a grouted rock ramp structure that in addition to ensure the Company could divert its full water right, provided added benefits to fish and recreational users. The structure was designed to facilitate fish passage at a variety of flows, including a fish passage notch for low flow fish passage. The design also created hydraulic conditions across the grouted rock ramp and in the tail water pool allowing for recreational use. The Company worked with FEMA to fund a portion of the permanent repairs. Construction occurred from fall 2014 to spring 2015. The final FEMA Project Closeout meeting is pending.

Р	R O J E C	ΤΟΑΤ	Α						
Sponsor: Supply Irrigating Ditch Repair Project	County: Boulder		Water Source: Saint Vrain Creek						
Type of Loan: Ditch Rehabilitation	on	Board Approval Date: November 2014							
Terms of Loan: \$324,210 at 2.25	% for 30 years								
Design Engineer: S ₂ O Design									
Contractor: Environmental Excavation, LLC									



Outlet Works Modification Project

Town of Georgetown Substantially Complete April 1, 2018



Project Description

The Town of Georgetown owns and operates Georgetown Lake, located on Clear Creek, along the I70 corridor, east of the continental divide. The Town was required, per a water court mandate related to its augmentation plan, to increase the outlet works capacity. The outlet works could originally release up to 260 cfs. This project was the construction of a new spillway crest gate. As a result, the Town now has the ability to release of up to 500 cfs.

Р	R O J E C T	D A T	А			
Sponsor: Town of Georgetown (Water and Sewer Enterprise)	County: Clear Creek	ζ.	Water Source: Clear Creek			
Type of Loan: Dam Rehabilitation	n Bo	Board Approval Date: July 2011				
Terms of Loan: (Original) \$2,976,975.00 at 4.5% for 30 years (Final) \$966,021.96						
Design Engineer: NV5, Inc.						
Contractor: Lillard & Clark Construction						



Lake McIntosh Outlet Works Repair

Lake McIntosh Reservoir Company Substantially Complete May 1, 2018



Project Description

Lake McIntosh Reservoir Company is a mutual irrigation reservoir company formed in 2001. The Company owns Lake McIntosh Reservoir which is used as part of an exchange between the Highland Ditch Company and the Oligarchy Ditch Company.

The reservoir was constructed in 1890 and enlarged in 1902. In May 2015, a section of the reservoir's outlet pipe collapsed, creating a sinkhole which deposited soil in the outlet works pipes downstream for approximately 300 feet, rendering the reservoir's outlet works unusable. This Project restored the reservoir's outlet functionality by repairing the damaged outlet works. Phase 1 construction consisted of installing a new pipe from the sinkhole downstream to its outlet. Phase 2 construction consisted of installing a new pipe from the sinkhole upstream, under the roadway and under Platte River Power Authority switch yard to the outlet structure. Phase 1 was completed by April 2017 and Phase 2 was substantially completed in March 2018.

Р	ROJECT DA 1	Ā						
Sponsor: Lake McIntosh	County: Boulder	Water Source: St. Vrain Creek						
Reservoir Company	county. Bounder							
Type of Project: Reservoir Reha	bilitation Board Approva	Board Approval Date: January 2016						
Loan Terms: 2.70% for 30 years (Original) \$1,727,100 (Final) \$1,727,100								
Design Engineer: Deere & Ault Consultants, Inc								
Contractor: America West Constr	Contractor: America West Construction, LLC							

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	РМ	Status Description/Update
1	Bennett, Town of >Wells #3 and #6 Replacement Project CT2015-161	Adams Arapahoe	\$1,454,000	100%	May 2015 - March 2018	99%	AM	The wells are online. Loan substantial completion is pending.
2	Bessemer Irrigation Ditch Company >Landslide Stabilization and Dirtch Lining CT2018-2829	Pueblo	\$909,000	100%	March 2018 - March 2021	50%	RP	Ditch stabilization phase complete. Backfill complete along wall. Winter 2018/2019 begin ditch lining.
3	Big Elk Meadows Association > Emergency Raw Water Storage Repair C150391	Boulder/ Larimer	\$2,020,000	60%	July 2014 - Sept 2018	60%	JH	Project will rebuild 5 dams damaged in 2013 flood. 3 dams have been completed: Mirror Dam (2015), Rainbow Dam (2016) and Willow Dam (2017). Sunset and Meadow Dams final design and construction pending. Loan increased at March 2017 Board meeting, 0% interest thru 2020.
4	Bonus Ditch Company > St. Vrain Diversion Replacement CT2018-2081	Longmont & Boulder	\$1,309,970	60%	Fall 2018 - Spring 2019	0%	JH	City of Longmont will perform project management for this project. Final Design is near complete. Bidding should occur Summer 2018 with construction starting Fall 2018
5 - C	HATFIELD Reallocation Project - First Cost of Storage							6
а	Castle Pines North Metropolitan District >(C150404A) CT2018-1617	Arapahoe Douglas Park Weld	\$723,160	N/A	N/A	0%	JH	
b	Centennial Water & Sanitation District >(C150405A) CT2016-2053	Arapahoe Douglas Park Weld	\$4,978,290	N/A	N/A	0%	JH	This contract is to provide reimbursement for the Chatfield Reallocation Project, specific to the "first cost of storage." Payment will be due once
с	Center of Colorado Water Conservancy District >(C150406A) CT2016-2047	Arapahoe Douglas Park Weld	\$94,637	N/A	N/A	0%	JH	storage in the new reservoir pool is allowed (after Phase 1 Mitigation contract is complete).
d	Central Colorado Water Conservancy District >(C150407A) CT2016-2057	Arapahoe Douglas Park Weld	\$3,187,560	N/A	N/A	0%	JH	
6 - C	HATFIELD Reallocation Project - Phase 1 Mitigation							\$39,334,349
а	Castle Pines North Metropolitan District >(C150404B) CT2018-1616 *\$	Arapahoe Douglas Park Weld	\$5,462,484	99%	Sept 2017 - Fall 2019	40%	JH	This contract is to provide reimbursement for the Chatfield Reallocation
b	Centennial Water & Sanitation District >(C150405B) CT2016-2055	Arapahoe Douglas Park Weld	\$37,573,717	99%	Sept 2017 - Fall 2019	40%	JH	Project, for engineering, recreation facilities construction, on-site mitigation, off-site mitigation, and mitigation monitoring. Phase 1 covers the work required before storage is allowed.
с	Center of Colorado Water Conservancy District >(C150406B) CT2016-2048	Arapahoe Douglas Park Weld	\$511,363	99%	Sept 2017 - Fall 2019	40%	JH	Corps review of preliminary design has been completed. Final Design is nearing completion. There are 12 identified individual projects for recreation modification and environmental mitigation with various schedules. The first projects began construction in September 2017. It is currently anticipated that Bhase 1 acuid be completed by fall 2010.

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	РМ	Status Description/Update
d	Central Colorado Water Conservancy District >(C150407B) CT2016-2058	Arapahoe Douglas Park Weld	\$19,812,059	99%	Sept 2017 - Fall 2019	40%	JH	That Phase 1 could be completed by fail 2019.
7 - (CHATFIELD Reallocation Project - Phase 2 Mitigation							\$7,000,310
а	Castle Pines North Metropolitan District >(C150404C) CT2018-1619	Arapahoe Douglas Park Weld	\$1,587,720	0%	Fall 2019 - Summer 2020	0%	JH	This contract is to provide reimbursement for the Chatfield Reallocation
b	Centennial Water & Sanitation District >(C150405C) CT2016-2056	Arapahoe Douglas Park Weld	\$10,934,260	0%	Fall 2019 - Summer 2020	0%	JH	off-site mitigation, and mitigation monitoring. Phase 2 covers the work remaining after storage is allowed. It was originally estimated Phase 2 work could last until 2028. However, the on-site mitigation in Phase 1 is proving more effective than planned, lessoning the amount of off-site mitigation in Phase 2. Lis currently applicated that Phase 2 could be completed by
с	Central Colorado Water Conservancy District >(C150407C) CT2016-2060	Arapahoe ouglas Weld	\$7,000,310	0%	Fall 2019 - Summer 2020	0%	JH	summer 2020.
8	Centenial Irrigating Ditch Company >Centenial Diversion Replacement CT2108-1999	Rio Grande	\$232,300	100%	Jan 2018 - Mar 2018	95%	JH	This project is part of the Rio Grand Five Ditches WSRF Project and consisted of replacing the existing diversion dam. Contractor mobilized to site in January 2018 and construction was substantially completed by the end of March 2018. Miscellaneous site clean up and final billing remain.
9	Central Colorado Water Conservancy District >Shores Lakes Pond C Infrastructure Improvement CT2018-2851	Weld	\$2,367,440	80%	Fall 2018 - Spring 2019	0%	JH	This project will increase the efficiency by which the Shores Lakes can capture and release water for augmentation use by making infrastructure improvements at the site of an old gravel pit. Final design should be completed by Summer 2018.
10	Church Ditch Water Authority >Ditch System Improvements CT2018-1335	Jefferson	\$3,615,000	75%	Dec 2017 - Spring 2019	50%	RP	Loan covers 5 individual projects within the Church Ditch system. The Leyden Flushing Structure and Headgate 53 Retaining Wall projects near completion, Engineer preparing As-Builts and Completion Letter. The Area 15 Ditch Lining, Ford Street Siphon, and Legacy Farms Culvert will be completed after the 2018 irrigation season.
11	Consolidated Ditch and Headgate Co >Consolidated Diversion and Headgate Replacement CT2018-1017	Rio Grande	\$1,010,000	100%	Jan 2018 - Mar 2019	50%	JH	This project is part of the Rio Grand Five Ditches WSRF Project and will consist of replacing the existing diversion dam and headgate. Contractor mobilized to site in January 2018 finished the headgates and trash rack structures by the end of March 2018. Dam scheduled for construction Fall 2018 thru Spring 2019.
12	Corsentino Dairy Farms, Inc. >Holita Dam Rehibilitation CT2018-980	Walsenburg	\$112,716	100%	Jan 2018 - May 2018	99%	AM	The contractor is working on punchlist items. Construction is near completion.
13	Dixon Canon Ditch & Reservoir Company >Dixon Reservioir Dam Improvements CT2017-914	Larimer	\$278,100	100%	Jan 2018 - Mar 2018	99%	JH	Contractor mobilized to site in January 2018 and construction was substantially completed by the end of March 2018. Loan to be Substantially Completed 7/1/18.
14	Duke Ditch Company >Piping the Duke Ditch CT2017-915 Loan-WSRFGrant	Delta	\$90,000	90%	Fall 2018 - Spring 2019	0%	AM	NRCS began design work in August 2017. Construction will begin in fall 2018. Loan increase may be needed.

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	РМ	Status Description/Update
15	Fort Lyon Canal Company >Adobe Creek Dam Rehabiliatation CT2018-1960 CTGG1 2018-806	Bent	\$8,181,000	30%	Fall 2017 - Spring 2020	0%	RP	Waiting Dam Safety approval (anticipate June 2018). Out for bid in July 2018.
16	Fowler, Town of >Augmentation Pipeline Project C150359 (CT2015-054)	Otero	\$277,245	100%	Fall 2018 - Spring 2019	0%	RP	Engineering completed. Easement and appraisal processes causing delay; might result in litigation per disc with Town 5/23/17. Bid process on hold. Will have project update Summer 2018.
17	Grand Mesa Water Conservancy District >Peak Res. & Blanche Park Res. Rehabilitation C150354 (CT2015-061)	Delta	\$227,250	100%	Mar 2013 - Sept 2018	50%	AM	Construction on Peak Reservoir began in the 2013 season and was completed in Oct 2014. Blanche Park construction was delayed due to Forest Service permit issues. Construction is expected to begin in summer of 2018.
18	Grand Valley Water Users Association >Government Highline Canal Lining CT2017-2258 CTGG1 2017-770	Mesa	\$151,500	100%	Nov 2017 - April 2018	99%	AM	Construction is complete. Staff is working with borrower on loan substantial completion.
19	Grand Valley Water Users Association >Grand Valley Power Plant Rehabilitation CT2017-2875 - SCTF	Mesa	\$1,717,000	100%	Fall 2018 - Spring 2019	0%	JH	Project was delayed due to a Dept of the Interior review of pending projects nationwide. Design is 100% complete but has not had final approval from Bureau of Reclamation. Approval is anticipated by end of summer with construction beginning Fall 2018.
20	Huerfano County Water Conservancy District >Regional Augmentation Project C150364 (CT2015-047) CTGG1 2015-528	Huerfano	\$2,222,000	100%	Jan 2014 - Mar 2019	60%	RP	Land and water rights purchase occurred in January 2014. Camp Ranch augmentation site construction is complete. Phase I of III at Sheep Mountain Ranch augmentation site was completed in Oct 2017.
21	Lake Durango Water Authority >Source Water Supply Project C150317 (CT2015-013) CTGG1 2015-370	LaPlata	\$2,525,000	100%	Oct 2016 - Feb 2018	98%	KR	All project components are completed. Final testing and warranty monitoring is underway. Project substantial completion is expected midsummer.
22	Lamar, City of >Repurposing of Wells 12 and 13 CT2017-917 CTGG1 2017-211	Prowers	\$101,000	100%	Jun 2017 - Sept 2019	70%	RP	Precon mtg held 5/23/17. City staff is doing construction. Work has been postponed due to staffing/workload issues. Staffing changes. JVA providing additional information and submitting a plan to move forward with project.
23	Larimer & Weld Irrigation Company >Headgate Structure Replacement CT2017-2253	Larimer & Weld	\$681,750	100%	Nov 2017 - Apr 2018	98%	JH	Constructin began in November 2017 and was substantially completed in April 2018. Final billing remains.
24	Left Hand Water District >Participation in Southern Water Supply Project II CT2018-2028	Broomfield & Weld	\$10,000,000	100%	June 2018 March 2020	0%	JH	Final design and bidding is complete. Contractor to mobilize June 2018. Project is managed by Northern Water with Left Hand Water District paying for its prorata share based on pipeline capacity.
25	Lupton Bottom Ditch Company >Diversion Structure Repair CT2018-2829	Weld	\$606,000	100%	April 2018	95%	RP	Northern portion diversion structure near completion, next step, southern portion. Final walk-through April 2018. Received as-builts June 29, 2018.

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	РМ	Status Description/Update
26	Monte Vista, City of >Augmentation Water Rights Acquisition C150309 (CT2015-011)	Rio Grande	\$1,693,770	N/A	N/A	50%	AM	The City purchased Anderson Ditch rights and will file a water court application to enable the use of those rights to replace depletions. Contracted with the San Luis Valley Irr. Dist. for storage space in the Rio Grande Res. City continues negotiations to purchase additional water.
27	North Poudre Irrigation Company >Mountain Supply Reservior No. 10 Repairs CT2017-3641	Larimer	\$802,950	100%	Nov 2017 - Mar 2018	95%	JH	Final design complete and SEO has approved for construction. Construction begain in November 2017. Major elements are completed and contractor is working thru a punchlist. Company is waiting for final billing from Contractor.
28	North Poudre Irrigation Company >Fossil Creek Res. Diversion Structure Repair C150368 (CT2015-024)	Larimer	\$876,680	100%	Nov 2015 - March 2016	99%	JH	The was an emergency loan due to the September 2013 flood. Construction began in November 2015 and was completed in March 2016. FEMA funding is pending. Per terms of the emergency loan contract, the loan will be closed out, and interest will begin accruing, on November 1, 2018.
29	Orchard Mesa Irrigation District >Grand Valley Power Plant Rehabilitation CT2017-2878 - SCTF	Mesa	\$1,717,000	100%	Fall 2018 - Spring 2019	0%	JH	Project was delayed due to a Dept of the Interior review of pending projects nationwide. Design is 100% complete but has not had final approval from Bureau of Reclamation. Approval is anticipated by end of summer with construction beginning Fall 2018.
30	Orchard Ranch Ditch Company >Orchard Ranch Ditch Pipe Project CT2016-2795 POGG1 2017-493	Delta	\$151,500	75%	Fall 2018 - Mid 2019	0%	RP	Design and permitting work is underway. Construction is expected to begin in Fall 2018.
31	Overland Ditch and Reservoir Company >Overland Reservoir Rehabilitation C150206 (CT2015-034)	Delta	\$1,141,300	50%	No Est Permitting	0%	KR	Permitting issues are being addressed to enlarge reservoir. Company is concerned about the impact of increased costs to the project. Meeting scheduled to review current loan and project advancement.
32	Riverside Reservoir and Land Company >Emergency Spillway Project C150291 (CT2015-026)	Weld	\$2,838,100	95%	July 2018 - Fall 2018	0%	RP	Plans SEO approved, preparing bid package. Construction timing non- irrigation season. Contract extension approved through 12/31/2018. Awarded Connell Resources April 2018. June pre-con. Riverside working with Dam Safety and then construction begins Jul 2018.
32	Sanchez Ditch and Reservoir Company >Sanchez Reservoir Outlet Rehabilitation Project C150342 (CT2015-012)	Costilla	\$1,502,476	100%	Oct 2014 - March 2018	99%	AM	Construction began in Oct 2014. Outlet works work was completed in Jan 2015. Seepage and monitoring work is currently ongoing.
33	San Luis Valley Irrigation District >Rio Grande Reservoir Rehabilitation CT-2018-3303, CTGG1-2018-1805	Hinsdale, Rio Grande	\$15,000,000	100%	Fall 2018 - Spring 2020	0%	KR	Project includes a \$10M CWCB Grant Contractor has been selected
34	St. Vrain & Left Hand Water Conservation District >Lake No. 4 Outlet Pipeline Repair CT2017-3213	Boulder	\$619,130	95%	Fall 2018 - Spring 2019	0%	JH	Project is being done in partnership wtih Emergency Rock'n WP Ranch Lake No. 4 Repair, as well as repairs to Boulder County's West Lake and A- Frame Lake. County is lead agency for all projects and plans to bid all projects under one contract in Summer 2018 for a construction start of fall 2018.
35	St. Vrain & Left Hand Water Conservancy District > Emergency Rock'n WP Ranch Lake No. 4 Repair CT2016-2452	Boulder	\$4,545,000	95%	Fall 2018 - Spring 2019	0%	JH	Project is being done in partnership wtih Lake 4 Outlet Pipeline Repair, as well as repairs to Boulder County's West Lake and A-Frame Lake. County is lead agency for all projects and plans to bid all projects under one contract in Summer 2018 for a construction start of fall 2018.

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	РМ	Status Description/Update
36	Southeastern CO Water Conserv. District >Pueblo Dam Hydroelectric Project CT2018-833	Pueblo	\$16,725,600	100%	June 2017 - Fall 2019	50%	RP	Construction beginning fall 2017. District anticipates power production by fall of 2018. Tie-in to SDS complete April 2018. Turbines delivered. Waiting on transformer approval from Black Hills. Anticpate siding powerhouse in Aug 2018.
37	Town of Firestone >Storage Development and Water Rights Purchase CT2017-2880	Weld	\$10,000,000	50%	May 2018 - Mar 2019	0%	RP	LG Everist to complete mining and reclamation of future reservoir in Fall 2017/Winter 2018. Lower Boulder water rights purchased in July 2017. Final design pending - engineer looking at filling reservoir via wells/pipelines instead of diversion off river. Change case application to be filed 2nd half of 2017 for reservoir water rights. Want to look at addtl water supply.
38	Trinchera Irrigation Company >Mountain Home Dam Outlet Rehibilitation Phase III CT2018-3122	Costilla	\$440,360	75%	Fall 2018 - Spring 2019	0%	JH	This is a loan/grant project to replace outlet valves at Trinchera Reservoir. Design is pending SEO review. Construciton is scheduled to occur between 2018 and 2019 irrigation seasons.
39	Tunnel Water Company >Laramie-Poudre Tunnel Rehabilitation CT2016-2001	Larimer	\$1,717,000	100%	Sept 2015 - Spring 2019	50%	JH	Phase 1 (Inlet) complete in 2016. Phase 2 (outlet) construction was dealyed due to need to reroute access road. Construction of Phase 2 is planned for fall 2018. Company received a loan increase at March 2018 meeting to fully cover expected Phase 2 costs.
40	Wiggins, Town of >Wiggins Recharge Facility at Glassey Farms CT2018-892	Morgan	\$2,408,850	70%	Fall 2018 - Spring 2019	0%	JH	Town purcahsed Galssey Farms. Final design of the project began in December 2017 and is underway. Construction is still planned for Fall 2018.
41-\	VISE Project - Phase 1 Infrastructure							\$16,802,501
а	Cottonwood W&S Dist - C150408B (CT2015-106)	Douglas/ Arapahoe	\$2,636,100	100%	Spring 2015 - Jan 2018	80%	RP	
b	Inverness W&S Dist - C150409B (CT2015-118)	Douglas/ Arapahoe	\$1,181,700	100%	Spring 2015 - Jan 2018	40%	RP	Infrastructure to treatment plant completed. 42-inch Pipeline construction on Ridgeway line continues. E470 bore complete. All lines in ground and
с	Parker W&S Dist - C150410B (CT2015-108)	Douglas/ Arapahoe	\$6,785,321	90%	Spring 2015 - Jan 2018	60%	RP	connections in place. Next step, testing. Waiting on water treatment piece before startup testing in March 2018.
d	Pinery (Den SE WSD)C150411B (CT2015-085)	Douglas/ Arapahoe	\$6,199,380	90%	Spring 2015 - Jan 2018	60%	RP	
42-	WISE Project - Phase 2 Infrastructure							\$7,400,078
а	Cottonwood W&S Dist - C150408C (CT2015-105)	Douglas/ Arapahoe	\$1,127,160	0%	Spring 2018 - Fall 2021	0%	RP	
b	Inverness W&S Dist - C150409C (CT2015-119)	Douglas/ Arapahoe	\$1,427,130	0%	Spring 2018 - Fall 2021	0%	RP	

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	РМ	Status Description/Update
с	Parker W&S Dist - C150410C (CT2015-109)	Douglas/ Arapahoe	\$3,418,658	0%	Spring 2018 - Fall 2021	0%	RP	
d	Pinery (Den SE WSD)C150411B (CT2015-086)	Douglas/ Arapahoe	\$1,427,130	0%	Spring 2018 - Fall 2021	0%	RP	
43- \	NISE Project - DIA Connection							
а	Cottonwood W&S Dist - C150408D (CT2015-104)	Douglas/ Arapahoe	\$363,600	35%	N/A	35%	RP	
b	Inverness W&S Dist - C150409D (CT2015-120)	Douglas/ Arapahoe	\$454,500	35%	N/A	35%	RP	Annual disbursment to be made on this loan through 2021.Design Status
с	Parker W&S Dist - C150410D (CT2015-110)	Douglas/ Arapahoe	\$1,099,890	46%	N/A	46%	RP	indicates percent of funds disbursed to date.
d	Pinery (Den SE WSD)C150411B (CT2015-087)	Douglas/ Arapahoe	\$454,500	46%	N/A	46%	RP	
	Projects Un	der Contract	\$220,708,616	100%				
	Approved Projects - Not Under Contract							
а	Florida Consolidated Ditch Company >Hess Lateral Improvement CT2019-XXXX	La Plata	\$1,085,750	0%	Spring 201x Fall 202x	0%	AM	
b	San Juan Water Conservancy District >Dry Gultch Reservior Land Acquistion CT2018-839	Archuleta	\$2,000,000	0%	Spring 201x - Fall 202x	0%	JH	Board approval is conditioned on voters approving debt. Debt approval failed at November 2017 election. Board regathering to determine how/when to move the project forward.
с	Southeastern CO Water Conserv. District > Arkansas Valley Conduit C150238	Crowley	\$40,000,000	0%	Spring 201x Fall 202x	0%	KR	Pending Federal Appropriation. Southeastern's Pueblo Dam Hydro project was taken out of these loan funds.

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	РМ	Status Description/Update
d	City of Walsenburg > City Lake Dam Rehabilitation & Enlargement CT2019-648 Grant CTGG1 2019-094	Huerfano	\$6,889,210	0%	Spring 201x - Fall 202x	0%	RP	Waiting for IGA from City
е	Fruitland Irrigation Company >Tunnel and Canal Renvation CT2019- XXXX CTGG1 2019XXXX	Delta & Montrose	\$1,746,290	0%	Spring 201x - Fall 202x	0%	RP	July 2018 letter from Bureau of Reclamation.
f	Pueblo Consevancy District > Arkansas River and Wildhorse Creek Levees CT2019-XXXX	Pueblo	\$17,170,000	0%	Spring 201x - Fall 202x	0%	RP	Funds approved June 2018. Planning a July 2018 meeting with PCD
g	Municipal Subdistrict >Windy Gap Project CT2019-XXXX	Larimer	\$90,000,000	0%	Spring 201x - Fall 202x	0%	JH	
h	Julesburg Irrigation District >Diversion Structure Rehabilitation CT2019-XXXX	Sedgwick	\$3,341,080	0%	Spring 201x - Fall 202x	0%	RP	Per Rachel-there will be somewhat of a delay before Julesburg is ready to execute a loan contract. The District is currently seeking additional funding for their project so they may decrease the additional assessments asked for approval in their special election. They plan to gather additional funding sources prior to holding the special election. This project is not a rush in any way at this point./no BOL needed just AOL
i	Ogilvy Irrigating and Land Comapny >Seely Reservoir Dredging CT2019-XXXX	Weld	\$2,274,520	0%	Spring 201x - Fall 202x	0%	RP	
j	San Luis Valley Canal Company >San Luis Canal Headgate Construction CT2019-XXXX	Rio Grande	\$303,000	0%	Spring 201x - Fall 202x	0%	JH	
	Not Under Contract	ct SubTotal =	\$164,809,850					
		Grand Total =	\$385,518,466					



Loan Program Attachment 3

Wells #3 and #6 Replacement Project

Town of Bennett November 2014 Board Meeting

LOAN DETAIL	S						
Project Cost:	\$1,600,000						
CWCB Loan (with Service Fee):	\$1,454,400						
Loan Term and Interest Rate: 30 Y	ears @ 3.25%						
Funding Source: Construction Fund							
BORROWER TY	ΡΕ						
Agriculture Municipal	Commercial						
0% 0% Low - 100% Mid - 0% High	0%						
PROJECT DETA	ILS						
Project Type:	Well Drilling						
Average Annual Delivery:	261 AF						



The Town of Bennett provides water to its 2,500 residents from the Denver, Upper Arapahoe and Lower Arapahoe, and Laramie-Fox Hills aquifers. A recent study revealed the need to address operational reliability, efficiency, and safety of the Town of Bennett's well #3 and well #6. The Town currently has 11 wells. The replacement of wells #3 and #6 will provide the Town with additional

supply to meet demands and needed redundancy in its water supply system. Both wells need to be replaced due to the age of the existing wells. Construction is expected to occur during the spring of 2015.





Landslide Stabilization and Ditch Lining Project

Bessemer Irrigation Ditch Company

January 2018 Board Meeting

LOAN DET	AILS
Project Cost:	\$900,000
CWCB Loan (with Service Fee):	\$909,000
Loan Term and Interest Rate:	20 years @ 1.65%
Funding Source:	Construction Fund
BORROWER	ΤΥΡΕ
Agriculture Municipal	Commercial
62% 38% Low - 0% Mid -0%	High 0%
PROJECT DE	TAILS
Project Type:	Ditch Rehabilitation
Average Annual Diversions:	71,600 AF

The Bessemer Ditch Company was incorporated in 1888 and construction of the ditch began in 1889. It serves nearly 20,000 irrigated acres in Pueblo County and provides water for municipal use. In the summer of 2017, land along limestone bluffs, approximately 2 miles east of Pueblo Dam, started sliding away from the Bessemer Ditch canal. The landslide area is approximately 200 feet wide. Stabilization and corrective work will occur in two

3	RE	75	3	7-	Δ	/ 1	
L	0	С	А	т	I	0	N
Count	ty:						Pueblo
Water	r Soui	rce:			Ark	ansa	s River
Drain	age B	asin:				Ar	kansas
Divisi	on:	2		Distri	ict:	1	4

stages; mechanical stabilization and ditch lining. Mechanical stabilization of the slide area will protect the canal and provide width for access and maintenance. The second stage of work includes synthetic liner installation, extending upstream and downstream from the slide area 1200 lineal feet to control canal seepage. Construction is expected to begin in January 2018.





Emergency Raw Water Storage Repair

Big Elk Meadows Association

March 2017 Board Meeting

(Loan Increase)

LOAN DE	TAILS
Project Cost:	\$4,162,453
CWCB Loan:	\$2,020,000
Loan Term and Interest Rate: 6-	Yrs @ 0%, 30-Yrs @ 2.75%
Funding Source:	Severance Tax PBF
BORROWER	R ТҮРЕ
Agriculture Municipal	Commercial
0% 0% Low - 100% Mid	- 0% High 0%
PROJECT D	ETAILS
Project Type:	Reservoir Rehabilitation
Water Storage Preserved:	108 AF



During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged. Measured rainfall in and around Big Elk Meadows exceeded the 1,000-year Average Recurrence Interval for rainfall. Flow along the West Fork reached

historic levels and resulted in the destruction of all five dams; both flow monitoring stations; the community's access road (CR-47); the majority of interior roads; and the water, power, and telephone services. The purpose of this project is to restore the community's water supply by reconstructing the five dams and two monitoring stations. Two of the five dams have been rebuilt and the Association is seeking an increase to the emergency loan to help with its cash flow during construction and through the FEMA grant reimbursement period.





St. Vrain Diversion Replacement

Bonus Ditch Company September 2017 Board Meeting

LOAN DET	AILS
Project Cost:	\$1,297,000
CWCB Loan (with Service Fee):	\$1,309,970
Loan Term and Interest Rate:	30 Years @ 2.90 %
Funding Source:	Severance Tax PBF
BORROWER	ТҮРЕ
Agriculture Municipal	Commercial
Agriculture Municipal 2% 0% Low - 52% Mid -46	<i>Commercial</i> % High 0%
Agriculture Municipal 2% 0% Low - 52% Mid -46 PROJECT DE	Commercial % High 0% E T A I L S
AgricultureMunicipal2%0% Low - 52% Mid -46P R O J E C T D EProject Type:	Commercial % High 0% E T A I L S Ditch Rehabilitation

The Bonus Ditch irrigates open space property leased to farmers in Boulder County and Weld County. Its diversion structure on St. Vrain Creek was destroyed during the September 2013 flood in the South Platte Basin.

The Company is working with Longmont under the Resilient St. Vrain (RSV) project, a multi-year project to



fully restore the St. Vrain Greenway trails and improve the St. Vrain Creek channel to protect people and property from future flooding. The Company's diversion structure is located with the "City Reach" of the RSV project. The selected alternative for repairing the diversion structure fits with the goals of the RSV project. The Company has an approved Project Worksheet with FEMA to cover the "like for like" replacement cost of the project. Construction of the repair project is on hold until FEMA acts on a funding request to instead fund an "improved project" as replacing the diversion like for like is no longer feasible due to the post flood channel condition, and does not fit with the goals of the RSV project.





Castle Pines North Metropolitan District

Chatfield Reallocation Project

January 2018 Board Meeting

(Loan Increase)

LC)	A	Ν	D	E	Т	Α		L	S			
Project Cost:										\$	8,3	50,7	76
CWCB Loan (w	/ith	n Se	rvic	e Fee	e):					\$	7,7	73,3	364
Loan Term an	d Ir	nter	est	Rate	1				3	0 y	ear	's @	3%
Funding Source	e:		S	ever	ance	e Ta	ax Pe	erp	etu	al I	Bas	e Fu	Ind
ΒO	R	R	0	W	Е	R		Т	Υ	Ρ	E		
Agriculture				Mun	icip	al				Со	mn	nerc	ial
0%	0	% L	OW	- 0%	Mid	-10	0% I	ligh	۱		С)%	
PRO	J	Ε	С	Т		D	E	Т	Α	T	L	S	
Project Type:								Re	ese	rvo	ir S	tora	ige
New Storage:											1,	006	AF



The Castle Pines North Metropolitan District provides water and wastewater services to the residents and businesses in the City of Castle Pines, Douglas County. The District is participating in the Chatfield Reallocation Project in order to increase the permanence and reliability of its water supply. Successful completion of the Project would result in

the District securing renewable water rights that on average would supply 32% of its average annual water demand. Of the 20,600 acre-feet proposed to be reallocated, the District would receive 1006 AF of storage, or 4.88% of the total reallocation. The District will use Chatfield storage through exchanges as authorized in water court Case Nos. 04CW308 and 09CW279.

The US Army Corps of Engineers issued the Project's final Feasibility Report and Environmental Impact Statement (FR/EIS) and the Record of Decision on May 29, 2014. The Selected Alternative recommended in the FR/EIS will provide 20,600 acre-feet of storage in Chatfield between the elevations 5432 and 5444 msl for M&I water supply and other purposes including agriculture, environmental restoration, and recreation and fishery habitat protection and enhancement. Construction cost in October 2015 estimated the overall Reallocation Project to cost to \$134 million. An October 2017 cost estimate revised this cost to be \$171 million. The District is seeking an increase to its Chatfield Ioan to cover its share of the cost difference.



Water Project Loan Program - Project Data Sheet



Centennial Water and Sanitation District

Chatfield Reallocation Project

January 2018 Board Meeting

(Loan Increase)

LOAN	DET	AILS
Project Cost:		\$57,459,314
CWCB Loan (with Service	e Fee):	\$53,486,267
Loan Term and Interest I	Rate:	30 years @ 3%
Funding Source: Se	everance Tax I	Perpetual Base Fund
BORRO	WER	ТҮРЕ
Agriculture	Municipal	Commercial
0% 0 % Low -	0% Mid -100%	High 0%
PROJEC	T D E	TAILS
Project Type:		Reservoir Storage
New Storage:		6,922 AF



The Centennial Water & Sanitation District provides water and wastewater services to the residents and businesses of Highlands Ranch in Douglas County. The District is participating in the Chatfield Reallocation Project in order to increase the permanence and reliability of its water supply. Successful completion of the Project would result in the

District securing renewable water rights that on average would supply 16% of its average annual water demand. Of the 20,600 acre-feet proposed to be reallocated, the District would receive 6,922 acre-feet of storage, or 33.6% of the total reallocation. The District will store Chatfield water in accordance with water court Case Nos. 83CW184, 84CW411, and 85CW314.

The US Army Corps of Engineers issued the Project's final Feasibility Report and Environmental Impact Statement (FR/EIS) and the Record of Decision on May 29, 2014. The Selected Alternative recommended in the FR/EIS will provide 20,600 acre-feet of storage in Chatfield between the elevations 5432 and 5444 msl for M&I water supply and other purposes including agriculture, environmental restoration, and recreation and fishery habitat protection and enhancement. Construction cost in October 2015 estimated the overall Reallocation Project to cost to \$134 million. An October 2017 cost estimate revised this cost to be \$171 million. The District is seeking an increase to its Chatfield Ioan to cover its share of the cost difference.



Water Project Loan Program - Project Data Sheet

CWCB Water Project Loan Program Project Data Sheet

C150406

Borrower: Center of Colorado Water Conservancy District	County: Park
Project Name: Chatfield Reallocation Project	Project Type: Reservoir Storage
Drainage Basin: South Platte	Water Source: South Platte River
Total Project Cost: \$931,000	Funding Source: Severance Tax Perpetual Base Fund
Type of Borrower: Middle-income Municipal	Average Annual Diversion: 700 AF Added Water Supply Storage: 131.3 AF

CWCB Loan: \$606,000 (with 1% service fee) Interest Rate: 2.5% Term: 15-years

The Center of Colorado Water Conservancy District co-owns and manages a blanket augmentation plan with the Upper South Platte Water Conservancy District through the Headwater Authority of the South Platte. The District is participating in the Chatfield Reallocation Project in order to improve its augmentation operations by needed storage space at the lower reaches of its augmentation plan. Of the 20,600 acre-feet proposed to be reallocated, the District would receive 131.3 acre-feet of storage, or 0.64% of the total reallocation. The District will use Chatfield storage to store senior and junior rights as authorized in water court Case Nos. 12CW50 and 13CW3148.

The US Army Corps of Engineers issued the Project's Feasibility Report and Environmental Impact Statement (FR/EIS) in July 2013 and a Record of Decision is expected in 2014. The Selected Alternative recommended in the Final FR/EIS will provide 20,600 acre-feet of storage in Chatfield between the elevations 5432 and 5444 msl for M&I water supply and other purposes including agriculture, environmental restoration, and recreation and fishery habitat protection and enhancement. Project participants completed the Project's Fish, Wildlife and Recreation Mitigation Plan, in accordance with C.R.S. 37-60-122.2 in January 2014.





Central Colorado Water Conservancy District

Chatfield Reallocation Project

January 2018 Board Meeting

(Loan Increase)

LOAN DETAII	LS
Project Cost:	\$35,478,346
CWCB Loan (with Service Fee):	\$29,999,929
Loan Term and Interest Rate: 30	years @ 1.75%
Funding Source: Severance Tax Perpet	ual Base Fund
BORROWER TY	ΡΕ
Agriculture Municipal	Commercial
100% 0 % Low - 0% Mid - 0% High	0%
PROJECT DETA	ILS
Project Type: Res	ervoir Storage
New Storage:	4,274 AF

The Central Colorado Water Conservancy District is located in the South Platte River basin between Denver and Fort Morgan including Beebe Draw, and the lower portions of the Box Elder Creek and Lost Creek drainages. Approximately 210,000 acres of irrigated agricultural lands are served by the District. The District is participating in the Chatfield

Reallocation Project to increase the availability of augmentation water for users within its District. Of the 20,600 acre-feet proposed to be reallocated, the District would receive 4,274 acre-feet of storage, or 20.75% of the total reallocation. The location of Chatfield provides the ability to replace well depletions to all locations within the District.

The US Army Corps of Engineers issued the Project's final Feasibility Report and Environmental Impact Statement (FR/EIS) and the Record of Decision on May 29, 2014. The Selected Alternative recommended in the FR/EIS will provide 20,600 acre-feet of storage in Chatfield between the elevations 5432 and 5444 msl for M&I water supply and other purposes including agriculture, environmental restoration, and recreation and fishery habitat protection and enhancement. Construction cost in October 2015 estimated the overall Reallocation Project to cost to \$134 million. An October 2017 cost estimate revised this cost to be \$171 million. The District is seeking an increase to its Chatfield Ioan to cover its share of the cost difference.

Water Project Loan Program - Project Data Sheet

Centenial Diversion Replacement

Centenial Irrigating Ditch Company

September 2017 Board Meeting

LOAN DET.	AILS
Project Cost:	\$512,000
CWCB Loan (with Service Fee):	\$232,300
Loan Term and Interest Rate:	20 Years @ 1.50%
Funding Source: Severance Tax	PBF and WSRF Grant
BORROWER	ΤΥΡΕ
Agriculture Municipal	Commercial
100% 0% Low - 0% Mid - 0%	High 0%
PROJECT DE	TAILS
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	21,700 AF

The Company's diversion and headgate structures are located four miles east of Monte Vista on the Rio Grande. 8,500 acres are irrigated under the system. The diversion was highlighted as a river rehabilitation priority in a 2001 study titled "Rio Grande Headwater Restoration Project." That study analyzed the condition of riparian habitats and

structures along a 91-mile reach of the Rio Grande from the town of South Fork to Alamosa, and was sponsored by the San Luis Valley Water Conservancy District and funded with a grant from the CWCB. A 2007 Rio Grande Watershed Restoration Strategic Plan highlighted the importance of continued efforts to implement the 2001 study recommendations.

The Company partnered with the Colorado Rio Grande Restoration Foundation, the fiscal agent for the Rio Grande Headwater Restoration Project, to organize and raise funds for the Project. The Foundation similarly worked with four other ditch companies and consolidated those needs into one WSRF grant request ("Five Ditches: Rio Grande Diversion and Headgate Improvement"). That grant request will also be heard at the September 2017 Board Meeting. The existing diversion dam will be replaced with a grouted rock diversion dam spanning the width of the river. The dam will include a low flow channel to allow for sediment transport. Project stakeholders worked with Colorado Parks and Wildlife, and at CPW's request, final design will incorporate a partial fish barrier to protect native fish upstream from downstream non-native predators such as the pike.

COLORADO

Colorado Water Conservation Board Shores Lakes Ponds C Infrastructure Improvement

Department of Natural Resources

Central Colorado Water Conservancy District January 2018 Board Meeting

LOA	N D	ΕT	A I	L	S
Project Cost:					\$3,430,000
CWCB Loan (with Se	ervice Fee	e):			\$2,367,440
Loan Term and Inte	rest Rate	:	30) yea	ars @ 1.65%
Funding Source:			Со	nstru	action Fund
BORR	O W	ER	Т	Y F	P E
Agriculture	Mun	icipal		С	commercial
Agriculture 100% 0 %	Mun Low - 0%	icipal Mid -0%	6 High	С	commercial 0%
Agriculture 100% 0 % P R O J E	Mun Low - 0% C T	icipal Mid -0% D	6 High E T	С А І	commercial 0% L S
Agriculture 100% 0 % P R O J E Project Type:	Mun Low - 0% C T	icipal Mid -0% D Re	6 High E T eservoi	C A I r Reł	Commercial 0% L S nabilitation

4 2 3 0 \mathbf{O} Δ Weld County: South Platte River Water Source: Drainage Basin: South Platte Division: 1 District: 2

The Well Augmentation Subdistrict (WAS) was formed in 2004 to develop a permanent augmentation plan for well owners who were previously members of the Groundwater Appropriators of the South Platte (GASP), and covers land in Adams, Weld, and Morgan counties. There are currently 275 wells contracted for coverage in

the WAS Augmentation Plan, covering 78 square miles, for a total of 15,250 AF. WAS issues an annual pumping quota to its member wells based on WAS overall augmentation supplies. The first seven years the quota was set to 0%, but in recent years the quota has ranged from 35%-60%.

The Shores Lakes is a gravel pit complex located near Firestone in Weld County and consists of four lined cells (Ponds A, B, C, D), which are interconnected via pipelines. Shores Lakes has all planned infrastructure installed except Pond C's inlet and outlet structures. This Project will install the inlet and outlet infrastructure for Pond C, thereby allowing WAS to efficiently store and release water under its augmentation plan. Construction is anticipated to being in fall 2018 and be complete in spring 2019.

Ditch System Improvements Church Ditch Water Authority

July 2017 Board Meeting

LOAN DET	AILS
Project Cost:	\$3,580,000
CWCB Loan (with Service Fee):	\$3,615,800
Loan Term and Interest Rate:	30 Years @ 3.0%
Funding Source:	Construction Fund
BORROWER	ТҮРЕ
Agriculture Municipal	Commercial
Agriculture Municipal 0% 0% Low - 33% Mid - 67%	Commercial 6 High 0%
Agriculture Municipal 0% 0% Low - 33% Mid - 67% PROJECTDE	Commercial 6 High 0% T A I L S
Agriculture Municipal 0% 0% Low - 33% Mid - 67% P R O J E C T D E Project Type:	Commercial 6 High 0% T A I L S Ditch Rehabilitation

The Authority was formed in 2004 by the cities of Northglenn and Westminster to operate the Church Ditch. The ditch is 26-miles long and carries water from its headgate in Clear Creek, near Golden, through Jefferson County until it ends near the intersection of 100th Ave and Simms St at the Wilson Flume. There are 97 Contractual Users who receive water from the ditch.

The Authority and Ecological Resource Consultants (ERC) created a Master Plan in 2009 to identify areas in need of maintenance, modification, or replacement. Since 2009, the Authority has been completing identified projects as time and budgets have allowed. Currently, the following five projects have been identified as the highest priority for the Authority over the next two years. (1) The Leyden Creek Flushing Structure will replace the aging structure and improve efficiency, safety, and maintenance. (2) The Headgate 53 Retaining Wall project will repair a concrete block wall which was installed as an emergency fix due to the 2013 flood. (3) The Area 15 Ditch Lining will line a section of ditch where the dewatering by new homes and businesses adjacent to the ditch are causing increased water loss in the ditch. (4) The Ford Street Siphon will address a 75 year old culvert that is at or near

the end of its expected lifespan. Finally (5) the Legacy Farms Culvert will replace an undersized culvert which is currently creating a bottleneck.

All projects will be constructed during the non-irrigation season and are planned to be complete by spring of 2019.

Water Project Loan Program - Project Data Sheet

Consolidated Diversion and Headgate Replacement

Consolidated Ditch and Headgate Company

July 2017 Board Meeting

LOAN DETAIL	S
Project Cost:	\$1,862,000
CWCB Loan (with Service Fee):	\$1,010,000
Loan Term and Interest Rate: 30	Years @ 1.8%
Funding Source: Severance Tax Perpetu	ial Base Fund
BORROWER TY	ΡΕ
Agriculture Municipal	Commercial
100% 0% Low - 0% Mid - 0% High	0%
PROJECT DETA	ILS
Project Type: Ditch R	ehabilitation

The Company is a Mutual Ditch Company formed in 1910. Its diversion and headgate structures are located five miles northwest of Monte Vista on the Rio Grande. The company serves 38 shareholders made up of water right owners who use the ditch as a carrier ditch. The diversion dam and headgate structures are at the end of its service

L O C A	ΤΙΟΝ
County:	Rio Grande
Water Source:	Rio Grande
Drainage Basin	Dia Crando
Dramage Dasin.	RIU GLAHUE

life and are no longer effective at low or high river flows. These structures were highlighted as river rehabilitation priorities in 2001 study titled "Rio Grande Headwater Restoration Project." That study analyzed the condition of riparian habitats and structures along a 91-mile reach of the Rio Grande from the town of South Fork to Alamosa.

The Company has partnered with the Colorado Rio Grande Restoration Foundation, the fiscal agent for the Rio Grande Headwater Restoration Project, to organize and raise funds for the Project. The Natural Resources Conservation Service is providing design and construction oversight for the project, as well as a \$750,000 grant from its Environmental Quality Incentive Program (EQIP). The Foundation will be including this Project as part of a WSRF grant request that, if approved by the Rio Grande Roundtable, will be heard at the CWCB September 2017 Board Meeting. The EQIP grant funds are subject to forfeiture if the Project does not begin construction in Fall 2017. Therefore, to ensure construction can begin as soon as river conditions allow, the Company is seeking this CWCB loan to cover its full cost share. Any WSRF grant funds obtained for this Project will reduce the final loan amount.

Holita Dam Rehabilitation

Corsentino Dairy Farms July 2017 Board Meeting

L O A N D	ΕΤΑΙ	LS
Project Cost:		\$94,000
CWCB Loan (with Service Fee):	\$85,446
Loan Term and Interest Rate:		10 Years @ 0.5%
Funding Source:		Severance Tax
BORROW	ER T	ΥΡΕ
Agriculture Muni	cipal	Commercial
Agriculture Muni 100% 0% Low - 0% I	<i>cipal</i> ⁄lid - 0% High	Commercial 0%
Agriculture Muni 100% 0% Low - 0% I P R O J E C T	<i>cipal</i> ⁄lid - 0% High D E T	Commercial 0% A I L S
Agriculture Muni 100% 0% Low - 0% I P R O J E C T Project Type:	<i>cipal</i> Mid - 0% High D E T Reservo	Commercial 0% A I L S bir Rehabilitation
AgricultureMuni100%0% Low - 0% IPROJECTProject Type:Average Annual Delivery:	cipal Aid - 0% High D E T Reservo	Commercial 0% A I L S pir Rehabilitation 540 AF

Corsentino Dairy Farms, Inc. is located on 1,019 acres located approximately three miles east of the City of Walsenburg, along the north and south sides of State Highway 10. The Dairy has been in the Corsentino family since 1936 and is currently operated as an organic dairy.

The primary water for the dairy operation comes from a well. The well is operated in accordance with the Corsentino Dairy plan for augmentation. The replacement water comes from the Holita Reservoir.

Holita reservoir has a storage capacity of 498 acre-feet and was built in 1889. In September of 2014 the Dairy received a letter from the Office of the State Engineer (SEO) that identified the Holita dam as unsatisfactory and restricted the storage level to five feet below the low point of the west dam crest. If the dam safety issues are not addressed by December 2017, the Dairy could be required to breach the dam.

The intent of the SEO storage restriction is to eliminate uncontrolled seepage from the dam. The SEO also identified the spillway as unsafe and is requiring a permanent lowering that will result in a storage volume of 274 acre-feet. Through this loan, the Dairy plans to rehabilitate the dam in the fall/winter of 2017.

Water Project Loan Program - Project Data Sheet

Loan Program Attachment 3

Dixon Reservoir Dam Improvement Dixon Canon Ditch and Reservoir Company

May 2016 Board Meeting

LOAN DET	AILS
Project Cost:	\$309,000
CWCB Loan (with Service Fee):	\$278,100
Loan Term and Interest Rate:	30 years @ 2.55%
Funding Source:	Construction Fund
BORROWER	ТҮРЕ
Agriculture Municipal	Commercial
Agriculture Municipal 17% 0% Low - 83% Mid - 0%	Commercial High 0%
Agriculture Municipal 17% 0% Low - 83% Mid - 0% PROJECT DE	Commercial High 0% T A I L S
AgricultureMunicipal17%0% Low - 83% Mid - 0%PROJECTProject Type:	CommercialHigh0%TAILDSDam Rehabilitation
AgricultureMunicipal17%0% Low - 83% Mid - 0%PROJECTProject Type:Average Annual Delivery:	CommercialHigh0%TAILDamRehabilitation312AF

5 4 2 3 Ν 0 O County: Larimer Water Source: **Dixon Creek** Drainage Basin: South Platte River Division: District: 1 3

Dixon Canon Ditch and Reservoir Company owns and operates the Dixon Reservoir Dam and associated ditch located in Larimer County on the west side of Fort Collins. Dixon Reservoir is directly east of Horsetooth Reservoir. The ditch diverts water off of Dixon Creek and

provides water for outdoor irrigation to a 206-acre service area via approximately 9,000 feet of pipe and ditch. The water is typically used to irrigate turf, agricultural crops, and the City of Fort Collins parks and open space. The dam was constructed in 1885 and is classified as a Significant Hazard Dam by the Dam Safety Branch of the Office of the State Engineer (SEO). The Reservoir has a decreed storage volume of 412 acre-feet. Recent SEO inspections identified areas of seepage that need to be addressed in order to maintain the full storage decrees. The purpose of this project is to address seepage issues and improve the dam outlet works so the Company can continue providing an adequate amount of irrigation water to shareholders while minimizing the risk of dam failure. Construction is expected to begin in late 2016.

		Loa Att	n Program achment 3
Piping	the	Duke	Ditch
D	uke [Ditch Co	ompany

March 2016 Board Meeting

LOAN DET.	AILS
Project Cost:	\$749,374
CWCB Loan (with Service Fee):	\$90,900
Loan Term and Interest Rate:	30 years @ 2.0%
Funding Source: Construction Fund, Wa	SRA, Salinity Control
BORROWER	ТҮРЕ
Agriculture Municipal	Commercial
Agriculture Municipal 68% 32% Low - 0% Mid - 0%	Commercial High 0%
AgricultureMunicipal68%32% Low - 0% Mid - 0%P R O J E C T D E	Commercial High 0% TAILS
AgricultureMunicipal68%32% Low - 0% Mid - 0%PROJECTProject Type:	Commercial High 0% T A I L S Ditch Rehabilitation

The Duke Ditch Company diverts from Leroux Creek and Barrow Gulch, west of the Town of Hotchkiss, and delivers water through the Company's ditch to a 380-acre service area. The earthen ditch traverses a steep hillside in the Leroux Creek canyon where it is prone to washout and is subject to significant seepage and evaporative losses. As a result of the location, it has significant

maintenance and aquatic vegetation growth issues. The deep percolation of irrigation water in this area contributes salinity and selenium to the Colorado River system; therefore, the Company obtained a \$464,000 Salinity Control Program grant (61% of project costs) and a \$100,900 NRCS grant (13% of project costs), as the project is expected to reduce salt loading to the Colorado River system by 395 tons/year. In addition, the Company is applying for a \$47,237 basin grant and a \$47,237 statewide grant from the Water Supply Reserve Account Grant Program to pipe the entire 2.7 miles of ditch. Construction is scheduled for the fall/winter of 2016/2017.

Adobe Creek Dam Rehabilitation

Fort Lyon Canal Company September 2017 Board Meeting

	L	0	Α	Ν	D	E	Т	Α			L	S			
Project C	ost:											\$9	,20	0,0	00
CWCB Loa	an (I	vit	h Se	ervid	ce Fee	?):						\$8	,18	81,0	00
Loan Teri	n ar	nd I	nte	rest	Rate	:			4	0	ye	ars	@	1.5	0%
Funding S	Sour	ce:	WSF	RF &	Seve	ranc	:e 1	Гах	Ре	rp	etı	ıal	Bas	se F	unc
В	0	R	R	0	W	Е	R		Т	Y	'	Р	Ε		
Agricultu	ıre				Mun	icipa	a/				(Cor	nm	erci	ial
00 1%			1 0/ 1					001	1.1.1					0/	
77.1/0		<	1%	LOW	- IBD	0% M	id -	0%	НI	дh			<1	%	
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P R Project T	O ype.	> ل :	1% E	Low C	- IBD	0% M	id -)	•0% E	ні Т Da	gn A m	Re	hal	<1 L Dilli	% S tati	on
P R Project T Average	0 ype. Annu	< J al	T% E Div	Low C ersi	- TBL T ons:	0% M [id -)	∙0% E	Ні Т Da	gn A m	Re	hal 22	<1 	% S tati 000	on AF
P R Project T Average Recovere	O ype Annu d St	J : Jal ora	Div ge:	Low C ersi	- TBL T ons:	0% M [id -)	.0% E	Hiţ T Da	gn A m	Re	hal 22 3	<1 Dili 1,0 2,5	% S tati 000 660	on AF AF

Adobe Creek Reservoir (also known as Blue Lake) is owned by the Fort Lyon Canal Company. The dam is a 32foot-high, high hazard dam that impounds approximately 77,400 acre-feet of active storage and 4,292 acre feet of dead storage. The water is used to irrigate

approximately 93,000 acres of land in Bent, Otero, and Prowers County.

A storage restriction was issued by the Dam Safety Branch of the Office of the State Engineer on May 5, 2017 due to adverse seepage conditions in the dam's foundation and deteriorated conditions in the 112-year-old, vitrified clay outlet works. Through this loan, the Company intends to design and construct new outlet works and seepage control systems in Adobe Creek Dam to regain the approximately 32,560 acre-feet of storage that was lost due to the storage restriction. The project will also be funded by a \$100,000 Water Supply Reserve Fund (WSRF) Arkansas Basin grant and a \$1,000,000 Statewide WSRF grant. Construction is expected to being in late 2018.

CWCB Water Project Loan Program Project Data Sheet

C150359

Borrower: Town of Fowler, Water Enterprise	County: Otero
Project Name: Augmentation Pipeline Project	Project Type: Augmentation
Drainage Basin/ District: Arkansas / 17	Water Source: Arkansas River
Total Project Cost: \$305,000	Funding Source: Construction Fund
Type of Borrower: Municipal (Low)	Average Annual Diversion: 157 AF
CWCB Loan: \$277,245 (with 1% Service Fee)	Interest Rate: 2.25% Term: 30 years

The Town is located in Otero County along Highway 50, approximately 35 miles east of Pueblo. It has approximately 1,185 residents. The Town's water system service area includes the Town and adjacent areas within unincorporated Otero and Crowley Counties for a total of 709 taps. Per a water court mandate, the Town must separate its augmentation water from its stormwater. The purpose of this project is to construct a diversion box to separate stormwater from augmentation water and to pipe the augmentation water to the Arkansas River. Construction of the Project is scheduled for the fall of 2013 with completion expected to occur by the end of the year.

CWCB Water Project Loan Program Project Data Sheet

Borrower: Grand Mesa Water Conservancy District	County: Delta
Project Name: Peak Reservoir and Blanche Park Reservoir Rehabilitation	Project Type: Reservoir Rehabilitation
Drainage Basin/ District: Gunnison / 40	Water Source: Surface Creek
Total Project Cost: \$640,000	Funding Source: Construction Fund/ WSRA Gunnison Basin Funds
Type of Borrower: Municipal/Agricultural	Average Annual Diversion: 400 AF Storage Added: 155 AF
CWCB Loan: \$227,250 (with 1% Service Fee)	Interest Rate: 1.55%* Term: 20 years (Reduced from 1.8% blended rate)

The Grand Mesa Water Conservancy District owns several reservoirs and a network of ditches to service agricultural users and municipal users including the Town of Orchard City and Cedaredge. It is requesting a loan to rehabilitate Peak Reservoir and Blanche Park. Both reservoirs are located in the Grand Mesa National Forest and have not been used in nearly 50 years. The District has already contributed \$352,500 towards Project costs and has also been awarded \$75,000 in Water Supply Reserve Account (WSRA) Gunnison Basin Roundtable grant funds. Peak Reservoir involves earthwork on the dam and new outlook works. Blanche Park reservoir work will be a complete rebuilding of the dam. Construction is expected to resume in the summer of 2013 with the ability to store water by the winter of 2014-2015.

Loan Program Attachment 3 Government Highline Canal Lining

Grand Valley Water Users Association

September 2016 Board Meeting

LOAN DET	AILS
Project Cost:	\$800,000
CWCB Loan (with Service Fee):	\$151,500
Loan Term and Interest Rate:	30 Years @ 1.55%
Funding Source:	Construction Fund
BORROWER	ТҮРЕ
Agriculture Municipal	Commercial
Agriculture Municipal 90% 0% Low - 10% Mid - 0%	Commercial 5 High 0%
Agriculture Municipal 90% 0% Low - 10% Mid - 0% PROJECTDE	Commercial 5 High 0% TAILS
AgricultureMunicipal90%0% Low - 10% Mid - 0%PROJECTProject Type:	Commercial High 0% TALLS Ditch Rehabilitation

The Grand Valley Water Users Association (Association), is requesting funding for the Government Highline Canal Lining Project. The Association is the managing entity of the Bureau of Reclamation's Grand Valley Project. The Grand Valley Project facilities include the Grand Valley Diversion Dam (also known as the Roller Dam) on the Colorado River in De Beque Canyon, the

55-mile-long Government Highline Canal,150 miles of project operated laterals, 100 miles of drainage ditches, and a hydroelectric power plant. The embankment immediately below the Roller Dam is relatively narrow and separates the Government Highline Canal from the Colorado River. This section of canal was constructed around 1915. Over the last 100 years the embankment has slumped, settled and degraded. Occasional erosion within the embankment has led to material loss and sinkholes. As a result of canal degradation, water flow is restricted and the canal cross section has been reduced, causing a reduction in capacity of the canal channel. The canal is currently physically restricted to approximately 1,600 cfs while the water rights are for 1,730 cfs. To increase the capacity, the Association intends to improve first 500 feet of the canal. Permitting and final design are scheduled for completion by March 2017. Construction is anticipated in summer and fall of 2017.

COLORADO Colorado Water Conservation Board Department of Natural Resources

Attachment 3 Grand Valley Power Plant Rehabilitation

Grand Valley Water Users Association November 2016 Board Meeting

Loan Program

	L ()	A	N	D	E		Γ,	A	ΙL	S			
Project Co	ost:										\$	5,2	00	,000
CWCB Loa	n (v	vith	Se	rvic	e Fe	e):					\$	1,7	17	,000
Loan Tern	n an	d Ir	nter	est	Rate	2:				30	Yea	ars	@ 7	2.0%
Funding So	ourc	:e:							С	onsi	truc	tio	n F	und
В	0	R	R	0	W	E	R		Т	Y	Ρ	Ε		
В	0	R	R	0 	W lydro	E opov	R wei	r	Т	Y	Ρ	E		
B P R	0	R J	R E	0 	W lydro T	E opov	R wei D	r E	T T	Y A	P I	E	S	
B P R Project Ty	0 0 (pe:	R J	R E	0 	W Hydro T	E opov	R wei D	r E	T T	Y A	P I Hyd	E L roe	S	ctric

The Grand Valley Water Users Association (Association) and Orchard Mesa Irrigation District (District) are each seeking a loan to cover its cost share for the Grand Valley Power Plant (GVPP) Rehabilitation Project. The GVPP is owned by the Bureau of Reclamation and originally operated by Public Service Company of Colorado (Xcel Engergy) in conjunction with the Cameo coal fired power plant. The Association and District took operational control of the plant when Xcel decided to cease its operations. The Association and District equally split costs and

revenues from the GVPP under a Lease of Power Privilage with Reclamation and a Power Purchase Agreement with Xcel. In addition to being a revenue source, the GVPP serves an important role in providing water to the "15-Mile Reach" which has been designated by the Upper Colorado River Endangered Fish Recovery Program as critical habitat. The non-consumptive hydropower water right ensures continued flows for this important stretch of river.

The goal of the Project is to bring the GVPP up to a sustainable operating condition and meet current electric and safety standards. The GVPP was built in the early 1930s and has seen no major upgrades or modernization to date. Under current operations, the "water-to-wire" efficiency is approximately 54% with a maximum generation output of 2.5 MW. Calculations show as much as 4.1MW production should be feasible based on flow rate and available head.

Water Project Loan Program - Project Data Sheet

	Water Project Loan	Program				
	Project Data Sł	neet				
Borrower:	Huerfano County Water Conservancy District	County:	Huerfano			
Project Name:	Regional Augmentation Project	Project Type:	Water Rights Acquisition			
Drainage Basin:	Arkansas / District 67	Water Source:	Huerfano	River		
Total Project Cost:	\$3,050,000	Funding Source:	Construct	tion Fund		
Type of Borrower:	Low-Income Municipal	Avg. Annual Diversions:	19.5 AF			
CWCB Loan:	\$2,222,000 (w/ 1% service fee)	Interest Rate:	2.25%	Term:	30 years	

The Huerfano County Water Conservancy District is applying for a CWCB loan to develop a regional augmentation program to replace depletions of wells in unincorporated communities in Huerfano County through a regional augmentation program. Within Huerfano County there are many water users that are at risk of being curtailed due either to being out of priority or due to failing (or failed) augmentation plans. The users include schools and domestic, commercial, and agricultural users. The District has utilized a Substitute Water Supply Plan and Regional Rule 14 Replacement Plan from 2009 to 2013 to provide augmentation water to five entities that were in danger of having water use curtailed due to out of priority usage. The District believes that other water users will find it necessary to join the regional augmentation plan and the Division Engineer has indicated an urgent need for such a plan. Project components include: the purchase of land and water rights, the construction of a recharge reservoir, and the construction of a reservoir for augmentation use. The Project is expected to occur between 2014 and 2016.

CWCB Water Project Loan Program Project Data Sheet

Borrower: Lake Durango Water Authority	County : La Plata
Project Name: Source Water Supply Project	Project Type: Water Rights Purchase/Infrastructure
Drainage Basin: San Juan / Dolores	Water Source: ALP
Total Project Cost: \$3,000,000	Funding Source: Construction Fund and WSRA Statewide Funds
Type of Borrower: Low-income Municipal	Average Delivery: 309 AF
CWCB Loan: \$2,525,000 (w/ 1% service fee) WSRA Statewide Grant: \$500,000 \$450,000	Interest Rate: 4.0% Term: 30 years

The Lake Durango Water Authority serves 1,435 taps in southwest La Plata County. A safe yield analysis has indicated that the Authority can only supply water to 792 taps in a drought year. This was an issue in the 2002-2003 drought, so the Authority is seeking additional supply and storage to safely serve its customers. The Authority is planning on purchasing 100 AF of A-LP water from the Colorado Water Resources and Power Development Authority, constructing a pump station at Lake Nighthorse, building an access road, and installing a pipeline to bring water from Lake Nighthorse to Lake Durango (where the Authority currently stores the majority of its water).

2009 NAP aerial imagery provided by the US Farm Service Agency

Loan Program Attachment 3 Repurposing of Wells 12 and 13

City of Lamar September 2015 Board Meeting

LOAN DET	AILS
Project Cost:	\$400,000
CWCB Loan (with Service Fee):	\$101,000
Loan Term and Interest Rate:	10 Years @ 1.95%
Funding Source: WSRA & Sev. Tax	x Perpetual Base Fund
BORROWER	ТҮРЕ
Agriculture Municipal	Commercial
0% 100% Low - 0% Mid - 0	0% High 0%
PROJECT DE	ETAILS
Project Type:	Municipal & Industrial
Average Annual Delivery:	2,005 AF

The City of Lamar, through its Water and Wastewater Department, has been providing the city with water and sewer services for over 135 years. Although the City has undertaken numerous upgrades, rehabilitation, and expansion projects over the years, most of the existing infrastructure was funded and built during New Deal-era programs. The City's Wells 12 and 13 were developed in

the 1950s and used for municipal potable water supply until 2012, when Microscopic Particulate Analysis water quality testing was conducted, resulting in a reclassification of both wells as Ground Water Under Direct Influence of Surface Water (GWUDI) by the Colorado Department of Public Health and Environment (CDPHE). The wells were taken out of service at that time. A Feasibility Study conducted in 2014 concluded that it is feasible to redevelop both wells for non-potable irrigation use. Once this project is completed, water can be used for any non-potable municipal application, including irrigation of a city-owned cemetery and a golf course, both of which are currently watered with potable water.

Water Project Loan Program - Project Data Sheet

Attachment 3 Headgate Structure Replacement

Larimer and Weld Irrigation Company

September 2016 Board Meeting

Loan Program

LOAN DET	AILS
Project Cost:	\$750,000
CWCB Loan (with Service Fee):	\$681,750
Loan Term and Interest Rate:	30 Years @ 1.5%
Funding Source:	Construction Fund
BORROWER	ТҮРЕ
Agriculture Municipal	Commercial
96% 0% Low - 4% Mid - <1%	High 0%
PROJECT DE	ТАНС
	IAILS
Project Type:	Ditch Rehabilitation

The Larimer and Weld Irrigation Company is a Colorado Mutual Ditch Company and a nonprofit corporation. The Company's service area extends from the Cache la Poudre River diversion north of Fort Collins, east to near the town of Galeton, encompassing approximately 61,000 acres of irrigated land in Larimer and Weld Counties. The

Company's diversion off the Cache la Poudre River is aging and in need of repair. This Project will focus on replacing the headgate structure, including the concrete structure, gates, and gate operators. The replacement of the trash rack and forebay structure, and repairs to the diversion structure, are planned to take place within the next few years and are not a part of this Project.

The City of Fort Collins has developed a flood control plan for the Dry Creek Basin, which in part uses the Larimer & Weld Ditch as a conveyance for flood flows in Dry Creek. Therefore, should a flood occur in the Dry Creek Basin, it is of great importance for life, safety, and prevention of property damage, that the ditch's upstream headgate off the Poudre River be able to close so there is capacity available in the ditch to handle flood flows. Construction activities will include the replacement of the concrete structure, new gates and operators, and a new control building. Construction is expected to occur between the 2016 and 2017 irrigation seasons.

COLORADO Participation in Southern Water Supply Project II

Conservation Board Department of Natural Resources Left Hand Water District September 2017 Board Meeting

LOAN DET	AILS
Project Cost:	\$10,735,300
CWCB Loan (with Service Fee):	\$10,000,000
Loan Term and Interest Rate:	20 Years @ 2.75%
Funding Source:	Construction Fund
BOBBOWER	TVPF
Agriculture Municipal	Commercial
Agriculture Municipal 0% 0% Low - 30% Mid -70%	Commercial High 0%
Agriculture Municipal 0% 0% Low - 30% Mid -70% P R O J E C T D E	Commercial High 0% T A I L S
Agriculture Municipal 0% 0% Low - 30% Mid -70% P R O J E C T D E Project Type: Municipal Municipal Municipal Municipal	Commercial High 0% T A I L S r Supply System New

The District provides potable water service within a 108 square mile service area within unincorporated areas of Boulder and Larimer Counties; serving approximately 20,000 people through 7,154 individually metered taps. Water is treated at the Spurgeon Water Treatment Plant (WTP) and Dodd WTP. Spurgeon WTP is operated yearround while Dodd WTP is operated only during the

Carter

Lake

Berthoud

irrigation season. By participating in the Southern Water Supply Project (SWSP) II, the District will be able to supply Dodd WTP with a year-round water supply, significantly reducing the risk associated with having only one water supply during the non-irrigation season, as well as reducing the maintenance associated with an open canal supplying water for treatment.

The SWSP II, proposed by Northern Colorado Water Conservancy District, is a 20-mile pipeline from Carter Lake to the Boulder Reservoir. The pipeline will deliver raw water for municipal use to Left Hand Water District (Borrower), Longs Peak Water District,

and the City of Boulder. The full cost of the project is estimated to be \$43,890,000. The Districts participation cost is estimated to be \$10,735,000. The \$10,000,000 CWCB loan will cover a majority of the District's participation cost. The District will use its cash reserves for any cost exceeding that exceeds the CWCB loan.



Diversion Structure Repair

Lupton Bottom Ditch Company January 2018 Board Meeting

LOAN DETAI	LS
Project Cost:	\$676,000
CWCB Loan (with Service Fee):	\$606,000
Loan Term and Interest Rate: 10) years @ 1.6%
Funding Source: Cons	struction Fund
BORROWER TY	ΡE
Agriculture Municipal	Commercial
47.2% 0 % Low – 46.4% Mid -0% High	6.4%
PROJECT DETA	ILS
Project Type: Diversion Structure	Rehabilitation

The Lupton Bottom Ditch Company diverts water from the South Platte River near Wattenberg in Weld County. The existing check dam was built in 1949 and the gates were replaced in 2001. Damage to the structure began when high river flows overtopped the rock dam and scoured a large hole on the downstream side and subsequently extended that scour into the structure.



The structure was initially damaged during the September 2013 flooding and further damaged in subsequent high river flows. The proposed repair work will be completed in a two-stage process due to the requirement for construction to occur during low flow conditions within the river. During the first stage, stabilization and installation of upstream sheet piling followed by construction of a concrete apron is planned. The downstream side of the structure will be stabilized with grouted boulders. The second stage includes rebuilding the rock dam. Construction is scheduled for Winter/Spring of 2018.



Water Project Loan Program - Project Data

Borrower: City of Monte Vista (Water Activity Enterprise)	County: Rio Grande
Project Name: Augmentation Water Rights Acquisition	Project Type: Water Rights Purchase
Drainage Basin: Rio Grande	Water Source: Rio Grande River
Total Project Cost: \$1,863,500	Funding Source: Construction Fund
Type of Borrower: Low-Income Municipal	Aver. Demand: 1,212 AF/year
CWCB Loan: \$1,693,770 (incl. 1% loan fee)	Interest Rate: 4.0% Term: 30 years

The City of Monte Vista, by and through its water activity enterprise, provides water to 4,300 residents in the San Luis Valley. The City's water system consists of five wells in a confined aquifer and three wells in an unconfined aquifer. Upcoming rules from the Office of the State Engineer will require water users in the San Luis Valley to replace depletions from pumping of wells in both the confined and unconfined aquifers tributary to the Rio Grande River. The water rights currently owned by the City are insufficient to fully replace the City's depletions. The City needs an additional 321 AF of replacement water. In order to meet this need, the City is purchasing Anderson Ditch water rights and storage in the Rio Grande Reservoir to store both the excess credits from the water it is purchasing and to store additional water it intends on leasing. Upon loan approval, the City plans on executing purchase agreements with the sellers of the Anderson Ditch rights and will then file in water court to enable the use of those rights to replace depletions as soon as possible.





Mountain Supply Reservoir No. 10 Repairs

North Poudre Irrigation Company

November 2017 Board Meeting

(Loan Increase)

LOA	N D	ΕT	AI	LS
Project Cost:				\$795,000
CWCB Loan (with Se	ervice Fee):		\$802,950
Loan Term and Inter	rest Rate:		30	years @ 2.50%
Funding Source:	Severa	nce Tax	Perpet	ual Base Fund
BORR	O W	ER	ΤΥ	ΡΕ
Agriculture	Muni	cipal		Commercial
26% 0% L	.ow - 73%	Mid - 0%	High	1%
PROJE	СТ	DE	ТА	ILS
Project Type:		Res	servoir	Rehabilitation
Average Annual Del	ivery:			44,400 AF
Storage Maintained:				344 AF
Storage Recovered:				264 AF

The Company's service area encompasses approximately 28,000 irrigated acres in Larimer County north of Fort Collins near Wellington, and includes service to 14 communities and municipal water providers that own Company shares.

Mountain Supply Reservoir No. 10 (Reservoir), owned and operated by the Company, was constructed in 1905, and a major rehabilitation of the dam was completed in 1973. The Company has a storage decree in this reservoir of 344 acre-feet. The reservoir is an off-stream reservoir with a drainage basin of approximately 0.14 square miles. In August of 2015, the Reservoir's outlet works experienced a failure in the corrugated metal pipe (CMP) outlet. The reservoir was drained and a full storage restriction was imposed by the State Engineer's Office (SEO). The Company made temporary emergency repairs in 2016 and were then permitted to store up to 80 AF.

The Project components are: (1) repair the outlet works including construction of a new inlet gate tower and walkway, and lining the length of the outlet conduit using a cured-in-place pipe (CIPP) liner; (2) remove silt from the reservoir bottom and install a new spillway control wall to achieve the ability to store the full decreed storage amount of 344 AF; and (3) repair 500 feet of 30-inch inlet





works by installing a CIPP liner in the existing inlet pipe from the Upper 10 Ditch to the reservoir, as well as replacing the inlet works and installing a new energy dissipation structure.

Bids were opened on October 12, 2017. The Company is seeking an increase to its loan amount as the bids exceeded the original budget. Construction is planned to begin in November 2017, and be completed before the start of the 2018 irrigation season.



COLORADO Fossil Creek Reservoir Diversion Structure Repair

Conservation Board Department of Natural Resources North Poudre Irrigation Company

September 2015 Board Meeting

(Loan Increase)

LOAN DE	TAILS
Project Cost:	\$868,000
CWCB Loan (with Service Fee):	\$876,680
Loan Term and Interest Rate:	27 Years @ 2.35%
Funding Source: Severence	e Tax Perpetual Base Fund
BORROWE	R TYPE
Agriculture Municip	al Commercial
37% 1% Low - 57% Mid	d – 4% High <1%
PROJECT	DETAILS
Project Type:	Diversion Rehabilitation
Average Annual Delivery:	44,400 AF



During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including North Poudre Irrigation Company's Fossil Creek Reservoir inlet diversion off the Cache la Poudre River. The purpose of the Project is to

repair the existing diversion structure by rebuilding the check dam and abutment. The Project will restore the structure to pre-flood elevations while modifying the foundation to improve protection against future scouring.

Construction cost increased as a result of final design and the new requirement to route river flows through the construction site. Bids were received on August 4, 2015 and construction will be completed prior to the 2016 irrigation season.



Water Project Loan Program - Project Data Sheet

COLORADO Colorado Water Conservation Board Department of Natural Resources Attachment 3 Grand Valley Power Plant Rehabilitation

> Orchard Mesa Irrigation District November 2016 Board Meeting

Loan Program

LOA	A N	D	E	Г	4 I	L	S			
Project Cost:							\$	5,20	00,00	00
CWCB Loan (with	Serv	vice Fee	e):				\$	1,7 [,]	17,00)0
Loan Term and In	tere	st Rate				30	Yea	irs (2.0 ھ	%
Funding Source:					C	onst	ruc	tior	ו Fun	d
BOR	R (0 W	ER		Т	Υ	Ρ	E		
		Hydro	powe	r						
PROJ	Е	Hydro C T	opowe D	r E	Т	Α	I	L	S	
PROJ Project Type:	E	Hydro C T	powe. D	r E	Т	A	l lyd	L roe	S lectri	ic

The Orchard Mesa Irrigation District (District) and Grand Valley Water Users Association (Association) are each seeking a loan to cover its cost share for the Grand Valley Power Plant (GVPP) Rehabilitation Project. The GVPP is owned by the Bureau of Reclamation and originally operated by Public Service Company of Colorado (Xcel Engergy) in conjunction with the Cameo coal fired power plant. The District and Association took operational control of the plant when Xcel decided to cease its operations. The District and Association equally split costs and revenues



from the GVPP under a Lease of Power Privilage with Reclamation and a Power Purchase Agreement with Xcel. In addition to being a revenue source, the GVPP serves an important role in providing water to the "15-Mile Reach" which has been designated by the Upper Colorado River Endangered Fish Recovery Program as critical habitat. The non-consumptive hydropower water right ensures continued flows for this important stretch of river.

The goal of the Project is to bring the GVPP up to a sustainable operating condition and meet current electric and safety standards. The GVPP was built in the early 1930s and has seen no major upgrades or modernization to date. Under current operations, the "water-to-wire" efficiency is approximately 54% with a maximum generation output of 2.5 MW. Calculations show as much as 4.1MW production should be feasible based on flow rate and available head.



Water Project Loan Program - Project Data Sheet

COLORADO Colorado Water Conservation Board Department of Natural Resources Loan Program Attachment 3 Orchard Ranch Ditch Pipe Project

Orchard Ranch Ditch Company

January 2016 Board Meeting

LOAN DET A	AILS
Project Cost:	\$1,430,720
CWCB Loan (with Service Fee):	\$151,500
Loan Term and Interest Rate:	30-Years @ 1.95%
Funding Source: Severance Tax	Perpetual Base Fund
BORROWER	ΤΥΡΕ
Agriculture Municipal	Commercial
86% 14% Low - 0% Mid - 0%	High 0%
PROJECT DE	TAILS
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	2,750 AF

The Company serves approximately 350 irrigated acres in Delta County, approximately 10 miles north of the town of Delta, diverting all its supplies via a concrete diversion structure on Surface Creek. The Company's ditch was constructed in the late 1800s by a group of early settlers cooperating to get water to their new farms, and has been in continuous operation since that time. The

L O C A	ΤΙΟΝ
County:	Delta
Water Source:	Surface Creek
Drainage Basin:	Gunnison River
Division: 4	District: 40

proposed project will pipe the 1.6 mile long main earthen canal and portions of 4 laterals. The project will be done in conjunction with the U.S. Bureau of Reclamation's Colorado River Basin Salinity Control Program. Approximately 90% of project costs will be provided by a grant from the the U.S. Bureau of Reclamation. Construction is expected to begin in mid-2016 with completion by mid-2017.



CWCB Construction Loan Program Project Data Sheet

Borrower: Overland Ditch and Reservoir Co.	County: Delta
Project Name: Overland Reservoir Enlargement	Project Type: Reservoir Enlargement
Drainage Basin: Gunnison River Basin	Water Source: Cow Creek
Total Project Cost: \$1,255,555	Funding Sources: CWCB & Local Bank
Type of Borrower: Agricultural	Average Delivery: 17,000 acre-feet
Loan Amount: \$1,130,000	Interest Rate: 2.5% Term: 30 years

The Overland Reservoir Company is a non-profit mutual ditch company established in the State of Colorado in 1895. The Company owns and operates the Overland Reservoir for the 120 shareholders and delivers an average of 17,000 AF of irrigation water annually. The Reservoir is located in Delta County in the Gunnison National Forest at an elevation of 10,000 feet. The Reservoir has a current storage capacity of 6,200 AF and will be increased to 7,171 AF with this project. The reservoir was built in 1905 and required significant repair work in 1987 by the Company with financial assistance from CWCB and the Bureau of Reclamation. This project consists of raising the spillway elevation by 3.8 feet, installing toe drains, increasing the dam crest width and adding necessary embankment protection. Construction is scheduled to begin in the summer of 2007.



CWCB Construction Loan Program Project Data Sheet

Borrower: Riverside Reservoir and Land Co.	County: Weld
Project Name: Emergency Spillway Project	Project Type: Reservoir Rehabilitation
Drainage Basin: South Platte	Water Source: South Platte River
Total Project Cost: \$3,120,000	Funding Sources: Severance Tax Trust Fund Perpetual Base Account
Type of Borrower: Agricultural	Average Delivery: 39,000 AF (from Reservoir storage) (105,000 Total AF for Company)
Loan Amount: \$2,838,100 (Including 1% fee)	Interest Rate: 2.5% Term: 30 years

The Riverside Reservoir and Land Company (Company) owns and operates the 64,000 acre-foot capacity Riverside Dam and Reservoir, an inlet canal known as Riverside Ditch, and a river diversion structure located near the town of Kersey, Colorado. The Company diverts water from the South Platte River, approximately 10 miles downstream of Greeley, Colorado. It stores water primarily during winter months for irrigation releases during the following water season. The Company, formed in 1902, delivers irrigation water to approximately 50,000 acres. The Company is applying for a loan to install a spillway at Riverside Reservoir (Reservoir). The Reservoir is not equipped with an emergency spillway, which is required by the DWR's *Rules and Regulations for Dam Safety and Dam Construction*. There is currently a nominal restriction of 0.05 feet (200 AF of storage loss) due to the lack of a spillway. In order to enhance the safety of the Reservoir and prevent further storage restrictions, the Company plans on constructing an emergency spillway. The final design is expected to be complete in January 2010 with construction occurring from July 2010 through March 2011.





COLORADO Colorado Water

Sanchez Reservoir Outlet Rehabilitation Project

Conservation Board Department of Natural Resources Sanchez Ditch and Reservoir Company

May 2017 Board Meeting

(2nd Loan Increase)

LOAN DETA	AILS
Project Cost:	\$2,402,000
CWCB Loan (with Service Fee):	\$1,502,476
Loan Term and Interest Rate:	40 Years @ 2.0%
Funding Source: Const	ruction Fund / WSRF
BORROWER	ΤΥΡΕ
Agriculture Municipal	Commercial
100% 0% Low - 0% Mid - 0% I	High 0%
PROJECT DE	TAILS
Project Type:	Dam Rehabilitation
Average Annual Delivery:	15,000AF

The Sanchez Ditch and Reservoir Company provides irrigation water for users in Costilla County, southwest of the town of San Luis. Its primary storage reservoir is Sanchez Reservoir. The approximately 104,000 acre-foot reservoir was built in 1910. The reservoir's outlet originally included a 135 foot tall concrete gate tower. To operate the dam, a tramway/gondola ran along a



cable and was powered by a portable gasoline generator. Because daily access to the tower was required during irrigation season, the reliability and safety of the gondola system had been a concern of the Company. Using loan and grant funds, the Company replaced the outlet tower with new control gates and operators; patched the outlet conduit; repaired the downstream outlet structure. It is in the process of addressing seepage monitoring concerns. The seepage monitoring (both installation of equipment and engineering to review and analyze the data) is more expensive than the Company originally budgeted. Therefore, the Company is requesting a \$120,000 loan increase. With this increase the total CWCB funding into the project will be \$1,502,476 in loan funds and \$914,400 in Water Supply Reserve Fund Grant funds.





Rio Grande Reservoir Rehabilitation Project

San Luis Valley Irrigation District

LOAN DETAILS	
Project Cost: \$25M	Λ
Funding Package: \$10M Grant & \$15M Loan	n
Loan Term and Interest Rate: 30 years @1.659	6
Funding Source: Const Fund & NonReimbursable	Э
BORROWER TYPE	
Agriculture Municipal Commercia	Ι
100% 0% Low - 0% Mid - 0% High 0%	
PROJECT DETAILS	
Project Type: Reservoir Rehabilitation	ſ
Preserved Storage: 51,113 A	F

The San Luis Valley Irrigation District is applying for a loan and grant for the Rio Grande Reservoir Rehabilitation - Phase 2 (Project). The purpose of the Project is to rehabilitate the outlet works of the onchannel Rio Grande Reservoir Dam. The Reservoir has a capacity of 51,113 acre-feet and delivers water to nearly



March 2018 Board Meeting

62,000 acres of agricultural land in the San Luis Valley. The Reservoir's outlet has long been a limiting factor in the administration of the Rio Grande.

This Project is vital to the basin and region as it will provide operational efficiencies by better managing the timing of water stored and released from the Reservoir. This will result in improved stream health and utilization of Rio Grande water by the District, the State of Colorado, and the many other water users in the basin.

The total Project cost estimate (Phase 1 & 2) is \$30,000,000. The District received a \$5,000,000 grant in Projects Bill SB12S-002 for Phase 1, which included seepage control improvements, a U.S. Forest service land exchange, and final design of the outlet works. SB12S-002 also included an appropriation for a loan and grant funding package of \$15,000,000. A subsequent Projects Bill in 2017 (HB17-1248) increased this loan/grant funding package to \$25,000,000.

The District, is requesting a loan from the CWCB for 60% of the Phase 2 Project costs and a grant for 40% of the Phase 2 Project costs.



Water Project Loan Program - Project Data Sheet



Loan Program Attachment 3 Lake 4 Outlet Pipeline Repair

St. Vrain and Left Hand Water Conservancy District January 2017 Board Meeting

LOAN DETAI	LS
Project Cost:	\$912,000
CWCB Loan (with Service Fee):	\$619,130
Loan Term and Interest Rate:	30 Years @ 2.85%
Funding Source: C	onstruction Fund
BORROWER T	ΥΡΕ
Agriculture Municipal	Commercial
3	
0% 0% Low - 0% Mid - 97% Higl	n 3%
0% 0% Low - 0% Mid - 97% Higi P R O J E C T D E T	n 3% AILS
0% 0% Low - 0% Mid - 97% High P R O J E T Project Type: Reserve	n 3% A I L S bir Rehabilitation
0% 0% Low - 0% Mid - 97% High P R O J E C T D E T Project Type: Reserve Average Annual Delivery:	n 3% A I L S bir Rehabilitation 182 AF



The St. Vrain and Left Hand Water Conservancy District and Boulder County Parks and Open Space jointly own a lined reservoir known as Rock'n WP Ranch Lake No. 4 (Lake 4). Lake 4 was created by reclaiming mined slopes, installing a slurry wall liner around the former gravel pit,

and installing inlet and outlet structures. The outlet works included a half-mile-long 18-inch reinforced concrete pipe approximately extending from the dam to the St. Vrain Creek. The District and County County recently inspected the outletworks pipeline and determined that it is leaking in several locations. It is critical for reservoir accounting and water rights administration purposes that the water delivered through the pipeline be water from Lake 4 and not groundwater leaking into the pipe between the dam and the river. Therefore the District and Boulder County desire to repair the pipe to resolve the leakage and to extend the service life of the structure.



Water Project Loan Program - Project Data Sheet

Borrower:	St. Vrain and Left Hand Water Conservancy District	County: Boulder	
Project Nam	e: Emergency Rock'n WP Ranch Lake No. 4 Repair Project	Project Type: Res	ervoir Rehabilitation
Drainage Ba	sin: South Platte	Water Source:	St. Vrain Creek
Total Projec	t Cost: \$9,000,000	Funding Source:	Severance Tax Perpetual Base Fund
Type of Bor	rower: Blended	Average Annual A Preserved Water	ugmentation: 200 AF Supply Storage: 600 AF
CWCB Loan:	\$4,545,000 (with 1% service fee)	Interest Rate: 3.2 (Ownership: 93% H	12% Term: 30-years ligh Municipal, 7% Commercial)

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the District's Rock'n WP Ranch Lake No. 4. During the flood, St. Vrain Creek breached in over four locations above the Lake. The unlined gravel pits above the Lake were flooded, causing their earthen embankments to fail, sending flood water into the Lake. The Lake filled and eventually overtopped, breaching its eastern embankment. The purpose of the Project is to repair the Lake to resume its use as a water augmentation reservoir by the District. Boulder County is a co-owner of the Lake. As the County and the District are public agencies, it is expected that FEMA will reimburse 75% of the Project Cost and the State's Public Assistance Program will cover 12.5% under their respective emergency programs. The remaining cost of repairs will be evenly split with Boulder County.





Attachment 3 Arkansas Valley Conduit Phase One Pueblo Dam Hydroelectric Project

Southeastern Colorado Water Conservancy District

July 2016 Board Meeting

Loan Program

LOAN DET	AILS		
Project Cost:	\$19,060,000		
CWCB Loan (with Service Fee):	\$17,392,200		
Loan Term and Interest Rate: 30 Years @ 2.0%			
Funding Source:	Severance Tax PBF		
BORROWER	ТҮРЕ		
Hydropower			
PROJECT DE	TAILS		
Project Type: Hydroelectric			
2 21			

Southeastern Colorado Water Conservancy District, acting by and through its water activity enterprise, is applying for a loan for the construction of the Pueblo Dam Hydroelectric Project. The Project is located at the existing Pueblo Dam and will utilize the existing releases to the Arkansas River without changing the flow regime. This Project is being constructed as Phase One of the overall Arkansas Valley Conduit project, authorized in the

LOCA	TION
County:	Pueblo
Water Source:	Arkansas River
Drainage Basin:	Arkansas River
Division: 2	District: 10

2007 and 2009 Projects Bill (SB07-122, SB09-125). The purpose of the Project is to develop a revenue source to offset the operational and maintenance cost of the Arkansas Valley Conduit.

The proposed 7.5 megawatt facility will be located on the North Outlet of Pueblo Dam. A powerhouse would be located at the downstream end of the existing outlet works that supplies water to the Arkansas River and would allow the Dam's authorized releases to generate an annual average 28 million kWh (enough to power approximately 3,300 homes) and \$1,500,000 in average revenue per year. The Project is being performed under the U.S. Bureau of Reclamation's Lease of Power Privilege (LOPP) process. Power generated will be purchased by Colorado Springs Utilities via transmission through the local Black Hills Energy power delivery system. Construction is planned to start in October 2016 for commissioning in May 2018.





Loan Program Attachment 3 Storage Development and Water Rights Purchase

Town of Firestone

November 2016 Board Meeting

LOAN	DET	AIL	S
Project Cost:		9	\$10,043,150
CWCB Loan (with Servic	e Fee):	0	\$10,000,000
Loan Term and Interest	Rate:	20 Ye	ars @ 2.35%
Funding Source:		Constr	uction Fund
BORRO	WER	ТҮ	ΡE
Agriculture	Municipal	(Commercial
Agriculture 0% 0% Low -	Municipal 0% Mid - 10	()% High	Commercial 0%
Agriculture 0% 0% Low - P R O J E C	Municipal 0% Mid - 100 T D	()% High E T A	Commercial 0% I L S
Agriculture 0% 0% Low - P R O J E C Project Type:	Municipal 0% Mid - 100 T D Storage and	()% High E T A Water Righ	Commercial 0% L S its Purchase
Agriculture0%0%PROJECProjectType:AverageAnnualDeliver	Municipal 0% Mid - 100 T D Storage and	(D% High E T A Water Righ	Commercial 0% L S Its Purchase 2442 AF

The Town of Firestone's boundary encompasses approximately 9,089 acres and is generally located east of Interstate 25 between Highway 66 and Highway 52. The Town of Firestone provides water and wastewater services to approximately 12,110 residents and operates a water distribution network of approximately 58.5 miles of pipeline and associated facilities. The purpose of this

LOCAT	I O N
County:	Weld
Water Source: St	. Vrain River /
	Boulder Creek
Drainage Basin: Sou	th Platte River
Division: 1 Distric	t: 2

project is to provide a water storage project to help meet the Town's current and future non-potable water needs. For planning purposes, the Town is pursuing a little over two times the demand, or 2,000 acre-feet of non-potable storage for the Town. As a short-term water supply goal, the Town is requesting funds to Purchase the Carbon Valley Resource Pit and acquire 1,092 acre-feet as part of this project.



Water Project Loan Program - Project Data Sheet



Colorado Water Conservation Board Mountain Home Dam Outlet Rehabilitation Phase III

Department of Natural Resources

Trinchera Irrigation Company March 2018 Board Meeting

LOAN DETA	A I L S
Project Cost:	\$987,000
CWCB Loan (with Service Fee):	\$440,360
Loan Term and Interest Rate:	30 years @ 1.65%
Funding Source: Severar	nce Tax PBF & WRSF
BORROWER	ΤΥΡΕ
Agriculture Municipal	Commercial
100% 0% Low - 0% Mid - 0% H	ligh 0%
PROJECT DE	TAILS
Project Type:	Dam Rehabilitation



Trinchera Irrigation Company is located in Costilla County and owns and operates Mountain Home Reservoir, Smith Reservoir, and approximately 26 miles of canals and 45 miles of laterals. Mountain Home Reservoir (Reservoir) was built in 1908 and has a capacity of 17,964 AF. The Reservoir's primary function is for irrigation but Colorado

Parks and Wildlife operates a State Wildlife Area around the Reservoir and maintains a conservation pool of 653 AF in the Reservoir.

The Reservoir's existing outlet works experience significant leakage and since only one of the three valves is operable, does not meet the State Engineer's Office, Dam Safety Branch's emergency drawdown requirements. This Project will replace the original valves with new valves and make other minor repairs to the outlet including a new trash rack, line the outlet tunnel and tower, and replace the gate house. Successful repair of the dam outlet works will prevent a storage restriction, recover approximately 2,000 AF currently lost to leakage, and ensure the long-term integrity and protection of 11,800 acres of irrigated land, as well as the environment, wildlife, and recreation at the State Wildlife Area. Funding for the project will come from the CWCB loan and \$513,000 in WSRF grant funds.





Laramie-Poudre Tunnel Rehabilitation

Loan Program Attachment 3

The Tunnel Water Company September 2015 Board Meeting

LOAN DETAILS	
Project Cost: \$1,225,00	0
CWCB Loan (with Service Fee): \$1,111,00	0
Loan Term and Interest Rate: 30 Years @ 2.55	%
Funding Source: Construction Fun	d
BORROWER TYPE	
Agriculture Municipal Commercia	l
24% 20% Low - 24% Mid - 32% High 0%	
PROJECT DETAILS	
Project Type: Ditch Rehabilitatio	n
Average Annual Diversion: 6,875 A	F

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 County:
 Larimer

 Water Source:
 Laramie River

 Drainage Basin:
 North Platte/South Platte

 Division:
 1
 District:
 48/3

The Tunnel Water Company operates the Laramie-Poudre Tunnel for the benefit of its two shareholders: Water Supply and Storage Company (WSSC) and Windsor Reservoir and Canal Company (WRCC). The tunnel diverts from the Laramie River, about 60 miles west of Fort Collins, and delivers water through a 2.15-mile tunnel to the Poudre River. WSSC delivers irrigation water to its

shareholders, primarily for agricultural irrigation on approximately 40,000 acres lying below the Larimer County Canal. WRCC delivers water to its municipal shareholders via the Soldier Canyon and Bellvue Water Treatment Plants.

The Company purchased the Laramie Poudre Tunnel and its adjoining Laramie River System in 1938. The west portal (inlet) has deteriorated since it was originally constructed in 1910. The interior timber cribbing and concrete lining are at or near the end of their useful lives and the steepness of the slope of this section makes it very difficult to access the tunnel for maintenance. Additionally the east portal's (outlet) concrete energy attenuation structure, which has been resurfaced many times before, is heavily spalled and near failure. The Company is seeking this CWCB loan to cover 90% of construction cost associated with the west and east portal repairs. West portal repairs will occur after the 2015 irrigation season with the east portal repairs being completed after the 2016 irrigation season.



Water Project Loan Program - Project Data Sheet



Attachment 3 Wiggins Recharge Facility at Glassey Farms

Loan Program

Town of Wiggins March 2017 Board Meeting

L O A N D	ETAILS
Project Cost:	\$2,385,000
CWCB Loan:	\$2,408,850
Loan Term and Interest Rate:	30 Years @ 2.40%
Funding Source:	Severance Tax PBF
BORROWI	ER TYPE
Agriculture Munic	icipal Commercial
0% 100% Low - 0%	5 Mid - 0% High 0%
PROJECT	
Project Type:	Augmentation

2 3 0 0 Morgan County: South Platte River Water Source: Drainage Basin: South Platte River Division: District: 1 1

The Town of Wiggins, through a water activity enterprise, provides service to approximately 900 residents. The Town anticipates considerable growth over the next 10 years due to four new developments recently annexed into the Town limits. Those developments are projected to bring up to 310 jobs into Wiggins over the next 5 years and approximately 500 new single family units and 150 multi-family units.

Historically the Town has relied on non-tributary wells drilled into the Kiowa Bijou Designated Ground Water Basin. Due to water quality issues and dropping aguifer levels, the Town drilled two wells into the South Platte Alluvial Aquifer. Those wells are augmented through the Kammerer Recharge site and augmentation water leases. In order to develop a reliable and long-term augmentation water supply, the Town will purchase the Glassey Farm and associated water rights. Recharge ponds will take approximately 40 acres and the Town is in negotiations with Morgan County Community College to share the remaining farmland for an agricultural education program focused on low watering farming techniques. Construction is planned to begin summer 2017 and be complete by fall 2017.



Project Dat	C15040	
Borrower: Cottonwood Water & Sanitation District	County: Douglas & Arapahoe	
Project Name: Water Infrastructure and Supply (WISE) Efficiency Project	Project Type: New Water Supply	
Drainage Basin/ District: South Platte / 8	Water Source: South Platte	
Total Project Cost: \$4,960,000	Funding Source: Construction Fund	
Type of Borrower: High-Income Municipal	Average Annual Delivery: 789 AF	
CWCB Loan: \$4,508,640 (with 1% service fee)	Interest Rate: 3.00% Term: 30 years	

In 1981, the Cottonwood Water & Sanitation District was formed, pursuant to Title 32 C.R.S., to provide water supply and treatment systems for customers within its service area.

Cottonwood's local project infrastructure components will extend from an existing tee located on the ECCV Western Pipeline, where a below-grade vault with flow control and metering equipment will be installed. From this location 500 feet of 36-inch pipe will be installed to connect to an existing Cottonwood pipeline. In addition, Cottonwood will also participate in a Rueter-Hess Reservoir fill pipeline and pump station being constructed by Parker.

The WISE Project is the result of regional cooperative planning efforts between Denver Water, Aurora Water, and 10 regional water providers in the south metropolitan area. The South Metro WISE Authority (WISE Authority) is comprised of ten governmental water providers in Douglas and Arapahoe Counties bound together by a 2013 Intergovernmental Agreement. The WISE Project will reduce dependence on non-renewable groundwater resources.



C150409

Borrower: Inverness Water & Sanitation District	County: Douglas & Arapahoe
Project Name: Water Infrastructure and Supply (WISE) Efficiency Project	Project Type: New Water Supply
Drainage Basin/ District: South Platte / 8	Water Source: South Platte
Total Project Cost: \$5,400,000	Funding Source: Construction Fund
Type of Borrower: High-Income Municipal	Average Annual Delivery: 1,100 AF
CWCB Loan: \$4,908,600 (with 1% service fee)	Interest Rate: 2.75% Term: 20 years

In 1973, Inverness was formed pursuant to Article 1 of Title 32 C.R.S. to provide water supply and treatment systems for the customers within their service area.

Inverness will have a connection to the East Cherry Creek Valley (ECCV) Western Pipeline near the intersection of South Jamaica Street and E-470. Immediately downstream of the connection will be a below-grade vault with flow control and metering equipment. Downstream of the vault will be approximately 1,800 feet of 10-inch pipe to connect to the existing Inverness distribution system.

The WISE Project is the result of regional cooperative planning efforts between Denver Water, Aurora Water, and 10 regional water providers in the south metropolitan area. The South Metro WISE Authority (WISE Authority) is comprised of ten governmental water providers in Douglas and Arapahoe Counties bound together by a 2013 Intergovernmental Agreement. The WISE Project will reduce dependence on non-renewable groundwater resources.



C150410

Borrower: Parker Water & Sanitation District	County: Douglas & Arapahoe
Project Name: Water Infrastructure and Supply (WISE) Efficiency Project	Project Type: New Water Supply
Drainage Basin/ District: South Platte / 8	Water Source: South Platte
Total Project Cost: \$17,305,500	Funding Source: Construction Fund
Type of Borrower: High-income Municipal	Average Annual Delivery: 5,000 AF
CWCB Loan: \$15,734,790 (with 1% service fee)	Interest Rate: 2.75% Term: 20 years

Parker Water and Sanitation District is a quasi-municipal corporation and political subdivision of the State of Colorado created in 1962 in Douglas County, for the purpose of providing water and sanitary sewer services its users.

Parker will take the lead on construction of 20,300 feet of new 42-inch pipeline from near the intersection of Chambers Road and E-470 to the Parker Water Treatment Plant located just south of Rueter-Hess Reservoir. Southward from the treatment plant a 16.5 million gallons per day pumping station will be constructed, followed by 9,000 feet of new 24-inch pipe that will allow WISE water to be conveyed to Rueter-Hess Reservoir for storage. Parker's facilities will oversized for use by other WISE Authority members.

The WISE Project is the result of regional cooperative planning efforts between Denver Water, Aurora Water, and 10 regional water providers in the south metropolitan area. The South Metro WISE Authority (WISE Authority) is comprised of ten governmental water providers in Douglas and Arapahoe Counties bound together by a 2013 Intergovernmental Agreement. The WISE Project will reduce dependence on non-renewable groundwater resources.



C150411

Borrower: Denver So and Sanita Pinery Wa	outheast Suburban Water tion District (dba tter and Wastewater District)	County: Douglas
Project Name: Water (WISE	Infrastructure and Supply E) Efficiency Project	Project Type: New Water Supply
Drainage Basin/ Dist	rict: South Platte / 8	Water Source: South Platte
Total Project Cost:	\$10,920,000	Funding Source: Construction Fund
Type of Borrower: H	ligh-income Municipal	Average Annual Delivery: 2,837 AF
CWCB Loan: \$9,926	,280 (with 1% service fee)	Interest Rate: 3.00% Term: 30 years

In 1965, the District was formed as the Denver Southeast Suburban Water and Sanitation District. The District has been providing water and wastewater services since 1971 to its predominately residential customers.

The District will participate in Parker's WISE infrastructure components including 20,300 feet of new 42-inch pipeline from near the intersection of Chambers Road and E-470 to the Parker Water Treatment Plant located just south of Rueter-Hess Reservoir. At the Parker Water Treatment Plant site a new 16.5 million gallons per day pumping station will be constructed. Downstream of the pumping station 9,000 feet of new 24-inch pipe will be constructed that will allow WISE water to be conveyed to Reuter-Hess Reservoir for storage. In addition, Pinery will construct about 6,200 feet of 12-inch pipeline to deliver water to an existing finished water distribution system pumping station.

The WISE Project is the result of regional cooperative planning efforts between Denver Water, Aurora Water, and 10 regional water providers in the south metropolitan area. The South Metro WISE Authority (WISE Authority) is comprised of ten governmental water providers in Douglas and Arapahoe Counties bound together by a 2013 Intergovernmental Agreement. The WISE Project will reduce dependence on non-renewable groundwater resources.



Loan Program Attachment 3

Projects Not Under Contract



Hess Lateral Improvement

Florida Consolidated Ditch Company May 2017 Board Meeting

LOAN	DETAILS
Project Cost:	\$2,800,000
CWCB Loan:	\$1,085,750
Loan Term and Interest Ra	ate: 30-years @ 1.80%
Funding Source: Seve	erance Tax Perpetual Base Fund
BORROW	ER TYPE
Agriculture Mu	unicipal Commercial
100%	0% 0%
PROJECT	DETAILS
Project Type:	Ditch Rehabilitation
Average Annual Diversion:	43,000 AF

The Hess Lateral, part of the Florida Consolidated Ditch Company water conveyance system, is located 7 miles south of Durango, CO on the Florida Mesa. The lateral serves approximately 67 users irrigating over 1,500 acres of hay and pasture land. The project will replace the open ditch with buried gravity-pressurized pipeline and

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Count	y:					La	Plata
Water	Sour	ce:			Α	nimas	River
Draina	ige B	asin:	Sa	n Jua	n/Do	olores	River
Divisio	on:	7		Distri	ict:	30)

relocate approx. 21,100 feet of the Hess Lateral due to expansion of HWY 550. CDOT has committed \$950,000 to the project. The company also received approval of a \$775,000 WSRF grant at the September 2015 meeting. Final design of the project is expected to begin in the fall of 2017 and construction will likely follow one year later.







Dry Gulch Reservoir Land Acquisition

San Juan Water Conservancy District

May 2017 Board Meeting

LOAN DETAILS	
Project Cost: \$2	2,000,000
CWCB Loan (with Service Fee): \$2	2,000,000
Loan Term and Interest Rate: 30 Year	s@2.55%
Funding Source: Construc	tion Fund
BORROWER TYP	Е
Agriculture Municipal Co.	mmercial
0% 100% Low - 0% Mid - 0% High	0%
PROJECT DETAI	LS
Project Type: Water Storage Land A	cquisition
Average Annual Delivery:	NA

The District was created in 1987 with a purpose to conserve, maximize, and utilize the water resources of the San Juan River and its tributaries, with the primary function to address future water supply needs within its boundaries. Population projections predict an increase of 25,400 county-wide by 2070, an increase that could produce a water supply gap of 4,300 AF per year.



The District has identified the development of Dry Gulch Reservoir as a top priority project for the region's long-term water supply solution. This reservoir site has been under consideration since the 1960s and has been identified in 1989 and 2003 as a preferred water storage location for diversions from the San Juan River. A previous CWCB loan to the Pagosa Area Water and Sanitation District and a WSRF grant to the San Juan Water Conservancy District provided funding for the purchase of a large portion of the land needed for the proposed Dry Gulch Reservoir. This loan will acquire the remaining land needed for the proposed reservoir. The overall Dry Gulch Reservoir project will be planned in keeping with the objectives outlined in the Colorado Water Plan for new water storage, by not only off-setting the projected water supply gap, but also providing water resources for non-consumptive uses to enhance environmental and recreational opportunities of state and local economic benefit. Planning and permitting for the reservoir is expected to take up to 10 years. This loan will not provide funds for reservoir construction.



Water Project Loan Program - Project Data Sheet

Water Project Construction Loan Program - Project Data

Borrower: SECWCD - Enterprise	County: Pueblo, Crowley, Otero, Bent, Prowers
Project Name: Arkansas Valley Conduit	Project Type: Water Supply Pipeline
Drainage Basin: Arkansas	Water Source: Arkansas – Fry-Ark Project
Total Project Cost: \$300,000,000	Funding Sources: CWCB, Federal
Type of Borrower: Municipal/Low	Aver. Delivery: 6,555 AF (2005 demand)
CWCB Construction Fund Loan: \$60,600,000 (incl. 1% loan fee)	Interest Rate: 3.25% Term: 30 years

The Arkansas Valley Conduit is designed to bring relatively clean raw water to 41 water providers in the lower Arkansas Valley, who currently either take water from the Arkansas River, and/or pump from shallow and\or deep aquifers. This pumped water has quality problems and requires significant treatment before it meets Clean Drinking Water standards. The conduit will begin at Pueblo Reservoir Dam, where a 30.94 cfs municipal outlet is already in place and reserved for the specific use of the conduit. The conduit will gravity flow approximately 138 miles down the Arkansas River Valley to Lamar. The conduit water will flow by the St. Charles Mesa Water District where it will enter a water filtration plant. As the conduit moves down the valley, spurs will take off the main line to deliver water to local and regional water providers. The conduit will receive its water from the USBR Fryingpan-Arkansas Project. Currently, about 5,779 acre-feet of water per year is available for entities East of Pueblo in an average year. Additionally, Return Flows are retained by the District and can be exchanged back up to Pueblo Reservoir for delivery. These Return Flows can provide up to an additional 1,600 acre-feet of water. Storage is available to these entities in Pueblo Reservoir because they are in the SECWCD service area. This storage will help provide water in the years when less than average water is provided by the Fry-Ark Project. The water will be provided strictly for municipal and industrial purposes. Final chlorination or treatment will be left up to each water provider. The conduit is currently planned to be paid 80% (approximately \$240 million) by the federal government.



Location Map



City Lake Dam Rehabilitation & Enlargement

City of Walsenburg July 2017 Board Meeting

L	0	Α	Ν	D	Ε	Т	Α		L	S			
Project Cos	t:									\$6	5,8	21,0	000
CWCB Loan	(wit	h Se	rvic	e Fee	e):					\$(5,8	89,2	210
Loan Term a	and I	ntei	rest	Rate	1			6.5	80 y	/ea	rs	@ 2	.0%
Funding Sou	irce:								Se	ver	an	ice 7	Гах
B C) R	R	0	W	Е	R	٦	- `	Y	Р	Ε		
Agriculture	ò			Mun	icip	al				Со	mn	nerc	ial
0%	1	00%	Lov	N - 0%	6 Mi	d - ()% H	igh			C)%	
PR	0 J	E	С	Т		DI	ΕT	- /	4		L	S	
Project Typ	e:					Re	eserv	voir	· Re	eha	bil	itat	ion
Average Ani	nual	Del	iver	y:								730	AF
Total Reser	voir	Stor	rage	:								531	AF
Water Stora	ige D	eve	lope	ed:								120	AF

The City of Walsenburg's City Lake dam and reservoir provides the primary water supply and storage for the City's water treatment plant located downstream of the dam. This dam has been subject to a State Engineer's Office (SEO) safety compliance plan since September of 2014, and a formal storage restriction since April 2017 as a result of dam safety deficiencies including seepage, stability, and spillway capacity. The dam safety imposes a 1-foot storage restriction on April 1, 2017, a 2-foot storage restriction on November 15, 2017, and a 3-foot storage restriction on May 1, 2019.

The City needs the full storage capacity of City Lake to adequately supply their water treatment plant and to ensure future water supplies.

Elements of the Project include dam embankment reconstruction, new outlet works, new spillway construction, riprap channel lining, and a temporary bypass conduit to route water to the water treatment plant. The project will increase storage by 120 acre-feet by raising the dam embankment three feet. Construction is planned for 2017/2018.









Tunnel and Canal Renovation

Fruitland Irrigation Company September 2017 Board Meeting

LOAN DE	TAILS
Project Cost:	\$10,509,000
CWCB Loan (with Service Fee):	\$1,746,290
Loan Term and Interest Rate:	40 Years @ 2.0%
Funding Source: Severance	e Tax PBF and WSRF Grant
BORROWE	R T Y P E
Agriculture Municip	al Commercial
100% 0% Low - 0% Mic	l -0% High 0%
PROJECT	DETAILS
Project Type:	Ditch Rehabilitation
Average Annual Diversions	10 102 AF



The Company owns and operates the 17.7 mile-long earthen Fruitland Highline Canal, the 22 mile-long earthen Gould Canal including 0.8 miles through two rock tunnels, and the 10,168 AF Gould Reservoir. The Fruitland Highline Canal diverts from Crystal Creek, 13 miles south of the Town of Crawford and provides irrigation water to approximately 5,900 acres in Delta and Montrose Counties.

The Company is seeking a CWCB Loan and a WSRF Grant as part of an overall funding package for the Tunnel and Canal Renovation Project. The two tunnels in the Gould Canal are over 100 years old and have eroded to the point that its structural integrity is threatened. A collapse would eliminate the ability to deliver irrigation water after the junior direct flow rights are out of priority, typically in mid-June. Additionally, the Fruitland Highline and Gould Canals are located within the Colorado River salinity control area. The seepage losses are estimated to be 12.5 cfs, or 1856 AF annually which equates to approximately 6,053 tons of salt to the Colorado River system.

CWCB funding will be used to pipe the Gould Canal from Gould Reservoir through the two tunnels, a distance of approximately 2.1 miles and line the earthen canal for approximately 10.3 miles.





Arkansas River and Wildhorse Creek Levee Rehabilitation Pueblo Conservancy District

September 2017 Board Meeting

LOAN DETAIL	S
Project Cost:	\$23,000,000
CWCB Loan (with Service Fee):	\$17,170,000
Loan Term and Interest Rate: 30 y	ears at 2.45%
Funding Source: Severance Tax Perpetu	al Base Fund
B O R R O W E R T Y	ΡΕ
Agriculture Municipal	Commercial
0% 100% Low - TBD% Mid -0% High	0%
PROJECT DETA	ILS
Project Type	Icad Control
Troject Type.	-lood Control

The District was formed in response to the 1921 flood in Pueblo. Its primary function is flood protection within its designated boundaries. In 2006, the District was advised that unless the Arkansas and Wildlhorse Creek levees were accredited by the Federal Emergency Management Agency (FEMA), the City would lose it protected status which ensures that flood insurance can be provided at



affordable rates. To date, the District has completed the reconstruction and stabilization of 6,600 feet of the Arkansas River Levee, the top 12-feet of an additional 4,400 feet of the Arkansas Levee embankment has been removed, and 2,800 feet of Wildhorse Creek Levee has been constructed. The next phase of work is scheduled to begin in late 2017. Construction is limited to November to March when river flows are the lowest. The entire project is expected to be complete in 2022.



Water Project Loan Program - Project Data Sheet

COLORADO Colorado Water

Windy Gap Firming Project

Conservation Board ML Department of Natural Resources

Municipal Subdistrict, Northern Colorado Water Conservancy District Windy Gap Firming Project Water Activity Enterprise

November 2017 Board Meeting

LOAN DE 1	F A I L S
Project Cost:	\$440,000,000
CWCB Loan (with Service Fee):	\$90,000,000
Loan Term and Interest Rate:	30 years @ 3.10%
Funding Source: Revenue Bonds &	Construction Fund Loan
BORROWER	ΤΥΡΕ
Municipal	
P R O J E C T D	ETAILS
Project Type:	New Reservoir
Now Storage Conscitu	00.000.45

In 1970, six Northern Colorado cities formed the Municipal Subdistrict to plan, finance, and build the Windy Gap project. That project was completed in 1985. The annual delivery of Windy Gap water is not reliable because in dry years the junior water rights may not come into priority, and in wet years, there may not be room in Lake Granby to store Windy Gap water. L O C A T I O N County: Larimer, Boulder, Broomfield, Weld Water Source: Drainage Basin: Division: 1 District: 2,3,4,5,6

In 1999, The Subdistrict formed the Windy Gap Firming Water Activity Enterprise with the purpose of pursuing activities that would lead to firming the yield of Windy Gap water. Participants identified 30,000 AF as a goal for total firm yield. After a review of over 170 alternatives, the Bureau of Reclamation and project participants identified the construction of a 90,000 AF Chimney Hollow Reservoir as the preferred alternative. This Project will consist of the construction of Chimney Hollow Reservoir and associated pipelines to deliver water from the existing C-BT infrastructure, as well as environmental mitigation and enhancements. Construction is anticipated to begin in fall of 2018 and be complete in 2022.



Water Project Loan Program - Project Data Sheet



Diversion Structure Rehabilitation

Julesburg Irrigation District May 2018 Board Meeting

LOAN DETA	ILS
Project Cost:	\$3,308,000
CWCB Loan (with Service Fee):	\$3,341,080
Loan Term and Interest Rate:	30 Years @ 1.70%
Funding Source: Se	everance Tax PBF
BORROWERT	ΥΡΕ
Agriculture Municipal	Commercial
98% 1% Low - 0% Mid -0% High	า 1%
PROJECT DET	AILS
Project Type: Diversion Structu	re Rehabilitation
Avorago Appual Divorcions:	

The Julesburg Irrigation District (District) operates a South Platte River diversion structure and the Petersen Ditch headgate as well as other ditches and reservoirs for the benefit of the shareholders by providing direct flow irrigation water. The District service area is comprised of approximately 19,129 acres. The District's diversions from the South Platte River through the Petersen Ditch



are normally 164 cubic feet per second from the South Platte River providing water to 8,925 acres. The diversion of water is accomplished with a concrete diversion dam across the South Platte and a ditch regulating head gate structure. The 1956 river diversion dam is approximately 320 feet wide and the ditch head gate structure is approximately 30 feet wide. The District wants to rebuild the diversion dam and ditch head gate in order to continue water deliveries to the shareholders and provide and improve the structures' operational safety. Construction is anticipated during the 2018-2019 winter months prior to the 2019 irrigation season.





Seeley Reservoir Dredging

Ogilvy Irrigating and Land Company May 2018 Board Meeting

LO	Α	Ν	D	E	Т	Α		L	S			
Project Cost:									\$3	3,6	67,74	0
CWCB Loan (wit	h Se	ervic	e Fee):					\$2	2,2	74,52	0
Loan Term and I	nte	rest	Rate	:			30) Ye	ear	s @	1.70	%
Funding Source:		Seve	rance	e Ta	x Pe	3F 8	W	ate	rР	lar	Gran	nt
BOR	R	0	W	Ε	R		Γ	Y	Ρ	Ε		
Agriculture			Muni	icipa	al				Со	mn	nercia	1
Agriculture 95%			Muni 5%	i <i>cipa</i> Mid	al				Со	mn C	nercia %	n/
Agriculture 95% P R O J	E	C	Muni 5% T	icipa Mid	al D I		ī	A	Co I	mn C	nercia % S	1
Agriculture 95% P R O J Project Type:	Ē	C	Muni 5% T	icipa Mid	al D E Re	eser	voi	<mark>A</mark> r R€	Coi I eha	mn C L bil	nercia % S itatio	n
Agriculture 95% P R O J Project Type: Average Annual	Div	C C	Muni 5% T	icipa Mid	al D I Re	eser	voi	A r Re	Coi I eha	mn C L Ibil	nercia % S itatio 778 A	n F

The Ogilvy Irrigating and Land Company is a Colorado Mutual Ditch that owns and operates Seeley Reservoir and the Ogilvy Ditch. The Ogilvy Ditch system encompasses 3,600 acres from a Cache Ia Poudre River diversion, located on the east edge of Greeley to farms east of Kersey. Seeley Reservoir has a decreed capacity of 1,543



acre-feet. The proposed project will re-establish the physical capacity to this decreed volume. The water stored in the reservoir is used to provide supplemental irrigation supplies to the Ogilvy Ditch service area. Stored water is also used to provide augmentation water for the Ogilvy Augmentation Company, whose members own wells that provide irrigation water within the same service area. This project will recover 356 acre-feet of reservoir storage space that has been lost to sedimentation deposition over many years. New water storage sites have been considered, but would be limited to about 100 acre-feet of capacity. Sedimentation of Seeley Reservoir resulted largely because of the high inflows running through the steep inlet channel above the reservoir. The Colorado Department of Transportation completed major improvements to the Seeley Reservoir inlet channel at State Highway 392 in 2011 that substantially mitigated the conditions causing the erosion within the inlet ditch generating sediment at Seeley Reservoir. It is expected that the recurrence of sedimentation will be limited. Construction is scheduled for the fall of 2018. Funding will come from a Water Plan Grant for \$1,415,740 and a CWCB loan.





San Luis Valley Canal Headgate Construction

LOA	N	DET	AI	LS
Project Cost:				\$569,000
CWCB Loan (with s	service fe	ee):		\$303,000
Loan Term and Int	erest Ra	te:	20	Years @ 1.45%
Funding Source:	Seve	erance Ta	ax PBF ar	nd WSRF Grant
BOR	ROW	E R	ТΥ	ΡΕ
Agriculture	ML	ınicipal		Commercial
100%		0%		0%
PROJ	ЕСТ	D	ΕΤΑ	ILS
Project Type:			Headgate	e Replacement
Average Annual Di	versions:			24,000 AF



San Luis Valley Canal Company

May 2018 Board Meeting

The San Luis Valley Canal Company (Company) was incorporated as a mutual ditch company in 1923. It diverts water from the Rio Grande into the San Luis Valley Canal 4 miles east of the town of Monte Vista.

The irrigation system serves 78 shareholders covering 20,200 irrigated acres. The Project is a structural and

riparian improvement project that will improve the Company's ability to divert its water right as well as meet non-consumptive needs of the area by replacing a poorly functioning headgate and stabilizing streambanks.

The Colorado Rio Grande Restoration Foundation (Foundation) is the fiscal agent for the RGHRP and partnered with the Company, as well as four other ditch companies, to organize and raise funds for diversion and headgate improvement projects that also incorporate streambank stabilization and riparian restoration. The Foundation consolidated the individual ditch projects into a single WSRF Grant request known as "Five Ditches: Rio Grande Diversion and Headgate Improvement Project" (Five Ditches). The Foundation received a WSRF Grant to help cover the implementation cost of Five Ditches at the CWCB September 2017 Board Meeting. Additionally, the Foundation, at the CWCB May 2017 Board Meeting, received a WSRF Grant to cover the cost of engineering design for three headgate improvement projects around the Rio Grande State Wildlife Area, which included this Project. In total, \$263,000 in WSRF grant funding is allocated to the San Luis Valley Headgate Construction Project.

Final Design is expected to be completed in spring 2018 with construction occurring between the 2018 and 2019 irrigation seasons.



Water Project Loan Program - Project Data Sheet

WATER PROJECT CONSTRUCTION LOAN PROGRAM LOAN REPAYMENT DELINQUENCY REPORT LOAN FINANCIAL ACTIVITY REPORT JULY 2018

LOAN REPAYMENT DELINQUENCY

Loan Repayments received relative to the Water Project Construction Loan Program have been reviewed for the period covering July 2017 through June 2018. The effective due date of the payment is inclusive of the Board's current 60 day late policy. Hence, the date the payment was received was compared to the last day allowable prior to the payment being considered late.

Repayments due for Fiscal Year 2018 totaled 326. There were two loan payments not received on time during this period. The loan payment from Fuchs Ranches, Inc. was less than 30 days late. A partial loan payment from the Two Rivers Water Company was less than 30 days late; which, is the first of four partial payments due to financial difficulty. Thus, the on-time performance for the total repayments due was 99% in compliance or 1% not in compliance.

LOANS PAID OFF

During Fiscal Year 2018, there were twenty-three loans repaid in full to the Construction Fund and two loans repaid in full to the Severance Tax Perpetual Base Fund, detailed as follows:

	Borrower	Contract No.	0	riginal Loan	Loan Principal Received	
1	Beaver Park Water, Inc.	C153320	\$	1,500,000	\$	183,550
2	Beaver Park Water, Inc.	C153333	\$	350,000	\$	74,449
3	Beaver Park Water, Inc.	C153355	\$	280,000	\$	69,997
4	Beaver Park Water, Inc.	C153438	\$	125,000	\$	51,780
5	Beaver Park Water, Inc.	C153501	\$	125,000	\$	64,568
6	Cache La Poudre Reservoir Company	C153301	\$	880,000	\$	36,959
7	Central Colorado Water Conservancy District	C150160	\$	4,513,200	\$	3,092,073
8	City of Victor	C150081	\$	600,000	\$	228,195
9	East Dillon Water District	C150100	\$	2,550,000	\$	1,660,564
10	Fruitland Irrigation Company	C153542	\$	168,549	\$	85,863
11	Greeley & Loveland Irrigation Company	C153835A	\$	308,000	\$	152,191
12	John Peroulis & Sons Partnership	C150083	\$	250,000	\$	152,266
13	Kern Reservoir & Ditch Company	C150112	\$	1,000,000	\$	736,266
14	Kern Reservoir & Ditch Company	C150118	\$	3,620,000	\$	2,665,284
15	Lake Henry Reservoir Company	C150098	\$	147,701	\$	85,120
16	Montezuma Valley Irrigation Company	C150333	\$	252,225	\$	223,066
17	New Cache La Poudre Irrigating Company	C153639L	\$	450,000	\$	54,330
18	Overland Ditch & Reservoir Company	C153527	\$	541,947	\$	33,576
19	Smith Irrigation Ditch	C153787	\$	50,000	\$	3,399
20	Swan's Nest Metropolitan District	C150312	\$	151,500	\$	113,489
21	Town of Breckenridge	C153351	\$	1,200,000	\$	269,891
22	Town of Parachute	C153314	\$	250,000	\$	12,268
23	Woodchuck Ditch Company	C150041	\$	30,000	\$	624
	Totals for Construction Fund		\$	19,343,122	\$	10,049,768

	Borrower	Contract No.	Original Loan		Principal Received	
24	Fulton Irrigating Ditch Company	C150168	\$	171,700	\$	71,115
25	Town of Monument	C150062	\$	202,000	\$	51,279
	Totals for Severance Tax PBF		\$	373,700	\$	122,394

LOAN FINANCIAL ACTIVITY

Loan Financial Activity relative to the Water Project Construction Loan Program for Fiscal Year 2018 is summarized as follows: Funds received relative to loans in repayment totaled \$41.0 M for this year. Funds disbursed relative to new project loans totaled \$49.0 M for this year. Net activity resulted in \$8.0 M disbursed by the CWCB Construction Fund and the Severance Tax Perpetual Base Fund (STPBF) over the total received.

Further breakdown is summarized as follows: The Construction Fund portion consists of \$31.1 M in receivables and \$9.8 M in disbursements for a total net activity of \$21.3 M received over disbursed. The STPBF consists of \$9.9 M in receivables and \$39.2 M in disbursements for a total net activity of \$8.0 M disbursed over received.

COLORADO WATER CONSERVATION BOARD

Period Principal		Interest		Total Received		Disbursements		Net Activity		
					-		-			
July 2017	\$	865,621	\$	495,858	\$	1,361,479	\$	-	\$	1,361,479
August 2017	\$	4,115,117	\$	164,144	\$	4,279,261	\$	1,811,633	\$	2,467,629
September 2017	\$	1,075,737	\$	1,590,612	\$	2,666,348	\$	211,542	\$	2,454,807
October 2017	\$	766,163	\$	150,209	\$	916,372	\$	395,859	\$	520,513
November 2017	\$	1,914,351	\$	933,157	\$	2,847,508	\$	19,724	\$	2,827,783
December 2017	\$	469,665	\$	471,879	\$	941,544	\$	556,783	\$	384,761
January 2018	\$	594,892	\$	333,192	\$	928,084	\$	676,607	\$	251,476
February 2018	\$	690,024	\$	377,672	\$	1,067,695	\$	182,204	\$	885,492
March 2018	\$	9,877,231	\$	858,546	\$	10,735,777	\$	2,185,743	\$	8,550,034
April 2018	\$	1,040,271	\$	548,916	\$	1,589,187	\$	465,379	\$	1,123,808
May 2018	\$	1,391,702	\$	392,697	\$	1,784,399	\$	1,764,171	\$	20,228
June 2018	\$	1,260,059	\$	681,984	\$	1,942,043	\$	1,481,168	\$	460,875
FV 2018 Totals	\$ 2	4 060 832	\$	6 998 865	\$	31 059 698	\$	9 750 813	\$	21 308 885

FINANCIAL ACTIVITY REPORT FOR FISCAL YEAR 2018

CONSTRUCTION FUND

COLORADO WATER CONSERVATION BOARD

FINANCIAL ACTIVITY REPORT FOR FISCAL YEAR 2018

Period Principal		Interest Total Received		Disbursements	Net Activity	
July 2017	\$ 65,586	\$ 33,608	\$ 99,194	\$ -	\$ 99,194	
August 2017	\$ 2,963,482	\$ 910,785	\$ 3,874,267	\$ 1,475,304	\$ 2,398,963	
September 2017	\$ 456,050	\$ 505,677	\$ 961,727	\$ 686,539	\$ 275,188	
October 2017	\$ 173,878	\$ 151,787	\$ 325,666	\$ 5,439,351	\$ (5,113,685)	
November 2017	\$ 283,642	\$ 83,985	\$ 367,627	\$ 1,575,331	\$ (1,207,704)	
December 2017	\$ 712,814	\$ 288,436	\$ 1,001,250	\$ 2,170,319	\$ (1,169,069)	
January 2018	\$ 94,988	\$ 74,396	\$ 169,384	\$ 2,409,449	\$ (2,240,065)	
February 2018	\$ 705,594	\$ 240,698	\$ 946,292	\$ 3,583,037	\$ (2,636,745)	
March 2018	\$ 190,482	\$ 61,759	\$ 252,241	\$ 4,603,657	\$ (4,351,415)	
April 2018	\$ 146,891	\$ 48,319	\$ 195,210	\$ 4,443,856	\$ (4,248,646)	
May 2018	\$ 1,001,794	\$ 566,048	\$ 1,567,842	\$ 4,201,728	\$ (2,633,886)	
June 2018	\$ 99,624	\$ 87,422	\$ 187,046	\$ 8,627,145	\$ (8,440,099)	
FY 2018 Totals	\$ 6,894,827	\$ 3,052,921	\$ 9,947,748	\$ 39,215,717	\$ (29,267,969)	
GRAND						
TOTALS	\$ 30,955,659	\$ 10,051,786	\$ 41,007,446	\$ 48,966,530	\$ (7,959,084)	

SEVERANCE TAX PERPETUAL BASE FUND

MEMORANDUM

July 18, 2018

TO:	Board of Directors, Colorado Water Conservation Board, and Rebecca Mitchell, Director
FROM:	Michael Brod, Executive Director

RE: Colorado Water Resources & Power Development Authority - Director's Report

Water Pollution Control Revolving Fund (WPCRF)

There are currently nine (9) loans in process for approximately \$9.8 million. The loan capacity for the program in 2018 is approximately \$100 million. We have modified our project eligibility list through a Joint Resolution of the Legislature (passed) that results in a project list of 280 projects for an estimated need of \$7.3 billion.

Drinking Water Revolving Fund (DWRF)

There are three (3) loans in process for approximately \$3.5 million. The loan capacity for the program in 2018 is approximately \$75 million. We have modified our project eligibility list through a Joint Resolution of the Legislature (passed) that results in a project list of 361 projects for an estimated need of \$7.5 billion.

Water Revenue Bonds

We continue our meetings with participants in the Windy Gap Firming Project and the Northern Integrated Supply Project regarding financing options.

<u>Animas – La Plata Project</u>

The Authority still holds 284 ac/ft of depletion that is under contract with the Animas La Plata Water Conservancy District for purchase in installments. The District has purchased 416 ac/ft. to date (a recent purchase of 71 ac/ft on May 8th). The District has executed an installment purchase agreement with Lake Durango Water Authority that will likely mean an accelerated purchase schedule from the Authority.

CWCB – Authority Joint Funding Opportunities

We continue the efforts of the Statewide Funding Committee and work with CWCB staff to investigate viable funding mechanisms for future water projects.

Authority Legislative Matters

Two Authority Board members', Bob Wolff and Bruce Smith, terms (first term) will expire on October 1st.

Future Authority Board Meetings

August 23, 2018 – Hotel Talisa – Vail (in conjunction with the CWC Summer Conference)October 5, 2018 – City of La JuntaDecember 7, 2018 – Authority Denver officeJanuary 30, 2019 – Westin Westminster (in conjunction with the CWC Annual Convention)March 1, 2019 – Authority Denver officeApril 19, 2019 – Authority Denver officeJune 7, 2019 – Authority Denver office


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Robert Randall, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO:	Colorado Water Conservation Board Members
FROM:	Jojo La, Endangered Species Policy Specialist Carlee Brown, Interstate and Federal Manager Interstate, Federal and Water Information Section
DATE:	July 18-19, 2018 Board Meeting
AGENDA ITEM:	6. Platte River Recovery Implementation Program Update

Background:

The Platte River Recovery Implementation Program ("PRRIP" or "Program") is a partnership that was established in 2006 with an agreement signed between the governors of Colorado, Wyoming, Nebraska, and the Secretary of the Interior. PRRIP provides Endangered Species Act compliance for existing and new water-related activities in the South Platte and North Platte River Basins. The Program supports recovery of four threatened (T) and endangered (E) species by improving and maintaining habitat in the Platte River in Nebraska. The target species are the piping plover (T), least tern (E), whooping crane (E), and pallid sturgeon (E).

PRRIP is vital for allowing water users to continue to pursue water projects in Colorado's growing South Platte Basin. The Program embodies the goals of Colorado's Water Plan by simultaneously supporting a productive economy and a strong environment. The Program allows water use and development to continue through a streamlined Section 7 consultation process with the U.S. Fish and Wildlife Service (USFWS). Since the inception of the Program, USFWS has provided 141 out of 180 total streamlined Section 7 consultations in Colorado. Additionally, the least tern is exceeding recovery plan goals; a recent 5-Year Review from the USFWS has recommended delisting the species (pending demographic modeling and securing agreements to continue current conservation measures).

The following memorandum summarizes key Program activities and recent developments.

Staff recommendation:

This item is informational only. No Board action is requested.

Discussion:

Current Program Activities Under the First Increment

The PRRIP sets goals in multi-year increments. The First Increment covers the 13-year period from 2007 to 2019. The objectives set forth in the First Increment include:

- Using incentive-based water projects to provide sufficient water to and through the central Platte River habitat area. This includes re-timing and improving flows to reduce target flow shortages by an average of 130,000 to 150,000 acre-feet per year.
- Protecting, restoring where appropriate, and maintaining at least 10,000 acres of habitat between Lexington and Chapman, Nebraska.

Additionally, the Program includes an Adaptive Management Plan which provides a systematic process to test hypotheses and apply the information learned to improve management decisions. For example, the USFWS had hypothesized that large reservoir releases conducted over a short duration would help provide whooping crane habitat and remove invasive vegetation. Recent science has disproven this hypothesis, allowing the Program to focus on more effective measures.

First Increment Extension

The PRRIP partners have reached an agreed-upon approach for a 13-year extension of the First Increment (from 2020 to 2032). This would provide additional time to meet the water goals of the First Increment, which are not achievable by the original deadline of 2020; Note, this would would *not* be considered a new, Second Increment.

The objectives of the First Increment Extension remain largely the same, with two primary additions:

- 1. Increased flexibility regarding the water objectives of the program
- 2. An agreement to acquire 1,500 acres of additional habitat

One feature of the First Increment Extension is that the Program will only be required to reduce target flow shortages by 120,000-150,000 acre-feet of water per year, rather than the original 130,000-150,000 acre-feet objective. This revised water goal will allow for additional science to be conducted to determine whether the last 10,000 acre-feet of water is needed. This last 10,000 acre-feet would be very expensive to secure, so the opportunity to assess the value it would provide to the target species is a helpful step to ensure that Program dollars are spent wisely.

Though the plan for the First Increment Extension has been agreed on by all partners, the extension will require congressional authorization and formal approval by the Program Signatories—the governors of the three partner states and the Secretary of the Interior—before implementation can begin. PRRIP is currently congressionally authorized through 2019. Members of the congressional delegation of the three states are aware of the need to extend the Program for the duration of the First Increment Extension and will determine when the best timing for introducing the legislation would be, either this year or next.

Financial Obligations

The Program partners are committed to provide \$157 million through 2019 for the First Increment. To date, the federal agencies have contributed approximately \$88.4 million; Wyoming's obligation is \$6 million; Colorado's original obligation through 2019 was \$24 million (in 2005 dollars) and has approximately \$28 million in authorizations from the General Assembly (along with interest income) towards this obligation.

The First Increment Extension will require an additional \$106 million. Colorado's contribution would remain roughly the same at \$24.9 million (2005 dollars adjusted for inflation) over the 13-year extension. Wyoming will contribute an additional \$3.1 million. The federal agencies will contribute \$78 million. This represents a marked decrease in funding, a matter which received pushback from Program partners during negiotiations; however, the federal agencies conveyed that this was the most they could provide.

Colorado's representative to the PRRIP, Don Ament, testified before the Colorado General Assembly's Water Resources Review Committee on June 19, 2018. Mr. Ament spoke to the need to reauthorize the Program and to secure funding for its implementation. The Committee was receptive to Mr. Ament's message. A state funding bill has not yet been introduced. CWCB staff is working with DNR to determine what next steps are required before taking on such an effort.

Colorado's Tern to Pipe Up

Colorado's participation in the PRRIP is at a turning point, not only in working to open a new chapter of the PRRIP by pursuing the First Increment Extension, but also in that some of the individuals who have worked on the Program on behalf of Colorado's water users have reached retirement. CWCB recognizes the value of capturing the institutional knowledge of those individuals and others who have been involved in the Program since its inception.

On June 20-21, 2018, CWCB hosted a workshop titled "Colorado's Tern to Pipe Up" to interview and document the knowledge of Colorado's representative, Don Ament, and water user representatives including Alan Berryman (Northern Water), Kevin Urie (Denver Water), and Deb Freeman (Trout Raley, representing Northern Water). CWCB staff is working on processing the video, audio, and notes collected during the workshop to create public informational materials as well as internal training documents for future CWCB staff.

Water

The Program is making progress towards continued development of projects that will cumulatively reduce shortages to USFWS target flows by an average of 120,000-150,000 acrefeet per year. The Program has focused on long-term projects to facilitate the retiming of excess flows, with secondary emphasis on short-term purchase or lease of water. The initial state water projects—the Environmental Account in Lake McConaughy (Nebraska), the Pathfinder Modification Project (Wyoming), and Tamarack (Colorado)—were completed by 2012 and are credited with providing 80,000 acre-feet towards the Program's water objective.

Other Program water projects completed during the First Increment include the Phelps County Canal groundwater recharge, the Pathfinder Municipal Account Lease, and a combined water leasing-groundwater recharge project with the Central Platte Natural Resources District. The Program's water projects provide an estimated 100,000 acre-feet of water cumulatively.

Potential future Program water projects under evaluation include broad-scale recharge, slurry wall pit storage, and water leases and transfers. In addition to these water supply projects, the Program continues to evaluate ways to increase flow capacity through the North Platte chokepoint to allow larger flow releases from the Lake McConaughy Environmental Account. These proposed projects will provide an estimated 20,000 acre-feet of water.

Colorado is obligated to retime an average of 10,000 acre-feet of water annually at the state line in the First Increment and extension. Colorado's water contribution was designed to retime water that is physically and legally in excess of our demands, meaning that retimed water would normally flow out of the state. The retiming of water is accomplished through groundwater recharge via the Tamarack Plan.

Land

During the First Increment, the Program met its objective to obtain, protect and restore 10,000 acres of habitat for the three avian species. The Program currently protects more than 12,000 acres of land. Although the Program has acquired enough land to meet its overall land objective, an additional approximately 154 acres of non-complex land is still required to meet the First Increment subcategory land requirement, which includes acquiring additional off-channel and palustrine wetlands habitat. The Program has also acquired 120 acres of land towards its First Increment Extension land objective of 1,500 acres of additional habitat.

Species Status

Continued progress and implementation of the Program's land and water plans serves as the Reasonable and Prudent Alternative for the USFWS' Final Biological Opinion on the Platte River and thus is helping to secure "defined benefits for the target species and their associated habitat to assist in their conservation and recovery." Systematic monitoring for piping plovers, least terns, whooping cranes, and their habitat has continued to determine species production and survival.

Since 2007, the number of piping plover and least tern nesting habitat and breeding pairs have increased, indicating that off-channel habitat creation is effective. In 2001, nesting habitat acreage for piping plovers and least terns was approximately 50 acres. Currently, the Program provides almost 150 acres of managed nesting habitat. Since 2001, the number of piping plover breeding pairs has increased from approximately 25 pairs to now over 45 pairs. The number of least tern breeding pairs has also increased from 50 pairs in 2001 to over 75 pairs today.

At the inception of the Program, approximately 182 whooping cranes were counted. In 2018, a record 431 whooping cranes were counted—the most crane-use days ever documented. This is a marked difference from the 48 whooping cranes observed in 1967, when the species was first listed as endangered.

Finally, the Program is currently developing a plan for potential future activities related to the pallid sturgeon. The Program is compiling existing reseach and data on the pallid sturgeon on the lower Platte River to facilitate discussion on potential conservation strategies.



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Bob Randall, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO:	Colorado Water Conservation Board Members
FROM:	Brent Newman, Interstate, Federal, & Water Information Section
DATE:	July 18, 2018
AGENDA ITEM:	7. Technical Assistance for Federal Cost-Share Program

Background

At the May 2017 CWCB meeting, the Board approved criteria for technical assistance funding, to assist applicants seeking competitive federal grant funds, as described in the 2017 Projects Bill (HB17-1248):

Technical assistance for federal irrigation improvement cost-sharing program - appropriation. (1) For the 2017-18 state fiscal year, \$500,000 is appropriated to the department of natural resources for use by the Colorado water conservation board. This appropriation is from the Colorado water conservation board construction fund created in section 37-60-121, C.R.S. To implement this section, the Colorado water conservation board may use this appropriation to provide technical assistance for applicants seeking competitive federal grant funds.

These funds were expended consistent with Board direction over the past year to assist ditch companies, conservation districts, and other agricultural entities to prepare feasibility studies and competitive applications for federal funding opportunities. This first year of the Technical Assistance for Federal Cost-Share (TAFC) Program has been very successful. CWCB loans, WRSF grants, and TAFC funds totaling \$2.5 million were utilized as matching funds and cost-share for the 2017 Funding Opportunity Announcement for the Bureau of Reclamation's Salinity Control Program. This investment leveraged \$26 million of agricultural infrastructure upgrades in the Gunnison and Southwest Basins, benefitting water quality, agricultural efficiencies, and modernizing water delivery systems.

In November of 2018, the Board approved the Non-Reimbursable Investments proposed by staff to be included in the 2018 Projects Bill, including a continuation of the TAFC program. These additional funds will be available in July of 2018.

The Bureau of Reclamation has indicated that an upcoming Funding Opportunity Announcement (FOA) will be released in early 2019. When the Bureau has chosen a date for the FOA release, several workshops will be held to engage potential applicants and provide



information about the requirements and application process. CWCB staff will work with the Bureau and local partners to provide information about the opportunities available for feasibility studies and technical assistance through the TAFC program.

These funds may also be used to cost-share on efforts that leverage federal funds for programmatic support. The National Association of Conservation Districts (NACD) recently announced a program to cost-share with local conservation districts on the District Conservation Technician (DCT) Program. CWCB funds have been used to partner with NACD and the Colorado State Conservation Board to support the local DCT programs, which provide natural resource conservation technical assistance to private landowners.

CWCB staff have been partnering with local conservation districts and the Department of Agriculture to identify and cooperate with interested applicants for these federal grant funds. Salinity control projects leverage a significant amount of federal funds for the benefit of water users and water quality in western Colorado. The on-the-ground assistance provided by these local conservation districts has been invaluable in identifying and preparing applicants for the FOA process. Staff will recommend that purchase orders with these local partner districts be executed, so that applications for technical assistance funds may be reviewed by district staff, in consultation with CWCB staff, and successful applicants may be reimbursed for costs incurred by this pre-application work.

Draft scopes of work are attached to this memorandum, for Board review.

Staff recommendation

Staff recommends that the Board approve purchase orders to be executed in the amounts as follows:

- 1) \$99,000 to Delta Conservation District for Salinity Control Program feasibility studies and program capacity building;
- 2) \$33,000 to Delta Conservation District for cost-share on DCT program and Irrigation Water Management program; and
- 3) \$25,000 to Mancos Conservation District for Salinity Control Program feasibility studies and other Federal cost-share program capacity building.

These funds shall be utilized to provide technical assistance for applicants seeking competitive federal grant funds, consistent with the 2017 and 2018 Projects Bill (HB17-1248, SB18-218).



Scope of Work Delta Conservation District Technical Assistance for Federal Cost-Share (TAFC) Program Technical Assistance and Feasibility Planning for Colorado River Basin Salinity Control USBR Funding Opportunity Announcement Applicants

Purchase Order Amount: \$99,000

CWCB Funding Source: Construction Fund, HB17-1248, sec. 8 Contractor: Delta Conservation District, 690 Industrial Blvd., Delta, CO 81416 Taxpayer ID# 846010950 Suzie Bilberry, District Manager, Phone: 970-874-5725 ext 121; Email: deltaconservationd@gmail.com

Project Purpose: Provide technical assistance (TA) and feasibility planning to entities demonstrating a commitment to submitting high quality, cost competitive applications to US Bureau of Reclamation's Funding Opportunity Announcement (FOA) in support of the Colorado River Basin Salinity Control Program (CRBSCP).

Task Descriptions:

1. Consultant Technical Assistance Grants:

A. District shall develop criteria and conduct a selection process to determine ditch companies eligible for grant funding. Criteria shall include previous participation, willingness to provide non-salinity program funding for project, number of irrigated acres served, and likelihood of successful participation in the 2019 FOA. Criteria may also include a reimbursement cap and a requirement for matching funds as part of the grant award. District shall review proposed ditch company selections with the approval of CWCB and the Gunnison Basin Salinity Coordinator prior to final award of TA grants. At the request of, and/or with the permission of the CWCB the District may award grants to entities outside its historic service area.

B. Provide technical service grants to ditch companies to defray the actual cost of engineering services retained to applications for USBR's 2019 FOA. Technical services must be provided by registered engineers licensed to do work in the State of Colorado.

C. Provide technical service grants to ditch companies to defray the actual cost of engineering services related to interim studies, engineering, or feasibility for cooperative projects before the next announced FOA date (est. 2019). Technical services must be provided by registered engineers licensed to do work in the State of Colorado. District shall review proposed ditch company selections with the approval of CWCB and the Gunnison Basin Salinity Coordinator prior to final award of TA grants.

D. District shall manage all aspects of the grant program including: assisting water users with consultant selection, documentation of claims for reimbursement, disbursement of funds, and preparation of deliverables. District shall reimburse grantees for final engineering costs only after the entity submits a written copy of its FOA application.

2. Project Administration:

District may charge the CWCB up to 10% of the costs of task 1C to defray a portion of the project management and administration expense it incurs in providing those services and preparation of all deliverables.

Deliverables:

- 1. Provide status reports documenting all task activities with each invoice.
- 2. Provide copy of FOA application for each ditch company.
- 3. Provide copy of completed feasibility studies for each company.

Task Schedule: Complete project by December 31, 2020.

Payment Schedule: CWCB will reimburse the District on a monthly basis after receipt of invoices for costs related to the task described above at the rates set forth below.

Invoice Items by Task	Quantity	Max. Unit Charge	Maximum Reimburse
1A and 1D no charge, costs covered by Task 2 below.		N/C	0
1B and 1C. Consultant Technical Service and Feasibility Grants (actual consultant invoiced cost not to exceed)	TBD	\$10,000.00	\$90,000.00
2. Project Administration @ 10% of cost for tasks 1 - 2 above			\$9,000.00
Total			\$99,000.00

Scope of Work Delta Conservation District Technical Assistance for Federal Cost-Share (TAFC) Program District Conservation Technician and Irrigation Water Management Programs

Purchase Order Amount: \$33,000

CWCB Funding Source: Construction Fund, HB17-1248, sec. 8 Contractor: Delta Conservation District, 690 Industrial Blvd., Delta, CO 81416 Taxpayer ID# 846010950 Suzie Bilberry, District Manager, Phone: 970-874-5725 ext 121; Email: deltaconservationd@gmail.com

Project Purpose: Provide technical assistance (TA) and cost-share funds for Delta Conservation District programming.

Task Descriptions:

1. District Conservation Technician:

District has been awarded matching grant funds from the National Association of Conservation Districts and the Natural Resources Conservation Service to support the District Conservation Technician Program. This portion of TAFC funds represents matching grant funds to fully fund this assistance program. A more detailed scope of work for the DCT program will be provided to the CWCB and included as part of the purchase order execution.

2. Irrigation Water Management:

These funds may be expended to support the Irrigation Water Management program at Delta Conservation District – to purchase equipment for use in support of IWM program and to fund the elements of the soil health conference and soil health education efforts.

3. Project Management

District may charge the CWCB up to 10% of the costs of tasks 1 and 2 to defray a portion of the project management and administration expense it incurs in providing those services and preparation of all deliverables.

Deliverables:

- 1. Provide status reports documenting all task activities with each invoice.
- 2. Provide approved scope of work for NACD cost-share.

Task Schedule: Complete project by December 31, 2020.

Payment Schedule: CWCB will reimburse the District on a monthly basis after receipt of invoices for costs related to the task described above at the rates set forth below.

		Max. Unit	Maximum
Invoice Items by Task	Quantity	Charge	Reimburse
1. DCT		\$15,000.00	\$15,000.00
2. IWM		\$15,000.00	\$15,000.00
3. Project Administration @ 10% of cost for tasks 1,2 above			\$3,000.00
Total			\$33,000.00

Scope of Work Mancos Conservation District Technical Assistance for Federal Cost-Share (TAFC) Program Technical Assistance for Water Conservation, Irrigation Efficiency and Water Quality and Soil Health Enhancements

Purchase Order Amount: \$25,000

CWCB Funding Source: Construction Fund, HB17-1248, sec. 8 Contractor: Mancos Conservation District, PO Box 694, 604 Bauer Ave, Mancos, CO 81328 Gretchen Rank, District Manager, Phone: 970-533-7317, Email: mancoscd1@gmail.com Taxpayer ID # 84-0614777

Project Purpose: Provide technical assistance (TA) to entities demonstrating a commitment to submitting high quality, cost competitive applications to USDA and NRCS conservation programs, BOR WaterSMART applications, US Bureau of Reclamation's Funding Opportunity Announcement (FOA) in support of the Colorado River Basin Salinity Control Program (CRBSCP), and other Federal cost-share programs.

Task Descriptions:

1. Consultant Technical Assistance Grants:

A. District shall develop criteria and conduct a selection process to determine ditch companies or individual landowners eligible for grant funding or assistance. Criteria shall include previous participation, willingness to provide program funding for project, number of irrigated acres served, and likelihood of successful participation in a 2018-2019 federal grant request. Criteria may also include a reimbursement cap and a requirement for matching funds as part of the grant award. District shall review proposed selections with the approval of CWCB representative. At the request of, and/or with the permission of the CWCB the District may award grants to entities outside its historic service area.

B. Provide technical service assistance or grants to ditch companies and individual landowners to defray the actual cost of engineering services, facilitation and capacity building necessary for federal applications. Technical services must be provided by registered engineers licensed to do work in the State of Colorado.

C. Provide technical service assistance or grants to ditch companies and individual landowners to defray the actual cost of engineering services related to interim studies, engineering, or feasibility for cooperative projects. Technical services must be provided by registered engineers licensed to do work in the State of Colorado. District shall review proposed selections with the approval of CWCB.

D. District shall manage all aspects of the grant program including: assisting water users with consultant selection, documentation of claims for reimbursement, disbursement of funds, and preparation of deliverables. District shall reimburse grantees for final project costs only after the entity submits a written copy of its federal grant application.

2. Project Administration:

District may charge the CWCB up to 10% of the costs of task 1C to defray a portion of the project management and administration expense it incurs in providing those services and preparation of all deliverables.

Deliverables:

- 1. Provide status reports documenting all task activities with each invoice.
- 2. Provide copy of federal grant applications for each grantee.

Task Schedule: Complete project by June 30, 2020

Payment Schedule: CWCB will reimburse the District on a monthly basis after receipt of invoices for costs related to the task described above at the rates set forth below.

Invoice Items by Task	Quantity	Max. Unit Charge	Maximum Reimburse
1A, 1B, 1C:	TBD	\$5,000.00	\$12,500.00
1D. Consultant Technical Service Grants (actual consultant invoiced cost not to exceed)	TBD	\$5,000.00	\$10,000.00
2. Project Administration @ 10% of cost for tasks above			\$2,500.00
Total			\$25,000.00

A. Funds available for award in Fiscal Year 2018/2019 = \$500,000

B. Eligibility

- Units of Colorado local government: Conservation Districts, Water Conservancy Districts, Water Conservation Districts, Municipalities
- Environmental and conservation organizations: non-profits and 501(c) groups
- Incorporated ditch and irrigation companies selected by unit of local government
- Must demonstrate eligibility for underlying federal program (WaterSMART, NRCS EQIP, Salinity Control Program)

C. Federal Project types (activities must be located in Colorado)

- Water conservation, irrigation efficiency enhancement (infrastructure)
- Encouraged to include elements of: Stream restoration, invasive phreatophyte control, water quality enhancement, aquatic/riparian endangered species habitat and mitigation, and soil health

D. Technical assistance funds may be used as follows:

- No mandatory cost-share percent, as significant funding will be leveraged if federal application is successful
- Payment of reasonable administrative charges/fees
- Pre-feasibility level design and cost estimates
- Grant writing assistance
- Capacity building and coordination with potential participants
- Feasibility level design and cost estimates
- Detailed design and cost estimates
- Environmental compliance
- No reimbursement for in-kind services allowed

E. Procedure

- Availability announced on CWCB website
- Rolling process timed to meet federal submittal deadlines
- Director's discretion for grants less than \$25,000 to any single entity
- Board approval for larger grants
- If requests exceed available funds, applications evaluated on the following:
 - The irrigation system is currently deemed a significant source of salinity loading;
 - There exists potential to improve current system delivery efficiency;
 - The number of irrigated acres in service area, and current average annual diversions;
 - o Additional on-farm irrigation system improvements can be made;
 - The availability of storage to better utilize water saved through elimination of losses;
 - There are opportunities to save water and support environmental benefits;
 - The proposed project or program will increase energy efficiency and the use of renewable energy in water management;
 - Risk can be mitigated in areas at high risk of future water conflict.



COLORADO

Colorado Water Conservation Board

Department of Natural Resources



1313 Sherman Street Denver, CO 80203

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Robert Randall, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO:	Colorado Water Conservation Board Members
FROM:	Erik Skeie, Special Projects Coordinator Interstate, Federal & Water Information Section
DATE:	July 18-19, 2018
AGENDA ITEM:	8. Damaging High Groundwater Grant Application and Guidelines

Background

High groundwater is resulting in damage to private and public property and agricultural land in certain areas of the South Platte River Basin. This is caused by of a combination of natural geology and hydrology, average to above-average precipitation, increased recharge for augmentation purposes, and decreased groundwater pumping. CWCB Staff is actively engaged in efforts to address the high groundwater issue in the South Platte in close coordination with the South Platte Basin Roundtable's Groundwater Technical Committee.

The General Assembly provided \$500,000 for South Platte river basin groundwater level data collection, analysis and remediation in the 2018 CWCB Projects Bill (SB18-218, Section 10). This is the latest appropriation indicating the General Assembly's attention to this matter. The most recent previous round of funding was provided in the 2017 Projects Bill.

The proposed criteria and guidelines for this grant program are attached to this memo. This document was adapted from the HB17-1248 criteria and guidelines and the Colorado Water Plan Implementation Grant Guidelines. Significant changes include increasing minimum match (in cash or in-kind) from 10 percent to 15 percent of the total project cost. The language regarding project types was changed to be more general to encourage a variety of projects, rather than focusing primarily on dewatering wells. Potential projects include passive systems, groundwater management strategies, and studies. The grant application formatting has been updated to the same format used for Colorado's Water Plan Implementation Grants for consistency across CWCB grant programs. This includes the application, scope of work, and budget forms for applicants. Each application will be provided to the South Platte Basin Roundtable Groundwater Technical Committee for review.

Staff Recommendation

Staff recommends the approval of the proposed Criteria and Guidelines for Damaging High Groundwater Response Grants in the South Platte Basin.

Attachments



Damaging High Groundwater Response Grants in the South Platte Basin

GUIDELINES

Introduction

High groundwater is resulting in damage to private and public property and agricultural land in certain areas of the South Platte River Basin. This is caused by of a combination of natural geology and hydrology, average to above-average precipitation, increased recharge for augmentation purposes, and decreased groundwater pumping. HB 15-1178 established the Emergency Dewatering Grant Program, which directed the Colorado Water Conservation Board (CWCB) to administer funds for emergency dewatering of areas in and around Gilcrest and Sterling. After several projects under this funding source, it was determined that the area of concern needed to include the entire South Platte Basin. Section 10 of HB17-1248 provided this expansion to include the South Platte River Basin and opened up project types for construction, maintenance, and monitoring of dewatering infrastructure. SB 18-218 provides additional funds for these purposes.

In order to help ensure opportunities for applicants to seek funding in an orderly fashion and at the same time to encourage competitive access to the funding, applications will be evaluated based on the eligibility requirements and evaluation criteria outlined in this document. After thorough evaluation, CWCB staff will recommend projects to the CWCB Board for approval of grant funding during regularly scheduled Board meetings.

Eligible Applicants include:

- Governmental entities municipalities, districts, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Covered Entities as defined in Section 37-60-126, C.R.S., are eligible if the applicant has adopted an approved water conservation plan.
- Private entities mutual ditch companies, consulting firms, non-profit corporations, individuals, sole proprietors, and partnerships.
- Non-governmental organizations

Level of Funding Request:

• The CWCB will attempt to distribute the grant funds in a fair and equitable fashion. No application should exceed 50% of total the funding available, as identified in the 2018 CWCB Projects Bill (SB 18-218). Applicants should be aware that many variables will impact funding levels, including overall funding demand.

Examples of eligible projects and activities

- Emergency dewatering
- Groundwater management pilot programs
- Studies or analysis of regional groundwater (including modeling, monitoring wells, etc.)
- Design of structural projects or activities.

Matching Fund Requirements

Grant requests require matching funds at a minimum of 15% of the total project cost. The match may be provided by the applicant or a third party and may consist of any combination of cash or in-kind services such as an organization's operational costs and volunteer services. Cash match must account for at least half of the total match, and projects with more cash match may be viewed more favorably.



Damaging High Groundwater Response Grants in the South Platte Basin

Any matching contributions not provided by the applicant must be accompanied by a letter of commitment, or a letter of pending commitment from the contributing entity.

Waivers: The CWCB may waive the match requirement if it is in the best interest of the State of Colorado or the applicant demonstrates that the matching requirement imposes a significant financial hardship on the applicant.

Evaluation Criteria

CWCB staff, in consultation with the State Engineer's Office (SEO), and with the South Platte Basin Roundtable Groundwater Technical Committee (Committee), will review applications based on the following criteria:

- Existence of damaging high groundwater, and the demonstrated need for dewatering,
- Compliance with permission requirements;
- Compliance with permitting requirements;
- Compliance with monitoring requirements including;
 - Minimum requirements: groundwater level monitoring (either through existing or newly constructed monitoring wells)
 - Consultation with the Division of Water Resources Division 1 Office to identify any additional monitoring needed to ensure no injury is caused by the project;
- Effectiveness of proposal at lowering groundwater table;
- Reasonableness of the requested grant value;
- Completeness of application; and
- Matching funding provided by the Applicant or others.

Application Process

Application forms are available on the CWCB website:

cwcb.state.co.us (navigate to the Water Management tab and follow to South Platte Groundwater)

Applicants will be required to include at a minimum the following documents:

- Completed Application
- Statement of Work (Exhibit A, Word format)
- Budget and Schedule (Exhibit B, Excel format)
- Maps (Exhibit C)
- Letters of Commitment (matching funds)
- Permits (if applicable)
- Easements (if applicable)

The applicant is also encouraged to submit the following:

- Letter of Support from the Basin Roundtable Groundwater Technical Committee
- Letter of Support from the Division of Water Resources Division 1 Engineer (or delegate)
- Any applicable photos (project location, damage from high groundwater, etc.)

Financial Documents Required for Contract Execution

- Certificate of Liability
- Certificate of Good Standing



The CWCB's review and approval process will include the following steps:

- CWCB staff will determine if the required documentation has been submitted. The application will be accepted once all documentation has been received.
- CWCB staff will evaluate the application based on the criteria described in this document.
- Applications will be provided to the South Platte Basin Roundtable Groundwater Technical Committee for review. The Committee may request that the applicant present their proposal at the next scheduled Committee meeting.
- CWCB staff will notify the applicant of the staff's recommendation. CWCB staff may approve projects less than \$100,000 and reserves the right to present the application to the Board if deemed necessary. Projects requesting \$100,000 or more will be notified of the date and time when the Board will consider the application. While CWCB staff has primary responsibility for presenting the recommendation to the Board, the applicant will need to attend the meeting to address the Board and may offer comments during the opportunity for public comment.
- Upon Board approval of the applicant's request, funding will be available after a contract is executed.

Grant Review and Approval Schedule

Application Due	Staff Review	Board Meeting (Approval)	Notice of Approval/ Denial	Grant Contracting (Estimate)*
August 1, 2018	30 days	Nov. 15/16	Dec. 1	45 days
October 1, 2018	30 days	Jan. 22/23	Feb. 1	45 days
February 1, 2018	30 days	May 23/24	June 1	45 days
Ad Hoc requests as appropriate**				

*The grant contracting estimate of 45 days is from the receipt of the signed grant contract from the grantee. **Please contact Erik Skeie to discuss

Grant Administration

Contracting:

After approval or conditional approval of funding by the Board, CWCB staff will direct the applicant to revise and supplement submitted documents if required for issuance of a purchase order or execution of a contract. Grants less than \$100,000 will be implemented by use of a purchase order. Grants for \$100,000 or more will require execution of a contract.

Successful applicants are expected to execute a contract with CWCB within 6 months of award. If a grant contract is not executed within this timeframe, CWCB staff may return the funds back to the appropriate funding category if adequate progress is not made.

Reporting Requirements:



Progress Reports: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues. The CWCB may withhold reimbursement until satisfactory progress reports have been submitted.

Final Report: At completion of the project, the applicant shall provide the CWCB a Final Report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will withhold disbursement the last 10% of the budget until the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

Payments:

Payment will be based on actual expenditures invoiced by the grantee. The request for payment must be transmitted on the grantee's letterhead, and shall include:

- Date of request
- Grantee's contact name, email address, physical address, and phone number
- Date of CWCB grant approval
- Contract or purchase order number
- Description of the work accomplished by major task as presented in the approved budget
- Supporting documentation for items or services billed
- Estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent
- Identification of any major issues, and proposed or implemented corrective actions



Colorado Water Conservation Board

Damaging High Groundwater Response Grants in the South Platte Basin

Instructions

To receive funding for a Damaging High Groundwater Response Grant, applicant must demonstrate how the project, activity, or process (collectively referred to as "project") funded by the CWCB will help reduce high groundwater and/or implement the South Platte Basin Roundtable Groundwater Technical Committee's recommendations. Grant guidelines are available on the CWCB website.

If you have questions, please contact Erik Skeie via phone at (303) 866-3441 x3260 or email at erik.skeie@state.co.us

FINAL SUBMISSION: Submit all application materials to erik.skeie@state.co.us in the original file formats [Application (Word); Statement of Work (Word); Budget/Schedule (Excel)]. Please do not combine documents.

Water Project Summary		
Name of Applicant		
Name of Project		
Grant Request Amount		
Other Funding Sources		
Other Funding Sources		
Other Funding Sources		
Applicant Funding Contribution		
Total Project Cost		



Applicant & Grantee Information		
Name of Grantee(s)		
Mailing Address		
FEIN		
Organization Contact		
Position/Title		
Email		
Phone		
Grant Management Contact		
Position/Title		
Email		
Phone		
Name of Applicant		
Mailing Address		
Position/Title		
Email		
Phone		

Description of Grantee/Applicant

Provide a brief description of the grantee's organization (100 words or less).



Type of Eligible Entity (check one)
Public (Government): Municipalities, enterprises, counties, and State of Colorado agencies.
Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but
only if they can make a compelling case for why a local partner cannot be the grant recipient.
Public (Districts): Authorities, Title 32/special districts (conservancy, conservation, and irrigation
districts), and water activity enterprises.
Private Incorporated: Mutual ditch companies, homeowners associations, corporations.
Private Individuals, Partnerships, and Sole Proprietors: Private parties may be eligible for
funding.
Non-governmental organizations (NGO): Organization that is not part of the government and is
non-profit in nature.

Type of Project (check all that apply)	
	Study
	Construction
	Other

	Location of Project			
Please provide the general of	Please provide the general county and coordinates of the proposed project below in decimal degrees .			
The Applicant shall also provide, in Exhibit C, a site map.				
County/Counties				
Latitude				
Longitude				



Project Overview

Please provide a summary of the proposed project. Include a description of the project and what the grant funding will be used for specifically (e.g., studies, permitting process, construction). For projects that require augmentation, please provide a description of the water supply source to be utilized or the water body affected by the project. Include details such as necessary permitting; whether permissions or easements are needed; number of residential and commercial properties impacted; length of ditch improvements; length of pipe installed. If this project addresses multiple purposes, please explain. Finally, include details on the monitoring plan for the project. 200 words or less.

The Applicant shall also provide, in separate documents, a detailed Statement of Work (Exhibit A) and a Budget/Schedule that includes Other Funding Sources/Amounts (Exhibit B).



Measurable Results

Please explain the measurable results that will be used to determine if the project is successful. This could be achieving a desired water table level, reducing the water table elevation by a certain amount, water budget changes, drainage improvements, etc. 200 words or less.

Project Justification

Provide a description of how this project supports the recommendations of South Platte Basin Roundtable Groundwater Technical Committee.

The proposed water project shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan Framework for State of Colorado Support for a Water Project (CWP, Section 9.4, pp. 9-43 to 9-44;)



Related Studies

Please provide a list of any relevant studies. Please also note if the water project is complementary to or assists in the implementation of other CWCB programs.

Previous CWCB Grants, Loans or Other Funding

List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving Roundtable(s); 4) CWCB board meeting date; 5) Contract number or purchase order; 6) Percentage of other CWCB funding for your overall project.

Taxpayer Bill of Rights

The Taxpayer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect your application.



Submittal Checklist

I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract. Exhibit A Statement of Work⁽¹⁾ Exhibit B Budget & Schedule⁽¹⁾ Letters of Matching and/or Pending 3rd Party Commitments⁽¹⁾ Exhibit C Map⁽¹⁾ Photos/Drawings/Reports Letters of Support Permits (if applicable) Easements (if applicable) Certificate of Insurance (General, Auto, & Workers' Comp.)⁽²⁾ Certificate of Good Standing with Colorado Secretary of $State^{(2)}$ W-9⁽²⁾ Independent Contractor Form⁽²⁾ (If applicant is individual, not company/organization)

(1) Required with application.

(2) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.



Colorado Water Conservation Board

Damaging High Groundwater Response Grants - Exhibit A

	Statement Of Work
Date:	
Name of Grantee:	
Name of Water Project:	
Funding Source:	
Water Project Overview:	
Project Objectives:	



Lasks
Task 1 – [Name]
Description of Task:
Method/Procedure:
Deliverable:



Tasks
Task 2 – [Name]
Description of Task:
Method/Procedure:
Deliverable:

Repeat for Task 3, Task 4, Task 5, etc.



Budget and Schedule

This Statement of Work shall be accompanied by a combined Budget and Schedule (in Excel format) that reflects the Tasks identified in the Statement of Work.

Reporting Requirements

Progress Reports: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Report: At completion of the project, the applicant shall provide the CWCB a Final Report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will withhold the last 10% of the budget until the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

Project costs not covered by those or other grants, and are therefore the responsibility of the grantee, will be eligible for CWCB funds at the following percentages of project costs:

Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided to CWCB in hard copy and electronic format as part of the project documentation.



Performance Measures

Performance measures for this contract shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum inkind contributions (if applicable) per the budget in Exhibit B. Per Damaging High Groundwater Response Grant Guidelines, the CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

(b) Accountability: Per Damaging High Groundwater Response Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Damaging High Groundwater Response Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.



COLORADO Colorado Water Conservation Board

Department of Natural Resources

Colorado Water Conservation Board

Damaging High Groundwater Response Grant - Exhibit B

Budget and Schedule

Date:

Name of Applicant:

Name of Water Project:

Project Start Date:

Project End Date:

Task No.	Task Description	Task Start Date	Task End Date	Grant Funding Request	Match Funding	Total
1						\$0
2						\$0
3						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
			Total	\$0	\$0	\$0
		Page 1	ofx			



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

то:	Colorado Water Conservation Board Members
FROM:	Kirk Russell, P.E., Finance Section Chief
DATE:	July 18-19, 2018 Board Meeting
AGENDA ITEM:	9. Emergency Dam Response Funding

Introduction

The Emergency Dam Repair Cash Fund was created in CRS 37-60-122.5 as available funding for "in the opinion of the state engineer, conditions of any dam or reservoir are so dangerous to the health and safety of life or property as not to permit time for issuance and enforcement of an order relative to construction, modification, maintenance, or restriction of storage, or the dam is threatened by any large flood, the state engineer may immediately employ remedial measures necessary to protect such life and property." This is reflected in CRS 37-87-108.5.

CRS 37-60-122.5 states:

Emergency dam repair cash fund. There is hereby created in the state treasury the emergency dam repair cash fund. The state treasurer is hereby authorized and directed to transfer moneys from the Colorado water conservation board construction fund to the emergency dam repair cash fund in such amounts and at such times <u>as determined by the Colorado water conservation board</u>. Such transfers shall not exceed five hundred thousand dollars*. The moneys in the emergency dam repair cash fund are hereby continuously appropriated to the Colorado water conservation board for the emergency repair of dams pursuant to section 37-87-108.5.

All moneys collected by the state engineer pursuant to section 37-87-108.5 shall be transmitted to the state treasurer who shall credit such moneys to the Colorado water conservation board construction fund. All interest derived from the investment of moneys in the emergency dam repair cash fund shall be credited to the Colorado water conservation board construction fund. Any balance remaining in the emergency dam repair cash fund at the end of any fiscal year shall remain in the fund.

* The 2018 CWCB Projects Bill modified the amount from "fifty thousand dollars" to "five hundred thousand dollars". This was primarily to allow a more reasonable amount of funding to respond to the potential need.

Staff Recommendation

Staff recommends the Board authorize the transfer of \$500,000, or as much as is needed to establish a \$500,000 balance as of July 1, 2018, from the Construction Fund to the Emergency Dam Repair Cash Fund which will remain available to the CWCB and the Division of Water Resources for its intended use.





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

Robert Randall, DNR Executive Director

Rebecca Mitchell, CWCB Director

то:	Colorado Water Conservation Board Members
FROM:	Linda Bassi, Stream and Lake Protection Section Michelle Garrison, Interstate, Federal, & Water Information Section
DATE:	July 18-19, 2018 Board Meeting
AGENDA ITEM:	10. Renewal of Ute Water Conservancy District Lease of Ruedi Water for Instream Flow Use in the 15-Mile Reach (Water Div. 5)

Introduction

On August 27, 2015, the CWCB entered into a renewable short-term lease with the Ute Water Conservancy District ("Ute Water") to use a portion of the water that Ute Water owns in Ruedi Reservoir ("Ruedi water") for instream flow ("ISF") use in the 15-Mile Reach of the Colorado River. See attached Vicinity Map. The purpose of the lease was to supplement existing ISF water rights and preserve/improve the natural environment of the four endangered fish species present in the 15-Mile Reach of the Colorado River. The CWCB used 9,000 acre-feet of leased water in September and October 2015 at a total cost of \$64,800 (\$7.20 per acre-foot). In 2016, the CWCB and Ute Water renewed the lease for one year and the CWCB used 12,000 acre-feet of water from late August through mid-October 2016 at a total cost of \$86,400. The CWCB and Ute Water renewed the lease again in 2017, and the CWCB used 6,000 acre-feet of water at a total cost of \$43,200. Ute Water has offered to renew the lease and make available 6,000 acre-feet of Ruedi Water for ISF use in the 15 Mile Reach this year. In 2015, the General Assembly approved the expenditure of up to \$500,000 from the Species Conservation Trust Fund for this renewable lease of water for ISF use on the Colorado River for endangered fish recovery purposes (HB15-1277). To date, the CWCB has spent \$194,400 on this lease.

Staff recommendation: Staff recommends that the Board approve a one-year renewal of the lease of up to 6,000 acre-feet of Ruedi Water from the Ute Water Conservancy District for \$7.20 per acre-foot, and an expenditure of up to \$43,200 from the Species Conservation Trust Fund, subject to the following conditions:

1. Releases of Ruedi water under the Water Lease Agreement shall not cause the releases out of Ruedi Reservoir to exceed 300 cfs and shall not cause flows in the Fryingpan River below Ruedi Reservoir to exceed 350 cfs. Staff and the U.S. Fish and Wildlife Service shall coordinate with the Bureau of Reclamation to ensure that these conditions are met.

2. CWCB staff shall consult and coordinate weekly with Colorado Parks and Wildlife staff on proposed releases to minimize impacts to the fishery on the Fryingpan River below Ruedi Reservoir.



Interstate Compact Compliance • Watershed Protection • Flood Planning & Mitigation • Stream & Lake Protection

Renewal of Ute Water Conservancy District Lease of Ruedi Water for Instream Flow Use in the 15 Mile Reach (Water Div. 5) July 18-19, 2018

3. At the Bureau of Reclamation's annual Ruedi Reservoir water operations public meeting on August 9, 2018, staff will give a presentation on the lease and discuss lease implementation with local stakeholders.

Discussion

The CWCB holds ISF water rights on the following reaches of the Colorado River on which the leased water would be used:

Case No.	Stream	Segment	Length (miles)	Amount	Approp. Date
5-92CW286	Colorado River (15 mile reach)	Tailrace of Grand Valley Pumping Plant to confl Gunnison River	Approx. 15 miles	581cfs (7/1-9/30)	3/5/1992
5-94CW330	Colorado River (15 mile reach)	27.5 Road Gage to confl Gunnison River	Approx. 2 miles	300 cfs (7/1-9/30)	11/4/1994

Use of the Leased Water

The leased water will be used to supplement the existing ISF water rights in the 15-Mile Reach to preserve the natural environment, and to provide water to help meet or reduce shortfalls to the U.S. Fish and Wildlife Service's ("USFWS") flow recommendations (810 cfs this year) for the four endangered fish species that are present in the reach. The CWCB's use of the leased water above the decreed ISF rates to meet the USFWS flow recommendations will improve the natural environment to a reasonable degree. The CWCB, USFWS, and U.S. Bureau of Reclamation (USBR) will coordinate on the timing and amount of such uses.

In 2015, 2016, and 2017, releases of leased water from Ruedi Reservoir resulted in higher flows in the 15-Mile Reach and provided some operational flexibility for the USFWS and operators of other reservoirs that release water in late summer to benefit the endangered fish habitat in the 15-Mile Reach. Additionally, the released water was allowed to pass through the Ruedi Reservoir hydropower plant and Orchard Mesa Irrigation District's power plant on its way to the 15-Mile Reach, providing some additional local benefits. Staff anticipates that the same benefits will result from the lease this year, in addition to helping to alleviate the impacts of this very dry year. The Upper Colorado River Endangered Fish Recovery Program's fish pool in Ruedi Reservoir starting July 2, 2018 - the second earliest date in Recovery Program history that such releases from Ruedi Reservoir have been requested.

Public Outreach

Staff intends to give a presentation on the lease to local stakeholders at the USBR annual Ruedi Reservoir water operations meeting on August 9. In previous years, stakeholders have expressed concerns about increased flow rates in the Fryingpan River limiting opportunities for recreational fishing. Consequently, the CWCB has coordinated with the USFWS and USBR to ensure that releases from Ruedi Reservoir do not exceed 300 cfs (a rate that maximizes hydropower benefits) and do not cause flows in the Fryingpan River below the Reservoir to exceed 350 cfs, and will continue that coordination this year. Staff anticipates that the lease renewal will be finalized and become effective in mid to late August.





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: 1	 Colorado River Water Conservation District Lease of Ruedi Water for Winter Instream Flow Use in the Fryingpan River (Water Div. 5)

The Colorado River Water Conservation District, acting through its Colorado River Water Projects Enterprise ("District"), has offered the CWCB an opportunity to enter into a one-year renewable short-term lease of a portion of water that the District holds in Ruedi Reservoir for instream flow ("ISF") use to boost winter flows in the Fryingpan River below Ruedi Reservoir. The CWCB would use the leased water to supplement its existing decreed ISF water right to preserve, and to increase flows to improve the natural environment to a reasonable degree on the Fryingpan River. See Vicinity Map at **Attachment 1**. The CWCB's decreed ISF water right could benefit from this water, and the reach would benefit from additional flows above the existing decreed ISF rate to help meet winter flow targets set primarily to prevent formation of anchor ice in the river. This is the second meeting of the two-meeting process required by ISF Rule 6 for considering water acquisitions.

Staff recommends that the Board:

- 1. Conclude that the proposed acquisition of an interest in water by lease from the Colorado River Water Conservation District is appropriate to preserve and improve the natural environment of the Fryingpan River from the confluence with Rocky Fork Creek to the confluence with the Roaring Fork River to a reasonable degree;
- 2. Determine that the acquired interest in water would be best utilized by: (a) using it to preserve the natural environment of the Fryingpan River at rates up to the existing decreed ISF water right in that reach; and (b) using it to improve the natural environment in that reach by protecting flows above the decreed ISF rates at rates not to exceed 70 cfs;
- 3. Approve the expenditure of up to \$228,775 from the Construction Fund for the lease; and
- 4. Authorize the Director to execute a Water Lease Agreement with the Colorado River Water Conservation District.
- 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



Colorado River Water Conservation District Lease of Ruedi Water for Winter Instream Flow Use on the Fryingpan River (Water Div. 5) July 18-19, 2018

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 May 2018 meeting initiated the 120-day time period for the Board to consider the terms and conditions of the proposed acquisition. Because no hearing was requested, the Board may take final action on the proposal at 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 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 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 5.

2. Background

The District has been working with the Roaring Fork Conservancy ("RFC") to evaluate needs and potential available supply to enhance instream flow in the Fryingpan River below Ruedi Reservoir during the winter months under certain conditions. The Fryingpan River ISF water right is decreed for 39 cfs from November 1 - April 30. Studies indicate that winter flows of 70 cfs (31 cfs above the decreed ISF rate of 39 cfs) would benefit the natural environment. The objective of the lease would be to maintain Fryingpan River flows at a minimum of 70 cfs when temperatures and low flows could otherwise combine to create anchor ice, which adversely impacts aquatic macroinvertebrates and trout fry.

3. Water Proposed for Leased Acquisition

The District's Enterprise has offered to lease up to 5,000 acre-feet of water available to it in Ruedi Reservoir under a perpetual contract with the Bureau of Reclamation ("Ruedi water"). The contract includes an explicit term that the water may be used "...to supplement winter instream flows in the Fryingpan River." Ruedi Reservoir is decreed for several types of use: irrigation, domestic, municipal, generation of electrical energy, stockwatering, industrial, piscatorial, recreation, and other beneficial uses. Based upon discussions among the District, RFC, Colorado Parks and Wildlife ("CPW"), and CWCB staff regarding the need for and use of leased water, staff will recommend that the CWCB lease up to 3,500 acre-feet of the Ruedi water.

4. Reach of Stream Proposed for Use of the Leased Rights

The reach of stream proposed for use of the District's Ruedi water is the Fryingpan River from its confluence with Rocky Fork Creek, adjacent to the outlet of Ruedi Reservoir, down to its confluence with the Roaring Fork River in Pitkin and Eagle Counties, described below and shown on the attached Vicinity Map.
Colorado River Water Conservation District Lease of Ruedi Water for Winter Instream Flow Use on the Fryingpan River (Water Div. 5) July 18-19, 2018

5. Existing ISF Water Rights

The CWCB holds an ISF water right on the following reach of the Fryingpan River on which the leased water would be used:

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
W-1945 (73)	Fryingpan River	confl Rocky Fork Creek	confl Roaring Fork River	39 (11/1 - 4/30) 110 (5/1 - 10/31)	07/12/1973

6. Natural Flow Regime

The Fryingpan River originates in the central Rocky Mountains of Colorado northeast of Aspen in Pitkin County. The headwaters of the Fryingpan River are at the Continental Divide in the Hunter Fryingpan Wilderness at an elevation of about 12,000 feet.

Streamflow in the Fryingpan River is primarily from snowmelt and local precipitation. The hydrology of the basin is influenced by reservoir operations and transmountain diversions. The largest storage facility in the basin is the Bureau of Reclamation's Ruedi Reservoir, located in the lower portion of the watershed approximately 11 miles above the point at which the Fryingpan River flows into the Roaring Fork River near the Town of Basalt. Peak flows typically occur in May, June, and early July and diminish down to base flows July through September; streamflows are characteristically low and steady November through March of most years. The upper basin of the Fryingpan River (above Ruedi Reservoir) is approximately 230 square miles with an extensive tributary network; several of the upper basin tributaries are diverted to the eastern slope via facilities associated with the Fryingpan-Arkansas project.

The Fryingpan River below Ruedi Reservoir flows in a westerly direction through a confined canyon fed by only a few small tributary streams. The streamflow of the Fryingpan River in this canyon is almost entirely made up of Ruedi Reservoir releases, especially during the winter months. The thermal effects of the reservoir create open water conditions virtually year round, making the river a very popular fishery for both local residents and visitors to the area.

7. Existing Natural Environment

The Fryingpan River is a Gold Medal trout fishery renowned for its abundant quality-sized trout, specifically a robust brown trout population and a burgeoning rainbow trout population recovering from the impacts of whirling disease. Mottled sculpin and aquatic invertebrates are the foundation of the diet that supports the Gold Medal fishery. The daily aquatic invertebrate hatches are well known for their consistency and timing such that anglers can "set their watches" to virtually guarantee fish feeding frenzies and predictable conditions for dry fly fishing. The anglers drawn to this fishing opportunity provide a significant economic

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driver for local communities, and the quality fishery is pivotal to the high quality of life for residents and visitors.

Winter flow conditions below the reservoir and the thermal effects of the reservoir have, over time, created fairly predictable conditions for anchor ice formation when stream flows are below 70 cfs and when air temperatures are in the single digits. Extensive anchor ice deposits can have dramatic impacts on aquatic macroinvertebrate numbers and can disrupt their life cycles. Impacts on trout fry in the interstitial spaces in the substrate can also occur with the formation and accumulation of anchor ice deposits.

8. Proposed Method of Acquisition

To implement this proposal, the CWCB would enter into a water lease agreement with the District for up to 3,500 acre-feet of Ruedi water. CWCB staff has initiated discussions with the District on drafting the water lease agreement to meet both entities' contracting requirements. Any final lease agreement will become effective after approval by both the CWCB and the District's board of directors, and by the Department of Natural Resources Controller. Issues that the lease agreement would address include: (1) the lease term; (2) amount of water to be leased; (3) payments to the District for the leased water; (4) the potential for the Bureau of Reclamation to suspend releases when necessary to meet its legal and regulatory obligations; (5) timing of and coordination on releases and on ramping rates if circumstances require reservoir releases to be tapered off or discontinued; (6) acknowledgment by the CWCB and District that the lease agreement will be implemented in accordance with the Fryingpan-Arkansas Act and Operating Principles; and (7) any other provisions deemed necessary by the parties. The use of the water under the lease is authorized by the Ruedi Reservoir decrees, the District contract with USBR, and CWCB findings and acceptance of the acquired water.

9. Proposed Use of the Acquired Water

The leased water would be used to supplement the existing 39 cfs ISF water right in the Fryingpan River to preserve the natural environment, and used at rates up to 70 cfs to meet RFC and CPW flow recommendations to improve the natural environment to a reasonable degree.

CPW has provided a letter setting forth its final opinions and recommendations regarding this proposal (see **Attachment 2**). CPW has observed that increased flows during the winter months improve fish habitat, increase spawning success and fry emergence for brown trout, promote a more robust macroinvertebrate food base for fish, and most importantly, address issues related to anchor ice formation and accumulation, which adversely impacts aquatic macroinvertebrates and trout fry. The objective of the lease would be to maintain Fryingpan River flows at a rate of 70 cfs to prevent the formation of anchor ice at times when temperatures and low flows could otherwise combine to create anchor ice.

The RFC estimates that eight weeks, or fifty-six days, is the maximum length of time that the use of leased water would be necessary during any given winter season. That time period

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would translate to approximately 3,500 AF (31 cfs = 61.487 af/day X 56 days - 3,443 af). Based upon its river monitoring system and analysis of weather conditions, the RFC will inform the CWCB of when conditions are conducive to the formation of anchor ice. The CWCB, District, CPW, RFC, and USBR will coordinate on the timing and amount of releases of Ruedi water; requests for such releases; end of season operations, including, but not limited to ramping down releases; and recording and accounting for the releases. The time period during which the eight weeks of use would occur is from January 1 - March 31.

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 Fryingpan River; however, they will not be affected by this release of storage water.

12. Material Injury to Existing Rights

There will be no injury to existing rights. Under this lease, water previously stored in priority under the Ruedi Reservoir water rights would be released during times when temperature and flow conditions are conducive to the formation of anchor ice in the winter months.

13. Stacking Evaluation

When water is available under this lease for ISF use in the Fryingpan River, it can be used to supplement the Board's decreed ISF water rights and may be combined, or "stacked," with the existing ISF water right to achieve a greater level of protection for the natural environment and meet the RFC and CPW flow recommendation to help prevent formation of anchor ice in the winter.

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

The proposed lease does not negatively affect any interstate compact.

15. Effect on Maximum Utilization of Waters of the State

This proposed lease will promote maximum utilization of waters of the State by generating hydropower at the Ruedi power plant, preserving and improving the natural environment of the Fryingpan River, and making water available to downstream users.

16. Availability for Downstream Use

Water leased from the District would be available for use downstream of the Fryingpan River's confluence with the Roaring Fork River.

17. Administrability

Preliminary discussions with the Division 5 Division Engineer indicate that the release and delivery of this water from Ruedi Reservoir through the Fryingpan River pursuant to a contract between the District and the CWCB will be administrable.

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18. Potential Benefits of This Proposed Lease

During the duration of this short-term lease, when water is available for ISF use, the released Ruedi Water will be protected through the subject reach of the Fryingpan River down to the confluence with the Roaring Fork River. The proposed acquisition would increase stream flows in the Fryingpan River and provide benefits to the fish and macroinvertebrate species that live in this reach by preventing the formation of anchor ice.

19. Cost to Complete Transaction

The District's Water Marketing Policy, dated January 17, 2018, set costs for project year 2018 as \$65.25/AF plus a \$400 non-reimbursable application fee, which, for 3,500 AF, would total \$228,775.00. The CWCB would pay for the lease with funds authorized by section 37-60-123.7, C.R.S. (2018) for acquisitions of water for ISF use to preserve or improve the natural environment.

20. Policy 19 Funding Request

Because staff is requesting the Board to approve an expenditure of funds authorized by section 37-60-123.7, information required by CWCB's Financial Policy 19, which governs such expenditures, is set forth below.

A. Financial Aspects of the Proposal

The price for this lease is based upon the District's Water Marketing Policy, which sets a price of \$65.25/AF for Ruedi water used in-channel in the Fryingpan and Roaring Fork Rivers to the confluence with the Colorado River, plus a \$400 non-reimbursable application fee. Costs related to negotiating and finalizing the lease agreement can be absorbed as part of the ordinary course of business of the CWCB staff. Consequently, staff will recommend that the Board authorize an expenditure of up to \$228,775.00 for this lease.

B. Required Information from Colorado Parks and Wildlife

Because the acquired water will be used to improve the natural environment to a reasonable degree on the Fryingpan River, Policy 19 requires CPW to provide data and information regarding the subject ISF reach of the River that addresses the following criteria:

- a. The degree to which the acquired water will add useable habitat to riffles, pools and runs within the subject ISF reach;
- b. The amount of additional useable area for fish and macroinvertebrates that the acquired water will provide;
- c. Where applicable, the amount of protection from high temperatures and low oxygen levels in hot summer months that the acquired water will provide;
- d. An analysis of the degree to which the additional water resulting from the acquisition: (1) benefits the natural environment, and (2) does not result in hydraulic conditions that are detrimental to the aspects of the natural environment intended to be benefited by the acquired water, such as habitat requirements for a particular life stage of a fish species; and

e. Where applicable, an estimate of the degree to which the acquired water will increase moisture levels in the alluvial aquifer to support the riparian vegetation in the subject stream reach.

Since this proposal is to provide water during the winter season, CPW has concluded that criteria c. and e. do not apply in this case. In addition to the benefits of reduced anchor ice formation, there are a number of sources of information that exist to address criteria a., b., and d.:

- During the 1980s and 1990s, CDOW researcher R. Barry Nehring conducted longterm research projects that included the reach of the Fryingpan River below Ruedi. These investigations included IFIM and PHABSIM studies where Nehring concluded, among other things, that wintertime flows in the Fryingpan River of up to 100 cfs are optimum for brown trout adults and for egg incubation. Optimum flows for various life stages of rainbow trout are also between 100 and 250 cfs (Policy 19, criteria a., b., and d.(1)).
- The Ruedi Round II Water Marketing Program Final Supplemental EIS (1989) contains additional IFIM/PHABSIM data curves that also show brown and rainbow trout habitat improving as flows increase up to 100 cfs (Policy 19, criteria a., b., and d.(1)).
- The Ruedi Round II Water Marketing Program Final Supplemental EIS also shows that for nearly all trout life stages flows have to exceed 100 cfs before there is any reduction in overall habitat. This point addresses criterion d.(2) of Policy 19.

Staff's recommendation is set forth on page 1 of this memo.

Attachment 1: Vicinity Map

Attachment 2: Colorado Parks and Wildlife Letter dated July 2, 2018

Attachment 1





COLORADO

Parks and Wildlife

Department of Natural Resources

Water Resources Section - Capital, Parks, and Trails Branch 6060 Broadway Denver, CO 80216

July 2, 2018

Linda Bassi Kaylea White Colorado Water Conservation Board Stream and Lake Protection Section 1313 Sherman Street, 7th Floor Denver, CO 80203

SUBJECT: Potential Contractual Interest in Water from Ruedi Reservoir for the Benefit of the Fryingpan River Instream Flow

Linda and Kaylea:

Colorado Parks and Wildlife (CPW) is responding to a request by the Colorado Water Conservation Board (CWCB) that we review and analyze a proposal from the Roaring Fork Conservancy and the Colorado River Water Conservation District to acquire, by lease, an interest in water stored in Ruedi Reservoir for a release to the Fryingpan River during winter months. We have reviewed historical operations, the written proposal documents, and various scientific reports that document flow/habitat relationships. Also, we have discussed the proposed lease with our Glenwood Springs biological staff, and have had meetings with the proponents. At the May, 2018 CWCB meeting, the proposal was presented to the CWCB Board, as part of a two meeting process, to obtain Board approval; CPW provided a letter to the Board that highlighted a few operational issues that will be either incorporated into the final contractual lease or will be addressed by CWCB staff when finalizing the lease. Specifically, we have raised concerns relating to including CPW's role in operational coordination when decisions are made relating to ramping rates at the end of the lease period and circumstances that may cause reservoir releases to be stopped, tapered off, or discontinued for any reason. The following represents CPW's final opinions and recommendations on the Ruedi/Fryingpan River proposal.

The Fryingpan River is a highly regarded fishery resource with a designation as a Gold Medal Fishery. It has a widespread reputation as a premier trophy brown and rainbow trout fishery with high use among the angling public. The Fryingpan River has an existing 1973 instream flow water right for 39 cfs (November through April) and 110 cfs (May through October). This is one of the first instream flow water rights that the CWCB Board appropriated following the original passage of legislation creating the instream flow program. Per the statute, the CWCB followed the recommendation of the Division of Wildlife and made the determination that these flows were "necessary to preserve the natural environment to a reasonable decree."



The CWCB now has the authority to acquire water, water rights, or interests in water to "preserve or improve the natural environment to a reasonable decree." The above described proposal contemplates a one-year renewable lease of up to 3,500 acre-feet of Ruedi Reservoir water to be released during the winter months; the stated goal of this acquisition is to boost flows from 39 cfs to approximately 70 cfs. While 39 cfs meets the criteria to be the "minimum amount necessary to preserve the natural environment to a reasonable decree," various studies have determined that more flow during the winter months improves fish habitat, increasing spawning success and fry emergence for brown trout, promotes a more robust macroinvertebrate food base for fish, and most importantly, addresses issues related to anchor ice formation and accumulation.

Anchor ice is a problem that can occasionally occur downstream of reservoirs where a combination of air and water temperatures can cause ice to become anchored to the bottom of the river channel, as opposed to on top of the water column. Anchor ice formation is, in general, detrimental to aquatic invertebrates and to incubating fish eggs. Anchor ice in the Fryingpan River has been observed to be less prevalent at flows greater than approximately 70 cfs than at flows near 40 cfs (see *Summary Report of Macroinvertebrate Community Response to Winter Flows of the Fryingpan River* conducted by Bill Miller in 2006). Miller also noticed that macroinvertebrate diversity recovers after severe anchor ice formation within one to two years if flows remain greater than 70 cfs.

Observational data collected by CDOW and CPW staff have confirmed this opinion by Miller, putting a preference on flows between 70 cfs and 100 cfs in the winter, noting that flows in excess of 70 cfs minimize anchor ice formation.

CWCB Policy 19 Considerations

CWCB staff has informed us that since this proposal will be funded with monies authorized by 37-60-123.7 to acquire water to improve the natural environment to a reasonable degree, CWCB Policy 19 must be followed. Specifically, Policy 19 asks CPW to provide data and information to the Board that addresses the following:

a. The degree to which the acquired water will add useable habitat to riffles, pools and runs within the subject ISF reach;

b. The amount of additional useable area for fish and macroinvertebrates that the acquired water will provide;

c. Where applicable, the amount of protection from high temperatures and low oxygen levels in hot summer months that the acquired water will provide;

d. An analysis of the degree to which the additional water resulting from the acquisition: (1) benefits the natural environment, and (2) does not result in hydraulic conditions that are detrimental to the aspects of the natural environment intended to be benefited by the acquired water, such as habitat requirements for a particular life stage of a fish species; and e. Where applicable, an estimate of the degree to which the acquired water will increase moisture levels in the alluvial aquifer to support the riparian vegetation in the subject stream reach.

Since this proposal is to provide water for the winter season, CPW believes that c. and e. do not apply in this case. In addition to the benefits of reduced anchor ice formation, there are a number of sources of information that exist to address a., b. and d.

- During the 1980s and 1990s, CDOW researcher R. Barry Nehring conducted long-term research projects that included the reach of the Fryingpan River below Ruedi. These investigations included IFIM and PHABSIM studies where Nehring concluded, among other things, that wintertime flows in the Fryingpan River of up to 100 cfs are optimum for brown trout adults and for egg incubation. Optimum flows for various life stages of rainbow trout are also between 100 and 250 cfs (Policy 19, criteria a., b. and d.(1)).
- The Ruedi Round II Water Marketing Program Final Supplemental EIS (1989) contains additional IFIM/PHABSIM data curves that also show brown and rainbow trout habitat improving as flows increase up to 100 cfs (Policy 19, criteria a., b. and d.(1)).
- The Ruedi Round II Water Marketing Program Final Supplemental EIS also shows that for nearly all trout life stages flows have to exceed 100 cfs before there is any reduction in overall habitat. This point addresses criterion d.(2) of Policy 19.

Conclusions and Recommendations

CPW is of the opinion that the proposed acquisition of water from Ruedi Reservoir will result in an increase in flow from approximately 39 cfs to approximately 70 cfs and this additional water will result in an improvement to the natural environment. This conclusion is based on the reduction of anchor ice formation and an overall increase in habitat for several life stages of both rainbow and brown trout.

CPW therefore believes that CWCB should proceed with this acquisition subject to the conditions relating to ramping rates and flow reductions (planned and unforeseen) at the end of the flow enhancement period. CPW looks forward to working with the Board's staff, the Roaring Fork Conservancy, and the Colorado River District next winter when this lease is finalized and implemented.

As always, CPW staff will be in attendance at the July, 2018 CWCB meeting in Glenwood Springs to provide testimony or to answer any questions that the Board might have relating to this agenda item. Thank you for the opportunity to assist in this matter.

Sincerely Jay Skinder, CPW Instream Flow Program Coordinator

CC: Graf, Bakich, Martin, Will, Romatski



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: <u>http://www.northernwater.org/docs/NISP/MapsDocuments/2017FWMEPFinal.pdf</u>.

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				
Month	Releases	Releases		
	(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:
	Rebecca Mitchell, Director
	Date:
ATTEST:	NORTHERN COLORADO WATER CONSERVANCY DISTRICT
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

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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;

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(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

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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

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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

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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.

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(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

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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.

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(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;

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(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

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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

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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

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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.



Introduction

Section 37-60-123.7, C.R.S. (2018), enacted in 2008, authorizes a continuous appropriation of \$1,000,000 to the CWCB annually for the costs of water acquisitions for instream flow ("ISF") use. The Board's Financial Policy 19 addresses expenditures of these funds, including costs other than direct purchase or lease prices, such as preliminary evaluations of the feasibility of a temporary or permanent transfer of a water right to ISF use. In 2013, the Board authorized staff to pay some of the costs of evaluating and monitoring water rights offered to the CWCB for ISF use by entering into a contract with an entity to perform tasks related to those evaluations and monitoring activities. Using a sole source selection process, the CWCB entered into a five-year contract with the Colorado Water Trust for an amount not to exceed \$500,000 to perform tasks related to preliminary evaluations and analyses of water rights offered for ISF use, and other activities related to ISF water acquisitions. That contract expires on August 21, 2018. Based upon the benefits derived from that contract and staff's expectation that offers of water, water rights and interests in water for ISF use will continue to be made, staff seeks Board authorization to initiate a selection process to enter into another five-year contract for the above-described tasks.

Staff recommendation:

Staff recommends that the Board authorize it to initiate a selection process to contract with an entity for conducting technical analyses and performing other tasks necessary for evaluating proposed acquisitions of water for instream flow use and monitoring the use of acquired water. The contract would be for a term of five years for an amount not to exceed \$500,000, and would be funded from the Construction Fund as authorized by section 37-60-123.7, C.R.S. (2018).

Background

In addition to the actual purchase or lease price of water rights acquired for ISF use, costs are incurred for tasks associated with evaluating water rights offered for ISF use, such as historical consumptive use analyses, appraisals, title searches, and site visits for purposes of due diligence, assessment of measuring needs, and negotiations. Engineering costs associated with long-term or permanent water acquisitions can range from \$5,000 to over \$100,000, depending on the water right(s) involved and the level of participation in water court necessary to implement the acquisition. Additionally, some temporary leases require on-site monitoring to comply with the terms and conditions of the lease approval. By paying for some of these types of costs, the CWCB can leverage available funds and add value to its

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partnerships with entities that collaborate with the CWCB on water acquisitions, including the Colorado Water Trust, Trout Unlimited, other state agencies, and local governmental entities.

Financial Policy 19

The Board's Financial Policy 19 provides that the Board will consider recommendations from staff for expenditures of funds to pay for the following types of costs related to acquiring water, water rights and interests in water for ISF use:

- 1. Lease or purchase price of water, water rights or interests in water for ISF use;
- 2. Costs of preliminary evaluations of the feasibility of a temporary or permanent transfer of a water right for ISF use;
- 3. Costs of historical consumptive use analyses of water rights;
- 4. Costs of water rights appraisals;
- 5. Costs of water rights title searches;
- 6. Costs related to negotiating and finalizing the agreement(s) necessary for the transaction;
- 7. costs related to obtaining a decreed right to use the water for ISF purposes; and
- 8. Any other costs related to an acquisition of water for ISF use that the Board may deem appropriate.

2013 Master Task Order Contract with Colorado Water Trust

In 2013, the sole source selection process resulted in selection of the Colorado Water Trust to perform the work under a master task order contract. The CWT provided a general scope of work describing the categories of tasks to be performed and then developed specific task orders for each acquisition project when needed. The scope of work outlined the tasks related to hydrologic, engineering and other technical analyses required to determine whether water offered for ISF use can benefit the ISF Program and to inform the Board's application of the factors set forth in ISF Rule 6. The scope of work also outlined tasks related to: (1) obtaining administrative (Division of Water Resources) approval or a water court decree for ISF use of an acquired water right; (2) preparation of water right applications and other documents related to water court proceedings; (3) economic valuation of water rights; (4) legal analyses and preparation of transaction documents; (5) monitoring activities related to administration and enforcement of the acquired rights; and (6) other ISF acquisition program activities.

Tasks performed pursuant to the CWCB's 2013 contract with the CWT include:

McKinley Ditch Permanent Change of Use to ISF Use on the Little Cimarron and Cimarron Rivers - In support of the CWCB's acquisition of a permanent right to use a portion of the McKinley Ditch water right for ISF use under a split-season ISF/irrigation water sharing agreement, CWT: (1) contracted for a stream condition assessment on the Little Cimarron River; (2) installed groundwater wells for monitoring purposes; (3) prepared an economic valuation of the water rights; (4) prepared an engineering report to support the water court application and change case; (5) obtained engineering support for addressing objectors'

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concerns during decree negotiations; and (6) prepared a preliminary design of the infrastructure modifications needed to get the water instream and through the ISF reach. This work was also funded by the Walton Family Foundation.

Coats Bros Ditch Temporary Lease for ISF use on Tomichi Creek - In 2015, CWT assisted in securing the approval of this temporary ISF lease that will use up to 3 cfs of the water rights decreed to the Coats Bros Ditch to protect up to 12.3 miles of Tomichi Creek. Due to low flow conditions in the Gunnison Basin, the lease is being implemented this year, augmenting low flows beginning on July 1. Prior to July 1, the water was used to irrigate hay meadows. The CWT partnered with Trout Unlimited on the project.

Yampa River Temporary ISF Lease and Reservoir Releases - In 2012, the CWT worked closely with the CWCB staff on obtaining approval of the first temporary ISF lease pursuant to for releases from Stagecoach Reservoir to restore flows to the Yampa River upstream of and through the City of Steamboat Springs. The CWT also supported implementation of this lease in 2013 and 2017. This work was also funded by the City of Steamboat Springs, The Nature Conservancy, Southwestern Energy, Imperial, Gates Family Foundation, National Geographic, and the Yampa Valley Community Foundation.

Monitoring of Acquired Water Rights - The CWT has facilitated eleven ISF water acquisitions to preserve and/or improve the natural environment, and is acting as CWCB's agent for the implementation, monitoring, and reporting for a number of these acquisitions. This work done consists of ensuring that the goals and objectives of each ISF acquisition are being met and that the project is managed responsibly. This includes preparing monitoring plans for each acquisition and implementing the plans. This work was also funded by the Gates Family Foundation and the Greenwaves Fund.

Request for Water Acquisitions Pilot Process - The CWT's tasks related to this item include developing the process, designing and launching the website, and outreach for the program. Launched in January 2018, the process to date has generated 17 offers of water, which the CWT is reviewing for opportunities. This work was also funded by the Lyda Hill Foundation.

Poudre Instream Flow Augmentation Plan - As part of this stakeholder process to develop an ISF augmentation plan concept on the Cache La Poudre River ("ISF Aug Plan"), the CWT has participated in developing the technical underpinnings of a water court application, including quantifying the gap in flows to meet environmental needs as determined by Colorado Parks and Wildlife, drafting and negotiating the necessary agreements, drafting the water court application, and meeting with stakeholders. This work is also funded by the Gates Family Foundation, Northern Water, Greeley, Ft. Collins, New Belgium, and the Community Foundation of Northern Colorado.

Process for 2018 Contract

Staff will coordinate with the State Controller's Office on the selection and contracting process. This proposal will enable the CWCB and its partners to continue to pool their resources on water acquisition projects, maximize utilization of Colorado's water resources, and work more effectively with water rights owners to achieve their goals.



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Robert Randall, DNR Executive Director

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то:	Colorado Water Conservation Board Members
FROM:	Greg Johnson, Water Supply Planning Section
DATE:	July 18-19, 2018 Board Meeting
AGENDA ITEM:	14. Statewide Water Supply Initiative Update

Staff recommendation: This item is informational only, with no Board action requested.

Background:

CWCB staff is working with the technical team to implement Phase 2 of the update to the Statewide Water Supply Initiative. Phase 2 entails detailed technical evaluations for each of the subject areas (e.g. municipal and self-supplied industrial, agricultural, environmental and recreational, etc.) per the methodologies developed in Phase 1. CWCB staff is also working with the technical team, roundtables, and other stakeholders to appropriately message key aspects of the project and gain a better understanding of how the project fits with other water planning efforts. All project documentation is available on the <u>SWSI Update webpage</u>.

CWCB staff will give a brief status report and update the SWSI update and the current project schedule.

