



COLORADO

**Colorado Water
Conservation Board**
Department of Natural Resources

DIRECTOR'S REPORT

September 2020

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
Alana Holdren

DATE: September 16-17, 2020

SUBJECT: **Agenda Item 4d, September 2020 CWCB Board Meeting Director's Report**

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~STATEWIDE~

CWCB SMALL FEASIBILITY STUDY GRANT FUND UPDATE:

New grant applications approved:

1. None

Previously approved grants in FY20/21:

1. None

Total funds approved for feasibility study grants in FY20/21: \$0

~COLORADO RIVER BASIN~

COLORADO RIVER WATER USE—

2020 Colorado River Storage as of August 31, 2020			
	Elevation (feet above mean sea level)	Storage (MAF)	Percent of Capacity
Lake Mead	1,084.02	10.347	40%
Lake Powell	3,599.93	11.743	48%
Total System Active Storage		31.374	53%
2019 Total Active Storage		32.295	54%
		Flow (MAF)	Percent of Average
Forecasted Unregulated Inflow into Powell (Forecasted Water Year 2020)		6.175	57%

Forecasted CY 2020 Lower Basin Consumptive Use		
State	Use (MAF)	Total (MAF)
Arizona	2.470	
California		
California Agricultural	3.259	6.832
Metro. Water District	0.824	
Other	0.015	
Nevada	0.265	

*Note MAF = million acre-feet

Wild and Scenic Fund Expenditures—

Expenditures for Fiscal Year 2020-21 are set forth below.

FY2020-21	
Upper Colorado River Wild and Scenic	
<u>Purchase Orders (PO) issued FY20-21</u>	
Colorado River Water Conservation District PO 2021-2050	(\$95,680.00)
Northwest Colorado Council of Governments PO 2021-2048	(\$70,525.00)
Upper Colorado River Wild and Scenic: Funds Spent	(\$166,205.00)
Unencumbered balance for FY20-21	\$233,793.00

Upper Colorado River Wild and Scenic Stakeholder Group—

The Amended and Restated Management Plan was completed in June 2020 and includes final Outstandingly Remarkable Values indicators and Resources Guides related to recreational fishing and floatboating. On August 27, 2020, the Upper Colorado Wild and Scenic Stakeholder Group (SG) held its quarterly meeting and discussed timelines and tasks required to implement the Management Plan, the role of adhoc committees now that the Management Plan is finalized, and initiated a discussion on a permanent financial structure. The SG has made significant progress in two areas since its last quarterly meeting: (1) The SG is developing a draft Request for Qualifications to develop a channel maintenance monitoring plan, and (2) the SG has developed a final Cooperative Measures toolbox that includes voluntary measures to protect the Outstandingly Remarkable Values.

~SAN JUAN/DOLORES RIVER BASIN~

LOWER DOLORES WORKING GROUP UPDATE: The Lower Dolores Plan Working Group continues to conduct outreach and education on the draft National Conservation Area (NCA) legislation. The Four Corners Water Resources Center at Fort Lewis College has begun archiving the work done by the Group, particularly research and data related to native fish on the Dolores River. The Center also will coordinate with the Group on opportunities for students and scientists to work with the Native Fish Monitoring and Recommendation Team (M&R Team) on fish monitoring and other data collection and analyses linked to the Native Fish Implementation Plan.

On March 6, 2020, the Native Fish M&R Team and researchers from the FLC Water Resources Center and Rivers Edge West/Dolores Restoration Partnership participated in a workshop to advance long-term collaboration on monitoring strategies and deployments. As follow-up to the Workshop, participants

are formulating the *Dolores River Adaptive Management Support Project* to support the development of a monitoring protocol that will cover both regularly scheduled annual monitoring and responsive monitoring in spill years. Monitoring will be performed by academic researchers and Conservation Legacy’s strike teams and will include reporting of monitoring results, with data housed at Fort Lewis College. Responsive monitoring in spill years will require more significant monitoring deployment funding to get researchers and students in the field during these periods of opportunity.

The work of the Native Fish M&R Team, assisted by academic researchers, has taken root as an important part of the Wild and Scenic Alternative on the Lower Dolores River. Even though the NCA legislation continues to be a work in progress, the intent of the draft legislation with regard to collaborative science-based monitoring and adaptive management for the protection of the native fish Wild and Scenic ORVs is being fully implemented as the result of actions and strategies presented above.

RECENTLY DECREED ISF WATER RIGHTS: On July 29, 2020, the Division 7 Water Court decreed ISF water rights to the CWCB on a reach of Himes Creek in Case No. 19CW3028 for all unappropriated flow (01/01-12/31), with an appropriation date of March 21, 2019. The upstream terminus is Himes Creek’s headwaters, and the lower terminus is the Himes Ditch headgate. This reach is approximately 2.0 miles long and flows in a southeasterly direction through parts of Mineral County. The U.S Forest Service recommended this ISF on Himes Creek to protect its natural environment which is a step-pool system that contains a self-reproducing population of the San Juan lineage of Colorado River cutthroat trout (*oncorhynchus clarkii pleuriticus*). Himes Creek contains one of only five known distinct populations of the San Juan lineage trout and the total number of San Juan lineage trout in all known populations is estimated to be as few as 1,000. The total number of stream miles that the fish exists in is estimated to be 9.3 miles, and Himes Creek contains the longest continuous section of known habitat.

~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. The CWCB and CPW may exercise the loan for up to 120 days in each year, not to exceed 3 years during the 10-year period ending in 2022.

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

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
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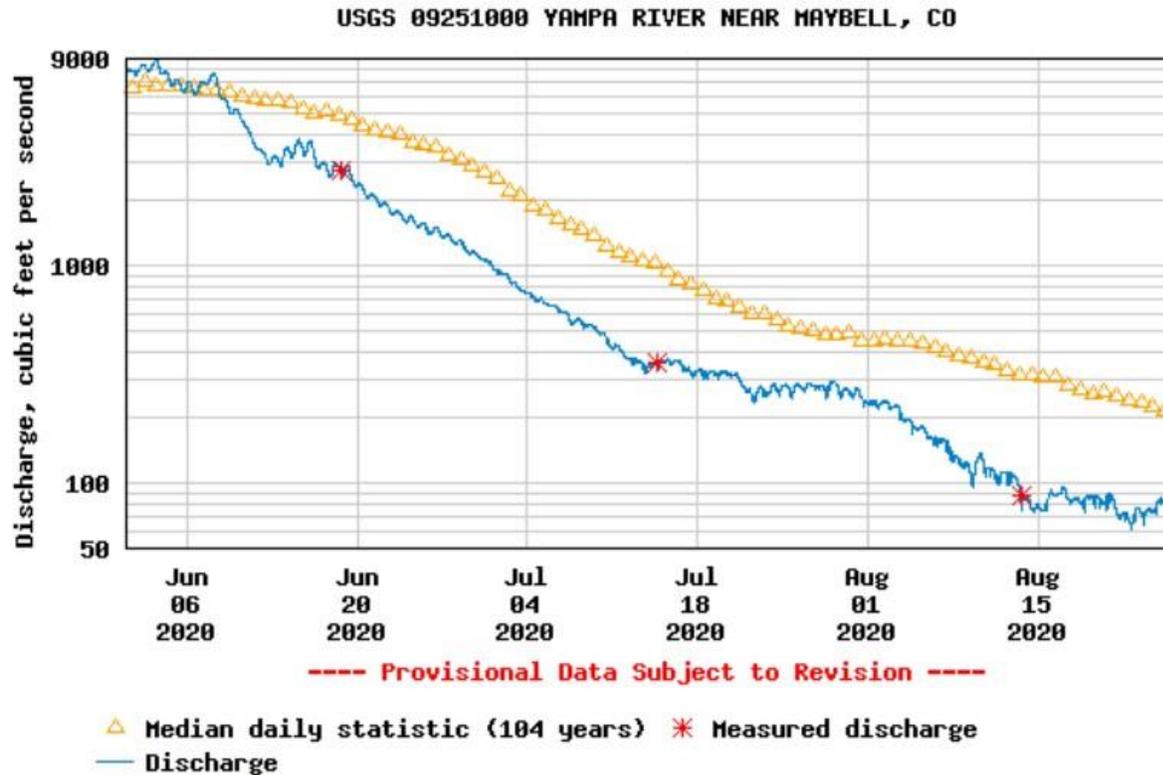
The CWCB and CPW exercised this loan of water in 2012 and 2018, and did not exercise it in 2013-2017. On August 10, 2020, to address low flows and rising temperatures on the White River, CWCB staff sent a written request to CPW, with a copy to the Division Engineer for Water Division 6, requesting releases of loaned water from Lake Avery for instream flow use on Big Beaver Creek and the White River. CPW initiated releases starting on August 10 at a rate of approximately 20 cfs, and ceased the releases on the morning of August 31, 2020, releasing a total of approximately 1,000 acre-feet at an average rate of 25 cfs. This is the third and last year that the CWCB and CPW can implement this loan of water for instream flow use.

UPPER COLORADO RIVER ENDANGERED FISH RECOVERY PROGRAM—ELKHEAD RESERVOIR LEASE

The Upper Colorado River Endangered Fish Recovery Program is leasing an additional 1,500 acre-feet of short-term water supply in Elkhead Reservoir from the Colorado River Water Conservation District, pursuant to the entities’ established 2005 agreement. This 1,500 acre-feet lease will supplement the 5,000 acre-feet of Elkhead Reservoir storage allocated for the Recovery Program’s use annually, for a total of 6,500 acre-feet of water this year. The purpose of the lease is to augment Yampa River instream flows under decree entered in Case Number 11CW9 (02CW106), appropriated on October 16, 2002 for the Elkhead Reservoir Enlargement (Water Division 6), which allows for “releases from Elkhead Reservoir for in-river fish habitat and river flow maintenance and enhancement uses, and uses in furtherance of the Upper Colorado River Basin Fishes Recovery Program.”

In March 2019, the Colorado Water Conservation Board provided a \$30,000 grant to the Colorado Water Trust to lease water from either Elkhead Reservoir or Stagecoach Reservoir. The funding source was the 2018-2019 Severance Tax Operational Fund. The Colorado Water Trust is providing \$12,500 of the grant funds to provide 250 acre-feet of the 1,500 total acre-feet lease.

Unusually hot and dry conditions have persisted this summer in the Yampa River basin, with minimal precipitation since April. The Recovery Program began releasing water from its Elkhead Reservoir 5,000 acre-feet lease on August 7. However, exceptionally low flow conditions persist—flows have not consistently met the U.S. Fish and Wildlife Service’s dry-year target of 93 cubic feet per second at the Maybell gage (see graph below). At the current rate of release, the currently available 5,000 acre-foot lease would be exhausted around September 14. This additional 1,500 acre-feet lease would allow for additional flow augmentation; for example, it would allow for an additional 19 days of 40 cubic feet per second releases, approximately. (*Jojo La*)



~ WATER CONSERVATION AND DROUGHT PLANNING UPDATES ~

OWCDP Director's Report Items – September 2020

CWCB WATER EFFICIENCY GRANT FUND PROGRAM (WEGF) UPDATE:

Two grant applications have been received since the July 2020 Director's Report

- **Town of Windsor** – Drought Management Plan
- **Tri-County Water Conservancy District** – Water Efficiency Plan Update

No grants have been approved since the July 2020 Director's Report

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

- **City of Westminster** – AMI Water Meter Installation– *50% Progress Report*
- **Western Resource Advocates** – Removing Barriers: Building Capacity to Implement Water Conservation & Efficiency Programs – *50% Progress Report*
- **City of Evans** – Water Efficiency Plan Update – *Final Plan submittal*

(Ben Wade)

WATER EFFICIENCY & DROUGHT PLANS UPDATE: 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

- City of Fort Collins

Drought Management Plans in review

- City of Durango

WATER EFFICIENCY PLANS

Approved Plans

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.

Conditional Approval

- **Widefield Water & Sanitation District**
- **City of Lamar**
- **City of Loveland**
- **Town of Eagle**
- **Northglenn**
- **City of Alamosa**
- **Pueblo West**
- **City of Westminster**

Water Efficiency Plans in review

- **Central Weld County Water District**
- **Evans**
(Kevin Reidy & Ben Wade)

GOVERNOR'S WATER AVAILABILITY TASK FORCE: The next Water Availability Task Force meeting will be held on September 22 from 9:30-11:30am. Please check the website (<http://cwcb.state.co.us/public-information/flood-water-availability-task-forces/Pages/main.aspx>) for additional information. **(Ben Wade)**

CO WATER LOSS INITIATIVE: Kevin Reidy 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. At present, the consultant team has finished the one-on-one technical assistance sessions with each participant utility to ensure the water loss audit data from the participating utilities is correct and valid. During this last phase, the team prepared a survey of participants to see what worked and what didn't. The consultant team is wrapping up the data collection and evaluating the entire project at this time. A non-reimbursable request was successful through HB 20-1403 for Phase II of the CO Water Loss Initiative. Kevin will be creating an RFP in the next few months for this second phase to continue Phase I work. **(Kevin Reidy)**

LAND/WATER PLANNING NEXUS:

- Sonoran Institute, through a CWCB water plan grant, has extended their Colorado Growing Smart program to carry out 3 more additional workshops over the next 18-24 months. Kevin is on the advisory group for these trainings. The next and last of the three trainings is being held virtually at present time. At the time of this report, we have completed two days of training with two more to go.
- Kevin has been participating on the core planning team for the Denver One Water Plan funded by a water plan grant. The team consists of various Denver city departments, Mile High Flood, Denver Water, Metro Wastewater and the Greenway Foundation. The core team has been working on defining what the plan will cover and what goals the plan should address. The project just had its first One Water Advisory Group virtual meeting with about 50 people attending. The group was highly engaged. **(Kevin Reidy)**

~WATERSHED AND FLOOD UPDATES~

NFIP Community Assistance Program Coordinator

Flood After Fire. The Colorado State Recovery Task Force (RTF) was activated in August in response to multiple wildfires including the Pine Gulch fire, the largest in Colorado history, north of Grand Junction and the Grizzly Creek fire near Glenwood Springs. As a member of the task force, this office is working closely with the CO Division of Homeland Security & Emergency Management (DHSEM), the Department of Local Affairs (DOLA), impacted Colorado communities, and the Federal Emergency Management Administration (FEMA) to coordinate timely and effective flood-after-fire information to residents, staff, and elected officials.

Wildfires dramatically alter the terrain and ground conditions. Normally, vegetation absorbs rainfall, reducing runoff. However, wildfires leave the ground charred, barren, and unable to absorb water, creating conditions ripe for flash flooding and mudflow. Flood risk remains significantly higher until vegetation is restored—up to 5 years or more after a wildfire. Flooding after fire is often more severe, as debris and ash left from the fire can form mudflows. As rainwater moves across charred and denuded ground, it can also pick up soil and sediment and carry it in a stream of floodwaters. These mudflows can cause significant damage.

The message to the communities and their residents is the time to purchase flood insurance is now to assure financial protection from flooding and also to take additional steps to reduce their risk such as preparing their property and emergency planning for any future flood event. This message is equally important to those whose properties are not currently in an identified flood zone but who may now be at risk following the fires as 20-30% of all annual flood insurance claims are for properties outside regulatory flood zones. Public meetings for those communities impacted by the fires are planned in the coming weeks.

FY20/21 Community Assistance Program/State Support Services Element (CAP-SSSE) Grant

The CAP-SSSE grant for fiscal year 20/21 has been approved and awarded to the CWCB. The grant performance period began July 1, 2020. As in past years, this grant will allow this office to proactively identify, prevent, and resolve floodplain management issues in communities participating in the National Flood Insurance Program (NFIP) before a flood event occurs. The CAP-SSSE program helps to build state and community floodplain management expertise and capability, improving resiliency. Additionally, the program drives demand for strong floodplain management development standards and insurance and promotes state inter-agency coordination and collaboration.

(Doug Mahan)

Colorado Fluvial Hazard Zone (FHZ) Mapping – Update from May 2020

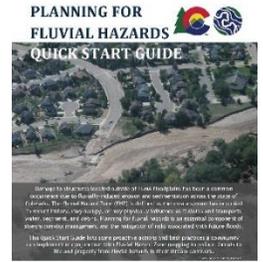
In order to recognize and assess the hazards associated with erosion, sediment deposition, and other dynamic river processes, the Colorado Water Conservation Board has developed a technical protocol to help communities identify, map, and plan for natural hazards. The State of Colorado's Fluvial Hazard Zone Mapping Program represents a significant and necessary step forward in adaptively managing stream corridors, preparing for and mitigating flood impacts, protecting environmental processes, and making informed land use decisions based on an awareness of fluvial processes.

The draft "Colorado Fluvial Hazard Zone Delineation Protocol" was out for public comment in early 2020. The final Protocol is on the website as version 1.0. It includes a document that describes the changes made to the draft version.

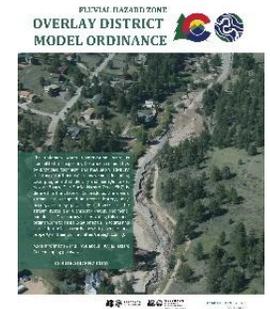
The CWCB has prepared resources for communities to learn more about how to utilize the protocol and resultant maps in their planning. The website resource page (www.ColoradoFHZ.com) includes the following resources:

1. *Colorado FHZ Delineation Protocol V 1.0*
2. *Colorado FHZ Fact Sheet*. The FHZ Fact Sheet is an introduction to the concepts of fluvial hazards, the CWCB program developed to identify them, and provides an explanation as to how FHZ maps differ from FEMA floodplain maps.

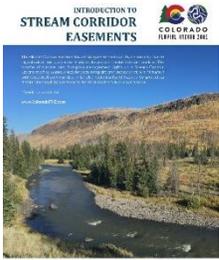
3. *Colorado Planning for Fluvial Hazards Quick Start Guide.* Damage to structures located outside of FEMA floodplains has been a common occurrence due to fluvially-induced erosion and sedimentation across the state of Colorado. Planning for fluvial hazards is an essential component of stream corridor management and the mitigation of risks associated with future floods. The Quick Start Guide lists some proactive actions and best practices a community can implement in conjunction with Fluvial Hazard Zone mapping to reduce threats to life and property from fluvial hazards in their stream corridors.



4. *Colorado Overlay District Model Ordinance.* The Colorado Water Conservation Board is committed to supporting Colorado communities by providing technical and regulatory advisory assistance for floodplain management including local programs that identify and manage Fluvial Hazard Zones. The purpose of providing the model ordinance is to assist local officials in addressing the risk fluvial hazards pose to people and property in their communities through zoning.



5. *Introduction to Stream Corridor Easements.* The Stream Corridor Easement is a management tool used by community-based organizations and government entities to protect a natural stream corridor. The transfer of channel and floodplain management rights via a Stream Corridor Easement offers a unique tool for preserving stream functions that benefit human and ecological communities while also reducing flood hazards by protecting stream and floodplain processes at critical locations in our watersheds.



(Chris Sturm)

Long-Term Flood Recovery Monitoring

Following the September 2013 floods along the Front Range, the CWCB began working with Colorado Watershed Assembly and its team of stream scientists and monitoring specialists from Alba Watershed Consulting, Johnson Environmental Consulting, and EcoMetrics to facilitate stream health and resilience monitoring by completing tasks related to classifying and prioritizing project reaches for monitoring, compiling project background information and existing as-built data, performing field surveys at select sites to facilitate repeatable empirical measures, and assessing baseline stream health conditions and trends at select sites. These monitoring efforts have resulted in numerous photo point monitoring sites throughout the Front Range. Up until now, this monitoring has been completed by consultants; however, with the depletion of funds, this responsibility will now fall to CWCB staff and Andrea Harbin

Monahan will continue to monitor these locations moving into the fall months and beyond, assessing their long-term flood recovery with photos so that we can visualize the changes that have taken place.

(Andrea Harbin Monahan)

September Risk MAP Project Updates by Major Water Basin

North Platte – No work being conducted in this area.

South Platte – Park, Jefferson, Gilpin, Boulder, Larimer, Weld, Morgan, Washington, Sedgwick, and Logan Counties have ongoing studies (though some are currently being managed by the Mile High Flood District, or MHFD):

- South Platte River areas: Mapping will go effective on September 4, 2020.
- Weld County: Preliminary FIRM panels will be distributed to the county and communities on September 9. Resilience meeting held July 24th, and Consultation Coordination Officer (CCO) and public meetings scheduled throughout September.
 - o Cache La Poudre Additional Studies: FEMA provided additional funds for this effort in FY 2018. The floodplain mapping task has been approved. Next step is to prepare for preliminary map distribution.
- CHAMP Physical Map Revision, Phases 1-2: 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, Gilpin, Weld, and Larimer Counties.
 - o Boulder County: A new appeal period will be set, and a revised preliminary DFIRM panel distribution issued. Tentative new appeal start date for late October/early November.
 - o Larimer and Big Thompson River areas: floodplain mapping issues were addressed with guidance from FEMA, and all data development approved.
- The St. Vrain Risk Map phase 3: Project continues from its original funding in FY16. Gilpin County's public meeting, held virtually on August 10th, had low community attendance; but appeal period will be scheduled soon so project is moving forward as expected.
- Elbert and Park Counties Base Level Engineering (BLE): Projects just kicked off late August. Contractor working on topographic data processing. BLE is a wide scale, automated approach to analyzing flood risk order to provide communities with an initial overview, but it is not a regulatory product.

Colorado – Mesa, Eagle, Summit, and Garfield Counties have ongoing studies:

- Mesa County Phase 2: Survey, terrain, and basemap data submittals were sent for review recently. The next step will be to conduct the hydraulic analysis for Colorado River areas. The remainder of the County will be funded by a FEMA FY20 grant.
- Flood Risk Information System (Mesa County): Contractor is developing a web app to present draft flood risk products in Mesa County. This will include a public user interface as well as a community official (private) interface to highlight various types of flood risk information. Contractor has developed most components of the interface, and we are reviewing as well as quality checking/quality testing functionality.
- Grand Junction Levee (Mesa County): Project kicking off this summer. This is a component of the larger countywide project. We are currently obtaining data and information from the local community.
- Eagle County Physical Map Revision Phase 2-3: Model/mapping issues in the Town of Basalt have been resolved. The hydraulics submittal has been approved. Eagle County and Basalt have until September 1st to provide comments or feedback regarding the floodplain mapping developed.
- Garfield County Phase 2-3: CWCB received a \$212,558 grant in FY17, to provide updated hydrologic and hydraulic engineering as well as floodplain mapping for the Roaring Fork River. Colorado River floodplain mapping services were also scoped within the County. This project is continuing this year. Currently, the contractor is working on a 2D floodway modeling technique that received special approval. The flood risk review meeting will likely take place in the early fall.

Gunnison/Uncompahgre – Delta, Gunnison, Hinsdale, San Miguel, and Ouray Counties have ongoing studies:

- Delta County Phase 2-3. Some issues with hydraulics data in the southern tip of the county being handled thanks to recent preliminary topographic data that was just made available this summer.
- Upper Gunnison Phases 2-3: This project is being continued under new grants (since the original FY15 grant), part of which are covered by state funds such as the Hinsdale County Partial Countywide Revision. The Gunnison Physical Map Revision process is being covered by FEMA FY19 funds.
 - o Hinsdale County: Contractor is updating hydraulics through Lake City thanks to new LiDAR data, and will submit for review in late August.
 - o Gunnison County: Survey for the Gunnison River being acquired. Modeling in Crested Butte is complete, and submission of the hydraulics task will be sent along the survey data once on file.

Rio Grande – Costilla, Mineral, Conejos, Alamosa, and Rio Grande Counties have ongoing studies:

- Rio Grande River hydrology: The hydrology results have been approved by FEMA Risk MAP reviewers. CWCB and mapping contractors held a virtual meeting on August 13th to present results of this study update with affected communities, and to obtain concurrence in order to process a formal Conditional Letter of Map Revision (CLOMR). This CLOMR will ensure the hydrology updates become the new official, latest and greatest source of hydrology data for future studies along this basin.
- City of Alamosa levee: Surveying completed and currently in review with our mapping contractor. Final reporting expected for late summer/early fall.

Arkansas – Lake, Chaffee, Fremont, Teller, El Paso, Custer, Huerfano, Las Animas, Otero, Bent, Prowers, and Lincoln Counties have ongoing studies:

- Arkansas River Physical Map Revision: Chaffee County hydraulics were approved. Fremont County hydraulics came back with comments, so the data was resubmitted and is pending approval. Prowers County hydraulics data reviewers had comments on the submission, so the contractor will be having a meeting with the reviewing team to walk through edits.
- Lake and Chaffee BLE: Contractor is working on the topographic data refinements and begun modeling in some areas. Some additional coordination with another contractor is required to obtain inflow data for nearby counties.
- Custer and Fremont BLE: The initial stage of modeling for these two counties just started.
- Huerfano BLE: Hydrology task was completed and the contractor is now moving onto the hydraulics piece.
- Bent and Otero BLE, and CHAMP 3 Phase 2 projects: Base Level Engineering work begun recently for the areas of these two counties outside of the Arkansas River basin, which was already undergoing a study as part of the CHAMP 3 Phase 2 project. Hydrology will be submitted for review for areas in the counties just north of the Arkansas River (not part of the BLE effort).
- Las Animas (Bent County) Pre-Levee: Project is part of the larger countywide map update for Bent County. Contractor reached out to the local community to request data.
- Granada/Holly (Prowers County) Pre-Levee: Project just kicked off and contractor coordinating with other contractor working in the county, to receive relevant data.
- Prowers and Las Animas BLE projects: LiDAR data was shared with contractor, who is beginning to process it. Kickoff meeting likely to be held in the winter.
- El Paso BLE/Phase 2 and Templeton Gap (T-Gap) pre-levee work: Original work in El Paso County was funded in 2014, but continues through FY19. Discovery and Templeton Gap (T-Gap) levee meeting held in April, and hydrology updates will be examined under the El Paso County

phase 2 scope of work for FY19. Phase 2 kickoff meeting was held July 21. This county will have a 2-year study with about 50 miles worked on in the first year, and another 100 miles in the second year of data development. We are currently finalizing the scope of work by refining the streams that will be studied in an approximate or detailed capacity.

- Teller County BLE/Phase 2: Discovery meeting held in April and communities' draft data reviews completed. Phase 2 kickoff meeting held July 20. This project is on a similar timeline as the El Paso County study.

Yampa/White – Rio Blanco, Routt, and Moffat Counties have ongoing studies:

- Upper Yampa River hydrology: This is a state funded effort to update hydrology for the Upper Yampa River. The report has been submitted and we are working with FEMA on addressing some clarification comments and obtaining final approval, likely in early September.
- Upper White Watershed/Rio Blanco County Additional Studies: Originally, the Upper White Watershed project was funded in FY16 but work continues today. The Consultation Coordination Officer (CCO) meeting took place in April, and the public meetings were on late July. The appeal period is set to begin in the next few weeks, and the information about this is posting to the Federal Register and newspapers as well.

San Miguel/Dolores/Animas/San Juan – La Plata, Montezuma, Archuleta, and San Juan Counties, along with the Southern Ute Tribe, have ongoing studies:

- Animas Watershed Phases 2-3: FEMA awarded CWCB \$654,717 to fund this project's phase 2 to update 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. FEMA then awarded funds for Phase 3 of this project under FY18 to take the project through additional community and public meetings as well as the appeal period. Currently, the non-regulatory products produced to portray flood risk across the four project counties and the Southern Ute Tribe are complete and were presented at the Resiliency meeting on August 6. The preliminary DFIRM products will be ready for distribution soon.
- Southwest Colorado (Montezuma, Dolores, San Juan, La Plata, Archuleta, Hinsdale, and Mineral Counties) BLE: Project just started. Contractor is processing 2 of the 3 topographic data deliverables, and awaiting the last piece of the data in the next few months.

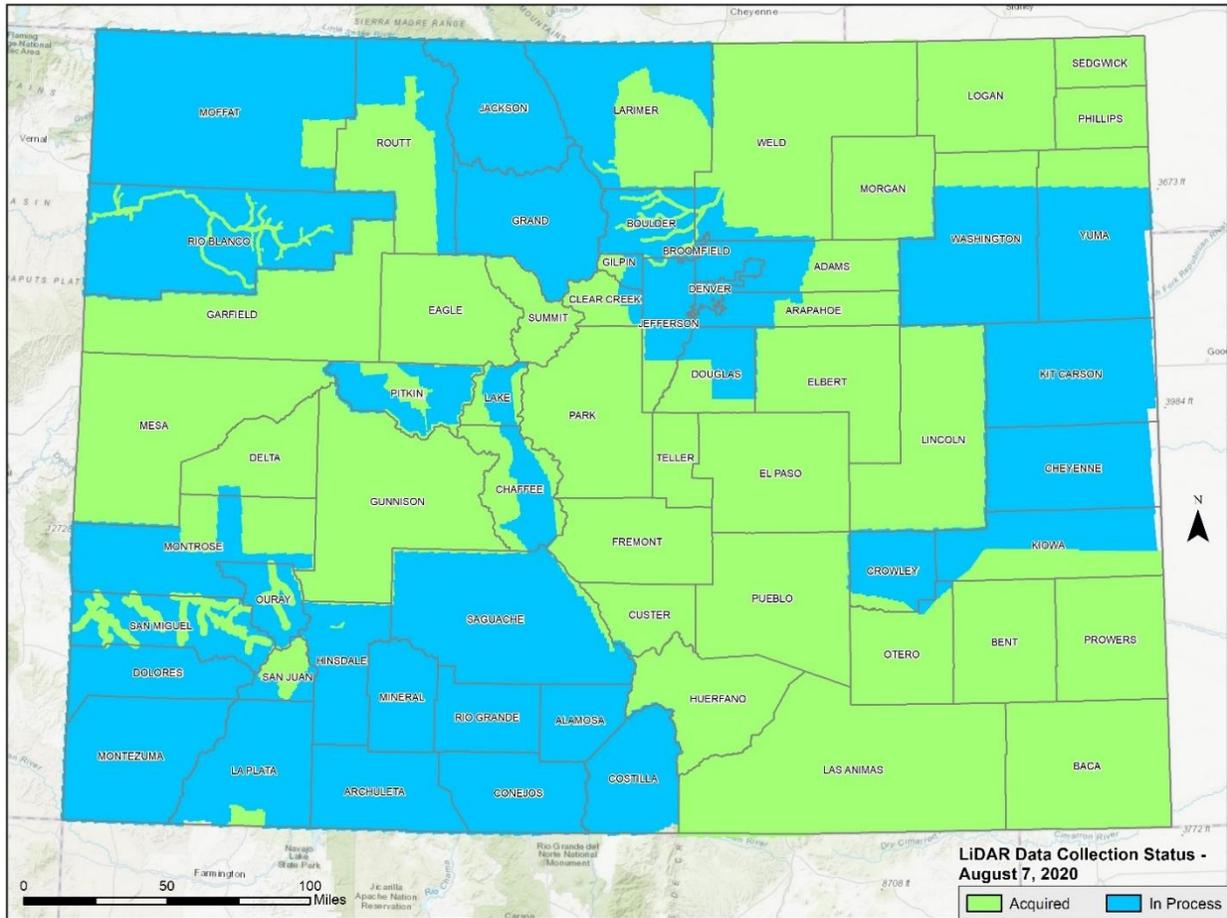
Multi-Watershed Projects:

- CHAMP 3 Phase 2 (also see: Arkansas projects, and the Rio Grande River hydrology work for related information): *Bent and Otero Counties* addressed under the Arkansas Basin projects.

Costilla County floodplain mapping updates being and the hydrology task submitted in late August for review. *Ouray County* model as updated to a HEC-RAS 2D format, and we received approval from FEMA Region 8 to use the presented flow regime, since the model is complex. *San Miguel County* hydraulics comments are being reviewed, and the flood risk review meeting is likely going to take place in the early fall in coordination with a new contractor (as the project is switching over). Contractor is coordinating with the review team to address comments/issues.

- CHAMP 3 Phase 3: *Moffat County* survey was completed in mid-August, and the hydrology submittal is anticipated for September. *Lincoln County* terrain modeling completed and task switched over to a new contractor. The new contractor is scheduling a kickoff meeting with the communities in early September. *Phillips County* terrain submittal completed, and contractor working on the hydraulics task. A kickoff meeting was held with the communities and we received great feedback from the City of Holyoke regarding local flood issues. The flood risk review meeting will likely take place late fall/early winter. *Mineral County* will have updated hydraulics (1D and 2D) through the Town of Creede. Still waiting on levee certification, and data from the Town contractor; levee certification is currently being handled including a LOMR. *Saguache County* hydraulics were updated due to a diversion structure near Town of Crestone, and comments from the data submission are being addressed currently.
- LiDAR acquisition: CWCB received \$3.4 million in a FEMA FY16 grant and \$2.2 million in FY18 for LiDAR acquisition in Colorado for future floodplain mapping projects.
 - o The 2016 grant money was used to leverage an additional \$1 million from the USGS to supplement a late spring 2018 LiDAR acquisition in *Eastern Colorado*. This data has been collected and final deliverables are now available by request on the Colorado Hazard Mapping website (www.coloradohazardmapping.com). The FY18 grant funded LiDAR in northeastern and southeastern corners of Colorado. Other LiDAR collection tasks that were recently completed included an project for *Montrose, Gunnison, Lake, and Chaffee Counties*. Finally, the *Southwest CO* data collection, led by the USGS, is going through the final stages of QA/QC; two thirds of the data acquired is already available in its preliminary (not final or approved) format, and we expect a final deliverable of all the project data in the fall. The rest of the state was contracted to be acquired in the next couple of years, led by the USGS 3DEP program.

Below is a map of the most recent status for LiDAR data acquired in Colorado:



(Thuy Patton and Marta Blanco Castano)

Thuy Patton, 14-Year CWCB Staff Member, Leaving for FEMA Region 8

The CWCB Flood Section lost one of its longtime members when Thuy Patton, Floodplain Mapping Coordinator, left to pursue a position at FEMA Region 8 in Lakewood. Thuy began her service at CWCB in 2006, initially taking the Community Assistance Program Coordinator position, which manages the National Flood Insurance Program and is currently held by Doug Mahan. Thuy transitioned to the Floodplain Mapping Coordinator position in 2009, a position she held until her departure. The program has seen tremendous growth during her tenure, and she will be deeply missed.

Kevin Houck, her supervisor and Flood Section Chief, stated “Thuy is the only person to hold this position throughout my time as Chief of the Watershed and Flood Protection Section. Her knowledge of the program, and indeed, her institutional knowledge of all things flood-related in the state will be equaled by few.”

Thuy's last day was Friday, September 4th. The duties will be continued on an interim basis by Marta Blanco Castano, mapping assistant for the Flood Section. The Floodplain Mapping Coordinator position, which is 100% federally funded, was approved for backfill, and has already been advertised. It is anticipated that the position will be occupied sometime in October.

(Kevin Houck)

~INSTREAM FLOW ATTACHMENTS~

- 01 Instream Flow and Natural Lake Level Program Summary of Resolved Opposition Cases
- 02 Stream and Lake Protection Section De Minimis Cases
- 03 Requests for Administration of Instream Flow Water Rights

~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
- 05 Construction Fund, Special Funds and Severance Tax Funds Non-Reimbursable Investments Status Report Fiscal Year 2018-2019

**September 16-17, 2020 Board Meeting
Instream Flow and Natural Lake Level Program
Summary of Resolved Legal Protection 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 in which Staff had filed statements of opposition.

STATEMENTS OF OPPOSITION

(1) Case No. 19CW3074 (Water Division 2) - Application of Town of Buena Vista

The Board ratified this Statement of Opposition at its May 2020 meeting. Applicant sought to make conditional water rights partially absolute and a finding of reasonable diligence. 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 CWCB holds instream flow water rights, including the following, in Water Division 2 in the Arkansas Headwaters watershed that could have been injured by this application:

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

- Applicant addressed CWCB concerns regarding exchange rate and timing.

(2) Case No. 18CW3064 (Water Division 4) - Application of Double RL Company

The Board ratified this Statement of Opposition at its March 2019 meeting. Applicant requested to enlarge water storage right, make water storage right absolute, and amend plan for augmentation. 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 CWCB holds instream flow water rights, including the following in Water Division 4 in the Uncompahgre watershed, that could be injured by this application:

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Appropriation Date
98CW0234	Dallas Creek	confl E & W Forks Dallas Cr	confl Ridgway Reservoir	9 (10/15 - 4/30) 20 (5/1 - 10/14)	07/13/1998
98CW0222	Uncompahgre River	Highway 62 bridge	confl Ridgway Res	20 (10/15 - 4/30) 65 (5/1 - 10/14)	07/13/1998
84CW0423	West Fork Dallas Creek	headwaters in vicinity	hdgt Burkhardt Eddy div	2.5 (1/1 - 12/31)	05/04/1984

- Upon CWCB's request, Applicant included terms clarifying the claims, place of use, requirements for measuring devices, accounting and retained jurisdiction.

(3) Case No. 17CW3258 (Water Division 5) - Application of Snowmass Water and Sanitation District

The Board ratified this Statement of Opposition at its March 2018 meeting. Applicant requested conditional surface water right, approval of plan for augmentation, and conditional appropriative rights of exchange. 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 CWCB holds instream flow water rights, including the following in Water Division 5 in the Roaring Fork watershed, that could have been injured by this application:

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Appropriation Date
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 Owl Creek	confl Fryingpan River	0.15-0.89 cfs (dates vary)	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
W-2943A-B (1976)	Snowmass Creek (3 reaches)	outlet Snowmass Lake	confl Roaring Fork River	4-12 cfs (dates vary)	01/14/1976
92CW0280*	Snowmass Creek	confl W Snowmass Creek	confl Capitol Creek	3 (4/1 - 10/15)	09/15/1992
92CW0281*	Snowmass Creek	confl Capitol Creek	confl Roaring Fork River	10.5 (4/1 - 10/15)	09/15/1992

* Increased

[^] Donated/Acquired Water Right

- Applicant addressed CWCB concerns regarding irrigation efficiency, exchanges, a procedure to add additional replacement sources, curtailment provisions, and a reuse restriction, as well as requirements for measuring devices, accounting and retained

jurisdiction.

(4) Case No. 18CW3051 (Water Division 7) - Application of Bootjack Ranch, LLC

The Board ratified this Statement of Opposition at its March 2019 meeting. Applicant requested conditional surface water rights, conditional underground water rights, conditional storage water rights, and plan for augmentation. 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 CWCB holds instream flow water rights, including the following in Water Division 7 in the Upper San Juan watershed, that could be injured by this application:

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Appropriation Date
80CW0030	West Fork San Juan River	headwaters in vicinity	confl Wolf Creek	14 (3/1 - 8/31) 8 (9/1 - 2/29)	01/30/1980
80CW0041	West Fork San Juan River	confl Wolf Creek	confl EF San Juan River	25 (4/1 - 8/31) 14 (9/1 - 3/31)	01/30/1980

- Applicant addressed CWCB concerns regarding acreage to be irrigated, curtailment of flow-through claims in relation to decreed instream flows, physical return points of replacement water on the stream, groundwater interception of the ponds, details regarding the uses being augmented, as well as requirements for measuring devices, accounting and retained jurisdiction.

Director's Report Attachment - September 16-17, 2020 CWCB 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.

Applicant Case No.	Water Division	Applicant	Waterbody/ CWCB Case No.	ISF Flow Amount (cfs/date)	Individual Injury (%)	Cumulative Injury (%)	Count
20CW3062	5	Mark and Karin Scanlon	Crystal River 75W2721	40 (10/1 - 4/30) 80 (5/1 - 9/30)	0.00250 0.00120	0.16804 0.32691	9
20CW3083	1	MR Group of CO, Inc. Mikhail Romanov and Oxana Romanova, Mountain Mutual Reservoir Company, North Fork Associates, LLC	Bear Creek 94CW260	14.9 (4/1 - 10/15) 7 (10/16 - 3/31)	0.01470 0.03350	0.24258 0.45101	44

Requests for Administration of Instream Flow Water Rights

From July through August 2020, staff investigated low flow alerts from the satellite monitoring system and placed 8 formal requests for administration, identified in the table below. The Division Engineers have worked to enforce the calls through curtailment of junior water rights or undecreed uses, limiting water rights to decreed rates, and through implementation of augmentation plans. The call letters and detailed information on the Board's rights that were administered can be found on the CWCB's web page at: <https://cwcb.colorado.gov/instream-flow-administrative-calls>

Stream Name	Case Number	Date of Formal Written Call	Amount (cfs)/ Dates	Terminus
Eagle River	80CW0134	8/24/2020	35 (10/1 - 4/30) 85 (5/1 - 9/30)	UT: confl Gore Creek LT: confl Lake Creek
Eagle River	80CW0126	8/24/2020	45 (10/1 - 4/30) 110 (5/1 - 9/30)	UT: confl Lake Creek LT: confl Brush Creek
Crystal River	75W2720	8/20/2020	60 (10/1 - 4/30) 100 (5/1 - 9/30)	UT: confl Avalanche Creek LT: confl Roaring Fork River
South Fork Rio Grande	84CW0163	8/18/2020	25 (10/1 - 4/30) 50 (5/1 - 9/30)	UT: confl Beaver Creek LT: confl Rio Grande
Hunter Creek	Various	8/12/2020	Various	UT: hdgt Fry-Ark Project div LT: confl Roaring Fork River
Beaver Creek	75W2719	8/12/2020	4 (10/1 - 4/30) 12 (5/1 - 9/30)	UT: outlet Beaver Lake LT: confl Eagle River
Washington Gulch	10CW0180	8/11/2020	0.23 (5/1 - 5/31) 1.29 (6/1 - 6/30) 1.3 (7/1 - 7/31) 0.99 (8/1 - 8/31) 0.25 (9/1 - 9/30) 0.08 (10/1 - 10/31)	UT: Breem Ditch hdgt LT: confl Slate River
Elk River	77W1279	8/7/2020	65 (1/1 - 12/31)	UT: confl NF Elk River LT: confl Rock Creek
Elk River	77W1331	8/7/2020	65 (1/1 - 12/31)	UT: confl Rock Creek LT: confl Yampa River
Slate River	80CW0092	8/3/2020	12 (12/1 - 3/31) 23 (4/1 - 11/30)	UT: headwaters LT: confl Poverty Gulch

Other actions to improve instream flow conditions

Cimarron River

The low flow conditions on the Cimarron River triggered communication between staff and CPW about using water stored in Silverjack Reservoir to improve streamflow conditions. CPW can request release

of 1,500 acre-feet of water stored in Silverjack Reservoir that is intended to maintain flows of 25 cfs in the Cimarron River downstream of the Cimarron Canal. CPW worked with Bostwick Park Water Conservancy District and the Bureau of Reclamation to implement use of this water for instream flow use similar to what was done in 2018. DWR shepherded the CPW release past the Cimarron Canal headgate through the instream flow reach, which resulted in a greater positive impact on flow conditions than an ISF call alone.

RELEASES FROM LAKE SAN CRISTOBAL FOR ISF USE: In 2011, the CWCB acquired 200 acre-feet of storage in Lake San Cristobal for instream flow use on the Lake Fork of the Gunnison River as part of a stipulation between the CWCB and the Upper Gunnison River Water Conservancy District ("District") in Case No. 03CW108. The stipulation is intended to mitigate injury to the natural lake level water right on Lake San Cristobal through operation of the Lake San Cristobal dam. During the week of August 17, 2020, flow rates at the Lake Fork below Lake San Cristobal gage were below the ISF rate and water temperatures were rising to dangerous levels for the fishery. Staff coordinated with CPW to determine the amount and timing of water to be released from the Lake to supplement the instream flow water right on the Lake Fork and decrease water temperatures. On August 20, Staff submitted a request to the District to begin releases from the 200 acre-foot pool at a rate that would bring flows up to the decreed instream flow rate of 35 cfs. Releases began on August 21 at a rate of 5 cfs and were increased on August 24 to a rate of 8 cfs to meet the decreed instream flow rate. Staff continues to coordinate with CPW and the District to adjust the release as stream conditions change. Since the start of the instream flow releases, flows have generally been above the decreed instream flow rate and water temperatures have stayed below 70 degrees Fahrenheit.



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

1313 Sherman Street
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Jared Polis, Governor

Dan Gibbs, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Kirk Russell, P.E., Finance Section Chief

Board Meeting: September 16-17, 2020 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:

- 1.25% - Agricultural
- 1.75% - Low-income Municipal
- 2.00% - Middle-income Municipal
- 2.25% - 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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Jared Polis, Governor

Dan Gibbs, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Matthew Stearns, P.E., Project Development

DATE: September 16-17, 2020 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.



Prequalified Project List

BORROWER	PROJECT NAME	APPLICATION DATE	BASIN	PROJECT DESCRIPTION	PROJECT COST/LOAN AMOUNT
Previously Approved Applications					
<i>No prequalified projects at this time</i>					
Total					\$ -



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. Projects are also identified if they have a Health/Safety (*), Economic Impact (†), or Federal Match (‡) component.

BORROWER	PROJECT NAME	POTENTIAL LOAN AMOUNT
South Platte		
NISP Participants	NISP	\$750,000,000
Woods Lake Mutual Ditch Company	Culvert Replacement	\$150,000
Town of Kersey	Water Line Project	TBD
Riverside Reservoir and Land Company	Ditch Rehabilitation	\$250,000
Town of Bennett	Raw Water Tank	\$500,000
Evergreen Metro District	Evergreen Dam Enlargement	TBD
Left Hand Water District	Dry Creek Reservoir	TBD
Roxborough Water & Sanitation District	Reservoir Rehabilitation	TBD
Shawnee Water Consumers Association	Reservoir Rehabilitation	\$200,000
Boulder and White Rock Ditch & Res. Co.	Reservoir Dredging	TBD
Western Mutual Ditch Company	Reservoir Dredging	TBD
Bergen Ditch and Reservoir Company (*)	Reservoir Rehabilitation	TBD
Louviers Water and Sanitation District	Regional Connection	TBD
City of Fort Collins	Irrigation Ditch Piping	\$20,000,000
City of Fort Collins	Halligan Reservoir Enlargement	\$120,000,000
Northern Colorado WCD	Windy Gap Firming (increase)	\$40,000,000
Cherry Creek Water Project Authority	Walker Pit	\$14,500,000
City of Loveland	Reservoir Enlargement	TBD
Lookout Mountain MD (*)	Reservoir Rehabilitation	\$2,000,000
SPROWG Participants	SPROWG	\$1,800,000,000
City of Milliken (*)	Hillsboro Dam Rehabilitation	\$15,000,000
Colorado Parks and Wildlife (*)	Tarryall Dam Rehabilitation	\$5,000,000
Dave Miller Mutual Ditch Company	Ditch Piping Project	\$150,000
Orphan Wells of Wiggins, LLC (†)	Groundwater Recharge Project	TBD
Standley Lake Operating Committee	Reservoir Expansion	TBD
Switzerland Park HOA	Reservoir Rehabilitation	\$300,000
Danna Ortiz	Knouth Reservoir Rehabilitation	\$3,000,000
Subtotal		\$2,771,050,000



BORROWER	PROJECT NAME	POTENTIAL LOAN AMOUNT
Arkansas		
Oxford Ditch	Siphon Repair	\$1,800,000
Town of Manitou Springs	Raw Water Pipeline	\$3,000,000
City of Woodland Park	Storage Project	\$1,000,000
Fort Lyon Canal Company	Adobe Creek Enlargement	\$8,000,000
Deweese Ditch and Reservoir Co. (+)	Reservoir Enlargement	TBD
Holbrook Ditch Company	Reservoir Enlargement	TBD
Lake County	New Reservoir	TBD
Catlin Canal Company	Canal System Improvement	\$1,500,000
Empire Lodge HOA	Water Rights Purchase	\$700,000
Lower Arkansas WCD	New Storage Account	TBD
Donala Water and Sanitation District	Ditch Construction	TBD
City of Colorado Springs	Irrigation System Improvements	\$3,500,000
Town of Victor(*)	Reservoir Rehabilitation	TBD
Mesa McKenna Mutual Ditch Company	Ditch Piping Project	TBD
Town of Avondale(*)	New Well	TBD
Round Mountain Water & Sanitation	New Reservoir	TBD
Subtotal		\$19,500,000
San Miguel/Juan		
Town of Bayfield	Ditch Piping Project	\$500,000
Redmesa Reservoir and Ditch Co. (*)	Redmesa Reservoir Enlargement	\$8,500,000
City of Cortez	Distribution System (Loss Prevention)	\$10,000,000
Webber Ditch Company (‡)	Ditch Piping Project	TBD
Pagosa Area Water and Sanitation Dist. (*)	Raw Water Pipeline Rehabilitation	TBD
Subtotal		\$19,000,000
Colorado		
Town of Breckenridge (*, ‡)	Goose Pasture Tarn Dam	\$10,000,000
Orchard Mesa Irrigation District	Lateral Piping	\$300,000
Silt Water Conservancy District	Harvey Gap Reservoir	\$300,000
Middle Ditch	Ditch Piping Project	TBD
New Multa Trina Ditch Company (‡)	Ditch Piping Project	TBD
Horse Pasture HOA	Ditch Piping Project	\$100,000
Orchard Mesa Irrigation District	Hydropower Plant	\$7,500,000
Perry Ranch	Taponas Project Phase 1	\$75,000
Subtotal		\$18,275,000
Gunnison		
Gunnison County Electric	Taylor Park Hydro	\$1,000,000
Duke Ditch Company	Ditch Piping Project	\$400,000
City of Grand Junction (*)	Dam Rehabilitation	\$3,000,000
Bostwick Park Water Conservancy District	Dam construction	TBD
Vouga Reservoir Association	Reservoir Rehabilitation	\$300,000
Kendall Reservoir Company	Reservoir Rehabilitation	\$140,000
Subtotal		\$4,840,000



BORROWER	PROJECT NAME	POTENTIAL LOAN AMOUNT
North Platte		
Colorado Parks and Wildlife (*)	North Michigan Creek Reservoir	\$6,000,000
Subtotal		\$6,000,000
Rio Grande		
Manassa Land & Irrigation Co.	Ditch Rehabilitation	\$6,000,000
Baca Grande WSD	Water Rights Purchase	\$1,000,000
Sanchez Ditch and Reservoir Co.	Dam Rehabilitation	\$4,000,000
Rio Grande WCD - Subdistrict #1	Water Rights Purchase	\$5,000,000
Trinchera Water Conservancy District	Water Rights Purchase or Lease	\$2,000,000
Town of Center	Water Meter Project	\$200,000
San Luis Valley WCD (+)	Shaw Reservoir Purchase	TBD
Colorado Parks and Wildlife	Alberta Park Dam Rehabilitation	\$4,000,000
Subtotal		\$22,200,000
Yampa		
Town of Oak Creek (*)	Reservoir Rehabilitation	\$5,600,000
Rio Blanco WCD	Wolf Creek Reservoir	\$100,000,000
Bear River Reservoir Company	Stillwater #1 Dam Rehabilitation	TBD
Subtotal		\$105,600,000





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Dan Gibbs, DNR Executive Director

Rebecca Mitchell, Director

To: Colorado Water Conservation Board Members

From: Kirk Russell, P.E., Finance Section Chief
Jessica Halvorsen, Program Assistant

Board Meeting: September 16-17, 2020 Board Meeting

Directors Report: Water Project Loan Program, Design & Construction Status Report

The CWCB Loan Program has Substantially Completed seventeen (17) projects in Calendar Year 2020 as shown in Table 1. There are currently forty five (45) projects authorized to receive loan funding totaling \$386 million. There are thirty five (35) projects currently under contract and in the Design/Construction phase totaling \$189 million. The attached spreadsheet summarizes the status of all loan projects. A detailed description about each project is provided under Water Project Loan Program on the CWCB website cwcb.colorado.gov

TABLE 1

	Borrower	Project	County	Loan Amount	Complete
1	Fort Lyon Canal Company	Adobe Creek Dam	Bent	\$8,053,081	2/1/2020 (a)
2	Walsenburg, City of	City Lake Dam Rehab & Enlargement	Huerfano	\$6,889,210	2/1/2020 (b)
3	Tunnel Water Company	Laramie-Poudre Tunnel	Larimer	\$1,654,041	2/1/2020
4	Roxborough Water & Sanitation District	Ravenna Development Interconnect	Douglas	\$1,464,050	2/1/2020
5	Big Elk Meadows Association	Emergency Raw Water	Boulder/Larimer	\$1,729,427	2/1/2020 (c)
6	Bessemer Irrigation Ditch Co	Landslide Stabilization &	Pueblo	\$903,602	4/1/2020
7	Dominion Water & Sanitation	Chatfield Reallocation Purchase	Douglas	\$4,191,989	4/1/2020 (d)
8	Consolidated Ditch & Headgate Co	Diversion & Headgate Project	Rio Grande	\$756,129	4/1/2020
9	Republican River WCD	Surface Water Rights	Yuma	\$5,570,150	5/1/2020
10	Arabian Acres	Automatic Meter	Teller	\$214,459	5/1/2020
11	San Luis Valley Canal	Canal Headgate Construction	Rio Grande	\$198,428	6/1/2020
12	Church Ditch Water Authority	Ditch Systems Improvements	Jefferson	\$2,236,657	6/1/2020
13	Lower Arkansas Water Management Association	West Farm Gravel Pit Storage Purchase	Prowers	\$3,556,598	7/1/2020 (e)
14	Firestone, Town of	Storage Development & Water Rights Purchase	Weld	\$5,964,859	7/1/2020 (f)
15	CCWCD, Well Augmentation Subdistrict	Shores Lake Pond C Infrastructure Improvement	Weld	\$2,367,440	8/1/2020 (g)
16	Centennial Irrigating Ditch Co	Centennial Diversion Replacement	Rio Grande	229,060	8/1/2020
17	Missouri Heights Mountain Meadow Irrigation Company	Ditch Piping Phase B	Garfield	\$178,971	8/1/2020
			Total	\$46,158,151	

Calendar Year - 2020 has added and preserved 90,226 acre-feet of reservoir storage; (a) 81,692; (b) 651; (c) 108; (d) 500; (e) 1,683; (f) 1,092; (g) 4,500



Outlet Tower and Gates



Construction of Mud Mat and Outlet Terminal Structure



Project Description

Adobe Creek Reservoir (also known as Blue Lake) is owned by the Fort Lyon Canal Company (Company). The original dam was a 32-foot-high, high hazard dam that impounds approximately 77,400 acre-feet of active storage and 4,292 acre feet of dead storage. The Adobe Creek Reservoir water is used to irrigate approximately 93,000 acres of land in Bent, Otero, and Prowers County. The new dam height is 32.3 feet and has a crest length of 7,375 feet.

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 and outlet deficiencies in the dam's foundation and deteriorated conditions in the 112-year-old, vitrified clay outlet works. Through this loan, the Company constructed 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.

Construction was complete in 2019 with temporary storage approval in June 2019 and a Final Acceptance of Construction by Colorado Dam Safety in November 2019.

P R O J E C T D A T A			
<i>Sponsor:</i> Fort Lyon Canal Company	<i>County:</i> Bent	<i>Water Source:</i> Arkansas River	
<i>Type of Project:</i> Dam Rehabilitation		<i>Board Approval Date:</i> September 2017	
<i>Terms of Loan:</i> 1.50% for 40 years		<i>(Original)</i> \$8,181,000	<i>(Final)</i> \$8,053,081.83
<i>Terms of WSRF Grant:</i>		<i>(Original)</i> \$1,100,000	<i>(Final)</i> \$1,071,714.28
<i>Design Engineer:</i> W.W.Wheeler and Associates, Inc.			
<i>Contractor:</i> Moltz Construction, Inc.			



Outlet Works Construction



Outlet Valve Tower



Auxiliary Spillway



Upstream Slope of Dam

Photos show construction and completion of Walsenburg's City Lake Dam Project.

Project Description

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. Its average annual water delivery is 730 acre-feet. The original dam was 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 Colorado Dam Safety imposed 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 needed the full storage capacity of City Lake to adequately supply their water treatment plant and to ensure future water supplies.

Elements of the Project included 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 increased storage by 120 acre-feet by raising the dam embankment three feet. Construction rehabilitation and enlargement was completed in 2019.

P R O J E C T D A T A		
<i>Sponsor:</i> City of Walsenburg	<i>County:</i> Huerfano	<i>Water Source:</i> Cucharas River
<i>Type of Project:</i> Reservoir Rehabilitation		<i>Board Approval Date:</i> July 2017
<i>Terms of Loan:</i> 2.0% for 30 years	<i>(Original)</i> \$6,889,210	<i>(Final)</i> \$6,889,210
<i>Terms of Grant:</i> <i>(Original)</i> \$804,000 <i>(Final)</i> \$804,000		
<i>Design Engineer:</i> RJH Consultants, Inc.		
<i>Contractor:</i> Kirkland Construction		



Photos show West Portal and East Portal rehabilitation of the Laramie-Poudre Tunnel Project.

Project Description

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 its original construction in 1910. The interior timber cribbing and concrete lining were at or near the end of their useful service lives and the slope steepness at the portals made it difficult for maintenance access. The east portal's (outlet) concrete energy attenuation structure was resurfaced many times before and was heavily spalled, near failure. The west portal construction rehabilitation was completed in 2016. Construction rehabilitation on the east portal was completed in 2019.

P R O J E C T D A T A		
<i>Sponsor:</i> The Tunnel Water Company	<i>County:</i> Larimer	<i>Water Source:</i> Laramie River/Cache La Poudre River
<i>Type of Project:</i> Water Supply and Storage		<i>Board Approval Date:</i> September 2015
<i>Terms of Loan:</i> 2.55% for 30 years (Original) \$1,717,000 (Final) \$1,654,041.46		
<i>Design Engineer:</i> Golder Associates, Inc.		
<i>Contractor:</i> Rock Solid Solutions and Connell Resources, Inc.		



COLORADO

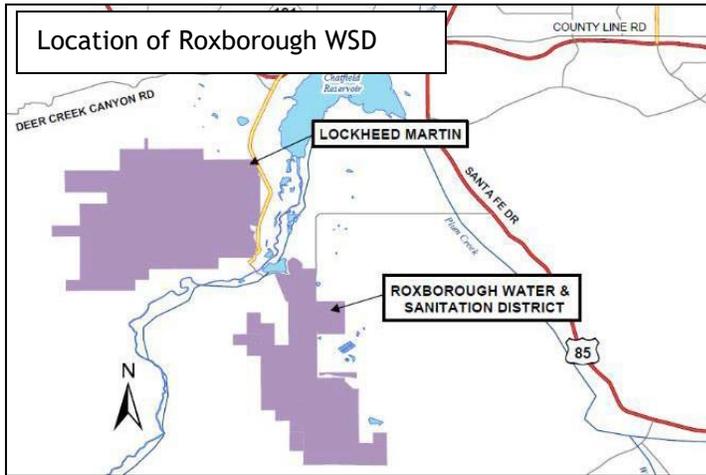
Colorado Water Conservation Board

Department of Natural Resources

Ravenna Development Interconnect

Roxborough Water and Sanitation District

Substantially Complete February 1, 2020



Project Description

The Roxborough Water and Sanitation District was established in 1971 and provides water and sewer service within its service area in northwest Douglas County. Ravenna sought inclusion into the District as a means to replace its non-renewable water supply—non-tributary groundwater wells—with a renewable supply. In the summer of 2017, the District installed a single emergency interconnect with Ravenna and has been the sole source of potable water since. The inclusion agreement required that in addition to the emergency interconnect, two additional interconnects between the District and Ravenna be construction in order to provide a permanent and reliable water supply to Ravenna. This project undertook the construction of those new interconnects. In addition to the new interconnects construction included new and relocated pressure reducing valves to keep pressures throughout the development as close to existing conditions as possible.

P R O J E C T D A T A		
Sponsor: Roxborough Water and Sanitation District	County: Douglas	Water Source: South Platte River
Type of Loan: Municipal Water Supply System New	Board Approval Date: July 2018	
Loan Terms: 3.15% for 30 years (Original) \$1,584,690		(Final) \$1,464,050.02
Design Engineer: TST Infrastructure, LLC		
Contractor: Redline Pipeline, LLC		



Mirror Lake and Intake Structure



Willow Lake and Intake Structure



Rainbow Lake Reservoir

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. 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 was to restore the community’s water supply by reconstructing five dams and two monitoring stations. During the next six years the community secured the funding and technical expertise to reconstruct the destroyed infrastructure. The lakes have been restored with new infrastructure and can now be utilized for community water purposes.

P R O J E C T D A T A		
<i>Sponsor:</i> Big Elk Meadows Association	<i>County:</i> Boulder/Larimer	<i>Water Source:</i> West Fork of the Little Thompson
<i>Type of Loan:</i> Reservoir Rehabilitation		<i>Board Approval Date:</i> January 2014
<i>Loan Terms:</i> 0.0% for 6 years, 2.75% for 27 years (Original) \$2,020,000 (Final) \$1,729,427.24		
<i>Design Engineer:</i> GEI Consultants, Inc.		
<i>Contractor:</i> Zak Dirt, Inc.		



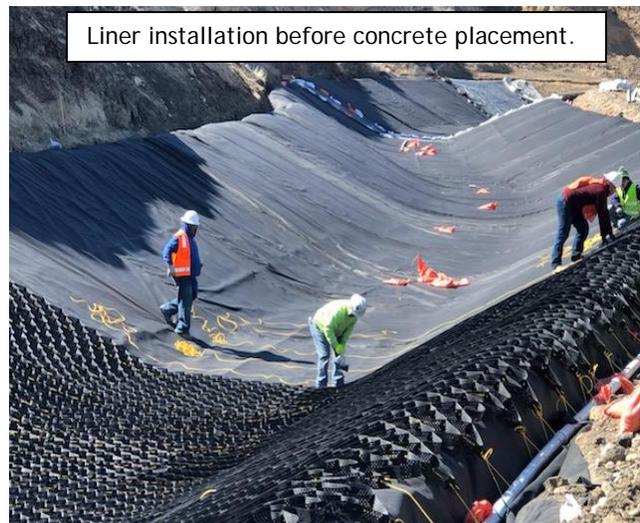
Landslide Stabilization



Landslide stabilization complete.



Lined ditch section complete.

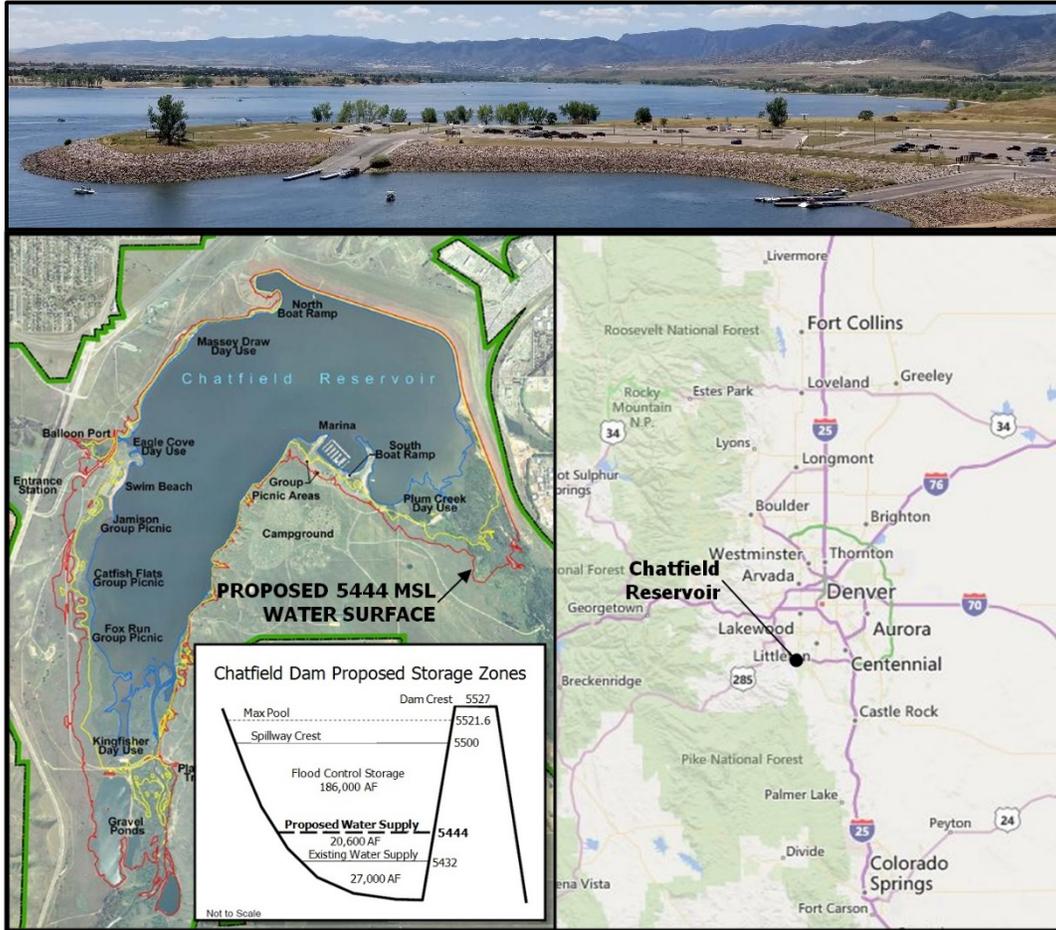


Liner installation before concrete placement.

Project Description

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 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 began in January 2018 and both construction stages were complete March 2019.

P R O J E C T D A T A		
<i>Sponsor:</i> Bessemer Irrigating Ditch Company	<i>County:</i> Pueblo	<i>Water Source:</i> Arkansas River
<i>Type of Project:</i> Ditch Rehabilitation		<i>Board Approval Date:</i> January 2018
<i>Terms of Loan:</i> 1.65% for 20 years (Original) \$909,000 (Final) \$903,602.24		
<i>Design Engineer:</i> Kidd Engineering and Construction Management Services, Inc.		
<i>Contractor:</i> Coggins and Sons, Inc. and K.R. Swerdfeger Construction, Inc.		



Project Description

The Dominion Water & Sanitation District is a wholesale water district participating in the Chatfield Reallocation Project in order to increase the permanence and reliability of its water supply. The Project will reallocate a total of 20,600AF of storage space from the flood control pool into a multipurpose pool. The District became a participant in the Project by purchasing 500AF of the reallocated storage and is proportionally responsible for all Reallocation Project cost.

The US Army Corps of Engineers issued the Project’s Record of Decision on May 29, 2014. The Selected Alternative recommended in the EIS provides 20,600 acre-feet of storage in the Chatfield Reservoir for M&I and agriculture water supplies, environmental restoration, and recreation and fishery habitat protection and enhancement. The District purchased shares owned by the CWCB at the current overall Reallocation Project cost estimate of \$8,300.97 per AF (\$171 million total). Use of storage is anticipated in the spring 2020.

P R O J E C T D A T A		
<i>Sponsor:</i> Dominion Water & Sanitation District	<i>County:</i> Douglas	<i>Water Source:</i> South Platte River & Plum Creek
<i>Type of Loan:</i> Reservoir Storage		<i>Board Approval Date:</i> March 2019
<i>Loan Terms:</i> 3.30% for 30 years (Original) \$4,191,989.85 (Final) \$4,191,989.85		
<i>Design Engineer:</i> Various		
<i>Contractor:</i> Various		



Before

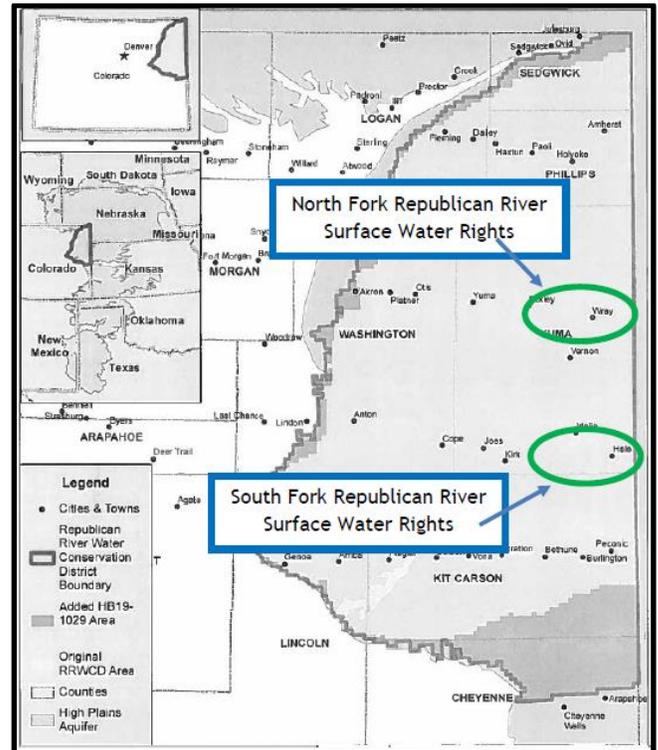


After

Project Description

The Consolidated Ditch Implementation Project (The Project) was a diversion dam and headgate replacement project completed through a partnership with the Consolidated Ditch and Headgate Company and the Rio Grande Headwaters Restoration Project (RGHRP). The goal of the Project was to replace the aging and inefficient Consolidated Ditch and Pace Ditch diversion dam and headgates, while improving streambank stability and riparian condition throughout the project area. The Project included the construction of a new concrete diversion dam, concrete headgate, trash rack, sluice gate, and sluice channel for the Consolidated Ditch Company, as well as a new concrete headgate for the Pace Ditch, which shares the diversion point. In addition to replacing the infrastructure, the Project included the stabilization of 800 feet of streambank in the Project area. Throughout project implementation, the RGHRP gave tours, developed outreach materials, and provided updates to community groups as part of outreach and education. The RGHRP will continue to give tours and complete long-term monitoring to ensure that the project objectives stand the test of time. Benefits of the Project include improved diversion efficiency and reduced maintenance, enhanced water quality, improved riparian condition, increased capacity for sediment transport, improved aquatic and wildlife habitat, improved public safety and recreation opportunity, and increased public involvement in water improvement activities.

P R O J E C T D A T A		
<i>Sponsor:</i> Consolidated Ditch and Headgate Company	<i>County:</i> Rio Grande	<i>Water Source:</i> Rio Grande
<i>Type of Loan:</i> Ditch Rehabilitation		<i>Board Approval Date:</i> May 2017
<i>Loan Terms:</i> 1.80% for 30 years (Original) \$1,010,000		(Final) \$756,129.65
<i>Design Engineer:</i> Natural Resources Conservation Service		
<i>Contractor:</i> Robins Construction, LLC		



Project Description

In December 2002, Colorado entered into a Stipulation with Kansas and Nebraska to address the U.S. Supreme Court Case of Kansas v. Nebraska and Colorado. Since then, the State of Colorado had exceeded its annual allocations of beneficial consumptive use under the Republican River Compact (Compact) by an average of 11,000 acre-feet per year. In 2004, the State of Colorado established the Republican River Water Conservation District (District) to assist with Compact compliance. Since, the District has actively sought to acquire senior surface water rights.

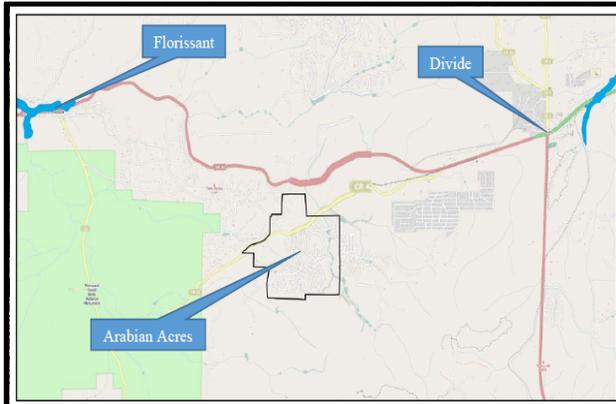
This Project included the purchase of senior surface water rights in both the North Fork and South Fork of the Republican River in order to assist the State in complying with the Compact by increasing stream flows. The Project provided multiple benefits that included preventing curtailment of existing water rights and wells due to noncompliance, avoiding a reduction of groundwater-irrigated acreage, furthering a collaborative approach to Endangered Species Act compliance, and minimizing costly litigation with Kansas and Nebraska.

PROJECT DATA		
Sponsor: Republican River Water Conservation District	County: Yuma	Water Source: North Fork and South Fork of the Republican River
Type of Project: Water Rights Purchase		Board Approval Date: November 2019
Terms of Loan: 1.20% for 20 years (Original) \$5,570,150.00 (Final) \$5,570,150.00		
Engineer: Randy Hendrix, P.E., Hendrix Wai Engineering, Inc.		
Appraiser: Kevin McCarty, McCarty Land & Water Valuation, Inc.		



Automatic Meter Implementation Project

Arabian Acres Metropolitan District
 Substantially Complete May 1, 2020



Project photos of Arabian Acres automatic meter installation and connection to distribution system.

Project Description

The Arabian Acres Metropolitan District (District) provides potable water service to the Arabian Acres subdivision and Trout Haven Estates in Teller County. The District currently serves 145 residential and 5 commercial taps for a population of approximately 392 people. The District has trouble providing reliable service with an approximately 40-year-old, poorly constructed distribution system that leaks considerably and lacks adequate flow measurement of potable water delivery.

Through this Automatic Meter Implementation (Project) the District installed an automatic meter reading (AMR) system, new meter pits, installed hardware, a drive-by meter read base station, and software. This Project helped improve the District's operational efficiency by upgrading its water system. The meters help accurately measure the amount of water usage and help quantify the system water loss. In addition to the loan, the District received a DOLA Energy Impact Assistance Fund Grant which resulted in needing approximately 50% of the CWCB loan for project costs.

P R O J E C T D A T A		
<i>Sponsor:</i> Arabian Acres Metropolitan District	<i>County:</i> Teller	<i>Water Source:</i> Groundwater
<i>Type of Project:</i> Water Meter Implementation		<i>Board Approval Date:</i> September 2018
<i>Terms of Loan:</i> 1.85% for 10 years (Original) \$404,000.00 (Final) \$214,459.76		
<i>Design Engineer:</i> AquaWorks DBO, Inc.		
<i>Contractor:</i> Velocity Constructors, Inc.		



Before



After



Project Description

The San Luis Valley Canal Headgate Construction Project was a headgate replacement, streambank stabilization, and riparian restoration project completed through a partnership with the San Luis Valley Canal Company and the Rio Grande Headwaters Restoration Project. The goal of the Project was to replace the aging and inefficient San Luis Valley Canal headgate and improve streambank stability and riparian condition throughout the project area. The Project included the construction of a new concrete headgate for SLVCC, as well as river channel shaping for increased capacity. In addition to replacing the infrastructure, the Project included the stabilization of 750 feet of streambank in the Project area. Benefits of the Project include improved diversion efficiency and reduced maintenance, enhanced water quality, improved riparian condition, increased capacity for sediment transport, improved aquatic and wildlife habitat, improved public safety, and increased public involvement in water improvement activities.

P R O J E C T D A T A		
<i>Sponsor:</i> San Luis Valley Canal Company	<i>County:</i> Rio Grande	<i>Water Source:</i> Rio Grande
<i>Type of Loan:</i> Headgate Replacement		<i>Board Approval Date:</i> May 2018
<i>Loan Terms:</i> 1.45% for 20 years (Original) \$303,000.00 (Final) \$198,428.30		
<i>Design Engineer:</i> Riverbend Engineering, LLC		
<i>Contractor:</i> Cooley & Sons Excavating Inc.		



Project photos of Leyden Flushing Structure



Project photos of Headgate 53 Retaining Wall



Project photos of Area 15 Lining

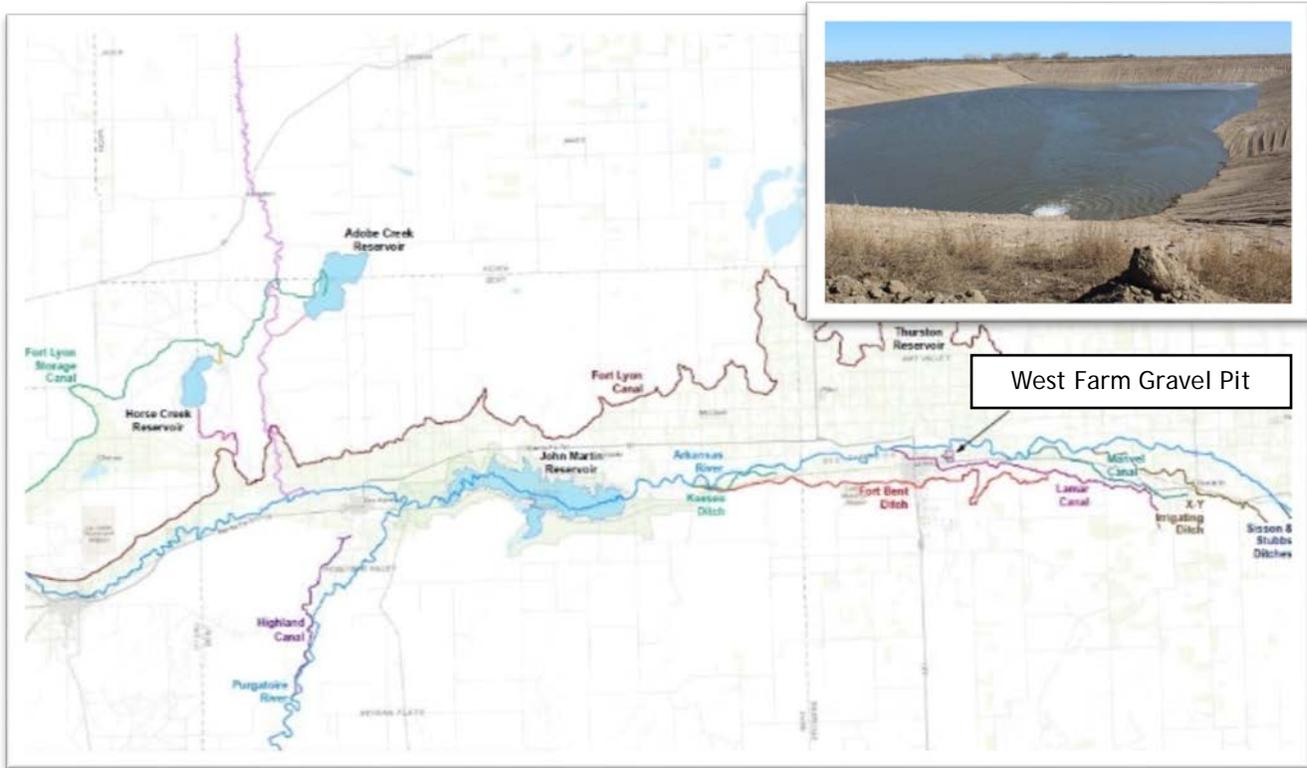
Project Description

There are 97 Contractual Users who receive water from Church Ditch. The 2009 Master Plan identifies areas in need of maintenance, modification, or replacement. Since 2009, the Church Ditch Water Authority (CDWA) has been completing the identified maintenance and replacement projects as time and budgets allow. The following five projects were identified as the highest priority for CDWA:

- (1) the Leyden Creek Flushing Structure work included replacement of the aging structure and improving efficiency, safety, and maintenance accessibility;
- (2) the Headgate 53 Retaining Wall project involved repairing a concrete block wall installed as an emergency fix due to the 2013 flood;
- (3) the Area 15 Ditch Lining rehabilitation included lining a ditch section where dewatering by new homes and businesses adjacent to the ditch increased water loss in the ditch;
- (4) the Ford Street Siphon project addressed a 75-year old culvert that was thought to be near the end of its expected lifespan; and
- (5) the Legacy Farms Culvert replacement of an undersized culvert created backwater.

The CDWA concluded that the Ford Street Siphon does not require replacement. The siphon is in good working condition and only required new grout which was applied and paid for by CDWA in 2020. The CDWA also decided to remove the Legacy Farms Culvert and not replace it, but leave the ditch open. The Area 15 Ditch Lining was reduced in length resulting in additional cost savings.

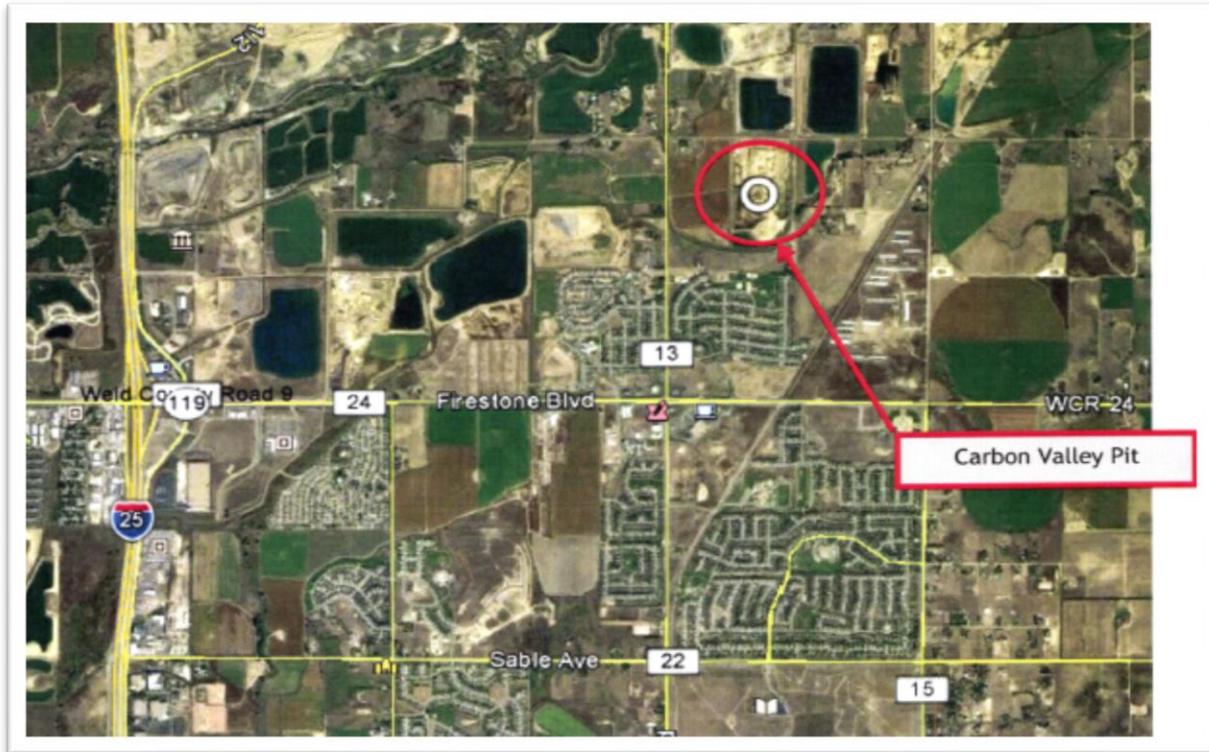
P R O J E C T D A T A		
<i>Sponsor:</i> Church Ditch Water Authority	<i>County:</i> Jefferson	<i>Water Source:</i> Clear Creek
<i>Type of Project:</i> Ditch Systems Improvements		<i>Board Approval Date:</i> July 2017
<i>Terms of Loan:</i> 3.00% for 30 years	<i>(Original)</i> \$3,615,800.00	<i>(Final)</i> \$2,236,657.28
<i>Design Engineer:</i> Ecological Resource Consultants, Inc.		
<i>Contractor:</i> Merdiam Partners, LLC - JL Melton Construction, Inc. - Lillard and Clark Construction Co., Inc.		



Project Description

The West Farm Gravel Pit (WFGP) storage reservoir is located downstream of the City of Lamar on the Arkansas River. The Lower Arkansas Water Management Association (LAWMA) purchased approximately 1,638 acre-feet of open water storage capacity in the WFGP to store fully consumable water for use in LAWMA's decreed plan for augmentation, its annual Arkansas River Use Rules replacement plan (Rule 14 Plan), LAWMA-operated Compact Compliance Plans under Rule 10 of the Compact Rules Governing improvements to Surface Water Irrigation Systems in the Arkansas River Basin in Colorado (Rule 10 Plan), and substitute water supply plans that include LAWMA shares as a source of replacement supply. Project benefits included an increased average annual allocation to a common share from 72% to 85% and a reduction in the number of dry year allocations. LAWMA was approved for a Water Plan Grant to fund a portion of this project from the water Supply and Storage grant program. A February 2015 final letter report prepared by the State Engineer's Office determined the WFGP slurry wall was lined to their design standard. LAWMA completed the water storage purchase in June 2020.

PROJECT DATA		
<i>Sponsor:</i> Lower Arkansas Water Management Association	<i>County:</i> Prowers	<i>Water Source:</i> Arkansas River
<i>Type of Project:</i> Reservoir Storage	<i>Board Approval Date:</i> July 2019	
<i>Terms of Loan:</i> 2.45% for 30 years	<i>(Original)</i> \$3,630,950.00	<i>(Final)</i> \$3,556,598.35
<i>Terms of Water Plan Grant:</i> <i>(Original)</i> \$1,000,000.00		<i>(Final)</i> \$993,211.02
<i>Engineer:</i> Randy Hendrix, P.E., Hendrix Wai Engineering, Inc.		
<i>Appraiser:</i> Gregory T. Gerken, MAI, AI-GRS, Hegarty & Gerken, Inc.		



Project Description

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 provides water and wastewater services to approximately 12,110 residents. The purpose of the project is to provide a water storage to help meet the current and the future non-potable water needs. The Town plans for approximately two times the demand, or 2,000 acre-feet (AF) of non-potable storage. They purchased the Carbon Valley Resource Pit and acquired 1,219 AF of lined storage and 1.41 shares of Rural Ditch Company with an average annual yield of 105 AF/share. Also purchased was 3.97 of preferred shares and 6.667 of common shares of Lower Boulder Reservoir and Ditch Company. A common share average annual yield is approximately 11.5 AF/share and a preferred share average annual yield is approximately 34.5 AF/share. The water purchased may be used to fill the reservoir. Construction is planned for the Fall of 2020. The Town has acquired a revenue bond to pay off the CWCB loan balance and complete the project. The CWCB loan allowed for the purchase of the cornerstone elements of the non-potable irrigation system.

P R O J E C T D A T A		
Sponsor: Town of Firestone	County: Weld	Water Source: St. Vrain River and Boulder Creek
Type of Project: Reservoir Storage and Water Rights Purchase		Board Approval Date: November 2016
Terms of Loan: 2.35% for 20 years	(Original) \$10,000,000.00	(Final) \$5,964,859.01
Engineer: David B. Lindsay, P.E., Colorado Civil Group, Inc. Engineering Consultants		



Outlet Structure to St. Vrain River



Variable Frequency Drive and Switch Gear



Pond C Column Pump

Project Description

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. The Well Augmentation Subdistrict (WAS) of the Central Colorado Water Conservancy District (CCWCD) had been storing water at the site since 2008. In order to make releases to the St. Vrain River for augmentation needs, temporary floating pontoon pumps were utilized. Prior to the project, Shores Lakes had all the infrastructure necessary for efficient operation except for the inlet and outlet structures and a column pump for Pond C.

In 2018 WAS retained Deere & Ault to design the necessary infrastructure and Concrete Works of Colorado undertook the site work in 2019 and 2020. The completed project provides WAS with operational flexibility including the ability to deliver water by gravity to the St. Vrain River; a unique feature of a gravel pit augmentation pond. The whole Shores Complex is now well designed and an efficiently operated storage vessel.

P R O J E C T D A T A		
<i>Sponsor:</i> Well Augmentation Subdistrict	<i>County:</i> Weld	<i>Water Source:</i> South Platte River
<i>Type of Project:</i> Reservoir Rehabilitation	<i>Board Approval Date:</i> January 2018	
<i>Terms of Loan:</i> 1.65% for 40 years	<i>(Original)</i> \$2,367,440.00	<i>(Final)</i> \$2,367,440.00
<i>Design Engineer:</i> Deere & Ault Consultants Inc.		
<i>Contractor:</i> Concrete Works of Colorado, Inc.		



Before



After



Obermeyer Gate

Project Description

The Centennial Irrigating Ditch Company, with the support of the Rio Grande Headwaters Restoration Project, hired Robins Construction to replace the company's diversion dam in October 2017. Robins mobilized in January 2018, building a coffer dam and dewatering half of the channel. After completing earthwork on the southern half of the channel, they placed rock for the diversion, grouted them with concrete, and installed an Obermeyer gate. Then, they removed the cofferdam and built a new one of the north side of the channel, completing the other side of the dam in March 2018. Channel shaping was completed upstream and downstream of the site and the area was revegetated with willow transplants. In spring 2020, robins built a concrete measuring structure in the ditch to improve the measurement accuracy. The project closeout took place on August 1, 2020.

P R O J E C T D A T A		
<i>Sponsor:</i> Centennial Irrigation Ditch Co.	<i>County:</i> Weld	<i>Water Source:</i> Rio Grande
<i>Type of Project:</i> Ditch Rehabilitation	<i>Board Approval Date:</i> September 2017	
<i>Terms of Loan:</i> 1.50% for 20 years	<i>(Original)</i> \$232,300.00	<i>(Final)</i> \$229,060.12
<i>Design Engineer:</i> Natural Resources Conservation Service (NRCS)		
<i>Contractor:</i> Robins Construction		



Pipe Installation



Framing Concrete Splitting Structure



Completed Structure



Completed Alignment

Project Description

The Missouri Heights Mountain Meadow irrigation Ditch provides irrigation water to approximately 2,000 acres of ranch land 12 miles northeast of Carbondale. Their mainline ditch was unlined and experiencing significant losses due to seepage. The company worked with the NRCS to design a three phase lining and piping project of which the Phase B piping was the last to be completed. The previously completed phases, A and C, lined 3,500 feet and 5,750 feet of ditch, respectively. Phase B began when Environmental Excavation LLC mobilized on site in October 2019. They started installing pipe soon afterwards. By March 2020 most of the Phase B work had been completed including the installation of 5,500 feet of pipe and two concrete structures. Seeding and demobilization continued into the spring and the project closeout took place on August 1, 2020.

P R O J E C T D A T A		
<i>Sponsor:</i> Missouri Heights Mountain Meadows Irrigation Company	<i>County:</i> Garfield	<i>Water Source:</i> Cattle Creek
<i>Type of Project:</i> Ditch Piping	<i>Board Approval Date:</i> July 2018	
<i>Terms of Loan:</i> 2.05% for 30 years	<i>(Original)</i> \$303,000.00	<i>(Final)</i> \$178,971.72
<i>Design Engineer:</i> Natural Resources Conservation Service (NRCS)		
<i>Contractor:</i> Environmental Excavation LLC		

Borrower/Projects	County	Loan Amount	Design Status	Const. Start/End	Const Status	PM	Status Description/Update	
Projects in Design or Construction								
1	Arapahoe County Water and Wastewater Authority >Chambers Reservoir Liner Rehabilitation CT2021-513	Arapahoe	\$2,525,000	100%	Spring 2020 - Fall 2020	10%	RP	Reservoir Rehabilitation - under construction Aug2020, liner prep and liner installation through Oct2020
2	Cedar Mesa Ditch Company >Lower Cedar Mesa Ditch Piping CT2020-2680	Delta	\$1,359,460	100%	Fall 2020 - Spring 2022	0%	MS	The company has selected a contractor and was approved for a Water Plan Grant and WSRF grant prior to construction. Construction will likely start in September 2020.
3 - CHATFIELD Reallocation Project - First Cost of Storage								
a	Castle Pines North Metropolitan District >(C150404A) CT2018-1617	Arapahoe Douglas Park Weld	\$723,160	N/A	April 2020	100%	KR	This contract provided funding specific to the "first cost of storage." Payments were made in April of 2020. Center of Colorado WCD and Castle Pines North MD did not utilize their CWCB loan funds for this payment.
b	Centennial Water & Sanitation District >(C150405A) CT2016-2053	Arapahoe Douglas Park Weld	\$4,978,290	N/A	April 2020	100%	KR	
c	Center of Colorado Water Conservancy District >(C150406A) CT2016-2047	Arapahoe Douglas Park Weld	\$94,637	N/A	April 2020	100%	KR	
d	Central Colorado Water Conservancy District >(C150407A) CT2016-2057	Arapahoe Douglas Park Weld	\$3,187,560	N/A	April 2020	100%	KR	
4 - CHATFIELD Reallocation Project - Phase 1 Mitigation								
\$19,522,290								
a	Castle Pines North Metropolitan District >(C150404B) CT2018-1616	Arapahoe Douglas Park Weld	\$0	100%	Sept 2017 - Fall 2019	100%	KR	These contracts provided reimbursement for the Chatfield Reallocation Project, for engineering, recreation facilities construction, on-site mitigation, off-site mitigation, and mitigation monitoring. Phase 1 covers the majority of work required before storage is allowed. All construction funds will come out of Phase 1 contract until fully disbursed, and then construction funds will come out of Phase 2's contract.
b	Centennial Water & Sanitation District >(C150405B) CT2016-2055	Arapahoe Douglas Park Weld	\$0	100%	Sept 2017 - Fall 2019	100%	KR	
c	Center of Colorado Water Conservancy District >(C150406B) CT2016-2048	Arapahoe Douglas Park Weld	\$511,363	100%	Sept 2017 - Fall 2019	100%	KR	
d	Central Colorado Water Conservancy District >(C150407B) CT2016-2058	Arapahoe Douglas Park Weld	\$0	100%	Sept 2017 - Fall 2019	100%	KR	
5 - CHATFIELD Reallocation Project - Phase 2 Mitigation								
\$7,000,310								
a	Castle Pines North Metropolitan District >(C150404C) CT2018-1990	Arapahoe Douglas Park Weld	\$1,587,720	100%	Fall 2019 - Summer 2020	90%	KR	This contract provides reimbursement for the Chatfield Reallocation Project, for engineering, recreation facilities construction, on-site mitigation, off-site mitigation, and mitigation monitoring. Phase 2 covers the construction work remaining after Phase 1 loan funds are fully depleted.
b	Centennial Water & Sanitation District >(C150405C) CT2016-2056	Arapahoe Douglas Park Weld	\$10,934,260	100%	Fall 2019 - Summer 2020	90%	KR	
c	Central Colorado Water Conservancy District >(C150407C) CT2016-2060	Arapahoe Douglas Park Weld	\$7,000,310	100%	Fall 2019 - Summer 2020	90%	KR	
6 - DIVERSION STRUCTURE REPLACEMENT								
a	Deuel and Snyder Improvement Company >Diversion Structure Replacement CT2020-3562	Morgan	\$649,430	100%	Fall 2020 - Spring 2021	5%	CB	This project will support the replacement of UPBCC/DSIC's 1,400 foot long diversion structure on the South Platte. Contractor mobilization and first purchase of materials took place in June 2020.
b	Upper Platte and Beaver Canal Company >Diversion Structure Replacement CT2020-333	Morgan	\$4,435,920	100%	Fall 2020 - Winter 2020	5%	CB	This project will support the replacement of UPBCC/DSIC's 1,400 foot long diversion structure on the South Platte. Contractor mobilization and first purchase of materials took place in June 2020.
7	Duke Ditch Company >Piping the Duke Ditch CT2017-915 CTGG1 2017-212 (WSRF)	Delta	\$90,900	100%	No Hold	0%	MS	NRCS finalized the design in August 2018. Federal grant expired. Company is evaluating options of applying for a loan increase and completing project without federal grant dollars.
8	Florida Consolidated Ditch Company >Hess Lateral Improvement CT2019-2034 CTGG1 2016-1319 (WSRF)	La Plata	\$1,085,750	100%	Summer 2020 - Fall 2021	0%	KR	Company is currently using CDOT funds to secure ROW. PreBid complete.
9	Fruitland Irrigation Company >Tunnel and Canal Renovation CT2019-2848 CTGG1 2019-2449 CTGG1 2019-2475	Delta & Montrose	\$1,746,290	100%	Jan 2020 - Dec 2022	15%	RP	Contract needed by - 11/30/2018. Sept 2018 letter from Bureau of Reclamation recvd. Require letter prior to CWCB contract. Construction material delivery began 11/2019. Tunnel bid pkg summer 2020. Rebidding tunnel work Sep2020.
10	Grand Mesa Water Conservancy District >Peak Res. & Blanche Park Res. Rehabilitation C150354 (CT2015-061)	Delta	\$466,620	100%	Mar 2013 - Dec 2021	65%	MS	Construction on Peak Reservoir began in the 2013 season and was completed in Oct 2014. Construction on Blanche Park Reservoir began in July. Embankment fill stockpile is not sufficient and attempts to locate suitable material have not been successful so far.
11 - GRAND VALLEY POWER PLANT REHABILITATION PROJECT								
\$3,434,000								
a	Grand Valley Water Users Association >Grand Valley Power Plant Rehabilitation CT2017-2875 - SCTF	Mesa	\$1,717,000	100%	Fall 2021 - Fall 2022	0%	MS	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

	Borrower/Projects	County	Loan Amount	Design Status	Const. Start/End	Const Status	PM	Status Description/Update
b	Orchard Mesa Irrigation District >Grand Valley Power Plant Rehabilitation CT2017-2878 - SCTF	Mesa	\$1,717,000	100%	Fall 2021 - Fall 2022	0%	MS	Bureau of Reclamation. Final approval is still pending, and Association is exploring construction of a new plant nearby to avoid need for approval.
12	Groundwater Management Subdistrict of CCWCD >Hokestra Reservoir Purchase CT2020-3348	Weld	\$5,444,405	0%	Spring 2020 - Fall 2021	0%	CB	Project has been contracted. No funds have been disbursed for the reservoir purchase.
13	Groundwater Management Subdistrict of CCWCD >Pioneer Reservoir CT2019-3687	Weld	\$8,697,110	50%	Fall 2021 - Spring 2022	0%	CB	This is a gravel pit retrofit for augmentation water supply. Funds for the initial reservoir purchase and some engineering were disbursed in May 2019. Construction efforts are expected to begin in 2020.
14	Hidden Valley Water District >Master Water Meter Connection CT2020-2244	Jefferson	\$1,737,200	100%	Feb 2020 - Dec 2020	99%	RP	Assets and operations are all to the District. District signed and approved EMD IGA. Precon Dec2019. Construction begin Feb 2020. EMD connect 7/2020. Construction complete, final walkthru Aug2020.
15	Huerfano County Water Conservancy District >Regional Augmentation Project C150364 (CT2015-047)	Huerfano	\$2,666,400	100%	Jan 2014 - Dec 2021	90%	RP	Land and water rights purchase occurred in January 2014. Phase I completed Oct 2017. Ph 3 - Reservoir liner complete 8/2019. Approved loan increase and time extension 11/2019 mtg. Award to Frontier Environ. Services. Ph4 construction begins AUG2020.
16	Julesburg Irrigation District >Diversion Structure Rehabilitation CT2020-396 WPG CTGG1-2020-2445	Sedgwick	\$2,886,580	100%	Spring 2020 - Fall 2021	10%	CB	This project is a diversion structure replacement on the South Platte. The Contractor has been selected and a first disbursement has been made for long lead-time materials. Construction had been slowed due to the State's shelter-in-place order, but is still moving ahead.
17	Larimer & Weld Irrigation Company >Headgate Structure Replacement CT2017-2253	Larimer & Weld	\$681,750	100%	Nov 2017 - Apr 2018	98%	KR	Construction began in November 2017 and was substantially completed in April 2018. Final invoicing is expected soon.
18	Left Hand Ditch Company >Allen's Lake Filler Canal Improvements CT2019-3463	Boulder	\$772,650	99%	Fall 2020 - Spring 2021	0%	CB	This project will replace 2,750 feet of open ditch with a buried pipe. No funds have been disbursed. Construction is expected to begin after Grading Permit is received. Loan Increase was approved in January.
19	Left Hand Water District >Participation in Southern Water Supply Project II CT2018-2028	Broomfield & Weld	\$10,000,000	100%	July 2018 - March 2020	99%	CB	This contract is for LHWD's participation in Southern Water Supply Project II--a large pipeline supplying water to users in the Northern Front Range. The pipeline has been installed and 100% of loan funds have been disbursed. Substantial completion is expected in Fall 2020.
20	Ogilvy Irrigating and Land Company >Seely Reservoir Dredging CT2019-2099 CTGG1 2019-2018 (WPG)	Weld	\$2,274,520	85%	Fall 2020 - Fall 2022	0%	RP	USACE 12/2019 non-jurisdictional determination. Finalizing contractor agmt, bonds, construction plans. OILC initiating sediment removal Fall 2020. OILC excavate a few exploratory pits to verify soil conditions and depths to bedrock Summer 2020.
21	Orchard Ranch Ditch Company >Orchard Ranch Ditch Pipe Project CT2016-2795 POGG1 2017-493	Delta	\$151,500	100%	Dec 2018 - Sep 2020	99%	RP	PreBid 7/23/18. Material supply issue - JUB redesign and rebid 10/2018. Construction begin 12/2018. July 2019 construction complete. Pipeline is working well. Spring 2020 reseeded and habitat replacement plan complete. Anticipate SC Sept 2020.
22	Pueblo Conservancy District >Arkansas River and Wildhorse Creek Levees CT2019-366	Pueblo	\$23,230,000	100%	Dec 2014 - Jun 2021	98%	RP	Funds approved June 2018. Phase 5 under construction - removing, replacing concrete where Ph4 ended. Phase 5A under construction - grouting, filling voids in toe of levee for future Ph6. Requesting loan increase 11/2019 from Projects Bill 2020. Wrapping up construction Phase 6.
23	Redlands Water and Power Company >Pumpline Replacement Project CT2021-511, WSRF POGG1 2020-2970	Mesa	\$641,350	100%	Summer 2020 - Fall 2020	0%	CB	Contractor has been selected for the project and is currently contractin with the borrower. Construction is expected to begin in August or September.
24	San Luis Valley Irrigation District >Rio Grande Reservoir Rehabilitation CT-2018-3303, CTGG1-2018-1805	Hinsdale, Rio Grande	\$15,000,000	100%	Aug 2018 - June 2020	95%	KR	Project is near complete. Moltz has begun demobilization. Outlet is operable and the reservoir is releasing water. Final touches on the Gate House and site clean up will continue through the summer. Ribbon cutting ceremony was postponed due to the COVID-19 public gathering limitations.
25	Schneider Ditch Company >Diversion Structure Replacement CT2020-437	Logan	\$1,245,330	100%	Sep 2019 - May 2020	98%	CB	The SDC is replacing their diversion structure on the South Platte near Sterling. Long lead-time items have been purchased and a contractor selected. The pre-construction meeting was held in mid-October. Work is completed, waiting on project closeout.
26	Southeastern CO Water Conservancy District >Pueblo Dam Hydroelectric Project CT2018-833	Pueblo	\$17,392,200	100%	June 2017 - Dec 2020	99%	RP	Construction beginning fall 2017. District anticipates power production by fall of 2018. Tie-in to SDS complete April 2018. Waiting on transformer approval from Black Hills. Turbine and generator placement and fiber optic line approval. Functional and producing power. Finalizing adjustments and design details. 2-yr performance time extension approved.
27	South Fork, Town of >Augmentation Water Purchase CT2020-3398	Rio Grande	\$444,400	100%	Spring 2020 - Fall 2020	100%	RP	augmentation water purchase anticipate completion Fall 2020.
28	Spring Dale Ditch Company >Diversion Structure Replacement Project CT2020-3110	Logan	\$1,222,100	100%	Spring 2020 - Fall 2021	10%	CB	This project will replace Springdale's aging diversion structure on the South Platte. Some purchase of materials and mobilization has begun.
29	St. Vrain & Left Hand Water Conservancy District >Lake No. 4 Outlet Pipeline Repair CT2017-3213	Boulder	\$864,560	100%	Sept 2019 - April 2020	92%	CB	This project and the Emergency Rock'n WP are independent components of a larger rehabilitation of reservoirs destroyed in 2013. Early in the construction phase, disagreement arose between the owner and contractor and Work shut down, but is now back underway.
30	St. Vrain & Left Hand Water Conservancy District > Emergency Rock'n WP Ranch Lake No. 4 Repair CT2016-2452	Boulder	\$4,545,000	100%	Sept 2019 - April 2020	92%	CB	This project and the Lake No. 4 Outlet Pipe are independent components of a larger rehabilitation of reservoirs destroyed in 2013. Early in the construction phase, disagreement arose between the owner and contractor and Work shut down, but is now back underway.
31	Tunnel Water Company >West Half Laramie-Poudre Tunnel Rehabilitation CT2019-3706	Larimer	\$17,250,800	100%	Sep 2019 - Apr 2022	40%	RP	Construction scheduled to begin the Fall 2019, when low water and non-irrigation season. Requesting loan increase 11/2019, 3/2020 from Projects Bill 2020.
32	WALKER RECHARGE PROJECT							
a	Central Colorado WCD >Walker Recharge CT2020-310 CTGG1 2019-3648 WPG	Weld	\$2,272,500	100%	Fall 2019 - Spring 2020	25%	CB	\$15,150,000

Borrower/Projects	County	Loan Amount	Design Status	Const. Start/End	Const Status	PM	Status Description/Update
b Groundwater Management Subdistrict of CCWCD >Walker Recharge CT2020-324	Weld	\$9,847,500	100%	Fall 2019 - Spring 2020	25%	CB	The Walker Recharge project consists of diversions off the South Platte, a pipeline, and infiltration facilities to re-time augmentation flows. Two other loans and a grant are tied to the project. Construction related to the grant will begin in November and the first dipursals were made in December.
c Well Augmentation Subdistrict of CCWCD >Walker Recharge CT2020-326	Weld	\$3,030,000	100%	Fall 2019 - Spring 2020	25%	CB	
33 Wiggins, Town of >Wiggins Recharge Facility at Glassey Farms CT2018-892	Morgan	\$2,408,850	100%	Spring 2019 - Summer 2019	0%	CB	
34- WISE Project - Phase 2 Infrastructure							\$7,400,078
a Cottonwood W&S Dist - C150408C (CT2015-105)	Douglas/ Arapahoe	\$1,127,160	100%	Spring 2020 - Fall 2022	0%	RP	Binney Connection Pipeline of Water Infrastructure and Supply Efficiency project will increase WISE flow capacity to 30MGD and provide infrastructure from Aurora Binney Facility to SMWA. Engineer Prebid 11/15/18. Jacobs selected. Pump and Pipeline construction bid Feb2020, Award planned Mar2020. PreCon scheduled Apr2020. Pumps/Treatment-Glacier, Pipeline/Infrastructure-T.Lowell, Jacobs is Engineer.
b Inverness W&S Dist - C150409C (CT2015-119)	Douglas/ Arapahoe	\$1,427,130	100%	Spring 2020 - Fall 2022	0%	RP	
c Parker W&S Dist - C150410C (CT2015-109)	Douglas/ Arapahoe	\$3,418,658	100%	Spring 2020 - Fall 2022	0%	RP	
d Pinery (Den SE WSD)C150411B (CT2015-086)	Douglas/ Arapahoe	\$1,427,130	100%	Spring 2020 - Fall 2022	0%	RP	
35- WISE Project - DIA Connection							
a Cottonwood W&S Dist - C150408D (CT2015-104)	Douglas/ Arapahoe	\$363,600	80%	N/A	60%	RP	Annual disbursement to be made on this loan through 2021. Design Status indicates percent of funds disbursed to date. No orthophosphate determination created need for alternatives and renegotiations. Working through alternatives.
b Inverness W&S Dist - C150409D (CT2015-120)	Douglas/ Arapahoe	\$454,500	80%	N/A	60%	RP	
c Parker W&S Dist - C150410D (CT2015-110)	Douglas/ Arapahoe	\$1,099,890	80%	N/A	60%	RP	
d Pinery (Den SE WSD)C150411B (CT2015-087)	Douglas/ Arapahoe	\$454,500	80%	N/A	60%	RP	

Projects Under Contract \$189,289,943

Approved Projects - Not Under Contract							
a San Juan Water Conservancy District >Dry Gulch Reservoir Land Acquisition CT2020-XXXX	Archuleta	\$2,000,000	0%	Spring 201x - Fall 202x	0%	KR	Contract needed by - Postponed Indefinitely CWCB approval is conditioned on voters approving debt. Debt approval failed at November 2017 election. District is determining if/how/when to move the project forward.
b Municipal Subdistrict >Windy Gap Project CT2021-XXXX	Larimer	\$90,000,000	0%	Summer 2020 - Summer 2023	0%	CB	Construction contract was awarded in December and allotment contracts among project participants are being drafted. Contractor was selected in October. Project loan conditions were amended at the March Board Meeting. Construction is tentatively planned to begin in November 2020.
c Logan Irrigation District >Prewitt Reservoir Rehabilitation CT2021-XXXX Grant CTGG1 2020XXXX	Washington and Logan	\$1,849,310	0%	Spring 201x - Fall 202x	0%	CB	This project will support dredging efforts to eliminate a dead pool at Prewitt Reservoir. The project is currently on hold.
d Taylor & Gill Ditch Company >Ditch Piping CTGG1 2021-XXXX	Larimer	\$126,500	0%	Fall 2020 - Spring 2021	0%	CB	This project will replace 1,000 feet of open ditch with a buried pipe. Contracting documents are currently out to the borrower for signing.
e Highland Meadow Estates at Castle Peak Ranch, Inc >Noecker Reservoir Repair CT2021-XXXX	Eagle	\$655,490	100%		0%	MS	
f Lateral Ditch ML47, Inc. >Lateral Ditch Pipeline Project CT2021-XXXX	Mesa	\$707,000	100%	Fall 2020 - Spring 2021	0%	CB	Currently in contracting.
g Southeastern Colorado Water Conservancy District >Arkansas Valley Conduit CT2021-XXXX	Pueblo, Crowley, Otero, Bent, Prowers	\$90,000,000				KR	
h Amity Mutual Irrigation Company >Queen Reservoir Dam Rehabilitation CT2021-XXXX	Kiowa	\$1,343,300	50%	Fall 2020 - Spring 2022	5%	RP	Dam breached. Final design underway then Dam Safety review/approval. Bid pkg Jan2021.
i Fort Morgan Farms, LLC >Delta Water Storage Phase 1 CT2021-XXXX	Weld	\$9,424,310				CB	

	Borrower/Projects	County	Loan Amount	Design Status	Const. Start/End	Const Status	PM	Status Description/Update
j	Rural Ditch Company >Diversion Structure Improvement CT2021-XXXX	Weld	\$813,050				CB	
Not Under Contract SubTotal =			\$196,918,960					
Grand Total =			\$386,208,903					

**WATER PROJECT CONSTRUCTION LOAN PROGRAM
 LOAN REPAYMENT DELINQUENCY REPORT
 LOAN FINANCIAL ACTIVITY REPORT
 September 2020**

LOAN REPAYMENT DELINQUENCY

Loan Repayments received relative to the Water Project Construction Loan Program have been reviewed for the period covering July 2020 through August 2020. 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 2021 totaled 49. Two Rivers Water and Farming Company had an annual payment due March 1, 2020 in the amount of \$76,006.78 which has not been remitted to CWCB as of this Board Meeting (September 16, 2020). This is the 5th year that the Company has not made their loan payment on time. A late fee of 5% or \$3800.34 has been assessed per CWCB policy because the payment has not been received within 60 days of the due date. Kirk Russell, Finance Section Chief, will address this during agenda item 9a.

LOAN FINANCIAL ACTIVITY

Loan Financial Activity relative to the Water Project Construction Loan Program for Fiscal Year 2021 is summarized as follows: Funds received relative to loans in repayment totaled \$15.8M for this year. Funds disbursed relative to new project loans totaled \$2.1M for this year. Net activity resulted in \$13.7M 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 \$11.6M in receivables and \$1.2M in disbursements for a total net activity of \$10.4M received over disbursed. The STPBF consists of \$4.2M in receivables and \$1M in disbursements for a total net activity of \$3.24M received over disbursed.

CONSTRUCTION FUND

Period	Principal	Interest	Total Received	Disbursements	Net Activity
July	\$ 9,639,144	\$ 356,912	\$ 9,996,055	\$ 924,682	\$ 9,071,373
August	\$ 1,380,219	\$ 205,913	\$ 1,586,133	\$ 233,385	\$ 1,352,747
FY 2021 Totals	\$ 11,019,363	\$ 562,825	\$ 11,582,188	\$ 1,158,067	\$ 10,424,121

SEVERANCE TAX TRUST FUND PERPETUAL BASE ACCOUNT

Period	Principal	Interest	Total Received	Disbursements	Net Activity
July	\$ 30,637	\$ 8,111	\$ 38,748	\$ 330,453	\$ (291,705)
August	\$ 3,254,608	\$ 940,551	\$ 4,195,159	\$ 647,738	\$ 3,547,421
FY 2021 Totals	\$ 3,285,245	\$ 948,662	\$ 4,233,907	\$ 978,191	\$ 3,255,716

GRAND TOTALS	\$ 14,304,608	\$ 1,511,487	\$ 15,816,095	\$ 2,136,258	\$ 13,679,837
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Colorado Water Conservation Board Construction Fund Non-Reimbursables 07.01.19-06.30.20

Construction Fund Non-Reimbursable Investments Status Report Fiscal Year 2019-2020							
Project Name	<u>7/1/19</u> <u>Beginning</u>	<u>Contracted</u>	<u>Disbursed</u>	<u>Available 06/30/20</u>	<u>Statute Projects Bill Authorization</u>	<u>Project Manager Status Update</u>	<u>Project Manager</u>
Acquisitions-Wtr for Instream Flow	\$1,000,000	\$410,191	\$94,230	\$495,579	37-60-123.7 set annual authorization at \$1M	Funding in the amount of \$228,375 was provided to the Colorado River Water Conservation District to lease water for winter releases from Ruedi Reservoir to the Fryingpan River. The objective of the lease was 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 during the time period of January 1 - March 31. On April 1, the remaining leased water was delivered to the 15-Mile Reach as needed to help meet or reduce shortfalls to the U.S. Fish and Wildlife Service's flow recommendations for the endangered fish critical habitat in that reach. The remaining balance of funding was provided to the Colorado Water Trust as part of its master contract to provide services to support the acquisition of water rights for use in the ISF program.	Linda Bassi
ISF Engineering Support Services	\$287,086	\$0	\$0	\$287,086	SB05-084 HB10-1250 SB19-221 section 5 added \$250K	There were no funds disbursed from this account from 7/1/2019-6/30/2020. The effects of the Covid-19 virus caused staff to postpone intended fieldwork projects to be funded by this account for the foreseeable future. Once conditions related to the virus and its economic impact have been mitigated, staff will restart work on these type of projects.	Rob Viehl
Satellite Monitoring	\$380,417	\$0	\$309,515	\$70,902	HB93-1273 HB17-1248 HB20-1403 added \$380,000 on 7/1/20	DWR used this fund to procure and install satellite-linked monitoring equipment. This included work to continue the V2 satellite telemetry grades for gages that need to be in compliance by 2026. Once these upgrades are completed, equipment will need to be replaced on a 15-20 year cycle. In addition, a number of streamgage sites were refurbished. Just over \$50,000 was spent for the ongoing Arkansas lysimeter research project.	Brandy Logan, updated on 8/11/2020
Stream Gage Fund	\$257,268	\$43,052	\$41,301	\$172,915	37-60-124.4 refresh \$250,000 annually	Provided funding for purchasing equipment and supplies for temporary stream gages used to monitor new instream flow recommendations. Funded travel expenses for visiting ISF stream gages and field sites. Funds were also used to purchase supplies for the installation of a permanent telemetry stream gage on Abrams Creek. Provided funding for the operation and maintenance of the Washington Gulch Bypass Structure to monitor the Breem Ditch ISF acquisition. Provided funding for the annual operation and maintenance of the USGS Dolores River at Slick Rock stream gage.	Laura Fields-Sommers
Water Adaptation Partnership Prg	\$20,056	\$0	\$12,220	\$7,836	SB09-125	FY20: No Update Provided	Holcomb

Colorado Water Conservation Board Construction Fund Non-Reimbursables 07.01.19-06.30.20

Construction Fund Non-Reimbursable Investments Status Report Fiscal Year 2019-2020							
Project Name	<u>7/1/19</u> <u>Beginning</u>	<u>Contracted</u>	<u>Disbursed</u>	<u>Available 06/30/20</u>	<u>Statute Projects Bill Authorization</u>	<u>Project Manager Status Update</u>	<u>Project Manager</u>
Colorado Mesonet	\$278,081	\$82,390	\$175,284	\$20,407	SB15-253 HB17-1248 HB18-218 SB19-221 HB20-1403 adds \$150,000 on 7/1/20	Funding through the end of Fiscal Year 2019 has been used to continue calibration of soil moisture stations and develop tools for better visualizations, developing evaporative demand tracking tools based on CoAgMET data, integrating the Regional Climate Reference Network (RCRN) into CoAgMET and working to improve measurements of important weather variables at CoAgMET stations, including better and higher wind measurements and all-weather precipitation gauges. Funds have also helped advance the dissemination of data with our web-based tools. Development of the climate summaries for long-term stations is ongoing. The COVID-19 situation has delayed some planned enhancements, including installing measurement towers at 10 meters above ground (in addition to the existing 2-3 meter towers) at one or two stations, and experimenting with all-weather precipitation gauges. (The equipment for these stations has been acquired, but travel restrictions have not yet allowed for installation.) On the other hand, this has allowed for a focus on numerous new tools for analyzing, interpreting, and disseminating the CoAgMET data. CCC now has regularly updated monthly climate summaries for the seven longest-running stations available on the web. CCC has developed a new set of real-time maps that allow for quick looks at weather conditions, precipitation, and winds across the network. CCC has also rolled out a new set of graphs and tables on the web that allow for easier access and visualization of the data, while also maintaining the data access methods that long-time users are accustomed to.	Ben Wade
Chatfield Channel Improvement	\$38,014	\$38,014	\$0	\$0	SB79-537 SB90-41 SB18-218	Annually the Corps of Engineers inspects the CWCB owned 4 miles of river channel downstream of Chatfield Reservoir. A P.O. was issued to Urban Drainage and Flood Control District for \$38,000 for vegetation removal for flood conveyance as recommended by the Corps. No expenses occurred during this year.	Andrew Rickert
Co Floodplain Map Modernization	\$672,656	\$349,993	\$134,051	\$188,611	SB03-110 HB17-1248 SB18-218 SB19-221 HB20-1403 adds \$500,000 on 7/1/20	Provide funding to update FEMA regulatory floodplain mapping and non-regulatory products for communities and provide all related activities to help community officials make better land use decisions and protect people and property from future flood events.	Thuy Patton
Fish and Wildlife Resources Fund	\$172,058	\$0	\$141,844	\$30,215	SB19-207	From FY19: Urban Drainage and Flood Control District has expended \$397,260 of a \$439,500 grant to create wetland and riparian benches to improve fish habitat on the South Platte River below Chatfield Reservoir. FY20: Project is complete and fully invoiced	Chris Sturm
Flood and Drought Response Fund	\$632,457	\$153,471	\$451,306	\$27,680	37-60-123.2 refresh \$500,000 annually	Provided funding for the Flood Threat Bulletin during the flood season, rain gauges for a flood warning system for the Lake Christine burn area, levee certification for the City of Creede, a project to quantify Colorado's current and future vulnerability to flood, drought, and wildfire, a project by CSU to address impacts of drought on ecosystems, and a project to update municipal drought planning.	Kevin Houck

Colorado Water Conservation Board Construction Fund Non-Reimbursables 07.01.19-06.30.20

Construction Fund Non-Reimbursable Investments Status Report Fiscal Year 2019-2020							
<u>Project Name</u>	<u>7/1/19 Beginning</u>	<u>Contracted</u>	<u>Disbursed</u>	<u>Available 06/30/20</u>	<u>Statute Projects Bill Authorization</u>	<u>Project Manager Status Update</u>	<u>Project Manager</u>
Tamarisk Control Cost-Sharing Prg	\$19,094	\$5,000	\$0	\$14,094	HB08-1346 SB12S-002 HB15-1006	From FY19: RiversEdge West Annual Conference Sponsorship. FY20: RiversEdge West Annual Conference Sponsorship	Chris Sturm
Water Forecasting Partnership	\$759,790	\$92,000	\$474,779	\$193,010	HB20-1403 adds \$350,000 on 7/1/20	No funds were expended for FY19/20 as CWCB Staff thought remaining funds would be better used to conduct LiDAR flights for snow measurement in FY20/21.	Andrew Rickert, Erik Skeie
Watershed Restoration	\$6,619,915	\$3,666,394	\$1,469,370	\$1,484,150	HB06-1313 HB17-1248 SB18-218 HB20-1403 adds \$4M on 7/1/20	From FY19: Provided funding for grants approved through the Colorado Watershed Restoration Program. These include Stream Management Planning grants in the Colorado, South Platte, Southwest, Metro, Rio Grande, and Gunnison Basing. Funds were also provided for post-fire recovery activities in Fremont, Huerfano, and La Plata Counties. Other projects include stream restoration and riparian re-vegetation statewide, Forest Health education and outreach efforts were funded in the South Platte (Fourmile Watershed) and Southwest (Dolores) Basins. The Program also approved funding for fish passage studies through reconstructed diversion structures, diversion reconstruction, and monitoring & adaptive management of existing restoration projects. FY20: Stream Management Plans in the Arkansas, South Platte, Southwest, and Colorado Basins. Funds were provided for post fire restoration in Huerfano County. Other funds were provided for watershed planning, stream restoration, invasive removal, and monitoring.	Chris Sturm
Weather Modification Program	\$928,329	\$396,321	\$515,950	\$16,058	HB04-1221 HB17-1248 SB18-218 HB20-1403 adds \$350,000 on 7/1/20	Funding was matched with \$419K from the Colorado River Lower Basin water users, and \$20K from the New Mexico Interstate Stream Commission for the following projects. Grants to six water district managed programs to support their manual generator programs with their contractors. Funding will be used to purchase three remote operated generators from the Desert Research Institute. The three seeders will be deployed in: Grand Mesa, Southwest Colorado, and Grand County. Remaining funding was used to support the new remote seeders deployed in previous years, and to support extended operations for seven of the eight remaining weather modification programs in Colorado.	Andrew Rickert
Acquisition of Lidar Data hb18	\$400,000	\$213,204	\$186,796	\$0	SB18-218 HB20-1403 adds \$200,000 on 7/1/20	These funds will be used to acquire LIDAR Data for counties which are used for floodplain mapping and other uses in Colorado	Thuy Patton
Acquisition of Lidar Data 37-60-121	\$559,971	\$33,853	\$288,623	\$237,495	37-60-121 HB20-1403 adds \$200,000 on 7/1/20	These are funds contributed to help pay for LIDAR acquisitions that the state has already acquired.	Thuy Patton
Statewide Water Supply Initiative	\$292,380	\$28,424	\$263,902	\$53	SB13-181 SB16-174	From FY19: Completed July 2019. Renamed Analysis and Technical Update to the Colorado Water Plan. Remaining funds could potentially be used for BIP/CWP update process. FY20: No updated provided	Russ Sands

Colorado Water Conservation Board Construction Fund Non-Reimbursables 07.01.19-06.30.20

Construction Fund Non-Reimbursable Investments Status Report Fiscal Year 2019-2020							
Project Name	7/1/19 Beginning	Contracted	Disbursed	Available 06/30/20	Statute Projects Bill Authorization	Project Manager Status Update	Project Manager
Water Loss Control Initiative	\$844,013	\$108,497	\$735,321	\$194	HB17-1248 HB20-1403 adds \$1M on 7/1/20	Project is one third of the way completed. Fall 2019 will complete another third of the project with workshops. Project on schedule and on budget for completion in beginning of 2021.	Kevin Reidy
Water Planning Studies	\$100,000	\$0	\$0	\$100,000	SB99-173 SB09-125	Data visualization project for tech update currently underway. Currently contracting with RS21 (August 2019).	Kevin Reidy
Feasibility Study Grant Fund	\$670,849	\$310,557	\$135,098	\$225,195	37-60-122.7 refresh \$500,000 annually	On going program to help applicants with Water Project Loan Program Loan Feasibility Study preparation. In FY20, six grants were awarded.	Anna Mauss/Matt Stearns
Alt Ag Water Transfer Sustain Prg	\$1,273,135	\$1,107,354	\$165,780	\$0	SB07-122 HB17-1248 HB20-1403 adds \$750K on 7/1/20	CWCB funded five ATM grants in FY20- grants included the expansion of ATMs in the San Luis Valley, a pilot project to explore the use of ATMs on the Western Slope, and creation of an ATM education workshop initiative	Alex Funk
Bear Creek Reservoir Reallocation	\$2,498,029	\$1,075,278	\$519,994	\$902,757	SB16-174	CWCB and the City of Brighton continued their partnership on a permanent stream gage installation in Turkey Creek above Bear Creek Lake. This stream gage allows the CWCB to collect accurate inflow data into Bear Creek Lake from Turkey Creek and is available here: https://waterdata.usgs.gov/nwis/uv?06711040 The Army Corps of Engineers made progress on completing a Risk Assessment to inform the Feasibility Study process. The Risk Study is anticipated to be complete late September, 2020.	Erik Skeie
Co Decision Support Systems O & M	\$200,000	\$174,080	\$25,920	\$0	SB13-181 HB14-1333 HB20-1403 adds \$500,000 on 7/1/20	Phase II of the OpenCDSS project was contracted and started in the fiscal year ending on 6/30/20. This phase will include work on automated testing, further refinement of the open source software projects and repositories, and general CDSS software maintenance, support, and enhancements. The project is in the early phases and is contracted through August 2021.	Brian Macpherson
Co River Augmentation Project	\$60,000	\$0	\$59,983	\$17	HB08-1346	The last of these funds were utilized to fund Colorado's share of an updated Colorado River Basin Climate and Hydrology State of the Science report, completed in early 2020.	Michelle Garrison
Co Water Needs & Alternatives	\$760,054	\$0	\$0	\$760,054	SB07-122 SB12S-002	These funds will be used for future phases of the Colorado River Water Availability Study (CRWAS). No modeling or studies were completed in 2020.	Brian Macpherson

Colorado Water Conservation Board Construction Fund Non-Reimbursables 07.01.19-06.30.20

Construction Fund Non-Reimbursable Investments Status Report Fiscal Year 2019-2020							
Project Name	7/1/19 Beginning	Contracted	Disbursed	Available 06/30/20	Statute Projects Bill Authorization	Project Manager Status Update	Project Manager
Litigation Fund	\$2,851,517	\$52,572	\$733,816	\$2,065,129	HB95-1155 HB17-1248 HB20-1403 - reauthorized up to \$2M	Colorado River Basin: Fund 2.5 FTE Attorneys and 1 Paralegal and contracting work associated with implementation of the Glen Canyon Dam LTEMP compact administration considerations; fund needed software including management of the Colorado River Database. Republican River Basin: Case work and work of expert consultants to implement accounting consistent with settlements and court decisions; travel and operating costs to finalize settlements with Kansas and Nebraska; defend State Engineer's Office Compact Rulemaking efforts. Rio Grande Basin: Travel and operating costs to conduct discovery, prepare briefs and attend arguments before the Special Master and potentially the U.S. Supreme Court.	Amy Ostdiek
L. So Platte Water Mgmt & Storage	\$500,000	\$0	\$0	\$500,000	HB00-1419 SB01-157	These funds will be used for a future study of Lower South Platte storage alternatives. No modeling or studies were completed in 2020.	Brian Macpherson
SP Groundwater Level Data Collect	\$942,368	\$29,206	\$27,438	\$885,724	SB12S-002 HB14-1333 HB17-1248 SB18-218	There were no applications for the Damaging High Groundwater Program. Modeling efforts are underway to assess the efficacy of a dewatering well installation in the Town of Gilcrest.	Erik Skeie
UDSA Regional Con Partnership	\$172,343	\$49,065	\$85,171	\$38,107	SB15-253	Funding to date has been awarded to support ongoing implementation of the Lower Gunnison RCPP project focusing on salinity and selenium reductions through irrigation efficiency projects	Greg Johnson
Water Resource Info Center	\$385,413	\$116,232	\$38,365	\$230,816	SB09-125	Money was be put toward the Grant Portal in FY19/20	Carolyn Kemp
Wild and Scenic Rivers Fund	\$493,013	\$116,304	\$175,928	\$200,781	37-60-122.3 refresh \$400,000 annually	FY20: No Update Provided	JoJo La
Arkansas River Decision Support	\$1,244,404	\$699,336	\$383,481	\$161,587	SB07-122 HB11-1274 SB13-181 HB14-1333 SB15-253 SB18-218 HB20-1403 adds \$500,000 on 7/1/20	Phase I of ArkDSS was broken into 3 sections: GIS, Admin Tools, and Modeling. The GIS and Admin Tools components are complete. The modeling component has gone through a contract extension which gives the project 2 more years and additional budget and scoped tasks. Phase II of ArkDSS has begun with the issuance of the Colors of Water and Forecasting Tool RFP. Responses are due September 24, 2020. This project is leveraging USBR WaterSMART grant funding.	Brian Macpherson
Chatfield Res Reallocation Project	\$3,097,759	\$0	\$565,000	\$2,532,759	HB08-1346 SB18-218	Chatfield Reallocation is an important storage project in the south metro Denver area involving strong cooperation between the State and six other municipal & agricultural water providers. Construction is near complete and water is now being stored in the Res. This funding provides for state-federal contracting and project implementation costs. The remaining funds are available for the operational costs for the mitigation company to support CWCB and CPW involvement.	Kirk Russell

Colorado Water Conservation Board Construction Fund Non-Reimbursables 07.01.19-06.30.20

Construction Fund Non-Reimbursable Investments Status Report Fiscal Year 2019-2020							
<u>Project Name</u>	<u>7/1/19 Beginning</u>	<u>Contracted</u>	<u>Disbursed</u>	<u>Available 06/30/20</u>	<u>Statute Projects Bill Authorization</u>	<u>Project Manager Status Update</u>	<u>Project Manager</u>
Chatfield Res Reallocation Imp.	\$26,996,810	\$16,245,559	\$407,760	\$10,343,491	SB125-002	Related to the item above, this funding focused on CWCB's role of owning storage shares in the Chatfield project. CWCB will retain ownership of the environmental pool and sell shares to potential water providers.	Kirk Russell
Chatfield Res Reallocation Study	\$217,015	\$7,986	\$0	\$209,029	SB97-008 SB07-122	Funding from a series of authorizations allowed CWCB to act as the non-federal sponsor with the U.S. Army Corps of Engineers to develop a feasibility study and EIS for the Chatfield project. The contract was first signed in 1999 and was based on a 50/50 cost-share arrangement.	Kirk Russell
Reservoir Dredging Project	\$98,431	\$0	\$98,431	\$0	SB16-174	Funding was provided to dredge Georgetown Lake to provide more storage of augmentation water. In total 37 acre-feet of storage was recovered.	Anna Mauss
Rocky Mt. Fen Demonstration	\$72,677	\$49,826	\$22,851	\$0	SB07-122	From FY19: Funding was awarded to the Colorado Mountain College-Timberline Campus for a demonstration project designed to explore the extent to which the harvest and transplation of slow-forming organic peat soils, from the specifically-prepared receiver sites, can serve as mitigation of impacts to fens. In 2016, the fen was relocated and current funding is supporting 5 years of monitoring. 2019 marks the second year of CWCB-supported monitoring. Funds were used to monitor the fen wetland during summer/fall of 2019 to help determine project success. Monitoring included vegetation surveys and hydrology and soil monitoring. Significant progress on the project includes reparation of the oxidation-redox probes, water chemistry laboratory analyses, and preparation of the 2018 and 2019 monitoring report. The total non-CWCB partner match is \$64,000. FY20: No update provided	JoJo La
Windy Gap Res Bypass Channel	\$2,200,000	\$0	\$0	\$2,200,000	SB13-181 SB16-174	Funding was provided for the planning, design and construction of the Windy Gap Reservoir Bypass Project by CWCB and the Northern Colorado Water Conservancy District in an amount of \$2 million each toward the project. However, the estimated cost of the project exceeds \$15 million and the project is on hold while additional funding options are explored. Senate Bill 16-174 provided funding in the amount of \$200,000 toward a feasibility study. Additional funding has been provided by the CWCB via the Colorado Water Plan Grant Program.	Cole Bedford
Republican River Matters	\$8,000,000		\$6,000,000	\$2,000,000	HB18-218	\$4M was paid to the state of Nebraska and \$2M to the state of Kansas to resolve disputes over Colorado's past use of water under the Republican River Compact. Remaining funds will be used to retire irrigation wells in the basin.	Kirk Russell

Colorado Water Conservation Board Construction Fund Non-Reimbursables 07.01.19-06.30.20

Construction Fund Non-Reimbursable Investments Status Report Fiscal Year 2019-2020							
Project Name	<u>7/1/19</u> <u>Beginning</u>	<u>Contracted</u>	<u>Disbursed</u>	<u>Available 06/30/20</u>	<u>Statute Projects Bill Authorization</u>	<u>Project Manager Status Update</u>	<u>Project Manager</u>
Emergency Dam Repair	\$413,190	0	\$0	\$413,190	37-60-122.5	This money remains available to address emergency actions necessary due to dam safety concerns. The breaching of Cucharas #5 Dam was the most recent use of this funding. It is anticipated that the money will be returned the Consruciton Fund when collected by the dam owner.	Kirk Russell
Rio Grande Cooperative	\$6,724,047	\$1,164,929	\$5,512,833	\$46,285	SB125-002 HB17-1248	Seven contracts worth \$15M have been executed towards this effort that includes project design, project management, federal land exchange, and construction. To-date, the San Luis Valley Irrigation District (District) has completed the: clay liner project, final design of the outlet works, the federal land exchange, access road construction. The District is under contract with Moltz Civil, LLC for the construction of the rehabilitated outlet structure. The Project is expected to be complete in 2020. Funding includes a \$15 million loan to the District. Project is approximately 95% complete.	Kirk Russell
Colorado River Decision Support	\$563,535	\$29,287	\$533,926	\$322	SB07-122 HB08-1346	See Co Decision Support Systems O & M	Brian Macpherson
Underground Storage Pilot Project	\$100,000	\$94,378	\$5,622	\$0	SB16-174	Upper Arkansas Water Conervancy District has completed construction of a recharge facility, and completed engineering desgins for the pipeline for aquifer storage of up to 20,000af.	Erik Skeie
Technical Assistance Fed. Irrig. Improve.	\$460,691	\$167,604	\$181,135	\$111,952	HB 17-1248 SB 18-218	Recently, T AFC funds were utilized to successfully leverage significant funding through the Colorado River Basin Salinity Basinwide Program. Other recent projects include a grant to the Silt Water Conservancy District to help secure USDA PL-566 Watershed Plan funding for design work on SWCD water delivery infrastructure and to the Mosca-Hooper Con District to develop an application for a USDA Conservation Innovation Grant focusing on soil health	Alex Funk
Totals	\$75,256,861	\$27,110,358	\$20,973,026	\$27,173,478			

Severance Tax Operational Fund Grant Status Report Fiscal Year 2019-2020

<u>Grantee Name</u>	<u>Project Name</u>	<u>Recommended</u>	<u>Spent</u>	<u>Project Manager Status Update</u>	<u>Project Manager</u>
North La Junta Conservancy District	North La Junta Streamlined Flooding Mitigation and Flow Management Phase III	\$ 25,000	\$25,000.00	Project is complete and successfully removed sediment posing potential flooding hazard.	Alex Funk
CWCB	Water Plan Implementation	\$ 50,000	\$39,857.22	Misc. expenses related to Chatfield Reservoir Realocation - enviromental pool	Kirk Russell
CWCB	Alternative Transfer Methods Program Strategic Plan Development	\$ 70,000	\$69,329.30	Project is complete and ATM report is available on the CWCB website.	Alex Funk/Greg Johnson
CWCB	Operating support related to outreach for ISF	\$ 15,000	\$14,456.04	Funding was provided for staff to travel and conduct public outreach meetings on the instream flow program and to seek input on upcoming recommendations.	Linda Bassi/Rob Viehl
CWCB	Agency Case Management and Program Support	\$ 100,000	\$86,096.96	Hired temporary employees to provide assistance on ISF transactions, appropriation of new ISF water rights, paralegal work on loan documents, analyses of ISF rules, analyses of federal laws and impact to state of Colorado, and legal research on the history of the ISF program	Linda Bassi/Kaylea White/Rob Viehl
CWCB	Colorado River Drought Contingency Planning	\$ 100,000	\$100,000.00	Funded additional modeling efforts for the Upper Colorado River Basin to complement existing drought contingency planning model results. Additional modeling increases understanding of a wider range of possible future streamflows, operations, impacts and vulnerabilities.	Michelle Garrison/Greg Johnson
Precision Water Resources Engineering	Evaluating RiverWare's Ability to Simulate Colorado Water Right Systems	\$ 82,000	\$82,000.00	Consultants created RiverWare model of the White Basin to compare to the ym2015 StateMod model. The model dataset was received by the CWCB and final report is being peer-reviewed at this time.	Brian Macpherson
Brink, Inc	Demonstrating Ag Progress on Water Quality: Modeling the Effectiveness of EQIP - funded conservation practices	\$ 24,250	\$24,250.00	Project is complete and report is undergoing final review and feedback by advisory group. The report assessed the impact of EQIP funded conservation practices on nutrient runoff/reduction - total nitrogen and total phosphorous. The implementation of all EQIP-funded conservation practices considered in this analysis reduced TN by an average of 8.2% per county and TP by an average of 27.7% per county from 2008 to 2018, averaged across all counties considered in this analysis. Within Division 1, TN was reduced by 10.8% and TP was reduced by 42%. Division 2 had reductions of 9.9% and 18.8% for TN and TP, respectively, and Division 3 saw reductions of 5.6% and 6.8% for TN and TP, respectively.	Alex Funk

Severance Tax Operational Fund Grant Status Report Fiscal Year 2019-2020

<u>Grantee Name</u>	<u>Project Name</u>	<u>Recommended</u>	<u>Spent</u>	<u>Project Manager Status Update</u>	<u>Project Manager</u>
Colorado Youth Corps Association	Watershed Health Grants: Implementation of riparian restoration, watershed health, and wildfire mitigation projects statewide	\$ 60,000	\$59,292.97	4 Youth Corps projects were funded through this program: 1) Meadows Greenbelt Russian Olive Removal 2) Invasive Tree Removal along Arkansas River Trail 3) Russian Olive Removal and Habitat Improvements in the Lower Colorado River 4) 416 Fire Local Restoration	Erik Skeie
CWCB	Work Related to Recreational Water Projects	\$ 40,000	\$40,000.00	Funding was used to assist Southern Nevada Water Authority in Colorado River modeling efforts.	Erik Skeie
CWCB	CSU Water Resources Archive - Digitization of Water Resources Archive Materials	\$ 25,000	\$25,000.00	The Archive digitized 14,899 total pages/items, including 3 photo albums and scrapbooks • Selected and digitized materials from 5 collections: o North Poudre Irrigation Company Records (continuing) o Arkansas Valley Sugar Beet and Irrigated Land Company Records (in progress) o National Water Resources Association Papers o Groundwater Data Collection (in progress) • Material types selected include correspondence, annual reports, engineering documents, reports, financial information, data, and conference proceedings.	Carolyn Kemp
CWCB	Flood Mitigation and Project Compliance	\$ 100,000	\$91,892.40	Provided funding for a project developing intensity-duration-frequency curves for Colorado and estimating potential effects on floods due to climate change, a pilot project to examine hydroclimatic indices and their effect on early-season runoff forecasting, and a rain-on-mesh sensitivity study to examine better methods of rainfall-runoff modeling.	Kevin Houck
CO Geological Survey, School of Mines	Statewide Mapping of Quaternary Alluvium	\$ 48,215	\$42,285.84	CGS compiled available Qal GIS files, digitized into GIS, and prepared a summary report. CWCB has received final summary report as well as GIS files. Project came in slightly under budget, but was finished as scoped.	Brian Macpherson
Dryland Consulting LLC	Sustainability of Trout Populations and Role of Tributaries	\$ 10,000	\$10,000.00	Funds were used to examine water-temperature habitat conditions in the Dolores River Basin to analyze the sustainability of trout populations. The purpose was to determine if portions of the basin became too warm during July-August, and whether thermal relief was available for trout. Project was complete May 2020 with a 60 page final report.	Megan Holcomb

Severance Tax Operational Fund Grant Status Report Fiscal Year 2019-2020

<u>Grantee Name</u>	<u>Project Name</u>	<u>Recommended</u>	<u>Spent</u>	<u>Project Manager Status Update</u>	<u>Project Manager</u>
DWR - Dam Safety	CO Dam Safety Inundation Mapping Grant Program	\$ 30,000	\$30,000.00	Grant funds were used to help fund dam breach modeling studies and inundation mapping for 4 dams located along the South Platte, Big Thompson, and Little Thompson Rivers that are owned by the Farmers Reservoir and Irrigation Company and the Handy Ditch Company.	Matt Stearns
DWR - Dam Safety	CO Dam Safety Comprehensive Safety Evaluation (CDSE) Program	\$ 30,000	\$30,000.00	Funds were provided directly to DWR to provide a 50% cash match to FEMA funds for DWR's contract with AECOM to perform a CDSE pilot project.	Matt Stearns
Open Water Foundation	StateMod Dataset Cloud Publishing	\$ 50,000	\$50,000.00	A website was developed that displays the Colorado mainstem StateMod dataset and allows graphing and data download.	Brian Macpherson
Open Water Foundation	Develop HydroBase Web Services Client API Software	\$ 25,000	\$25,000.00	Consultant developed suite of web services APIs for connection to CDSS web services. These have been shared on CDSS website and with other projects performing web services data queries. Received final report. We are in the process of moving hosting of website to CDSS website.	Brian Macpherson
CWCB	Community Assistance Program	\$ 42,000	\$54,181.06	Provided non-federal cost-share for FEMA CAP position.	Doug Mahan
CSU	Investigating the Impact of Recharge Ponds, Pumping, and a Drought on Groundwater Levels and Return Flows in the LaSalle/Gilcrest Area during 2013-2018	\$ 50,000	\$50,000.00	Assess the influence of constructed recharge ponds on water table elevation in the LaSalle/Gilcrest area in relation to irrigation recharge, canal seepage and pumping.	Erik Skeie
Adams State University	Mineralogical and Microbiome Characterization of Aeolian Dust Deposited on Alpine Snowpack in the South San Juan Mountains Associated with Regional Climate Change	\$ 11,293	\$79.00	Creation of data sets that will expand knowledge of the mineralogical characteristics and the taxonomic identity of the microbial community associated with aeolian dust deposited in alpine snowpack.	Andrew Rickert

Severance Tax Operational Fund Grant Status Report Fiscal Year 2019-2020

<u>Grantee Name</u>	<u>Project Name</u>	<u>Recommended</u>	<u>Spent</u>	<u>Project Manager Status Update</u>	<u>Project Manager</u>
CSU	Streamflow estimation in Colorado ungauged basins	\$ 50,000	\$49,658.43	CSU has completed research to develop new approaches to predict streamflow in ungauged basins. This work evaluated the effects of both in and out of basin diversions on annual flows. They also evaluated the effects of urbanization and forest disturbance. These results are presented in a report along with a web application for viewing and using the data and models. A masters thesis was completed and additional publications based on this effort are underway.	Brandy Logan
CSU	Quantifying Impacts of Hydrological Parameter Uncertainty on Dam Safety Analysis	\$ 50,000	\$49,979.87	Develop parameter estimation methods to facilitate implementation of new rainfall-runoff modeling guidelines which will allow regulators and consultants to apply the improved approaches for dam safety analyses and potentially water supply forecasting from ungauged basins.	Rachel Pittinger
CSU	Tools for improving knowledge of reservoir water quality in the Front Range of Colorado	\$ 49,991	\$49,854.57	Develop tool for water managers to determine if an algal bloom is likely to occur or currently occurring in their reservoir, identify time-series trends of blooms and water clarity historically, use data to mitigate algal blooms.	Erik Skeie
CSU	Direct Measurements of Colorado Reservoir Evaporation: A Comparison Between Eddy Covariance and Class-A Pan Measurement, and model Results	\$ 44,392	\$44,391.68	Installation of instrumentation to measure evaporation from a reservoir using the eddy covariance method to allow for better short-and long-term planning of water resources by giving water managers information about magnitude and timing of water loss and the best location for future reservoirs.	Erik Skeie
CSU	Exploring the Potential of Improved Soil Management Practices to Support Soil Health and Water Conservation in Irrigated Corn Systems of Eastern Colorado	\$ 42,628	\$41,179.64	Examine benefits and costs of different soil management practices for supporting soil health and water quality in agricultural areas, particularly where the livestock industry is prominent to inform producers, extension agents and policymakers.	Erik Skeie

Severance Tax Operational Fund Grant Status Report Fiscal Year 2019-2020

<u>Grantee Name</u>	<u>Project Name</u>	<u>Recommended</u>	<u>Spent</u>	<u>Project Manager Status Update</u>	<u>Project Manager</u>
CSU	Relationship Between Irrigation Return Flows, Riparian Vegetation Water Use, and Soluble Pollutant Removal in the Lower Arkansas River Basin	\$ 50,000	\$48,615.29	Utilize models to assess relative groundwater fluxes in the unsaturated and saturated zones in the riparian regions of the Lower Arkansas River Valley to understand relationships between irrigation return flows, vegetation characteristics and solute removal to assist water managers in the region.	Erik Skeie
GRAND TOTAL		\$ 1,274,769	\$1,232,400.27		