

## Satellite Monitoring/Maintenance Program

Colorado Water Conservation Board  
November 2019 Board Meeting

This project entails the continued, long-term operational viability of the State Satellite Linked Monitoring System and Stream Gage Refurbishment Program, which is administered by the Division of Water Resources (DWR). This program currently encompasses 600 satellite stream gaging stations that require continued replacement of outdated data collection platforms, upgrades to transmission components, and refurbishment of the associated infrastructure. In addition, many existing gaging stations need to be modified to provide critical stream flow data for both flood and low flow monitoring. Changes in technology, which will ultimately increase reliability and real time data transmission rates, will require the DWR to continue to upgrade the system in the future. In addition, this project provides annual maintenance for the Arkansas River Basin Compact Lysimeter Research Project. The costs associated with the continued refurbishment and operational viability of the Satellite Monitoring System is currently approximately \$330,000 per year. The cost associated with the Lysimeter Project is approximately \$50,000 per year. The total project cost is \$380,000.

P R O J E C T D E T A I L S	
<i>Project Cost:</i>	\$380,000
<i>NRI Funding Request:</i>	\$380,000
<i>Funding Source:</i>	Construction Fund
<i>Project Type:</i>	DWR Streamgaging
<i>Type of Grantee:</i>	State Agency

L O C A T I O N	
<i>Benefits:</i>	Statewide
<i>Water Source:</i>	Various
<i>Drainage Basin:</i>	All Basins



Trinchera Creek Below Smith Reservoir - Cantilever and Radar Installation (Note these installations are more cost efficient as they require significantly less infrastructure than a typical stilling well and shelter)



**COLORADO**

Colorado Water Conservation Board

Department of Natural Resources

**Colorado Floodplain Map Modernization**

Colorado Water Conservation Board

November 2019 Board Meeting

Colorado has received approximately \$29.32 million in federal grant dollars for floodplain mapping activities as part of the floodplain Map Modernization/Risk Map Program (Program) initiated by FEMA in 2003. The FEMA funds are being matched by CWCB and local cost-share dollars to implement the map update work to create updated digital floodplain maps and flood risk tools. The initial Program funds authorized in the 2003 and all subsequent Construction Fund Bills have provided the required non-federal matching dollars (80/20 cost share program). The State funds are further leveraged by local cost share dollars and in-kind services from many communities thus far. The total funding amounts have been instrumental in keeping Colorado as a lead state within FEMA Region 8 and will continue to benefit Colorado communities in the future. It is expected that significant FEMA funding will continue as long as the Program exists. Program deliverables will become part of the Flood DSS system to increase data capture and enhance Colorado's decision support tools.

P R O J E C T D E T A I L S	
<i>Project Cost:</i>	\$5,600,000
<i>NRI Funding Request:</i>	\$500,000
<i>Funding Source:</i>	Construction Fund
<i>Project Type:</i>	Matching Funds for Grants
<i>Type of Grantee:</i>	State Government

L O C A T I O N	
<i>Benefits:</i>	Statewide
<i>Water Source:</i>	Various
<i>Drainage Basin:</i>	All Basins

The Program will eventually impact the entire state, and the objective is to develop updated watershed-based and/or countywide floodplain maps using current base map information within a digital environment. The use of GIS technology will be employed for all new countywide studies for ease of distribution, updating and viewing. The table below summarizes funding approved by FEMA for Federal Fiscal Year 2019, which starts October 1<sup>st</sup> and ends September 30, 2020.

Grant Description	FEMA Funding	Grant Description	FEMA Funding
FY19 CTP Grant	\$352,409	Moffat County Phase 3	\$480,005
FY19 Communications/Outreach Grant	\$256,183	Las Animas Levee Pre-Analysis	\$84,702
Delta County Risk Map Phase 3	\$354,295	Prowers County Levee Pre-Analysis	\$84,702
El Paso County Phase 2 Flood Risk Study	\$536,651	Grand Junction Levee Pre-Analysis	\$45,289
Teller County Phase 2	\$206,876	SW BLE	\$457,138
Bent/Otero Countywide Phase 2	\$77,977	Lake County BLE	\$111,078
Eagle County Phase 3	\$120,821	Custer Fremont BLE	\$183,150
Costilla Countywide Phase 3	\$90,195	Bent/Otero BLE	\$177,936
Phillips County Phase 3	\$147,936	Prowers County BLE	\$155,034
Lincoln County Phase 3	\$56,835	Huerfano County BLE	\$118,918
Mesa County Flood Risk Study Phase 2	\$287,000	Park County BLE	\$139,364
Lake County Phase 3	\$187,190	Las Animas BLE	\$208,164
Ouray County Phase 3	\$145,984	Elbert County BLE	\$134,551
San Miguel County Phase 3	\$179,083	Gunnison County Phase 3	\$242,846
<b>Total FEMA Funding for FY 2019</b>	<b>\$5,622,312</b>		



The CWCB has had grants since 2004 for water district sponsored cloud seeding programs developed after the early 2000s drought. In 2007, State-to-state agreements were signed to provide grants in Colorado. CWCB distributes grants from the CWCB, New Mexico Interstate Stream Commission, Southern Nevada Water Authority, Central Arizona WCD, and California Six Agency Committee. CWCB funding helps staff leverage pledged match funding from Lower Basin States water users. The CWCB goals are industry standard equipment in operation for efficient and effective programs.

**P R O J E C T  
D E T A I L S**

<i>Project Cost:</i>	\$1.3M (matching from Lower Basin States and local sponsors)
<i>NRI Funding Request:</i>	\$350,000
<i>Funding Source:</i>	Construction Fund
<i>Project Type:</i>	Snowpack augmentation
<i>Type of Grantee:</i>	Local Water Districts

**L O C A T I O N**

<i>Benefits:</i>	Statewide
<i>Water Source:</i>	Various
<i>Drainage Basin:</i>	All Basins

Last year the State of Wyoming partnered with the CWCB and the Jackson Water Conservancy District helping to launch Colorado’s first permitted aerial cloud seeding program. Some of the requested funding increase will help to continue this new state-to-state collaboration in the North Platte Basin. A 2015 National Center for Atmospheric Research Climatology of seeding potential study showed high seeding potential in the North Platte. The local goals are to augment snowpack in the southeastern part of the basin. Potential programs for this upcoming water year aim at siting new remote generators in locations that will provide an increase in snowpack to multiple watersheds.

Since 2007 the Lower Basin Water Users in the Colorado River (Southern Nevada Water Authority, California Six Agency Committee, and Central Arizona WCD) have donated \$2.8M to match the CWCB’s \$2.6M to bolster locally sponsored cloud seeding in Colorado. Each year about \$1M is spent with \$175,000 or 18% from the CWCB and \$175,000 or 17% from the Lower Basin and New Mexico. The other 65% of the funding comes from ski areas, water districts, towns and counties.



Effective cloud seeding requires siting cloud seeders high onto ridges in areas of good airflow to ensure the silver iodide particles are regularly transported into clouds. We have had success at helping upgrade programs with new high elevation seeders at: Winter Park, Grand Mesa, Crested Butte, above McPhee Reservoir, near Mancos, and Telluride. These seeders are now owned by water districts. It has been clearly demonstrated that low elevation manually operated seeders are not particularly effective at getting seeding material in cloud. High elevation seeding equipment is needed. Colorado has high elevation terrain and siting remote generators at high altitudes is vital for effective seeding.

The CWCB has ten years of facilitating successful multi-state collaborations to work on a watershed basin to benefit local water supplies and downstream river compact obligations. In 2015, a ten year \$15M winter research experiment in Wyoming concluded that 5-15% increases in snowpack can be expected but only from about 30% of the storms appropriate for seeding. Therefore, a 1-5% increase in snowpack was demonstrated and can be expected in well designed and executed programs. As we move forward, Colorado must continue to investigate and pursue opportunities for collaboration between basins to benefit multiple watersheds and thus the entire state as a whole.



**COLORADO**

Colorado Water Conservation Board

Department of Natural Resources

**Colorado Mesonet Project**  
**Colorado Water Conservation Board**  
 November 2019 Board Meeting

The Colorado Climate Center runs the Colorado Agricultural Meteorological (CoAgMet) network consisting of 75 stations statewide tracking agricultural weather, climate and drought. The Center also manages the Colorado Regional Climate Reference Network (CO-RCRN) which consists of 17 high-quality precipitation and temperature monitoring stations located in pristine environments. These sites, started by NOAA, were intended to monitor the climate over long periods of time in areas free of urbanization and with datasets free of station moves, changes in observation time and other factors that create inhomogeneity in climate datasets. Current base funding for these networks does not allow for them to be run at high quality levels and still develop products to enhance the data. CO-RCRN needs multiple station visits per year to add and remove fluids from rain gauges. The CoAgMet network, in order to be run as a reliable mesonet for real-time weather monitoring, drought monitoring, and calculations of consumptive use needs close attention paid to quality control and making sure all sensors are functioning properly. If they aren't, a technician should be deployed as soon as possible to resolve issues (particularly during the growing season). Due to budget and staff constraints, products cannot be developed while providing the close attention needed for quality data.

P R O J E C T D E T A I L S	
Project Cost:	\$150,000
NRI Funding Request:	\$150,000
Funding Source:	Construction Fund
Project Type:	Data Collection/Maint.
Type of Grantee:	State Government

L O C A T I O N	
Benefits:	Statewide
Water Source:	Various
Drainage Basin:	All Basins

July 2015, CoAgMet received the first funding from the state to begin moving towards a multipurpose state "Mesonet" focusing on agricultural and water resources as well as long-term climate monitoring and short term real-time weather tracking to aid weather prediction, emergency management and other diverse uses. With this funding, we have been able to develop products and tools greatly needed to enhance data, identify and implment areas for expansion and upgrading to newer technology in order to provide beneficial real-time weather data. Stations in the network are now transmitting data every 5 minutes and the network covers and reasonably represents the weather conditions of the majority of state, resulting in and broader application and surveillance capabilities.

In order to continue expanding and improving the Colorado Mesonet data and products, and track long term climate conditions that could impact our water resources, continuation of the state funding is needed. Funds will allow effective enhancements to the CoAgMET network, improved delivery of data and new products for water use planning and climate change monitoring. They will improve real-time monitoring capabilities to improve severe weather warnings and emergency management applications.

*Importantly, this grant funding will be used to qualify for federal matching funds through the National Mesonet to support critical operations and maintenance needs.*



Colorado has received approximately \$5.6 million in federal grant dollars for elevation data acquisition activities to support the floodplain Map Modernization/Risk Map Program in Colorado. High quality topographic data is necessary to develop accurate FEMA flood hazard mapping. Additionally, the Colorado Hazard Mapping program relies on high quality elevation data for debris flow mapping and fluvial hazard mapping. The FEMA funds can be leveraged through the U.S. Geological Survey (USGS) 3DEP Program (3D Elevation Program).

P R O J E C T D E T A I L S	
<i>Project Cost:</i>	\$2,200,000
<i>NRI Funding Request:</i>	\$200,000
<i>Funding Source:</i>	Construction Fund
<i>Project Type:</i>	Matching Funds for Grants
<i>Type of Grantee:</i>	State Government

L O C A T I O N	
<i>Benefits:</i>	Statewide
<i>Water Source:</i>	Various
<i>Drainage Basin:</i>	All Basins

The 3DEP Program (Program) was developed to respond to a growing need for high quality topographic data nationwide. The primary goal of this Program is to systematically collect 3D elevation data in the form of light detection and ranging (lidar) across the U.S over an 8-year period. Lidar technology has many uses and is utilized across many different industries. In addition to floodplain mapping, other examples of lidar uses include determining forest biomass, measuring snow pack, transportation planning, identification of reclamation mining sites, and geohazard mapping.

The Program is a unique opportunity for collaboration between all levels of government and to leverage services and expertise of private sector mapping firms to acquire the data. The CWCB has been contacted by several local, State, and Federal organizations, including the Colorado Department of Transportation (CDOT), Colorado Geological Survey (CGS), Division of Reclamation and Mining Services (DRMS), and the U.S. Forest service, with great interest in partnering on future lidar acquisitions in Colorado. The CWCB can leverage FEMA and State funds to obtain USGS funding through the 3DEP Program. This Program requires a 25% non federal cost share for acquisition projects in order to receive USGS matching funds up to 50% of the total cost of the projects.

Similar to the FEMA Map Modernization Program where the CWCB has leveraged millions of federal dollars for floodplain mapping Colorado, this is a rare opportunity to leverage additional federal funds with State dollars and provide communities across the State with up to date, accurate elevation data that can be utilized for a multitude of purposes.



**COLORADO**

**Colorado Water Conservation Board**

Department of Natural Resources

**Litigation Fund**  
**Colorado Water Conservation Board**  
 November 2019 Board Meeting

Section 37-60-121(2.5) provides that the Colorado Water Conservation Board is authorized “to expend, pursuant to continuous appropriation and subject to the requirements of paragraph (b) of this subsection (2.5), a total sum not to exceed the balance of the litigation fund, which is created, for the purpose of engaging in litigation...to defend and protect Colorado’s allocations of water in interstate streams and rivers...” Paragraph (b) of section 121(2.5) provides: “pursuant to the spending authority set forth in paragraph (a) of this subsection (2.5), moneys may be expended from the litigation fund at the discretion of the board if (l) with respect to litigation, the Colorado Attorney General requests that the Board authorize the expenditure of moneys in a specified amount not to exceed the balance of the fund for the costs of litigation associated with one or more specifically identified lawsuits meeting the criteria set forth in paragraph (a) of this subsection (2.5).”

P R O J E C T D E T A I L S	
<i>Project Cost:</i>	\$1,452,700
<i>NRI Funding Request:</i>	Up to \$2,000,000
<i>Funding Source:</i>	Construction Fund
<i>Project Type:</i>	Legal Support
<i>Type of Grantee:</i>	State Government

L O C A T I O N	
<i>Benefits:</i>	Statewide
<i>Water Source:</i>	N/A
<i>Drainage Basin:</i>	All Basins

The CWCB has received a letter from Attorney General Phil Weiser stating that a total of \$1,452,700 will be needed in FY19/20 to adequately: defend in negotiations; litigation; and other processes the State's apportionments under the Compacts. The funds will be allocated as follows:

- 1) Colorado River Basin: \$695,000 for FY19/20
- 2) Republican River Basin: \$110,000 for FY19/20
- 3) Rio Grande Basin: \$647,700 for FY19/20

The CWCB will request a refresh of the Litigation Fund up to \$2,000,000 each year through annual appropriations in order for the Board to respond to unforeseen legal challenges.



Colorado's Decision Support Systems (CDSS) are a joint effort of CWCB and DWR, with the purpose of providing data and analytical tools to aid in water resources planning and management in the State. Basin DSSs take a deep-dive into each major river basin in Colorado and add information, data, and models for that Basin to the statewide sets. Currently there are Basin DSSs in place for the Colorado River, Rio Grande, and South Platte Basins.

The Arkansas River Decision Support System (ArkDSS) is the last DSS to be developed for CDSS. The feasibility study was completed in December 2011, resulting in an estimated total cost of \$7,590,000. \$2,750,000 has previously been approved by the Board. Work will conclude in 2020 on the first phase of ArkDSS, which includes three major components of ArkDSS: spatial system integration (GIS); consumptive use analysis and surface water planning model development; and administration and accounting tool development.

The funding requested herein will be used to continue the ArkDSS implementation (Phase II). Phase II priorities include additional surface water modeling in support of the Trinidad Reservoir 10-year review, additional administration tools, an update of the StateCU graphical user interface (GUI), compilation of groundwater data into full gridded datasets, and installation and maintenance of streamflow gages, monitoring wells, and telemetry equipment.

P R O J E C T D E T A I L S	
<i>Project Cost:</i>	\$7,590,000
<i>NRI Funding Request:</i>	\$500,000
<i>Funding Source:</i>	Construction Fund
<i>Project Type:</i>	Other
<i>Type of Grantee:</i>	State Government

L O C A T I O N	
<i>Benefits:</i>	Statewide
<i>Water Source:</i>	N/A
<i>Drainage Basin:</i>	Arkansas



**COLORADO**

**Colorado Water Conservation Board**

Department of Natural Resources

**Colorado's Decision Support System (CDSS)  
Operation & Maintenance  
Colorado Water Conservation Board  
November 2019 Board Meeting**

This funding request is for ongoing operation and maintenance of Colorado's Decision Support Systems (CDSS), a joint effort between CWCB and DWR to provide data and modeling tools to assist in water resource planning and management in Colorado. Over the last 25 years, HydroBase databases, GIS databases, analytical tools, and consumptive use, surface water allocation, and groundwater models have been developed and implemented for most of the State, with development of the Arkansas River DSS finishing its first phase in 2020. These CDSS components require maintenance and operational revisions to protect the State's investment and keep the tools viable as water resource planning becomes more technical and data-driven in the future. CDSS data and tools are crucial in State planning, including the Water Plan Technical Update and studies involving the Compacts, water court engineering analysis, federal water accounting for endangered fish flow, and protection of the State's interests when it comes to Compact allotment and negotiations of agreements such as the upcoming Colorado River Interim Guidelines.

P R O J E C T D E T A I L S	
<i>Project Cost:</i>	\$500,000
<i>NRI Funding Request:</i>	\$500,000
<i>Funding Source:</i>	<i>Construction Fund</i>
<i>Project Type:</i>	Operations & Maintenance
<i>Type of Grantee:</i>	State Government
L O C A T I O N	
<i>Benefits:</i>	Statewide
<i>Water Source:</i>	N/A
<i>Drainage Basin:</i>	All CDSS Basins



The water forecasting partnership project began in the FY2016/2017 under SB 16-174. This original authorization appropriated \$300,000, and was reauthorized for in both HB17-1248 and SB18-218 for \$800,000 each fiscal year. Of those original appropriations, \$200,000 remains unencumbered. Staff requests \$350,000 be appropriated for continuation of this work in FY 2020/2021. The new funds will be used to complete the projects described in the table below. The goal of this program is to acquire new data and refine water supply forecasting. Matching funds will be sought from partners.

A highlight from previous funding years is [the RIO-SNO-FLOW project](#); a multi-year scientific collaboration between CWCB, Conejos Water Conservancy District, NCAR, NASA, and NRCS to refine water supply forecasting in the Conejos Basin.

P R O J E C T D E T A I L S	
<i>Project Cost:</i>	\$550,000
<i>NRI Funding Request:</i>	\$350,000
<i>Funding Source:</i>	Construction Fund
<i>Project Type:</i>	Data and Modeling Upgrades
<i>Type of Grantee:</i>	Funding for Partnerships

L O C A T I O N	
<i>Benefits:</i>	Statewide
<i>Water Source:</i>	Various
<i>Drainage Basin:</i>	All Basins

FY 2020-21 Proposed Funding			
Location	Item	Cost	Notes
Gunnison	NASA ASO Flight	\$250,000	One peak snow flight for Ohio, Taylor, and East River Basin for winter 2020-2021. These flights are meant to help forecast inflows into Taylor and also compliment Crested Butte in a large multi-year research project funded by Department of Energy conducted by the Lawrence Berkeley National Lab (LBNL). LBNL has also funded proposals to evaluate the NASA datasets in the Gunnison Basin.
Rio Grande	NCAR	\$40,000	Maintain 6 stations in Conejos Gunnison basin in partnership with Conejos WCD. Provide forecasts using NOAA's multi-radar multi sensor method from the new radar into the national water model.
Statewide	SNODAS DSS Work	\$40,000	Maintain (SNODAS) daily snowpack data in the DSS and on the Open Water Foundation website.
Southwest	NCAR	\$85,000	Provide experimental forecasting using multi-radar multi-sensor methods to calibrate the radar. This includes 3 new SNOTEL-Lite stations for snowpack runoff and flash flood forecasting.
Continuing Projects			
Statewide	Soil & solar radiation sensors	\$35,000	Soil moisture and solar radiation sensors will be installed on SNOTEL Stations.
Statewide	NRCS SNOTEL Stations	\$60,000	Upper Gunnison River WCD requested one NRCS SNOTEL Station, Upper Arkansas River WCD requested two SNOTEL Stations.
Western Slope	CSAS Database	\$40,000	Develop online database for Center for Snow and Avalanche Studies.
Total:		\$550,000	
Available		\$200,000	
Balance			
<b>New Request</b>		<b>\$350,000</b>	



The Fish and Wildlife Resources Fund (Fish and Wildlife Mitigation Fund) was established by the legislature in 1987 to help mitigate the impacts to fish and wildlife resources that are affected by the construction, operation, or maintenance of water diversion, delivery, or storage facilities, pursuant to C.R.S. Section 37-60-122.2 and Financial Policy 15 and 20. The statute was amended in 2002 to recognize the role instream flows in mitigating impacts, and authorized the Colorado Water Conservation Board as well as sponsors of existing facilities to use these funds. The purpose of the Financial Policies (15 and 20) is for the consideration and approval of Fish and Wildlife Resources Fund grant applications pursuant to sub-sections 2-5 of 37-60-122.2, C.R.S.

P R O J E C T D E T A I L S	
<i>Project Cost:</i>	\$1 million
<i>NRI Funding Request:</i>	\$1 million
<i>Funding Source:</i>	Construction Fund
<i>Project Type:</i>	Mitigation Grants
<i>Type of Grantee:</i>	Varies

L O C A T I O N	
<i>Benefits:</i>	Statewide
<i>Water Source:</i>	Various
<i>Drainage Basin:</i>	All Basins

The following projects have received approval for use of these funds over the years:

- 2008: \$30,000: Rio Blanco River Restoration Phase III, Lower Blanco Property Owners Association
- 2009: \$132,000: Rio Blanco River Restoration Phase IV, Lower Blanco Property Owners Association
- 2009: \$70,000: Clear Springs Ranch Fish Passage, Colorado Springs Utilities
- 2010: \$560,000: Reconstruction of the Hartland Diversion Dam, Painted Sky R C and D Council
- 2011: \$75,000: Upper South Platte Diversion Reconstruction Project, Coalition for the Upper South Platte
- 2012: \$50,000: Stream Mitigation Banking Protocols, Colorado State University
- 2014: \$100,000: Platte River Enhancement Phase II, South Suburban Park and Recreation District
- 2015: \$50,000: Stream Mitigation Protocol and Aquatic Habitat Mapping, Colorado State University
- 2017: \$450,000: South Platte Flood Hazard Mitigation, Urban Drainage and Flood Control District
- 2017: \$814,270: Chatfield Reservoir Mitigation Company, Plum Creek Restoration
- 2017: \$550,000: Buckhorn Valley Metropolitan District, Abrams Creek Ditch Lining Project



The initial Phase II scope and process includes the following:

**Task 1: Water Audit 101 Workshops & Level I Validation**

This task will serve as a refresher for Phase 1 participants and any new employees they have. It will also introduce all necessary content for utilities that did not participate in Phase 1, including Level 1 validation. Additionally, it will introduce participants to the most updated AWWA software (v.6).

- a. 6 workshops
- b. Level 1 Validation of audits
- c. Webinar

**Task 2: Level II and III Workshops**

This task will focus on more advanced techniques and concepts beyond those covered in Phase I. This task would include mostly participants from Phase I. These include input meter testing, customer meter testing, billing data analysis, real loss component analysis, and economic level of leakage.

- a. 10 workshops
- b. Webinar

**Task 3: Ranking and Prioritization for Technical Assistance**

This task will identify and prioritize the best hands-on technical assistance area for each participating utility. This prioritization is based on audit results, data validity grades and validation documentation.

- a. Review of all Level 1 validated audits

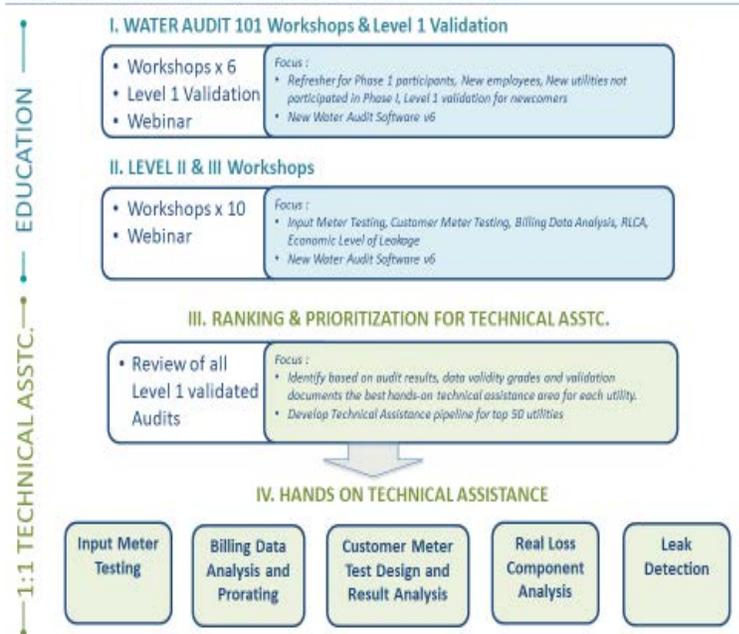
**Task 4: Technical Assistance**

This task carries out the technical assistance identified in Task 3. Depending on the water provider, there could be TA in the areas of input meter testing, billing data analysis and prorating, customer meter test design and result analysis, real loss component analysis, and leak detection.

PROJECT DETAILS	
Project Cost:	\$1,000,000
NRI Funding Request:	\$1,000,000
Funding Source:	Construction Fund
Project Type:	Grant Program
Type of Grantee:	State Government

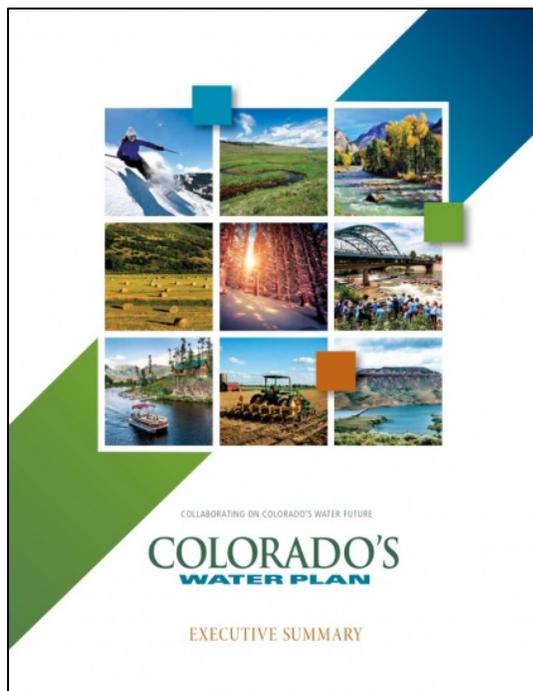
LOCATION	
Benefits:	Statewide
Water Source:	Various
Drainage Basin:	All Basins

**Colorado Water Loss Initiative PHASE II - Concept**



At the September 2019 Finance Committee Meeting, staff indicated the availability of funds for Water Plan Implementation funding. The Finance Committee supported the staff's recommendation of a \$12.25 million Water Plan Implementation Funding Package. Severance Tax revenues were strong in FY18/19 and are projected to be average in FY19/20. The distribution of the Implementation funding is shown below:

P R O J E C T D E T A I L S	
<i>Project Cost:</i>	\$12.25M
<i>NRI Funding Request:</i>	\$12.25M
<i>Funding Source:</i>	Const. Fund
<i>Project Type:</i>	Water Plan
<i>Type of Grantee:</i>	N/A
L O C A T I O N	
<i>Benefits:</i>	Statewide
<i>Water Source:</i>	Various
<i>Drainage Basin:</i>	All Basins



**(1) Watershed Restoration Grant Program - \$4 million**  
- This will fund planning, engineering, and implementation measures, aquatic habitat protection, restoration work, and monitoring efforts to address technical needs for watershed restoration and flood mitigation projects, and to support healthy stream and watershed goals.

**(2) Agricultural Transfer Methods (ATM) Grant Program - \$750,000** - The CWP encourages alternatives to permanent dry-up of irrigated agriculture and to utilize ATMs to support a sustainable agricultural industry while addressing other water resource challenges. The ATM Program is focused on implementing projects that will result in or facilitate actual wet-water transfers to support multiple uses, including municipal, industrial, agricultural, environmental, and recreational needs.

**(3) Colorado's Water Plan Grant (WPGrant) Funding - \$7.5 million** - This funding will provide grant funding for projects that assist with the implementation of the Colorado Water Plan through CWCB's Application and Guidelines process.

- a) \$1.5M Environment & Recreation WPGants
- b) \$1.5M Agricultural Projects WPGants
- c) \$3M Storage & Supply Gap WPGants
- d) \$1M Conservation & Drought Planning WPGants
- e) \$0.5M Innovation/Outreach/Education WPGants



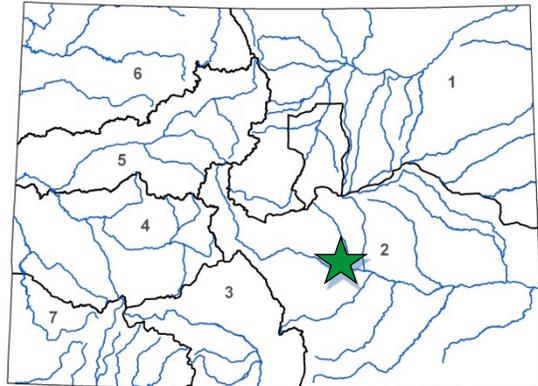
# Arkansas River and Wildhorse Creek Levee Rehabilitation

Pueblo Conservancy District

(Loan Increase)

November 2019 Meeting

L O A N   D E T A I L S	
Project Cost:	\$23,000,000
CWCB Loan (with Service Fee):	\$23,230,000
Loan Term and Interest Rate:	30 years at 2.45%
Funding Source:	Severance Tax Perpetual Base Fund
B O R R O W E R   T Y P E	
Agriculture	Municipal
0%	100% Low - 0% Mid - 0% High
Commercial	0%
P R O J E C T   D E T A I L S	
Project Type:	Flood Control
Average Annual Diversions:	N/A

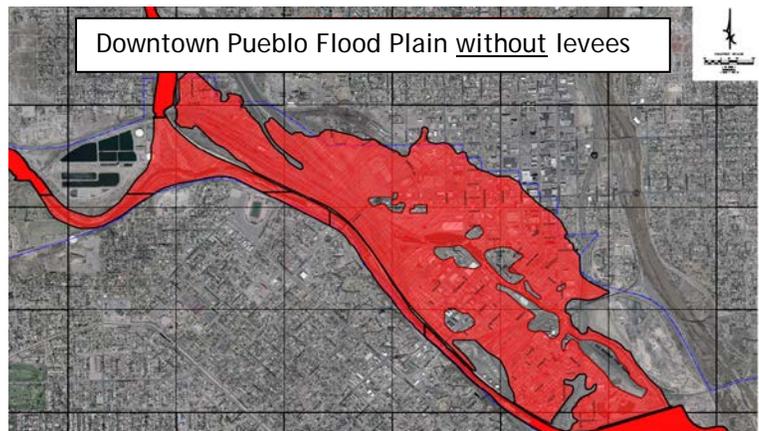


The District was formed in response to the 1921 flood in Pueblo. Its primary function is flood protection within its designated boundaries. In 2006, the District was advised that unless the Arkansas and Wildhorse Creek levees were accredited by the Federal Emergency Management Agency (FEMA), the City would lose its protected status which ensures that flood insurance can be provided at affordable rates. The District's current CWCB loan contract for \$17,000,000 constructed several phases of the Project. One more phase that includes replacement of additional lineal feet of the levee will increase the total Project cost to \$23,000,000. To date, the District has completed the reconstruction and stabilization of 9,700 feet of the Arkansas River Levee, and approximately 3,300 lineal feet will be removed and replaced in the last phase of this Project. Approximately 3,000 feet of Wildhorse Creek Levee has been constructed and complies with FEMA standards. Construction is limited to November to March when river flows are the lowest. The Project is expected to be complete by spring of 2020.

L O C A T I O N	
County:	Pueblo
Water Source:	Arkansas River
Drainage Basin:	Arkansas
Division: 2	District: 14



Wildhorse Creek Levee



Downtown Pueblo Flood Plain without levees



Arkansas River Levee

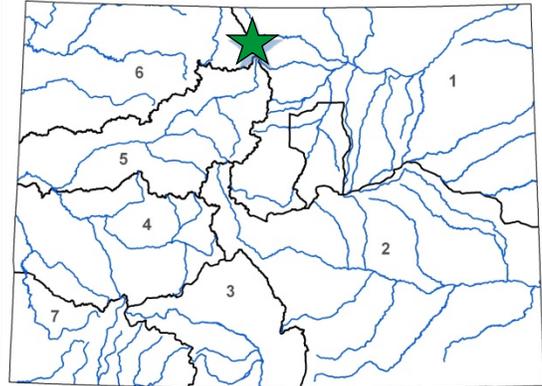


Arkansas River Levee repair and reconstruction 12/2017



(Loan Increase)

L O A N D E T A I L S	
Project Cost:	\$ 11,500,000
CWCB Loan (with Service Fee):	\$11,615,000
Loan Term and Interest Rate:	30 Years @ 2.85%
Funding Source:	Construction Fund
B O R R O W E R T Y P E	
Agriculture	Municipal
22%	4% Low - 25% Mid - 49% High
	Commercial
	0%
P R O J E C T D E T A I L S	
Project Type:	Ditch Rehabilitation
Average Annual Diversion:	15,755 AF



L O C A T I O N	
County:	Larimer
Water Source:	Laramie River
Drainage Basin:	North Platte/South Platte
Division:	1
District:	48/3

The Tunnel Water Company (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 2.2-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 shareholders via the Soldier Canyon and Bellvue Water Treatment Plants for use in their service areas.

The Company purchased the Laramie Poudre Tunnel and its adjoining Laramie River System in 1938. Since 2001, the Company has repaired various sections of the tunnel. To prevent future collapse and tunnel blockage, this project includes replacement of aging support structures and the addition of new supports, rock bolts and shotcrete to ensure future serviceability and maintenance access. Construction began in September 2019 and will continue through spring of 2021.

The original Project cost was \$9,000,000 and the total estimated Project cost is \$11,500,000. Since construction began, significant voids behind and above the existing concrete and existing steel sets were found. Substantial amounts of grout, above the anticipated quantities, filled voids. The old concrete and preexisting steel support structures are being replaced. In addition to the void spaces, in an original tunnel section, old square set timbers, rebar, trees, sand gravel and rocks were used as backfill. To ensure the tunnel is structurally sound in the short and long term, new steel sets are being used to replace the compromised section. Based on the initial geology report, it is anticipated the majority of the tunnel has more structural integrity and contains competent rock.

Walden

Laramie River

Cache la Poudre River

Laramie-Poudre Tunnel

Red Feather Lakes

Wellington

HWY 287

HWY 14

I-25

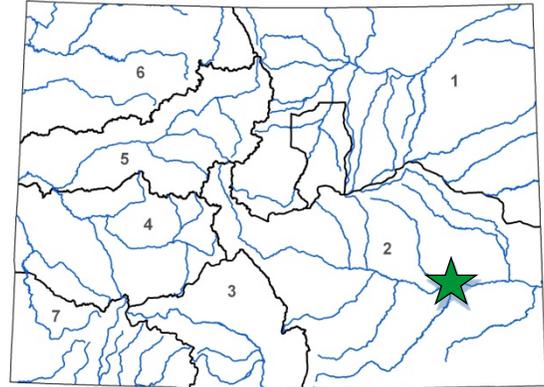
Timber and grout above concrete arch.

Crew removes concrete to make room for the steel set.

Grout intermixed with gravels and soils (solid grey in the brown).

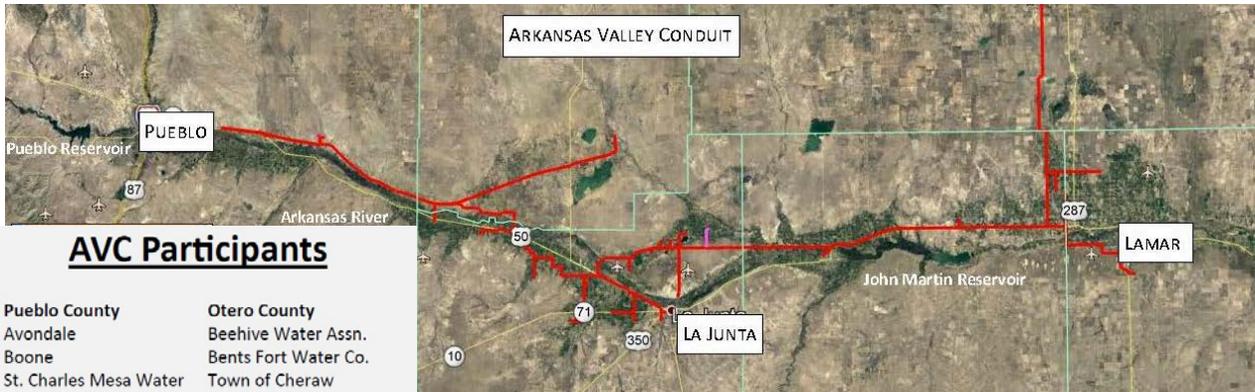


L O A N D E T A I L S		
Project Cost:	\$600,000,000	
CWCB Loan-Grant Package:	\$100,000,000	
Loan Term and Interest Rate:	TBD	
Funding Source:	Severance Tax Perpetual Base Fund	
B O R R O W E R T Y P E		
Agriculture	Municipal	Commercial
0%	100% Low - TBD% Mid -0% High	0%
P R O J E C T D E T A I L S		
Project Type:	Water Supply System	
Average Annual Diversions:	N/A	



The Arkansas Valley Conduit was authorized by Congress in 1962 as part of the Fryingpan-Arkansas Project (Project), but was never built because local communities could not afford the cost. In 2000, the Southeastern Colorado Water Conservancy District, working with people in six Lower Arkansas Valley counties, renewed planning efforts for the AVC. In 2009, new federal legislation (PL 111-11) reauthorized construction of the AVC, with a 65 percent federal share, and 35 percent local share. The legislation also allows miscellaneous revenues from the Project to fund and repay construction costs. The Bureau of Reclamation issued an Environmental Impact Statement in 2013, and a Record of Decision in 2014.

L O C A T I O N			
County:	Pueblo, Crowley, Otero, Bent, Prowers		
Water Source:	Arkansas River		
Drainage Basin:	Arkansas		
Division:	2	District:	14



**AVC Participants**

- |                        |                         |
|------------------------|-------------------------|
| <b>Pueblo County</b>   | <b>Otero County</b>     |
| Avondale               | Beehive Water Assn.     |
| Boone                  | Bents Fort Water Co.    |
| St. Charles Mesa Water | Town of Cheraw          |
|                        | East End Water Assn.    |
| <b>Crowley County</b>  | Eureka Water Co.        |
| 96 Pipeline Company    | Fayette Water Assn.     |
| Crowley County Water   | Fowler                  |
| Association            | Hancock Inc.            |
| Crowley                | Hilltop Water Co.       |
| Olney Springs          | Holbrook Center Soft    |
| Ordway                 | Water                   |
| Sugar City             | Homestead Improvement   |
|                        | La Junta                |
| <b>Bent County</b>     | Manzanola               |
| Hasty Water Company    | Newdale-Grand Valley    |
| Las Animas             | North Holbrook Water    |
| McClave Water          | Patterson Valley        |
| Association            | Riverside Water Co.     |
|                        | Rocky Ford              |
| <b>Prowers County</b>  | South Side Water Assn.  |
| Lamar                  | South Swink Water Co.   |
| May Valley Water Assn. | Swink                   |
| Wiley                  | Valley Water Co.        |
|                        | Vroman                  |
| <b>Kiowa County</b>    | West Grand Valley Water |
| Eads                   | West Holbrook Water     |

The project will deliver clean drinking water to 50,000 people in 40 communities in southeastern Colorado. Domestic wells in the Arkansas River watershed east of Pueblo are contaminated by naturally occurring radioactive materials and high levels of salinity, nitrates and selenium. Both the primary treatment of water, and the disposal of bi-products such as brine are driving up costs for water providers, and some communities are unable to meet basic water-quality standards.



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

May 27, 2020

Dear House Rural Affairs and Agriculture Committee Members,

House Bill 20-1403 is the annual Projects Bill that appropriates funding for a variety of water projects, programs, and loans from the Colorado Water Conservation Board's Construction Fund and the Severance Tax Perpetual Base Fund.

The Construction Fund is a revolving loan fund that generates interest earnings that are used in turn to fund operations, projects, programs and grants in CWCB. The Severance Tax Perpetual Base fund is a revolving loan fund that receives revenues from interest earnings and from severance taxes. The recent action by the Joint Budget Committee to transfer \$45.5 million from the Perpetual Base Fund to the General Fund will still allow funding for the appropriation in this bill.

The items in this bill support CWCB's mission and efforts to advance the Colorado Water Plan. The bill includes funding for a variety of ongoing programs throughout the agency, the majority of which are continuing programs that regularly appear in this bill, including funding for tools to measure precipitation and streamflow, floodplain mapping, and other funding for technical and design assistance. This year's bill also includes authorization for three loans including funding to assist the long-awaited Arkansas Valley Conduit project.

The attached fact sheet provides additional background information on the projects recommended for inclusion in this year's bill as approved by the CWCB Board in January 2020.

We are happy to follow up on any questions the committee may have. Thank you for your consideration and support.

Sincerely,

*Rebecca Mitchell*

Rebecca Mitchell

CWCB Director

# COLORADO WATER CONSERVATION BOARD

## Department of Natural Resources

Jared Polis, Governor

Dan Gibbs, DNR Executive Director

Rebecca Mitchell, CWCB Director

# HOUSE BILL HB20-1403

## THE 2020 WATER PROJECTS BILL

### Background

The General Assembly annually authorizes water projects from the Construction Fund and the Severance Tax Perpetual Base Fund. The CWCB provides low-interest loans to domestic and agricultural water providers for water supply projects. These revolving loan funds generate interest earning that are then used for CWCB operations, programs, projects and grants to help implement Colorado's Water Plan. To date, over 600 loans have helped finance engineering, construction, and the purchase of water.

The CWCB is celebrating the fourth anniversary of Colorado's Water Plan. This Bill includes several projects and programs that will help implement the Plan including consumptive and non-consumptive projects and activities throughout the state.

The **Construction Fund** was created in 1971 to provide low-interest loans for water projects and provide monies for non-reimbursable investments. The Fund is a revolving loan fund that allows the CWCB to operate without money from the state's General Fund. Revenues come from interest earnings and royalty distributions from federal mineral leases.

The **Severance Tax Perpetual Base Fund** was established by the General Assembly in 1997. The Fund is a revolving loan fund that receives revenues from interest earnings and from severance taxes paid by the producers of gas, oil, coal and other minerals.

**Small Project Loan Report** - A report detailing the 15 loans made in calendar year 2019, providing about \$49.4 million, was submitted to the General Assembly on January 15<sup>th</sup> 2020. A copy of the report will be available on the legislative website at [www.colorado.gov](http://www.colorado.gov).

Loan interest rates are adjusted bi-monthly by CWCB. The rates mid-year 2019 were:

- 1.65 % for agricultural loans and
- 2.30% to 3.00% for municipal loans
- 6.0% for commercial loans
- 2.0% for hydroelectric projects



**COLORADO**

Colorado Water  
Conservation Board

Department of Natural Resources

### 2020 Bill Highlights

*Provides \$134 million focusing on Implementation of Colorado's Water Plan. Including: Water storage, Watershed health, Environment and Recreation, Flood Control/mitigation, Stream Monitoring, Water Conservation, Innovation, Preserving Agriculture, Training and Education, Flood Hazard Mapping, Large Loans, and other programs and projects.*

For more information, contact Alice Cosgrove, DNR Legislative Liaison (303) 242-7841

Colorado Water Conservation Board  
1313 Sherman Street, Room 718  
Denver, CO, 80203  
Phone: (303) 866-3441  
Internet: [www.cwcb.state.co.us](http://www.cwcb.state.co.us)

The CWCB accepts applications for non-reimbursable project investments and project loans over \$10 million on August 1<sup>st</sup> of each year. Applications typically include programs, projects or activities of statewide impact or importance and are considered by the Board for inclusion in the annual CWCB Water Projects Bill.

<b>Non-Reimbursable Project Investments</b>			
<b>Section 1.</b> Satellite Monitoring (Continuation)	Appropriates funds to install, maintain, and operate satellite monitored stream gauges and lysimeters for water rights administration and data collection, as statutorily authorized.	Statewide	\$380,000
<b>Section 2.</b> Floodplain Map Modernization Program (Continuation)	Assists communities to revise and improve floodplain studies and maps. Provides the required non-federal matching dollars that are further leveraged by local cost share and in-kind services. This Program leverages four million dollars in local and federal funds annually.	Statewide	\$500,000
<b>Section 3.</b> Weather Modification Permitting Program (Continuation)	Assists water conservation and conservancy districts with the development of cloud seeding programs to provide benefits to recreation, streams, and reservoirs through snowpack enhancement. This Program leverages about one million dollars in local and out of state annually.	Statewide	\$350,000
<b>Section 4.</b> Colorado Mesonet Project (Continuation)	This project will provide funding for operation, maintenance, travel, communications, database and website management for temperature and precipitation stations referred to as the Colorado Mesonet, previously managed and operated by NOAA and currently operated by the Colorado Climate Center at CSU.	Statewide	\$150,000
<b>Section 5.</b> Lidar Acquisition (Continuation)	High quality topographic data is necessary to develop accurate FEMA flood hazard mapping. Additionally, the Colorado Hazard Mapping program relies on high quality elevation data for debris flow mapping and fluvial hazard mapping. These funds have leveraged \$5.6M in FEMA funds through the U.S. Geological Survey (USGS) 3D Elevation Program.	Statewide	\$200,000
<b>Section 6.</b> Arkansas River Basin Decision Support System (Continuation)	The Arkansas River Basin Decision Support System (ArkDSS) is the last DSS to be developed in Colorado's DSS. This funding continues implementation efforts as identified in the ArkDSS feasibility study completed in 2011. Implementation at this stage will include development of a surface water planning model and an admin/accounting tool.	Arkansas	\$500,000
<b>Section 7.</b> CDSS Operation and Maintenance (Continuation)	Provides funding to continue the operations and maintenance of the Colorado Decision Support System (CDSS). The CDSS provides data and analytical tools to aid in water resources planning and management in the State.	Statewide	\$500,000

<b>Section 8.</b> Water Forecasting Partnership Project (Continuation)	This program focuses on using modern technology to provide better characterization of snowpack, installing new ground and aerial remote sensing data, and develop employee accepted hydrologic modeling practices, to provide more reliable volumetric water supply forecasting.	Statewide	\$350,000
<b>Section 9.</b> Colorado Water Loss Control Initiative (Continuation)	Water loss control has been identified in Colorado's Water Plan. This Phase II funding will continue to provide statewide training workshops on the water loss control methodology (AWWA M36) with a focus on smaller rural providers. Funding also provides technical support to interested water providers in improving the management of their water systems.	Statewide	\$1,000,000
<b>Section 10.</b> Watershed Restoration Grant Program (Continuation)	Provides planning, engineering, implementation measures, aquatic habitat protection, restoration work, quantification of environmental flow needs, and monitoring efforts to address technical needs for watershed restoration and flood mitigation projects, and to support healthy stream and watershed goals outlined in Colorado's Water Plan.	Statewide	\$4,000,000
<b>Section 11.</b> Alternative Agricultural Transfer Methods (ATM) Grant Program (Continuation)	Provides continued funding for the ATM Grant Program as developed under SB07-122 as an effort to implement alternatives to permanent dry-up of agricultural lands.	Statewide	\$750,000
<b>Section 12.</b> Restoration of Litigation Fund Cash Balance	Restore the CWCB Litigation Fund to \$2,000,000 to assist in addressing legal issues associated with compact compliance or any other litigation activities as defined under section 37-60-121 C.R.S.	Statewide	Up to 2,000,000
<b>Section 13.</b> Fish & Wildlife Resources Fund (122.2)	Pursuant to C.R.S. 37-60-122.2 and CWCB Policy 15 and 20. The CWCB provides funding for the consideration and approval of Fish and Wildlife Resources Fund grant applications pursuant to statute.	Statewide	\$1,000,000
<b>Section 14.</b> Colorado Water Plan Implementation Funding (Continuation)	Appropriates \$7.5M in grant making from the Construction Fund to support the implementation of the Colorado Water Plan by funding the following activities: <ul style="list-style-type: none"> <li>• \$3.0M to facilitate the development of additional storage, artificial recharge into aquifers, and dredging existing reservoirs to restore the reservoirs' full decreed storage capacity for multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap;</li> <li>• \$1.0M for grant funding to implement long-term strategies for conservation, land use, and drought planning;</li> <li>• \$0.5M for grants for Water Education, Outreach, and Innovation efforts;</li> <li>• \$1.5M to provide technical assistance, project, or program funding for agricultural projects;</li> <li>• \$1.5M for Environmental, and Recreational projects;</li> </ul>	Statewide	\$7,500,000

**Large Water Project Loan Authorizations (> \$10 million)**

<p><b>Section 15.</b> Arkansas River and Wildhorse Creek Levee Rehabilitation (Increase)</p>	<p>Authorizes a loan increase to the Pueblo Conservancy District to repair an additional phase of levee rehabilitation within the City of Pueblo to bring them up to Federal Emergency Management Agency (FEMA) standards to provide flood protection to the City of Pueblo. (\$6.06M increase). This Project was originally authorized in SB18-218. This increase is due to an expansion of the Project’s original scope and therefore has been included in this year’s Projects Bill as an increase.</p>	<p>Arkansas</p>	<p>\$23,230,000 (Sev. Tax) \$6,060,000 increase</p>
<p><b>Section 16.</b> West Half Laramie-Poudre Tunnel Rehabilitation (Increase)</p>	<p>Authorizes a loan to the Tunnel Water Company to rehabilitate the Laramie-Poudre Tunnel. The tunnel delivers Laramie water to the front range for its two large shareholders, Water Supply and Storage Co and Windsor Reservoir Co. This was authorized by the CWCB in FY19-20 but since it exceeds the Board’s \$10M limit, it is in this year’s Projects Bill.</p>	<p>South Platte</p>	<p>17,250,800 (Const. Fund) \$8,160,800 increase</p>
<p><b>Section 17.</b> Arkansas Valley Conduit</p>	<p>Authorizes a \$90 million loan and a \$10 million grant to the Southeastern Colorado Water Conservancy District to provide non-federal cost share funding for this important component of the Frying Pan - Arkansas Project. This project will help bring quality drinking water to six counties in the lower Arkansas Valley. (inc. \$10M transfer from Sev Tax PBF to CF)</p>	<p>Arkansas</p>	<p>\$100,000,000 (Sev. Tax)</p>

**Other Provisions**

**(Section 18)**

**Statutory Revision:** Revision to the Colorado Revised Statutes CRS 37-60-121 - Colorado Water Conservation Board Construction Fund - Creation - Nature of Fund - Funds for Investigations - Contributions - Use for Augmenting the General Fund - Funds Created

(1)(b)(VI) After July 1, 1981, domestic water treatment ~~and distribution systems~~ shall not be recommended by the board to the general assembly.

*Justification - This a statute cleanup to reflect a change that was made five years ago*

**(Section 19)**

**Statutory Revision:** Revision to the Colorado Revised Statutes CRS 37-60-126(12) - Water Efficiency Grant Program Cash Fund

(IV) Any moneys remaining in the fund on June 30, ~~2020~~ 2030, shall be transferred to the severance tax operational fund described in section 39-29-109 (2) (b), C.R.S.

(b) Any covered entity or state or local governmental entity that has adopted a water conservation plan and that supplies, distributes, or otherwise provides water at retail to customers may apply for a grant to aid in the implementation of the water efficiency goals of the plan. Any agency may apply for a grant to fund outreach or education programs aimed at demonstrating the benefits of water efficiency. The office shall review the applications and make recommendations to the board regarding the awarding and distribution of grants to applicants who satisfy the criteria outlined in this subsection (12) and the guidelines developed pursuant to subsection (7) of this section.

(c) This subsection (12) is repealed, effective July 1, ~~2020~~ 2030.

*Justification - The CWCB desires to continue to fund this valuable grant program into the future*

**(Section 20)**

**Session Law Revision:** Revision to Senate Bill SB19-212 (Section 5) Appropriation

(2)(a) For the 2019-20 state fiscal year, ~~\$1,700,000~~ \$833,258 is appropriated to the department of natural resources for use by the Colorado water conservation board. This appropriation is from the general fund. To implement this section, the Colorado water conservation board may use this appropriation for stakeholder outreach and technical analysis to develop a water resources demand management program.

**(b) THE MONEY APPROPRIATED IN SUBSECTION (2a) OF THIS SECTION REMAINS AVAILABLE FOR EXPENDITURE UNTIL THE CLOSE OF THE 2020-21 STATE FISCAL YEAR.**

*Justification - This reduces the amount and adds one year to the appropriation to allow CWCB to fully utilize the funds as intended*

**Statement for the Record**

**May 27, 2020**

**Committee on Rural Affairs and Agriculture**

**Bill Long, President**

**Southeastern Colorado Water Conservancy District**

Thank you for the opportunity to provide a written statement in support of the Colorado Water Conservation Board's annual projects bill, HB20-1403. The Southeastern Colorado Water Conservancy District respectfully requests your favorable and prompt consideration of this bill.

The legislation before you includes a critical funding package for the Arkansas Valley Conduit, the final element of the Fryingpan-Arkansas Project. We are aware that the combined loan and grant provision included in this bill is a significant investment by the CWCB and the State of Colorado, for the benefit of southeastern Colorado residents who desperately need a safe drinking water supply that complies fully with the federal standards under the Safe Drinking Water Act.

Be very clear, however, that without a funding partnership between the State of Colorado, the Bureau of Reclamation and the Southeastern District, this fundamental need will go unmet.

As you all know, the time when the federal government fully funded water projects in the West, with repayment contracts upon completion, is gone. All federal projects require a non-federal cost-share. The SECWCD successfully fought for Public Law 111-11, which was enacted in 2009 and provided for that cost share through the future use of revenues derived from excess capacity contracts at Pueblo Reservoir.

However, three small phrases changed that funding plan. They are:

Subject to appropriation.

Earmark ban.

Office of Management and Budget.

The 2009 law provided authorization for funding the project, "subject to appropriation." The federal appropriations process begins with the Administration's budget request. Congress once could add dollars to any line item request if sufficient support to do so existed. But then, Congress imposed an "earmark ban" on itself. The result is the Administration's line-item budget requests are the funding level for any given project. The Office of Management and Budget, working with the Bureau of Reclamation, has the final say on line item requests.

The OMB has been diminishing Reclamation's construction budget for many years. In addition to the cost-share requirements, they have come to believe the federal interest in water resource development is questionable. They have demanded through the "power of the purse strings" that cost-sharing be provided **upfront and during project construction**.

This policy direction applies not just to the AVC, but to rural water projects throughout the West, and Western states have invested hundreds of millions of dollars to leverage the needed federal funds for project construction.

In its FY '19 and '20 budget requests, the Administration zeroed out the Arkansas Valley Conduit completely, after several years of insufficient funding to move the project forward. The message was perfectly clear: without non-federal funding, the project will not be built.

We are enormously grateful for the unanimous support of the Colorado Water Conservation Board for our funding application. The Board, which represents every part of our state from very diverse perspectives, understands that **all Coloradans** deserve a clean drinking water supply for the present, and for the future.

CWCB's total funding package of \$100 million for the Arkansas Valley Conduit represents non-federal funding support that seeks to leverage as much as \$500 million in future federal funding for this project. Failure to approve the \$100 million funding package could jeopardize \$36 million in FY '2020-21 federal funding opportunities, as well as an estimated \$464 million in future federal funding over a 15-year period.

In addition, failure to approve the full funding package would further delay the construction of the project, impacting several of the 40 communities under state enforcement orders for radionuclide levels and other water quality issues. Several communities have deadlines for compliance in the next few years.

The funding we request will help to provide the necessary infrastructure to deliver that existing supply, not to create a new supply.

Water infrastructure is critical in Colorado and throughout the semi-arid West. Your partnership with us, and with the Bureau of Reclamation, will deliver our most precious resource to the people of Southeastern Colorado.

Without that partnership, the project will die.

Thank you for your consideration.





S O U T H E A S T E R N C O L O R A D O

## **Water Conservancy District**

*"Your investment in water"*

### *The Arkansas Valley Conduit*

The Arkansas Valley Conduit has been anticipated for more than 70 years as a way to bring clean drinking water the cities, towns and domestic water companies east of Pueblo, Colorado. It is seen as a way to gain compliance with federal mandates on water quality; as a way to stabilize water supply for the development of the region's economy, and a way to improve water conservation.

The AVC will provide a safe, long-term water supply to over 50,000 people in 40 rural communities along the Arkansas River in Southeastern Colorado. Drinking water currently delivered to about 5,200 people in the AVC service area does not meet National Primary Drinking Water Regulations due to naturally occurring radionuclides in current groundwater sources, and 17 communities are under state enforcement orders. An additional 11,500 people are served by systems which are only able to provide acceptable drinking water through reverse osmosis (RO) systems. These systems are operating under temporary "discharger specific variances" from the state. These expire in 2026 and 2028, at which point the RO systems may not be able to continue operating due to high levels of selenium in effluent discharged to the Arkansas River, resulting in as many as 16,700 people potentially having unsafe drinking water supplies.

The AVC would efficiently and effectively replace contaminated groundwater with cleaner surface water from Pueblo Reservoir, which would be treated and delivered by the AVC.

Through a collaborative effort between Reclamation and the Southeastern Colorado Water Conservancy District (Southeastern), a revised project configuration was developed which eliminates a major segment of the Project's trunk line around Pueblo and utilizes Pueblo's existing treatment and distribution system. This reduces the total estimated project construction cost by as much as a 19 percent and shortens the construction schedule by several years.

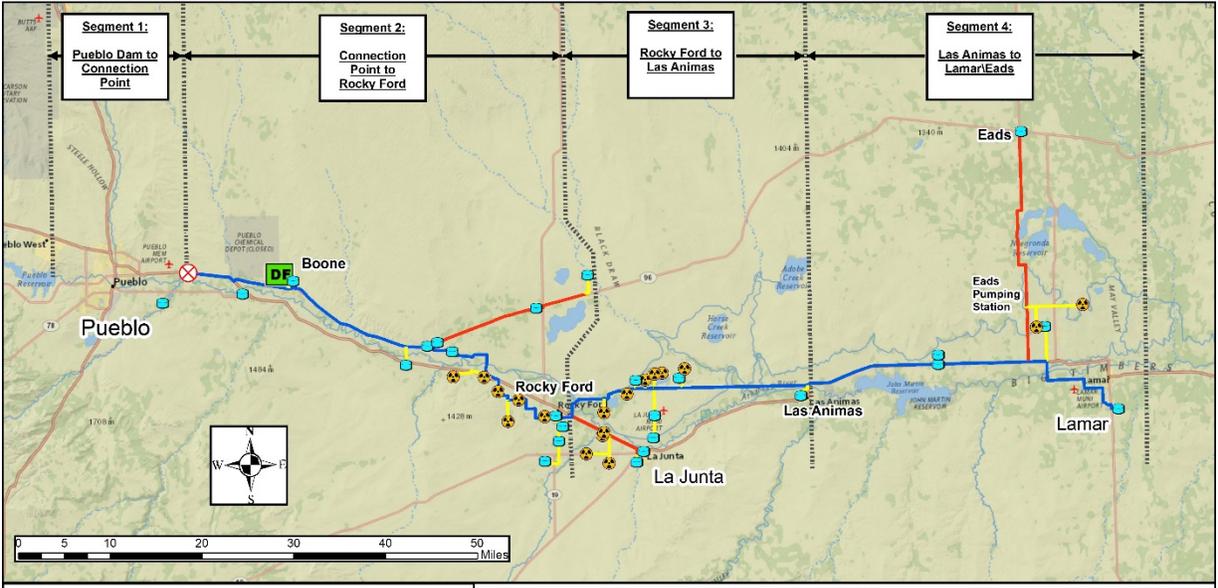
To further reduce the need for Reclamation appropriations, Southeastern is seeking final approval of a \$100 million loan and grant package, which received unanimous approval, from the Colorado Water Conservation Board in November 2019. Secondly, loan/grant programs that provide financial assistance to rural America are potential sources of funding.

The AVC has a clear path to repayment of federal outlays for construction, provided for in Public Law 111-11. That legislation, passed in 2009, allows miscellaneous revenues generated from excess capacity uses of the Fryingpan-Arkansas Project, by various Colorado water providers, to repay construction costs of the AVC. Since 2009, the number of long-term excess capacity contracts has grown, increasing the opportunity for the AVC to be fully repaid over time.

On February 4, 2020, Southeastern and Reclamation learned that \$28 million in federal appropriations for FY2020 had been approved *by the Bureau of Reclamation and Congress* for construction of the AVC. This is a significant amount of funding *that* will enable construction of the AVC to reach the first Lower Arkansas Valley community in need of clean drinking water. On Feb. 10, 2020, the President's Budget Message for FY2021 included an additional \$8 million for the AVC.

Since then, Southeastern and Reclamation have met on a weekly basis to discuss details of the AVC. A Project Charter and Project Management Plan were signed by Reclamation and District. Further steps continue will the goal of beginning construction in 2021, and completing the AVC by 2035.

Right now, 50,000 people are depending on the AVC for the most important ingredient in life: a clean water supply. They are also depending on a continued partnership with the federal and state government to develop the AVC in a way that assures quality and longevity of water systems.

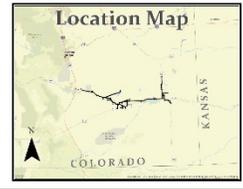


**Legend**

- ⊗ Connection Point
- ☠ Provider under CDPHE enforcement order for presence of radionuclides
- ⊡ Other water providers
- DF Dechloramination Facility
- Delivery - to be funded and built by others
- Spur - to be funded and built by others
- Trunk - to be funded and built by Reclamation



BUREAU OF RECLAMATION




*Bureau of Reclamation*  
*Southeastern Colorado Water Conservancy District*