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Jared Polis, Governor Dan Gibbs, DNR Executive Director Lauren Ris, CWCB Director

TO: Colorado Water Conservation Board Members

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

DATE: January 29-30, 2024 Board Meeting

AGENDA ITEM: 10a. 2024 Projects Bill Summary

Introduction (This is for information only and no action is necessary)

Attached is the summary of the proposed 2024 CWCB Projects Bill for discussion and modification as necessary.

The Projects Bill includes over \$204 million in funding for important CWCB Programs and Projects. The NonReimbursable Investment (NRI) from the CWCB Construction Fund and Severance Tax Perpetual Base Fund is \$181 million as shown in the following table.

	Program, Project, or Activity	Impact	NRI Request
Α	Satellite Monitoring (Continuation)	Statewide	\$380,000
В	Floodplain Risk Management (Continuation)	Statewide	\$500,000 *
С	Weather Modification Permitting Program (Continuation)	Statewide	\$500,000
D	Litigation Fund (Restore Balance up to)	Statewide	\$2,000,000
Е	Colorado Mesonet Enhancements (Continuation)	Statewide	\$200,000
F	Water Forecasting Partnership Project (Continuation)	Statewide	\$2,000,000
G	UCRC Modeling & Technical Analyses (Continuation)	Statewide	\$500,000
Н	Statewide Diversion Telemetry Project	Statewide	\$1,827,500
I	SHP Groundwater Study Update	Southeast CO	\$250,000
J	Turf Replacement Funding	Statewide	\$2,000,000
K	Drought Resilience Investment	Statewide	\$4,000,000
L	Loan: NCWCD - Windy Gap Firming Project - Increase	So. Platte Basin	\$65,650,000
М	Loan: NCWCD - Northern Integrated Supply Project	So. Platte Basin	\$101,000,000
Ν	Reserved for Shoshone Water Right Permanency		* *
			\$180,807,500

^{*} Request for an increase will be considered in Agenda Item 10b.



^{* *} Request will be considered in Agenda Item 10c.

Colorado water Conservation Board Department of Natural Resources

Jared Polis, Governor Dan Gibbs, DNR Executive Director Lauren Ris, CWCB Director

House BILL HB24-XXXX The 2024 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 680 loans totaling \$1.3 billion have helped finance engineering, construction, and the purchase of water.

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 funding from the state's General Fund. Revenues come from interest earnings and royalty distributions from federal mineral leases.

The Severance Tax Perpetual Base Fund (STPBF) 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. SB21-281 directed the CWCB to use the STPBF to fund the Water Supply Reserve Fund (WSRF), the Interbasin Compact Committee Operation Fund (IBCC) and the Water Efficiency Grant Program from the STPBF.

Small Project Loan Report - A report detailing the 13 loans new loans made in calendar year 2023, providing about \$38 million, was submitted to the General Assembly on January 15th 2024. A copy of the report is available on the legislative website at www.colorado.gov.

Loan interest rates are adjusted bi-monthly by CWCB. The rates mid-year 2023 were:

1.85% for Agricultural loans and 2.60% to 3.35% for Municipal loans

6.0% for Commercial loans

2.0% for Hydroelectric projects



2024 Bill Highlights

Includes over \$200M in funding for important CWCB Programs and Projects. Including: \$23M in Water Plan Grant funding: \$2M for Turf Replacement funding: \$2M for Water Forecasting; \$4M for Drought Planning; \$65M in loan funds for the Windy Gap Firming Project and \$100M in loan funds for the Northern Integrated Supply Project.

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

Non-Reimbursable	Project Investments		1
Section A. 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
Section B. Floodplain Risk Management (Continuation)	Assists communities to revise and improve floodplain studies and maps. (f/n/a Map Modernization Program) Provides the required non-federal matching dollars that are further leveraged by local cost share and in-kind services. This Program expects to leverage \$10M in federal funding alone this year.	Statewide	\$500,000
Section C. 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 funds annually.	Statewide	\$500,000
Section D. Litigation Fund -Restoring Cash Balance (Continuation)	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
Section E. Colorado Mesonet Enhancements (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	\$200,000
Section F. Water Forecasting Partnership Project (Continuation)	This project will use modern technology to provide better characterization of snowpack, install new ground and aerial remote sensing data, and develop employee accepted hydrologic modeling practices, to provide more reliable volumetric water supply forecasting.	Statewide	\$2,000,000
Section G. UCRC Modeling & Technical Analyses (Continuation)	Funds will support CWCB's efforts in the Upper Colorado River Commission (UCRC) with modeling and technical analyses necessary in development of post-2026 operational guidelines for Lake Powell and Lake Mead that protect Colorado's and the Upper Basin's significant interests in the River.	Statewide	\$500,000
Section H. Statewide Diversion Telemetry Project	This will fund the installation of telemetry equipment at 306 sites across Colorado. Department of Water Resources (DWR) will install the equipment over the next five years.	Statewide	\$1,827,500

Section I. SHP Groundwater Study Update	The Southern High Plains (SHP) Designated Groundwater Basin is in the southeast corner of Colorado, underlying most of Baca County and southeastern Prowers County. This funding will update a 2002 study and provide scenario analyses and community facilitation to establish the Southern High Plains residents' goals for their groundwater resources.	Southeast Colorado	\$250,000
Section J. Turf Replacement Funding	The State's Turf Replacement Program (TRP) created by HB22-1151 allocated \$2 million in state funding to implement transformative landscape change and support municipal outdoor water conservation efforts. This funding will allow the TRP to continue and help advance and create turf removal and replacement projects across Colorado.	Statewide	\$2,000,000
Section K. Drought Resilience Investment	This funding will support efforts to advance projects within and complimentary to the 2023 Water Plan that support drought planning, practical implementation of drought mitigation techniques, education, guidance and training. This will be done through the following focus areas: Drought Resilience Workshops; Water Plan Outreach Campaign; Water Loss Prevention and Validator Training; Adaptive and Critical Drought Projects; Storage Analysis Opportunities and Alternatives; Water Conservation Handbook.	Statewide	\$4,000,000
Section L. Windy Gap Firming	Allows for the CWCB Board to increase the Windy Gap Firming Water Activity Enterprise of the Northern Colorado Water Conservancy District's (District) existing loan of \$90M by \$65M for a final loan amount of \$155M. The loan increase will allow the District to complete its Windy Gap Firming Project (aka Chimney Hollow Reservoir)	So. Platte	\$65,650,000 (Loan)
Section M. Northern Integrated Supply Project	Authorizes a \$101M loan to the Northern Integrated Supply Project (NISP) Water Activity Enterprise of the Northern Colorado Water Conservancy District to develop a new regional water supply project called NISP. NISP will provide 40,000AF of new water supplies annually for 11 communities and 4 water districts in the northern front range. Providing water to an estimated 500,000 residents by 2050. It includes two major components (Glade Reservoir Complex and the South Platte Water Conservation Project)	So. Platte	\$101,000,000 (Loan)
Section N.			

Other Provisions

Section O

Water Plan Implementation Cash Fund Appropriation - This will appropriate \$23.3M of sports betting revenues within the Cash Fund to make grant funding available for projects that assist with the implementation of the Colorado Water Plan through CWCB's Application and Guidelines process.



Satellite Monitoring/Maintenance Program

Colorado Water Conservation Board November 2023 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 about 650 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

PROJ DETA	
Project Cost:	\$380,000
NRI Funding Request:	\$380,000
Funding Source:	Construction Fund
Project Type:	DWR Streamgaging
Type of Grantee:	State Agency

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Benefits:				State	wide		
Water	Water Source:				Va	rious	
Draina	ge Bo	asin:			All B	asins	

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.



Remote-controlled Automatic Data Collection Platform (ADCP) system developed by DWR to expand use and improve safety of ADCP's



Floodplain Risk Management

Colorado Water Conservation Board November 2023 Board Meeting

Colorado has received over \$63 million in federal grant dollars for floodplain mapping activities as part of the floodplain Map Modernization/Risk Map Program (Program) initiated by FEMA since 2003. The FEMA funds are supplemented by CWCB and local cost-share dollars to perform 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 past required nonfederal matching dollars, as well as associated projects for leverage. The State funds are further leveraged by local cost share dollars and in-kind services from many communities to obtain additional related information and project assistance. The total funding amounts have been

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Project Cost:						\$7,	727,617
NRI Funding Request:						\$	500,000
Funding Sour		Coi	nstr	ucti	on Fund		
Project Type: Leverage Funds for Grants							
Type of Grantee:					S	tate	Agency

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Benefits:					State	wide	
Water Source:					Va	rious	
Drain	Drainage Basin:					All B	asins

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 Decision Support System (DSS) to increase data capture and enhance Colorado's decision support tools.

The Program impacts the entire state, and the objective is to develop updated watershed-based and/or countywide floodplain maps using information based on high quality data and current engineering technology 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 expected to be approved by FEMA for Federal Fiscal Year 2023, which starts October 1, 2023 and ends September 30, 2024.

Grant Description	FEMA Funding	Grant Description	FEMA Funding	
FY23 CTP Project Management	\$1,514,036	Summit Phase 3 Add'l	\$98,947	
Republican Basin BLE	\$838,355	El Paso Phase 3 Add'l	\$88,210	
Routt BLE	Routt BLE \$377,230		\$413,327	
San Miguel Phase 2 Add'l	\$38,500	Las Animas Phase 3	\$303,585	
Grand Phase 2	\$484,666	Crowley, Kiowa, Lincoln, Phillips, and Sedgewick Counties Phase 3	\$1,071,146	
Gunnison Add'l, Phase 2	\$474,233	LOMR Review Partner Program	\$873,600	
Pueblo Add'l, Phase 2	\$673,654	FY23 COMS	\$165,634	
Total FEMA Funding:		\$7,727,617		



Weather Modification Permitting Program

Colorado Water Conservation Board November 2023 Board Meeting

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 Water Conservation District, and California Six Agency Committee. CWCB funding leverages pledged match funding from Lower Basin States water users. This funding helps meet CWCB goals to have industry standard equipment in operation for efficient and effective programs.

P R O J	E C T						
DET	AILS						
Project Cost: \$1.5M (matching from Lower							
Basin States and local	sponsors)						
NRI Funding Request:	\$500,000						
Funding Source:	Construction Fund						
Project Type: Snow	wpack Augmentation						
Type of Grantee:	State Agency						
LOCA	TION						
Benefits:	Statewide						
Water Source:	Various						
Drainage Basin:	All Basins						

In 2019, the State of Wyoming collaborated with the CWCB and the Jackson County Water Conservancy District (JCWCD) to launch Colorado's first permitted aerial cloud seeding program. In 2021, JCWCD in partnership with CWCB permitted a new ground-based weather modification program in the North Platte Basin. Some of the requested funding increase will help to continue this new state-to-state collaboration in the North Platte Basin. In 2022, CWCB permitted the most recent weather modification program in the St. Vrain and Left Hand drainage, Colorado's first permitted weather modification program targeting the front range. Currently, a feasibility study is being conducted for the Yampa/White/Green Basin in the hopes of permitting a new weather modification program in the coming years.

Since 2007 the Lower Basin Water Users in the Colorado River (Southern Nevada Water Authority, California Six Agency Committee, and Central Arizona Water Conservation District) have donated \$4.25M to match the CWCB's \$3.8M to bolster locally sponsored cloud seeding in Colorado. Each year, about \$1.5M is spent on supporting current operations, upgrading equipment, and financing various weather modification studies around the state.

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 into the clouds. 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 been facilitating successful multi-state collaborations to benefit local water supplies and downstream compact obligations for years. Most recently, the Bureau of Reclamation awarded a \$2.4 Million dollar grant to bolster cloud seeding programs in Utah, Wyoming, and Colorado. 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.



Litigation Fund

Colorado Water Conservation Board November 2023 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 (I) with respect to litigation, the Colorado Attorney General requests that the Board authorize the expenditure of moneys in a

PROJ DETA	
Project Cost:	\$1,970,000
NRI Funding Request:	\$1,970,000
Funding Source:	Construction Fund
Project Type:	Legal Support
Type of Grantee:	State Government

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Benefits:					State	wide
Water	Water Source:					N/A
Drain	age Bo	asin:			All B	asins

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)."

The CWCB has received a letter from Attorney General Phil Weiser stating that a total of \$1,970,000 will be needed in FY 23/24 to adequately: defend in negotiations; litigation; and other processes the State's apportionments under the Compacts. The funds will be allocated as follows:

Colorado River Basin: \$1,030,000 for FY 23/24
 Republican River Basin: \$110,000 for FY 23/24
 South Platte River Bain: \$205,000 for FY 23/24
 Rio Grande Basin: \$590,000 for FY 23/24
 Arkansas River Basin: \$35,000 for FY 23/24

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 Mesonet Enhancements

Colorado Water Conservation Board November 2023 Board Meeting

The Colorado Climate Center was established by the state in 1974 through the Colorado State University Agricultural Experiment Station to provide information and expertise on Colorado's complex climate. Through its program of Climate Monitoring, Climate Research and Climate Services, the Center is responding to many climate related questions and problems affecting the state today. One way the Center monitors the climate is through CoAgMET, a network of over 90 stations statewide tracking agricultural weather and Colorado's climate. The Climate Center is located at Colorado State University within the Department of Atmospheric Science.

PR (~			T S			
Project Cost:						\$45	0,000	1
NRI Funding Requi	est	•				\$20	0,000	
Funding Source:	Funding Source: Construction Fund						!	
Project Type:	D	ata	Co	llec	tio	n/۸	Λaint.	
Type of Grantee:				S	tat	e A	gency	,

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Benef	its:			Statewid					
Water	Sour	ce:			Various				
Draina	ige B	asin:			All Basins				

This project builds on recent work that has improved the quality, accessibility, and usability of meteorological data collected by the Colorado Agricultural Meteorological Network, CoAgMET (also known as Colorado's Mesonet). CoAgMET is rapidly maturing as Colorado's Mesonet, providing high quality weather data targeted for use in water planning, management, conservation and education. In recent years we have expanded the network (now with over 90 stations) and increased the number of stations reporting data every 5 minutes. We have also revamped the website and developed a new API that makes it even easier for data users to find what they need. The CoAgMET data are used for a broad range of applications, including irrigation planning, drought monitoring, water availability calculations, real-time weather monitoring, and much more. This proposed project will further enhance CoAgMET data and will increase its uses for understanding the climate of Colorado, especially in relation to stakeholder needs in the water and agriculture sectors.

High quality weather data for water resources application is greatly taken for granted and receives little financial support. It is a statewide effort benefiting many users from agricultural producers to municipal water providers and many others. Federal data collection efforts have provided useful long-term temperature and precipitation data but not the extensive measurements of humidity, wind and solar radiation needed for computing reference evaporation and crop consumptive use. The Colorado Regional Climate Reference Network, gifted to CSU from the National Weather Service, represents a federal investment in hardware of nearly \$1,000,000 and is an excellent high-quality network for tracking indicators of climate change. Funding from CWCB in previous years has enabled the enhancement of some of these stations to fill critical monitoring gaps and improve evapotranspiration monitoring. Grant 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 allow CoAgMET to continue to qualify for federal matching funds through the National Mesonet Program to support critical operations and maintenance needs.



Water Forecasting Partnership Project

Colorado Water Conservation Board November 2023 Board Meeting

The water forecasting partnership project began in the FY2016/2017 under SB 16-174. This original authorization appropriated \$300,000, and was reauthorized in both HB17-1248 and SB18-218 for \$800,000 each fiscal year. This project was most recently funded at \$450,000 in HB22-1316, and \$1,000,000 in SB23-177. Staff requests \$2,000,000 be appropriated for continuation of this work in FY 2024/2025. The new funds will be used to complete the projects described under the blue heading. This amount is in line with total CWCB Projects Bill, WSRF, and Water Plan Grant funding combined in FY22/23. The goal of this program is to acquire new data and refine water supply forecasting statewide.

PROJ DETA	
Project Cost:\$4,300,00	00 (matching will be
sought)	
NRI Funding Request:	\$2,000,000
Funding Source:	Construction Fund
Project Type: Data and	Modeling Upgrades
Type of Grantee:	State Agency

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Benef	its:					State	wide	
Water	r Sour	ce:			Various			
Drain	age B	asin:				All B	asins	

The FY22/23 round of funding leveraged \$1,822,213 in match from local stakeholders. These stakeholders created a central group called the Colorado Airborne Snow Measurement Group (CASM). The \$1,000,000 from FY23/24 is also being used to leverage Federal Funds through the Bureau of Reclamation's Snow Water Supply Forecasting Program. Staff anticipates at least this match level for FY24/25, and will be working to seek additional match.

	FY 2023-24 Proposed Funding								
Location	Item	Cost	Notes						
Statewide	Colorado Airborne Snow Measurement Group Pilot Project Support (continuation)	\$1,800,000	Partner with the stakeholders in the Colorado Airborne Snow Measurement group to conduct multiple LiDAR/Spectrometer flights in pilot basins to determine ideal flight numbers per season. Flights will be determined by a larger group representing areas across the State. This group includes Denver Water, Northern Water, Dolores Water, USGS, and the Colorado River District.						
Statewide	NCAR (continuation)	\$200,000	Maintain 5 stations in Conejos basin in partnership with Conejos Water Conservancy District. Provide experimental forecasting using multi-radar multi-sensor methods to compare to official federal forecasting.						

Total \$2,000,000 Request:



UCRC Modeling & Technical Analyses

Colorado Water Conservation Board November 2023 Board Meeting

The current operating guidelines for Glen Canyon Dam and Hoover Dam expire in December 2025. As such, the seven Basin States and the federal government have initiated a formal process to negotiate new operating guidelines.

The Upper Colorado River Commission (UCRC) is an interstate water administrative agency established by action of five state legislatures and Congress with the enactment of the 1948 Upper Colorado River Basin Compact. The UCRC serves as the Upper Division States' forum for interstate discussions. It is critical that the

	OJECT					
D E 7	TAILS					
Project Cost:	\$500,000					
NRI Funding Reque	est: \$500,000					
Funding Source:	Construction Fund					
Project Type:	Interstate Negotiations					
Type of Grantee: Interstate Commission						

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Benef	its:					State	wide
Water	Sour	ce:			Colo	rado I	River
Drain	age Bo	asin:			Colo	rado I	River

UCRC support the Upper Basin in technical modeling and analyses, to ensure that post-2026 negotiations develop operating guidelines that align with actual hydrology. The work will include a range of modeling efforts to better understand alternatives; analyses to test with the interstate technical teams; and potential findings for the UCRC Commissioners to consider. Analyses will also focus on other Upper Basin programs and technical matters in the interim period (through 2026) as needed.

This Non-Reimbursable Investment (NRI) of \$500,000 will support the UCRC in undertaking the modeling and technical analyses necessary to support development of post-2026 operational guidelines for Lake Powell and Lake Mead that protect Colorado's and the Upper Basin's significant interests in the River. This NRI will also support analyses and technical work relating to operations and programs in the interim period (through 2026), which will be undertaken by the CWCB.



Statewide Diversion Telemetry Project

Division of Water Resources November 2023 Board Meeting

DWR staff in seven division offices must evaluate available supply in each stream and compare that with demands for water from diversions with decrees for beneficial use in order to administer the priority system. This is a time consuming and difficult process because in many areas the water commissioner must visit numerous diversions to determine the demand to compare with supply as measured at a streamgage.

This request is to fund the equipment necessary to install telemetry equipment at 306 sites across Colorado. DWR will install the initial equipment funded through this request as an in-kind contribution over the next five years. The owners of each structure will be responsible for replacing the equipment in the future when it reaches end of life.

P R C) J E C T
D E 1	T A I L S
Project Cost:	\$2,195,000
NRI Funding Reque	est: \$1,827,500
Funding Source:	Construction Fund
Project Type:	Equipment Installation
Type of Grantee:	State Agency

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Benef	its:					State	wide	
Water	Sour	ce:			Various			
Draina	ige B	asin:				All B	asins	

This project includes installation of telemetry and/or continuous recording infrastructure across the state where DWR will be working with different ditch companies and other entities at each structure, which makes this a better fit for a funding request because pursuing loans for the many participants wouldn't be feasible. Division office staff, including water commissioners and hydrographers, have received positive reaction during outreach to owners of the structures that would be scheduled to obtain equipment with this funding. During those outreach efforts DWR staff have explained that if their telemetry installation is based upon GOES satellite infrastructure that they will be subject to a \$300 annual fee for work required to maintain access to that system. If cellular telemetry equipment is chosen to transmit data to our Stations system in CDSS then they will pay a fee to maintain access to the selected cellular network. Access fees may also be paid for groups of sites by entities such as a conservancy districts.



SHP Groundwater Study Update

CWCB/DWR/Colorado Ground Water Commission November 2023 Board Meeting

The Southern High Plains Designated Groundwater Basin is a complex aquifer system in the southeast corner of Colorado, underlying most of Baca County and southeastern Prowers County. In 2002, McLaughlin Water Engineers conducted a study titled "Hydrogeology and Water Resources of the Southern High Plains Designated Ground Water Basin." This study explored the Basin's groundwater formations, the volume of recoverable water in each layer, and the overall withdrawal and recharge of the system. The deeper portion of this complex aquifer system (Lower Dockum) is not well understood, but may contain considerable water supply. The Report found that the system is being mined and that recoverable groundwater life is limited.

P R O J	
DETA	A I L S
Project Cost:	\$250,000
NRI Funding Request:	\$250,000
Funding Source:	Construction Fund
Project Type:	Study/Facilitation
Type of Grantee:	State Agency
Type of Grancee.	State Agency

L O C	ATION
Benefits:	Southeastern Colorado
Water Source:	N/A
Drainage Basin:	Arkansas
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There is not consensus in the local community around continuing with the status quo where new well permits are issued for new uses, or seeking regulatory changes to restrict new well permits.

The Colorado Ground Water Commission is requesting this effort to provide information to the residents and to help them establish goals for their local groundwater resources. The study update will include scenario analyses and community facilitation to establish the Southern High Plains residents' goals for their groundwater resources. Community facilitation would include a presentation of the possible future outcomes for various levels of ongoing groundwater use or regulation, including likely social and economic impacts to the community.

Although the details of the proposed efforts will be further refined given local input and suggestions from the experts conducting the study, the study will describe: (1) the range of possible futures for Southern High Plains groundwater resources considering various management changes, and (2) the likely economic and social outcomes of each scenario.



Turf Replacement Funding

Colorado Water Conservation Board November 2023 Board Meeting

Funding and support of meaningful, transformational landscape change is critical to Colorado's water security, as noted in the 2023 Colorado Water Plan. The State's Turf Replacement Program (TRP) created by HB22-1151 allocated \$2 million in statewide investments to implement transformative landscape change and support municipal outdoor water conservation efforts. On June 30, 2025, the TRP will sunset and eliminate financial support from the General Fund for continued landscape transformation through local turf removal and replacement efforts. A Non-Reimbursable Investment (NRI) of \$2 million will allow the TRP to continue providing a vital funding source for local communities, build on the momentum created from HB22-1151, and

P R O J	Ε	С	T	
DETA	. 1	L	S	
Project Cost:			\$2	,000,000
NRI Funding Request:			\$2,	,000,000
Funding Source:	Co	nstr	uct	ion Fund
Project Type: Water P	lan	lmp	lem	entation
Type of Grantee:		S	tate	e Agency

L O C	Α	Т	0	N
Benefits:			State	wide
Water Source:				N/A
Drainage Basin:			All B	asins

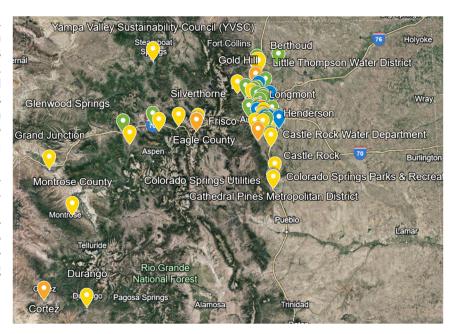
help advance and create turf removal and replacement projects across Colorado.

Focus areas include:

Focus Areas/Timeline	Description	Est. Cost
Turf Replacement Program Funding 2025-2028	Continuing the State's Turf Replacement Program created from HB22-1151 with additional funding to support and promote transformative landscape change on the local and State level.	\$2,000,000

Total \$2,000,000

Interest in turf replacement across Colorado has been widespread, and the projects CWCB has funded are not geographically isolated; around 25-30% of funding recipients from the initial funding in HB22-1151 are expected to be from the Western Slope when completed. contracting is Though contracting is still ongoing, CWCB anticipates that the full amount of allocated funding from HB22-1151 will be expended by the time the funding sunsets in 2025. The anticipated map of funding recipients is shown here:





Drought Resilience Investment

Colorado Water Conservation Board November 2023 Board Meeting

Funding and execution of meaningful drought mitigation initiatives are critical, as noted in the 2023 Colorado Water Plan. This \$4M funding investment will advance projects within and complimentary to the Water Plan that supports drought planning, practical implementation of drought mitigation techniques, education, guidance and training.

Funding between these tasks may shift as needed to best facilitate the execution of these tasks.

Focus areas include:

P R O J	ECT	
DETA	I L S	
Project Cost:	\$4,000,000	
NRI Funding Request:	\$4,000,000	
Funding Source:	Construction Fund	
Project Type: Water Plan Implementation		
Type of Grantee:	State Agency	

L	0	С	Α	Т	- [0	N
Benef	its:					State	wide
Water	Sour	ce:					N/A
Drainage Basin:					All B	asins	

Focus Areas/Timeline	Description	Est. Cost
Drought Resilience Workshops 2024-2027	Continuing the Growing Water Smart initiative that has already reached over half the population in Colorado is a strong investment in drought resilience. This investment will continue the existing statewide Growing Water Smart training and it will add pilot workshops for three regional communities on Drought-Ready Communities that supports Action 4.10 of the Colorado Water Plan, the Drought Resilience Toolkit concept.	\$1,500,000
Water Plan Outreach Campaign 2025-2027	With the launch of the Water Plan, Agency Action 4.3 calls for development of a statewide Water Plan outreach campaign. This initial infusion of funds will seek to develop branded marketing campaign materials that can be used to communicate key water challenges and potential solutions tied to the Water Plan.	\$1,000,000
Water Loss Prevention and Validator Training 2024-2028	Continuing to refine water loss in cities is a critical component to helping cities be more efficient, and it is described in Action 1.3 of the Colorado Water Plan. The CWCB has funded two past investments in this area and intends to use this funding to continue those efforts.	\$750,000
Adaptive and Critical Drought Projects for Colorado 2024-2025	There are key projects across each of the major areas of the Water Plan that are making a difference for Colorado. From new crops that are showing substantial yields/water savings, to One Water planning in cities, to stream restoration efforts that have reduced flooding risks. This report will showcase projects/project types that are identifying multi-benefit ways Colorado can adapt to changes in climate. This supports multiple agency actions including Action 4.10, and Action 2.7.	\$150,000
Storage Analysis, Opportunities and Alternatives 2024-2027	Both drought and flood have implications for storage which need to be considered in future planning. This analysis will refine Colorado's understanding of storage potential, work to identify and outline storage options, differentiate surface and groundwater storage opportunities, and provide a practical understanding of what challenges, opportunities, and alternatives to storage that must be considered alongside storage planning. This report will support Action 1.9 of the Colorado Water Plan.	\$350,000
Water Conservation Handbook 2024-2026	A conservation-first approach to growth is needed to advance Colorado communities, but the definition of a "water saving community," including realistic conservation goals, areas of focus, and potential water-use reduction metrics are less clear. This effort would compile the latest thinking and water conservation potential for new construction and retrofits through indoor and outdoor savings. This task would support Action 1.1 of the Colorado Water Plan.	\$250,000

Total \$4,000,000



Windy Gap Firming Project

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

Drainage Basin:

Division:

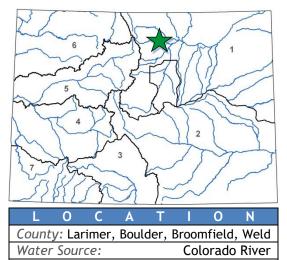
November 2023 Board Meeting

South Platte

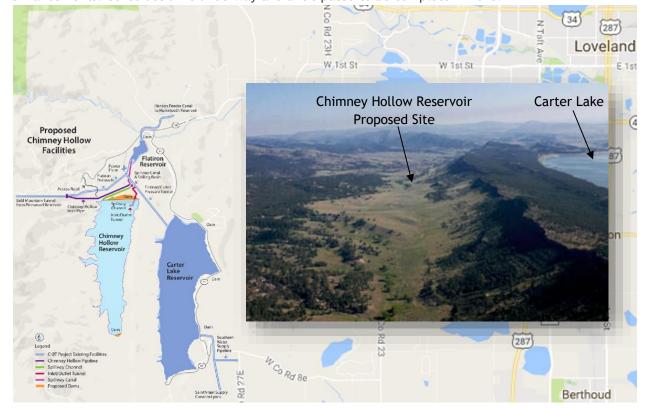
District: 2,3,4,5,6

(Increase) 0 \$682,000,000 Project Cost: CWCB Loan (with Service Fee): \$155,650,000 Loan Term and Interest Rate: 30 years @ 2.08% Funding Source: Revenue Bonds & Construction Fund Loan <u>BO</u>RROWE Ε Municipal Project Type: New Reservoir New Storage Capacity: 90,000 AF

In 1970, six Northern Colorado cities formed the Municipal Subdistrict to plan, finance, and build the Windy Gap project. That project was completed in 1985. The annual delivery of Windy Gap water is not reliable because in dry years the junior water rights may not come into priority, and in wet years, there may not be room in Lake Granby to store Windy Gap water.



In 1999, The Subdistrict formed the Windy Gap Firming Water Activity Enterprise with the purpose of pursuing activities that would lead to firming the yield of Windy Gap water. Participants identified 30,000 AF as a goal for total firm yield. After a review of over 170 alternatives, the Bureau of Reclamation and project participants identified the construction of a 90,000AF Chimney Hollow Reservoir as the preferred alternative. This Project will consist of the construction of Chimney Hollow Reservoir and associated pipelines to deliver water from the existing C-BT infrastructure, as well as environmental mitigation and enhancements. Construction is underway and anticipated to be complete in 2025.

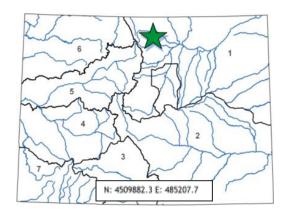




Northern Integrated Supply Project

NCWCD NISP Water Activity Enterprise November 2023 Board Meeting

LOAN DETAI	LS			
Project Cost:	\$1,871,800,000			
CWCB Loan (with 1% Service Fee)): \$101,000,000			
Loan Term and Interest Rate:	30 Yrs @ TBD%			
Funding Source:	Severance Tax PBF			
BORROWER T	YPE			
Agriculture Municipa	l Commercial			
X% X% Low - X% Mid	- X% High X%			
PROJECT DETAILS				
Project Type:	New Reservoir			
Average Annual Diversions:	TBD AF			
New Storage Created:	215,600 AF			



The Northern Colorado Water Conservancy District (District), acting by and through its Northern Integrated Supply Project (NISP) Water Activity Enterprise, is pursuing a new regional water supply project, providing 40,000 AF of new water supplies annually.

LOCATION			
County:	Larimer, Weld		
Water Source:	Cache La Poudre		
Drainage Basin:	South Platte		
Division: 1	District: 1,3		

The Project, which benefits 11 communities and 4 water districts in the northern front range, will provide water to an estimated 500,000 residents by 2050, double the current number of residents. It includes two major components named the Glade Reservoir Complex and the South Platte Water Conservation Project. It includes two new reservoirs (Glade and Galeton), other infrastructure necessary for the conveyance of the water, and environmental enhancements determined during the National Environmental Policy Act (NEPA) process administered by the U.S. Army corps of Engineers.

