COLORADO
Colorado Water Conservation Board
Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Greg Johnson, Water Supply Planning Section

DATE: November 15-16, 2017 Board Meeting

AGENDA ITEM: 28 a-c. Water Plan Grants – Supply and Demand Gap Projects
Final Consideration

Introduction

The items and grant amounts listed below were presented by staff for Initial Consideration at the September 2017 Board Meeting in Walden Colorado. The Board provided feedback and support for final consideration at this Board Meeting. No changes have been made to the recommended level of grant funding.

The Supply and Demand Gap funding category started at $2 million in available funds. With the final approval of the applications listed below, this Water Plan Grant category will have $1,011,949 available for future applications.

Staff Recommendation

Staff recommends Board Approval of the projects/activities listed in the following table for Water Plan Grant funding.

Applicant	Project Name	% of Eligible Project Costs	Grant Amount
a. South Metro WISE Authority	WISE Binney Connection	32%	$80,000
b. Central Colorado Water Conservancy District	Walker Ranch Recharge Project	8%	$750,000
c. Conejos Water Conservancy District	Conejos Cooperative Project	91%	$158,051
		Total	$988,051

* Indicates items which will include a presentation by the applicant

See attached Data Sheets for locations and summaries.

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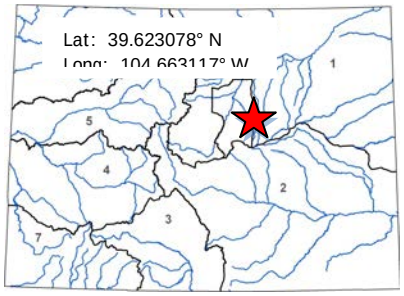
Water Plan Grant Application

South Metro WISE Authority
WISE Binney Connection

November 2017 Board Meeting
Final Consideration



L O C A T I O N
County/Counties: Arapahoe
Drainage Basin: Metro/South Platte

D E T A I L S	
Total Project Cost:	$250,000
Water Plan Grant Request:	$80,000
Other CWCB Funding:	$0
Applicant Match:	$170,000
Project Type(s): Study, IPP	
Project Categories: Supply & Demand	
Measurable Result: 10,000 AF/Yr New Annual Water Supplies Developed	

South Metro WISE Authority (WISE Authority) is an organization of 10 water providers with the purpose of implementing the Water Infrastructure and Supply Efficiency (WISE) Project. The WISE Authority Binney Connection is the next phase of the WISE Partnership and is the continuation of the partnership between Aurora Water, Denver Water, and the WISE Authority to develop a regional water supply project. The Binney Connection will be a new connection between the WISE distribution system and Aurora Water's system that was anticipated in the Water Delivery Agreement. The connection will free up system capacity in Aurora Water's system near the existing WISE connection and provide higher flow rates to the WISE Authority. The project will also add the ability for Aurora Water to provide treated, unblended water from the Prairie Waters Project to Denver Water through the WISE Authority distribution system.

The WISE Authority is seeking a CWCB Water Plan Grant to help with the feasibility study to evaluate how the connection will be made to Aurora Water's system as well as an alignment study for the new pipeline that will interconnect the WISE and Aurora Water systems. The project will include about 5 miles of new pipeline and booster pump stations. The feasibility study and alignment study are scheduled to commence mid to late January of 2018 and will be completed by April 1, 2019.

The Metro/South Platte BIP identified the South Metro area as a significant gap area due to the combination of growing M&I demands and the need to replace current uses of non-renewable groundwater. The WISE Partnership is identified as an IPP in SWSI 2010 (SWSI, Section 5, pp. 5-14 to 5-15) as well as being identified as a reuse IPP in the Metro/South Platte BIP 2015 (South Platte BIP, Section 4.3, pp. 4-24 to 4-25). The WISE Partnership was identified as a "no regret" scenario in planning processes. The WISE Partnership reduces the South Metro gap without creating a new water gap for Denver Water or Aurora Water.

Objectives of the WISE Binney Connection Project include: 1) Evaluate the feasibility alternatives for connecting to Aurora Water's Binney Water Purification Facility; 2) Prepare opinions of probable cost for alternatives for connecting to Aurora Water's Binney Water Purification Facility; 3) Evaluate pipeline alignment alternatives for connection between the Binney Water Purification Facility to the existing WISE Partnership Western Pipeline; and 4) Prepare opinions of probable cost for alternative pipeline alignments between the Binney Water Purification Facility and the Western Pipeline.

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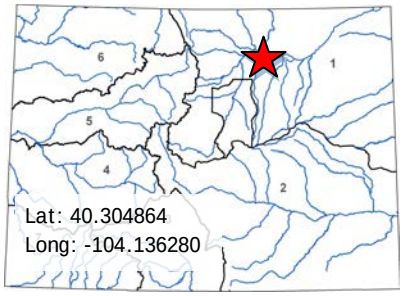
Walker Recharge Project
Central Colorado Water Conservancy District
November 2017 Board Meeting
Final Consideration

Water Plan Grant Application



DETAILS	
Total Project Cost:	$9,998,100
Water Plan Grant Request:	$1,000,000
Other CWCB Funding:	$0
Applicant Match:	$8,998,100
Project Type(s): Construction	
Project Categories: Supply & Demand Gap	
Measurable Result: 10,000 AF new supplies from recharge/retiming; 2.5 miles restored stream; 20% AF efficiency savings; 300 acres restored river bottomland	

LOCATION
County/Counties: Weld & Morgan
Drainage Basin: South Platte

The Central Colorado Water Conservancy District (CCWCD) manages over 750 square miles in Adams, Weld, and Morgan Counties. Two subdistricts of the Central District, the Groundwater Management Subdistrict (GMS) and the Well Augmentation Subdistrict (WAS), operate decreed plans for augmentation to replace depletions to the South Platte River (River) from pumping of approximately 1,400 alluvial groundwater wells. Well depletions are replaced through allotment contracts with constituent well owners totaling over 80,000 acre-feet (AF).

The Walker Recharge Project is a water supply retiming project where water supplies during periods of excess are retimed to coincide with periods of deficit. The project will divert water from the River to recharge basins located east of Wiggins, CO. Project operations will develop recharge accretions for use by GMS, WAS, and other project partners (including Riverside Irrigation District, Weldon Valley Ditch Company, Town of Wiggins, and dairy farms in the project area). CCWCD constituents and these partners rely heavily on alluvial groundwater supplies and the availability of augmentation credits. By providing up to 30,000 AF of augmentation water supplies, the Project will eliminate the need to buy senior water and dry up from 5,000 to 20,000 acres of irrigated farmland.

CWP Implementation Grant funding will be used for final engineering design, construction and equipment. Preliminary engineering and reconnaissance studies, permitting, and acquisition of easements for the Project have begun and are anticipated to be completed in late 2017. Water will be diverted from the River via several surface diversion structures and by alluvial groundwater wells in close proximity to the River. Diversions may occur under a junior water right (up to 100 cfs) when in priority and/or during times when CCWCD has excess fully consumable supplies in the River that can be recaptured and retimed. Deliveries will occur via pipelines to several large recharge basins totaling approximately 300 acres up to 3 miles from the River in rangeland areas that are not irrigated.

The South Platte Basin Roundtable supports this project and CCWCD's commitment to multi-benefit water management. The Roundtable sees this project as an innovative and collaborative tool that will be instrumental in maintaining agricultural production. The Walker Project is complimentary to CWCB programs that evaluate and support alternative transfer mechanisms, drought protection, water use efficiency, water supply planning, and protection and conservation of fish and wildlife resources.

The Project is both a high yield and cost-effective project. The current cost estimate for completion of Phase 1 of the Project is approximately $10 million. Phase 1 diversions are anticipate to yield approximately 7,000 AF on an average annual basis. Maximum diversions under the Project will be 30,000 AF. Based on a water availability analysis, CCWCD anticipates a firm yield ranging from 7,500 to 10,000 AF at eventual Project build-out. This puts the cost of water under the project at roughly $1,500 to $2,000 per acre-foot on a firm annual yield basis.

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Water Plan Grant Application

Conejos Cooperative Project
Conejos Water Conservancy District

November 2017 Board Meeting
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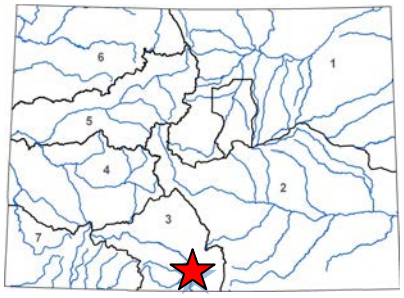

LOCATION
County/Counties: Conejos
Drainage Basin: Rio Grande

DETAILS	
Total Project Cost:	$173,051
Water Plan Grant Request:	$158,051
Other CWCB Funding:	$0
Applicant Match:	$15,000
Project Type(s): Study, IPP	
Project Categories: Supply & Demand	
Measurable Result: 2,000-8,000 AF new storage; 1,000 AF new supply; 800 AF preserved storage; 400 AF ATM sharing	

The Conejos Water Conservancy District (CWCD or the District) is a public, quasi-governmental entity. The District's boundaries include approximately 100,000 acres, of which 88,000 acres are capable of being irrigated. An additional 4,000 acres that are not within the boundaries of the District are also irrigated by the San Antonio River which is within the Conejos River system. CWCD was formed "in order to acquire and appropriate waters of the Conejos and its tributaries; to divert, store, and transport such water by means of works, as defined in the Water Conservancy Act; to control floods by means of the works; to conserve, develop and stabilize water supplies for domestic, irrigation, power, manufacturing and other beneficial uses" within the territory included in the boundaries of the CWCD.

This project will implement and expand upon the recommendations of the Trujillo Meadows (ATM) project and investigate and select opportunities for development of additional storage and coordinated water operations to provide multiple benefits. An enlargement of Trujillo Meadows Reservoir, and/or construction of new storage on the San Antonio upstream of Antonito or a gravity conveyance from the Conejos River to the San Antonio River, coupled with coordinated operations with Platoro Reservoir, can provide multiple benefits to agricultural water rights holders on the Rio de Los Pinos and San Antonio rivers. Benefits from these changes in reservoir operations include enhanced riparian habitat and streamflows because of extended summer releases from Trujillo Meadow Reservoir. The project scope is expanded beyond the San Antonio watershed boundaries since there are benefits and cooperative measures that extend to the entire CWCD boundaries.

Engineering and cost estimates for a Trujillo Meadows Reservoir enlargement will be developed. Feasibility studies of a new reservoir on the San Antonio between the state line and Antonito will be conducted. This includes engineering and costs, biological, wetlands, cultural and other resource investigations. The Rio Grande Basin Plan RiverWare model will be expanded to evaluate opportunities for maximization of the beneficial use of the Conejos' entitlement under the Rio Grande Compact and flood mitigation potential. Streamflow, riparian, other environmental, recreational and economic benefits will also be detailed.

The project has been identified in the Rio Grande Basin Implementation Plan. Environmental and recreational interests are included in the project to build on the Conejos Winter Flow Program. The CCP will address the economic and social impacts on rural agriculture in the Conejos River watershed. The project will identify and prioritize alternatives for implementation through robust outreach within Conejos, San Antonio, and the Los Pinos River water users, including storage opportunities, administration practices, formation of ground water management subdistricts, augmentation supply for local municipalities, and identify streamflow and other environmental enhancements. Increased recreation is anticipated to lead to improved social and economic impacts. The CCP is a community project that will bridge the cultural and economic sectors in the southern watershed of the San Luis Valley by developing additional storage and coordinated water operation for multiple benefits.