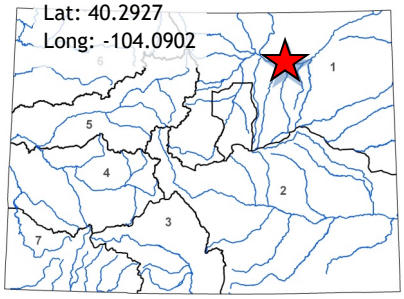
COLORADO
Colorado Water Conservation Board

Robert W. Walker Recharge Project
Central Colorado Water Conservancy District

Water Plan Grant Application

Septmeber 2021 Board Meeting



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

DETAILS	
Total Project Cost:	$6,200,140
Water Plan Grant Request:	$1,500,000
Other CWCB Funding:	$0
Other Funding Amount:	$914,503
Applicant Match:	$3,785,637
Project Type(s):	Construction
Project Category(Categories):	Water Storage & Supply
Measurable Result:	10,000 acre-feet of supply; 14,784 feet of stream restored

The Central Colorado Water Conservancy District was formed in 1965 and includes over 750 square miles in Adams, Weld, and Morgan Counties. It also includes two subdistricts: the Groundwater Management Subdistrict, and the Well Augmentation Subdistrict, which operate augmentation plans for approximately 1,200 alluvial groundwater wells in the South Platte River watershed. These depletions are replaced through allotment contracts with well owners totaling over 82,000 AF; however, contractual deliveries have been limited to an average of 50% over the past 15 years

In 2018, the Central Colorado Water Conservancy District began construction of the Robert W. Walker Recharge Project, which retimes flows for the benefit of agricultural users in Morgan and Weld Counties. The project pumps water 3.5 miles from 13 wells along the South Platte River to two recharge ponds was funded in part by CWCB loans and a grant. It is expected to finish construction in late 2021. This project is an expansion of that program, and will pipe water from the end of the existing pipeline approximately 1 mile to the District's new Wiggins Farms recharge complex. The complex will be located on 30 acres of land owned by the Town of Wiggins and will provide additional agricultural recharge as well as additional capacity for a future Town of Wiggins recharge pond.

The project also includes rehabilitation of 2.8 miles of the South Platte River near the Town of Orchard. This will provide long-term stability and sustainability of the river by utilizing Natural Channel Design methods. Goals include reducing streambank erosion, increasing the sediment transport capacity of the channel, creating a functioning floodplain and riparian community, reducing the adverse impacts of future flooding, and installing a surface diversion channel for the Walker Recharge Project. The diversion structure will be able to function at various river flow conditions and will be able to divert up to 50 CFS from the river.

Funding Recommendation: Staff is recommending a grant of $1,500,000 from the Water Storage and Supply category of funding. This is approximately 40% of the project cost. The project will meet the Colorado Water Plan measurable result of adding new supply to meet the Municipal and Industrial gap, and restoring 14,784 feet of stream. The remainder of the project will be funded by contributions from the Town of Wiggins and the District, and a grant from the Natural Resources Conservation Service for the stream restoration and diversion structure.

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Colorado Water Conservation Board
Department of Natural Resources

Last Updated: May 2021

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Water Plan Grant Application

Instructions

To receive funding for a Water Plan Grant, applicant must demonstrate how the project, activity, or process (collectively referred to as "project") funded by the CWCB will help meet the measurable objectives and critical actions in the Water Plan. Grant guidelines are available on the CWCB website.

If you have questions, please contact CWCB at (303) 866-3441 or email the following staff to assist you with applications in the following areas:

Water Storage & Supply Projects	Matthew.Stearns@state.co.us
Conservation, Land Use Planning	Kevin.Reidy@state.co.us
Engagement & Innovation Activities	Ben.Wade@state.co.us
Agricultural Projects	Alexander.Funk@state.co.us
Water Sharing & ATM Projects	Alexander.Funk@state.co.us
Environmental & Recreation Projects	Chris.Sturm@state.co.us

FINAL SUBMISSION: Submit all application materials in one email to *waterplan.grants@state.co.us* in the original file formats [Application (word); Statement of Work (word); Budget/Schedule (excel)]. Please do not combine documents. In the subject line, please include the funding category and name of the project.

Water Project Summary

Name of Applicant	Central Colorado Water Conservancy District
Name of Water Project	Robert W. Walker Recharge Project – Wiggins Farm Pond & Pipeline

CWP Grant Request Amount	$500,000
Town of Wiggins	$90,000
Other Funding Sources _____	$
Other Funding Sources _____	$
Applicant Funding Contribution	$742,600
Total Project Cost	$1,332,600

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Applicant & Grantee Information
Name of Grantee(s) - Central Colorado Water Conservancy District
Mailing Address - 3209 W. 28th Street, Greeley, CO 80634
FEIN – 84-6049901
Organization Contact – Randy W. Ray
Position/Title – Executive Director
Email – rray@ccwcd.org
Phone – 970-330-4540
Grant Management Contact
Position/Title
Email
Phone
Name of Applicant (if different than grantee)
Mailing Address
Position/Title
Email
Phone

Description of Grantee/Applicant
Provide a brief description of the grantee's organization (100 words or less).
Central Colorado Water Conservancy District, Groundwater Management Subdistrict (GMS) and Well Augmentation Subdistrict (WAS) are charged with the duty of developing water supplies within parts of Adams, Weld and Morgan Counties. The GMS and WAS augmentation plans have annual contractual obligations approximating 82,000 acre-feet. Over the past 15-16 years the two subdistrict plans of augmentation have been limited to an average of 50% of the contractual deliveries. Since 2004, each of the districts have generated voter support for capital water supply projects including the Robert W. Walker Recharge Project in the Wiggins/Orchard, CO vicinity. Central is staffed with 14 employees and has oversight by 15 members of the Board of Directors.

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Type of Eligible Entity (check one)	
	Public (Government): Municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
x	**Public (Districts):** Authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises.
	Private Incorporated: Mutual ditch companies, homeowners associations, corporations.
	Private Individuals, Partnerships, and Sole Proprietors: Private parties may be eligible for funding.
	Non-governmental organizations (NGO): Organization that is not part of the government and is non-profit in nature.
	Covered Entity: As defined in Section 37-60-126 Colorado Revised Statutes.

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

Category of Water Project (check the primary category that applies and include relevant tasks)		
x	Water Storage & Supply - Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity, multi-beneficial projects, water sharing agreements, Alternative Transfer Methods, and those projects identified in basin implementation plans to address the water supply and demand gap. *Applicable Exhibit A Task(s):* ***Note:*** *For Water Sharing Agreements or ATM Projects - please include the supplemental application available on the CWCB's website.*	
	Conservation and Land Use Planning - Activities and projects that implement long-term strategies for conservation, land use, water efficiency, and drought planning. *Applicable Exhibit A Task(s):*	
	Engagement & Innovation - Activities and projects that support water education, outreach, and innovation efforts. *Applicable Exhibit A Task(s):*	
x	Agricultural - Projects that provide technical assistance and improve agricultural efficiency. *Applicable Exhibit A Task(s):*	
	Environmental & Recreation - Projects that promote watershed health, environmental health, and recreation. *Applicable Exhibit A Task(s):*	
x	Other	Explain: The Walker Project is a collaborative effort that will benefit multiple water provider partners. The Project supports and implements the Colorado Water Plan.

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Location of Water Project	
Please provide the general county and coordinates of the proposed project below in **decimal degrees**. The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Counties	Morgan
Latitude	40 deg 17' 34N
Longitude	104 deg 05' 25W

Water Project Overview
Please provide a summary of the proposed water project (200 words or less). Include a description of the project and what the CWP Grant funding will be used for specifically (e.g., studies, permitting process, construction). Provide a description of the water supply source to be utilized or the water body affected by the project, where applicable. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, and area of habitat improvements, where applicable. If this project addresses multiple purposes or spans multiple basins, please explain. The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, Other Funding Sources/Amounts and Schedule.
The Robert W. Walker Recharge Project has been under design and construction since 2018. 3.5 miles of 54" steel pipeline has been installed to deliver water to two recharge ponds. 13 wells have been drilled along the South Platte River, a contractor is assembling the pumps and motors to be installed in the wells. Three other contractors are on site installing HDPE manifold pipeline to connect the wells, construct the surge tank and manifold/check valve vault, and install all electrical switchgear, communication equipment, transformers, and variable speed motor drives. On or before November 1st, 2021, the work near the South Platte River (nearby Orchard, CO) will be complete and capable of delivering water. This grant application seeks financial support to include a third location for recharge ponds and a pipeline to the ponds. In Central's IGA with the Town of Wiggins, Central has obtained an easement to construct up to 30 acres of recharge ponds on Town property. Estimated cost to deliver a flow rate of 30 cubic feet per second to the Town property is $1,332,600. Central's engineers have determined the Town property provides good recharge timing to improve annual quotas for both the GMS and WAS augmentation plans.

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Measurable Results		
To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:		
Recharge/Retiming Average 10,000 AF/Year	New Storage Created (acre-feet)	
10,000 AF/Year	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
10,000 AF/Year	Existing Storage Preserved or Enhanced (acre-feet)	
	Length of Stream Restored or Protected (linear feet)	
	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
	Area of Restored or Preserved Habitat (acres)	
	Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement	
	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning	
South Platte Basin	Number of Coloradans Impacted by Engagement Activity	
Up to 60 acres	Other	Explain: Wildlife Habitat Creation with the installation of the pipeline for Central's up to 30 acres of ponds, and the ponds that Town of Wiggins will also construct into the future.

Water Project Justification

Provide a description of how this water project supports the goals of Colorado's Water Plan, the Analysis and Technical Update to the Water Plan, and the applicable Roundtable Basin Implementation Plan and Education Action Plan. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).

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

Section 6.5 of the Colorado Water Plan ("Municipal, Industrial, and Agricultural Infrastructure Projects and Methods") opens with the following goal: *"Colorado's Water Plan encourages the use of grassroots efforts to identify and implement projects and methods to meet community and agricultural water needs throughout Colorado, and to achieve the following state-wide long-term goals: … Develop and implement policies and strategies that support meaningful agricultural viability statewide."* (Water Plan, Page 6-127).

The Walker Recharge Project is an important and vital project for the future of agriculture in Adams, Weld and Morgan Counties. While many of the Identified Projects and Processes in the South Platte Basin Roundtable Basin Implementation Plan focus on addressing the water gap for municipal and industrial users or limiting the transfer of water out of agriculture, the Walker Project focuses on firming additional water supplies to support agricultural viability in Northeast Colorado. As the Water Plan correctly recognizes, agriculture is the *"economic backbone for many rural communities, supports important environmental attributes, strengthens Colorado's food security, and upholds our States cultural identity."* (Water Plan, Page 6-115). The Project will have both direct and indirect benefits on the preservation of agriculture along the South Platte River Valley north of the Denver Metropolitan area and along the Front Range of Colorado. The Project also provides for open space and wildlife habitat as well as other environmental benefits. The Walker Project is consistent with, supports and implements core components of the Colorado Water Plan.

For instance, the Statewide Water Supply Initiative 2010 ("SWSI 2010") estimated that Colorado may lose between 500,000 to 700,000 acres of irrigated farmland by 2050. See Table 4-11 of SWSI 2010. The South Platte Basin, the State's most populated, is predicted to shoulder a substantial amount of this dry-up, potentially losing up to one third of the acres currently irrigated. See Figure 4-9 of SWSI 2010. The effects of buy and dry are already felt in Central's districts. Presently, GMS and WAS have well pumping quotas ranging from 30% to 60%, and quotas are expected to decline in the future without development of additional augmentation supplies. This has resulted in the de-facto dry up of tens of thousands of acres of land within Central's boundaries and has limited the types of crops that can be grown on thousands of others. One of the primary direct benefits of the Walker Recharge Project is the development of a water supply for the wells included within the GMS and WAS augmentation plans.

Project partners, GMS and WAS constituents, and the Town of Wiggins ("Wiggins") will also realize direct benefits from increased augmentation water supplies. Central constituents and these Project partners rely heavily on alluvial groundwater supplies (and availability of augmentation credits) to continue irrigation of thousands of acres of productive farmland. Project development and continued irrigation of these lands will a) increase the economic productivity of those lands, b) promote soil conservation, c) create and enhance many acres of waterfowl and wildlife habitat, and d) improve air quality via the benefits of dust suppression associated with irrigation.

The Walker Recharge Project will have indirect benefits that include preservation of agriculture in as much as it provides an augmentation water supply without relying on the buy and dry of presently irrigated agricultural lands. By providing up to 30,000 acre-feet 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.

The Walker Recharge Project will provide a cost-effective water supply for agricultural and other uses via the diversion of water during wet periods and retiming that water into a firm augmentation supply.

The Colorado Water Plan provides a Framework for State of Colorado Support for Water Projects (Pages 9.43-9.44). The key elements of the framework include: Collaboration; Addressing an Identified Water Gap, Sustainability, and Fiscal and Technical Feasibility. Each of these elements are discussed below:

Collaboration

Central is committed to a collaborative approach in all aspects of the Walker Project. Central has had discussions with various entities, each of which need additional water supplies for various uses. Central is engaged in ongoing discussion with, Riverside Irrigation Company, Bijou Irrigation Company, Jackson Lake & Reservoir Company, Weldon Valley Ditch Company, Town of Wiggins and several local agricultural users regarding potential partnership in Project. Riverside has identified a need to re-time certain credits it generates as part of its decreed recharge projects. Wiggins has identified a need for an augmentation supply to supplement its municipal use wells. Like Central, Riverside, Weldon Valley, and local area dairy operations have many shareholders and irrigated lands that rely on alluvial groundwater for irrigation supplies.

Water Supply Gap

The water supply gap for agriculture is well documented in the South Platte Basin Implementation Plan and the Colorado Water Plan. The Walker Project has gained the endorsement of the South Platte Basin Roundtable because the Project supports the Roundtable's goal of adding 28,000 acres of irrigated farmland in the South Platte Basin. See Table 5-2 of the Water Plan. That is a lofty goal given that the South Platte Basin faces more pressure for buy and dry than any other Basin. Yet Central is committed to supporting this goal and is one of the few entities currently developing new water supplies for agricultural irrigation along the Northern Front Range. The Walker Recharge Project will provide up to 30,000 acre-feet of new water for agricultural use, which is expected to bring up to 5,000 acres back into irrigated production and provide much needed supplemental irrigation supplies for many more farmers. The Project, through use of the

alluvial aquifer to store excess water supplies during periods of excess for use during periods of deficit, will increase water use efficiencies of existing supplies. Storage and conjunctive use of the South Platte surface and alluvial systems are critical strategies recognized in the South Platte Basin Roundtable Implementation Plan (Page 1-5 of South Platte BIP).

Sustainability

The Walker Recharge Project is sustainable. Use of aquifer recharge avoids many of the environmental impacts associated with surface storage. The impact on the local economy will be positive; it will provide the primary water supply for many farms in Adams, Weld and Morgan Counties and supplemental irrigation supplies for many others. Cooperative agreements with Riverside, Weldon Valley, Wiggins and local dairy operations are currently being developed which will leverage the Project to provide a broader scope of benefits to local area water providers and water users. The Project will be used to divert water during times of abundant supply and deliver that water to recharge to the aquifer so that it provides a supply during times of high demand. By diverting water during times of high supply, water quality in the aquifer will be improved.

Central has filed an application in water court for the project to ensure that it is operated within Colorado's priority system and without injury to other water rights. With regards to interstate impacts, there are no known impacts associated with the South Platte River Compact. The Project diverts within District 1 and Central is a present member of the South Platte Water Related Activities Program, a program designed to address Endangered Species Act concerns in the South Platte Basin.

Fiscal and Technical Feasibility

The Walker Recharge Project is both a high yield and cost-effective project. The current cost estimate for completion of the Project is approximately $32 million. As of July 2021, Central has spent nearly $15M for the installation of 3.5 miles of 54" pipeline, three recharge basins, construction of 13 high-capacity wells, manifold pipeline and other project components such as the well pumps and motors. Maximum diversions under the Project will be 30,000 acre-feet. Based on a water availability analysis, Central anticipates a firm yield ranging from 7,500 to 14,000 acre-feet at eventual Project build-out. This puts the cost of water under the project at roughly $3,200 per acre-foot on a firm annual yield basis.

Upon award of a grant, Central is ready to move forward with construction and development of the Wiggins Pipeline Extension and an additional Walker Recharge Pond. Central has completed its technical evaluation regarding the legal and physical availability of water for the Project and is preparing to proceed with the design work necessary to begin construction of the Wiggins Property pipeline and recharge facilities. Central has an IGA in place with the Town of Wiggins to share capacity in the project and for Central to utilize up to 30 acres of land on the Wiggins property. Central has investigated the ability to install pipelines within Morgan County right of ways and is prepared to proceed with obtaining those approvals. Central anticipates beginning construction on the Project within the next 6 months.

Related Studies

Please provide a list of any related studies, including if the water project is complementary to or assists in the implementation of other CWCB programs.

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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 SB06-193 Underground Water Storage Study examined underground storage in several alluvial aquifers in both the South Platte and Arkansas river basins. That study found that the South Platte River alluvial aquifer near Fort Morgan had ample (depth to groundwater of greater than 50 feet) storage capacity. In addition to the storage availability, the South Platte alluvial aquifer near Fort Morgan also ranked favorably in categories such as proximity to demand and the presence of existing infrastructure.

Previous CWCB Grants, Loans or Other Funding

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

CCWCD, Agricultural Emergency Drought Grant C150105, 5/1/2003, $56,700
GMS, Loan Contract C150117, 10/1/2003, $15,000,000
GMS, Loan Contract C150160, 7/10/2004, $4,513,200
GMS, Loan Contract C150184, 6/8/2006, $170,909
CCWCD, Agricultural Emergency Drought Grant, 5/26/2009, $435,393
WAS, Loan Contract C150194, 5/7/2011, $14,934,611 (adjusted from $20,200,000)
WAS, Agricultural Emergency Drought Grant, 11/15/2012, $216,577
WAS, Loan Contract C150337, 4/24/2013, $1,635,550 (adjusted from $3,030,000)
CCWCD, Loan Contract C150407A, 5/23/2014, $3,187,560
CCWCD, Loan Contract C150407B, 5/23/2014, $18,263,830
CCWCD, Loan Contract C150407C, 5/23/2014, $7,000,310
CCWCD, WSRA Grant CMS #79096, 5/13/2015, $220,000
CCWCD, Chatfield Grant CMS #84740,10/20/2015, $1,853,882
WAS, Shores Reservoir, 1/22/2018, Loan Contract CMS #107431, $2,367,440
GMS, Pioneer Reservoir, 3/20/2019, Loan Contract CT2019-3687, 2019, $8,697,110
GMS-Enterprise Fund, Hokestra Reservoir, 10/20/2019, Loan Contract CT2020-3348, $5,444,405
WAS, Walker Recharge Project, 7/26/2019, Loan Contract CT2020-326, $3,030,000
GMS, Walker Recharge Project, 7/26/2019, Loan Contract CT2020-324, $9,847,500
CCWCD Enterprise, Walker Recharge Project, 7/26/2019, Loan Contract CT2020-310, $2,272,500
CCWCD, Walker Recharge Project Grant, 4/24/2019, Grant Award CTGG12019-3468, $750,000

Taxpayer Bill of Rights

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

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CCWCD, GMS and WAS have been "de-Bruced" from TABOR by voters.

Submittal Checklist	
x	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract.
x	Statement of Work(1)
x	Budget & Schedule(1)
x	Engineer's statement of probable cost (projects over $100,000)
x	Letters of Matching and/or Pending 3rd Party Commitments(1)
x	Map (if applicable)(1)
x	Photos/Drawings/Reports
x	Letters of Support (Optional)
x	Certificate of Insurance (General, Auto, & Workers' Comp.) (2)
x	Certificate of Good Standing with Colorado Secretary of State(2)
	W-9(2)
x	Independent Contractor Form(2) (If applicant is individual, not company/organization)
Water Sharing Agreements and Alternative Transfer Methods ONLY	
	Water Sharing Agreements and Alternative Transfer Methods Supplemental Application(1)

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

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ENGAGEMENT & INNOVATION GRANT FUND SUPPLEMENTAL APPLICATION

Introduction & Purpose

Colorado's Water Plan calls for an outreach, education, public engagement, and innovation grant fund in Chapter 9.5.

The overall goal of the Engagement & Innovation Grant Fund is to enhance Colorado's water communication, outreach, education, and public engagement efforts; advance Colorado's water supply planning process; and support a statewide water innovation ecosystem.

The grant fund aims to engage the public to promote well-informed community discourse regarding balanced water solutions statewide. The grant fund aims to support water innovation in Colorado. The grant fund prioritizes measuring and evaluating the success of programs, projects, and initiatives. The grant fund prioritizes efforts designed using research, data, and best practices. The grant fund prioritizes a commitment to collaboration and community engagement. The grant fund will support local and statewide efforts.

The grant fund is divided into two tracks: engagement and innovation. The Engagement Track supports education, outreach, communication, and public participation efforts related to water. The Innovation Track supports efforts that advance the water innovation ecosystem in Colorado.

Application Questions

*The grant fund request is referred to as "project" in this application.

Overview (answer for both tracks)
In a few sentences, what is the overall goal of this project? How does it achieve the stated purpose of this grant fund (above)?
Who is/are the target audience(s)? How will you reach them? How will you involve the community?
Describe how the project is collaborative or engages a diverse group of stakeholders. Who are the partners in the project? Do you have other funding partners or sources?

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Describe how you plan to measure and evaluate the success and impact of the project?
What research, evidence, and data support your project?
Describe potential short- and long-term challenges with this project.

Please fill out the applicable questions for either the Engagement Track or Innovation Track, unless your project contains elements in both tracks. If a question does not relate to your project, just leave it blank. Please answer each question that relates to your project. Please reference the relevant documents and use chapters and page numbers (Colorado's Water Plan, Basin Implementation Plan, PEPO Education Action Plan, etc.).

Engagement Track
Describe how the project achieves the education, outreach, and public engagement measurable objective set forth in Colorado's Water Plan to "significantly improve the level of public awareness and engagement regarding water issues statewide by 2020, as determined by water awareness surveys."
Describe how the project achieves the other measurable objectives and critical goals and actions laid out in Colorado's Water Plan around the supply and demand gap; conservation; land use; agriculture; storage; watershed health, environment, and recreation; funding; and additional.
Describe how the project achieves the education, outreach, and public engagement goals set forth in the applicable Basin Implementation Plan(s).

Describe how the project achieves the basin roundtable's PEPO Education Action Plans.

Innovation Track
Describe how the project enhances water innovation efforts and supports a water innovation ecosystem in Colorado.
Describe how the project engages/leverages Colorado's innovation community to help solve our state's water challenges.
Describe how the project helps advance or develop a solution to a water need identified through TAP-IN and other water innovation challenges. What is the problem/need/challenge?
Describe how this project impacts current or emerging trends; technologies; clusters, sectors, or groups in water innovation.

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Colorado Water Conservation Board
Water Plan Grant - Exhibit A

Statement Of Work	
Date:	**July 1, 2021**
Name of Grantee:	Central Colorado Water Conservancy District
Name of Water Project:	Robert W. Walker Recharge Project – Wiggins Farm Pond & Pipeline
Funding Source:	**Water Storage & Supply and Agriculture**

Water Project Overview:

The Robert W. Walker Recharge Project has been under design and construction since 2018. 3.5 miles of 54" steel pipeline has been installed to deliver water to two recharge ponds. 13 wells have been drilled along the South Platte River, a contractor is assembling the pumps and motors to be installed in the wells. Three other contractors are on site installing HDPE manifold pipeline to connect the wells, construct the surge tank and manifold/check valve vault, and install all electrical switchgear, communication equipment, transformers, and variable speed motor drives. On or before November 1st, 2021, the work near the South Platte River (nearby Orchard, CO) will be complete and capable of delivering water.

This grant application seeks financial support to include a third location for recharge ponds and a pipeline to the ponds. In Central's IGA with the Town of Wiggins, Central has obtained an easement to construct up to 30 acres of recharge ponds on Town property. Estimated cost to deliver a flow rate of 30 cubic feet per second to the Town property is $1,332,600. Central's engineers have determined the Town property provides good recharge timing to improve annual quotas for both the GMS and WAS augmentation plans.

Project Objectives:

1) **Construct a 54" manifold**
2) **Construct a 5,000 foot 34" HDPE pipeline from the end of the existing 54" Walker Recharge Pipeline to the Central's Wiggins Farms recharge complex.**
3) **Construct approximately 15 acres of new recharge ponds on property owned by the Town of Wiggins for the benefit of Central and for use in the Walker Recharge Project.**

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Tasks
Task 1 – 54" Manifold Fabrication and Installation
Description of Task:
A manifold is necessary to join the previously constructed 54" Walker Recharge pipeline with the new 34" HDPE Wiggins Farm pipeline that is the subject of this application. The manifold pipe will also include an isolation valve and air relief valve, as necessary. The 54" Steel Manifold will be installed at the end of the existing 54" steel pipeline. This manifold will have an outlet for the Wiggins Farm pipeline extension and an outlet for a future pipeline extension to additional recharge ponds.
Method/Procedure:
Central will enter into a contract with a local vendor to fabricate the 54" steel manifold to the defined specifications. Upon completion of the fabrication, the manifold pipe will be shipped to the project site, welded to the end of the existing 54" pipeline and jointed to the Wiggins Farm pipeline extension with a mechanical fitting.
Deliverable:
Upon completion, the 54" manifold pipeline will be installed and fully operational.

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Tasks
Task 2 – Construction of the Wiggins Farms Pipeline Extension
Description of Task:
Central will install approximately 5,000 feet of 34" HDPE pipeline and appurtenances to convey water to Central's recharge pond complex that will be constructed on property owned by the Town of Wiggins. Task 2 will include crossing two Morgan County roads and will be constructed on lands owned by private landowners. The pipeline will connect to the 54" steel manifold described in Task 1 and upon completion will be able to deliver 30 c.f.s. to Central's Wiggins Farm recharge complex that will be approximately 15 acres in size when completed.
Method/Procedure:
Central has retained AB Underground, a contractor from Platteville, to construct and install 5,000 feet of 34" HDPE and all necessary appurtenances. Construction will occur by excavating the pipeline path pursuant to the engineered drawings that have been put together by Wayne P. Eckas, a consulting engineer that was retained by Central. Once excavation is completed, the sections of HDPE pipeline will be fused together and placed in the excavated trench, and the excavated trench will then be backfilled. Final grading over the pipeline will be completed such that the top of the pipeline will be at least 4 feet under the ground surface. All pressure relief valves and air release valves will be installed on the top of the pipeline and will be enclosed in a buried vault that will provide access to contractors and District employees for maintenance and repairs.
Deliverable:
Upon completion, Central's Wiggins Farm pipeline extension will be capable of delivering recharge water to the Central Wiggins Farm recharge complex described in Task 3.

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Tasks
Task 3 – Construction of the Wiggins Farms Recharge Pond Complex
Description of Task:
Central will construct on recharge pond complex that will consist of at least two recharge pond basins that will cover approximately 15 acres in land surface area that will be capable of recharging up to 30 c.f.s. Each recharge cell will cover approximately 8 acres of land surface and will be separated with each cell being able to be operated independently of each other. Recharge ponds will be constructed below grade, will be approximately 4 feet in depth, and with side slopes of 4:1. Materials that are removed from the ponds during excavation will be piled around the exterior of the pond and will create a bank with a road around the pond for convenient access. Topsoil will be removed and stock-piled and upon completion will be spread on the banks. The banks will be final graded and seeded with short rooted grass mixture upon completion of excavation.
Method/Procedure:
Central has retained AB Underground, a contractor from Platteville, to construct Central's Wiggins Farm Recharge complex. Construction will occur by stripping the topsoil from the site of the recharge pond, stock piling the topsoil, excavating the recharge ponds to the engineered specifications, placing the excavated material around the perimeter of the pond in 9" lifts, packing the banks, and seeding the completed banks. In Task 3 Central will also install required measuring and recording devices, turnout gates, rip-rap to protect the shoreline of the recharge ponds, and energy dissipation infrastructure, as necessary.
Deliverable:
Upon completion, the Central's Wiggins Farm pipeline extension and recharge pond complex will be capable of delivering recharge water to the Central Wiggins Farm recharge complex at a rate of approximately 30 c.f.s. and will be fully operational.

Last Updated: May 2021

Budget and Schedule

This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format.

Reporting Requirements

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

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

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

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

Payment

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

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

Performance Measures

Performance measures for this contract shall include the following:
(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit C. Per Water Plan Grant Guidelines, the CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.
(b) Accountability: Per Water Plan Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Water Plan Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.
(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.

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Department of Natural Resources

Colorado Water Conservation Board

Water Plan Grant - Exhibit C
Budget and Schedule

Prepared Date: 7/1/2021

Name of Applicant: Central Colorado Water Conservancy District

Name of Water Project: Robert W. Walker Recharge Project – Wiggins Farm Pond & Pipeline

Project Start Date: 12/1/2021

Project End Date: 6/1/2022

Task No.	Task Description	Task Start Date	Task End Date	Grant Funding Request	Match Funding	Total
1	Manifold Fabrication and Construction	12/1/2021	2/1/2022	$38,647	$64,353	$103,000
2	Installation of Wiggins Farms Pipeline Extension	12/1/2021	6/1/2022	$324,969	$541,131	$866,100
3	Construction of the Wiggins Farms Recharge Pond Complex	2/1/2021	6/1/2022	$136,389	$227,111	$363,500
			Total	$500,005	$832,595	$1,332,600

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Colorado Water Conservation Board
Department of Natural Resources

Last Updated: May 2021

Colorado Water Conservation Board

Water Plan Grant Application

Instructions

To receive funding for a Water Plan Grant, applicant must demonstrate how the project, activity, or process (collectively referred to as "project") funded by the CWCB will help meet the measurable objectives and critical actions in the Water Plan. Grant guidelines are available on the CWCB website.

If you have questions, please contact CWCB at (303) 866-3441 or email the following staff to assist you with applications in the following areas:

Water Storage & Supply Projects	Matthew.Stearns@state.co.us
Conservation, Land Use Planning	Kevin.Reidy@state.co.us
Engagement & Innovation Activities	Ben.Wade@state.co.us
Agricultural Projects	Alexander.Funk@state.co.us
Water Sharing & ATM Projects	Alexander.Funk@state.co.us
Environmental & Recreation Projects	Chris.Sturm@state.co.us

FINAL SUBMISSION: Submit all application materials in one email to *waterplan.grants@state.co.us* in the original file formats [Application (word); Statement of Work (word); Budget/Schedule (excel)]. Please do not combine documents. In the subject line, please include the funding category and name of the project.

Water Project Summary

Name of Applicant	Central Colorado Water Conservancy District
Name of Water Project	Walker Recharge Stream Restoration Project

CWP Grant Request Amount	$1,000,000.00
Other Funding Sources: NRCS EQIP GRANT	$500,000.00
Other Funding Sources: Town of Wiggins	$324,503.00
Other Funding Sources _____	$
Applicant Funding Contribution	$3,043,037.00
Total Project Cost	$4,867,540.00

Last Updated: May 2021

Applicant & Grantee Information
Name of Grantee(s) Central Colorado Water Conservancy District
Mailing Address 3209 W. 28th St. Greeley, CO 80634
FEIN: 84-6049901
Organization Contact: Randy Ray
Position/Title: Executive Director
Email: rray@ccwcd.org
Phone: 970-330-4540
Grant Management Contact: Danyelle Hart
Position/Title: Financial Analyst
Email: dhart@ccwcd.org
Phone: 970-330-4540
Name of Applicant (if different than grantee)
Mailing Address
Position/Title
Email
Phone

Description of Grantee/Applicant
Provide a brief description of the grantee's organization (100 words or less).
The Central Colorado Water Conservancy District was formed in 1965 pursuant to the 1937 Water Conservancy Act of the State of Colorado (CRS 150-5). The District includes 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), were formed in 1973 and 2004, respectively. The subdistricts operate decreed plans for augmentation to replace depletions to the South Platte River from pumping of approximately 1,200 alluvial groundwater wells. Well depletions are replaced through allotment contracts with constituent well owners totaling over 82,000 acre-feet.

Last Updated: May 2021

Type of Eligible Entity (check one)	
	Public (Government): Municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
X	**Public (Districts):** Authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises.
	Private Incorporated: Mutual ditch companies, homeowners associations, corporations.
	Private Individuals, Partnerships, and Sole Proprietors: Private parties may be eligible for funding.
	Non-governmental organizations (NGO): Organization that is not part of the government and is non-profit in nature.
	Covered Entity: As defined in Section 37-60-126 Colorado Revised Statutes.

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

Category of Water Project (check the primary category that applies and include relevant tasks)	
X	Water Storage & Supply - Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity, multi-beneficial projects, water sharing agreements, Alternative Transfer Methods, and those projects identified in basin implementation plans to address the water supply and demand gap. *Applicable Exhibit A Task(s): Grant funding requested would be applied only to construction of Project infrastructure.* ***Note:*** *For Water Sharing Agreements or ATM Projects - please include the supplemental application available on the CWCB's website.*
X	Conservation and Land Use Planning - Activities and projects that implement long-term strategies for conservation, land use, water efficiency, and drought planning. *Applicable Exhibit A Task(s): Grant funding requested would be applied only to construction of Project infrastructure.*
	Engagement & Innovation - Activities and projects that support water education, outreach, and innovation efforts. *Applicable Exhibit A Task(s):*
X	Agricultural - Projects that provide technical assistance and improve agricultural efficiency. *Applicable Exhibit A Task(s): Please see Exhibit A discussion re. Project improvements in efficient use of existing supplies*
X	Environmental & Recreation - Projects that promote watershed health, environmental health, and recreation. *Applicable Exhibit A Task(s): Please see Exhibit A discussion re. stream corridor protection, wildlife and waterfowl habitat development, and water quality benefits.*

	Other	Explain:

Location of Water Project	
Please provide the general county and coordinates of the proposed project below in **decimal degrees**. The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Counties	Weld County and Morgan County
Latitude	40.304864
Longitude	-104.136280

Water Project Overview
Please provide a summary of the proposed water project (200 words or less). Include a description of the project and what the CWP Grant funding will be used for specifically (e.g., studies, permitting process, construction). Provide a description of the water supply source to be utilized or the water body affected by the project, where applicable. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, and area of habitat improvements, where applicable. If this project addresses multiple purposes or spans multiple basins, please explain. The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, Other Funding Sources/Amounts and Schedule.

Last Updated: May 2021

CCWCD's Walker Stream restoration project ("Project") is a shovel-ready, conjunctive use construction project to rehabilitate 2.8 river miles of the South Platte River, near Orchard, Colorado. An engineering study/design for the Project has been completed by Wildland Hydrology. Wildland Hydrology has also been retained by CCWCD to manage and oversee construction for the duration of the Project.

The overall goal of the Project is to provide long-term river stability and sustainability by utilizing Natural Channel Design methods. Specific project goals include; reducing accelerated streambank erosion and associated high sediment supply, establishing a near bank riparian vegetation corridor, increasing the channel capacity for sediment transport while reducing the annual sediment supply through the Project reach, creating a functioning floodplain and riparian community in place of the override braided channel by designing a single-threaded meandering stream channel, reducing the adverse impacts of future flooding to the stream and nearby infrastructure, and installing a surface diversion channel for CCWCD's Walker Recharge Project that is functional at various river flow conditions and can withstand the effects of high river flows and flooding. The surface diversion structure will allow Central and the Town of Wiggins to divert up to 50 cfs from the South Platte.

Measurable Results	
To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:	
Recharge/Retiming 10,000 af (average)	New Storage Created (acre-feet)
10,000 af	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
10,000 af	Existing Storage Preserved or Enhanced (acre-feet)
14,784 ft	Length of Stream Restored or Protected (linear feet)
20 percent (currently 2,000 af)	Efficiency Savings (indicate acre-feet/year OR dollars/year)
234 acres/ 2.8 miles river bottomland	Area of Restored or Preserved Habitat (acres)
NA	Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement
South Platte Basin	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
N/A	Number of Coloradans Impacted by Engagement Activity

Optimization of Water Supply Use	Other	Explain: The Walker Project develops new augmentation water supplies that allow increased pumping from alluvial groundwater wells used for agricultural production and municipal purposes. Increase in well pumping expected to average 10,000 af. Walker Stream Restoration Project will protect installed infrastructure (pipelines, wells, valves, and electrical and control facilities) that are vital to operations.

Water Project Justification

Provide a description of how this water project supports the goals of Colorado's Water Plan, the Analysis and Technical Update to the Water Plan, and the applicable Roundtable Basin Implementation Plan and Education Action Plan. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).

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

Section 6.5 of the Colorado Water Plan ("Municipal, Industrial, and Agricultural Infrastructure Projects and Methods") opens with the following goal: *"Colorado's Water Plan encourages the use of grassroots efforts to identify and implement projects and methods to meet community and agricultural water needs throughout Colorado, and to achieve the following state-wide long-term goals: ... Develop and implement policies and strategies that support meaningful agricultural viability statewide."* (Water Plan, Page 6-127).

The Walker Recharge Project is an important and vital project for the future of agriculture in Adams, Weld and Morgan Counties. While many of the Identified Projects and Processes in the South Platte Basin Roundtable Basin Implementation Plan focus on addressing the water gap for municipal and industrial users or limiting the transfer of water out of agriculture, the Walker Recharge Project focuses on firming additional water supplies to support agricultural viability in Northeast Colorado. As the Water Plan correctly recognizes, agriculture is the *"economic backbone for many rural communities, supports important environmental attributes, strengthens Colorado's food security, and upholds our States cultural identity."* (Water Plan, Page 6-115). The Walker Recharge Project will have both direct and indirect benefits on the preservation of agriculture along the South Platte River Valley north of the Denver Metropolitan area and along the Front Range of Colorado. The Walker Recharge Project also provides for open space and wildlife habitat as well as other environmental benefits. The Walker Recharge Project is consistent with, supports and implements core components of the Colorado Water Plan. The Walker Stream Restoration Project is essential to the protection and development of the Walker Recharge Project.

The Walker Stream Restoration Project will reduce streambank erosion and associated high sediment supply, establish near bank riparian vegetation corridors, increase the channel capacity for sediment transport and reduce the annual sediment supply through the Stream Restoration Project reach, create a functional floodplain, and reduce the impacts of future flooding to the stream and nearby infrastructure. Reducing the overall width of the stream channel will increase the velocity within the channel and reduce the evaporation of surface water. The reduction of evaporative losses will provide a direct benefit to downstream irrigation canals, furthering their available supply and decreasing the water supply gap.

The Statewide Water Supply Initiative 2010 ("SWSI 2010") estimated that Colorado may lose between 500,000 to 700,000 acres of irrigated farmland by 2050. See Table 4-11 of SWSI 2010. The South Platte Basin, the State's most populated, is predicted to shoulder a substantial amount of this dry-up, potentially losing up to one third of the acres currently irrigated. See Figure 4-9 of SWSI 2010. The effects of buy and dry are already felt in Central's districts. Presently, GMS and WAS well pumping quotas have averaged 55% over the past five years, and quotas are expected to decline in the future without development of additional augmentation supplies. This has resulted in the de-facto dry up of tens of thousands of acres of land within

Central's boundaries and has limited the types of crops that can be grown on thousands of others. One of the primary direct benefits of the Walker Recharge Project is the development of a water supply for the wells included within the GMS and WAS augmentation plans.

Project partners including the Town of Wiggins ("Wiggins"), farmers, and dairy operators in the Project area will also realize direct benefits from increased augmentation water supplies. Central constituents and these Project partners rely heavily on alluvial groundwater supplies (and availability of augmentation credits) to continue irrigation of thousands of acres of productive farm land. Project development and continued irrigation of these lands will a) increase the economic productivity of those lands, b) promote soil conservation, c) create and enhance many acres of waterfowl and wildlife habitat, and d) improve air quality via the benefits of dust suppression associated with irrigation.

Landowners within the identified project reach are primarily hunters or hunting clubs that will realize the direct benefit of increased riparian areas and the development of additional waterfowl habitat. These landowners will be able to reclaim land that was lost by major flooding and flood events, including the historic 2013 flood. Restoration efforts will also provide additional protection to adjacent landowners and infrastructure against future flood events.

The Walker Recharge Project has indirect benefits that include preservation of agriculture in as much as it provides an augmentation water supply without relying on the buy and dry of presently irrigated agricultural lands. By providing up to 30,000 acre-feet of augmentation water supplies, the Walker Recharge Project reduces the need to buy senior water and dry up irrigated farmland.

The Walker Recharge Project provides a cost-effective water supply for agricultural and other uses via the diversion of water during wet periods and retiming that water into a firm augmentation supply.

The Colorado Water Plan provides a Framework for State of Colorado Support for Water Projects (Pages 9.43-9.44). The key elements of the framework include: Collaboration; Addressing an Identified Water Gap, Sustainability, and Fiscal and Technical Feasibility. Each of these elements are discussed below:

<u>Collaboration</u>
Central is committed to a collaborative approach in all aspects of the Walker Project including the Walker Stream Restoration Project efforts. Central has had discussions with all landowners within the Walker Stream Restoration Project Reach and is in the process of finalizing construction and access easement agreements. Colorado Department of Transportation has reviewed the proposed plans and is in support of implementation of the Walker Stream Restoration Project. The Walker Stream Restoration Project will provide protection against damage to State Highway 144, which was severely damaged during the 2013 flood.

<u>Water Supply Gap</u>
The water supply gap for agriculture is well documented in the South Platte Basin Implementation Plan and the Colorado Water Plan. The Walker Recharge Project has gained the endorsement of the South Platte Basin Roundtable because the Project supports the Roundtable's goal of adding 28,000 acres of irrigated farmland in the South Platte Basin. See Table 5-2 of the Water Plan. That is a lofty goal given that the South Platte Basin faces more pressure for buy and dry than any other Basin. Central is committed to supporting this goal and is one of the few entities currently developing new water supplies for agricultural irrigation along the Northern Front Range. The Walker Recharge Project will provide up to 30,000 acre-feet of new water for agricultural use, which is expected to bring up to 5,000 acres back into irrigated production and provide much needed supplemental irrigation supplies for many more farmers. The Walker Recharge Project, through use of the alluvial aquifer to store excess water supplies during periods of excess for use during periods of deficit, will increase water use efficiencies of existing supplies. Storage and conjunctive use of the South Platte surface and alluvial systems are critical strategies recognized in the South Platte Basin Roundtable Implementation Plan (Page 1-5 of South Platte BIP).

Sustainability

The Walker Recharge Project is sustainable, and the Walker Stream Restoration Project will serve to protect critical infrastructure components. Use of aquifer recharge avoids many of the environmental impacts associated with surface storage. The impact on the local economy will be positive; it will provide the primary water supply for many farms in Adams, Weld and Morgan Counties and supplemental irrigation supplies for many others. Cooperative agreements with Riverside, Weldon Valley, Wiggins and local dairy operations are currently being developed which will leverage the Project to provide a broader scope of benefits to local area water providers and water users. The Project will be used to divert water during times of abundant supply and deliver that water to recharge to the aquifer so that it provides a supply during times of high demand. By diverting water during times of high supply, water quality in the aquifer will be improved.

Fiscal and Technical Feasibility

The Walker Stream Restoration Project is a cost-effective project. The current cost estimate for completion of the Stream Restoration Project is approximately $4.87 million.

Grant monies provided by the State of Colorado will be leveraged with several other sources to support construction of the Stream Restoration Project. A preliminary project budget is provided in Exhibit A.

All necessary permits have been obtained, including permits from the Army Corps of Engineers. Upon award of this grant, Central is ready to move forward with construction of the Walker Stream Restoration Project. Central has completed its technical evaluation. Central has the support of landowners within the Project Reach and will be able to obtain the necessary easements. Central will commence with construction of the Stream Restoration Project in the late fall or early winter.

Related Studies

Please provide a list of any related studies, including if the water project is complementary to or assists in the implementation of other CWCB programs.

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 SB06-193 Underground Water Storage Study examined underground storage in several alluvial aquifers in both the South Platte and Arkansas river basins. That study found that the South Platte River alluvial aquifer near Fort Morgan had ample (depth to groundwater of greater than 50 feet) storage capacity. In addition to the storage availability, the South Platte alluvial aquifer near Fort Morgan also ranked favorably in categories such as proximity to demand and the presence of existing infrastructure.

Previous CWCB Grants, Loans or Other Funding

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

Last Updated: May 2021

CCWCD, Agricultural Emergency Drought Grant C150105, 5/1/2003, $56,700
GMS, Loan Contract C150117, 10/1/2003, $15,000,000
GMS, Loan Contract C150160, 7/10/2004, $4,513,200
GMS, Loan Contract C150184, 6/8/2006, $170,909
CCWCD, Agricultural Emergency Drought Grant, 5/26/2009, $435,393
WAS, Loan Contract C150194, 5/7/2011, $14,934,611 (adjusted from $20,200,000)
WAS, Agricultural Emergency Drought Grant, 11/15/2012, $216,577
WAS, Loan Contract C150337, 4/24/2013, $1,635,550 (adjusted from $3,030,000)
CCWCD, Loan Contract C150407A, 5/23/2014, $3,187,560
CCWCD, Loan Contract C150407B, 5/23/2014, $18,263,830
CCWCD, Loan Contract C150407C, 5/23/2014, $7,000,310
CCWCD, WSRA Grant CMS #79096, 5/13/2015, $220,000
CCWCD, Chatfield Grant CMS #84740,10/20/2015, $1,853,882
WAS, Shores Reservoir, 1/22/2018, Loan Contract CMS #107431, $2,367,440
GMS, Pioneer Reservoir, 3/20/2019, Loan Contract CT2019-3687, 2019, $8,697,110
GMS-Enterprise Fund, Hokestra Reservoir, 10/20/2019, Loan Contract CT2020-3348, $5,444,405
WAS, Walker Recharge Project, 7/26/2019, Loan Contract CT2020-326, $3,030,000
GMS, Walker Recharge Project, 7/26/2019, Loan Contract CT2020-324, $9,847,500
CCWCD Enterprise, Walker Recharge Project, 7/26/2019, Loan Contract CT2020-310, $2,272,500
CCWCD, Walker Recharge Project Grant, 4/24/2019, Grant Award CTGG12019-3468, $750,000

Taxpayer Bill of Rights

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

CCWCD, GMS and WAS have been “de-Bruced” from TABOR by voters.

Last Updated: May 2021

Submittal Checklist	
	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract.
	Statement of Work(1)
	Budget & Schedule(1)
	Engineer's statement of probable cost (projects over $100,000)
	Letters of Matching and/or Pending 3rd Party Commitments(1)
	Map (if applicable)(1)
	Photos/Drawings/Reports
	Letters of Support (Optional)
	Certificate of Insurance (General, Auto, & Workers' Comp.) (2)
	Certificate of Good Standing with Colorado Secretary of State(2)
	W-9(2)
	Independent Contractor Form(2) (If applicant is individual, not company/organization)
Water Sharing Agreements and Alternative Transfer Methods ONLY	
	Water Sharing Agreements and Alternative Transfer Methods Supplemental Application(1)

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

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Colorado Water Conservation Board
Department of Natural Resources

Last Updated: May 2021

ENGAGEMENT & INNOVATION GRANT FUND SUPPLEMENTAL APPLICATION

Introduction & Purpose

Colorado's Water Plan calls for an outreach, education, public engagement, and innovation grant fund in Chapter 9.5.

The overall goal of the Engagement & Innovation Grant Fund is to enhance Colorado's water communication, outreach, education, and public engagement efforts; advance Colorado's water supply planning process; and support a statewide water innovation ecosystem.

The grant fund aims to engage the public to promote well-informed community discourse regarding balanced water solutions statewide. The grant fund aims to support water innovation in Colorado. The grant fund prioritizes measuring and evaluating the success of programs, projects, and initiatives. The grant fund prioritizes efforts designed using research, data, and best practices. The grant fund prioritizes a commitment to collaboration and community engagement. The grant fund will support local and statewide efforts.

The grant fund is divided into two tracks: engagement and innovation. The Engagement Track supports education, outreach, communication, and public participation efforts related to water. The Innovation Track supports efforts that advance the water innovation ecosystem in Colorado.

Application Questions

*The grant fund request is referred to as "project" in this application.

Overview (answer for both tracks)
In a few sentences, what is the overall goal of this project? How does it achieve the stated purpose of this grant fund (above)?
Who is/are the target audience(s)? How will you reach them? How will you involve the community?
Describe how the project is collaborative or engages a diverse group of stakeholders. Who are the partners in the project? Do you have other funding partners or sources?

Describe how you plan to measure and evaluate the success and impact of the project?
What research, evidence, and data support your project?
Describe potential short- and long-term challenges with this project.

Please fill out the applicable questions for either the Engagement Track or Innovation Track, unless your project contains elements in both tracks. If a question does not relate to your project, just leave it blank. Please answer each question that relates to your project. Please reference the relevant documents and use chapters and page numbers (Colorado's Water Plan, Basin Implementation Plan, PEPO Education Action Plan, etc.).

Engagement Track
Describe how the project achieves the education, outreach, and public engagement measurable objective set forth in Colorado's Water Plan to "significantly improve the level of public awareness and engagement regarding water issues statewide by 2020, as determined by water awareness surveys."
Describe how the project achieves the other measurable objectives and critical goals and actions laid out in Colorado's Water Plan around the supply and demand gap; conservation; land use; agriculture; storage; watershed health, environment, and recreation; funding; and additional.
Describe how the project achieves the education, outreach, and public engagement goals set forth in the applicable Basin Implementation Plan(s).

Describe how the project achieves the basin roundtable's PEPO Education Action Plans.

Innovation Track
Describe how the project enhances water innovation efforts and supports a water innovation ecosystem in Colorado.
Describe how the project engages/leverages Colorado's innovation community to help solve our state's water challenges.
Describe how the project helps advance or develop a solution to a water need identified through TAP-IN and other water innovation challenges. What is the problem/need/challenge?
Describe how this project impacts current or emerging trends; technologies; clusters, sectors, or groups in water innovation.

Last Updated: May 2021

Colorado Water Conservation Board
Water Plan Grant - Exhibit A

Statement Of Work	
Date:	**June 30, 2021**
Name of Grantee:	**Central Colorado Water Conservancy District**
Name of Water Project:	**Walker Stream Restoration Project**
Funding Source:	

Water Project Overview:

The Walker Recharge Project is a water supply retiming project, i.e., water supplies during periods of excess are retimed to coincide with periods of deficit. The Recharge Project diverts water from the South Platte River to recharge basins located east of Wiggins, CO. Recharge Project operations develop recharge accretions for use by GMS, WAS, and other Project partner augmentation plans.

Water is diverted from the River via a surface diversion structure and by 13 alluvial groundwater wells in close proximity to the River. Diversions may occur under a junior water right (up to 100 c.f.s.) when in priority and/or during times when Central has excess fully consumable supplies in the River that can be recaptured and retimed. Deliveries occur via pipelines to several large recharge basins that may up to 300 acres and up to three miles from the River in rangeland areas that are not irrigated. Central has constructed approximately 40 acres of recharge basins to date.

The Walker Stream Restoration Project will provide long-term river stability and sustainability by utilizing Natural Channel Design methods. The CWP Implementation Grant funding will be used to construct the stream restoration features described in Exhibit 1.

Project Objectives:

Specific project objectives include; reducing accelerated streambank erosion and associated high sediment supply, establishing a near bank riparian vegetation corridor, increasing the channel capacity for sediment transport while reducing the annual sediment supply through the Project reach, creating a functioning floodplain and riparian community in place of the override braided channel by designing a single-threaded meandering stream channel, reducing the adverse impacts of future flooding to the stream and nearby infrastructure, and installing a surface diversion channel for CCWCD's Walker Recharge Project that is functional at various river flow conditions and can withstand the effects of high river flows and flooding. The surface diversion structure will allow Central and the Town of Wiggins to divert up to 50 cfs from the South Platte.

Last Updated: May 2021

Tasks
Task 1 – <u>Design of Stream Restoration</u>
Description of Task:
Design of stream restoration features, facilities, components, and future location of the South Platte River within the designated project reach. Engineering analysis of the current hydraulic conditions to determine the existing sediment loading and transport capabilities at various flow conditions, including flood stage.
Method/Procedure:
This task has been completed by Wildland Hydrology, please see Exhibit 1
Deliverable:
Please see Exhibit 1.

Last Updated: May 2021

Tasks
Task 2 – Acquisition of Easements and Agreements
Description of Task:
Central will acquire necessary easements with landowners impacted by the Walker Stream Restoration Project. Central owns approximately 1.5 miles of the 2.8 miles of the Project Reach. Construction of the Stream Restoration Project can proceed on Central owned property immediately.
Method/Procedure:
Central has met with all adjacent landowners and has prepared the necessary easement agreements for review by the landowner. Next steps will include distribution of the easement agreements to landowners, negotiations, and execution of the easement agreements. This task is not included in the project budget supplied in Exhibit C and will not be funded by the requested grant.
Deliverable:
Executed easement agreements.

Last Updated: May 2021

Tasks
Task 3 – Construction of the Walker Stream Restoration Project
Description of Task:
Central will construct the Walker Stream Restoration according to the engineering design provided by Wildland Hydrology.
Method/Procedure:
Construction methods are discussed in detail in Exhibit 1.
Deliverable:
Upon completion of construction, Central will provide CWCB with: 1. A figure illustrating the final location of Project infrastructure. 2. Photos of the completed infrastructure. 3. Copies of invoices from contractors, consultants, and suppliers. 4. And invitation to tour Project facilities.

Last Updated: May 2021

Budget and Schedule

This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format.

Reporting Requirements

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

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

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

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

Payment

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

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

Performance Measures

Performance measures for this contract shall include the following:
(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit C. Per Water Plan Grant Guidelines, the CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.
(b) Accountability: Per Water Plan Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Water Plan Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.
(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Colorado Water Conservation Board

Water Plan Grant - Exhibit C
Budget and Schedule

Prepared Date: June 28, 2021

Name of Applicant: Central Colorado Water Conservancy District

Name of Water Project: Walker Stream Restoration Project

Project Start Date: September 2021

Project End Date: April 2022

Task No.	Task Description	Task Start Date	Task End Date	Grant Funding Request	Match Funding	Total
2	Stream Restoration Construction	Sep-21	Apr-22	$1,000,000	$3,867,540	$4,867,540
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
			Total	$1,000,000	$3,867,540	$4,867,540

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Colorado Water Conservation Board

Water Plan Grant - Detailed Budget Estimate

Fair and Reasonable Estimate

Prepared Date: 28-Jun-21
Name of Applicant: Central Colorado Water Conservancy District
Name of Water Project: Walker Stream Restoration Project

EXAMPLE C: Construction

Task 3 - Construction of the Walker Stream Restoration Project

Sub-task	Unit	Quantity	Unit Cost	Total Cost	CWCB Funds	Matching Funds	
Mobilization	LS	1	$ 296,999	$ 296,999	$ 59,400	$ 237,600	296999.5
Surveying	LS	1	$ 13,576	$ 13,576	$ 2,715	$ 10,861	13575.68
Clearing and Grubbing	AC	50	$ 3,420	$ 171,001	$ 34,200	$ 136,801	171001.1
Grading	CY	602,649	$ 3.76	$ 2,265,960	$ 453,192	$ 1,812,768	
Boulders	TN	2,300	$ 221	$ 508,116	$ 101,623	$ 406,493	
18" Diversion Structure	LS	1	$ 25,565	$ 25,565	$ 5,113	$ 20,452	
60" Diversion Structure	LS	1	$ 39,835	$ 39,835	$ 7,967	$ 31,868	
Toe Wood with Geo Lifts	LF	9,791	$ 59	$ 576,005	$ 115,201	$ 460,804	
Seeding	AC	150	$ 1,826	$ 273,861	$ 54,772	$ 219,089	
Engineering Observation & Coordination	HR	1	$ 254,352	$ 254,352	$ 50,870	$ 203,482	
Contingency & Overhead		1	$ 442,270	$ 442,270	$ 88,454	$ 353,816	
TOTAL				$ 4,867,540	$ 973,508	$ 3,894,032	