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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:

Supply and Demand Gap Projects: Rebecca.Mitchell@state.co.us

Water Storage Projects: Anna.Mauss@state.co.us

Conservation, Land Use Planning: Kevin.Reidy@state.co.us

Education & Innovation Activities: Mara.MacKillop@state.co.us

Agricultural Projects: Gregory.Johnson@state.co.us

Environmental & Recreation Projects: Linda.Bassi@state.co.us

Applicants interested in submitting an 'Intent to Apply' in the future are encouraged to check here ☐ and fill in all sections with the best information available at the time. Exhibits excluded.

This "Intent to Apply" will help CWCB prioritize Projects that are not ready for fully completed Water Plan Grant Application due to the initial timeframe and deadlines required.

Water Project Summary

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

CWP Grant Request Amount	$1,000,000
Other Funding Sources US Bureau of Reclamation	$750,000
Other Funding Sources Project Partnerships	$ *Contributions unknown at this time*
Applicant Funding Contribution	$8,248,100
Total Project Cost	$9,998,100

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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 Ray
Position/Title	Executive Director
Email	rray@ccwcd.org
Phone	(970) 330-4540
Grant Management Contact	Danyelle McCannon
Position/Title	Financial Analyst
Email	dmccannon@ccwcd.org
Phone	(970) 330-4540
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	

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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 1,400 alluvial groundwater wells. Well depletions are replaced through allotment contracts with constituent well owners totaling over 80,000 acre-feet.

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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
	Identified Process or Program
	Other

Category of Water Project (check all that apply)	
X	Supply and Demand Gap Projects - Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap. (Applicable Exhibit A Task(s) *All tasks identified in Exhibit A. Note: Grant funding requested would be applied only to design, engineering, and construction of Project infrastructure.*
X	Water Storage Projects - Projects that facilitate the development of additional storage, artificial recharge into aquifers, and dredging existing reservoirs to restore the reservoirs' full decreed storage capacity. (Applicable Exhibit A Task(s) *All tasks identified in Exhibit A. Note: Grant funding requested would be applied only to design, engineering, and construction of Project infrastructure.*
X	Conservation and Land Use Planning Projects - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. (Applicable Exhibit A Task(s) *All tasks identified in Exhibit A. Please see discussion re. conservation, recreation, land management, and environmental benefits of Project in Exhibit A and elsewhere throughout this Application*).
	Engagement & Innovation Projects - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application available on the website. (Applicable Exhibit A Task(s)
X	Agricultural Projects - Projects that provide technical assistance and improve agricultural efficiency. (Applicable Exhibit A Task(s) *All tasks identified in Exhibit A. Please see Exhibit A discussion re. Project improvements in efficient use of existing supplies)*

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X	Environmental & Recreation Projects – Projects that promote watershed health, environmental health, and recreation. (Applicable Exhibit A Task(s) *All tasks identified in Exhibit A. Please see Exhibit A discussion re. stream corridor protection, wildlife and waterfowl habitat development, water quality benefits and recreational opportunities)*	
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	Weld and Morgan
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.
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 Project will divert water from the South Platte River to recharge basins located east of Wiggins, CO. Project operations will develop recharge accretions for use by GMS, WAS, and other Project partner augmentation plans. 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 Central 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 three miles from the River in rangeland areas that are not irrigated. It is anticipated that up to 30,000 acre-feet per year may be delivered to recharge. Preliminary engineering and reconnaissance studies, permitting, and acquisition of easements for the Project have begun and are anticipated to be completed in late 2017. CWP Implementation Grant funding will be used for final engineering design, construction and equipment.

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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 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)	
2.5 miles	Length of Stream Restored or Protected (linear feet)	
20 percent (currently 2,000 af)	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
+300 acres/ 2.5 miles river bottomland	Area of Restored or Preserved Habitat (acres)	
NA	Quantity of Water Shared through Alternative Transfer Mechanisms	
South Platte Basin	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning	
Optimization of Water Supply Use	Other	Explain: The Walker Project will develop new augmentation water supplies that will allow increased pumping from alluvial groundwater wells used for agricultural production and municipal purposes. Increase in well pumping expected to average 10,000 af. Project will also capture fully consumable credits and retime (improved efficiency).

Water Project Justification
Provide a description of how this water project supports the goals of Colorado's Water Plan, the most recent Statewide Water Supply Initiative, 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;)

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Water Project Justification

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 farm land 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, including Riverside Irrigation District ("Riverside"), Weldon Valley Ditch Company ("Weldon Valley"), Town of Wiggins ("Wiggins"), and dairy farms 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.

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:

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Water Project Justification

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 the Weldon Valley, Riverside, Wiggins and several local dairy farmers 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 Phase 1 of the Project is approximately $8.7 million. Phase 1 diversions are anticipated to yield approximately 7,000 acre-feet on an average annual basis. 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 10,000 acre-feet 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 Project Justification

Grant monies provided by the State of Colorado will be leveraged with several other sources to support design and construction of the Project. Central has recently been awarded a $750,000 grant from the U.S. Bureau of Reclamation under their WaterSmart Grant Program due largely to the benefits of the Walker Project to promote drought resiliency. Furthermore, Central has spent $666,138.50 on the acquisition of real property associated with the project and may access up to $2,100,000 from the $60 million bond that was approved by its voters in 2012 could be applied towards completion of Phase 1 of the Project. Central is involved with several local water providers regarding their financial participation/partnerships in the Project. A complete Project budget is provided in Exhibit A.

Upon award of a grant, Central is ready to move forward with construction and development of the Walker Recharge Project. 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 diversion, conveyance, and recharge facilities. Central has agreements in principle with local land owners to obtain easements and construct recharge ponds. 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.

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.

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Previous CWCB Grants, Loans or Other Funding

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

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.

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Submittal Checklist	
X	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract.
Exhibit A	
X	Statement of Work(1)
X	Budget & Schedule(1) *(Spreadsheet)*
X	Letters of Matching and/or Pending 3rd Party Commitments(1)
Exhibit C	
X	Map(1)
X	Photos/Drawings/Reports
X	Letters of Support (Support letter from Basin Roundtable encouraged)
X	Certificate of Insurance (General, Auto, & Workers' Comp.)
N/A	Certificate of Good Standing with Colorado Secretary of State(2)
X	W-9(2)
	Independent Contractor Form(2) (If applicant is individual, not company/organization)
Engagement & Innovation Grant Applicants ONLY	
	Engagement & Innovation 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
Water Plan Grant - Exhibit A

Statement Of Work	
Date:	**July 31, 2017**
Name of Applicant:	**Central Colorado Water Conservancy District**
Name of Water Project:	**Walker Recharge Project**
Funding Source:	**Central Funds; US Bureau of Reclamation WaterSMART Grant (awarded $750,000 in June 2017); Other Participant Contributions**

Water Project Overview: Please provide a summary of the proposed water project (200 words or less). The same summary can be used from Page 5 of the CWP Grant Application.

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 Project will divert water from the South Platte River to recharge basins located east of Wiggins, CO. Project operations will develop recharge accretions for use by GMS, WAS, and other Project partner augmentation plans.

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 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 will occur via pipelines to several large recharge basins totaling approximately 300 acres up to three miles from the River in rangeland areas that are not irrigated. It is anticipated that up to 30,000 acre-feet per year may be delivered to recharge.

Preliminary engineering and reconnaissance studies, permitting, and acquisition of easements for the Project have begun and are anticipated to be completed in late 2017. CWP Implementation Grant funding will be used for final engineering design, construction and equipment.

Objectives: List the objectives of the project.

The Walker Recharge Project supports the goals outlined in the Colorado Water Plan and the South Platte Basin Implementation Plan by:

1. Reducing loss of irrigated acres in the South Platte Basin.
2. Increasing beneficial use of native South Platte River flows.
3. Providing environmental and recreational features.
4. Maximizing conjunctive use of alluvial and surface water systems in the South Platte Basin.
5. Reducing evaporation losses as compared to surface storage projects.
6. Offering agricultural irrigation water at a cost-effective rate.
7. Enhancing Central's efficient use of its existing water rights portfolio through technology and additional capacity.
8. Collaborating with other water users to develop water supplies for various types of beneficial use.

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Tasks
Provide a detailed description of each project task using the following format:
Task 1 – Feasibility; Land Acquisition
Description of Task:
Land acquisition, preliminary project concept development, and initial engineering feasibility.
Method/Procedure:
Central has already acquired the property upon which Project diversion facilities will be located. Leonard Rice Engineers was retained to perform an environmental and federal permitting assessment of the construction activities necessary for the diversions facilities associated with the Project. Central has agreements in principal with several landowners upon which recharge ponds will be constructed and is initiating negotiations with others. Central will adhere to Morgan County and State of Colorado requirements to obtain right of way for pipelines within Morgan County. Observation wells have been drilled on the property where the production wells will be located. A pump test is currently being designed by Scott Mefford of Hydrokinetics, Inc., an expert who has been retained by Central. One of the observation wells will be converted (legally and physically) to a production well following which Central will commence with a pump test to provide technical information necessary for the development of a groundwater model.
Grantee Deliverable: Describe the deliverable the grantee expects from this task
1. Deed for property (already in Central's possession). 2. Well permit(s). 3. Pump test results. 4. Morgan County Right-of-Way Permits. 5. Easement agreements with landowners on which recharge basins will be situated.
CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task
Central will provide a letter to CWCB notifying CWCB once the following items have been completed (Central will also provide status updates on these items in its periodic reporting): 1. Well permits have been issued (copies will be included). 2. Pump test has been completed (executive summary will be included). 3. Right-of-Way permit has been issued by Morgan County for a pipeline from the first diversion facility to at least one recharge pond (copy of permit will be included). 4. One or more recharge pond locations have been acquired by easement or purchase.

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Tasks

Provide a detailed description of each task using the following format:

Task 2 – Geologic and hydrologic data collection and interpretation; Development of numerical groundwater model

Description of Task:

Dr. Willem Schrüeder has been retained by Central to develop a numerical groundwater model utilizing results of the geologic investigation and pump test being developed and overseen by Mr. Mefford. The resulting model will be utilized to determine timing and impacts of diversion of water from the well fields to be constructed as part of the Walker Project on South Platte River flows. The report will also be used to support Central's Water Court application in Case No. 16CW3202 to secure a water right for the Walker Recharge Project. The work currently being undertaken by Dr. Schrüeder and Mr. Mefford is to build upon Central's earlier evaluation of recharge capabilities in this area by Leonard Rice Engineers and White Sands Water Engineers. These earlier studies confirm the suitability of this area to accommodate recharge projects.

Task 2 efforts will also partially draw upon Central's past experience and expertise in designing and operating similar projects, particularly the nearby Orchard Project. The Orchard Project, undertaken and funded by Central, underscores Central's commitment to and expertise in developing alluvial recharge projects, water supply projects to support irrigated agriculture, and maximizing beneficial use of water in the South Platte Basin. Design, construction, operation, and maintenance of the Orchard Project has been a large success for Central and Central will bring its experience and the positive results of that project to support the development of the larger Walker Project.

Method/Procedure:

Mr. Mefford has/will analyze the local geology based on well logs associated with the wells drilled in the area. As discussed above, Mr. Mefford will design and oversee a pump test. Mr. Mefford will analyze the data obtained from the pump test and work with Dr. Schrüeder on the interpretation and utilization of that data within a groundwater model to be developed by Dr. Schrüeder. Upon review of the results, Dr. Schrüeder will determine the appropriate type of model to develop for this application.

Grantee Deliverable: Describe the deliverable the grantee expects from this task

1. Development of initial groundwater model.

CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task

1. Central will provide CWCB with an executive summary of the groundwater model results.

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Tasks
Provide a detailed description of each task using the following format:
Task 3 – Water Rights Permitting and Decree
Description of Task:
Central has applied to the State Engineers Office for the appropriate well permits related to the drilling of observation wells at the Walker Project site. It is anticipated that these well permits will be converted to production wells following completion of Task 2. Central will take the necessary steps for such conversion. Central filed a water court application on December 30, 2016 to obtain a decree recognizing the Walker Project water rights.
Method/Procedure:
Central will utilize the forms available from the State Engineer's Office to obtain the necessary well permits. Central will diligently pursue and obtain a Water Court decree for the Walker Project water rights in accordance with Colorado law and the requirements of the Division One Water Court.
Grantee Deliverable: Describe the deliverable the grantee expects from this task
1. Well Permits 2. Water Court Decree to be entered in Case No. 16CW3202
CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task
1. Central will provide CWCB with a copy of the Water Court Decree upon entry by the Water Court in Case No. 16CW3202.

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Tasks
Provide a detailed description of each task using the following format:
Task 4 – Design of Infrastructure; Construction
Description of Task:
Grantee is in the design stage for the infrastructure necessary to implement the Walker Project. That infrastructure includes: 1. Surface Diversions 2. Well Fields 3. Pipelines 4. Pump Stations 5. Recharge Ponds 6. Measurement and Control Devices, including SCADA 7. Electric Power Facilities
Method/Procedure:
Central will retain appropriate engineering consultants, suppliers, and construction companies to design and build the Project infrastructure. In addition to overall design for Project operations, engineering, design, and construction efforts will maximize land resources utilized for the Project by incorporating into the design and functionality: (1) a land management plan that is consistent with Morgan County land use regulations for the control of dust and noxious weeds; (2) enhancements to surrounding land uses, primarily agricultural and wildlife habitat with particular emphasis of supporting wildlife corridors along the South Platte River; and (3) opportunities for compatible recreational uses including hunting and fishing. Phase I design and construction activities will result in: 1. Power lines to supply electricity to wells. 2. 6-8 alluvial wells, each anticipated to yield approximately 5 c.f.s. 3. Infrastructure necessary to utilize the existing surface diversion of the Weldon Valley Ditch to divert water from that canal to one recharge pond located on the north side of the South Platte River. 4. Approximately 4.5 miles of 36 inch diameter pipeline. 5. Approximately 100 surface acres of recharge ponds. 6. Installation of SCADA equipment. The figure included in Exhibit C shows the approximate location of items 2-5. The SCADA is a key component of the Walker Project because it greatly enhances Central's operational efficiency. SCADA technology permits remote operations, thereby reducing costs associated with fuel and labor. It also allows Central to benefit from its close coordination with Division One Water Resources staff to identify excess supplies owned or leased by Central and quickly get that water diverted for beneficial use, which otherwise may leave the State unused.
Grantee Deliverable: Describe the deliverable the grantee expects from this task
1. The deliverable Central expects from this task is delivery of wet water to recharge ponds for use by Central in its augmentation plans and other project participants for beneficial use.

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Tasks
CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task
Upon completion of Phase I 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.

Tasks
Provide a detailed description of each task using the following format:
Task 5 – Development of Operations and Maintenance Plan
Description of Task:
The final task will be the development and ongoing refinement of an Operation and Maintenance Plan for the Project with the primary goals to maximize the water yield for optimum beneficial use and minimize the costs associated with the delivery of water.
Method/Procedure:
Evaluate actual operations under the priority to be awarded in Case No. 16CW3202 and factor in terms and conditions to be imposed by the Water Court decree to determine most efficient manner of operations. Said operations will also include consideration for operating the Project to recapture and retime other water rights which are available in the South Platte River at times when the same are not needed for beneficial use, increasing Central and other Project partners' efficiency of existing water rights and supplies.
Grantee Deliverable: Describe the deliverable the grantee expects from this task
This will be an ongoing management function.
CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task
As this will be an ongoing process, no deliverable is anticipated.

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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. The CWCB may withhold reimbursement until satisfactory progress reports have been submitted.

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 withhold disbursement the last 10% of the budget until 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.

Last Updated: July 5, 2017

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Colorado Water Conservation Board

Water Plan Grant - Exhibit A
Budget and Schedule

Date: July 31, 2017

Name of Applicant: Central Colorado Water Conservancy District

Name of Water Project: Walker Recharge Project

Task No.	Task Description	Start Date[(1)]	End Date	Grant Funding Request	Match Funding	Total
1	Feasibility; Land Acquisition	Fall 2016	Late 2018	$0.00	$700,000.00	$700,000
2	Data Collection; Model Development	Summer 2017	Summer 2018	$0.00	$250,000.00	$250,000
3	Water Rights Permitting; Decree	December 2016	2019	$0.00	$300,000.00	$300,000
4	Engineering; Design Infrastructure; Construction*	January 2018	2020	$1,000,000.00	$7,723,100.00	$8,723,100
5	Operations and Maintence Plan	2019	Ongoing	$0.00	$25,000.00	$25,000
	* Note: See detailed construction budget, attached					
			Total	$1,000,000	$8,998,100	$9,998,100

(1) Start Date for funding under $100K, minimum 45 Days from Board Approval; Start Date for funding over $100K, minimum 90 Days from Board Approval.

·Round values up to the nearest hundred dollars.

·Reimbursement eligibility commences upon the grantee's receipt of a Notice to Proceed (NTP)

·NTP will not be accepted as a start date. Project activities may commence as soon as grantee enters contract and receives formal NTP if prior to the listed "Start

·The applicant shall provide a progress repost every 6 months, beginning from the date of contract execution.

·CWCB will withhold disbursement of the last 10% of the total grant amount until a Final Report is completed to the satisfaction of CWCB staff (2017 CWP Grant

24" Pipe	$125	per foot
36" Pipe	$200	per foot

		Length		Cost
Well Collection Pipe	@24	1300	$	162,500
Well Field to Road 1	@36	700	$	140,000
Road V to Road 1	@36	1300	$	260,000
Road 1 to Empire	@36	5280	$	1,056,000
Empire to Seiber	@36	15832	$	3,166,400
Easements	@$10k/ac		$	159,171
Crossings, Surge Protection, Controls			$	250,000
Electrical			$	250,000
			$	5,444,071

		cfs		$/Unit		
Wells	8	35.71	$	150,000	$	1,200,000

		Ac		Cost
Recharge Ponds	Empire	50	$	100,000
	Seiber	50	$	100,000
	Smith	25	$	50,000
	WVD Carriage		$	-

Engineering, Permits	@10%		$	689,407.08
		Sub-total	$	7,583,478
Contingency	@15%		$	1,137,521.7
		Total	**$**	**8,721,000**

Walker Recharge Project

Central Colorado Water Conservancy District

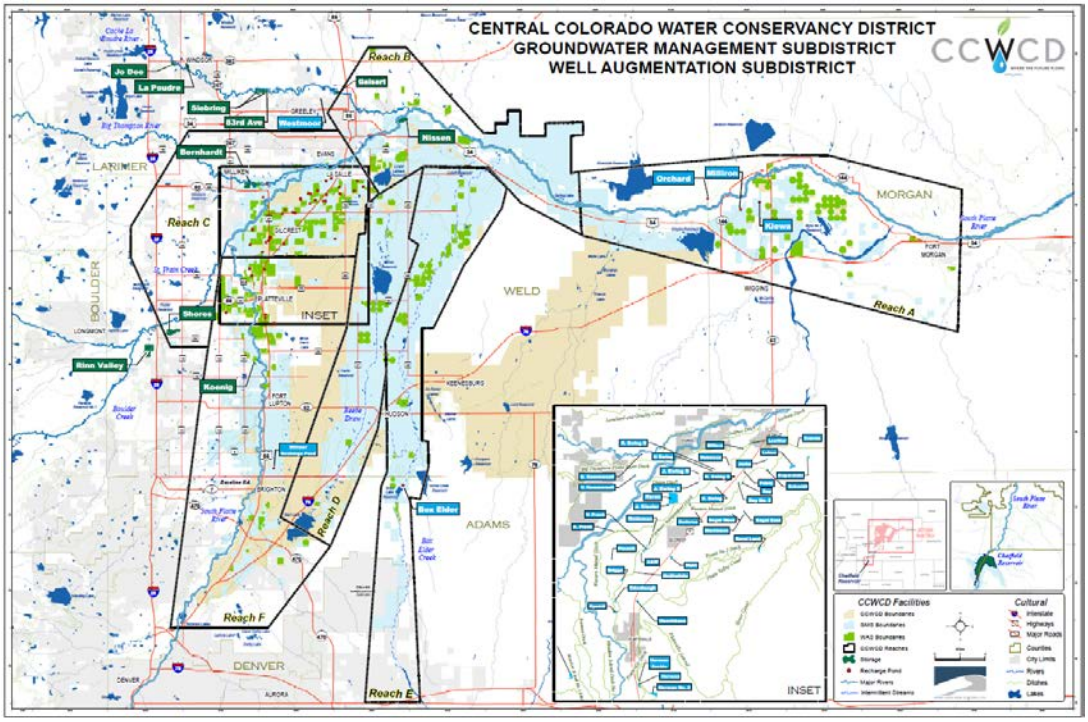

Figure 1: Central's District boundaries extend along the South Platte River from Denver to Fort Morgan, and include the drainages of Beebe Draw, Box Elder Creek and Lost Creek. Subdistrict boundaries (GMS and WAS) are within the District boundaries.

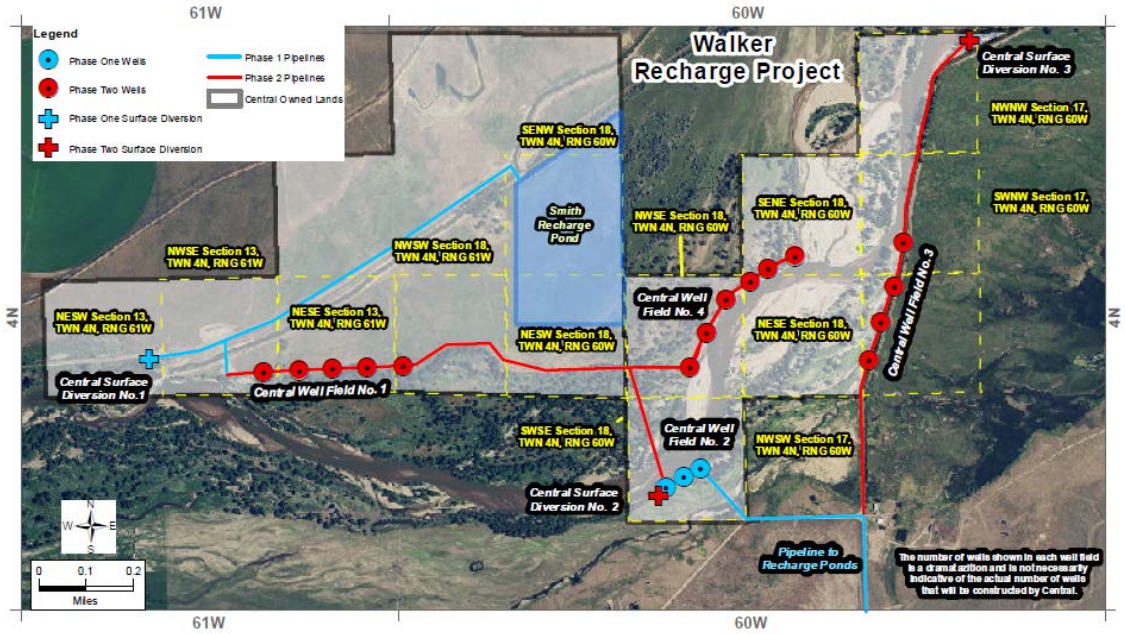

Figure 2: Central's adjacent Orchard (west) and Walker (east) properties. Phase 1 and Phase 2 Walker Project components are identified. Orchard Project components (constructed in 2005) not shown. (Orchard Project provides similar water supply retiming purpose but is smaller in scale).

Figure 3: Headgate well at Central's adjacent Orchard Project. Six wells divert from north bank of South Platte River for delivery to recharge ponds.

Figure 4: Sedimentation basin at Orchard Project. Water pumped from well field is carried to sedimentation basin prior to delivery into recharge ponds.

Figure 5: Recharge pond at Orcharge Project. Deliveries can be sustained at rates of approximately 3 cfs per surface acre because of the sandy geologic conditions.

Figure 6: All wells at Central's adjacent Orchard Project have been equipped with SCADA to allow remote control of facilities and optimization of well pumping/recharge operations.

United States Department of the Interior

BUREAU OF RECLAMATION
P.O. Box 25007
Denver, CO 80225-0007

IN REPLY REFER TO
84-27814
1.3.11

JUN 30 2017

VIA ELECTRONIC MAIL

Central Colorado Water Conservancy District
Attn: Mr. Randy Ray
3209 W. 28th Street
Greely, CO 80634-9778

Subject: Funding Opportunity Announcement (FOA) No. BOR-DO-17-F010 – WaterSMART Drought Response Program: Drought Resiliency Projects for Fiscal Year (FY) 2017 – DRP-015 Application Review Status, Your Application Titled, "Northeast Colorado Walker Recharge Project - Phase I"

Dear Mr. Ray:

Thank you for submitting a WaterSMART Drought Response Program: Drought Resiliency Project Grant application. The Bureau of Reclamation is pleased to inform you that your application was among those receiving the highest ratings and is now being considered for award of a financial assistance agreement. Your application included a request for $750,000 to complete your proposal titled, "Northeast Colorado Walker Recharge Project - Phase I." Reclamation anticipates awarding Federal funds in the amount of $750,000 for your proposed project.

Please note that this letter is not a final commitment of funding. A financial assistance agreement will not be executed and funds will not be awarded until further information about your project is developed and all statutory and regulatory requirements have been met as described in Section E.2.5 of the FOA. In addition, Reclamation must have sufficient evidence prior to award that non-Federal cost share will be available by the start of the project. The final funding amount may be adjusted if necessary. Construction and other ground disturbing activities may not begin until all environmental clearances are obtained and a notice to proceed is issued by the Reclamation Grants Officer.

Federal statute (42 U.S.C. 10364(a)(3)(B)) requires that before any funds are awarded, you agree not to use any water savings resulting from your proposed project to increase your total irrigated acreage or to otherwise increase the consumptive use of water in your operations. This requirement, which was discussed in Section F.2.3 of the FOA, will be included in the financial assistance agreement for your project.

Please be advised that your application has been ranked, in part, based on your description of the benefits you expect to result from your project. Revisions to the scope of the project described in your application can be made only after Reclamation determines that revisions would be consistent with the selection process and that the expected benefits of the project would not be reduced.

Also please be advised as stated in Section F.4 of the FOA, we intend to post copies of successful Drought Resiliency Project Grant applications as examples on Reclamation's website. While this generally does not raise any issues, we find it prudent to provide successful grant applicants with an opportunity to redact any sensitive information from their proposals prior to posting them on our website. As a rule, we remove the SF-424s; however, if there are any other items you would like to request be redacted, please let me know by Friday, August 4, 2017. Should we not hear from you by this date we will assume that there are no objections to posting the full application.

Thank you for your interest and participation in the WaterSMART Drought Response Program. If you have any questions about the program, please contact Mr. Darion Mayhorn, Reclamation Drought Coordinator, at 303-445-3121 or dmayhorn@usbr.gov. The Grants Specialist that will be responsible for awarding and administering your agreement will contact you to finalize your award. If you have questions concerning the next steps in awarding this agreement, please contact me at 303-445-2025.

Sincerely,

Irene M. Hoiby
Grants Officer

July 28, 2017

Dear CWCB Colorado Water Plan Grant Review Committee:

On behalf of the Orphan Wells of Wiggins, I am writing in support of the Central Colorado Water Conservancy District's (CCWCD) Water Plan grant application for the Walker Recharge project, located in northeast Colorado. This water retiming project is an innovative and collaborative water management tool that will be instrumental in maintaining agricultural production; as well as supporting industrial, commercial, and municipal needs in the South Platte River basin.

Diverting available year-round supplies to alluvial groundwater recharge ponds located several miles from the river is needed project to help mitigate sporadic drought conditions on the river. The result will be improved water management and efficiency practices. The Walker Recharge project will benefit many water users in the South Platte River basin, adding a dimension that makes it more regionally impactful, collaborative, and valuable as a multi- benefit water management model as called for in the Colorado Water Plan.

CCWCD has contributed significant time and expertise to this project and is committed to continuing this advocacy as this effort moves forward. The Orphan Wells of Wiggins supports their efforts.

Sincerely,

Steve Bantz, President

July 13, 2017

Dear CWCB Colorado Water Plan Grant Review Committee:

On behalf of the Riverside Irrigation District, I am writing in support of the Central Colorado Water Conservancy District's (CCWCD) Water Plan grant application for the Walker Recharge project, located in northeast Colorado. This water retiming project is an innovative and collaborative water management tool that will be instrumental in maintaining agricultural production; as well as supporting industrial, commercial, and municipal needs in the South Platte River basin.

Diverting available year-round supplies to alluvial groundwater recharge ponds located several miles from the river is needed project to help mitigate sporadic drought conditions on the river. The result will be improved water management and efficiency practices. The Walker Recharge project will benefit many water users in the South Platte River basin, adding a dimension that makes it more regionally impactful, collaborative, and valuable as a multi- benefit water management model as called for in the Colorado Water Plan.

CCWCD has contributed significant time and expertise to this project and is committed to continuing this advocacy as this effort moves forward. The Riverside Irrigation District supports their efforts.

Sincerely,

Don Chapman, Superintendent

July 13, 2017

Dear CWCB Colorado Water Plan Grant Review Committee:

On behalf of the South Platte Basin Roundtable, I am writing in support of the Central Colorado Water Conservancy District's (CCWCD) Water Plan grant application for the Walker Recharge project, located in northeast Colorado. This water retiming project is an innovative and collaborative water management tool that will be instrumental in maintaining agricultural production; as well as supporting industrial, commercial, and municipal needs in the South Platte River basin.

Diverting available year-round supplies to alluvial groundwater recharge ponds located several miles from the river is needed project to help mitigate sporadic drought conditions on the river. The result will be improved water management and efficiency practices. The Walker Recharge project will benefit many water users in the South Platte River basin, adding a dimension that makes it more regionally impactful, collaborative, and valuable as a multi- benefit water management model as called for in the Colorado Water Plan.

CCWCD has contributed significant time and expertise to this project and is committed to continuing this advocacy as this effort moves forward. The South Platte Basin Roundtable supports their efforts.

Sincerely,

Sean P. Conway
Chairman, South Platte Round Table

WIGGINS
COLORADO

July 18, 2017

Dear CWCB Colorado Water Plan Grant Review Committee:

On behalf of the Town of Wiggins, I am writing in support of the Central Colorado Water Conservancy District's (CCWCD) Water Plan grant application for the Walker Recharge project, located in northeast Colorado. This water retiming project is an innovative and collaborative water management tool that will be instrumental in maintaining agricultural production; as well as supporting industrial, commercial, and municipal needs in the South Platte River basin.

Diverting available year-round supplies to alluvial groundwater recharge ponds located several miles from the river is needed project to help mitigate sporadic drought conditions on the river. The result will be improved water management and efficiency practices. The Walker Recharge project will benefit many water users in the South Platte River basin, adding a dimension that makes it more regionally impactful, collaborative, and valuable as a multi- benefit water management model as called for in the Colorado Water Plan.

CCWCD has contributed significant time and expertise to this project and is committed to continuing this advocacy as this effort moves forward. The Staff at the Town of Wiggins supports their efforts.

Sincerely,

Paul D Larino, MPA
Town Administrator

304 Central Ave ~ Wiggins, CO 80654 ~ Ph: 970.483.6161 ~ Fax: 970.483.7364 ~ www.wigginsco.com

Weldon Valley Ditch Company

P.O. Box 626

Weldona, CO 80653

February 9, 2017

Dear USBR Drought Resiliency Grant Review Committee:

On behalf of the Weldon Valley Ditch Company, I am writing in support of the Central Colorado Water Conservancy District's (CCWCD) grant application for the Walker Recharge project, located in northeast Colorado. This water retiming project is an innovative and collaborative water management tool that will be instrumental in maintaining agricultural production; as well as supporting industrial, commercial, and municipal needs in the South Platte River basin.

Diverting available year-round supplies to alluvial groundwater recharge ponds located several miles from the river is needed project to help mitigate sporadic drought conditions on the river. The result will be improved water management and efficiency practices. The Walker Recharge project will benefit many water users in the South Platte River basin, adding a dimension that makes it more regionally impactful, collaborative, and valuable as a multi-benefit water management model as called for in the Colorado Water Plan.

Both Weldon Valley and CCWCD have contributed significant time and expertise to this project and are committed to continuing this advocacy and support as this effort moves forward. Weldon Valley supports their efforts and also strongly supports the USBR Drought Resiliency Walker Recharge grant application before you.

Sincerely,

Eric R. Christensen
Secretary

July 13, 2017

Dear CWCB Colorado Water Plan Grant Review Committee:

On behalf of the South Platte Basin Roundtable, I am writing in support of the Central Colorado Water Conservancy District's (CCWCD) Water Plan grant application for the Walker Recharge project, located in northeast Colorado. This water retiming project is an innovative and collaborative water management tool that will be instrumental in maintaining agricultural production; as well as supporting industrial, commercial, and municipal needs in the South Platte River basin.

Diverting available year-round supplies to alluvial groundwater recharge ponds located several miles from the river is needed project to help mitigate sporadic drought conditions on the river. The result will be improved water management and efficiency practices. The Walker Recharge project will benefit many water users in the South Platte River basin, adding a dimension that makes it more regionally impactful, collaborative, and valuable as a multi- benefit water management model as called for in the Colorado Water Plan.

CCWCD has contributed significant time and expertise to this project and is committed to continuing this advocacy as this effort moves forward. The South Platter Basin Roundtable supports their efforts.

Sincerely,

Sean P. Conway
Chairman, South Platte Round Table