

Maybell Ditch Diversion Structure & Headgate Modernization

The Nature Conservancy



May 2019 Board Meeting					
DETAILS					
Total Project Cost: \$373,000					
Water Plan Grant Request: \$75,000					
Recommended Amount \$75,000					
Other CWCB Funding: \$73,000					
Other Funding Amount: \$180,000					
Applicant Match: \$43,500					
Project Type(s): Design					
Project Category(Categories): Agricultural					
Measurable Result: Stream length restored (95,040 ft), 5,000 ac-ft efficiency savings, positive recreational benefit					

The Nature Conservancy (TNC) requests \$75,000 through Colorado's Water Plan (CWP) Grant Program to create engineering design and construction documents for the Maybell Ditch Diversion Structure and Headgate Modernization project on the Yampa River. The project objectives include increasing stream flow within the Yampa River, automate the diversion headgate to allow remote control and monitoring, collect and transit diversion data to the State Engineer as required, to enable the delivery of the full water right, and to improve boat and fish passage through the diversion dam. CWP funds will be used to develop two or three preliminary designs for diversion improvements required to meet project objectives. Applicants will then complete the design and specifications of the preferred design alternative selected through the analysis. The match will be secured through a WSRF grant and the partners. The project is supported by the Yampa-White-Green Basin Roundtable, Friends of the Yampa, Maybell Irrigation District, and Ranch Advisory Partners.

Staff recommends Board approval of the full grant amount requested on the condition that the applicants work with staff to ensure additional funds and other resources are secured to move forward with the preferred design once selected. The CWP Agricultural Project review committee found that this project conforms well to the Framework for State of Colorado Support for Water Projects set forth in Colorado's Water Plan and meets several of the CWP agricultural project evaluation criteria. Once completed the project will help increase the efficiency of the oldest and largest diversion on the Yampa River while meeting local and regional environmental and recreational needs. In particular, the project is anticipated to improve recreational passage for 100-200 boaters and improve stream flows for several endangered fish species. The project will also benefit agricultural producers through easier and more precise operation of the headgate and efficiency improvements. Furthermore, the project was identified as a priority through regional planning efforts involving multiple stakeholders. Implementation of projects identified through integrated and stream management plan planning efforts could help encourage more participation in related planning efforts and further CWP goals.



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 Projects Conservation, Land Use Planning Engagement & Innovation Activities Agricultural Projects Environmental & Recreation Projects Anna.Mauss@state.co.us Kevin.Reidy@state.co.us Ben.Wade@state.co.us Alexander.Funk@state.co.us 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	e Nature Conservancy			
Name of Water Project	Maybell Ditch Diversion Structure & Headgate Modernization			
CWP Grant Request Amount	\$ 75,000			
YWG RT/WSRF	\$ 75,000			
BoR WaterSmart	\$ 180,000			
Other Funding Sources	\$			
Applicant Funding Contribution	\$ 43,500			
Total Project Cost	\$ 373,500			

Applicant & Grantee Information



Name of Grantee(s): The Nature Conservancy

Mailing Address: 5398 Manhattan Circle, Boulder, CO 80303

FEIN: 53-0242652

Organization Contact: Nancy Smith

Position/Title: Director of Sustainable Food & Water

Email: nsmith@tnc.org

Phone: 303.859.9082

Grant Management: Contact Laura Wilkins

Position/Title: Grant Specialist

Email: <u>laura.wilkins@tnc.org</u>

Phone: 630.244.1693

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 Nature Conservancy is a leading conservation organization working around the world to protect ecologically important lands and waters for nature and people. Founded in 1951, The Nature Conservancy tackles the world's toughest environmental challenges – working side by side with those who make their living from the land.

	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.						
	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.						
х	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				
	Construction				
	Identified Projects and Processes (IPP)				
х	Other				

Category of Water Project (check the primary category that applies and include relevant tasks)

	Water Storage - Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity and Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap <i>Applicable Exhibit A Task(s):</i>						
	strategies	on and Land Use Planning - Activities and projects that implement long-term for conservation, land use, and drought planning. <i>Exhibit A Task(s):</i>					
	innovation	ent & Innovation - Activities and projects that support water education, outreach, and efforts. Please fill out the Supplemental Application on the website. <i>Exhibit A Task(s):</i>					
x	Agricultural - Projects that provide technical assistance and improve agricultural efficiency. <i>Applicable Exhibit A Task(s):</i> Preliminary Design Construction Documents Managing Competitive Bidding Process Resulting in Successful Selection of Design Firm						
	Environmental & Recreation - Projects that promote watershed health, environmental health, and recreation. Applicable Exhibit A Task(s):						
	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	Moffat County			
Latitude	40.5177° N			
Longitude	108.0870° W			



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 Nature Conservancy requests \$75,000 to create final engineering design and construction documents for the Maybell Ditch Diversion Structure and Headgate Modernization project on the Yampa River. Once constructed, the project will improve efficiency and ease of operation for irrigators, while generating environmental and recreational benefits in the Yampa. Annual diversions at Maybell are approximately 20,000 acre-feet per year with an irrigation water requirement of 1,800 acre-feet, providing water for 18 users and approximately 1,100 acres of high-elevation hay fields, the predominant irrigated crop in the region. The project is a partnership effort with agricultural, environmental, and recreational interests to upgrade the Ditch's water delivery system and operation, improve boater safety at the diversion, and enhance river health on the Yampa River between the Maybell diversion and the return flow point approximately 18 miles down-river. Since 2016, Maybell Irrigation District has initiated several projects to improve the operational efficiency of the canal, including canal lining, new check structures, and an automated waste gate. This capstone effort will allow for easier and more precise operation of the headgate while improving boater safety and passage of native fish at low flows, including the four species of endangered fish in the Yampa River.

Measurable Results						
To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:						
	New S	torage Created (acre-feet)				
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive					
Existing Storage Preserved or Enhanced (acre-feet)						
95,040	Length of Stream Restored or Protected (linear feet)					
Estimated 5,000 acre- feet/year*	Efficiency Savings (indicate acre-feet/year OR dollars/year)					
	Area of Restored or Preserved Habitat (acres)					
	Quanti	ty of Water Shared through Alternative Transfer Mechanisms				
	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning					
	Number of Coloradans Impacted by Engagement Activity					
100-200 boaters positively impacted	Other	Explain: Based on conversations with CPW staff at Yampa State Park, an average of 100-200 people/year float on the Yampa River upstream of Dinosaur National Monument. This project will enhance their safe passage at the Maybell Diversion.				

* This figure is a conservative estimate based on these assumptions: 1) Replacement of Maybell's headgate will improve lateral flows and thereby conserve water through ditch-lined portions and reduce seepage. This could result in an approximate 30% increase in efficiency within the project. 2) Flow



gauging and measurement at the headgate will enhance understanding of variable conditions for calculating average monthly irrigation efficiencies. 3) Improved local capacity to use real-time data to address water needs and irrigation scheduling will lead to more resilience on the Yampa River.

Water Project Justification

Provide a description of how this water project supports the goals of <u>Colorado's Water Plan</u>, the most recent <u>Statewide Water Supply Initiative</u>, and the applicable Roundtable <u>Basin Implementation Plan</u> and <u>Education Action Plan</u>. 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;)

Improvements to the Maybell Ditch were identified as a priority through a Basin Roundtable planning effort. In addition to addressing local agricultural, environmental, and recreation concerns, these improvements will contribute more broadly to improving water efficiencies in the Colorado River Basin. The project has strong potential to preserve water security for agricultural producers on the Maybell Ditch while benefitting the natural environment, both of which are goals of the Colorado Water Plan.

More specifically, the project conforms to Colorado's Water Plan criteria by:

- Addressing more than one type of need (agricultural, environmental, and recreational) (2016 WSRF Criteria and Guidelines pg. 4)
- Involves multiple participants (Maybell Irrigation District, Ranch Advisory Partners, The Nature Conservancy) (2016 WSRF Criteria and Guidelines pg. 4)
- Consults a broad set of local stakeholders (Basin Roundtable, water users, The Nature Conservancy) (2016 WSRF Criteria and Guidelines pg. 4)
- Addresses an identified water gap (project was identified in a basin needs assessment)
- Identified in a BIP (see below)
- Avoids adverse effects to environmental and recreational interests (2016 WSRF Criteria and Guidelines pg. 5)
- Avoids impacts on agricultural and rural communities (2016 WSRF Criteria and Guidelines pg. 5)
- Maximizes the use of water resources (improves efficiency) (2016 WSRF Criteria and Guidelines pg. 5)
- Demonstrated an intent to leverage any state grant with private and federal funding (The Nature Conservancy is contributing private funds, as well as applying to the WaterSmart Small-Scale Projects Grant from Bureau of Reclamation)

Furthermore, the Project conforms to the Yampa/White/Green Basin Implementation Plan by:

- Protecting the YWG Basin from compact curtailment of existing decreed water uses (increased efficiency and flows)
- Protecting agriculture uses of water in the YWG Basin within the context of private property rights (increased ease of operation and functionality of the headgate will allow irrigators to better measure and manage the diversion and thereby demonstrate beneficial use and compliance with water rights administration on the Yampa)
- Protecting environmental and recreational water uses at locations identified in the nonconsumptive needs study of the YWG BRT. (Project will dramatically increase safety of boat passage at both high and low flows)
- Restoring, maintaining, and modernizing water storage and distribution infrastructure. (Headgate replacement see pictures attached).



• Developing an integrated system of water use, storage, administration and delivery to reduce water shortages and meet environmental and recreational needs. (Diversion and headgate replacement serve multiple interests).

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.

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.



Applicant	Award	Agreement No. (Relation)	Agreement Start Date	Agreement End Date	RT
The Nature Conservancy	WINES DITCH EVALUATION	POGG1 PDAA 201700000494	10/16/16	7/31/18	SWCO
The Nature Conservancy	COWCB CDM SWSI TO 1	2015-009 TO 1	7/26/16	6/30/19	

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. Because the applicant is not a governmental entity, TABOR does not apply in this case.

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



Last Updated: November 2018 (1) Required with application.

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



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?



Overview (answer for both tracks)

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.



Colorado Water Conservation Board

Water Plan Grant - Exhibit A

Statement Of Work				
Date:January 24, 2019				
Name of Grantee:	The Nature Conservancy			
Name of Water Project:	Maybell Ditch Diversion Structure Rehabilitation & Headgate Modernization			
Funding Source:	CWCB WPI Grant			

Water Project Overview:

The Nature Conservancy, Maybell Irrigation District, Friends of the Yampa, and Ranch Advisory Partners are collaborating to create and develop engineering design and construction plans to improve the diversion structure and replace the headgate on the Maybell Ditch. Maybell Ditch improvements have been prioritized in Roundtable planning efforts and this proposed project meets multiple use criteria - agricultural water efficiency, increased passage for native fish, and addresses boater safety concerns. In the past year, project partners have invested significant resources into the Maybell Ditch - constructing check dams, lining the canal, and installing an automated waste gate. The final elements of the system improvements to the diversion structure and headgate will further increase the efficiency of the oldest and largest diverter on the Yampa River while meeting local and regional environmental and recreational needs.

Project Objectives:

The diversion improvements for the Maybell Ditch shall meet the following operational and design objectives:

- 1. Increase stream flow within the Yampa River by only diverting the quantity of water that will be beneficially used by irrigators, increasing efficiency by minimizing the amount of water returned to the River at the end of the canal or at other bypass locations.
- 2. Automate the diversion headgate to allow remote control and monitoring.
- 3. Collect and transmit diversion data to the State Engineer as required.
- 4. Be able to divert the full water right of 129 cfs through the diversion headgate structure and flow measurement device.
- 5. Improve boat and fish passage through the diversion dam.

Tasks

Task 1 – Preliminary Design

Description:

• The goal of this task is to provide two or three preliminary alternative designs for diversion improvements required to meet the project objectives.



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Last Updated: November 2018

Tasks

Method/Procedure: The following is required to complete this Task: 1. Meet with project stakeholders to verify operating and design parameters. The following topics will likely be discussed: • Verification of desired minimum and maximum flow capacities of the diversion. • Operation of the structure, including months of operation, level of automation desired, maintenance constraints, etc. • Preferences and/or standards for materials and components including gate manufacturers, pipe materials, etc. • Known permitting issues that may affect the design or operation of the structure. 2. Conduct topographic survey as required for hydraulic modeling, design of structures, estimating quantities of materials, permitting, and other uses as required. 3. Conduct geotechnical borings and sampling as required for the design of a new headgate structure. 4. Develop hydraulic models of proposed canal diversion improvements (HEC-RAS) to verify operation and compliance of each design to the design objectives. Hydraulic models shall start upstream of the river diversion dam and include the diversion approach channel, head gate structure, flume or flow measurement structure, and the canal downstream of the fume. 5. Develop hydraulic model of the existing canal from the diversion to a section downstream of the existing flume over the Yampa River to determine the safe capacity of the canal. This section of canal is approximately 1.1 miles in length. 6. Prepare preliminary plans and sections of alternative headgate diversion structures designs for review. Alternative designs can include, but are not limited to: a. Alternatives to using the existing ramp flume for flow measurement such as area velocity meters, automated head gates with integral area velocity meters, etc. b. Alternative materials for the diversion headwall and discharge pipes including but not limited to precast concrete, fabricated steel, precast concrete box culverts, corrugated steel, reinforced concrete pipe, etc. Prepare preliminary plans and sections of the alternate design 7. Prepare a preliminary design plan for telemetry and SCADA equipment required for remote operation and monitoring of the diversion. All controls, water level sensors, valve actuators, etc. shall be solar powered. A radio and/or cell phone coverage survey shall be completed to select a communication method that will work given the unique terrain of this location. The estimated capital cost and monthly operating costs for various communication methods shall be included in the summary memorandum. The controls shall include the integration of the existing bypass gate and the new diversion head gates. The equipment shall also collect and store flow data for the flow measurement device. The flow data collected from the flow measurement device shall also be used to adjust the headgate to provide a precise flow. In addition, the control system shall include two cameras at the diversion and flow measurement device if appropriate to allow for remote monitoring of the diversion. The controls shall allow the ditch company to monitor and control the diversion from a remote computer or cell phone. Prepare preliminary design plan for boulder weirs in the main channel of the Yampa River 8. to provide controlled drops for improved fish and boat movement. Data from the hydraulic

model and topographic survey shall be utilized to identify the quantity, and size of boulders required. The use of native boulders available in the River near the diversion is encouraged. Any permitting restrictions to using native material shall be researched and documented at



COLORADO Colorado Water Conservation Board Department of Natural Resources

Last Updated: November 2018

Tasks

this design phase. A preliminary plan and section shall be developed.

- 9. Prepare preliminary design of improvements required to increase the height of the diversion dam upstream of the headgate structure to divert the decreed diversion rate of 129 cfs. A plan, cross section, material specifications, and estimated quantity of material shall be noted.
- 10. Note any design constraints or issues due to permitting, including permits from the Army Corps of Engineers, Moffat County for flood plain permitting, and other agencies as required.
- 11. Prepare a brief design memorandum documenting the design alternatives considered, the pros and cons of each, and an opinion of probable cost for each. Note any design constraints due to permitting for the project including required permits from the Army Corps of Engineers, Moffat County for flood plain permitting, and the State of Colorado Division of Wildlife and/or Water Resources.
- 12. A meeting with the project stakeholders shall be scheduled to discuss the design alternatives and to select the preferred design alternative
- 13. Consistently consult with the contracted engineer, agricultural producers, and other stakeholders to ensure full engagement and project buy-in.
- 14. Consult with engineer to maximize recreation and environmental benefits while meeting onthe-ground needs of agricultural irrigators and ensure optimal alignment between engineering design and goals of the Yampa/Green/White Round Table.

Deliverable:

• Summary memorandum documenting the preliminary design, permitting issues, documentation of structure capacity, design, and operating requirements and constraints, opinion of probable costs, and summary of pros and cons for each flow measurement structure alternative including the estimated cost for data collection equipment.

Tasks

Task 2 – Construction Documents

Description of Task:

The goal of this task is to prepare a final set of construction documents that are suitable for competitive bidding, and to prepare a final design report documenting the finished design.

Method/Procedure:



COLORADO Colorado Water Conservation Board Department of Natural Resources

Last Updated: November 2018

Tasks

- 1. Complete the design and specifications of the preferred design alternative selected from the Preliminary Design task. The engineer shall complete bid documents including division, general conditions, and technical specifications for materials and construction in CSI format, and a bid form. A set of plans, suitable for competitive bidding, will be prepared for all structures and components. Construction drawings will include demolition, layout, sections, and component installation details as required. An updated opinion of probable cost will be required.
 - 2. Plans shall be provided as PDF documents on 11 x 17 sheets. Specifications shall also be provided as PDF documents, 8.5 x 11 sheets.
 - 3. Plans shall be submitted at 50%, 95%, and 100% complete for review and comment by the Maybell Ditch shareholders.
- 4. Provide consistent updates to the Yampa/White/Green Round Table
- 5. Staff and host a series of meetings between project proponents and the engineers to make certain all stakeholders are supportive of project activities.

Deliverable:

- Submit construction document plans set and technical specifications at 95% for LACC review and comment, and at 100% complete.
- Prepare an updated opinion of probable cost for the construction documents.
- Update other information provided in preliminary design report as required to document final design decisions, constraints, and operational requirements.

Tasks

Task 3 - Manage Competitive Bidding Process Resulting in Successful Selection of Design Firm

Description of Task:

The goal of this task is to competitively bid the design drawings to qualified contractors and observe construction to verify conformance to the plans and specifications.

Method/Procedure:

- Provide consistent updates to the Yampa/White/Green Round Table
- Staff and host a series of meetings between project proponents and the engineers to make certain all stakeholders are supportive of project activities.

Design and manage an open and competitive bid process that meets the needs of project stakeholders and agricultural producers. In addition, the bid process and selection will comport with all Basin Round Table and Public Funding requirements.

Deliverable:

Successful selection of Design/Build Firm.

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 CWCB in hard copy and electronic format 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 B. 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.



Performance Measures



COLORADO Colorado Water

Conservation Board

Department of Natural Resources

Colorado Water Conservation Board

Water Supply Reserve Fund

EXHIBIT B - BUDGET AND SCHEDULE - Direct & Indirect (Administrative) Costs

Date: January 23, 2019

Water Activity Name: Maybell Ditch Diversion Structure Rehabilition & Headgate Modernization Project

Grantee Name: The Nature Cosnervancy

Task No. ⁽¹⁾	<u>Description</u>	<u>Start Date⁽²⁾</u>	<u>End Date</u>	<u>Matching Funds</u> (cash & in-kind) ⁽³⁾	<u>WSRF Funds</u> (Basin & Statewide combined) ⁽³⁾	<u>Total</u>
1	Preliminary Engineering	6/15/2019	9/1/2019	\$ 100,100	\$ 26,200	\$126,300
2	Construction Documents	10/1/19	12/31/19	\$ 187,500	\$ 48,800	\$236,300
3	Stakeholder Engagement & Public Bidding Process	4/1/2019	6/1/2019	\$ 10,900	\$-	\$10,900
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0 \$0
						\$0
						\$0
						\$0
						\$0
			Total	\$298,500	\$75,000	\$373,500
exceed 15% of	ask that include costs for Grant Administration must pro the total WSRF Grant amount. or funding under \$100K - 45 Days from Board Approval;				F Grant contribution	towards that task does not
(3) Round value	es up to the nearest hundred dollars.					
Additional do	cumentation providing a Detailed/Itemized Budget may	be required for contracting	. Applicants are encoura	aged to coordinate with t	the CWCB Project Ma	anager to determine
specifics.						
Reimbursem	ent 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 comm	ence as soon as the grantee	enters contract and re	ceives formal signed Stat	e Agreement.	
accepted, the f	pay the last 10% of the entire water activity budget whe inal payment has been issued, the water activity and pu d submit to the CWCB with 90 days of the expiration of	rchase order (PO) or contra	ct will be closed without	t any futher payment. A	ny entity that fails to	

• Additonally, the applicant shall provide a progress report every 6 months, beginning from the date of contract execution

• Standard contracting proceedures dictate that the Expiration Date of the contract shall be 5 years from the Effective Date.



Friends of the Yampa

www.friendsoftheyampa.com PO Box 771654, Steamboat Springs, CO 80477

Mission: To protect and enhance the environmental and recreational integrity of the Yampa River and its tributaries thru stewardship, advocacy, education and partnerships.

January 31, 2019

Rebecca Mitchell, Director Colorado Water Conservation Board 1313 Sherman St., Room 718 Denver, CO 80203

RE: Letter of Support for the Maybell Ditch Diversion Rehabilitation Project

Hello Rebecca,

We at Friends of the Yampa would like for this letter of support to be added to any packet or consideration for the Maybell Ditch Diversion Rehabilitation Project granting needs.

This is a win-win project on many levels; one that partners agriculture, environmental and recreational uses. In rehabilitating this diversion, we will see better efficiencies for the Maybell Ditch as well as improvements for environmental and recreational uses.

Friends of the Yampa has eyed a project like this for years as the Maybell Ditch diversion structure of today limits recreation thru Juniper Canyon due to the diversion not having a clear boat chute for easy passage. In rehabilitating this diversion structure, we will see an increase in recreation in this section of the Yampa River.

If approved, this project will be a poster child for the State of Colorado and its Colorado Water Plans goal of benefiting multiple uses.

Please let me know if you need anything else.

Sincerely yours,

Kent Vertrees President Friends of the Yampa 970-846-7933





Rebecca Mitchell, Director Colorado Water Conservation Board 1313 Sherman St., Room 718 Denver, CO 80203

February 20, 2019

Dear Ms. Mitchell,

I am writing on behalf of the Yampa/White/Green Basin Roundtable in support of the partnership effort to rehabilitate the Maybell Ditch diversion structure and headgate being undertaken by the Maybell Irrigation District, The Nature Conservancy, Friends of the Yampa, and Ranch Advisory Partners.

The diversion structure and headgate improvement project proposed by the Maybell Irrigation District, The Nature Conservancy, Friends of the Yampa, and Ranch Advisory Partners will increase the efficiency and ease of operation of the historic Maybell Ditch – as well as improve boater and fish passage. By rehabilitating the inchannel diversion structure and installing a modern headgate, irrigators will be able to better control the amount of water diverted from the Yampa on a real time basis – creating water savings that will generate positive impacts for the Yampa River, as well as the Maybell ditch irrigators. Improvements to the Maybell ditch were identified as a priority through a Basin Roundtable planning effort and it will not only help meet local concerns, but will improve water efficiencies in the Colorado River Basin in general.

If funded, the diversion and headgate rehabilitation project will modernize existing infrastructure in order to address water reliability concerns. The Maybell Irrigation District has been engaged in a broader, multi-year effort to rehabilitate the Maybell ditch – with the ultimate goal of improving overall efficiencies and function to benefit the irrigation district while making the Maybell headgate and diversion structure safer for boating on the Yampa River. The Basin Roundtable supports these types of efforts, as they generate benefits for the agricultural community, outdoor recreation interests, and the endangered fish of the Yampa River.

I respectfully urge you to positively consider the Maybell Irrigation District and The Nature Conservancy's grant application to the Water Plan Implementation grant program and to provide funding for this project. This project has strong potential to preserve water security for agricultural producers on the Maybell ditch while benefitting the natural environment – both of which are goals of the Colorado Water Plan.

With Gratitu

Jackie Brown Yampa White Green Basin Roundtable, Chair

Maybell Irrigation District Maybell CO. 81640

Jackie Brown, Chair Yampa / Green / White Basin Roundtable

January 23, 2019

Dear Ms. Brown,

I am writing on behalf of [Maybell Irrigation District / Ranch Advisory Partners] in support of the effort to rehabilitate the Maybell Ditch diversion structure and headgate we are pursuing in partnership with The Nature Conservancy, Friends of the Yampa, and Ranch Advisory Partners. We feel this project warrants funding from the Yampa / White / Green Basin Roundtable because it aligns with the Roundtable goal to encourage locally driven collaborative solutions to water supply challenges in Colorado.

The diversion structure and headgate improvement project will increase the efficiency and ease of operation of the historic Maybell Ditch – as well as improve boater and fish passage. By rehabilitating the in-channel diversion structure and installing a modern headgate, the Maybell Irrigation District will be able to better control the amount of water diverted from the Yampa on a real time basis –generating positive impacts for the Yampa River as well as the Maybell ditch irrigators. Improvements to the Maybell ditch were identified as a priority through a Basin Roundatble planning effort and we believe it will not only help meet local concerns but will contribute to improving water efficiencies in the Colorado River Basin in general.

If funded, the diversion and headgate rehabilitation project will modernize existing infrastructure and address water reliability concerns. This project is part of a broader, multi-year effort the Maybell Irrigation District has undertaken to improve overall efficiencies and function of the Maybell Ditch. This phase of the bigger project will benefit the irrigation district while making the Maybell headgate and diversion structure safer for boating and better for fish passage on the Yampa River.

We believe this project aligns with the Basin Roundtable's commitment to projects that generate benefits for the agricultural community, outdoor recreation interests, and the endangered fish of the Yampa River. Additionally, it has strong potential to preserve water security for agricultural producers on the Maybell ditch while benefitting the natural environment – both of which are goals of the Colorado Water Plan.

Thank you for your time,

Mike Camblin

President Maybell Irrigation District P.O. Box 131 Maybell CO. 81640



RANCH ADVISORY PARTNERS

Rebecca Mitchell, Director Colorado Water Conservation Board 1313 Sherman St., Room 718 Denver, CO 80203

January 29, 2019

Dear Ms. Mitchell,

I am writing on behalf of Ranch Advisory Partners in support of the effort to rehabilitate the Maybell Ditch diversion structure and headgate. We are pursuing this effort in partnership with The Nature Conservancy, and the Maybell Irrigation District.

Ranch Advisory Partners works to improve the ecological and financial health of agricultural and rangelands across the West. Our team has been working in Northwest Colorado for over 20 years, and we are keenly aware of how critical effective irrigation infrastructure and water supply are for agricultural operators in the Basin.

The diversion structure and headgate improvement project will increase the efficiency and ease of operation of the historic Maybell Ditch – as well as improve boater and fish passage. By rehabilitating the in-channel diversion structure and installing a modern headgate, the Maybell Irrigation District will be able to better control the amount of water diverted from the Yampa on a real time basis –generating positive impacts for the Yampa River as well as the Maybell ditch irrigators. Improvements to the Maybell ditch were identified as a priority through a Basin Roundtable planning effort and we believe it will not only help meet local concerns but will contribute to improving water efficiencies in the Colorado River Basin in general.

If funded, the diversion and headgate rehabilitation project will modernize existing infrastructure and address water reliability concerns. This project is part of a broader, multi-year effort the Maybell Irrigation District has undertaken to improve overall efficiencies and function of the Maybell Ditch. This phase of the bigger project will benefit the irrigation district while making the Maybell headgate and diversion structure safer for boating and better for fish passage on the Yampa River.

I respectfully urge you to positively consider the Maybell Irrigation District and The Nature Conservancy's grant application to the Water Plan Implementation grant program and to provide funding for this project. This project has strong potential to preserve water security for agricultural producers on the Maybell ditch while benefitting the natural environment – both of which are goals of the Colorado Water Plan.

Thank you for your consideration,

Todd Graham Ranch Advisory Partners