

Water Supply Reserve Fund – Grant and Loan Program
Water Activity Summary Sheet
May 15-16, 2019
Agenda Item 26(d)

Applicant & Grantee: The Nature Conservancy

Water Activity Name: Maybell Ditch Diversion Structure Rehabilitation and Headgate Modernization

Water Activity Purpose: Agricultural & Environmental/Recreation/Implementation

County: Moffat

Drainage Basin: Yampa

Water Source: Yampa

Amount Requested: \$73,000 Yampa/White/Green Basin Account

Matching Funds: Applicant & 3rd Party Match (cash & in-kind) = \$305,500
• 418% of the Basin Account request (meets 10% min)

Staff Recommendation:

Staff recommends approval of up to \$73,000 from the Yampa/White/Green Basin Account to help fund the project titled: Maybell Ditch Diversion Structure Rehabilitation and Headgate Modernization.
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Water Activity Summary: WSRF grant funds, if approved, will assist The Nature Conservancy develop final engineering and construction documents for the Maybell Ditch head gate replacement and diversion structure improvement. A recent analysis based on publicly available data assessed the Maybell Ditch diversion as one of the least efficient in the area. The Maybell Ditch annual diversions through the canal are approximately 20,000 acre-feet per year with an irrigation water requirement of 1,800 acre-feet. The canal provides water for 18 users and approximately 1,100 acres of high-elevation hay fields, the predominant irrigated crop in the region. Project partners have identified several priority projects to improve the operational efficiency of the canal, including canal lining, new check structures, automated waste gate, and new headgate. The Project Partners have already made significant investment since 2016, lining the ditch, automating the waste gate and constructing new check structures. The diversion structure needs improvement to provide boater safety and allow fish passage of native fish, including the four species of endangered fish at low flows.

Discussion: This effort will assist the Yampa/White/Green Basin Roundtable meet the following goals as called out in the Yampa/White/Green Basin Implementation Plan: Protect the YWG from compact curtailment; protect agriculture uses of water; improve agricultural water supplies and reduce shortages; quantify and protect recreational water uses; maintain water quality; develop an integrated system of water use, storage, administration and delivery to reduce water shortages and meet environmental and recreational needs.

Issues/Additional Needs: The applicant must submit several letters of matching commitment (see *Funding Summary/Matching Funds* section below) prior to entering into a contract with the state, otherwise no issues or additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components: General Eligibility, Entity Eligibility, Water Activity Eligibility, and Eligibility Based on Match Requirements.

Evaluation Criteria: This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to Basin Roundtable Chair's Recommendation Letter and the WSRF Grant Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>	<u>Status</u>
The Nature Conservancy	\$195,000	\$20,500	\$215,500	Secured
CWCB Water Plan Grant	\$75,000	\$0	\$75,000	Pending
Maybell Irrigation District	\$10,000	\$0	\$10,000	Pending
Sub-total	\$280,000	\$20,500	\$300,500	
WSRF Gunnison Basin Account	\$73,000	\$0	\$73,000	Secured
Total Project Costs	\$353,000	\$20,500	\$373,500	

CWCB Project Manager: Craig Godbout



April 12, 2019

Craig Godbout
Colorado Water Conservation Board
1313 Sherman St., Room 718
Denver, CO 80203

Dear Craig Godbout,

At the April 10th meeting, the Yampa White Green Basin Roundtable (YWGBRT) voted unanimously to approve the Maybell Ditch Diversion Structure and Headgate Rehabilitation Project presented by Mike Camblin in the amount of \$73,000.

This grant request would develop final engineering designs and construction plans to improve the diversion structure and replace the headgate on the Maybell Ditch. The grant request meets seven of the Roundtable's BIP goals: Protect the YWG from compact curtailment; protect agriculture uses of water; improve agricultural water supplies and reduce shortages; quantify and protect recreational water uses; maintain water quality; develop an integrated system of water use, storage, administration and delivery to reduce water shortages and meet environmental and recreational needs.

Please do not hesitate to contact me with any questions.

With Gratitude,

Jackie Brown

Yampa White Green Basin Roundtable, Chair



Last Update: August 3, 2017

Colorado Water Conservation Board

Water Supply Reserve Fund Grant Application

Instructions

All WSRF grant applications shall conform to the current [2016 WSRF Criteria and Guidelines](#).

To receive funding from the WSRF, a proposed water activity must be approved by a Roundtable(s) **AND** the Colorado Water Conservation Board (CWCB). The process for Roundtable consideration and recommendation is outlined in the 2016 WSRF Criteria and Guidelines. The CWCB meets bimonthly according to the schedule on page 2 of this application.

If you have questions, please contact the current CWCB staff Roundtable liaison:

Arkansas

Ben Wade
ben.wade@state.co.us
303-866-3441 x3238

Gunnison | North Platte | South Platte | Yampa/White

Craig Godbout
craig.godbout@state.co.us
303-866-3441 x3210

Colorado | Metro | Rio Grande | Southwest

Megan Holcomb
megan.holcomb@state.co.us
303-866-3441 x3222

WSRF Submittal Checklist (Required)

x	I acknowledge this request for funding was recommended for CWCB approval by the sponsoring Basin Roundtable(s).
x	I acknowledge I have read and understand the 2016 WSRF Criteria and Guidelines .
x	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract . ⁽¹⁾
Exhibit A	
x	Statement of Work ⁽²⁾ (Word – see Exhibit A Template)
x	Budget & Schedule ⁽²⁾ (Excel Spreadsheet – see Exhibit A Template)
x	Letters of Matching and/or Pending 3 rd Party Commitments ⁽²⁾
Exhibit C	
x	Map ⁽²⁾
x	Photos/Drawings/Reports
x	Letters of Support
	Certificate of Insurance ⁽³⁾ (General, Auto, & Workers' Comp.)
Contracting Documents	
	Certificate of Good Standing ⁽³⁾
	W-9 ⁽³⁾
	Independent Contractor Form ⁽³⁾ (If applicant is individual, not company/organization)
	Electronic Funds Transfer (ETF) Form ⁽³⁾

(1) Click "Grant Agreements". For reference only/do not fill out or submit/required for contracting

(2) Required with application if applicable.

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



Last Update: August 3, 2017

Schedule		
CWCB Meeting	Application Submittal Dates	Type of Request
January	December 1	Basin Account; BIP
March	February 1	Basin/Statewide Account; BIP
May	April 1	Basin Account; BIP
July	June 1	Basin Account; BIP
September	August 1	Basin/Statewide Account; BIP
November	October 1	Basin Account/BIP

Desired Timeline	
Desired CWCB Hearing Month:	March Meeting
Desired Notice to Proceed Date:	April 1

Water Activity Summary		
Name of Applicant	The Nature Conservancy	
Name of Water Activity	Maybell Ditch Diversion Structure Rehabilitation and Headgate Modernization	
Approving Roundtable(s)		Basin Account Request(s) ⁽¹⁾
Yampa/Green/White		\$73,000 (1)
Basin Account Request Subtotal		\$ 73,000
Statewide Account Request ⁽¹⁾		\$ 0
Total WSRF Funds Requested (Basin & Statewide)		\$ 75,000
Total Project Costs		\$ \$373,500

(1) Please indicate the amount recommended for approval by the Roundtable(s)

* Amount of funding from Yampa/Green/White was reduced from \$75,000 to \$73,000 based on the recommendation by the Grants Sub-Committee

Grantee and Applicant Information	
Name of Grantee(s)	The Nature Conservancy
Mailing Address	5398 Manhattan Circle, Boulder, CO 80303
FEIN	53-0242652
Grantee's Organization Contact ⁽¹⁾	Jennifer Wellman
Position/Title	Yampa Program Director



Last Update: August 3, 2017

Grantee and Applicant Information	
Email	Jennifer.wellman@tnc.org
Phone	303.859.9082
Grant Management Contact ⁽²⁾	<u>Laura Wilkins</u>
Position/Title	Grants Specialist, The Nature Conservancy
Email	Laura.wilkins@tnc.org
Phone	630.244.1693
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	

(1) Person with signatory authority

(2) Person responsible for creating reimbursement invoices (Invoice for Services) and corresponding with CWCB staff.

Description of Grantee
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)	
<input type="checkbox"/>	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.
<input type="checkbox"/>	Public (Districts): authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises
<input type="checkbox"/>	Private Incorporated: mutual ditch companies, homeowners associations, corporations



Last Update: August 3, 2017

Type of Eligible Entity (check one)	
	Private Individuals, Partnerships, and Sole Proprietors: are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.
x	Non-governmental organizations: broadly, any organization that is not part of the government
	Covered Entity: as defined in Section 37-60-126 Colorado Revised Statutes

Type of Water Activity (check one)	
	Study
x	Implementation

Category of Water Activity (check all that apply)		
X	Nonconsumptive (Environmental)	
X	Nonconsumptive (Recreational)	
X	Agricultural	
	Municipal/Industrial	
	Needs Assessment	
	Education & Outreach	
	Other	Explain:

Location of Water Activity	
Please provide the general county and coordinates of the proposed activity below in decimal degrees . The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Counties	Moffat County, Colorado
Latitude	40.5177° N
Longitude	108.0870° W

Water Activity Overview
Please provide a summary of the proposed water activity (200 words or less). Include a description of the activity and what the WSRF funding will be used for specifically (e.g. studies, permitting, construction). Provide a description of the water supply source to be utilized or the water body affected by the activity. 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, area of habitat improvements. If this project addresses multiple purposes or spans multiple basins, please explain.



Last Update: August 3, 2017

Water Activity Overview

The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, and Schedule.

The Nature Conservancy respectfully requests \$73,000 to create final engineering and construction documents for the Maybell Ditch head gate replacement and diversion structure improvement. A recent analysis based on publicly available data assessed the Maybell Ditch diversion as one of the least efficient in the area. The Maybell Ditch annual diversions through the canal are approximately 20,000 acre-feet per year with an irrigation water requirement of 1,800 acre-feet. The canal provides water for 18 users and approximately 1,100 acres of high-elevation hay fields, the predominant irrigated crop in the region. Project partners have identified several priority projects to improve the operational efficiency of the canal, including canal lining, new check structures, automated waste gate, and new headgate. The Project Partners have already made significant investment since 2016, lining the ditch, automating the waste gate and constructing new check structures. The diversion structure needs to be improved to provide boater safety and allow fish passage of native fish, including the four species of endangered fish, at low flows. To be clear, the grant application is for final engineering and construction documents for replacing the head gate and improving the diversion structure only.

Measurable Results

To catalog measurable results achieved with WSRF funds please provide any of the following values.

	New Storage Created (acre-feet)	
3,000	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
0	Existing Storage Preserved or Enhanced (acre-feet)	
95,040	Length of Stream Restored or Protected (linear feet)	
	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
	Area of Restored or Preserved Habitat (acres)	
	Length of Pipe/Canal Built or Improved	
1,800	Other	Explain: Consumptive Use Preserved

Water Activity Justification

Provide a description of how this water activity supports the goals of [Colorado's Water Plan](#), the most recent [Statewide Water Supply Initiative](#), and the respective [Roundtable Basin Implementation Plan](#)



Last Update: August 3, 2017

Water Activity Justification

[and Education Action Plan](#) ⁽¹⁾. 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).

For applications that include a request for funds from the Statewide Account, the proposed water activity shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan criteria for state support (CWP, Section 9.4, pp. 9-43 to 9-44;) (Also listed pp. 4-5 in [2016 WSRF Criteria and Guidelines](#)).

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 contribute to improving water efficiencies in the Colorado River Basin in general. 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, 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, also 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)
- Protecting agriculture uses of water in the YWG Basin within the context of private property rights (local water commissioner is beginning to limit the Maybell ditch diversions to ensure Elkhead Reservoir releases are not diverted)
- Quantify and protect environmental and recreational water uses at locations identified in the nonconsumptive needs study of the YWG BRT. (Dramatically increase safety of boat passage at both high and low flows)
- Restore, maintain, and modernize water storage and distribution infrastructure. (Head gate replacement – see pictures attached).
- Develop an integrated system of water use, storage, administration and delivery to reduce water shortages and meet environmental and recreational needs. (Diversion and head gate replacement serve multiple interests).

(1) Access Basin Implementation Plans or Education Action Plans from Basin drop down menu.



Last Update: August 3, 2017

Matching Requirements: Basin Account Requests

Basin (only) Account grant requests require a 25% match (cash and/or in-kind) from the Applicant or 3rd party and shall be accompanied by a **letter of commitment** as described in the 2016 WSRF Criteria and Guidelines (submitted on the contributing entity's letterhead). Attach additional sheet if necessary.

Contributing Entity	Amount and Form of Match (note cash or in-kind)
The Nature Conservancy	\$195,000 (cash); \$20,500 (in-kind)
CWCB	\$75,000 (cash, unsecured)
Maybell Irrigation District	\$10,000 (cash secured)
Total Match	\$ 300,500
If you requested a Waiver to the Basin Account matching requirements, indicate the percentage you wish waived.	

Matching Requirements: Statewide Account Requests

Statewide Account grant requests require a 50% match as described in the 2016 WSRF Criteria and Guidelines. A minimum of 10% match shall be from Basin Account funds (cash only). A minimum of 10% match shall be provided by the applicant or 3rd party (cash, in-kind, or combination). The remaining 30% of the required match may be provided from any other source (Basin, applicant, or 3rd party) and shall be accompanied by a **letter of commitment**. Attach additional sheet if necessary.

Contributing Entity	Amount and Form of Match (note cash or in-kind):
Basin Account Funds	
The Nature Conservancy	
Maybell Irrigation District	
Total Match	
If you requested a Waiver to the Statewide Account matching, indicate % you wish waived. (Max 50% reduction of requirement).	

Related Studies

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



Last Update: August 3, 2017

Related Studies

Previous CWCB Grants

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

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	

Tax Payer Bill of Rights

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

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



Last Update: January 9, 2018

Colorado Water Conservation Board	
Water Supply Reserve Fund	
<u>Exhibit A - Statement of Work</u>	
Date:	January 21, 2019, Revised March 21, 2019
Water Activity Name:	Maybell Ditch Diversion Rehabilitation and Head Gate Modernization
Grant Recipient:	The Nature Conservancy
Funding Source:	YWG Basin Roundtable
Water Activity Overview: (Please provide brief description of the proposed water activity (no more than 200 words). Include a description of the overall water activity and specifically what the WSRF funding will be used for.)	
<p>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 Round Table planning efforts and this proposed project meets multiple use criteria - agricultural water efficiency, increased fish 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 auto waste gate. These final pieces of the system improvements will modernize the oldest and largest diverter on the Yampa River.</p>	
PROJECT OBJECTIVES	
<p>The diversion improvements for the Maybell Ditch shall meet the following operational and design objectives:</p> <ol style="list-style-type: none">1. Increase stream flow within the Yampa River by only diverting the quantity of water that will be beneficially used by irrigators and minimize return flows back to the River at the end of the canal or at other bypass locations.2. Automate the diversion head gates 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.	



Last Update: January 9, 2018

Tasks
Provide a detailed description of each task using the following format:
<u>Task 1 – Preliminary Engineering</u>
Description of Task: PRELIMINARY DESIGN & ENGINEERING
<ul style="list-style-type: none">The goal of this task is to provide two or three preliminary alternative design for diversion improvements required to meet the project objectives.
Method/Procedure:
<p>The following is required to complete this Task:</p> <ol style="list-style-type: none">1. Meet with project stake holders to verify operating and design parameters. The following topics will likely be discussed:<ul style="list-style-type: none">• 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 flume.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:



Last Update: January 9, 2018

Tasks

- 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 headgates 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.
8. Prepare preliminary design plan for boulder weirs in the main channel of the Yampa River 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 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. Not 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



Last Update: January 9, 2018

Tasks
<p>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.</p> <p>12. A meeting with the project stake holders shall be scheduled to discuss the design alternatives and to select the preferred design alternative</p> <p>13. Consistently consult with the contracted engineer, agricultural producers, other stakeholders to ensure full engagement and project buy-in.</p> <p>14. Consult with engineer to maximize recreation and environmental benefits while meeting on-the-ground needs of agricultural irrigators and ensure optimal alignment between engineering design and goals of the Yampa/Green/White Round Table.</p>
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
<p>Summary of Deliverables for the Preliminary Design Task:</p> <ul style="list-style-type: none">• Preliminary design drawings for the headgate structure, modifications to the flow measurement structure, controls and monitoring system, diversion dam modifications, and boulder weirs in the main river channel.• Opinion of probable cost for each design alternative.• 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.• Series of meetings with Maybell Ditch stake holders to review preliminary design alternatives.• 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.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
<ul style="list-style-type: none">• 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.



Last Update: January 9, 2018

Tasks
Provide a detailed description of each task using the following format:
<u>Task 2 – Construction Documents</u>
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:
<ol style="list-style-type: none">1. Complete the design and specifications of the preferred design alternative selected 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 stake holders.4. Provide consistent updates to the Yampa/White/Green Round Table5. Staff and host a series of meetings between project proponents and the engineers to make certain all stakeholders are supportive of project activities.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Summary of Deliverables for Construction Document Task. <ul style="list-style-type: none">• Submit construction document plans set and technical specifications at 95% for LACC review and comment, and 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.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
<ul style="list-style-type: none">• Submit construction document plans set and technical specifications at 95% for LACC review and comment, and 100% complete.
<u>Task 3 –Stakeholder Engagement & Public Bidding Process</u>



Last Update: January 9, 2018

Description of Task: Manage Competitive Bidding Process Resulting in Successful Selection of Design Firm
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:
<ul style="list-style-type: none">• 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.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
<ul style="list-style-type: none">• Successful selection of Design/Build Firm.

Budget and Schedule

Exhibit B - 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](#). A separate [excel formatted](#) Budget is required for engineering costs to include rate and unit costs.

Reporting Requirements

Progress Reports: The grantee 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 grantee shall provide the CWCB a Final Report on the grantee'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.

Payments



Last Update: January 9, 2018

Reporting Requirements

Payment will be made based on actual expenditures, must include invoices for all work completed and must be on grantee's letterhead. 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.

The CWCB will pay the last 10% of the entire water activity 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 water activity and purchase order or contract will be closed without any further payment. Any entity that fails to complete a satisfactory Final Report and submit to CWCB within 90 days of the expiration of a purchase order or contract may be denied consideration for future funding of any type from CWCB.

Performance Requirements

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

(b) Accountability: Per the 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 the 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.

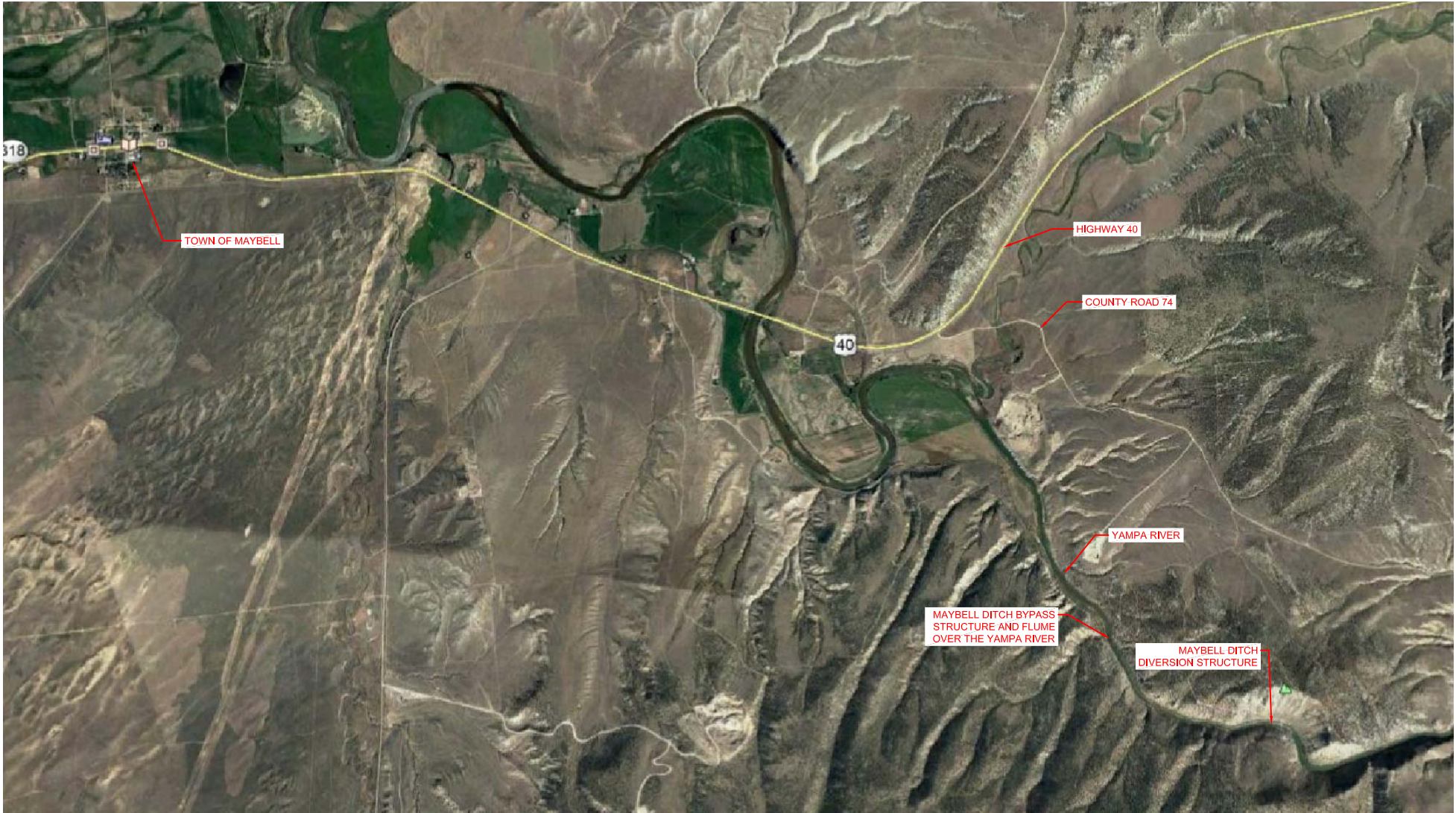
EXHIBIT B - BUDGET AND SCHEDULE - Direct & Indirect (Administrative) Costs

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

<u>Task No.</u> ⁽¹⁾	<u>Description</u>	<u>Start Date</u> ⁽²⁾	<u>End Date</u>	<u>Matching Funds</u> <u>(cash & in-kind)</u> ⁽³⁾	<u>WSRF Funds</u> <u>(Basin &</u> <u>Statewide</u> <u>combined)</u> ⁽³⁾	<u>Total</u>
1	Preliminary Engineering	6/15/2019	9/1/2019	\$ 102,100	\$ 26,200	\$128,300
2	Construction Documents	10/1/19	12/31/19	\$ 187,500	\$ 46,800	\$234,300
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				\$300,500	\$73,000	\$373,500

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

PRELIMINARY
MAYBELL DITCH
CONCEPT DIVERSION IMPROVEMENTS PLANS
FOR THE
THE NATURE CONSERVANCY
January 2019



VICINITY MAP
NOT TO SCALE

KNOW WHAT'S BELOW
811
CALL BEFORE YOU DIG

No.	Revisions:	Date:

Maybell Ditch
Diversion Improvements
Moffat County, Colorado

Maybell Ditch Diversion Improvements – Cover Sheet

Wayne E. Eckas, P.E.

1514 Ambrosia Court
Fort Collins, CO 80526
970-690-1001 (Cell)

Designed By:	WEE
Drawn By:	WEE
Checked By:	WEE
Date:	12-21-2018
Sheet No.	P-1



EXISTING BYPASS STRUCTURE AND
FLUME OVER THE YAMPA RIVER

ACCESS ROAD

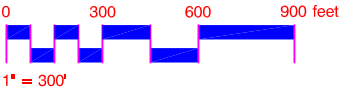
MAYBELL DITCH

EXISTING DIVERSION

YAMPA RIVER

CR 74

Scale 1" = 600', 11 x 17, 1" = 300' 22 x 34



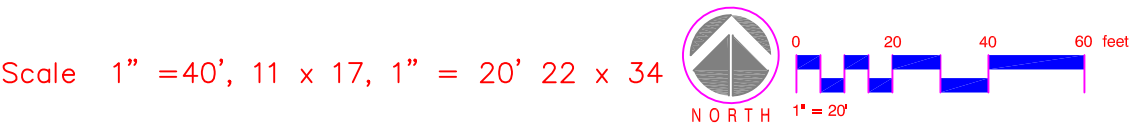
Revisions:		Date:
No.		

Maybell Ditch Diversion Improvements Moffat County, Colorado	
Maybell Ditch – Existing Structures Overall Plan	

Wayne E. Eckas, P.E.

1514 Ambrosia Court
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970-630-1001 (Cell)

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Sheet No.	EX-1



Revisions:		Date:
No.		

Maybell Ditch Diversion Improvements Moffat County, Colorado	Maybell Ditch – Existing Bypass Structure/Flume

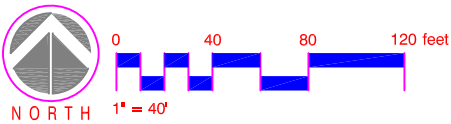
Wayne E. Eckas, P.E.

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Fort Collins, CO 80526
970-630-1001 (Cell)

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Scale 1" = 80', 11 x 17, 1" = 40' 22 x 34



Revisions:		Date:	
No.			

Maybell Ditch Diversion Improvements Moffat County, Colorado	Maybell Ditch - Existing Diversion Structure

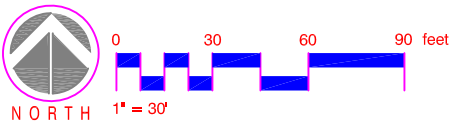
Wayne E. Eckas, P.E.

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970-690-1001 (Cell)

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Checked By:	WEE
Date:	12-21-2018
Sheet No.	EX-3



Scale 1" = 60', 11 x 17, 1" = 30' 22 x 34



Revisions:		Date:
No.		

Maybell Ditch Diversion Improvements Moffat County, Colorado	Maybell Ditch - Diversion Improvements

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Drawn By:	WEE
Checked By:	WEE
Date:	12-21-2018
Sheet No.	P-1