Water Supply Reserve Fund Water Activity Summary Sheet March 21, 2019 Agenda Item 24(m)

Applicant & Grantee: Pitkin County Board of County Commissioners

Water Activity Name: Robinson Ditch Diversion Modification

Water Activity Purpose: Agricultural Implementation

County: Eagle & Pitkin

Drainage Basin: Colorado

Water Source: Roaring Fork River

Amount Requested: \$45,000 Colorado Basin Account

Matching Funds: Applicant Match (cash & in-kind) = \$755,000*

*see issues/additional needs section

• 168% of the Basin Account request (meets 25% min)

• 94% of the total project cost of \$800,000

Staff Recommendation:

Staff recommends approval of up to \$45,000 from the Colorado Basin Account to help fund the project titled: Robinson Ditch Diversion Modification.

Water Activity Summary: The Robinson Ditch Project consists of a series of in-channel and bank improvements to the Roaring Fork River adjacent to the Robinson Ditch headgate. The improvements include modification of an existing boulder structures, construction of an engineered riffle and modifications to the Robinson Diversion inlet channel and headgate. WSRF grant funds, if approved, will help Pitkin County purchase, transport, and deliver boulders for the lower grade control structure.

The Robinson Ditch is a major supply source for agricultural and municipal irrigation in the mid-valley. It is located in the Roaring Fork River, 900 feet downstream of the lower Basalt Bypass Bridge, 2 miles east of El Jebel and 4 miles west of Basalt. The site is 140 feet wide and averages 3.5 feet deep with cobble and boulder substrate. An alluvium island exists between the inlet channel and the Roaring Fork River but has eroded over the years requiring annual maintenance. The main feature of the site is a boulder grade control structure that creates a severe hydraulic, resulting in navigational hazards for recreational boaters and a partial barrier for aquatic species. The Project consists of restoration of the alluvium island and enhancement of structures to reduce the head drop, creating a riffle habitat and allowing recreational passage while improving the quality of the riparian area.

Discussion: As described in the Colorado Basin Roundtable (BRT) chair's recommendation letter, this project was unanimously supported and recommended for approval by the roundtable on February 14, 2018. This project will meet several statewide goals and the Colorado Basin Implementation Plan Section 4 goals (Roaring Fork region) to 1) promote healthy streams, 2) support the recreational economy, 3) mitigate/protect water quality, and 4) sustain agriculture. Specifically, the project will 1) improve stream morphology for the benefit of wildlife, 2) allow recreationists to get by the diversion,

3) prevent deterioration from ongoing annual heavy-equipment maintenance around the diversion, and 4) support agricultural and municipal water needs via irrigation.

Issues/Additional Needs: A significant portion of project funds are yet to be secured. Staff will work with the applicant to ensure sufficient funds are secured prior to contracting.

Eligibility Requirements: The application meets requirements of all eligibility components.

Evaluation Criteria: Staff has determined this activity satisfies the Evaluation Criteria.

Funding Summary / Matching Funds:

| Funding Source | <u>Cash</u> | In-Kind | Total |
|---|-------------|------------|--------------|
| Pitkin County | \$110,000 | \$0 | \$110,000 |
| Eagle County pending | \$25,000 | \$0 | \$25,000 |
| Fishing Is Fun <i>pending</i> | \$103,759 | \$0 | \$103,759 |
| Undefined (additional requests in development from Pitkin | \$345,025 | \$0 | \$345,025 |
| County & Robinson Ditch Company) pending | | | |
| CWCB Water Plan Grant pending | \$171,216 | \$0 | \$171,216 |
| WSRF Colorado Basin Account | \$45,000 | n/a | \$45,000 |
| Totals | \$800,000 | \$0 | \$800,000 |

CWCB Project Manager: Megan Holcomb

THE COLORADO BASIN ROUNDTABLE C/O P.O. BOX 1120 GLENWOOD SPRINGS, COLORADO 81602

February 14, 2018

Megan Holcomb Colorado Water Conservation Board Water Supply Planning Section 1313 Sherman Street Denver CO

Dear Megan:

The Colorado Basin Roundtable voted unanimously at its Jan. 28, 2019 meeting to support the WSRF request of \$45k for the Robinson Ditch Diversion Modification Project on the Roaring Fork River. This project will improve the irrigation ditch's diversion, improve stream morphology for the benefit of wildlife and allow recreationists to get by the diversion. By addressing these factors, and more laid out in the full application, the project clearly comports with our BIP and is a homerun in our book, to borrow a sports term.

Sincerely yours,

Jim Pokrandt

Chair, Colorado Basin Roundtable



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 Gunnison | North Platte | Colorado | Metro | Rio Grande |

South Platte | Yampa/White Southwest

Ben Wade Craig Godbout Megan Holcomb

303-866-3441 x3238 303-866-3441 x3210 303-866-3441 x3222

| | WSRF Submittal Checklist (Required) |
|-------|---|
| Х | I acknowledge this request was recommended for CWCB approval by the sponsoring roundtable. |
| х | I acknowledge I have read and understand the 2016 WSRF Criteria and Guidelines. |
| Х | I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract. (1) |
| Appli | cation Documents |
| х | Exhibit A: Statement of Work ⁽²⁾ (Word – see Template) |
| Х | Exhibit B: Budget & Schedule ⁽²⁾ (Excel Spreadsheet – see Template) |
| Х | Letters of Matching and/or Pending 3 rd Party Commitments ⁽²⁾ |
| х | Map ⁽²⁾ |
| Х | Photos/Drawings/Reports |
| Х | Letters of Support |
| Conti | racting Documents ⁽³⁾ |
| х | Detailed/Itemized Budget ⁽³⁾ (Excel Spreadsheet – see Template) |
| | Certificate of Insurance ⁽⁴⁾ (General, Auto, & Workers' Comp.) |
| | Certificate of Good Standing ⁽⁴⁾ |
| | W-9 Form ⁽⁴⁾ |
| | Independent Contractor Form ⁽⁴⁾ (If applicant is individual, not company/organization) |
| | Electronic Funds Transfer (ETF) Form ⁽⁴⁾ |

- (1) Click "Grant Agreements". For reference only/do not fill out or submit/required for contracting
- (2) Required with application if applicable.
- (3) Additional documentation providing a Detailed/Itemized Budget maybe required for contracting. Applicants are encouraged to coordinate with the CWCB Project Manager to determine specifics.
- (4) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.



| 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: | November 2018 | |
| Desired Notice to Proceed Date: | January 2019 | |

| Water Activity Summary | | | |
|--|---|---|--|
| Name of Applicant | Pitkin County Board of County Commissioners | | |
| Name of Water Activity | Robinson Ditch Diversion Modification | | |
| Approving Roundtable | e(s) | Basin Account Request(s) ⁽¹⁾ | |
| Colorado Basin | | \$45,000 | |
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| | | | |
| Basin Account Request Subtotal | | \$45,000 | |
| Statewide Account Request ⁽¹⁾ | | | |
| Total WSRF Funds Requested (Basin & Statewide) | | \$45,000 | |
| Total Project Costs | | \$800,000 | |

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



| Grantee and Applicant Information | | | |
|--|--|--|--|
| Name of Grantee(s) | Pitkin County Board of County Commissioners | | |
| Mailing Address | 530 East Main Street – Suite 302 – Aspen, CO 81611 | | |
| FEIN | 84-600794 | | |
| Grantee's Organization Contact ⁽¹⁾ | Patti Clapper | | |
| Position/Title | Board of County Commissioners Chairperson | | |
| Email | patti.clapper@pitkincounty.com | | |
| Phone | 970-920-5200 | | |
| Grant Management Contact ⁽²⁾ | Lisa MacDonald | | |
| Position/Title | Healthy Rivers Administrator | | |
| Email | lisa.macdonald@pitkincounty.com | | |
| Phone | 970-920-5191 | | |
| Name of Applicant (if different than grantee) | n/a | | |
| Mailing Address | n/a | | |
| Position/Title | n/a | | |
| Email | n/a | | |
| Phone | n/a | | |

- (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).

Pitkin County is one of the 64 counties in Colorado. Through its Healthy Rivers Program, Pitkin County is committed to maintaining and improving water quality and quantity within the Roaring Fork watershed and the Colorado Basin. Pitkin County works diligently to secure, create and augment minimum stream flows, collaborating with non-profits, granting agencies and appropriate State and Federal agencies to ensure ecological health, recreational opportunities, and wildlife & riparian habitat. Pitkin County promotes water conservation and supports the construction of improvements that contribute to the Healthy Rivers Program and Colorado Water Plan's goals and objectives.



| | Type of Eligible Entity (check one) | | | |
|---|---|--|--|--|
| х | 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: are eligible for funding from the Basin Accounts but not for funding from the Statewide Account. | | | |
| | 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 | | |
| Х | Implementation | | |

| | Category of Water Activity (check all that apply) | | | |
|---|---|----------|--|--|
| Х | Nonconsumptive (Environmental) | | | |
| Х | Nonconsumptive (Recreational) | | | |
| Х | Agricultural | | | |
| Х | 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 Eagle & Pitkin Counties | | | | |
| Latitude | de 39.3697 degrees North | | | |
| Longitude | 107.0710 degrees West | | | |



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

Robinson Diversion Modification Project is located in the Roaring Fork River, 900 feet downstream of the lower Basalt Bypass Bridge, 2 miles east of El Jebel and 4 miles west of Basalt. The site is 140ft wide and averages 3.5ft deep. Substrate is cobble/boulder. The riparian zone extends 5ft on the right bank and 4ft on the left bank.

An alluvium island exists between the inlet channel and the Roaring Fork River but has eroded over the years requiring annual maintenance. The main feature of the site is a boulder grade control structure that creates a severe hydraulic, resulting in navigational hazards for recreational boaters and a partial barrier for aquatic species.

The Robinson Ditch is a major supply source for agricultural and municipal irrigation in the midvalley. It was utilized to replenish the water used for helicopter dips to put out the Lake Christine fire.

The Project consists of restoration of the alluvium island & enhancement of structures to reduce the head drop, creating a riffle habitat & allowing recreational passage & improving the quality of the riparian area.

WSRF funding will be used for the purchase, transport and delivery of boulders for the lower grade control structure.

| Measurable Results | | | |
|--|--|---|--|
| To catalog measurable results achieved with WSRF funds please provide any of the following values. | | | |
| | 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) | | |
| 325 feet | Length of Stream Restored or Protected (linear feet) | | |
| | Efficiency Savings (indicate acre-feet/year OR dollars/year) | | |
| | Area of Restored or Preserved Habitat (acres) | | |
| 200 feet | Length of Pipe/Canal Built or Improved | | |
| | Other | Explain: Amount of Stream Open for Recreational Boaters | |



Water Activity Justification

Provide a description of how this water activity supports the goals of <u>Colorado's Water Plan</u>, the most recent <u>Statewide Water Supply Initiative</u>, and the respective <u>Roundtable Basin Implementation Plan</u> and <u>Education Action Plan</u> (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 <u>2016 WSRF</u> Criteria and Guidelines).

GOALS SUPPORTED: Colorado Water Plan - Section 6.6

The policy of the State of Colorado is to identify and implement environmental and recreational projects and methods to achieve the following statewide long-term goals:

- Promote restoration, recovery, sustainability, and resiliency of endangered, threatened, and imperiled aquatic- and riparian-dependent species and plant communities.
- Protect and enhance economic values to local and statewide economies that rely on environmental and recreational water uses, such as fishing, boating, waterfowl hunting, wildlife watching, camping, and hiking.
- Support the development of multipurpose projects and methods that benefit environmental and recreational water needs as well as water needs for communities or agriculture.
- Understand, protect, maintain, and improve conditions of streams, lakes, wetlands, and riparian areas to promote self-sustaining fisheries and functional riparian and wetland habitat to promote long-term sustainability and resiliency.
- Maintain watershed health by protecting or restoring watersheds that could affect critical infrastructure and/or environmental and recreational areas.

This project promotes the recovery and sustainability of both aquatic & riparian communities. It protects & enhances the economic value of the local and statewide economies of rafting, boating and fishing. It supports agricultural and municipal water needs via irrigation. It improves the condition of the river to promote long-term sustainability of the area by preventing deterioration from ongoing annual heavy-equipment maintenance and portage around the diversion. Overall it contributes to the watershed health by improving the infrastructure, minimizing the erosion and protecting the environment & recreational areas.

GOALS SUPPORTED: Statewide Water Supply Initiative (SWSI) - Section 8

- 1. Actively encourage projects to address multiple purposes, including municipal, industrial, environmental, recreational, agricultural, risk management, and compact compliance needs.
- 5. Support meeting Colorado's nonconsumptive water needs by working with Colorado's water stakeholders to help:
 - Promote recovery and sustainability of endangered, threatened, and imperiled species in a manner that allows the state to fully use its compact and decreed entitlements.
 - Protect or enhance environmental and recreational values that benefit local and statewide economies
 - Encourage multi-purpose projects that benefit both water users and native species.
 - Pursue projects and other strategies, including CWCB's Instream Flow Program, that benefit consumptive water users, the riparian and aquatic environments, and stream recreation.
 - Recognize the importance of environmental and recreational benefits derived from agricultural water use, storage reservoirs, and other consumptive water uses and water management.



Water Activity Justification

This project addresses multiple purposes including recreational, agricultural, environmental and municipal. It supports Colorado nonconsumptive water needs by promoting the sustainability of the aquatic species, and enhancing the environmental and recreational values. The project benefits both water users and the native species in the area. The project also benefits those using the river for recreation and irrigation, eliminating barriers to use and creating opportunities for ease in use, and recognizes the importance of the benefits derived from these uses.

GOALS SUPPORTED: Colorado Basin Roundtable Plan – CBIP: Section 4 – Roaring Fork Region

- Support the objectives of the Roaring Fork Watershed Plan
- Provide adequate instream flows to:
 - Promote healthy streams
 - Support the recreational economy
 - Mitigate/protect water quality
 - · Sustain agriculture

This project promotes a healthy Roaring Fork River, supports the fishing and boating recreational economies, protects the water quality currently affected by annual heavy-equipment maintenance and portage round the hazard, and sustains agriculture by providing much-needed irrigation.

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



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) |
|---|---|
| Pitkin County | \$110,000 cash |
| Eagle County REQUEST | \$25,000 cash |
| CWCB Water Plan Grant REQUEST | \$171,216 cash |
| Fishing is Fun Grant REQUEST (25% Pitkin County Match Included) | \$103,759 cash |
| Other Funding Sources – In Development (including additional funding from Pitkin County & Robinson Ditch Company) | \$345,025 cash |
| | |
| | |
| Total Match | \$ 755,000 cash |
| 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.

| party) and shall be accompanied by a letter of commitment. Attach | | | | |
|--|--|--|--|--|
| Contributing Entity | Amount and Form of Match (note cash or in-kind): | | | |
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| 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. | | | | | | | | |
| Town of Basalt – River Opportunities & Constraints, - River Restoration, December 2015 | | | | | | | | |
| Commercial River Use in the State of Colorado 1988-2010 – Colorado River Outfitters Association | | | | | | | | |
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| 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 | | | | | | | | |
| None. | | | | | | | | |
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| 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. | | | | | | | | |
| None. | | | | | | | | |
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| Colorado Water Conservation Board | | | | | | |
|-----------------------------------|--|--|--|--|--|--|
| Water Supply Reserve Fund | | | | | | |
| Exhibit A - Statement of Work | | | | | | |
| Date: | October 1, 2018 | | | | | |
| Water Activity Name: | Robinson Diversion Modification Project | | | | | |
| Grant Recipient: | Pitkin County (Healthy Rivers) | | | | | |
| Funding Source: | Multiple (Pitkin County, Eagle County, GOCO, Colorado Water Plan Grant, Colorado River District Grant) | | | | | |

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.

The Robinson Ditch Project (Project) consists of a series of in-channel and bank improvements to the Roaring Fork River adjacent to the Robinson Ditch headgate. The improvements include modification of an existing boulder structures, construction of an engineered riffle and modifications to the Robinson Diversion inlet channel and headgate.

The existing structure has a change in water surface elevation greater than 2 feet, resulting in velocities and flow depths that prevent some fish species at certain life cycles from passing the structure. The configuration of the existing boulders creates a significant navigation hazard for commercial and private boaters. Project improvements will halve the water surface drop across the structure and spread the remainder of the water surface elevation change upstream, creating several riffles. This will greatly improve navigation and increasing passage-ability for wider range of aquatic species.

Channel and bank stability created by the project improvements will reduce annual in-channel, heavy-equipment maintenance activities to remove sediment accumulation, readjust boulders, remove large woody debris, and rebuild of push up dams to maintain water surface elevations at the headgate.

WSRF funding will be used for the purchase and transportation of boulders for the lower grade controls structure improvements.

Objectives: (List the objectives of the project)

Objectives of Robinson Ditch Diversion Modification Project:

- Safer boat passage
- Increased fish passage
- Improved headgate operations
- Improved stability in channel an on banks
- Reduced annual in-channel maintenance
- Pilot project for future improvements in the Roaring Fork Watershed
- Enhance relationship with valley irrigators



Tasks

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

Task 1 – Project Planning, Design and Permitting

Description of Task:

Task 1 focuses on the continued development of project design including hydraulic modeling. As part of this task the project team will complete construction plans and technical specifications. These construction documents will be used for the permitting process and for bidding and construction of the proposed improvements.

The project team will complete and apply for permits with the US Army Corps of Engineers, the State of Colorado and Eagle County.

Project planning will include coordination with project stakeholders and local, state and federal regulators.

Method/Procedure:

Standard engineering practices will be used to develop a design that meets the project's goals and objectives. Hydraulic models developed in HEC-RAS and SRH-2D will be used for information design decisions as it pertains to navigability, passage of aquatic species, channel and bank stability and flood conveyance.

Construction plans will be created using AutoCAD Civil 3D and will follow standard engineering practices.

Permit applications will be completed per the guidance of each respective regulatory agency.

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

Construction documents including plans, specifications and engineer's opinion of cost.

Approved permits for the project from the US Army Corps of Engineers, State of Colorado and Eagle County.

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

Note this task is not included in the current grant ask all will paid for through other funding sources described in this application.

Electronic copies of:

Construction documents including plans, specifications and engineer's opinion of cost.

Approved permits for the project from the US Army Corps of Engineers, State of Colorado and Eagle County.



Tasks

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

Task 2 - Mobilization, Site Preparation, Construction Management

Description of Task:

Task 2 includes the mobilization of the construction contractor, preparation and maintenance of the site during construction and inspection and management of the project during construction.

The majority of this task will be performed by the construction contractor, including the installation and maintenance of erosion/sediment control Best Management Practices (BMP's) and care of water facilities such as coffer dams and dewatering pumps and filters.

The task also includes a series of inspections conducted by the Grantee or their representation to verify proper construction of the project per the construction plans and technical specifications developed as part of Task 1.

Method/Procedure:

Preparation and management of the project site during construction will utilize construction techniques and Best Management Practices that are consistent with industry standards and in compliance with federal, state and local regulations.

Regular inspections of the project during construction will be conducted.

Equipment to be utilized will include excavators, dump trucks, front-end loaders and miscellaneous smaller earth moving equipment.

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

The completed construction of the overall project as described in the project construction plans and specifications (to be developed as part of Task 1).

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

Note this task is not included in the current grant ask and will paid for through other funding sources described in this application.

Contractor invoices related to the construction of this component of the overall project.



Tasks

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

Task 3 - Upper Grade Control Structure

Description of Task:

Task 3 covers the materials, labor and equipment needed for construction of the Upper Grade Control Structure per the construction plans and technical specifications developed as part of Task 1.

The upper grade control structure will be built in the Roaring Fork River approximately 185 feet upstream of the existing boulder grade control structure for the purpose of channel stability and to maintain the pool elevation in the inlet channel of the Robinson Diversion system.

The structure includes approximately 425 tons of boulder and 175 cubic yards of alluvial backfill.

Method/Procedure:

Construction of the Upper Grade Control will utilize construction techniques and Best Management Practices that are consistent with industry standards and in compliance with federal, state and local regulations.

Equipment to be utilized will include excavators, dump trucks, front-end loaders and miscellaneous smaller earth moving equipment.

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

The completed construction of the Upper Grade Control Structure as described in the project construction plans and specifications (to be developed as part of Task 1).

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

Note this task is not included in the current grant ask and will paid for through other funding sources described in this application.

Contractor invoices related to the construction of this component of the overall project. Photo documentation and as-built survey of the completed Upper Grade Control Structure.



Tasks

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

Task 4 - Engineered Riffle & Bank Improvements

Description of Task:

Task 4 covers the materials, labor and equipment needed for construction of the Engineered Riffle and Bank Improvements per the construction plans and technical specifications developed as part of Task 1.

The engineered riffle and bank improvements will be built on the Roaring Fork River to spread out changes in water surface elevation over a longer horizontal distance, improving navigation for commercial and private boaters and improving upstream passage for aquatic specifies in the river. As a secondary benefit, the riffle will provide additional habitat for resident and transient fish and macroinvertebrates.

Bank stability efforts will focus on existing banks through the project reach demonstration degradation and erosion.

The riffle and bank improvements include approximately 430 tons of boulder and 460 cubic yards of alluvial backfill.

Method/Procedure:

Construction of the Engineered Riffle and Bank Improvements will utilize construction techniques and Best Management Practices that are consistent with industry standards and in compliance with federal, state and local regulations.

Equipment to be utilized will include excavators, dump trucks, front-end loaders and miscellaneous smaller earth moving equipment.

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

The completed construction of the Engineered Riffle & Bank Improvements as described in the project construction plans and specifications (to be developed as part of Task 1).

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

Note this task is not included in the current grant ask and will paid for through other funding sources described in this application.

Contractor invoices related to the construction of this component of the overall project. Photo documentation and as-built survey of the completed Engineered Riffle & Bank Improvements.



Tasks

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

Task 5 – Lower Grade Control Structure

Description of Task:

Task 5 covers the materials, labor and equipment needed for construction of the Lower Grade Control Structure per the construction plans and technical specifications developed as part of Task 1.

The lower grade control structure will be built in the Roaring Fork River at approximately the same location as the existing structure to maintain channel stability in this reach of the Roaring Fork River.

The structure includes approximately 1000 tons of boulder and 220 cubic yards of alluvial backfill. 625 tons of the boulder total will be existing boulders located on the site.

The total amount (\$45,000) included in this grant ask will be used for the purchase, transport and delivery of boulders for the lower grade control structure improvements. The boulders will be stored on site adjacent to the Robinson Diversion inlet channel on the north bank.

Method/Procedure:

Construction of the Lower Grade Control will utilize construction techniques and Best Management Practices that are consistent with industry standards and in compliance with federal, state and local regulations.

Equipment to be utilized will include excavators, dump trucks, front-end loaders and miscellaneous smaller earth moving equipment.

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

The completed construction of the Lower Grade Control Structure as described in the project construction plans and specifications (to be developed as part of Task 1).

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

Contractor invoices related to the construction of this component of the overall project. Photo documentation and as-built survey of the completed Lower Grade Control Structure.



Tasks

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

Task 6 - Robinson Diversion Headgate Improvements

Description of Task:

Task 6 covers the materials, labor and equipment needed for construction of Robinson Diversion Headgate Improvements per the construction plans and technical specifications developed as part of Task 1.

The improvements will be made to the existing headgate and inlet channel to reduce the need for maintenance activities in the main channel of the Roaring Fork River and to improve system efficiency.

The improvements will likely include a new sluice gate structure to remove sediment from the inlet channel, 300 tons of boulder and 350 cubic yards of alluvial backfill.

Method/Procedure:

Construction of the Robinson Diversion Headgate Improvements will utilize construction techniques and Best Management Practices that are consistent with industry standards and in compliance with federal, state and local regulations.

Equipment to be utilized will include excavators, dump trucks, front-end loaders and miscellaneous smaller earth moving equipment.

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

The completed construction of the Robinson Diversion Headgate Improvements as described in the project construction plans and specifications (to be developed as part of Task 1).

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

Note this task is not included in the current grant ask all will paid for through other funding sources described in this application.

Contractor invoices related to the construction of this component of the overall project. Photo documentation and as-built survey of the completed Robinson Diversion Headgate Improvements



Budget and Schedule

Exhibit B - Budget and Schedule: This Statement of Work shall be accompanied by a combined <u>Budget and Schedule</u> that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in <u>excel format</u>. A separate <u>excel formatted</u> 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

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 <u>entire</u> 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 inkind 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.

Colorado Water Water Supr





Department of Natural Resources

EXHIBIT B - BUDGET AND SCHEDULE

Date: October 1, 2018

Water Activity Name: Robinson Ditch Diversion Modification Project

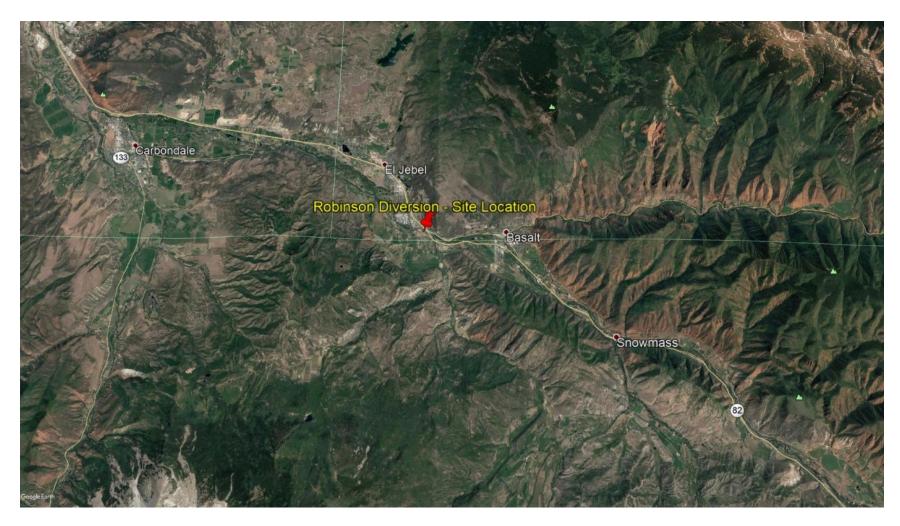
Grantee Name: Pitkin County

| Task No. (1) | <u>Description</u> | Start Date ⁽²⁾ | End Date | Matching Funds (cash & in-kind) ⁽³⁾ | WSRF Funds (Basin & Statewide combined) ⁽³⁾ | <u>Total</u> |
|--------------|---|---------------------------|---------------|---|--|--------------|
| | Project Planning , Design & Permitting | Underway | December 2019 | \$110,000 | | \$110,000 |
| | Mobilization, Site Prep, Construction Mgt | May 2019 | December 2019 | \$230,000 | | \$230,000 |
| | Upper Grade Control Structure | May 2019 | December 2019 | \$85,000 | | \$85,000 |
| | Engineered Riffle & Bank Improvements | May 2019 | December 2019 | \$105,000 | | \$105,000 |
| | Lower Grade Control Structure | October 2019 | December 2019 | \$95,000 | \$45,000 | \$140,000 |
| | Robinson Diversion Headgate Improvements | October 2019 | January 2020 | \$130,000 | | \$130,000 |
| | | | | | | \$0 |
| | | | | | | \$0 |
| | | | | | | \$0 |
| | | | | | | \$0 |
| | | | | _ | | \$0 |
| | | · | | | | \$0 |
| | | | | | | \$0 |
| Total | | | \$755,000 | \$45,000 | \$800,000 | |

- (1) The single task that include costs for Grant Administration must provide a labor breakdown (see Indirect Costs tab below) where the total WSRF Grant contribution towards that task does
- (2) Start Date for funding under \$100K 45 Days from Board Approval; Start Date for funding over \$100K 90 Days from Board Approval.
- (3) Round values up to the nearest hundred dollars.
- Additional documentation providing a Detailed/Itemized Budget may be required for contracting. Applicants are encouraged to coordinate with the CWCB Project Manager to determine
- 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 the grantee enters contract and receives formal signed State Agreement.

The CWCB will pay the last 10% of the entire water activity budget when the Final Report is completed to the satisfaction of the CWCB staff project manager. Once the Final Report has been

- · 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.



Robinson Diversion - Vicinity Map

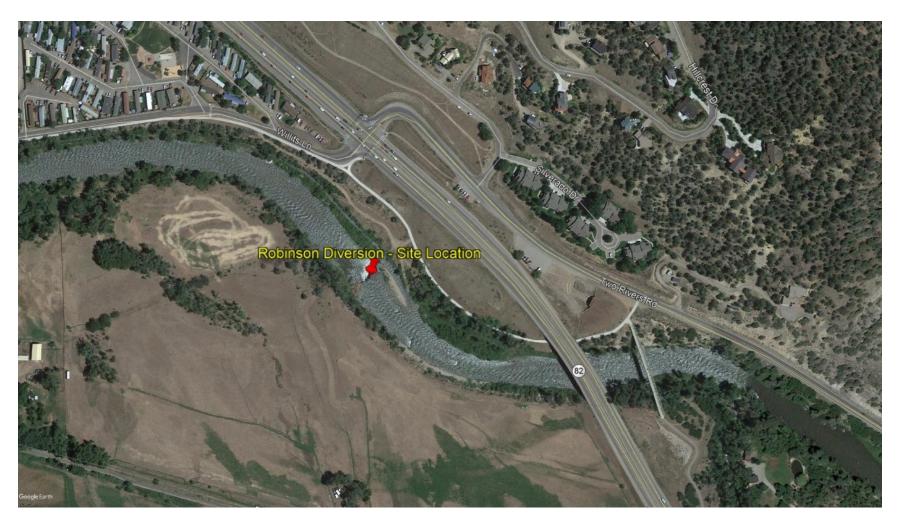
Roaring Fork River flows from lower right corner to upper left corner.



<u>Robinson Diversion - Location Map</u>

Roaring Fork River flows from lower right corner to upper left corner.

Frying Pan Rivers flows from upper right corner to its confluence with the Roaring Fork River in Basalt.



Robinson Diversion - Site Map

Roaring Fork River flows from lower right corner to upper left corner.



October 1, 2018

Colorado Water Conservation Board Water Supply Reserve Fund 1313 Sherman Street Room 718 Denver, CO 80203

Re: Letter of Commitment

Dear Board Members:

Thank you for considering Pitkin County's Water Supply Reserve Fund Grant Application. Pursuant to the WSRF Criteria and Guidelines, please let this letter serve as commitment to Pitkin County's Robinson Ditch Diversion Modification project. Funds have been budgeted in excess of \$110,000 for the project within Pitkin County's Healthy Rivers' budget line items.

Sincerely,

Lisa MacDonald

Pitkin County Healthy Rivers Administrator



September 25, 2018

BOARD OF DIRECTORS

Pat McMahon President Diane Schwener Vice President Jeff Conklin Secretary Jennifer Sauer Treasurer Ted Borchelt Stephen Ellsperman George Kelly Dick Kipper Jim Light Rick Lofaro Executive Director Rick Neiley Michelle Schindler Don Schuster Larry Yaw

PROGRAM STAFF

Rick Lofaro Executive Director Heather Lewin Director of Science and Policy Christina Medved Director of Outreach Liza Mitchell Education Program Manager Kristen Doyle Watershed Educator Chad Rudow Water Quality Program Manager Shervl Sabandal Development Manager Johnny Cronin Sr. Director of Donor Relations

Commissioner Patti Clapper, Chair Board of County Commissioners Pitkin County 530 E. Main Street, Suite 302 Aspen, CO 81611

RE: Support for Robinson Diversion Modification Project

Dear Commissioner Clapper,

Roaring Fork Conservancy has a vested interest in the health and vitality of the Roaring Fork River throughout the valley. The current boulder structure in the Roaring Fork River adjacent to the Robinson Diversion headgate is a known navigation hazard for private and commercial boaters. This project will create a safe connection in the Roaring Fork River through mid-valley for all river users. The project will also decrease the need for annual/biannual in-channel maintenance activities in this reach of the Roaring Fork, thus reducing impacts to the river channel.

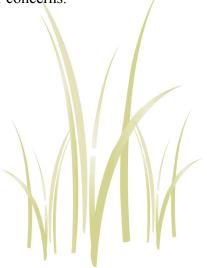
On behalf Roaring Fork Conservancy, I am writing in support of the Robinson Diversion Project. The project will open up an underutilized reach of the Roaring Fork River through mid-valley for recreational users, improve connections for fish and reduce impacts to the river and its riparian corridor.

Please feel free to contact me if you have any questions or concerns.

Sincerely,

Ríck Lofaro

Rick Lofaro Executive Director





Kyle Holt
President
Rick Lofaro
Vice President
John Livingston
Secretary
& Treasurer

September 27, 2018

Commissioner Patti Clapper, Chair Board of County Commissioners Pitkin County 530 E. Main Street, Suite 302 Aspen, CO 81611

RE: Support for Robinson Diversion Modification Project

Dear Commissioner Clapper,

Our group, the Roaring Fork Fishing Guide Alliance, has a keen interest in the health and vitality of the Roaring Fork River region. The current boulder structure in the Roaring Fork River adjacent to the Robinson Diversion headgate is a known navigation hazard for private and commercial rafters and boaters. At all water levels and especially lower levels, the area has been a real danger for our float guides and other recreational users. This project will improve safety and also make connections in the Roaring Fork River through the mid-valley for all river users. The project will also decrease the need for annual/biannual in-channel maintenance activities in this reach of the Roaring Fork, thus reducing impacts to the river channel. Since our beginning in 2014, we have advocated for change and improvement at the Robinson site. Ultimately, the project should improve the ability for trout to move up and down the river.

On behalf of the Roaring Fork Fishing Guide Alliance, I am writing in support of the Robinson Diversion Project. The project will open up an underutilized reach of the Roaring Fork River through the mid-valley for commercial and recreational users, and reduce impacts to the river and its riparian corridor. Please feel free to contact me if you have any questions or concerns.

Sincerely,

John Livingston 'JL'

Secretary/Treasurer, RFFGA

Our mission statement: Professional fishing guides dedicated to the protection and conservation of the Roaring Fork region fisheries. Guides and anglers promoting awareness and stewardship for future generations.



Bill Reynolds, on behalf of the of the MID VALLEY METROPOLITAN DISTRICT

&

ROBINSON DITCH COMPANY

sent a letter of support to the Colorado River District directly.



September 27, 2018

Commissioner Patti Clapper, Chair Board of County Commissioners Pitkin County 530 E. Main Street, Suite 302 Aspen, CO 81611

RE: Support for Robinson Diversion Modification Project

Dear Commissioner Clapper,

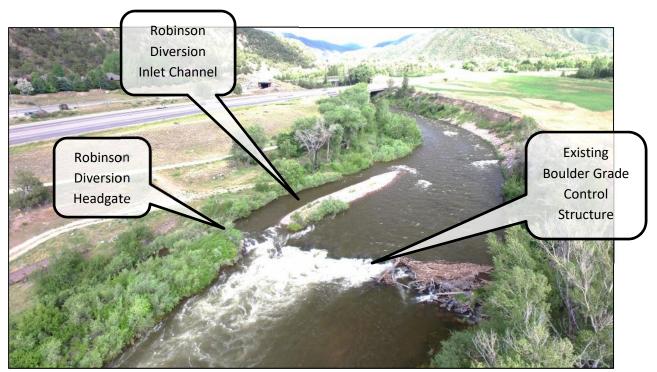
The local Ferdinand Hayden Trout Unlimited chapter (FHTU) has a keen interest in the health and vitality of the Roaring Fork River through mid-valley. The current boulder structure in the Roaring Fork River adjacent to the Robinson Diversion headgate is a known navigation hazard for private and commercial boaters and likely a barrier to aquatic species.

This project will improve connections in the Roaring Fork River through mid-valley for all river users, including boaters and aquatic species. The project will also decrease the need for annual/biannual in-channel maintenance activities in this reach of the Roaring Fork, thus reducing impacts to the river channel.

At a recent meeting, our board voiced unanimous support for the Robinson Diversion Project, which will open up an underutilized reach of the Roaring Fork River through mid-valley for recreational users, improve connections for aquatic species and reduce impacts to the river and its riparian corridor. Please feel free to contact me if you have any questions or concerns.

Sincerely, Matt Kelsic FHTU president (720) 560-4490 mkelsic@att.net

Collin Szewczyk FHTU vice president (773) 425-1074 onehandedflycaster@gmail.com



Aerial photograph of Site. River flowing towards bottom of photograph. June 7, 2017 - 2,750 cfs – Typical Runoff Flow



Ground level photograph of Site. River flowing towards right side of photograph. June 7, 2017 - 2,750 cfs



Aerial photograph of Site. River flowing towards bottom of photograph. May 5, $2017-500\ cfs-Typical\ Low\ Flow$



Ground level photograph of Site. River flowing towards right side of photograph. May 24, $2017 - 550 \, \text{cfs}$



Ground level photograph of Site looking up the Robinson Diversion inlet channel. Roaring Fork River flowing towards lower right side of photograph.



Ground level photograph of Site looking up Robinson Diversion inlet channel. Roaring Fork River flowing towards upper right side of photograph.