

Water Supply Reserve Fund – Grant and Loan Program
Water Activity Summary Sheet
March 21-22, 2018
Agenda Item 25(d)

Applicant & Grantee: Trout Unlimited
Water Activity Name: Tomichi Water Conservation Project
Water Activity Purpose: Multipurpose (Ag/Env&Rec) – Study & Implementation
County: Gunnison
Drainage Basin: Gunnison
Water Source: Tomichi Creek
Amount Requested: \$34,500 Gunnison Basin Account
Matching Funds: Applicant Match (cash & in-kind) = \$25,750
• 74% of the Basin Account request (meets 10% min)

Staff Recommendation:
Staff recommends approval of up to \$34,500 from the Gunnison Basin Account to help fund the project titled: Tomichi Water Conservation Project.

Water Activity Summary: WSRF grant funds, if approved, will assist Trout Unlimited and other stakeholders develop a program that will demonstrate how temporary and coordinated split-season agricultural water conservation can provide the flexibly necessary to sustain robust agriculture and healthy streams in the upper Gunnison Basin. The primary focus of this proposal will be to reduce local shortages during drought years. The secondary goal is to provide a conservation program template that will be useful in the future. This effort will be accomplished by the following tasks as indicated in the Statement of Work: Implement Voluntary Conservation Program; Estimate and verify reduced Consumptive Use and impacts; Secure water rights protections; Evaluate opportunities to bank conserved water in the Aspinall Unit.

This three-year water conservation project will involve regional coordination to improve environmental and recreational flows through the Tomichi State Wildlife Area (SWA), as well as to reduce agricultural shortages below the SWA. The program will also provide an example of how temporary, voluntary, and compensated reduction of consumptive use can be used to reduce local watershed shortages during drought years and protect water users from increasing water demands on the Colorado River.

The lower Tomichi Creek region was chosen as the demonstration site because existing relationships and past coordination will provide a project that is ready for implementation.

Discussion: As pointed out in the accompanying application, this project assists the Gunnison Basin Roundtable in meeting Goals 1, 5 and 7 of the Gunnison Basin Implementation Plan.

In addition, this effort helps the state achieve several of the Critical Goals and Actions of Colorado's Water Plan, such as: meeting D. Agricultural (Facilitate Alternative Transfer Methods & Support Agricultural Conservation and Efficiency); F. Watershed Health, Environment. and Recreation (Enhance Environmental and Recreational Economic Values); H. Education, Outreach and

Innovation; and Goal 3 in Section 6.6 – Environmental and Recreational Projects and Methods (“Support the development of multipurpose projects and methods that benefit environmental and recreational water needs as well as water needs for communities or agriculture”).

Issues/Additional Needs: 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>
Trout Unlimited	\$0	\$19,400	\$19,400	Secured
The Nature Conservancy	\$0	\$5,000	\$5,000	Secured
System Conservation Pilot Program	\$50,000	\$0	\$50,000	Secured
CWCB Water Plan Grant	\$75,000	\$0	\$75,000	Secured
Upper Gunnison WCD	\$15,525	\$0	\$15,525	Pending
Bonneville Environmental Foundation	\$20,000	\$0	\$20,000	Secured
Subtotal	\$160,525	\$24,400	\$184,925	
WSRF Gunnison Basin Account	\$34,500	n/a	\$34,500	
Total Project Costs	\$195,025	\$24,400	\$219,425	

CWCB Project Manager: Craig Godbout

The Gunnison Basin Roundtable
501 Palmer Street
Delta, CO 81416

January 17, 2018

Mr. Craig Godbout
Water Supply Management Section
COLORADO WATER CONSERVATION BOARD
1313 Sherman St., Room 718
Denver, CO 80203

Re: WSRF Grant Request: Tomichi Water Conservation Project

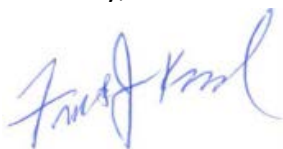
Dear Mr. Godbout:

This letter is presented to advise you that the grant application submitted by Trout Unlimited for \$34,500 from Basin Account funds from the Water Supply Reserve Fund for the Tomichi Water Conservation Project was reviewed by the Gunnison Basin Roundtable and its Project Screening Committee. The request for funding was approved by a unanimous vote of the Gunnison Basin Roundtable during our meeting on December 4, 2017.

This water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes. The requirements/language from the statute is provided in Part 3 of the Criteria and Guidelines. In addition, this project helps achieve Goals 1 through 9 of the Gunnison Basin Implementation Plan.

Thank you for your support of this grant application.

Sincerely,



Frank J. Kugel
Gunnison Basin Roundtable

cc: Kathleen Curry (email)
Tom Alvey (email)



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⁾
	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 2018
Desired Notice to Proceed Date:	May 2018

Water Activity Summary		
Name of Applicant	Trout Unlimited	
Name of Water Activity	Tomichi Water Conservation Project	
Approving Roundtable(s)	Basin Account Request(s) ⁽¹⁾	
Gunnison	\$34,500	
Basin Account Request Subtotal	\$ 34,500	
Statewide Account Request ⁽¹⁾	\$ 0	
Total WSRF Funds Requested (Basin & Statewide)	\$ 34,500	
Total Project Costs	\$ 219,425	

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



Last Update: August 3, 2017

Applicant & Grantee Information	
Name of Grantee(s)	Trout Unlimited
Mailing Address	1777 N. Kent Street, Suite 100 Arlington, VA 22209
FEIN	38-1612715
Organization Contact	Danielle Typinski
Position/Title	Grant Compliance Coordinator
Email	dtypinski@tu.org
Phone	(703) 284-9429
Grant Management Contact	<u>Jesse Kruthaupt</u>
Position/Title	Upper Gunnison Project Specialist
Email	Jkruthaupt@tu.org
Phone	(970)-209-0976
Name of Applicant (if different than grantee)	Trout Unlimited
Mailing Address	1777 N. Kent Street, Suite 100 Arlington, VA 22209
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).

Last Update: August 3, 2017

Trout Unlimited (TU), the nation's largest coldwater conservation organization, representing more than 150,000 members and volunteers nationwide, including 10,000 in Colorado, is developing a water conservation project on Tomichi Creek in the Upper Gunnison Basin focused on water use solutions that will benefit agricultural operations, protect and improve cold water trout habitat and improve water supply for other downstream users. Jesse Kruthaupt, Trout Unlimited's Upper Gunnison Project Coordinator, will be managing the project. Jesse has been working for TU in the Upper Gunnison since 2012 and has been involved in agriculture and irrigation in the area for over 20 years.

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: 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)	
x	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:

Last Update: August 3, 2017

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	Gunnison, CO
Latitude	38°31'46.57"N
Longitude	106°53'53.06"W

Water Activity Overview
<p>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.</p>
<p>This proposed agricultural water conservation project is located in the upper Gunnison basin on Tomichi Creek, tributary to the Gunnison River above Blue Mesa Reservoir. Trout Unlimited has helped organize this proposal in coordination with six individual land owners, local water leaders, and The Nature Conservancy. This three-year water conservation project will involve regional coordination to improve environmental and recreational flows through the Tomichi State Wildlife Area, as well as to reduce agricultural shortages below the SWA. The program will also provide an example of how temporary, voluntary, and compensated reduction of consumptive use can be used to reduce local watershed shortages during drought years and protect water users from increasing water demands on the Colorado River.</p> <p>The lower Tomichi Creek region was chosen as the demonstration site because existing relationships and past coordination will provide a project that is ready for implementation. Trout Unlimited has consulted with water users in the project area but will not seek commitment until funding is available.</p> <p>This water conservation approach will be transferable to other areas in the upper Gunnison and western Colorado. Documents used for contracting, accounting, verification, and monitoring will be provided as project deliverables to support future innovative water conservation efforts throughout the state.</p>

Measurable Results

Last Update: August 3, 2017

Measurable Results	
To catalog measurable results achieved with WSRF funds please provide any of the following values.	
	New Storage Created (acre-feet)
800-1000	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
	Existing Storage Preserved or Enhanced (acre-feet)
	Length of Stream Restored or Protected (linear feet)
	Efficiency Savings (indicate acre-feet/year OR dollars/year)
	Area of Restored or Preserved Habitat (acres)
	Length of Pipe/Canal Built or Improved
	Other Explain:

Water Activity Justification
<p>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 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).</p> <p>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).</p>

Last Update: August 3, 2017

Water Activity Justification

Participating water users will reduce irrigation withdraws from the stream during critical times to improve stream flows, satisfy downstream irrigation rights and potentially prevent administration on the watershed. The method for conserving water is temporary, voluntary, and compensated so the participating water right owners will maintain ownership and management of their water rights for existing and future uses. For those reasons, this conservation approach will help address the Gunnison BIP Goal 1: Protect Existing Uses; and Goal 2: Discourage the conversion of productive agricultural land to other uses within the context of private property rights (Gunnison BIP, pp 30-31).

This section of Tomichi Creek can experience low flows causing agricultural shortages, increased water temperatures and impaired aquatic habitat. Irrigation shortages on Tomichi creek are described in the Gunnison BIP on page 50, Table 13, as being 12,600 acre feet annually. This project will have the potential conserve 800-1000 acre feet on lower Tomichi Creek during the implementation year and will improve stream flows, angling opportunities through the Tomichi SWA and help reduce irrigation shortages on lower Tomichi Creek.

The Gunnison BIP also mentions on page 71, that ideal solutions to address environmental and recreational needs while preserving existing agricultural uses include temporary and voluntary instream flow leasing arrangements that sustain flows during critical drought periods. A temporary and voluntary leasing arrangement is exactly the approach proposed for this conservation program.

The Colorado Water Plan Water Plan frequently references collaboration and multiple use projects. In section 6.6, page 6-157, the third goal listed is “Support the development of multipurpose projects and methods that benefit environmental and recreational water needs as well as water needs for communities or agriculture”. This project will involve coordination between NGO’s, private land owners, and state agencies. It is specifically designed to benefit multiple uses. Four of the use types that will benefit from this project are recreation, tourism, agriculture, and the environment. These four uses are also highlighted as Colorado’s Water Values on page 1.6 of the Colorado Water Plan.

This project also addresses many of the goals listed in Section 6.4, Alternative Transfer Methods, including on page 6-115 “Colorado’s Water Plan will respect property rights and the contributions of the agricultural industry by maximizing options for alternatives to permanent agricultural dry-up.” This project example will be transferable to other areas in the upper Gunnison and western Colorado as an alternative to permanent dry up.

Furthermore, the proposed split-season conservation methodology, streamlined contracting, and associated monitoring is also emphasized as “Actions” in Section 6.4, on pages 6-125-126. For example, Action Number 2 states, “Encourage funding grants that focus on implementing on-the-ground ATM projects, data collection, agile administration practices, ATM



Last Update: August 3, 2017

Water Activity Justification

affordability, basin-specific ATM projects, and infrastructure modernization.”

(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)
CWCB Water Plan Grant - Approved	\$75,000



Last Update: August 3, 2017

Matching Requirements: Basin Account Requests	
Partner Funding in-kind The Nature Conservancy	\$5000 in-kind
System Conservation Pilot Program – Approved	\$50,000 cash
Upper Gunnison River Water Conservancy District – pending request	\$15,525 cash
Bonneville Environmental Foundation – Contacting, Attached Draft agreement.	\$20,000 cash
Funding in-kind Trout Unlimited	\$19,400 in-kind
Total Match	\$ 184,925
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 3 rd 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):
CWCB Water Plan Grant - Approved	\$75,000
Partner Funding in-kind The Nature Conservancy	\$5000 in-kind
System Conservation Pilot Program – Approved	\$50,000 cash
Upper Gunnison River Water Conservancy District – pending request	\$15,525 cash
Bonneville Environmental Foundation– Contacting	\$20,000 cash
Funding in-kind Trout Unlimited	\$19,400 in-kind
Total Match	\$184,925
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

D. H. Smith, J. E. Brummer, D. E. Temple (2006). "Consumptive Irrigation Water Use in the Upper Gunnison River Basin", Upper Gunnison River Water Conservancy District.

Smith, D. H. (2008). "Consumptive Irrigation Water Use Intermountain Meadows of Colorado", Colorado Water, Newsletter of the Water Center of Colorado State University, January/February 2008

Colorado Water Bank Feasibility Study, Phase 1 and 2. Completed for the Colorado River Water Conservancy District.

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

Grant Name	Agreement Number	Amount	Start Date	End Date
Irrigators in Kremmling	CTGG1 2017-0667	\$465,400	11/29/2016	9/30/2018
Redburn Ranch Diversion Dam	CTGG1 2015-2791	\$148,500	1/27/2015	6/1/2018
San Miguel River Stream Management Plan Pilot	POGG1 2016-0800	\$96,413	3/22/2016	6/1/2018
Ware Hinds Fish Bypass	POGG1 2017-0749	\$63,500	2/14/2017	12/31/2018
Windy Gap Reservoir Bypass	POGG1 2016-0900	\$30,000	5/18/2016	1/31/2017
W-Mountain Ranch Restoration	POGG1 2016-0610	\$15,000	1/8/2015	5/31/2017
Kerber Creek Restoration	POGG1 2015-0286	\$30,000	6/10/2015	10/31/2016
River Ranch Irrigation Diversion	CTGG1 2015-3313	\$113,000	6/9/2015	5/31/2016
South Arkansas River Restoration	POGG1 2015-0175	\$10,000	11/14/2014	10/31/2016
Upper Ohio Creek Flow Restoration	POGG1 2015-0161	\$6,000	10/10/2014	12/31/2014

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



Last Update: October 24, 2017

Colorado Water Conservation Board	
Water Supply Reserve Fund	
<u>Exhibit A - Statement of Work</u>	
Date:	10/31/2017
Water Activity Name:	Tomichi Water Conservation Program
Grant Recipient:	Trout Unlimited
Funding Source:	WSRF Basin Funds
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>This agricultural water conservation project proposal is located in the upper Gunnison basin on Tomichi Creek, tributary to the Gunnison River above Blue Mesa Reservoir. Trout Unlimited has helped organize this proposal in coordination with six individual land owners, local water leaders, and the Nature Conservancy. This three-year water conservation project will involve regional coordination to improve environmental and recreational flows through the Tomichi State Wildlife Area, as well as to reduce agricultural shortages below the SWA. The program will also provide an example of how temporary, voluntary, and compensated reduction of consumptive use can be used to reduce local watershed shortages during drought years and protect water users from increasing water demands on the Colorado River.</p> <p>The lower Tomichi Creek region was chosen as the demonstration site because existing relationships and past coordination will provide a project that is ready for implementation. Trout Unlimited has consulted with water users in the project area but will not seek commitment until funding is available.</p> <p>This water conservation approach will be transferable to other areas in the upper Gunnison and western Colorado. Documents used for contracting, accounting, verification, and monitoring will be provided as project deliverables to support future innovative water conservation efforts throughout the state.</p>	
Objectives: (List the objectives of the project)	
<p>Develop a program that will demonstrate how temporary and coordinated split-season agricultural water conservation can provide the flexibly necessary to sustain robust agriculture and healthy streams in the upper Gunnison Basin.</p> <p>The primary focus of this proposal will be to reduce local shortages during drought years. The secondary goal is to provide a conservation program template that will be useful in the future.</p>	



Last Update: October 24, 2017

Tasks
Provide a detailed description of each task using the following format:
<u>Task 1 – Implement Voluntary Conservation program</u>
Description of Task:
<p>Trout Unlimited will raise the money necessary to compensate water users for participation in the program and for their portion of reduced of consumptive use. Once sufficient funding is raised, Trout Unlimited will present water users on lower Tomichi Creek with the program and the opportunity to enroll. To avoid potential negative impacts, participation will be limited to regionally coordinated split-season fallowing or deficit irrigation. Additionally, we will establish a stakeholder group to review the program.</p> <p><u>Background</u></p> <p>The upper Gunnison basin is unique among the valleys in western Colorado due to its elevation, short growing season, high quality grasses, broad irrigated floodplains, and proximity to Blue Mesa Reservoir. In most cases, irrigation practices in the upper Gunnison Basin mimic natural hydrology because water diverted during spring runoff flows into ditches and is spread throughout the floodplain, thereby recharging the fluvial aquifer. Seepage from the aquifer helps maintain base flows for environmental and other uses later in the season. However, this irrigation practice can be difficult during periods of below average water availability because significant carriage water is needed to effectively saturate the cobble substrate and soil profile.</p> <p>Furthermore, research suggests it can take several years for irrigated mountain meadow grasses in the Upper Gunnison to recover from a full season of fallowing. All these factors influence the effectiveness of agricultural water conservation in this region.</p> <p>This proposed conservation program is designed with the appropriate “side boards” to address common concerns like crop recovery, ground water recharge and release, and the relationship of irrigation practices between property boundaries. This program will be flexible and fine-tuned based on user experiences to avoid the impacts a severe drought would have on the upper Gunnison community.</p>
Method/Procedure:
<p>Outreach material will be developed describing the program and its purpose and will be provided to water users in the project area. Enrollment will be open to parties in the region from March 2018 until June 2018. Trout Unlimited will work individually with interested parties to develop a summary of the irrigated land, irrigation ditches, and the proposed conservation strategy. The summaries will be submitted to UGRWCD General Manager, Division 28 water commissioner, and other stakeholders on the watershed. Conservation strategies will be coordinated between water users with input from agency staff in an effort to avoid negative impacts.</p> <p>Conservation efforts will begin as early as June 25th, 2018 and the program will end in October 2021. Implementation of conservation measures will occur during one year in the three-year period. Participants will receive a base rate of \$20 per acre to incentivize three-year enrollment. Water users will also be compensated per acre foot of water conserved during the year conservation actions take place.</p>



Last Update: October 24, 2017

Tasks
<p>Implementation of the water conservation program on the chosen year will be contingent on water availability as predicted by the Colorado River Water Forecast Center. Climate criteria for implementation will be developed with water user input and by modeling completed by a hired engineer.</p> <p>Trout Unlimited will individually contract with participating water users. The rate for reduced consumptive use will be negotiated and agreed upon the spring prior to any conservation measures taken place. This rate will not exceed \$180 an acre foot.</p>
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Enrollment of 6 property owners and Colorado Parks and Wildlife resulting in 800-1000 acre feet of conserved water and a 5-10% increase in flows through the State Wildlife area during critical low flow periods.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
<ol style="list-style-type: none">1. Outreach documents for program enrollment2. Summary of conservation plans for participating lands3. TU, water user contracts.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 2 - Estimate and verify reduced CU and impacts</u>
Description of Task:



Last Update: October 24, 2017

Tasks
<p>Trout Unlimited will work with a water resource engineer and coordinate with water users to appropriately estimate and verify reduction of consumptive use and document the resulting stream flow impacts. This task will also collect and summarize input from participating water users including production estimates and challenges with implementation.</p>
Method/Procedure:
<p>The contracted engineer will model how the chosen split-season water conservation strategies will increase water availability through and downstream of the project area during average and dry water years. The engineer will also help model reduced consumptive use for the proposed conservation actions with StateCU model.</p> <p>Trout Unlimited will coordinate with water users to photograph the participating ditch headgate and irrigated field before and after the agreed shutoff date. Verification photos will accompany a monthly site visit report. An atmometer will be installed to monitor evaporation in the project area and soil moisture measurements taken during site visits. Data collected at the project area will be referenced to Gunnison COAgMet station located 5 miles to the north of the project to estimate actual vs. modeled conserved water.</p> <p>Participant summaries will include production estimate for the year participating vs. typical operations (bale count, grazing days, residual forage) and a short survey on participation experience.</p> <p>Trout Unlimited will measure stream flow and temperature at the western end of the Tomichi State Wildlife Area prior to and after the irrigation shut off date. These measurements will be compared to Tomichi at Gunnison USGS gauge located 3 miles downstream. The relationship between these two measurements will help illustrate the amount of conserved and water diverted for irrigation use below the project area. Additional site-specific monitoring may be included depending on individual contracts and selected conservation strategies.</p>
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
<p>Project partners will develop a better understanding of how conserved water from changes to irrigation practices affects stream flow and water availability.</p>
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)



Last Update: October 24, 2017

Tasks
<ol style="list-style-type: none">1. Verification plan, photos, and reports for each site visit.2. Modeled stream flow through the project area depicting changes resulting from conservation measures during average and dry water years.3. Report summarizing relationship between scenario model runs and actual flow and temperature monitoring during implementation4. Report summarizing participants inputs, crop yields, and concerns.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 3 - Secure water right protections</u>
Description of Task: By using existing legislation (SB 19) water users can participate in this water conservation program without risking abandonment or reduction in historic consumptive use. This task will secure protection against abandonment or diminishment of historical consumptive use for the participating water users rights through enrollment in water conservation program as described in C.R.S 37-92-103.
Method/Procedure: The participating water rights will be included in a package application describing the conservation effort. This application will be submitted to the Colorado River District or Colorado requesting approval as a sponsored water conservation program providing the water rights the protection of SB 19. The local water commissioner will be provided this application, any confirmation of enrollment and notified prior to conservation actions.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)



Last Update: October 24, 2017

Tasks
Receive approval as a sponsored conservation program and demonstrate to other irrigators that Senate Bill 19 is a tool available for those willing to take conservation measures.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
<ol style="list-style-type: none">1. Package application requesting approval as sponsored water conservation program2. Approval letter from sponsoring agency
Tasks
Provide a detailed description of each task using the following format:
<u>Task 4 - Evaluate opportunities to bank conserved water in Aspinall Unit.</u>
Description of Task:
<p>Under this task, project partners will determine how the conserved water can be stored in the Aspinall Unit and accounted for by the Bureau of Reclamation. This task will help determine how conserved water programs in the upper Gunnison Basin can be used to affect system wide water shortages as well as protect a wide range of upper Gunnison water users.</p>
Method/Procedure:
<p>This task will be completed in coordination with the Upper Gunnison River Water Conservancy District, the Colorado River Water Conservancy District, the Colorado Division of Water Resources, the Bureau of Reclamation, The Nature Conservancy, Uncompahgre Valley Water Users Association, and other members of the Water Bank Working Group.</p> <p>Trout Unlimited with assistance from the partners listed above will meet with the Bureau of Reclamation and request input on the steps necessary to allow contracting for one year of substitute storage of conserved water in the Aspinall Unit or Taylor Reservoir.</p> <p>We will use BOR recommendations, stream flow monitoring, and consumptive use reduction analysis to evaluate the feasibility of pursuing a permanent arrangement with the BOR. If the evaluation demonstrates that storing conserved water in Blue Mesa is not feasible then this task will be considered completed.</p> <p>If contracting storage water in Blue Mesa is possible, partners will further analyze, refine and fund the following methodology. The priority in drought years will be to use upper Gunnison conserved water to</p>



Last Update: October 24, 2017

Tasks
offset a Gunnison Tunnel call during back-to-back dry years. If a tunnel call is not expected, the water will be released during Aspinall Spring Operations and flow to Lake Powell.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
<ol style="list-style-type: none">1. BOR recommendations on necessary steps to allow contracting of stored water for one year.2. Pilot contracting template with BOR
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
<ol style="list-style-type: none">1. BOR recommendations on necessary steps to allow contracting of stored water for one year.2. Pilot contracting template with BOR

Repeat for Task 3, Task 4, Task 5, etc.

Budget and Schedule
Budget: This Statement of Work and Schedule shall be accompanied by a Budget (link?) that reflects the Tasks identified in the Statement of Work and Schedule and shall be submitted to CWCB in an excel format.
Schedule: This Statement of Work and Budget shall be accompanied by a Schedule (link?) that reflects the Tasks identified in the Statement of Work and Budget and shall be submitted to CWCB in an excel format.

Reporting Requirements
Reporting: The grantee shall provide their respective Roundtable(s) and the CWCB a Progress Report every 6 months, beginning from the date of executed contract. The Progress Report shall describe the status of the water activity, the completion or partial completion of the tasks identified in the Statement of Work including a description of any major issues that have occurred and any corrective action to address these issues. The CWCB may withhold reimbursement until satisfactory Progress Reports have been submitted.
Final Deliverable: At the completion of the water activity, the grantee shall provide their respective Roundtable(s) and the CWCB a final report on the grantee's letterhead that: <ul style="list-style-type: none">• Summarizes the water activity and how the water activity was completed• Describes any obstacles encountered, and how these obstacles were overcome



Last Update: October 24, 2017

Reporting Requirements

- Explains the Proposed Budget versus the Actual Budget
- Confirms that all matching commitments have been fulfilled
- Includes photographs, summaries of meeting and engineering reports/design, if appropriate

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.



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: 1/12/18

Water Activity Name: Tomichi Water Conservation Program

Applicant Name: Trout Unlimited

Task No.	Task Description	Start Date	End Date	WSRF Grant Funding Request	Cash Match CWCB (CWP)	SCPP Funding Request (Approved)	Cash Match UGRWCD (will request)	Cash Match Bonneville Environmental Foundation	In-kind Match TU	Inkind Match TNC	Total
1	Implement Voluntary Conservation program	6/1/2018	2/1/2021	\$29,670.00	\$75,000.00	\$50,000.00	\$0.00	\$20,000.00	\$7,000.00	\$0.00	\$181,670.00
	Landowner program Enrollment payment			\$0.00	\$20,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$20,000.00
	Payments for reduced Consumptive Use \$180/AF			\$29,670.00	\$55,000.00	\$50,000.00	\$0.00	\$20,000.00	\$0.00	\$0.00	\$154,670.00
	Program Facilitation, outreach and meetings			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,000.00	\$0.00	\$2,000.00
	Program contracting			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,000.00	\$0.00	\$5,000.00
2	Estimate and Verify Reduced CU and Impacts	6/1/2018	2/1/2021	\$4,830.00	\$0.00	\$0.00	\$10,000.00	\$0.00	\$5,000.00	\$0.00	\$19,830.00
	Estimate CU using StateMod			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$500.00	\$0.00	\$500.00
	Scenario model of stream flow changes			\$4,830.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,830.00
	Soil moisture sensor			\$0.00	\$0.00	\$0.00	\$800.00	\$0.00	\$2,500.00	\$0.00	\$3,300.00
	Actual CU monitoring/Aerial Imaging and CoAgMet			\$0.00	\$0.00	\$0.00	\$6,900.00	\$0.00	\$0.00	\$0.00	\$6,900.00
	Streamflow monitoring/measurements			\$0.00	\$0.00	\$0.00	\$2,300.00	\$0.00	\$2,000.00	\$0.00	\$4,300.00
3	Secure Water Rights Protection	6/1/2018	2/1/2021	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,400.00	\$0.00	\$4,400.00
	Application assembly and submittal			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,000.00	\$0.00	\$2,000.00
	Legal Review			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,400.00	\$0.00	\$2,400.00
4	Evaluate oportunites to bank conserved water in Aspinal Unit	6/1/2018	2/1/2021	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,000.00	\$5,000.00	\$8,000.00
	Legal Analysis			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,000.00	\$4,000.00	\$5,000.00
	Meeting Coordination and Travel			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,000.00	\$1,000.00	\$2,000.00
	Meeting expense			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,000.00	\$0.00	\$1,000.00
Total				\$34,500.00	\$75,000.00	\$50,000.00	\$10,000.00	\$20,000.00	\$19,400.00	\$5,000.00	\$213,900.00

(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.

- 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.
- Additionally, the applicant shall provide a progress report every 6 months, beginning from the date of contract execution
- Standard contracting procedures dictate that the Expiration Date of the contract shall be 5 years from the Effective Date.

Legend

Lower Tomichi Conservation Project Area

Participating acreage in green

GULLETT TOMICHI IRG D

SOUTH SIDE DITCH

BIEBEL DITCHES NOS 1&2

GRIFFING NO 1 DITCH

GRIFFING NO 2 DITCH

MCCANNE 3 DITCH

MCDOWELL VAN TUYL NO 1 D MCCANNE 2 DITCH

Google Earth

© 2017 Google



1 mi

**Flow Restoration Funding Agreement
Between
Trout Unlimited and Bonneville Environmental Foundation**

This Flow Restoration Funding Agreement (this "Agreement") is entered into by Trout Unlimited (TU), a Michigan nonprofit corporation with its principal place of business located at 1777 N. Kent St, Suite 100, Arlington, VA 22209 and its principal place of business in Colorado at 1536 Wynkoop Street, Suite 320, Denver, CO 80202 and the Bonneville Environmental Foundation ("BEF"), an Oregon nonprofit corporation with its principal place of business located at 240 SW 1st Ave, Portland, OR 97204. Trout Unlimited and Bonneville Environmental Foundation may also be referred to herein individually as a "Party" or collectively as the "Parties."

The effective date of this Agreement shall be the date upon which it is fully executed by both parties ("Effective Date") and shall terminate on December 31, 2020 ("Termination Date").

I. RECITALS

i. The mission of Trout Unlimited is to conserve, protect and restore North America's coldwater fisheries and their watersheds. Specifically, TU is working with irrigation districts and water right holders in the State of Colorado to facilitate projects that enhance and/or restore instream flows to benefit fish and wildlife.

ii. BEF is interested: (a) in funding TU's initiatives to restore stream conditions favorable to environmental flows; and (b) in obtaining the exclusive right to claim to have funded one or more acre-feet of restored instream flows, which without such funding would not have been protected or restored as instream environmental flows.

II. AGREEMENT

The Parties NOW, THEREFORE, in consideration of the mutual promises and obligations contained herein and the recitals above agree as follows:

A. DEFINITIONS

Capitalized terms in this Agreement shall have the meanings defined below:

"Acre-foot" refers to a volume of water equal to standing water one foot in depth covering an area of one acre.

"Expected Quantity" means the quantity of acre-feet of water placed, restored, and/or protected instream which the Parties reasonably anticipate will occur as a result of TU's efforts to implement projects pursuant to this Agreement, as identified in Exhibit A.

"Specified Resource" means one or more stream reaches within Colorado in which the Parties, through this Agreement, shall cause instream flow enhancements to occur. The Specified Resources covered by this Agreement are further described in Exhibit A.

"Vintage" means the calendar years in which instream flow benefits will occur in a Specified Resource pursuant to a completed stream flow restoration project and/or administrative change of water use.

“The Tomichi Water Conservation Program ” means a flow restoration project located in the Gunnison River Basin, CO that TU will cause to be implemented. The Tomichi Water Conservation Program may also be referred to as the “Project” and is described in Exhibit C.

B. PROJECT IMPLEMENTATION AND REPORTING REQUIREMENTS

1. TU shall implement the Project by (1) designing and overseeing project implementation and/or construction; (2) executing contracts or other agreements or administrative changes with participating water right holders, irrigation districts, and/or agencies to facilitate project implementation, (3) facilitating payment to project partners, and d) monitoring and reporting on diversion and enhanced flows of water associated with the project.
2. In the year that the project conservation measures are activated (2018, 2019, or 2020), TU shall verify to BEF that the project has resulted in actual enhanced instream flows by completing the Report Form (Exhibit B) which describes the monitoring methods, applicable stream reach, and total amount of flow restored instream as a result of BEF’s funding. TU shall provide that form to BEF no later than December 1 of the Vintage year in which flows are restored.
3. TU will provide to BEF at least 5 photos that depict project implementation, landscape, and/or stream conditions in and around the Specified Resource. TU will make a good faith effort to obtain photos that depict “before-after” conditions in which enhanced flows may be visually and/or qualitatively compared with low flow conditions during a period in which the project is not active. TU acknowledges and agrees that BEF may use all photos provided to BEF under this agreement in BEF’s printed and electronic materials, funding reports, and/or other media that BEF deems appropriate.
4. TU will obtain signed agreements that represent commitments with water rights holders to participate in the program and will provide example copies of these agreements to BEF. TU reserves the right to redact any information from these documents that it deems to be confidential.

C. CLAIMING RIGHTS, WARRANTIES AND LIMITATIONS, AND GENERAL PROVISIONS

1. Claiming Rights. TU acknowledges that BEF intends to transfer and/or sell to third parties the right to claim to have funded some portion of the instream flows that are restored as a result of funding provided by BEF for the project. TU will report the portion of the project water funded by BEF, and any and all claims transferred or sold by BEF will be based on the actual funding provided by BEF and may include representations regarding the environmental benefits expected to occur as a result of restored instream flows. The Parties accordingly agree that:
 - a. TU shall take no action that may prevent BEF from selling or transferring all such Claiming Rights.
 - b. Any BEF representations and/or marketing materials regarding the environmental benefits that may result from the Project must be reviewed and approved by TU prior to dissemination to the public.

- c. The use of the TU logo or the use of the name “Trout Unlimited” for any purpose must be approved in advance by TU.
 - d. TU shall advise contractors, irrigation districts and/or water right holders associated with the project that BEF and other third parties may claim to have funded the conservation and/or restoration of water into Tomichi Creek as a result of the project, in whole or part, and may claim to have offset or balanced their water use or otherwise make sustainability claims as a result of funding for this project.
 - f. TU warrants to BEF that TU has not and will not sell, market, provide, retain, or otherwise transfer to any other person or entity a) the right to claim to have funded the instream flows made possible by BEF’s funding provided for the project, or b) the right to claim credit for the environmental flow benefits that occur as a result of such instream flows restored through BEF’s funding for the project.
 - g. TU and the water users who participate in the Project shall retain full rights to claim to have implemented the project and/or brokered, arranged, found, and otherwise facilitated all of the instream flows occurring as a result of this project.
2. Environmental Benefits: TU possesses the reasonable beliefs:
- a. That the funding provided by BEF pursuant to this Agreement will create environmental benefits;
 - b. That the water rights holders and/or irrigation districts engaging in this instream transfer or commitment, possess the means to divert and use this water for purposes other than instream beneficial uses; and
 - c. That funding for this transaction has directly caused or produced an increase in the amount of water flowing through a designated reach.
3. Limitations:
- a. This Agreement is not intended to and does not grant BEF any third-party rights with respect to any contractual arrangements between TU and project partners.
 - b. The Parties agree that nothing in this Agreement is intended to or does transfer any ownership or any property right to BEF in the underlying water rights associated with the project.

D. PAYMENT, INVOICING AND DELIVERY

1. In order to fund the implementation of the project subject to this Agreement and to support TU’s initiatives related to restoring flows in Tomichi Creek~~the Upper Rio Grande River~~, BEF shall pay to TU the amounts specified in Exhibit A.

E. RIGHTS OF TERMINATION

1. Right to Terminate and Event of Default. Either Party shall have the right to terminate this Agreement prior to the Termination Date if the other Party (a) fails to pay any amount due hereunder within 30 days of its due date, (b) breaches any other obligation hereunder and fails to

cure such breach within 30 days of notice thereof, (c) becomes insolvent, bankrupt, makes an assignment for the benefit of creditors or admits in writing that it cannot pay its debts as they become due, (d) defaults under any other agreement with the other Party, (e) is unable to complete project due to final costs or lack of funding or (f) is demonstrated to have made false declarations in signing the Monitoring Report Form.

2. Force Majeure. Neither Party shall be liable to the other Party, nor deemed to be in breach of this Agreement, for failure or delay in performance arising from a Force Majeure. Force Majeure means an event beyond the reasonable control of the affected Party, and which the Party is unable to prevent or provide against by exercising reasonable diligence. Force Majeure events include, but are not limited to, acts of God, acts of the public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, tornadoes, volcanoes, fires, storms, floods, disasters, civil disturbances, explosions, sabotage, breakdown or collapse of irrigation conveyance infrastructure, drought conditions with severity exceeding the 10-year period of record, the binding order of any court or governmental body which by exercise of due foresight the Parties could not reasonably have been expected to avoid, government declaration of public safety concerns and associated mandates, changes after the date hereof in Federal, State, or local laws or appropriations, but expressly excluding a Party's financial inability to perform.

F. MISCELLANEOUS.

1. This Agreement may be amended, extended or modified in any way only by written amendment signed by both parties.
2. Nothing in this Agreement shall preclude or otherwise dictate any future projects or collaborations between the parties to increase support and funding available for water restoration and sustainability projects in which the parties may engage in the future.

SO AGREED.

Bonneville Environmental Foundation

Trout Unlimited

Signature _____

Signature _____

Name Todd Reeve

Name Drew Peternell

Title CEO

Title Colorado Water Director

Date _____

Date _____

Exhibit A

ADDITIONAL TERMS TO THE FLOW RESTORATION FUNDING AGREEMENT BETWEEN

THE BONNEVILLE ENVIRONMENTAL FOUNDATION AND TROUT UNLIMITED

This Exhibit describes transaction-specific details of the Flow Restoration Funding Agreement, including a description of the Specified Resource(s) and certain conditions of performance.

This Exhibit is an integral part of the foregoing Agreement, adopts the definitions in the Agreement, and is intended by the parties to be treated as a part of the entire Agreement.

DESCRIPTION OF THE SPECIFIED RESOURCE

TU will facilitate the implementation of the instream flow restoration project for the Specified Resource with the accompanying characteristics:

— Specified Resource Description—

Waterbody, and/or section thereof:	Primary Benefit Reach: <u>Tomichi Creek—From McCanne Number 2 Diversion to Adams Number 1 Diversion Distance of 6.7 miles</u> Secondary Benefit Reach: <u>Tomichi Creek and Gunnison River—From below Adams Number 1 Diversion to Blue Mesa Reservoir. Distance of 9 miles. XX to XX</u>
Agent of Instream Water Transfer:	Trout Unlimited-Colorado
Instream water right or lease reference number (if known):	N/A
Seasonal period and effective dates of flow restoration:	<u>July 1 --- October 1</u>
Vintages of instream flow restoration:	Project will activate in one of the following years: 2018, 2019, or 2020.
Monitoring method:	Visual inspection, stream gaging, Photo points, atmometer.
Monitoring frequency:	Periodic gaging before, after, and during water release.
GPS Waypoints or Other Identifying Criteria (if any):	38.5458° N, 106.9253° W

QUANTITY OF INSTREAM FLOW

In exchange for BEF's obligations to provide TU with funding to facilitate project implementation at the Specified Resource(s) described above, TU will implement the Project and allow stream flow to be restored to the reach designated in the Specified Resource Description above. Flow benefits will accrue to the Primary Benefit Reach identified above. Additionally, there may be flow benefits to the Secondary Benefits Reach, although these benefits are uncertain given the existence of downstream diversions.

The tables below define the Vintage and quantity of instream flow that TU will restore instream as a result of funding from BEF. Note, however, that the projection of the volume of water to be restored is based on modeled conditions. The actual volume of water restoration, and therefore the cost per acre-foot, could vary based on actual conditions. The \$20,000 payment from BEF to TU will not change based on actual conditions, unless actual conditions are so dry that there is no water to restore, in which case the project will not be implemented.

Vintages (calendar years)	One Vintage will occur in either 2018, 2019, or 2020.
Project Costs and Contributions	
Cost per Acre Foot (Consumptive use)	\$180/AF
Total BEF Payment to TU	\$20,000
Projected Instream Flow Volume Expected to Result from BEF Funding	
Expected Quantity of flow to be restored as a result of BEF funding	111 Acre Feet

PAYMENT AND INVOICING

BEF will pay to Trout Unlimited \$20,000 (twenty thousand dollars) upon execution of this agreement by both parties.

BEF Funding provided through this agreement will be used by TU to provide payments and incentives to participating water rights holders to enroll them in the program. The price per Acre Foot is \$180, subject to the other provisions of the Flow Restoration Funding Agreement and this Exhibit A.

Exhibit B:

Environmental Flow Monitoring Report Form

This Report incorporates by reference the definitions of capitalized terms from the Flow Restoration Funding Agreement between Trout Unlimited and Bonneville Environmental Foundation dated _____ 2018.

Specified Resource Information:

Name of River or Stream (and Section thereof):

Tomichi Creek:

- Primary reach of benefit—Tomichi Creek from From McCanne Number 2 Diversion to Adams Number 1 Diversion Distance of 6.7 miles
- Secondary reach of benefit—Tomichi Creek and Gunnison River from below Adams Number 1 Diversion to Blue Mesa Reservoir. Distance of 9 miles.

Project Benefits Summary Table

Project Flow Enhancement Results Supported with BEF Funding	
A. Vintage of Water Restoration	
B. Amount of funding provided by BEF	
C. Cost per Acre Foot	
D. Volume Restored with BEF Funding only	
E. Volume restored by Total Project (funding from BEF and other funders)	

Monitoring methods employed in the prior year (check all that apply):

- ___ Stream Gaging (before, after, and during project implementation)
- ___ Visual inspection of water release and headgates
- ___ Atmometer used to measure evaporation
- ___ Other (Please describe) _____

Attach here brief narrative summary of monitoring reports and/or data used to estimate volume of instream flow restored pursuant to BEF funding for this transaction

Attestation:

As an authorized agent of **Trout Unlimited**, I attest that the above statements are true and correct to the best of my knowledge.

Signature: _____ Date: _____

Place of Execution: _____

Exhibit C

Project: The Tomichi Water Conservation Program

The Tomichi Water Conservation Program will involve regional coordination between six water users on lower Tomichi Creek to reduce consumptive use on irrigated meadows as a watershed drought management tool. The program will begin with water user enrollment in April of 2018 and end in November of 2020. The project will use water supply as a trigger for water conservation measures during one year in the three-year period. During implementation, participating water users would cease irrigation on July 1 to 1009 acres the resulting in an estimated 854 acre feet of conserved water. Water not diverted will improve environmental and recreational flows through the Tomichi State Wildlife Area and be available to water users below the project area.

TU has requested funding for this program from the Colorado Water Conservation Board (CWCB), Gunnison Basin Roundtable (GBR), Pilot System Water Conservation Program (PSWCP), and two private foundations. CWCB staff stated they will recommend approval of \$75,000 to the CWCB directors and the GBR has recommended approval for \$34,500. Trout Unlimited's request for \$50,000 from the PSWCP will be combined with funding from the CWCB and private foundations and be used to compensate water users for their portion of reduced consumptive use, at \$180 per acre foot, subject to the other provisions of the Flow Restoration Funding Agreement and the exhibits thereto. Trout Unlimited will sign funding agreements with all funding organizations and manage payments to participating water users and engineering contractors involved with this project.

The following four tasks outline are how the program will be structured.

1. Enroll participants in conservation program

TU will contract with water users interested in participating in the three-year program. The TU/Water User contract will provide a summary of the irrigated land, irrigation ditches, proposed conservation strategy, payment amount, and payment schedule. Additionally, the contract will include a stipulation that the participants agree to consult by May 1st of 2018, 2019, and 2020 to determine if conservation measures will take place during the upcoming irrigation season. May 1st consultation will not be necessary after the year conservation measures are implemented. Once the contract is completed, participants will receive an enrollment payment of \$20 per acre enrolled.

2. Model, Implement and verify conservation results

In January of 2018, Trout Unlimited will hire Wilson Water Group to analyze how the split-season water conservation strategies will increase streamflow through and downstream of the project area during average and dry water years. The streamflow model will help project the extent conserved water will be available through and downstream of the project area as well as help define the year types that conservation measures will be most beneficial to the watershed. The program will be implemented the first year that meets the implementation trigger criteria. If neither of the first two years meet the criteria, the program will be implemented in the third year, regardless of water availability conditions.

During the conservation year, Trout Unlimited will coordinate with water users to implement the conservation measures as they are described in the TU/Water User contract. Trout Unlimited will pay participants 50% of the conserved water payment within 30 days of the date parties decide it will be the implementation year. The remaining 50% of the payment will made within 30 days of the time conservation measures are completed.

Trout Unlimited will photograph the participating ditch headgate and irrigated field before and after the agreed shutoff date. Verification photos will accompany a monthly site visit report which will be provided to project

fundings. An atmometer will be installed to monitor evaporation in the project area and soil moisture measurements will be taken during site visits. Data collected will be referenced to Gunnison COAgMet station, located 5 miles to the north of the project, to estimate actual vs. modeled conserved water. Stream flows will be measured below the project area before, during, and after conservation actions take place. These measurements will be compared to the Tomichi at Gunnison USGS gauge to better understand the extent conserved water is measurable downstream of the project area.

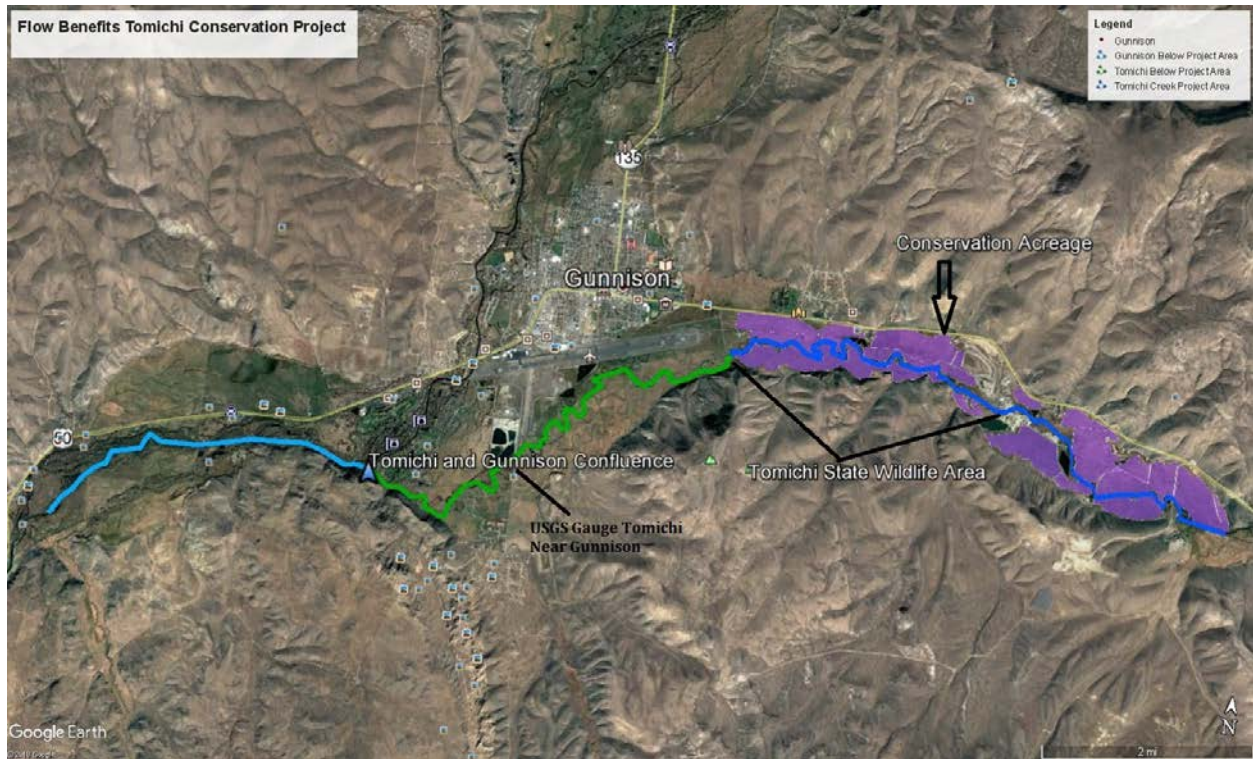
3. Secure water right protections

This task will secure protection against abandonment or diminishment of historical consumptive use for the participating water users rights through enrollment in water conservation program as described in C.R.S 37-92-103 and Colorado S.B. 13-019.

4. Evaluate opportunities to bank conserved water in Aspinall Unit

Project partners will evaluate whether and how water conserved in the Upper Gunnison might be shepherded to Aspinall Unit and be accounted for by the Bureau of Reclamation. This task will help determine how conserved water programs in the upper Gunnison Basin can be used to best address system-wide water shortages as well as protect a wide range of upper Gunnison water users.

Map on following page.



Jesse Kruthaupt

From: Bassi - DNR, Linda <linda.bassi@state.co.us>
Sent: Friday, February 09, 2018 12:47 PM
To: Jesse Kruthaupt
Cc: Brandy Logan
Subject: Water Plan Grant for Lower Tomichi Water Conservation Project
Attachments: WPGrant Budget and Schedule Template - Exhibit B.xlsx; Tomcihi Water Conservation Program Scope of Work.docx

Hi, Jesse. I am writing to follow up on the Water Plan Grant for the above-referenced project approved by the Colorado Water Conservation Board in the amount of \$75,000. As you are aware, a grant purchase order must be in place before the funds can be disbursed. To enable us to issue a purchase order, we need you to submit a detailed budget and schedule for this project. A template is attached that you will need to tailor to the specifics of this project. Please only include tasks that will be funded in part by this grant and identify the portions that will be funded by CWCB grant funds and by matching funds (should be a 50/50 split). Also, we have added two boilerplate provisions to your Scope of Work, attached for your review. Both are at the end of the document. The first addresses Payment and the second addresses Performance Measures.

The following CWCB web link will direct you to the Colorado Water Plan Grants page for information on contracting and reporting requirement guidelines: <http://cwcb.state.co.us/LoansGrants/Colorados-Water-Plan-Grants/Pages/main.aspx>

On behalf of the Board, I would like to thank you for your interest in a CWCB Colorado Water Plan Grant for this valuable project. Please let us know if you have any questions. Thank you.

Linda J. Bassi
Chief, Stream and Lake Protection Section



O 303-866-3441 x3204 | F 303-866-4474
1313 Sherman St., Rm. 721, Denver, CO 80203
linda.bassi@state.co.us | <http://cwcb.state.co.us>



UPPER COLORADO RIVER COMMISSION

355 South 400 East • Salt Lake City • Utah 84111 • 801-531-1150 • FAX 801-531-9705

January 19, 2018

Trout Unlimited
Attn: Jesse Kruthaupt
604 Elsa CT
Gunnison, CO 81230

Re: Notice of Satisfaction of Preliminary Submittal Requirements

Dear Mr. Jesse Kruthaupt:

Thank you for submitting an application to participate in the Colorado River Basin System Conservation Pilot Program (Pilot Program). As you know, the Pilot Program was established through the joint cooperation of the U.S. Bureau of Reclamation, Denver Water, the Central Arizona Water Conservation District, the Metropolitan Water District of Southern California, and the Southern Nevada Water Authority (Funders) and is being implemented to test methods to conserve Colorado River system water in both the Upper and Lower Colorado River Basins. The Pilot Program is being facilitated in the Upper Colorado River Basin by the Upper Colorado River Commission (UCRC) with support from the Funders.

With this letter, the UCRC is pleased to inform you that your application has satisfied the preliminary requirements for participation in the Pilot Program. Selection of your project for participation and subsequent compensation for your participation is contingent upon agreement to terms of the pilot project participation contract (contract) between you and the UCRC, final execution of the contract, and the securing of project-specific funding from the Funders. A representative from the State of Colorado and/or the UCRC will be in contact with you soon to work out the terms of a contract specific to your proposed pilot project.

Enclosed you will find a copy of the pilot project sample contract. This sample contract will require the addition of project-specific information and a verification plan specific to your particular project. Although the sample contract is subject to modification for your project, our office anticipates the final executed contract will closely resemble the sample contract. Please review the sample contract, enter information specific to your project where appropriate and add suggestions and/or questions, if any. Please provide any suggestions regarding the sample contract within ten (10) calendar days of receipt of this letter to the contracting representative. We will need to finalize the contract in a timely manner prior to your project's start date. Once you provide project-specific information and any suggestions, the UCRC will provide you with a revised proposed contract for your signature.

We are optimistic that this project will proceed. However, please be advised that any work you perform prior to the execution of a pilot program contract, including any funds expended or expenses incurred by you in anticipation of contract execution and successful completion of the above-mentioned project, are at your own risk. Should you choose to begin the project prior to full execution of a contract, please be advised that compensation for your work is not guaranteed.

Please do not hesitate to contact me with any questions or concerns.

Sincerely,

Don A. Ostler
Executive Director

bh

February 21, 2018

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

RE: Tomichi Water Conservation Program Project Proposal

Dear CWCB Staff,

On behalf of The Nature Conservancy and our Colorado River Program, I am pleased to offer our support for the Tomichi Water Conservation Program grant application. This project is in line with our program's goal to protect and restore healthy stream flows in the Colorado River Basin and we believe it will help further develop the solutions necessary to maintain robust agriculture and healthy streams as we face increasing demands and decreasing supplies here in Colorado and throughout the broader river basin.

The Nature Conservancy and Trout Unlimited have been active leaders in researching and developing innovative water conservation programs in Colorado, including investigation on how a water bank can work to address risks associated with drought and the Colorado River Compact. With this work, we frequently face questions and concerns about how agricultural water conservation will affect operations, their surrounding communities, and how water banking scenarios will play out on the ground. Additionally, we have worked with Trout Unlimited and other partners in the Gunnison Basin to understand the legal and operational implications of water banking as it relates to local storage facilities. This project provides the opportunity to better understand those tough questions through on the ground research and project implementation.

The Conservancy is a committed partner in the Tomichi Water Conservation Project and has agreed to provide up to \$5,000 of support through a combination of cash and in-kind staff time. I strongly encourage the Colorado Water Conservation Board to fully support the project.

Thank you for your time and consideration.

Sincerely,



Aaron Derwingson
Agricultural Coordinator, Colorado River Program

**UPPER GUNNISON RIVER WATER CONSERVANCY
DISTRICT 2018 GRANT APPLICATION**

Date Received (for UGRWCD use only): _____

Project Title: Tomichi Water Conservation Program

Applicant Trout Unlimited

Contact Information:

Name: Jesse Kruthaupt Address: 604 Elsa CT, Gunnison CO, 81230

Phone: 970-209-0976 Fax: _____ Email: jkruthaupt@tu.org

Estimated Start Date April 2018 Estimated Completion Date Dec 1, 2020

Amount of Funding Request: \$10,000

Match Amount provided (all sources): \$ 203,900

Total Project Cost: \$213,900

Project Description: Please see attached proposal

Project Background

This agricultural water conservation project proposal is located in the upper Gunnison basin on Tomichi Creek, tributary to the Gunnison River above Blue Mesa Reservoir. Trout Unlimited has helped organize this proposal in coordination with six individual land owners, input from local water leaders, and The Nature Conservancy. This project will involve regional coordination to improve environmental and recreational flows through and below the Tomichi State Wildlife Area, as well as to reduce agricultural shortages below the Tomichi SWA. The program will also provide an example of how temporary, voluntary, and compensated reduction of consumptive use can be used to reduce local watershed shortages during drought years and protect water users from increasing water demands on the Colorado River.

The lower Tomichi Creek region was chosen as the demonstration site because existing relationships and past coordination will provide a project that is ready for implementation.

The water conservation approach will be transferable to other areas in the upper Gunnison and western Colorado. Documents used for contracting, accounting, verification, and monitoring will be provided as project deliverables to support future innovative water conservation efforts locally and throughout the state.

The program will begin with water user enrollment in April of 2018 and end in November of 2020. The project will use water supply as a trigger for water conservation measures during one-year in the three-year project period. During implementation, participating water users would cease irrigation on or near July 1st to approximately 1009 acres resulting in an estimated 854-acre feet of conserved water.

TU has been approved funding for this program from the Colorado Water Conservation Board (CWCB) Colorado Water Plans Grants for \$75,000, Gunnison Basin Roundtable WSRF basin funds for \$34,500, Pilot System Water Conservation Program (PSWCP) for \$50,000, and Bonneville Environmental Foundation for \$20,000. This combined pool of \$179,500 will be used to compensate participating water users for their portion of projected reduced consumptive use, at \$180 per acre foot.

Trout Unlimited is requesting \$10,000 from the Upper Gunnison River Water Conservancy District to assist with stream flow measurement and gauging during implementation, soil moisture sensors and consumptive use monitoring and verification.

Project Objectives:

- Test if temporary and coordinated split-season agricultural water conservation is an applicable management tool for irrigated mountain meadows.
- Reduce local water shortages and improve stream flows during a below average water year.
- Use aerial imagery and soil moisture sensors to monitor actual consumptive use reduction resulting from proposed conservation actions.
- Measure resulting stream flow changes resulting from conservation actions.

- Evaluate opportunities to bank Upper Gunnison conserved water in the Aspinall Unit.

Definition of the Problem

Discussions about agricultural water conservation are becoming more common for water managers in Western Colorado. Questions are frequently brought up if conservation efforts in the Upper Gunnison Basin are practical and if they will result in measurable water.

Project Appropriateness

This project is consistent with UGRWCD mission and fulfills three of the five criteria for eligibility.

- Measures to improve in-stream water quality – Lower Tomichi can suffer from low flows and high temperatures during below average water years. This project will help improve flows on up to 6 miles of Lower Tomichi Creek during the next below average water year.
- Implementation of watershed management actions – Demonstration regional coordination and monitoring resulting impact from conservation measures will provide insight to future water management.
- Improvement of existing water supply- Management changes during the implementation year on the participating ditches will result in water supply for instream and agricultural use on lower Tomichi Creek.

Project Implementation

Task 1. Enroll participants in conservation program

In April 2018, TU will begin to contract with water users interested in participating in the three-year program. The TU/Water User contract will provide a summary of the irrigated land, irrigation ditches, proposed conservation strategy, payment amount, and payment schedule. Additionally, the contract will include a stipulation that the participants agree to consult by May 1st of 2018, 2019, and 2020 to determine if conservation measures will take place during the upcoming irrigation season. Determination will be based on water supply conditions. May 1st consultation will not be necessary after the year conservation measures are implemented. Once the contract is completed, participants will receive an enrollment payment of \$20 per acre enrolled in the program.

The rate for reduced consumptive use will be negotiated and agreed upon the spring prior to any conservation measures taken place. This rate will not exceed \$180 an acre foot.

Task 2. Model stream Flow

In the spring of 2018, Trout Unlimited will hire Hydros Consulting to analyze how the split-season water conservation strategies will increase streamflow through and downstream of the project area. Four water management scenarios will be modeled to estimate stream flows at three points below the project area. The points will include Adams No 1 head gate, Tomichi at Gunnison USGS Gauge, and Inflow to Blue Mesa. The four chosen scenarios will include:

- # 1. Historic flows at the three points 1998 to 2013

2. Flow at the three points during 1998 to 2013 if irrigation was shut off to participating diversions on July 1 each year.

#3. Same as Scenario 2, but with the consumptive use reductions from the 9 ditches shepherded to Blue Mesa.

#4. Model if releases from Taylor Park 2016 refill right would have been enough to satisfy the GT shortage in 2002 and 2003. If not, take outputs from Scenario 3 (the amount of conserved UG water shepherded to BM), and plug these into a new Conservation account in the Accounting Spreadsheets, to see how conserved water effects the GT shortage in 2002 and/or 2003.

The streamflow model will help project the extent conserved water will be available through and downstream of the project area as well as help define the year types that conservation measures will be most beneficial to the watershed. The Scope of Work for stream flow modeling is include in Appendix B.

Task 3: Implement Conservation Program

The program will be implemented the first year that meets the implementation trigger criteria. If neither of the first two years meet the criteria, the program will be implemented in the third year, regardless of water availability conditions.

During the conservation year, Trout Unlimited will coordinate with water users to implement the conservation measures as they are described in the TU/Water User contract. Trout Unlimited will pay participants 50% of the conserved water payment within 60 days of the date parties decide it will be the implementation year. The remaining 50% of the payment will made within 60 days of the time conservation measures are completed.

Conservation efforts will begin as early as June 25th, 2018 and will not go beyond October 2020. Implementation of the water conservation program on the chosen year will be contingent on water availability as forecast by the, May 1st Colorado Water Supply Outlook Report. Climate criteria for implementation will be developed with water user input and by modeling completed by a hired engineer.

Task 4: Monitor and Verification

Stream Flow

TU will coordinate with Western State Colorado University to select a student to assist with a temporary stream flow monitoring station just downstream of the project area. A pressure transducer will be installed to record stage height and manual flow measurements will taken throughout the season to develop a rating curve for the site. Flows will be recorded at this site before, during, and after conservation actions take place. These measurements will be compared to the Tomichi at Gunnison USGS gauge and the stream flow model and help better understand the extent conserved water is measurable downstream of the project area.

With guidance from Trout Unlimited and WSCU staff, the chosen student will be required to develop a monitoring plan, assist with flow measurements, and help develop the summary report.

Consumptive Use

To better understand the extent consumptive use is reduced Trout unlimited will contract with Axtel Imaging Solutions to capture aerial multispectral images of the project area prior to and during the conservation period. Images will be taken once a month in June, July, August and September. Dates will be scheduled to correlate with periods when irrigation is taking place, May-June 30th, and periods when conservation actions are taking place, July 1-September 30. Adjacent acreage not participating may also be captured and provide useful reference conditions. As see in Figure 1. imaging will provide a visual representation of crop stress levels. Soil moisture measurements will be taken throughout the project period. The soil moisture data will also be cross referenced with the aerial imagery to ground truth and reference actual conditions.

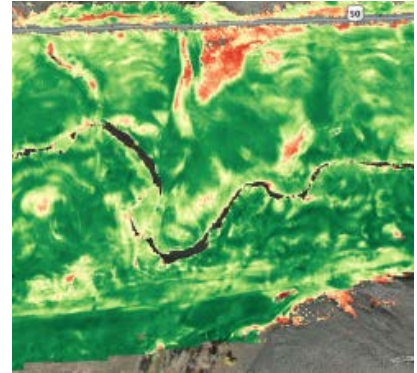


Figure 1: Crop stress imagery

Verification

Wilson Water group has been contracted to complete verification on PSWCP projects throughout CO, WY, Utah. Therefore, they will perform verification for this project. Text below was taken from a draft verification plan for the project.

Verification that the participating fields do not receive irrigation water during the conservation period will be done through coordination with the Division Engineer's Office, site visits throughout the duration of the project, and a consumptive use analysis.

A. Coordination with Division Engineer's Office. On behalf of the Tomichi Water Conservation Program, Trout Unlimited and/or Wilson Water Group will coordinate with the Division 4 Engineer's Office to inform them of project participation. This is important so that the diversion records and comments adequately reflect that water was intentionally not diverted as part of a State approved conservation plan. The Water Commissioners can also help ensure the diversions are not taken at the river headgate.

B. Site Visits. Site visits will consist of verifying the and ranch delivery headgates are completely closed for the duration of the fallowing, and no water is being applied to the participating acreage. Photos will be taken of the river and ranch delivery headgates and the fallowed acreage to verify Project Activity. Site visits will be completed monthly by a UCRC team member, Wilson Water Group staff, and/or staff from the Division Engineer's Office, and maybe accompanied by staff from Trout Unlimited. Site verification documents, including at least one photo of each river and ranch delivery headgate, where applicable, and photos covering the full extent of the fallowed acreage.

C. **Consumptive Use Analysis.** A consumptive use analysis will estimate the amount of water savings throughout the duration of the project. After the completion of the Project Activity, Wilson Water Group will perform a consumptive use analysis using the Modified Blaney-Criddle method and climate data from a selected CoAgMet station located near the Tomichi Water Conservation Program participants property. The analysis to estimate water savings will assume the participating fallowed acreage would have received either a full supply or a reduced supply based on the review of continued ditch diversions for other irrigated parcels served by the same headgate and will be based on the acreage provided for in the Contract. The potential consumptive use will be reduced by effective precipitation to determine the maximum consumptive use from irrigation. Actual consumptive use from irrigation for the participating fallowed field will be estimated to be zero; any consumptive use from irrigation water stored in the soil zone will be assumed to be negligible. Therefore, the calculated consumptive use from irrigation water will be the net savings.

Note, the Wilson Water Group consumptive use analysis is for study purposes only. Compensation to the applicant shall be provided for in the Contract.

Task 5: Secure water right protections

This task will secure protection against abandonment or diminishment of historical consumptive use for the participating water users rights through enrollment in water conservation program as described in C.R.S 37-92-103 and Colorado S.B. 13-019. TU will submit a package application for Program Participants to the Colorado River District and request enrollment as a sponsored water conservation program.

Task 6. Evaluate opportunities to bank conserved water in Aspinall Unit

Project partners will evaluate whether and how water conserved in the Upper Gunnison might be shepherded to Aspinall Unit and be accounted for by the Bureau of Reclamation. This task will help determine how conserved water programs in the upper Gunnison Basin can be used to best address system-wide water shortages as well as protect a wide range of upper Gunnison water users.

Project Budget and Schedule: Please see attached spreadsheet in Exhibit B. The \$10,000 requested from UGRWCD will be used for monitoring described in Task 4. Project will begin in April 2018 and end in December 2020.

Qualifications of Applicant and partners

Trout Unlimiteds work in the Upper Gunnison Basin focused on water use solutions that will benefit agricultural operations and protect and improve cold water trout habitat. Jesse Kruthaupt, Trout Unlimited's Upper Gunnison Project Coordinator, will be managing the project. Jesse has been working for TU in the Upper Gunnison since 2012 and has been involved in agriculture and irrigation in the area for over 20 years.

The Nature Conservancy has been an active leader in researching and developing innovative water conservation programs in Colorado, including investigation on how a water bank can work to address risks associated with drought and the Colorado River Compact. The Nature Conservancy will provide legal and technical assistance to evaluate opportunities to bank conserved water in Aspinall Unit.

Project beneficiaries

- Participating water users
- Colorado Parks and Wildlife
- Trout Unlimited
- Upper Gunnison River Water Conservancy District

Project Partners

- Colorado Water Conservation Board
- Bonneville Environmental
- Upper Colorado River Commission
- Trout Unlimited
- The Nature Conservancy