

### **AColorado 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

ben.wade@state.co.us craiq.qodbout@state.co.us megan.holcomb@state.co.us

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

	WSRF Submittal Checklist (Required)
	I acknowledge this request for funding was recommended for CWCB approval by the sponsoring Basin Roundtable(s).
	I acknowledge I have read and understand the 2016 WSRF Criteria and Guidelines.
Ī	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract.(1)
Exhibit	A .
	Statement of Work <sup>(2)</sup> (Word – see Exhibit A Template)
	Budget & Schedule <sup>(2)</sup> (Excel Spreadsheet – see Exhibit A Template)
	Letters of Matching and/or Pending 3 <sup>rd</sup> Party Commitments <sup>(2)</sup>
Exhibit	C
	Map <sup>(2)</sup>
	Photos/Drawings/Reports
	Letters of Support
	Certificate of Insurance <sup>(3)</sup> (General, Auto, & Workers' Comp.)
Contra	octing Documents
	Certificate of Good Standing <sup>(3)</sup>
	W-9 <sup>(3)</sup>
	Independent Contractor Form <sup>(3)</sup> (If applicant is individual, not company/organization)
	Electronic Funds Transfer (ETF) Form <sup>(3)</sup>
(4) OII	ob "Crant Agreements" For reference only do not fill out or submit/required for contracting

- (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.



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:	September 2018			
Desired Notice to Proceed Date:	Spring, 2019			

	Water Activit	y Summary	
Name of Applicant	Arkansas River Watershed Collaborative		
Name of Water Activity	Monarch Pass Forest and Watershed Health Project		
Approving Roundtable(s)		Basin Account Request(s)(1)	
Arkansas		37,000	
Basin Account Request Subtotal		\$37,000	
Basin Account Request Subtotal Statewide Account Request <sup>(1)</sup>		\$37,000 \$366,739	
· · · · · · · · · · · · · · · · · · ·	ısin & Statewide)		

<sup>(1)</sup> Please indicate the amount recommended for approval by the Roundtable(s)



Grantee and Applicant Information			
Name of Grantee(s)	Arkansas River Watershed Collaborative		
Mailing Address	Box 746		
FEIN	82-3840102		
Grantee's Organization Contact <sup>(1)</sup>	Carol Ekarius		
Position/Title	Executive Director		
Email	Carol.ekarius@co-co.org		
Phone	719-748-1496		
Grant Management Contact <sup>(2)</sup>	Same as above		
Position/Title			
Email			
Phone			
Name of Applicant (if different than grantee)	Coalitions & Collaboratives, Inc		
Mailing Address	Same as above		
Position/Title			
Email			
Phone			

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

### **Description of Grantee**

Provide a brief description of the grantee's organization (100 words or less).

The Arkansas River Watershed Collaborative (ARWC) is a new nonprofit organization that was formed by the Arkansas Basin Roundtable (ABRT). ARWC was first proposed by the Watershed Health subcommittee of the ABRT during its Basin Implementation Plan (BIP) process. Each County and water entity partner within the Basin supported it in their recommendations for the BIP. Since then ARWC has been involved in many projects, ranging from increasing capacity of local groups, to responding to wildfires, increasing work on pre-fire mitigation, and addressing water-quality concerns to name a few projects.



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.					
Х	Non-governmental organizations: broadly, any organization that is not part of the government					
	Covered Entity: as defined in Section 37-60-126 Colorado Revised Statutes					

Type of Water Activity (check one)			
	Study		
X	Implementation		

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

Location of Water Activity				
Please provide the general county and coordinates of the proposed activity below in <b>decimal degrees</b> .  The Applicant shall also provide, in Exhibit C, a site map if applicable.				
County/Counties Chaffee				
Latitude	38.9392			
Longitude 104.467				



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.

- 1.) Demonstrate a new technology that has not been used in Colorado, which if successful will help address fire mitigation on steep slopes. Many of Colorado's most important reservoirs and water infrastructure (such as trans-mountain diversions), are located in areas adjacent to extremely steep slopes. For example, Colorado Springs Utilities asked Brad Piehl of JW Associates (who did the wildfire/watershed analysis for the USFS and major water providers throughout the state) to analyze how many areas this could work on that are greater than 30% slopes and within the high priority zones of concern, and his analysis showed 21,000 acres. One specific example would be Clear Creek Reservoir, and primary reservoir for Pueblo Water. There are 1853 acres on the uphill side of the reservoir that could be treated with this technology. Twin Lakes, another critical reservoir, has 3,935 acres that would be suitable for this technology. These slopes have not been mitigated against catastrophic fire in the past due to the cost of treating such steep slopes (either by helicopter or cable logging), but this technology will significantly reduce the cost by ~60% of these other alternatives. For example heli-logging runs between \$5,000 and \$6,000 per acre, but we anticipate this approach to be less than \$2,500 per acre, even with mobilizing from out of state. If in the future we develop enough call for this work that local logging companies invest in the equipment, costs should come down even more. USFS Salida Ranger District staff have been out to Washington & Oregon to see the equipment in action, and are committed to implementing a 600-acre trial project on steep slopes adjacent to the South Arkansas River and across Highway 50 from Monarch Ski Area. They approached ARWC and the ABRT to develop a partnership demo project that also includes Trout Unlimited, and a variety of water partners and local governments in the Arkansas Basin.
- Perform watershed restoration activities in the drainage where forest treatments will occur, such as stream bank protection, soil amendment, seeding and willow planting, and similar activities.

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



### 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 and 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 2016 WSRF Criteria and Guidelines).

The Colorado Water Plan recognized the issue of fire in Colorado critical watershed areas, including the ABRT's "Circle of Fire". Subsequent to the plan, the legislature directed The Colorado State Forest Service (CSFS) and CWCB to prepare a report as a supplement to the Water Plan addressing the wildfire/watershed issues. The report, *Forest Management to Protect Colorado's Water Resources*, provides scientific information about the benefits and challenges of managing Colorado's forests to secure water supplies. On page 13, in the Conclusions section, it states:

"Sustained delivery of clean water is closely linked with the health of headwater forests, and projections of increased disturbance in these forests creates concerns regarding the future of Colorado's water resources... Research has advanced scientific understanding regarding the watershed implications of these disturbances and provided information to support proven forest management activities. Science-based forest management can create forest stand conditions that are less susceptible to bark beetle infestations, and also has been shown to reduce hazardous fuels levels linked to wildfire risk and severe fire behavior that can be harmful to watersheds."

The report also found: "Partnerships will continue to be key to implement effective management of forested watersheds for sustainable water supply and quality."

### Points of consideration per the criteria:

Need: This project will use science-based prescriptions and the latest technologies to treat a forest that has already experienced high mortality from insect infestations and will reduce future fire impacts to the South Arkansas River. It is multi-dimensional, addressing both the forest/fire issues, as well as other watershed issues, such as excessive sedimentation from culverts and improved riparian function. Forest/fire mitigation projects were identified in the Ark BIP as a high priority for protecting water resources in the basin.

Partnerships and Collaboration: COCO/ARWC's staff have been key members of some of the most effective wildfire/watershed partnerships in the state. The USFS has indicated that with local partnership support this project could be implemented within a year, yet if they do not have the support from water stakeholders the process may not be funded for several years into the future. We also have a number of other partners, including primary partners of the Upper Arkansas River Conservancy District and Trout Unlimited, with additional collaborators including Center of Colorado Conservancy, Chaffee County, Salida, Poncha Springs, Colorado Springs Utilities, and other water providers (Aurora, Denver, Pueblo, etc) who are providing funding to support the demonstration aspect.

Sustainability: The project helps to avoid adverse impacts of wildfire to recreation and watershed values, as well as mitigating economic impacts of high-intensity fires to local communities and state agencies.

Fiscal and technical feasibility: The project will demonstrate an approach that should significantly decrease the cost of treating steep slopes; it has good buy-in (including cash contributions) from a variety of stakeholders, including local governments, regional water interests, and support from local recreation businesses who depend on the Arkansas River for their livelihoods. It will leverage federal and nonprofit cash and in-kind match. The project has been through NEPA, so it is ready to go.



### Water Activity Justification

Additional criteria: The project team has consulted with a wide variety of stakeholders, providing presentations to CWCB staff and Board, the Joint Front Range Roundtable and the Ark Basin Roundtable, the Chaffee County Commissioners, Salida Town Council, Poncha Springs Town Council, the state Forest Health Advisory Council, and others. So far people in each of these venues have been very supportive of seeing this demo project move forward!

The following photo shows the current state of the area where watershed work will be completed.

(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) Total Match \$ If you requested a Waiver to the Basin Account matching

### Matching Requirements: Statewide Account Requests

requirements, indicate the percentage you wish waived.

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

Contributing Entity	Amount and Form of Match (note cash or in-kind):	
Ark Basin Account	\$37,000	
UAWCD	\$48,000 cash	
Chaffee County	\$48,000 cash	
ARWC	\$10,000 cash	
TU	\$13,000 cash	
Other local entities (see budget sheets)	\$60,869 cash	
USFS (note: includes estimated \$200,000 from sale of trees which will be applied to the watershed project)	\$932,780 cash and in-kind	
Total Match	\$1,149,649	
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.

Trout Unlimited has already completed the pre-project planning on the watershed restoration project portion of this proposal, working with the San Isabel Forest Hydrologist.

Forest project analysis was completed by USFS as part of NEPA (documentation available upon request).

Analysis of Steep Slopes in Ark Basin, by Brad Piehl, JW Associates for Colorado Springs Utilities (see attachment)

### **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

Although ARWC is a relatively new organization, and is expecting its first PO from CWCB for the Selenium Plan for the Lower Ark Water Quality Working Group, the organization is staffed and managed by the team at Coalitions & Collaboratives, which has had several CWCB grants in its own right, and many CWCB grants through the Coalition for the Upper South Platte. For ARWC these include:

Ark Basin Watershed Health Initiative—CTGG1-2018-1039

Arkansas Basin Fire Grants for Hayden, Junkins, and Beulah (Fiscal Host Lower Ark Conservancy)—POGG1 PDAA 201700001053; POGG1PDAA20170000985;

### 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.

Not applicable

# Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet September 19, 2018 Agenda Item 12(e)

**Applicant & Program Sponsor:** 

Arkansas River Watershed Collaborative

Water Activity Name:

Monarch Pass Forest and Watershed Health Project

Water Activity Purpose:

Implementation; Non-Consumptive Environmental

County:

**Chaffee County** 

Drainage Basin:

Arkansas

Water Source:

Headwaters of South Arkansas River

**Amount Requested/Source of Funds:** 

\$37,000 Arkansas River Basin Account

\$366,739 Statewide Account

\$403,739

**Matching Funds:** 

Basin Account Match (\$37,000) = 10% of Statewide

Account request (Meets 10% min);

Applicant's In-kind Match (\$1,112,649) = 333% of Statewide Account request (Meets 25% min.);

<u>Total Match</u> (Basin & Applicant Match of \$50,000 = 313% of Statewide Account request (meets 50% min). (refer to Funding Summary/Matching Funds section)

### Staff Recommendation:

Staff recommends approval of up to \$37,000 from the Arkansas River Basin Account and \$366,739 from the Statewide account to help fund the project titled: Monarch Pass Forest and Watershed Health Project

### Water Activity Summary:

If funded, the objectives of this project are to:

- Contract and Mobilize Equipment with Private Party
- Complete Ground Vegetation & Fuel Removal
- Complete Gravel Pit Reclamation and Channel Stabilization
- Complete Streambank Stabilization

The project aims to reduce the extent of the insect infestation and improve forest and watershed health, reduce fuel loading, protect infrastructure and provide for firefighter and public safety by removing trees in a 600-acre steep slope area on Monarch Pass near the headwaters of the Arkansas River. Historically, it has been expensive and unsafe to treat these steep slopes. This proposal aims to solve these issues by introducing new cut-to-length technology and equipment to the State of Colorado that can treat steep slopes at a reduced cost and with minimal environmental disturbance.

Many of Colorado's most important reservoirs and water infrastructure (such as trans-mountain diversions), are located in areas adjacent to extremely steep slopes. One example the applicant cites would be Clear Creek Reservoir, which has 1,853 acres on the uphill side of the reservoir that could be treated with this technology. Twin Lakes, another critical reservoir, has 3,935 acres that would be suitable for this technology. These slopes have not been mitigated against catastrophic fire in the past due to the cost of treating such steep slopes by helicopter or cable logging. The applicant believes this technology will significantly reduce the cost by ~60% of these other alternatives.

Along with tree removal on steep slopes, the project also includes watershed restoration activities in the drainage where forest treatments will occur, such as stream bank protection, soil amendment, seeding and willow planting, and similar activities. The gravel pit reclamation, Task 3, will work to reduce the sediment load to the headwaters of the South Arkansas River. The barren area and loss of root mass at the gravel pit have caused the creation of several head cut conveyance channels on steep slopes. These conveyance channels increase the amount of sediment to the headwaters which endanger fish and insect populations and can cause a reduction in surface water flows.

If approved, the applicant estimates WSRF funds would be utilized to protect 1,000 linear feet of the South Arkansas River and up to 600 acres of preserved habitat.

**Discussion:** The applicant states the Colorado Water Plan recognized the issue of fire in Colorado critical watershed. The applicant also cites the Colorado State Forest Service (CSFS) and CWCB report, "Forest Management to Protect Colorado's Water Resources" as a supplement to the Water Plan addressing the wildfire/watershed issues: "Science-based forest management can create forest stand conditions that are less susceptible to bark beetle infestations, and also has been shown to reduce hazardous fuels levels linked to wildfire risk and severe fire behavior that can be harmful to watersheds."

Issues/Additional Needs: This project, if funded, would be the first of its kind within the Water Supply Reserve Fund program. This particular forest health project does not qualify for Watershed Restoration Program funding as per the Board approved program guidance, funding for forest health projects does not include "Forest Fuel Reduction Treatments".

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 staff has determined it satisfies the Evaluation Criteria outlined in Colorado's Water Plan, Section 9.4. Please refer to Basin Roundtable Chair's Recommendation Letter and the Application for a detailed response.

### **Funding Summary/Matching Funds:**

Funding Source	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Upper Arkansas Water Conservancy District	\$48,000	\$0	\$48,000
Chafee County	\$48,000	\$0	\$48,000
Arkansas River Water Collaborative	\$10,000	\$0	\$10,000
Trout Unlimited	\$13,000	\$0	\$13,000

United States Forest Service	\$828,510	\$104,270	\$932,780
WSRF Arkansas Basin_Account	\$37,000	n/a	\$37,000
WSRF Statewide Account	\$366,739	n/a	\$366,739
<b>Total Project Costs</b>	\$1,351,249	\$104,270	\$1,455,519

CWCB Project Manager: Ben Wade

### Arkansas Basin Roundtable

July 25, 2018

### Via Electronic Mail: ben, wadea state.co. us

Mr. Ben Wade Colorado Water Conservation Board 1313 Sherman Street, Room 721 Denver, CO 80203

Re: Water Supply Reserve Fund Grant Application: Monarch Pass Forest & Watershed Health Project by Arkansas River Watershed Collaborative (ARWC)

Dear Ben:

At its July 10, 2018 meeting, the Arkansas Basin Roundtable (ABRT) approved the: Monarch Pass Forest & Watershed Health Project grant for \$37,000 in Basin Funds and \$366,739 in Statewide Funds. As shown below on page 2, the applicant has multiple partners who are providing \$1,152,650 in cash and in-kind contributions. There were no dissenting opinions expressed in the consensus decision.

With regard to the Colorado Water Plan, this project addresses Objective F, Watershed Health, Environment and Recreation:

Enhance Environmental and Recreational Economic Values: Protect and enhance river-based environments and recreational opportunities that support local and statewide economies and are important for the enjoyment of current and future generations of Coloradans.

Promote Protection and Restoration of Water Quality: The protection and restoration of water quality should be a key objective when planning for Colorado's current and future consumptive, recreational, and environmental water needs.

<u>Protect and Restore Critical Watersheds:</u> Protect and restore watersheds critical to water infrastructure, environmental or recreational areas.

This project is an excellent example of alignment with Colorado's Water Values (CWP p. 9-43 to 44) and a commitment to collaboration by a) addressing more than one type of need; b) involving multiple participants, and; c) consulting with a broad set of local stakeholders and local governments.

Should you have any questions or concerns, please feel free to contact me either by telephone, 719-742-6164, or by email, <a href="mailto:sandy@white-jankowski.com">sandy@white-jankowski.com</a>.

With warm regards

Michael D. (Sandy) White

Chair

Copy via email:

Applicant

**ABRT Executive Committee** 

## PROJECT TEAM, MATCHING PARTNERS & SUPPORTERS



Funding	Amou	ints for	Grant Purpos	ies
Current Matching Funds (Local, Water)				% of Statewide
UAWCD		\$	48,000	
Co. Springs Utilities		\$	25,000	
Trout Unlimited		s	13,000	
City of Salida		S	20,869	
Ark Basin Roundtable		\$	37,000	10%
Total Current Matching Funds		\$	143,869	100
Expected Addits	onal Lo	cal Fun	ding	
Chaffee County	\$	41	3,000	
Poncha Springs	\$	10	0,000	
Total Matching Funds	5	201	,869	50%
Total Matching	Funds	(+USI	FS)	(1) (1) (4) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1
Matching Partners	\$	201,869		
USFS	\$	950	,781	
Total Matching	5	1,152	,550	314%

	£.	