

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.);
Total Match (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:

<u>Funding Source</u>	<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
Total Project Costs	\$1,351,249	\$104,270	\$1,455,519

CWCB Project Manager: Ben Wade

Arkansas Basin Roundtable

July 25, 2018

Via Electronic Mail: ben.wade@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.*

Protect and Restore Critical Watersheds: *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, sandy@white-jankowski.com.

With warm regards



Michael D. (Sandy) White
Chair

Copy via email:

Applicant
ABRT Executive Committee

PROJECT TEAM, MATCHING PARTNERS & SUPPORTERS



Funding Amounts for Grant Purposes		
Current Matching Funds (Local, Water)		% of Statewide
UAWCD	\$ 48,000	
Co. Springs Utilities	\$ 25,000	
Trout Unlimited	\$ 13,000	
City of Salida	\$ 20,869	
Ark Basin Roundtable	\$ 37,000	10%
Total Current Matching Funds	\$ 143,869	
Expected Additional Local Funding		
Chaffee County	\$ 48,000	
Poncha Springs	\$ 10,000	
Total Matching Funds	\$ 201,869	50%
Total Matching Funds (+ USFS)		
Matching Partners	\$ 201,869	
USFS	\$ 950,781	
Total Matching	\$ 1,152,650	314%



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AColorado Water Conservation Board
Water Supply Reserve Fund Grant Application

Instructions		
<p>All WSRF grant applications shall conform to the current 2016 WSRF Criteria and Guidelines.</p> <p>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.</p> <p>If you have questions, please contact the current CWCB staff Roundtable liaison:</p>		
<p>Arkansas</p> <p>Ben Wade ben.wade@state.co.us 303-866-3441 x3238</p>	<p>Gunnison North Platte South Platte Yampa/White</p> <p>Craig Godbout craig.godbout@state.co.us 303-866-3441 x3210</p>	<p>Colorado Metro Rio Grande Southwest</p> <p>Megan Holcomb megan.holcomb@state.co.us 303-866-3441 x3222</p>

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 .
	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract . ⁽¹⁾
Exhibit A	
	Statement of Work ⁽²⁾ (<i>Word – see Exhibit A Template</i>)
	Budget & Schedule ⁽²⁾ (<i>Excel Spreadsheet – see Exhibit A Template</i>)
	Letters of Matching and/or Pending 3 rd Party Commitments ⁽²⁾
Exhibit C	
	Map ⁽²⁾
	Photos/Drawings/Reports
	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.



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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 Activity 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
Statewide Account Request ⁽¹⁾	\$366,739
Total WSRF Funds Requested (Basin & Statewide)	\$403,739
Total Project Costs	\$1,553,389

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



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Grantee and Applicant Information	
Name of Grantee(s)	Arkansas River Watershed Collaborative
Mailing Address	Box 746
FEIN	82-3840102
Grantee's Organization Contact ⁽¹⁾	Carol Ekarius
Position/Title	Executive Director
Email	Carol.ekarius@co-co.org
Phone	719-748-1496
Grant Management Contact ⁽²⁾	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.



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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)	
	Study
X	Implementation

Category of Water Activity (check all that apply)		
X	Nonconsumptive (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 decimal degrees . The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Countries	Chaffee
Latitude	38.9392
Longitude	104.467



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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.
- 2.) 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:



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Water Activity Justification

Provide a description of how this water activity supports the goals of [Colorado's Water Plan](#), the most recent [Statewide Water Supply Initiative](#), and the respective [Roundtable Basin Implementation Plan and Education Action Plan](#) ⁽¹⁾. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).

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

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.



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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.



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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 requirements, indicate the percentage you wish waived.	

Matching Requirements: Statewide Account Requests

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

Contributing Entity	Amount and Form of Match (note cash or in-kind):
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).	



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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; POGG1PDAA201700000985;

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



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Colorado Water Conservation Board	
Water Supply Reserve Fund	
<u>Exhibit A - Statement of Work</u>	
Date:	6/18/2018
Water Activity Name:	Monarch Pass Forest & Watershed Health Project
Grant Recipient:	Arkansas River Watershed Collaborative
Funding Source:	State & Basin WSRF
<p>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> <p>The Monarch Pass Forest and Watershed Health Project is a collaborative effort to address extreme forest degradation in the Upper Arkansas Basin and will lead as an example by utilizing new fuel reduction techniques, promoting industry, and creating integrated partnerships to leverage funding and reduce the threat of catastrophic forest fires, protecting watershed health.</p> <p>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. The impaired forested area is located on steep slopes on Monarch Pass. Historically, it has been too expensive and unsafe to treat these steep slopes. This project is geared toward solving these issues by introducing new technology and equipment to the State of Colorado that can safely and effectively treat steep slopes at a significantly reduced cost and with little environmental disturbance.</p> <p>The project brings together a diverse group of stakeholders and funding sources that will continue to work together on forest and watershed health projects across the Basin.</p>	
<p>Objectives: (List the objectives of the project)</p> <ul style="list-style-type: none"> • Build Partnerships and Leverage Funding • Prepare and Implement Field Layout and Silvicultural Prescriptions • Contract and Mobilize Equipment with Private Party • Complete Ground Vegetation & Fuel Removal • Complete Gravel Pit Reclamation and Channel Stabilization • Complete Streambank Stabilization • Construct Headcut Control Structures and Sediment Detention Basin • Provide Collaborative, Effective, and Efficient Project and Grant Management • Develop a Demonstration for State and Promote Local Industry 	



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Tasks	
Provide a detailed description of each task using the following format:	
<u>Task 1 – Field Preparation and Silvicultural Prescriptions</u>	
Description of Task:	
Field preparation and prescriptions will be developed in cooperation with ARWC Foresters and USFS Staff. USFS seasonal Timber Crew Staff will delineate boundaries, mark timber and provide on the ground field measurements for pre- and post-monitoring. ARWC Foresters and permanent USFS Staff will verify ground conditions, layout treatment areas, and complete treatment prescriptions.	
Method/Procedure:	
<ul style="list-style-type: none"> • Delineate Boundaries • Mark Timber • Conduct Ground Measurements • Verify Ground Conditions • Layout Treatment Areas • Complete Treatment Prescriptions 	
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)	
Completion of preparing and treating 600 acres of on the ground field work	
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)	
The grantee will provide documentation of this task through project reports, photos, and maps.	



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Tasks
Provide a detailed description of each task using the following format:
<u>Task 2 – Contract Administration & Implementation of Fuels Treatment</u>
<p>Description of Task:</p> <p>The groundwork will be implemented using a service contract with a private company who offers the cut-to-length technology. The contract will be awarded to a private company that will complete the cutting, skidding, and decking of the treated vegetation. The contract is awarded on a best value basis that includes price, past performance, contractor implementation schedule, and other factors in the award.</p> <p>The Arkansas River Watershed Collaborative (ARWC) will hold the contract for this task and will work in partnership with the USFS and the private contractor to implement this task.</p> <p>After the private company completes the cutting, skidding, and decking, ARWC and the USFS will work with local contractors to sell the timber. Funding from the timber sales will be used to help pay for watershed health projects identified in Task 4.</p>
<p>Method/Procedure:</p> <ul style="list-style-type: none"> • Contracting and Award • Mobilization of Equipment • Project Implementation- Cut-to-length 600 acres • Demobilization of Equipment • Timber Sales
<p>Grantee Deliverable: (Describe the deliverable the grantee expects from this task)</p> <p>Successful completion of cutting, skidding, and decking of 600 acres. The successful sale of timber.</p>
<p>CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)</p> <p>The grantee will provide documentation on the successful completion of this task through reports, photos, and maps.</p>



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Tasks
Provide a detailed description of each task using the following format:
<u>Task 3 – Gravel Pit Reclamation</u>
<p>Description of Task:</p> <p>The gravel pit reclamation task 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.</p> <p>This task aims to reduce sediment sources while supplying clean, sustainable flows to all water users. Protection of water resources will be accomplished through full reclamation of the gravel pit site, stabilization of conveyance channels and revegetation. Trout Unlimited will lead this work as a partner with ARWC and USFS.</p>
<p>Method/Procedure:</p> <ul style="list-style-type: none"> • Analyze soil samples and test plots taken in previous years to implement design • Design project reclamation and revegetation plan • Rip soil to promote native pan growth • Apply a mix of compost, biochar, and 3-6-3 fertilizer to project area • Apply native seeds and wood straw erosion blankets • Stabilize conveyance channels using local materials
<p>Grantee Deliverable: (Describe the deliverable the grantee expects from this task)</p> <p>Full-scale reclamation of the gravel pit area and stabilization of conveyance channels</p>
<p>CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)</p> <p>The grantee will provide documentation of the complete reclamation of the project area through reports, photos and maps.</p>



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Provide a detailed description of each task using the following format:
<u>Task 4 – Consultation, Project Management, and Contract Management</u>
<p>Description of Task:</p> <p>Due to the complexity of the project and large-scale, consultation and project management will be conducted by ARWC staff in partnership with the Upper Arkansas Water Conservancy District. Both entities will provide consultation and overall project management.</p> <p>The UAWCD will provide local project coordination, documentation, and oversight. UAWCD will report finding back to ARWC and work in partnership with ARWC to make sure that the project is moving along efficiently and effectively. UAWCD will also provide consultation on all watershed health-related initiatives and provide input on the protection of water rights.</p> <p>ARWC Staff will hold all contracts and will be fiscally responsible for the project. ARWC Staff will provide project and contract administration and management.</p>
<p>Method/Procedure:</p> <ul style="list-style-type: none"> • UAWCD <ul style="list-style-type: none"> ○ Local coordination of all project meetings and on the ground activities ○ Provide documentation and information for ARWC ○ Provide consultation on all water related activities ○ Provide overall project coordination and assistance for all parties • ARWC <ul style="list-style-type: none"> ○ Coordination of project tasks according to contracts ○ Field inspections and consultation ○ Contract administration and project management ○ Fiscal administration for all parties
<p>Grantee Deliverable: (Describe the deliverable the grantee expects from this task)</p> <p>Collaborative, efficient and effective project management by both parties working in collaboration. Successful administration of contract requirements.</p>
<p>CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)</p> <p>Documentation of all employee activities, hours and rates will be provided for this task</p>



Last Update: October 24, 2017

Provide a detailed description of each task using the following format:
<u>Task 5 – Grant Administration</u>
Description of Task:
ARWC will provide grant administration for the requested Water Supply Reserve Funds
Method/Procedure:
<ul style="list-style-type: none">• Contract with the State• Provide 6-month progress reports• Provide reimbursement documentation• Provide final report• Close contract when project is complete
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Successful documenting, reporting, and administration of CWCB funds
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
The grantee will provide adequate reimbursement documentation, progress reports every 6 months, and a final report for the project



Last Update: October 24, 2017

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:

- Summarizes the water activity and how the water activity was completed
- Describes any obstacles encountered, and how these obstacles were overcome
- 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.

Last Update: 10/17/17



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: June 18, 2018

Water Activity Name: Monarch Pass Forest & Watershed Health Project

Grantee Name: Arkansas River Watershed Collaborative

<u>Task No.</u> ⁽¹⁾	<u>Description</u>	<u>Start Date</u> ⁽²⁾	<u>End Date</u>	<u>Matching Funds</u> (cash & in-kind) ⁽³⁾	<u>WSRF Funds</u> (Basin & Statewide combined) ⁽³⁾	<u>Total</u>
1	Field Preparation & Silvicultural Prescriptions	5/1/2019	12/31/2024	\$ 59,124	\$ -	\$ 59,124
2	Contract Implementation & Fuels Treatment	5/1/2019	12/31/2024	\$ 799,406	\$ 326,350	\$ 1,125,756
3	Gravel Pit Reclamation	5/1/2019	12/31/2024	\$ 20,200	\$ 77,389	\$ 97,589
4	Watershed Improvements	5/1/2019	12/31/2024	\$ 168,770	\$ -	\$ 168,770
5	Consultation/ Project Management/ Contract	5/1/2019	12/31/2024	\$ 90,050	\$ -	\$ 90,050
6	Grant Administration	5/1/2019	12/31/2024	\$ 12,100	\$ -	\$ 12,100
Total				\$1,149,650	\$403,739	\$1,553,389

(1) The single task that include costs for Grant Administration must provide a labor breakdown (see Indirect Costs tab below) where the total WSRF Grant contribution towards that

(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.

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

- 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.

Acres of 30-60% slopes occupied by Four Forest Types In Arkansas River Basin by Zone of Concern (Wilderness and Upper Tier Roadless excluded)

