Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet

March 22-23, 2017 Agenda Item 24(d)

Applicant & Grantee: Trout Unlimited & Buckhorn Valley Metropolitan District 1

Water Activity Name: Abrams Creek Cutthroat Trout Project

Water Activity Purpose: Non-consumptive Environmental Implementation

County: Eagle County

Drainage Basin: Colorado

Water Source: Abrams Creek

Amount Requested/Source of Funds: \$45,000 Colorado Basin Account

\$319,711 Statewide Account *
\$364,711 Total Grant Request

Matching Funds: Basin Account Match = \$45,000

• 14.1% of statewide request (meets 10% min) Applicant/3rd Party Match (Cash & In-kind) = \$1,007,239

• 319% of statewide request (meets 10% min)

Total Match (Basin & Applicant) = \$1,052,239

• 329% of statewide request (meets 50% min)

• 76.7% of total project cost of \$1,371,950

*NOTE: The discrepancy between the Statewide Account request in the application, the Roundtable Chair Recommendation Letter (\$405,000), and that stated herein (\$319,711) can be attributed to the applicant voluntarily reducing their request to accommodate the Statewide Account shortfall.

Staff Recommendation:

Staff recommends approval of up to \$45,000 from the Colorado Basin Account; and \$319,711 from the Statewide Account to help fund the project titled: Abrams Creek Cutthroat Trout Project.

Water Activity Summary: If approved, WSRF grant funds will assist an irrigation efficiency project designed to reduce stream diversions and protect the Abrams Creek Cutthroat, the only known aboriginal cutthroat trout population in the Eagle River watershed. Currently, the single greatest limitation to this population is a significant diversion by a single irrigation ditch (JPO No 2). This very senior (1906) diversion takes away a significant portion of the habitat supporting water supply, especially during low flow. The project will pipe the JPO No. 2 ditch (29,790 ft), improving water delivery/efficiency by 40% (saving 300 ac-ft/yr). In turn, Buckhorn District (owner of the diversion rights) will reduce diversions by 40% and will curtail all diversions if flows are below 1.25 cfs. At a minimum, improving conditions for the Abrams Creek cutthroat trout will further goals of the Conservation Agreement for Colorado River Cutthroat Trout (2006), designed to prevent ESA listing. Moreover, the project is designed to improve the resiliency and, potentially, expand the population of a species of special concern.

Discussion: As described in the Colorado Basin Roundtable Chair's Recommendation Letter, this project was unanimously voted for and has widespread support including Eagle County's State Representative, BLM, BR, USDA, Eagle Valley Land Trust, Eagle Ranch Wildlife Committee, Eagle River Watershed Council, Eagle County Board of County Commissioners, and the Town of Gypsum. The Abrams Creek Project is called out in the Colorado Basin Implementation Plan (CBIP) and squarely meets two of six CBIP objectives (Healthy Streams and Sustaining Agriculture). According to Parks and Wildlife, preservation and improvement of the Abrams Creek cutthroat trout population is one of the highest priorities for cutthroat conservation efforts in western Colorado.

This project also addresses a significant component of the Colorado Water Plan's Critical Goals and Actions as identified in Chapter 10.3. F. Watershed Health, Environment, and Recreation – specifically, recovering imperiled species and protecting healthy riparian habitat. If successful, the project could stave off listing of the rare, genetically pure Green-Lineage cutthroat trout.

Issues/Additional Needs: Staff will work cooperatively with the grantee to obtain all necessary letters of commitment from secured and pending funders.

Eligibility Requirements: The application meets requirements of the three subsections of the Eligibility Requirements: General Eligibility, Entity Eligibility, and Water Activity Eligibility.

Eligibility Based on Funding Match Requirements: The application meets the Basin and Statewide Accounts' Matching 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:

Funding Source	Cash	In-Kind	Total	Status
Bureau of Reclamation Cooperative Watershed Grant	\$90,000	\$0	\$90,000	Pending
Eagle River Chapter of TU	\$5,000	\$0	\$5,000	Secured
Native Species Conservation Fund	\$40,000	\$0	\$40,000	Secured
Fish and Wildlife Resources Grant	\$521,000	\$0	\$521,000	Pending
Western Native Trout Initiative	\$50,000	\$0	\$50,000	Pending
Bureau of Land Management	\$10,000	\$0	\$10,000	Secured
Bureau of Reclamation	\$90,000	\$0	\$90,000	Pending
Private grants	\$76,239	\$0	\$76,239	Pending
Local governments	\$60,000	\$0	\$60,000	Pending
Individual donors	\$80,000	\$0	\$80,000	Pending
Trout Unlimited	\$0	\$50,000	\$50,000	Secured
Buckhorn District	\$0	\$25,000	\$25,000	Secured
Subtotal Matching Funds	\$932,239	\$75,000	\$1,007,239	
WSRA Colorado Basin Account	\$45,000	n/a	\$45,000	
WSRF Statewide Account	\$319,711	n/a	\$319,711	
Total Project Costs	\$1,296,950	\$75,000	\$1,371,950	

CWCB Project Manager: Megan Holcomb

All products, data, and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in-turn be made widely available to Basin Roundtables and the general public and will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the scope of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, meeting summaries, and engineering reports/designs.

Engineering: All engineering work (as defined in the Engineers Practice Act (§12-25-102(10) C.R.S.)) performed under this grant shall be performed by or under the responsible charge of a professional engineer licensed by the State of Colorado to practice engineering.

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

February 1, 2017

Craig Godbout
Colorado Water Conservation Board
Water Supply Planning Section
1313 Sherman Street
Denver CO
(303) 866-3441, ext 3210 (office)
(970) 218-9407 (cell)
craig.godbout@state.co.us

Dear Craig:

The Colorado Basin Roundtable voted 18-0 through email balloting (due to weather canceling the January RT meeting) to approve both the basin-wide (\$45k) and statewide WSRF requests (\$405k) for the Abrams Creek Cutthroat Trout Project. There was one comment in the voting: one person thought the basin request should be halved and the statewide request put at 12 percent. At that, we know the statewide funds are limited and we hope the staff and Board can do the best they can for the various applicants applying to that fund.

The Abrams Creek project squarely meets two of our six Basin Implementation objectives: Healthy Streams and Sustaining Agriculture. It scored 13 out of 14.25 total on our objectives evaluation matrix, which I have attached. More than that, if this project is successful, it could stave off the listing of the rare, genetically pure Green-Lineage cutthroat trout. The population is limited by reduced flows due to diversions by the JPO Ditch. Piping of the ditch will allow the ditch owners to leave more water in the creek by improving delivery efficiency by 40 percent.

The total estimate for the project is about \$1.371 million so cost sharing is spread adequately among many sources.

Sincerely yours,

Jim Pokrandt

Chair, Colorado Basin Roundtable

Attachment: CBRT Grant Matrix Scoring Sheet



COLORADO WATER CONSERVATION BOARD

WATER SUPPLY RESERVE ACCOUNT





Today's Date: March 2, 2017

Abrams Creek Cutthroat Trout Project

Name of Water Activity/Project

Trout Unlimited & Buckhorn Valley Metropolitan District No. 1

Name of Applicant

Colorado River Basin

\$ 405,000 **Amount from Statewide Account:**

\$ 45,000 **Amount from Basin Account(s):**

Total WSRA Funds Requested:

\$ 450,000

Approving Basin Roundtable(s)

(If multiple basins specify amounts in parentheses.)

FEIN: 38-1612715

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Required Exhibits

- A. Statement of Work, Budget, and Schedule
- B. Project Map
- C. As Needed (i.e. letters of support, photos, maps, etc.)

Appendices – Reference Material

- 1. Program Information
- 2. Insurance Requirements
- 3. WSRA Standard Contract Information (Required for Projects Over \$100,000)
- 4. W-9 Form (Required for All Projects Prior to Contracting)

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Instructions

To receive funding from the Water Supply Reserve Account (WSRA), a proposed water activity must be approved by the local Basin Roundtable **AND** the Colorado Water Conservation Board (CWCB). The process for Basin Roundtable consideration and approval is outlined in materials in Appendix 1.

Once approved by the local Basin Roundtable, the applicant should submit this application with a detailed statement of work including budget and schedule as Exhibit A to CWCB staff by the application deadline.

WSRA applications are due with the roundtable letter of support 60 calendar days prior to the bi-monthly Board meeting at which it will be considered. Board meetings are held in January, March, May, July, September, and November. Meeting details, including scheduled dates, agendas, etc. are posted on the CWCB website at: http://cwcb.state.co.us Applications to the WSRA Basin Account are considered at every board meeting, while applications to the WSRA Statewide Account are only considered at the March and September board meetings.

When completing this application, the applicant should refer to the WSRA Criteria and Guidelines available at: http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf. In addition, the applicant should also refer to the Supplemental Scoring Matrix applied to Evaluation Criteria Tiers 1-3 for Statewide Account requests .

The application, statement of work, budget, and schedule **must be submitted in electronic format** (Microsoft Word or text-enabled PDF are preferred) and can be emailed or mailed on a disk to:

Craig Godbout - WSRA Application Colorado Water Conservation Board 1313 Sherman St., Room 721 Denver, CO 80203 Craig.godbout@state.co.us

If you have questions or need additional assistance, please contact Craig Godbout at: 303-866-3441 x3210 or craig.godbout@state.co.us.

Part I. - Description of the Applicant (Project Sponsor or Owner);

1.	Applicant Name(s):	Trout Unlimited & Buckhorn Valley Metropolitan District No. 1					
	Mailing address:	P.O. B	Mely Whiting Box 1544 a Springs, CO 81147				
	FEIN#:		38-1612715				
	Primary Contact:	Mely '	Whiting	Position/Title:	Legal Counsel		
	Email:	mwhit	ing@tu.org				
	Phone Numbers:	Cell:	720-470-4758	Office:			
	Alternate Contact:	John H	Hill	Position/Title:	District Manager		
	Email:	jvhill.	co@gmail.com				
	Phone Numbers:	Cell:	970.470.2087	Office:			
2. Eli	Public (Government) – agencies are encourage	municipa d to work	clude the following. What to alities, enterprises, counties, to with local entities and the tonly if they can make a co	and State of Color local entity should	rado agencies. Federal be the grant recipient.	t be	
X	Public (Districts) authorities Title 22/special districts (conservancy conservation and irrigation districts)						
	Private Incorporated – mutual ditch companies, homeowners associations, corporations.						
	Private individuals, par not for funding from th	•	, and sole proprietors are elide Account.	gible for funding f	From the Basin Accounts b	but	
X	Non-governmental orga	anization	s – broadly defined as any o	rganization that is	not part of the governmen	ıt.	

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3. Provide a brief description of your organization

Trout Unlimited: Trout Unlimited is a national, non-profit organization with over 150,000 members nationwide, approximately 12,000 members in Colorado. Our volunteers and staff engage in partnerships and stakeholder driven efforts with the goal of conserving, protecting, and restoring cold water fisheries and their habitat in a cooperative, constructive setting.

Buckhorn Valley Metropolitan District No. 1: Buckhorn is a quasi-municipal corporation and political subdivision of the State of Colorado organized pursuant to the laws of the State of Colorado in order to construct, operate and maintain certain public facilities and improvements in accordance with its approved service plan, including, but not limited to, irrigation services.

4. If the Contracting Entity is different than the Applicant (Project Sponsor or Owner) please describe the Contracting Entity here.

The contracting entity will be Trout Unlimited.

5.	Successful applicants will have to execute a contract with the CWCB prior to beginning work on the portion of the project funded by the WSRA grant. In order to expedite the contracting process the CWCB has established a standard contract with provisions the applicant must adhere to. A link to this standard contract is included in Appendix 3. Please review this contract and check the appropriate box.
	The Applicant will be able to contract with the CWCB using the Standard Contract
	The Applicant has reviewed the standard contract and has some questions/issues/concerns. Please be aware that any deviation from the standard contract could result in a significant delay between grant approval and the funds being available.
6.	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

Water Supply Reserve Account – Application Form Revised October 2013

	Part II D	Description of the Water	Activity	7/Project
1.	What is the j	primary purpose of this g	rant appl	ication? (Please check only one)
	X	Nonconsumptive (Environment)	ronmenta	al or Recreational)
		Agricultural		
		Municipal/Industrial		
		Needs Assessment		
		Education		
		Other Explain	n:	
2.	If you feel th	nis project addresses mult	tiple purp	poses please explain.
	identified in		asin Rou	that will (1) address an environmental need specifically undtable's BIP; and (2) provide a more efficient means to municipal purposes.
3.	Is this projec	ct primarily a study or im	plementa	tion of a water activity/project? (Please check only one)
		Study	X	Implementation
4. '	To catalog n	neasurable results achieve	ed with V	VSRA funds can you provide any of the following numbers?
		New Storage Created	l (acre-fe	et)
		New Annual Water S	Supplies I	Developed, Consumptive or Nonconsumptive (acre-feet)
		Existing Storage Pres	served or	Enhanced (acre-feet)
	18,480	Length of Stream Re	stored or	Protected (linear feet)
	29,790	Length of Pipe/Cana	l Built or	Improved (linear feet)
	300 AF	Efficiency Savings (a	ncre-feet/	year OR dollars/year – circle one)
		Area of Restored or I	Preserved	l Habitat (acres)
		Other Explain:		

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4. To help us map WSRA projects please include a map (Exhibit B) and provide the general coordinates below:

Latitude: 39°35'11.85"N Longitude: 106°51'37.48"W

5. Please provide an overview/summary of the proposed water activity (no more than one page). Include a description of the overall water activity and specifically what the WSRA funding will be used for. A full **Statement of Work** with a detailed budget and schedule is required as **Exhibit A** of this application.

Abrams Creek supports a Core Conservation population of genetically pure Green-Lineage cutthroat trout. This is the only known aboriginal cutthroat trout population in the Eagle River watershed and one of a few remnant indigenous populations left in the Upper Colorado River. The Abrams Creek Green-Lineage cutthroat trout possesses a unique Haplotype not found elsewhere. Furthermore, Abrams Creek cutthroat are distinctive because they reside in a relatively low elevation drainage, giving them probable adaptations to warmer temperatures and drought conditions that may benefit reintroduction efforts in the face of climate change. Finally, due to uncertainties surrounding the distinction between green lineage and greenback cutthroat trout, listed as threatened under the ESA, the US Fish & Wildlife Service has advised federal agencies to conduct Section 7 consultations for actions that may affect green lineage cutthroat trout until such time as a status assessment and a decision pursuant to the ESA is made (Service 2012).

According to CPW, preservation and improvement of the Abrams Creek cutthroat trout population is one of the highest priorities for cutthroat conservation efforts in western Colorado. This valuable population is limited by reduced flows due to diversions by a single irrigation ditch, the JPO Ditch. This relatively small diversion (3.0 cfs decreed under two pre-Compact priorities) truncates about 50% of the useable cutthroat trout habitat in Abrams Creek. In dry years, the ditch has historically swept the entire creek with long lasting impacts on the trout population. Trout Unlimited and CPW have partnered with Buckhorn District, the ditch owner, in an effort to improve flow conditions in Abrams Creek while respecting Buckhorn's irrigation rights. The partners are proposing to pipe portions of the ditch, which is expected to improve delivery efficiency by 40%. In exchange, Buckhorn will reduce Abrams Creek diversions by 40% and will curtail all diversions if creek flows fall below 1.25 cfs, in perpetuity. The total efficiency savings is estimated to average ~300 AF/yr, which will be translated directly into increased streamflow in Abrams Creek. Increasing flows is expected to increase resiliency within the trout cutthroat population and, potentially, allow it to expand. If successful, the Abrams Creek cutthroat trout will assist in reintroduction efforts elsewhere in the Eagle River watershed.

Part III. - Threshold and Evaluation Criteria

1. <u>Describe how</u> the water activity meets these **Threshold Criteria.** (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines.)

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a) The water activity is consistent with Section 37-75-102 Colorado Revised Statutes. ¹

The project will be implemented through a negotiated agreement between Trout Unlimited and Buckhorn District and is consistent with C.R.S. 37-75-102.

b) The water activity underwent an evaluation and approval process and was approved by the Basin Roundtable (BRT) and the application includes a description of the results of the BRTs evaluation and approval of the activity. At a minimum, the description must include the level of agreement reached by the roundtable, including any minority opinion(s) if there was not general agreement for the activity. The description must also include reasons why general agreement was not reached (if it was not), including who opposed the activity and why they opposed it. Note- If this information is included in the letter from the roundtable chair simply reference that letter.

A letter from the Roundtable Chair has been provided.

c) The water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes.² The Basin Roundtable Chairs shall include in their approval letters for particular WSRA grant applications a description of how the water activity will assist in meeting the water supply needs identified in the basin roundtable's consumptive and/or non-consumptive needs assessments.

The Abrams Creek Cutthroat Trout project is identified in the Colorado River Basin Roundtable Implementation Plan as supporting Theme 1 of the Plan: Protect and Restore Healthy Streams, Rivers, Lakes and Riparian Areas (Section 6.4, Table 16, at p. 88); and is one of the Projects, Policies and Processes identified for the Eagle River Region (Section 6.4, Table 17, at p. 89).

¹ 37-75-102. Water rights - protections. (1) It is the policy of the General Assembly that the current system of allocating water within Colorado shall not be superseded, abrogated, or otherwise impaired by this article. Nothing in this article shall be interpreted to repeal or in any manner amend the existing water rights adjudication system. The General Assembly affirms the state constitution's recognition of water rights as a private usufructuary property right, and this article is not intended to restrict the ability of the holder of a water right to use or to dispose of that water right in any manner permitted under Colorado law. (2) The General Assembly affirms the protections for contractual and property rights recognized by the contract and takings protections under the state constitution and related statutes. This article shall not be implemented in any way that would diminish, impair, or cause injury to any property or contractual right created by intergovernmental agreements, contracts, stipulations among parties to water cases, terms and conditions in water decrees, or any other similar document related to the allocation or use of water. This article shall not be construed to supersede, abrogate, or cause injury to vested water rights or decreed conditional water rights. The General Assembly affirms that this article does not impair, limit, or otherwise affect the rights of persons or entities to enter into agreements, contracts, or memoranda of understanding with other persons or entities relating to the appropriation, movement, or use of water under other provisions of law.

² 37-75-104 (2)(c). Using data and information from the Statewide Water Supply Initiative and other appropriate sources and in cooperation with the on-going Statewide Water Supply Initiative, develop a basin-wide consumptive and nonconsumptive water supply needs assessment, conduct an analysis of available unappropriated waters within the basin, and propose projects or methods, both structural and nonstructural, for meeting those needs and utilizing those unappropriated waters where appropriate. Basin Roundtables shall actively seek the input and advice of affected local governments, water providers, and other interested stakeholders and persons in establishing its needs assessment, and shall propose projects or methods for meeting those needs. Recommendations from this assessment shall be forwarded to the Interbasin Compact Committee and other basin roundtables for analysis and consideration after the General Assembly has approved the Interbasin Compact Charter.

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d) Matching Requirement: For requests from the Statewide Fund, the applicants will be required to demonstrate a 25 percent (or greater) match of the total grant request from the other sources, including by not limited to Basin Funds. A minimum match of 5% of the total grant amount shall be from Basin funds. A minimum match of 5% of the total grant amount must come from the applicant or 3rd party sources. Sources of matching funds include but are not limited to Basin Funds, in-kind services, funding from other sources, and/or direct cash match. Past expenditures directly related to the project may be considered as matching funds if the expenditures occurred within 9 months of the date the contract or purchase order between the applicant and the State of Colorado is executed. Please describe the source(s) of matching funds. (NOTE: These matching funds should also be reflected in your Detailed Budget in Exhibit A of this application)

The total cost of the project is estimated at \$1,371,950. Applicant's WSRA request constitutes approximately 32% of the total cost of the project, with the remaining 68% to be derived from other sources including federal, other state sources, local government, private grants (corporate and foundations), and individual donors. Current estimates from these other sources are as follows:

Bureau of Reclamation Cooperative Watershed Grant (application pending): \$90,000

BLM (committed): \$10,000

Eagle River Chapter of Trout Unlimited: \$5,000

Native Species Conservation Fund (committed): \$40,000 Fish and Wildlife Resources Grant (to be applied for): \$521,000 Western Native Trout Initiative (to be applied for): \$50,000

Private grants (to be applied for): \$ 76,239 Local governments (to be applied for): \$ 60,000 Individual donors (to be applied for): \$ 80,000

Trout Unlimited (in-kind): \$50,000 Buckhorn District (in-kind): \$25,000

These sources include the required 10% match from the applicant or a third party.

2. For Applications that include a request for funds from the **Statewide Account**, <u>describe how</u> the water activity/project meets all applicable **Evaluation Criteria.** (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines and repeated below.) Projects will be assessed on how well they meet the Evaluation Criteria. **Please attach additional pages as necessary.**

Evaluation Criteria – the following criteria will be utilized to further evaluate the merits of the water activity proposed for funding from the Statewide Account. In evaluation of proposed water activities, preference will be given to projects that meet one or more criteria from each of the three "tiers" or categories. Each "tier" is grouped in level of importance. For instance, projects that meet Tier 1 criteria will outweigh projects that only meet Tier 3 criteria. The applicant should also refer to the Supplemental Scoring Matrix applied to Evaluation Criteria Tiers 1-3 for Statewide Account requests. WSRA grant requests for projects that may qualify for loans through the CWCB loan program will receive preference in the Statewide Evaluation Criteria if the grant request is part of a CWCB loan/WSRA grant package. For these CWCB loan/WSRA grant packages, the applicant must have a CWCB loan/WSRA grant ratio of 1:1 or higher. Preference will be given to those with a higher loan/grant ratio.

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Tier 1: Promoting Collaboration/Cooperation and Meeting Water Management Goals and Identified Water Needs

a. The water activity addresses multiple needs or issues, including consumptive and/or non-consumptive needs, or the needs and issues of multiple interests or multiple basins. This can be demonstrated by obtaining letters of support from other basin roundtables (in addition to an approval letter from the sponsoring basin).

This is an irrigation efficiency project designed to reduce stream diversions for the benefit of a rare cutthroat trout fishery. Water diverted from Abrams Creek is used to irrigate hay in areas that have not been developed. As such, the project furthers both consumptive and non-consumptive needs. Moreover, the project is designed to improve the resiliency and, potentially, expand the population of a species of special concern. Due to uncertainties surrounding the distinction between green lineage and greenback cutthroat trout, listed as threatened under the ESA, the US Fish & Wildlife Service has advised federal agencies to conduct Section 7 consultations for actions that may affect green lineage cutthroat trout until such time as a status assessment and a decision pursuant to the ESA is made (Service 2012). At a minimum, improving conditions for the Abrams Creek cutthroat trout will further the goals of the Conservation Agreement for Colorado River Cutthroat Trout (2006), designed to prevent ESA listing.

b. The number and types of entities represented in the application and the degree to which the activity will promote cooperation and collaboration among traditional consumptive water interests and/or non-consumptive interests, and if applicable, the degree to which the water activity is effective in addressing intrabasin or interbasin needs or issues.

The project is a partnership between the Buckhorn District, Colorado Parks and Wildlife, BLM and Trout Unlimited. The Eagle River Watershed Coalition will also join in the efforts. The project is an example of how irrigators, conservation interests, and regulatory agencies can work together to achieve, through collaboration, outcomes that are beneficial to all and are respectful of property rights. By increasing the resiliency and potentially expanding the habitat of a species of particular concern, the project meets the goal of protection of threatened species identified in several basin roundtables.

c. The water activity helps implement projects and processes identified as helping meet Colorado's future water needs, and/or addresses the gap areas between available water supply and future need as identified in SWSI or a roundtable's basin-wide water needs assessment.

The Abrams Creek Cutthroat Trout project is identified in the Colorado River Basin Roundtable Implementation Plan as supporting Theme 1 of the Plan: Protect and Restore Healthy Streams, Rivers, Lakes and Riparian Areas (Section 6.4, Table 16, at p. 88); and is one of the Projects, Policies and Processes identified for the Eagle River Region (Section 6.4, Table 17, at p. 89).

<u>Tier 2: Facilitating Water Activity Implementation</u>

d. Funding from this Account will reduce the uncertainty that the water activity will be implemented. For this criterion the applicant should discuss how receiving funding from the Account will make a significant

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difference in the implementation of the water activity (i.e., how will receiving funding enable the water activity to move forward or the inability obtaining funding elsewhere).

Funds for the project are being sought from various sources, including federal sources, other state sources, local government contributions, private foundations, corporations, and individuals. Extensive outreach to the community is being conducted to seek public participation in an effort to preserve the only indigenous cutthroat trout species in the Eagle River Basin. Still, the project requires significant funding and contribution from this account is critical to the project's ability to move forward. Without funding through the Water Supply Reserve Fund, it is unlikely that this project could move forward.

e. The amount of matching funds provided by the applicant via direct contributions, demonstrable in-kind contributions, and/or other sources demonstrates a significant & appropriate commitment to the project.

Applicants expect to provide 68% in matching funds from various sources. See section III.1.d.

Tier 3: The Water Activity Addresses Other Issues of Statewide Value and Maximizes Benefits

f. The water activity helps sustain agriculture & open space, or meets environmental or recreational needs.

The project is designed to improve the resiliency and, potentially, expand the population of a species of special concern. Due to uncertainties regarding the relationship between greenback and green lineage cutthroat trout, and whether or not these lineages could both be considered the greenback cutthroat trout, which is listed as threatened under the ESA, the US Fish & Wildlife Service has advised federal agencies to conduct section 7 consultations for actions that may affect both the greenback and green lineage cutthroat trout until such time as a status assessment and a decision pursuant to the ESA is made (Service 2012). At a minimum, improving conditions for the Abrams Creek cutthroat trout will further the goals of the Conservation Agreement for Colorado River Cutthroat Trout (2006), designed to prevent ESA listing.

g. The water activity assists in the administration of compact-entitled waters or addresses problems related to compact entitled waters and compact compliance and the degree to which the activity promotes maximum utilization of state waters.

The project addresses issues with a protected species in a manner that fully preserves the use of a pre-Compact water right. By improving efficiencies which leave more flows for protected species without reducing irrigation use, the project also promotes maximum utilization of state waters.

h. The water activity assists in the recovery of threatened and endangered wildlife species or Colorado State species of concern.

The project is expected to assist in the recovery of Green-Lineage cutthroat trout, currently treated as threatened under the ESA and identified as a Colorado State species of concern. Finally, due to uncertainties surrounding the distinction between green lineage and greenback cutthroat trout, listed as threatened under the ESA, the US Fish & Wildlife Service has advised federal agencies to conduct Section 7 consultations for actions that may affect green lineage cutthroat trout until such time as a status assessment and a decision pursuant to the ESA is made (Service 2012). At a minimum, improving

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conditions for the Abrams Creek cutthroat trout will further the goals of the Conservation Agreement for Colorado River Cutthroat Trout (2006), designed to prevent ESA listing. Benefits to threatened and conservation species are also itemized in CPW's Strategic Plan (2015), and this project fits into the following clearly articulated Objectives within Goal 1 of the Plan:

- "Maintain viable populations through species conservation planning";
- "Pursue partnerships and agreements to enhance in-stream flow and influence water management."
- i. The water activity provides a high level of benefit to Colorado in relationship to the amount of funds requested.

Given its uniqueness and risk of extirpation, preservation of the Abrams Creek cutthroat trout population provides an immeasurable benefit to the state.

j. The water activity is complimentary to or assists in the implementation of other CWCB programs.

In addition to furthering the goals of the WSRA program and the Colorado Water Plan, the project furthers the goals of the CWCB's Fish and Wildlife Resources program, established pursuant to C.R.S. 37-60-122.2 for the purpose of mitigating impacts of construction, **operation**, or maintenance of water diversion, delivery, or storage facilities. The project also furthers the goal of Colorado's Species Conservation Program established under C.R.S. 24-33-11 *et. seq* to conserve species that have been listed as threatened or endangered under state or federal law, or are candidate species or are likely to become candidate species as determined by the United States fish and wildlife service.

Continued: Explanation of how the water activity/project meets all applicable **Evaluation Criteria**. **Please attach additional pages as necessary.**

Part IV. – Required Supporting Material

1. Water Rights, Availability, and Sustainability – This information is needed to assess the viability of the water project or activity. Please provide a description of the water supply source to be utilized, or the water body to be affected by, the water activity. This should include a description of applicable water rights, and water rights issues, and the name/location of water bodies affected by the water activity.

Buckhorn District owns JPO Ditch No. 2 which diverts water from Abrams Creek, a tributary of the Eagle River, tributary of the Colorado River. The JPO Ditch No. 2 is decreed for a total of 3.0 cfs as follows:

- 1.0 cfs for irrigation under Civil Action 548, Water District 37, Division 5, issued on February 28, 1911, with an appropriation date of June 3, 1908; and
- 2.0 cfs for irrigation and domestic use under Civil Action 841, Water District 37, Division 5, issued December 3, 1925, with an appropriation date of April 1, 1916.

The point of diversion for the JPO Ditch is located in Abrams Creek, approximately half-way in the reach of Abrams Creek where Abrams Creek cutthroat trout are currently found.

Water Supply Reserve Account – Application Form Revised October 2013

Water diverted by the JPO Ditch No. 2 is delivered to the District's irrigated lands, approximately 5 miles downstream in the Alkali Creek drainage. Estimates are that as much as 40 percent of the water diverted does not reach the irrigated lands due to ditch leakage. This is a transbasin diversion, with leakage accruing to the Alkali Creek basin drainage, not to Abrams Creek.

2. Please provide a brief narrative of any related studies or permitting issues.

Abrams Creek cutthroat trout have been subject to extensive study and have been the focus of cutthroat conservation efforts for more than 20 years. Eagle Ranch subdivision, as part of their mitigation for development, constructed a fish barrier to protect the native cutthroat from invasion by non-native trout in Brush Creek. In the late 1990's, genetic researcher D. K. Shiozawa identified this population as having an important "archaic allele" that distinguished them from other cutthroat trout. Since that time, advances in genetic analyses used Abrams Creek cutthroat as a reference population as part of a landmark study investigating the history, genetics, and morphological attributes of cutthroat trout across Colorado's landscape (Metcalf et al. 2012, Bestgen et al. 2013, Rogers 2010 and 2012). During this study, it was determined that Abrams Creek cutthroat belong to a previously unrecognized lineage of cutthroat trout in Colorado that is unique in the Eagle Watershed and are genetically more distinct than other populations – which in conservation terms is significant to preserving diversity and resiliency within the green-lineage cutthroat population. This population will be the focus of reclamation and cutthroat reintroduction projects in the Eagle Watershed to ensure their persistence well into the future.

[References: Bestgen, K. R. et al. 2013. Phenotype predicts genotype for lineages of native cutthroat trout in the southern Rocky Mountains; Metcalf, J. L. et al. 2012. Historical stocking data and 19th century DNA reveal human-induced changes to native diversity and distribution of cutthroat trout; Molecular Ecology 21:5194-5207; Rogers, K. B. 2012. Piecing together the past: using DNA to resolve the heritage of our state fish; Rogers, K. B. 2010. Cutthroat trout taxonomy: exploring the heritage of Colorado's state fish].

Applicants anticipate the need for a right of way permit or similar approval from BLM and a 404 permit from the U.S. Army Corps of Engineers (USACE). Buckhorn District has had numerous preapplication project planning meetings with BLM, including extensive on-the-ground location and construction methods discussions. In addition, much of the evaluations associated with BLM's permitting have already been conducted.

The project will involve some wetlands modifications permitting at the JPO diversion structure. Buckhorn District has had introductory discussions with the USACE Grand Junction field office staff. The project will likely qualify for a nationwide permit.

3. Statement of Work, Detailed Budget, and Project Schedule See <u>Attachment A</u>.

The statement of work will form the basis for the contract between the Applicant and the State of Colorado. In short, the Applicant is agreeing to undertake the work for the compensation outlined in the statement of work and budget, and in return, the State of Colorado is receiving the deliverables/products specified. **Please note that costs**

Water Supply Reserve Account – Application Form Revised October 2013

incurred prior to execution of a contract or purchase order are not subject to reimbursement. All WSRA funds are disbursed on a reimbursement basis after review invoices and appropriate backup material.

Please provide a detailed statement of work using the template in Exhibit A. Additional sections or modifications may be included as necessary. Please define all acronyms and include page numbers.

REPORTING AND FINAL DELIVERABLE

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe 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 taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

PAYMENT

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 10 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.

Revised October 2013

The above statements are true to the best of my knowledge:

Signature of Applicant:

Print Applicant's Name: Amelia S. Whiting

Project Title: Abrams Creek Cutthroat Trout Project

Return an electronic version (hardcopy may also be submitted) of this application to:

Craig Godbout – WSRA Application Colorado Water Conservation Board 1313 Sherman St., Room 721 Denver, CO 80203 303-866-3441, ext. 3210 (office) 303-547-8061 (cell) craig.godbout@state.co.us

Exhibit A Statement of Work

WATER ACTIVITY NAME: Abrams Creek Cutthroat Trout Project

GRANT RECIPIENT: Trout Unlimited

FUNDING SOURCE: Colorado River Basin Roundtable and Statewide Account

INTRODUCTION AND BACKGROUND

Abrams Creek supports a Core Conservation population of genetically pure Green-Lineage cutthroat trout. This is the only known aboriginal cutthroat trout population in the Eagle River watershed and one of a few remnant indigenous populations left in the Upper Colorado River. The species is currently treated as threatened under the Endangered Species Act. According to CPW, preservation and improvement of the Abrams Creek cutthroat trout population is one of the highest priorities for cutthroat conservation efforts in western Colorado. This valuable population is limited by reduced flows due to diversions by a single irrigation ditch, the JPO No. 2 Ditch ('JPO Ditch'), which diverts water from Abrams Creek for irrigation of lands located in the Alkali Creek basin, tributary to the Eagle River near Gypsum, CO. This relatively small diversion (3.0 cfs decreed under two pre-Compact priorities) truncates about 50% of the useable cutthroat trout habitat in Abrams Creek.

Applicants Trout Unlimited (TU) and Buckhorn Valley Metropolitan District No. 1 (Buckhorn District), the owner of the JPO Ditch, together with CPW and BLM, have partnered in an effort to improve flow conditions in Abrams Creek while respecting Buckhorn District's irrigation rights. Applicants are proposing to pipe portions of the ditch (JPO Pipeline Project), which is expected to improve delivery efficiency by 40%. In exchange, Buckhorn District will reduce Abrams Creek diversions by 40% and will curtail all diversions if creek flows fall below 1.25 cfs, in perpetuity. Increasing flows is expected to increase resiliency within the cutthroat trout population and, potentially, allow it to expand. If successful, the Abrams Creek cutthroat trout will assist in reintroduction efforts elsewhere in the Eagle River watershed.

OBJECTIVES

The goals of the project are:

- 1. Improve Abrams Creek flows to improve resiliency within the Abrams Creek cutthroat trout population and, potentially, increase it.
- 2. Install a pipeline and related structures to improve efficiency of delivery of JPO Ditch irrigation water to Buckhorn District's lands.
- 3. Install a fish screen to prevent entrainment of fish in the JPO Dich diversion structure.

THE PROJECT TEAM

Grant Manager–Mely Whiting: TU will be the fiscal agent for purposes of the CWCB contract. Mely Whiting will be the primary contact for purposes of administration of the grant and grant contract. Ms. Whiting is Legal Counsel for Trout Unlimited, Colorado Water Project. She is currently managing grants for various projects both from the CWCB and from other sources, including private foundations.

JPO Pipeline Project Managers - Buckhorn District will be primarily responsible for final design, permitting, and construction of the JPO pipeline and associated structures ("JPO Pipeline Project"). Once the JPO Pipeline is constructed, Buckhorn District will be responsible for its operation and maintenance.

General Manager. John V. Hill is Buckhorn's president and manager. Mr. Hill will be responsible for overall coordination, supervision of design and permitting, and financial management of the JPO Pipeline Project. Mr. Hill is a civil engineer licensed in multiple states, and he has 45 years of design, permitting and construction works in the Americas and the Caribbean. He has conceived, designed, arranged financing for, and supervised the implementation of numerous restoration and enhancement projects, commencing with the start of the modern environmental movement in the early 1970's.

<u>Operations Manager</u>. Jeffrey Bennett is Buckhorn's operations manager and will be the operations manager for the JPO Pipeline Project. Mr. Bennett is a Colorado native and outdoorsman; he has been director of Buckhorn's JPO diversion and ditch systems for 16 years, which is the longest period of continuous management for this system in the past 100 years. Besides supervising the construction of the many miles of distribution networks in the Buckhorn network, Mr. Bennett has been closely involved in the Abrams project since its inception by CPW and TU, some 4-5 years ago. He knows the diversions and ditches, and he will make certain that the project is built with maximum efficiency and minimum disruption in the watersheds of Hernage, Abrams, Alkali, and McHatton Creeks.

In addition, Mr. Bennett will have primary responsibility for the controlled operation of the diversion and collection and management of flow data for the project, in accordance with the operating guidelines in the project contract between TU and Buckhorn.

Design and Engineering (Engineers): The following consultants will be involved in the design, engineering and permitting of the JPO Pipeline Project:

Conceptual Design and Engineering Coordination: RG & Associates: Civil Engineers (www.rgengineers.com). The JPO Project's final design, engineering, and oversight and implementation will be under the direction of founder Rick Goncalves, P.E. Mr. Gonçalves has 47 years of civil engineering experience. He personally acts as City Engineer and District Engineer for a number of the firm's clients. He has completed a wide range of projects, including water and wastewater treatment, collection and distribution systems, pumping and storage facilities, roadways, storm drainage facilities, and land/site development. Mr. Gonçalves serves as the Chairman of the Technical Advisory Committee of the Cherry Creek Basin Water Quality Authority and an active member of the American Consulting Engineers Council, the American Waterworks Association, Water Environment Federation, and the American Society of Civil Engineers. In addition, RG Engineers senior project manager Nicholas Marcotte, P.E.. Nick has been with this project since its inception, and will be leading his office team in the finalization of plans and permitting. Nick's specialty is in environmental aspects of civil engineering.

Justin Yarnell, P.E. has been retained by Buckhorn as the local, supervisory engineer in charge of permitting and construction coordination. Based in Eagle, Mr. Yarnell is well versed in local conditions, weather and soils implications of the Hardscrabble Mountain project area, and has a strong local reputation for getting works implemented on time and on budget.

Doug Clements, P.E. Water Resource Engineer. Buckhorn's Water Resource Engineer Doug Clements has been working for several years with TU and CPW personnel to perfect the agreement and reach the best possible solution for all parties, and especially to the benefit of the Abrams Creek Habitat. Mr. Clements has more than 30 years of experience performing engineering analysis relating to water rights, water resources, and hydrology throughout the western United States. Mr. Clements will continue to monitor and advise the parties with regards to reporting requirements, compliance matters, and preservation of District and project flow parameters.

Construction (Contractor): Once funding is in place, Buckhorn District will select a contractor to carry out construction of the JPO Pipeline Project.

WORK COMPLETED

Survey work at the project locations:

Survey for the JPO Pipeline Project has been completed. Given the steepness of the terrain, field surveys were conducted, using on-the ground recognizance, GPS, and satellite imagery. Buckhorn's staff, engineers and contractors have spent several hundred hours of in-field observations and documentation to determine the best location, means and methods to construct the diversion-screen structure and the downstream pipeline. In addition, Buckhorn staff has relied on 16 years of operations experience to determine which sections of the present JPO ditch system have the most leakage. The cost incurred by Buckhorn for this effort is in excess of \$30,000.

Preliminary Construction Drawings:

Preliminary construction drawings for the JPO Pipeline Project and conceptual designs for a fish screen-diversion structure at Abrams Creek have been completed. This set is about 70% of what will be the final construction plan set and is sufficient to proceed with required permitting. The cost incurred by Buckhorn District for this effort exceeds \$30,000.

SCOPE OF WORK

Task 1- Permitting

<u>Description of Task</u>: Once funding is in-place, Buckhorn District will finalize permitting with the Bureau of Land Management (BLM) and US Army Corps of Engineers (USACE).

Method/Procedure:

BLM. Buckhorn District has had numerous pre-application project planning meetings with BLM, including extensive on-the-ground location and construction methods discussions. In addition, much of the evaluations associated with BLM's permitting have already been conducted. Buckhorn District will file the appropriate permit applications with BLM and will complete analyses needed, if any, to finalize the permitting process. Buckhorn District will meet with BLM staff as needed to complete the process.

USACE. The project will involve some wetlands modifications permitting at the JPO diversion structure. Buckhorn District has held introductory discussions with the USACE Grand Junction field office staff. Buckhorn District will file the appropriate permit applications with the USACE

and will complete analyses needed, if any, to finalize the permitting process. Buckhorn District will meet with USACE staff as needed to complete the process. It is hoped that the field environmental officers will support a 'Nationwide Permit' process, which would substantially shorten the review period. This work will be performed coincidentally with the BLM permitting, with the goal being simultaneous finalization of permits in 60-90 days.

Deliverables: BLM and USACE permit applications and supporting permitting documents.

Task 2 - Final Design and Construction Plans

<u>Description of Task</u>: Complete final design and construction plans for the project; select and sign contracts with one or more contractors to install the pipeline and conduct associated work.

<u>Method/Procedure</u>: Concurrent with permitting (Task 1 above), Buckhorn District and its engineers will finalize the details of the construction plans, identify final construction staging areas and construction sequence, and enter into contracts with one or more contractors to conduct the on-the-ground work.

<u>Deliverables</u>: Final Design and Construction Plans. Final documents will include the provisions required by BLM and COE permits.

Task 3 – Construction of Project

<u>Description of Task</u>: Install approximately 21,790 linear feet of 18-inch pipeline and related structures as specified in the Final Design and Construction Plans.

While the project route is rugged terrain and presents challenges, Buckhorn District anticipates using materials and methods that will allow the project to be constructed in the post-runoff period season, before hard winter sets-in. Construction materials and equipment will be staged and ready to work, starting about mid-July of the construction year. Fused-joint HDPE pipe will be used to allow the contractor to assemble lengths of 1000' feet or more, and 'drag' the pipe into position in the existing channel. Simultaneously, when flow in the Abrams channel drops to a reasonably low rate, the contractor will commence construction of the head gate and fish screen. This work will probably be at the very end of the season, September to October.

Method/Procedure:

A. Pre-Construction Mobilization and Staging

The District has construction easements and owns the lands surrounding the Buckhorn Reservoir, (S1 on the plan) which will be where the contractor can accept delivery of materials and can store and stage equipment. This area is serviced by an all-weather accessible road, within ½ mile of paved public street. The contractor will have ample room also to start preassembly. The HDPE pipeline material will be pre-assembled in multiple-joint sub-assemblies for later relocation to upstream staging areas S2, S3, S4 and near the Abrams Diversion location. The Contractor will accept periodic deliveries from nearby supply yards, in keeping with the sequence of construction, thus the area to be disrupted for mobilization and staging will be kept to about 1 acre, although much more land is available as needed.

From S1, Contractor will transport sub-assemblies, and lay them out beside the JPO ditch

alignment. Pipe installation will commence at the east side of Buckhorn Reservoir and progress upstream. By this sequence, and because of the ability of the District to stage the materials as needed, disruption of the BLM 'landscape' will be minimized. As construction proceeds upstream, Contractor will relocate equipment as needed to subsequent staging areas S2-S4 and Abrams Diversion area.

B. Pipe Installation

The project engineers and consulting contractor have selected the pipeline material High Density Polyethylene (HDPE) piping because of its high-strength, attractive costs compared to other pipeline materials, and particularly because of the ease of installation. HDPE pipe is lightweight enough to be easily handled by installers with lightweight and small footprint equipment. The HDPE pipeline will be assembled at staging areas and pulled into place, then backfilled to cover, protect and prevent erosion.

In-channel check dams will be located during construction, based on grade changes and channel sections in order to prevent channel erosion and incision. These check dams will be constructed with native soils, rocks and brush, trees, and native materials so that in-channel rainfall and snowfall runoff will be slowed and detained. In some locations, these check-dams will be more "formalized" with local rocks.

C. Erosion Control and Re-Vegetation.

All construction work in the project will be compliant with State of Colorado and Eagle County Stormwater Pollution Protection guidelines operating under an approved SWPPP plan, and monitored by the District's engineers and construction supervisors. Typical guidelines are included in the State's guidelines, and further details will be included in the BLM and US Army COE permit stipulations.

Revegetation will be carried out but the Contractor, also in accordance with the permit restrictions of BLM and US Army COE. In particular, the project will comply with applicable sections of the "BLM Northwest Colorado District Recommended Outline for Surface Reclamation Planning" as may be directed by BLM when construction occurs on BLM lands.

D. Reconstruction of Diversion Structure at Abrams Creek.

The project includes installation of a new diversion structure at Abrams Creek, in the same location originally constructed by Julius Olsen back in 1906. As part of this project, the Abrams in-stream flume will be improved; the current flume in-channel needs to be enlarged for early season flows, which frequently inundated the entire flume, with significant bypass flow. Improvement of the flume will also improve fish passage. The downstream flume, at the head of JPO2 is going to be replaced. Over the years, the flume has become inadequate and insufficiently accurate for the purposes of monitoring and reporting the flow management per the TU-Buckhorn agreement for the project.

The three components to be built in the Abrams Diversion are:

- The Abrams Channel flume upstream from the diversion
- The diversion control headgate to control the diversion flow in accordance with the operating agreement
- The fish screen to keep the cutthroat trout in the Abrams habitat, not washed down in the JPO2 channel

• The JPO2 flow measuring flume for monitoring actual diversion to JPO2

Because of the remote location, the project engineers, in concert with CPW biologist Kendall Backich have chosen a self-cleaning design manufactured in Colorado, designed and developed by a member of the Colorado State engineering faculty. (http://www.corrugatedwaterscreens.com)

<u>Deliverables</u>: Final report describing project as-built.

Task 4 – Monitoring

Description of Task: Monitor stream conditions to evaluate effect on stated goals

<u>Method/Procedure</u>: Develop a monitoring plan to measure flow improvement and its effects. The plan will include evaluation of physical habitat (including wetted widths, pool frequency, depths, and sediments); stream temperature; macroinvertebrate surveys; and fish surveys.

Deliverables: Monitoring Plan

Task 5 – Administration

<u>Description of Task</u>: This task includes the work associated with managing the project including, but not limited to, grant administration, invoicing, accounts receivable, scheduling, and project oversight.

	BUDGET AND TIMELINE							
Task	Description	Target Start Date	Target End Date	WSRA Funds	Other Funds/In- Kind	Total		
1	Permitting	05-01-17	06-01-18	\$ 20,000	\$ 20,000	\$ 40,000		
2	Final Design and Construction Plans	05-01-17	06-01-18	\$ 30,000	\$ 30,000	\$ 60,000		
3	Project Construction	07-01-18	07-01-19*	\$ 318,000	\$ 745,000	\$1,063,000		
4	Monitoring	05-01-17	07-01-19	\$ 15,000	\$ 15,000	\$ 30,000		
5	Administration	05-01-17	07-01-19	\$ 67,000	\$ 111,950	\$ 178,000		
Total				\$ 450,000	\$ 921,950	\$1,371,000		

^{*}Pipeline and main components to be completed during late summer and Fall 2018. Depending on seasonal weather restrictions, some elements may be completed in the Spring 2019.

BUDGET AND TIMELINE

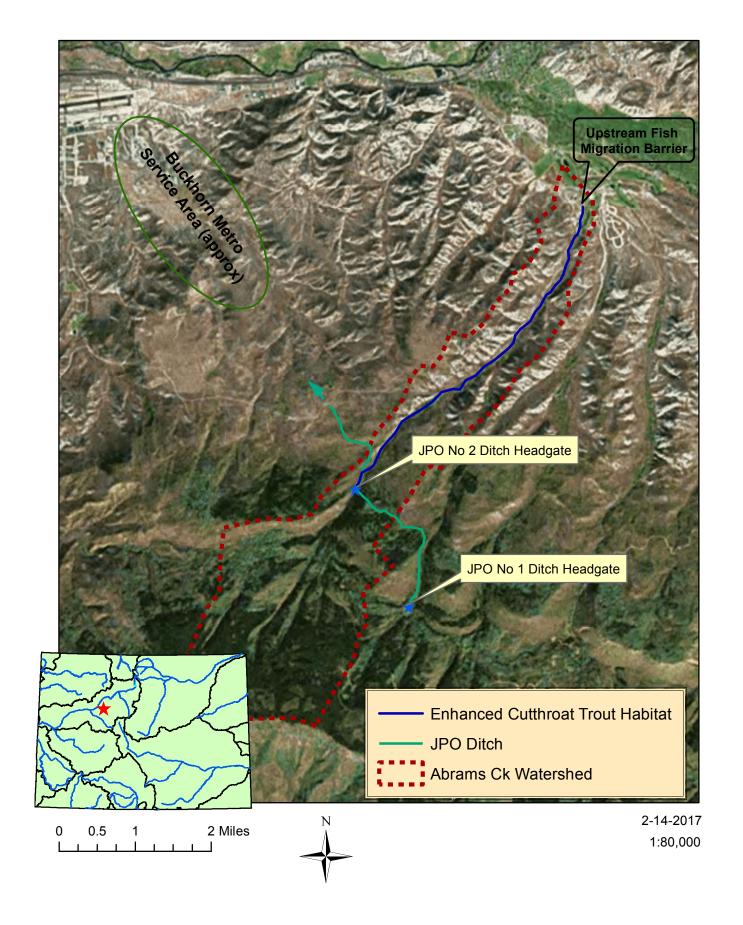
					Other	
		Target	Target	WSRA	Funds/In	
Task	Description	Start Date	End Date	Funds	Kind	Total
1	Permitting	5/1/2017	6/1/2018	\$20,000	\$20,000	\$40,000
	Final Design and					
2	Construction Plans	5/1/2017	6/1/2018	\$30,000	\$30,000	\$60,000
	Project					
3	Construction	7/1/2018	07-01-19*	\$318,000	\$745,000	\$1,063,000
4	Monitoring	5/1/2017	7/1/2019	\$15,000	\$15,000	\$30,000
5	Administration	5/1/2017	7/1/2019	\$67,000	\$111,950	\$178,950
Total				\$450,000	\$921,950	\$1,371,950

^{*}Pipeline and main components to be completed during late summer and Fall 2018.

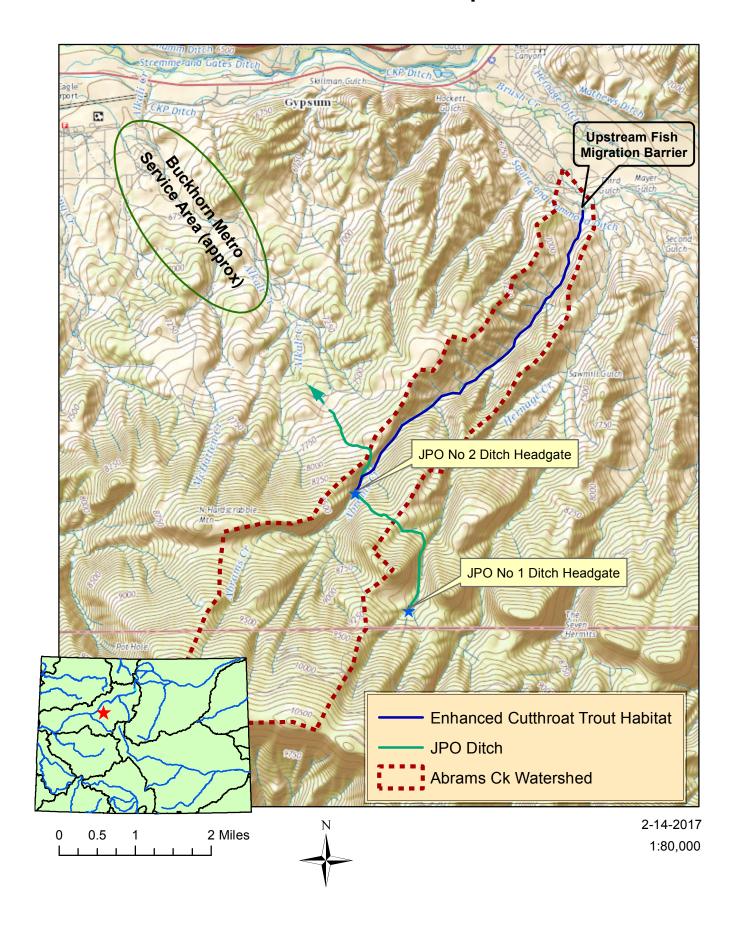
Depending on seasonal weather restrictions, some elements may be completed in the Spring 2019.

Funding Source	Cash	In-Kind	<u>Total</u>	Status
Bureau of Reclamation Cooperative Watershed Grant	\$90,000	\$0	\$90,000	Pending
Eagle River Chapter of TU	\$5,000	\$0	\$5,000	Secured
Native Species Conservation Fund	\$40,000	\$0	\$40,000	Secured
Fish and Wildlife Resources Grant	\$521,000	\$0	\$521,000	Pending
Western Native Trout Initiative	\$50,000	\$0	\$50,000	Pending
Bureau of Land Management	\$10,000	\$0	\$10,000	Secured
Private grants	\$76,239	\$0	\$76,239	Pending
Local governments	\$60,000	\$0	\$60,000	Pending
Individual donors	\$80,000	\$0	\$80,000	Pending
Trout Unlimited	\$0	\$50,000	\$50,000	Secured
Buckhorn District	\$0	\$25,000	\$25,000	Secured
Subtotal Matching Funds	\$932,239	\$75,000	\$1,007,239	
WSRA Colorado Basin Account	\$45,000	n/a	\$45,000	
WSRF Statewide Account	\$319,711	n/a	\$319,711	
Total Funding Sources	\$1,296,950	\$75,000	\$1,371,950	

Abrams Creek Cutthroat Trout Project Overview Map



Abrams Creek Cutthroat Trout Project Overview Map





United States Department of the Interior

BUREAU OF LAND MANAGEMENT Colorado State Office 2850 Youngfield Street

2850 Youngfield Street Lakewood, Colorado 80215-7210 www.co.blm.gov



In Reply Refer To: CO-932 (7250)

MAR 0 1 2017

James Eklund, Director Colorado Water Conservation Board 1313 Sherman St., 7th Floor Denver, CO 80203

Dear Mr. Eklund:

The purpose of this letter is to communicate the that Bureau of Land Management (BLM) has committed 10,000 dollars toward the Abrams Creek Instream Flow Project. The BLM established a broad cooperative agreement with Trout Unlimited in 2014 for the purpose of supporting on-the-ground projects that provide direct benefits to salmonid fisheries throughout the United States. In July 2016, BLM Colorado specifically committed 10,000 dollars for the Abrams Creek Instream Flow Project.

The BLM understands that the proposed project is designed to provide additional water for fish habitat in Abrams Creek. Piping portions of the JPO Ditch System, thereby reducing water lost to seepage, and allowing less water to be diverted from Abrams Creek into the ditch would provide the additional water. BLM believes that the project could result in significantly more usable fish habitat below the headgate of the JPO Ditch. The BLM supports the objectives of the project because Abrams Creek provides important habitat for a conservation population of Colorado River Cutthroat Trout, a species that appears on BLM's sensitive species list. The BLM believes that the collaborative effort envisioned by the project, which would include nonprofit entities, local government, State government agencies and Federal government agencies, would greatly increase the chances of success.

BLM offers its support for the project with the caveat that such support does not guarantee or imply approval of the proposed project on BLM lands. The project proponent will be required to apply for Federal Land Policy and Management Act Title V right-of-way for any reconstructed portions of the ditch that cross BLM lands. The proposed project will be subject to review under

the National Environmental Policy Act (NEPA) procedures, along with required review under other federal laws that are designed to protect cultural and archaeological resources. The formal review process could result in denial of the proposed project, or could result in a request by the BLM to significantly modify proposed construction features or project routing. However, the BLM is committed to working collaboratively with the project proponent to conduct a timely NEPA review, and to carefully consider any mitigation or design features proposed by the project proponent to avoid and minimize impacts.

Sincerely,

Men St. George

Deputy State Director

Resources and Fire Management

Cc: Field Manager, Colorado River Valley Field Office

330 Broadway, Unit D PO Box 5740 Eagle, Colorado 81631 970-827-5406 info@erwc.org www.erwc.org

Advocates for our rivers

February 24, 2017

To Whom It May Concern:

Eagle River Watershed Council is in full support of the Abrams Creek Cutthroat Trout Restoration Project.

The project will help to protect the only known population of Colorado River cutthroat trout in the Eagle River watershed. It was assumed by many that there were no aboriginal cutthroats in the watershed at all. Not only will this project protect this population, it will likely make it possible to expand the population and reintroduce them into other streams in the watershed. This helps us to meet our mission to advocate for the health and conservation of the Upper Colorado and Eagle River basins through research, education and projects. Additionally, it furthers a project we have been working on with the US Forest Service for several years to protect native trout habitat.

In supporting the project the Watershed Council is assisting with outreach, local marketing and grant writing for the project. A grant application was recently submitted to the Bureau of Reclamation by the Watershed Council requesting \$90,000 for the project. If received these monies will be contributed to the project.

I am available to answer any questions or provide any additional information you may need.

Sincerely,

Holly Loff

Executive Director

State Representative DIANE MITSCH BUSH Colorado State Capitol 200 East Colfax Avenue, Room 307 Denver, Colorado 80203 Office: 303-866-2923 diane.mitschbush.house@state.co.us



Chair:
Transportation & Energy
Committee
Vice Chair:
Agriculture, Livestock, &
Natural Resources Committee

COLORADO HOUSE OF REPRESENTATIVES

State Capitol Denver 80203

To Whom It May Concern,

I am writing you in my capacity as the Colorado State Representative for Eagle County to very strongly support funding for the Abrams Creek Cutthroat Trout project in Eagle County, Colorado.

This project will protect the Abrams Creek Cutthroat, the *only* known aboriginal cutthroat trout population in the Eagle River watershed. Additionally, it is one of only a few indigenous populations remaining in the Upper Colorado River system.

This project is a cooperative effort among several stakeholders in a key reach of the Eagle River. The Eagle River is a major tributary to the Colorado River. The confluence with the Colorado is near Dotsero, Colorado in Eagle County.

Currently, the single greatest limitation to this population is a significant diversion by a single irrigation ditch (JPO No 2). This very senior (1906) diversion takes away a significant portion of the habitat-supporting water supply, especially during lower flow periods. The project will pipe the JPO No. 2 ditch, improving water delivery/efficiency by 40%. In turn, Buckhorn District (owner of the diversion rights) will reduce diversions by 40% and Buckhorn will curtail all diversions if the flows are below 1.25 cfs.

Additional benefits will result from the project's periodic provision of flushing flows to Abrams Creek channel, thereby enhancing the Cutthroat habitat. As a perpetual agreement with Buckhorn, the benefits to the trout are *forever*.

By increasing efficiency and therefore flows, not only will the native cutthroat population be protected, but it is believed the population will expand - making it possible to reintroduce the population to additional streams in the watershed.

I urge your support of this long-term, joint effort of local and national nonprofit organizations, the ditch owner (Buckhorn), Colorado Parks & Wildlife and BLM. These stakeholders have worked closely on this and other key river restoration projects. They have a very successful record of completing projects to make the Eagle River whole for this and future generations. This is a critical project.

Yours for a just, equitable, sustainable, and prosperous Colorado for all,

Representative Diane Mitsch Bush, HD26-Eagle County and Routt County

Chair, House Transportation and Energy Committee Vice-Chair, House Agriculture, Livestock, and Natural Resource Committee



Forest Service White River National Forest

Eagle/Holy Cross Ranger District 24747 US Highway 24 P.O. Box 190 Minturn, CO 81645 OFFICE (970) 827-5715 FAX (970) 827-9343

File Code: 1580

Date: February 13, 2017

Bureau of Reclamation
Financial Assistance Operations Section
Attn: Ms. Irene Hoiby
Mail Code: 84-27852
P.O. Box 25007

To Whom It May Concern,

The Eagle/Holy Cross Ranger District of the White River National Forest (WRNF) strongly supports the efforts of the Eagle River Watershed Council (ERWC) to obtain grant funding for the Abrams Creek Cutthroat Trout project in Eagle County, Colorado.

The ERWC and the Eagle/Holy Cross Ranger District have had a long standing and successful partnership resulting in the completion of a number of restoration projects that have contributed to stream health and fish habitat improvements. The headwaters of Abrams Creek are located on USFS lands and the proposed project would improve the quality of habitat in Abrams Creek and ensure future flows needed to maintain the fragile cutthroat trout population. If successful, this project would increase the population of cutthroat trout in Abrams Creek which could then be replicated and introduced into other Forest Service streams increasing the occupied range of this species. Securing the viability of this fish population could guide restoration and recovery efforts for native cutthroat trout into the future.

The proposal submitted by the ERWC was developed in cooperation with Colorado Parks and Wildlife and is supported by the USFS East Zone Fisheries Biologist. With the support of joint effort of local and national nonprofit organizations, the ditch owner (Buckhorn), Colorado Parks & Wildlife and Bureau of Land Management we believe that the Abrams Creek Cutthroat Trout project can be successfully completed.

Sincerely,

AARON W. MAYVILLE

District Ranger







February 1, 2017

To whom it may concern,

I am writing this letter on behalf of Eagle Valley Trout Unlimited chapter #102 (EVTU), in support of the ongoing conservation efforts on Abrams Creek in Western Eagle County, Colorado.

Over the last few years the tiny Abrams Creek, flowing off of the fairly arid Hardscrabble Mountain, has generated quite a buzz among local native trout enthusiasts, Colorado Trout Unlimited, and National Trout Unlimited. Until recently it was thought Abrams was little more than a small tributary to the Brush Creek with no real unique characteristics, but we now know that Abrams is far from being just another place to pull irrigation water from. Abrams Creek is exceptional for one main reason, a natural fish barrier on the lower stretch of the stream that has kept non-native trout species from taking over. Because of this feature, Abrams holds the only population of Eagle River Green Lineage Cutthroat Trout known to still exist.

As the west was developed, streams such as Abrams played a critical role in providing water to homesteads for crop irrigation and other use. In the late 19th century, Abrams was diverted across Hardscrabble Mountain in an open air ditch toward Gypsum, a distance of around 7 miles. The trek across Hardscrabble in an open air ditch results in substantial water loss from seepage, evaporation, and consumption by vegetation. This loss requires that significantly more water be diverted at the head gate than is actually needed by the end-user. Water is diverted about ¼ of the way down Hardscrabble leaving the lower portion of Abrams mostly dry year round. Above the head gate there is just enough water to maintain this small population of fish. In order to grow and sustain the fragile population, habitat that can support fish year round must be created from the head gate downstream to the natural fish barrier. In short, more water must be left in the lower stretch of stream so fish can populate those areas.

Colorado Parks and Wildlife, several area non-profit groups, along with the owner of the water rights, have decided on a solution that would pipe the irrigation water from the head gate to the end user. Piping the ditch drastically reduces water loss in transit requiring less volume to be initially diverted. This will leave much more water in the creek and create good habitat. However, we must act fast as we are one minor catastrophe in the Abrams Creek drainage away from the loss of a species.

Please consider supporting this effort to save the last population of native Eagle River trout. It is not often that a conservation movement is able to identify and act on such a remarkable opportunity, the opportunity to right a historical blunder. Thank you for your consideration, and if you have any questions please do not hesitate to contact me directly at 970-306-9424.

Sincerely,

Brian Bloess

Eagle Valley Trout Unlimited

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970.748.7654

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To Whom it May Concern,

Eagle Valley Land Trust strongly supports the Abrams Creek Cutthroat Trout project here in Eagle County, and respectfully requests that your group lends all available support.

These are some of the reasons we think this project is so important:

The Abrams Creek cutthroat is the *only* known aboriginal cutthroat trout population in the Eagle River watershed.

It is one of only a few indigenous populations remaining in the Upper Colorado River system.

Currently, the single greatest limitation to this population is significant diversion by a single irrigation ditch (JPO No 2). This very senior (1906) diversion takes away a significant portion of the habitat-supporting water supply, especially during lower flow periods

The project will pipe the JPO No. 2 ditch, improving water delivery/efficiency by 40%.

In turn, Buckhorn District (owner of the diversion rights) will reduce diversions by 40% and Buckhorn will curtail all diversions if the flows are below 1.25 cfs.

Additional benefits will result from the project's periodic provision of flushing flows to Abrams Creek channel, thereby enhancing the Cutthroat habitat.

This is a perpetual agreement with Buckhorn, the benefits to the trout are *forever*.

By increasing efficiency and therefore flows, not only will the native cutthroat population be protected, but it is believed the population will expand - making it possible to reintroduce the reintroduce the population to additional streams in the watershed.

As the holder of the Abrams Creek Conservation Easement it Eagle, CO, we support any efforts to protect and restore Abrams Creek and the native Cutthroat Trout population.

Eagle Valley Land Trust asks for your support of this long-term, joint effort of local and national nonprofit organizations, the ditch owner (Buckhorn), Colorado Parks & Wildlife and BLM.

Sincerely,

Jessica Foulis

Jessica Foulis, Stewardship and Outreach Manager

Eagle Ranch Wildlife Committee c/o Eagle Ranch Association PO Box 1630 Eagle CO 81631

February 16, 2017

To Whom It May Concern,

The Eagle Ranch Wildlife Committee supports the Abrams Creek Cutthroat Trout project in Eagle County, Colorado.

This project is designed to provide increased and sustained flows in Abrams Creek, home of the only known aboriginal cutthroat trout population in the Eagle River watershed. Few such populations remain in the Upper Colorado River system.

This population is downstream of a diversion by irrigation ditch JPO No 2. This diversion takes away a significant portion of the habitat-supporting water supply, especially during lower flow periods. The project will pipe the JPO No. 2 ditch, improving water delivery/efficiency.

Reducing the amount of the diversion may result in greater protection for the native cutthroat population.

The Eagle Ranch Wildlife Committee respectfully encourages your support of this long-term, joint effort of local and national nonprofit organizations, the ditch owner (Buckhorn), Colorado Parks & Wildlife and BLM.

Sincerely,

Kent Rose

Eagle Ranch Wildlife Committee

OFFICE OF THE **BOARD OF COMMISSIONERS** 970-328-8605 FAX: 970-328-8629 eagleadmin@eaglecountv.us www.eaglecounty.us



JILL H. RYAN KATHY CHANDLER-HENRY JEANNE MCQUEENEY

February 3, 2017

Re: Abrams Creek Cutthroat Trout Project

To Whom It May Concern:

The Eagle County Board of County Commissioners supports the Abrams Creek Cutthroat Trout Project. The Abrams Creek cutthroat is the only known aboriginal cutthroat trout population in the Eagle River watershed. In fact, it is one of only a few indigenous populations in the Upper Colorado River. Eagle County supports the preservation of this population and is encouraged by Colorado Parks and Wildlife's belief that, once protected in this stream, this rare population can be reintroduced into other streams within the watershed.

The protection of the Abrams Creek cutthroat would be achieved by improving the delivery of irrigation water diverted from Abrams Creek by 40%. This effort supports Eagle County's strategic goal to "protect surface and ground water quality and quantity." Protecting water resources will become a greater challenge due to increasing impacts from climate change and rising human populations. The cooperation and collaboration of the water rights holders, the State of Colorado and nonprofit organizations to bring this project to fruition will serve as a model to other communities.

We look forward to this project being completed, and the Abrams Creek Cutthroat protected.

If you have questions regarding our support of the project, please contact one of us at the above email address.

athy Chandler-Hear

Sincerely.

Jill H. Ryan

Chair

Kathy Chandler-Henry

Commissioner

Jeanne McQueeney Commissioner

Telephone (970) 524-7514 • Facsimile (970) 524-7522 • www.townofgypsum.com

February 2, 2017

Greetings,

The Town of Gypsum strongly supports the Abrams Creek Cutthroat Trout project here in Eagle County, Colorado, and respectfully requests that your group lend all available support.

Why is this important?

- The Abrams Creek cutthroat is the *only* known aboriginal cutthroat trout population in the Eagle River watershed.
- This location is home to one of only a few indigenous cutthroat populations remaining in the Upper Colorado River system.

Risks to these cutthroat

• The single greatest risk to this cutthroat population is significant diversion by a single irrigation ditch called the JPO No 2. This 1906 senior water diversion takes away a significant portion of the habitat-supporting water supply, with substantial risks during lower flow periods.

Solution

• Pipe the JPO No. 2 ditch which will improve water delivery and efficiency by 40%. By increasing efficiency and water flows, not only will the native cutthroat population be protected, but it is believed the population will expand making it possible to reintroduce the population to additional streams in the watershed. Additional benefits will be periodic flushing flows to Abrams Creek channel which also enhances outthroat habitat.

Support from JPO Ditch Owner

• The owner of the JPO Ditch No. 2, Buckhorn Valley Metro District, will be supporting this improved habitat by reducing diversions by 40% and curtail all diversions if flows are below 1.25 cfs.

This is a perpetual agreement with Buckhorn, the benefits to the trout are forever.

ADMINISTRATION

Town Manager Jeff Shroll

Asst. Town Manager Frances Barela

Town Clerk Danette Schlegel

Finance Officer Mark Silverthorn

Sales Tax Auditor Lynn Trudeau

ipecial Projects Coordinator Krista DeHerrera The Town of Gypsum asks for your support of this long-term, joint effort of local and national nonprofit organizations, the ditch owner (Buckhorn Valley Metro District), Colorado Parks & Wildlife, and BLM.

Very truly yours,

TOWN OF GYPSUM A Home Rule Municipal Corporation

Jeff Shroll, Town Manager



United States Department of the Interior

BUREAU OF LAND MANAGEMENT Colorado State Office 2850 Youngfield Street Lakewood, Colorado 80215-7210 www.co.blm.gov



In Reply Refer To: CO-932 (7250)

MAR 0 1 2017

James Eklund, Director Colorado Water Conservation Board 1313 Sherman St., 7th Floor Denver, CO 80203

Dear Mr. Eklund:

The purpose of this letter is to communicate the that Bureau of Land Management (BLM) has committed 10,000 dollars toward the Abrams Creek Instream Flow Project. The BLM established a broad cooperative agreement with Trout Unlimited in 2014 for the purpose of supporting on-the-ground projects that provide direct benefits to salmonid fisheries throughout the United States. In July 2016, BLM Colorado specifically committed 10,000 dollars for the Abrams Creek Instream Flow Project.

The BLM understands that the proposed project is designed to provide additional water for fish habitat in Abrams Creek. Piping portions of the JPO Ditch System, thereby reducing water lost to seepage, and allowing less water to be diverted from Abrams Creek into the ditch would provide the additional water. BLM believes that the project could result in significantly more usable fish habitat below the headgate of the JPO Ditch. The BLM supports the objectives of the project because Abrams Creek provides important habitat for a conservation population of Colorado River Cutthroat Trout, a species that appears on BLM's sensitive species list. The BLM believes that the collaborative effort envisioned by the project, which would include nonprofit entities, local government, State government agencies and Federal government agencies, would greatly increase the chances of success.

BLM offers its support for the project with the caveat that such support does not guarantee or imply approval of the proposed project on BLM lands. The project proponent will be required to apply for Federal Land Policy and Management Act Title V right-of-way for any reconstructed portions of the ditch that cross BLM lands. The proposed project will be subject to review under

the National Environmental Policy Act (NEPA) procedures, along with required review under other federal laws that are designed to protect cultural and archaeological resources. The formal review process could result in denial of the proposed project, or could result in a request by the BLM to significantly modify proposed construction features or project routing. However, the BLM is committed to working collaboratively with the project proponent to conduct a timely NEPA review, and to carefully consider any mitigation or design features proposed by the project proponent to avoid and minimize impacts.

Sincerely,

Mey Why Brian St. George

Deputy State Director

Resources and Fire Management

Cc: Field Manager, Colorado River Valley Field Office



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
COLORADO RIVER VALLEY FIELD OFFICE
2300 River Frontage Road
Silt, CO 81652
www.blm.gov/co/st/en/fo/crvfo.html

In Reply Refer to: 7250 (CON040)

February 9, 2017

To Whom It May Concern:

The purpose of this letter is to express Bureau of Land Management (BLM) support for a proposed restoration project on Abrams Creek on lands managed by the BLM's Colorado River Valley Field Office. It is the BLM's understanding that the proposed project is designed to provide additional water for fish habitat in Abrams Creek. The additional water would be provided by piping portions of the JPO Ditch System, thereby reducing water lost to seepage, and allowing less water to be diverted from Abrams Creek into the ditch. BLM believes that the project could result in significantly more usable fish habitat below the headgate of the JPO Ditch. The BLM supports the objectives of the project because Abrams Creek provides important habitat for a conservation population of Colorado River cutthroat trout, a species that appears on the BLM's sensitive species list. The BLM believes that the collaborative effort envisioned by the project, which would include nonprofit entities, local government, state government agencies, and federal government agencies, would greatly increase the chances of success.

The BLM's support for the project is offered with the caveat that such support does not guarantee or imply approval of the proposed project on BLM-managed lands. The project proponent will be required to apply for a Federal Land Policy and Management Act Title V right-of-way for any reconstructed portions of the ditch that cross BLM-managed lands. The proposed project will be subject to review under the National Environmental Policy Act (NEPA) procedures, along with required review under other federal laws that are designed to protect cultural and archaeological resources. The formal review process could result in denial of the proposed project, or could result in a request by the BLM to significantly modify proposed construction features or project routing. However, the BLM is committed to working collaboratively with the project proponent to conduct a timely NEPA review and to carefully considering any mitigation or design features proposed by the project proponent to avoid and minimize impacts.

If you have questions, please contact Chad Mickschl, Hydrologist, at (970) 876-9071 or cmickschl@blm.gov.

Sincerely,

Assistant Field Manager

Colorado River Valley Field Office