



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

1313 Sherman Street
Denver, CO 80203

P (303) 866-3441
F (303) 866-4474

John Hickenlooper, Governor

Robert Randall, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Chris Sturm, Watershed and Flood Protection Section

DATE: July 19, 2017

AGENDA ITEM: 9. Fish and Wildlife Resources Fund (FWRF) – Buckhorn Valley
Metropolitan District Application for Abrams Creek Cutthroat Trout Recovery

Background:

The Fish and Wildlife Resources statute (attached), § 37-60-122.2, authorized the Fish and Wildlife Resources Fund in 1987. It was amended in 2002 to help mitigate the impacts of existing water facilities. The Abrams Creek project seeks to restore stream flows for the benefit of a population of genetically pure Green-Lineage cutthroat trout. This is the only known aboriginal population in the Eagle River watershed. Diversions from the JPO Ditch, a pre-compact ditch, significantly reduce flows and sometimes dry up portions of the stream, truncating approximately 50% of the useable habitat for the species. Project partners include the Buckhorn Valley Metropolitan District (Buckhorn), Co Parks and Wildlife (CPW), Trout Unlimited, Eagle River Watershed Council, and the Bureau of Land Management. CPW considers this project among the highest priorities for western Colorado cutthroat trout conservation.

Discussion:

Currently, the JPO Ditch diverts water from Abrams Creek for irrigation of lands within the Buckhorn District area located five miles downstream. It is estimated that as much as 40% of the water diverted does not reach the irrigated lands. The applicant proposes to pipe portions of JPO Ditch to improve its delivery efficiency. The applicant will also construct a fish screen to prevent entrainment of fish into the ditch. Under a partner's agreement, Buckhorn will leave 40% of water otherwise available to the JPO Ditch in Abrams Creek and will curtail all diversions if stream flows are at or below 1.25 cfs. This arrangement, estimated to produce approximately 300 acre-feet per year on average, will continue in perpetuity. It is anticipated that the partners will seek a CWCB instream flow water right to account for the additional base flows made available by the partners' agreement.

Staff recommendation:

Staff has reviewed Buckhorn's FWRF application (attached) and found it in conformance with Board Policy 15 (attached). Staff recommends that the Board approve a non-reimbursable expenditure of up to \$550,000 from the Fish and Wildlife Resource Fund for the purpose of providing matching dollars to the Abrams Creek Cutthroat Trout Recovery Project. This amount represents 40% of the total project cost.





BUCKHORN VALLEY METROPOLITAN DISTRICTS NO. 1 AND NO. 2

PO BOX 5127 GYPSUM, CO 81637

June 8, 2017

Via Federal Express delivery to:

Chris Sturm
Colorado Water Conservation Board
1313 Sherman Street, Suite 721
Denver, CO 80203 Phone: 303-866-3441 ext. 3236

RE: Grant Application for the FWRF program
Applicant: Buckhorn Valley Metropolitan District No. 1 (BVMD)
Project Partners: Trout Unlimited and BVMD in cooperation with US BLM and Colorado Parks
and Wildlife

Dear Mr. Sturm,

Enclosed please find three copies of our application for our:
Application for Funding Assistance by Buckhorn Valley Metropolitan District No. 1 By
for the project entitled
Abrams Creek Cutthroat Trout Recovery Project

I believe you have been in contact with Mely Whiting of TU regarding this, and we'd like to give due credit to Mely, and CPW's field aquatic biologist Kendall Bakich and CPU hydrologist David Graf. Of course, many others from BVMD, TU, and CPW have lent capable hands.

Thanks very much for your consideration of this application, and we highly appreciate your time to review it. Kindly contact me with any questions or concerns, directly at either jvhill.co@gmail.com, or at 90-470-20787.

Sincerely,
Buckhorn Valley Metropolitan District No. 1

John V. Hill, President

Also via email to: chris.sturm@state.co.us



BUCKHORN VALLEY METROPOLITAN DISTRICTS NO. 1 AND NO. 2

PO BOX 5127 GYPSUM, CO 81637

Application to the
Fish and Wildlife Resources Fund Grant
Colorado River Water Conservation Board

Application for Funding Assistance
by
Buckhorn Valley Metropolitan District No. 1
for the project entitled

Abrams Creek Cutthroat Trout Recovery Project

filed in cooperation with

Trout Unlimited
Colorado Parks and Wildlife

Supporting Agencies

Colorado Parks and Wildlife
US Department of the Interior
USDA Forest Service
Eagle County
Town of Gypsum
Town of Eagle
American Rivers
Eagle Valley Land Trust
Eagle Ranch Wildlife Fund



Abrams Creek Cutthroat Trout Recovery Project

Application to the
Fish and Wildlife Resources Fund Grant
Colorado River Water Conservation Board

Contents

- 3.1 Applicant Information
- 3.2 Project Summary Form
- 3.3 Technical Narrative Description
- 3.4 Evaluation Criteria
- 3.5 Project Budget
- 3.6 Application Checklist

Appendices

A - June 28, 2016 Agreement between Buckhorn District and TU (Partners Agreement) B -
Project Location Map, Ownership Map, and Flood Plain Map & Analysis

C - Project Scope of Work

D - Letters of Support

E - Appendix E – Vail Daily Articles “Deal Struck to Protect Native Trout in County”

(July 19, 2016) and "Plan to Save Native Fish Moving Forward" (September 10, 2016)

3.1 Applicant Information

3.2 Project Summary Form



Section 3.1: Applicant Information

Date of Submittal: June 7, 2017

Name of Project: Abrams Creek Cutthroat Trout Recovery Project

Applicant Information

Name and Address of Applicant Responsible for Project:

Buckhorn Valley Metropolitan District No. 1

P.O. Box 5127, 0044 Indian Heights Way, Gypsum, CO 81637

Phone: (970) 470-2087 FAX: (866) 760-1296

Email: jvhill.co@gmail.com

Name and Type of Organization: Special District

Applicant Federal Employer ID Number (FEIN): 84-1547562

Contact Information, if Different from Sponsor

Name and Address of Applicant Responsible for Project:

Buckhorn Valley Metropolitan District No. 1, c/o John V. Hill, President of the Board of Directors

PO Box 5127, 11 Bridger Drive, Gypsum, CO 81637

Phone: () 970-470-2087 FAX: (866) 760-1296

Email: jvhill.co@gmail.com

Submitted by

Name John V. Hill

Date 6-8-17

Received by

Name _____

Date _____



Section 3.2: Project Summary Form

Project Location Information

Nearest Town or City	Gypsum
County	Eagle
Township/Range/Section	start of project: Section 11, Township 5 Range 85
Latitude/Longitude	start of project: 39d 37m 29.75sN; 106d 53m 04.67s W
State Senate District	5
State Representative District	26
Stream Name and Watershed	Abrams Creek, Eagle River Watershed
Water Division	5
Water District	

Land Ownership

On a map of scale $\geq 1"=2000'$, indicate all property affected by this project and evidence of ownership or easements for project work. This information should also be shown on an ownership map in the appendices. If the project area has over three property owners, please attach a separate sheet with names and permission status for each.

Name of Landowner(s) Bureau of Land Management

Evidence of ownership or easements for river restoration work:

☐ Enclosed ☐ Will forward if requested ☒ Not yet available (explain timeline)

Grant Request (round figures to the nearest \$100)

Total Project Cost	\$1,371,000
Grant Request	\$550,000
List Funding Sources	BLM BOR CWCB WSRA Gypsum
	Native Species CF Trout Unlimited Private
	Local governments USFWS Buckhorn

Brief Description of Project Request (Please limit to no more than 100 words; this will be used to inform reviewers and the public about your proposal):

The project seeks to restore stream flows for the benefit of a Core Conservation population of genetically pure Green-Lineage cutthroat trout - the only known aboriginal population in the Eagle River watershed. Diversions from the JPO Ditch, a pre-compact ditch, significantly reduce flows and sometimes dry up portions of the stream, truncating approximately 50% of the useable habitat for the species. The project partners are proposing to pipe portions of the ditch, which is expected to improve efficiency by 40%. In exchange, Buckhorn District, the ditch owner, will leave 40% of available diversions in Abrams Creek and will curtail all diversions if flows fall below 1.25 cfs, in perpetuity. Funds are requested to construct the JPO Ditch pipeline.

3.3 Technical Narrative

Abrams Creek Cutthroat Trout Recovery Project

Fish & Wildlife Resources Grant Application

Section 3.3 – Technical Narrative Description

I. Project Need / Definition of the Problem

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.¹ Conservation and recovery of the native Colorado River cutthroat trout is a high priority for the state. In 2006, Colorado signed a Conservation Agreement for the purpose of eliminating or reducing threats that may warrant listing under the Endangered Species Act (ESA).² According to Colorado Parks and Wildlife (CPW), preservation and improvement of the Abrams Creek cutthroat trout population is one of the highest priorities for cutthroat trout conservation efforts in western Colorado.

This valuable cutthroat trout population is impacted by reduced flows due to diversions by a single irrigation ditch – the JPO No. 2 Ditch (JPO Ditch). JPO Ditch diversions truncate approximately 50% of the useable cutthroat trout habitat in the creek. In dry years, the ditch has historically swept the entire creek with long lasting impacts on the trout population. Discussions between CPW, TU, and Buckhorn District span for several years, with various alternatives to improve conditions discussed but no agreement reached. In June of 2016, an agreement was reached (Partners Agreement) committing the partners to pursue funding to pipe portions of the JPO Ditch to improve its delivery efficiency thereby allowing Buckhorn District to leave more flows in Abrams Creek for the benefit of the cutthroat trout fishery. A copy of the Partners Agreement is attached as Appendix A. This project offers a momentous opportunity to fix a long-standing problem in a manner that respects and preserves this valuable, pre-compact water right.

II. Project Goals and Objectives

The Abrams Creek Cutthroat Trout Project seeks to restore flows in Abrams Creek, a tributary of the Eagle River, for the benefit of the Abrams Creek cutthroat trout population. Currently, the JPO Ditch diverts water from Abrams Creek for irrigation of lands within the Buckhorn District area located 5 miles downstream. It is estimated that as much as 40% of the water diverted does not reach the irrigated lands due to ditch leakage. Because the JPO Ditch delivers water via the Alkali Creek drainage, ditch leakage accrues to that drainage, never returning to Abrams Creek. A map showing the location of the JPO Ditch is attached as Appendix B. The partners propose to pipe portions of JPO Ditch to improve its

¹ Due to uncertainties surrounding the distinction between green lineage and the ESA listed greenback cutthroat trout, the USFWS 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).

² http://cpw.state.co.us/Documents/Research/Aquatic/pdf/CRCT_Conservation_Agreement_Final_Dec06.pdf

delivery efficiency. Under the partner's agreement, if the piping project is completed, Buckhorn District will leave 40% of water otherwise available to the JPO Ditch in Abrams Creek and will curtail all diversions if stream flows are at or below 1.25 cfs. This arrangement, estimated to produce approximately 300 acre-feet per year on average, will continue in perpetuity.

The project is expected to produce significant benefits to the Abrams Creek cutthroat trout population while at the same time enabling Buckhorn District to continue to rely on this pre-compact water right for irrigation. State and BLM biologists have determined that low flows are a limiting factor for the Abrams Creek cutthroat trout population. In the spring, diversions reduce flows needed to flush sediment, scour pools, and maintain the riparian corridor. In the summer, low flows reduce wetted habitat, affect habitat connectivity and availability and result in increased stream temperatures. Increased flows would allow for increased canopy cover, and enhance habitat for terrestrial insects, an important food resource for resident cutthroat. Increased flows would allow for improved quality of spawning habitat, deeper pools, and greater depth over riffles during critical low flow periods. Ultimately, the goal for increasing available flows is to boost the resiliency of the existing cutthroat trout population and protect the future of expansion efforts for the aboriginal cutthroat trout elsewhere within the Eagle River watershed.

III. Technical Feasibility of the Proposed Project

The project consists of installing approximately 21,790 linear feet of 18-inch pipeline and related structures to deliver water from the JPO Ditch headgate to Buckhorn Reservoir. A copy of the scope of work for the project is attached as Appendix C. Buckhorn District has, at its own expense, commissioned a professional engineering evaluation, analysis and design for the project. The project has been designed through the design development phase and is ready for final construction plans. The diversion structure will also be improved and made more 'trout friendly' with a self-cleaning fish screen and flow controllers and monitors with recording gauges installed to facilitate implementation of the Partners Agreement. The durable life of the project components is estimated to well exceed 50 years. With routine maintenance, the durable life can be extended indefinitely. Buckhorn will be responsible for all maintenance.

The entire length of the pipeline will lie in the historic JPO ditch right-of-way authorized under the Act of July 26, 1866 and, therefore, a ROW permit is arguably not required. However, Buckhorn District has been working closely with BLM in identifying construction methods, staging sites, and means to facilitate construction that minimize environmental disruption. BLM has cleared the route for potential historical and archaeological conflicts. The improved diversion structure and fish screen will be partially located in the Abrams channel itself, and so a CWA 404 permit may be required. The project has been previewed with the U.S. Army Corps of Engineers (ACOE) permitting staff at Grand Junction, who indicated that the project will likely qualify for the 2017 Nationwide Permit for Fish and Wildlife Enhancement. Once funding is secured for the project, Buckhorn will seek the necessary 404 permitting, concurrent with required BLM approvals, if any.

The JPO Ditch is decreed for a total of 3.0 cfs (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 District has maintained strict

compliance with Colorado water law, including recording of sources and uses, reporting, and maintaining the legal status of its water rights. Issues with water rights are not anticipated. There are no land owners on the project route or access other than BLM. The District owns the project terminus, Buckhorn Reservoir. The CWCB holds an instream flow water right on Abrams Creek in the amount of 0.5 cfs from January 1 to December 31. The CWCB instream flow right is currently limited by water availability. It is anticipated that, once the project is completed, the partners will seek an additional CWCB instream flow water right to account for the additional base flows made available by the Partners Agreement and protect such additional flows from potential appropriation by third parties.

According to analyses conducted at the request of BLM, the project will have no adverse impacts on the 100-year floodplain and may actually slightly improve conditions. Currently, the open ditch can intercept overland flow in a significant event, which would concentrate and expedite the flow to the lower reaches of Alkali Creek. The project will “pipe” the ditch and the open ditch will be covered, slightly reducing impacts to the 100 year floodplain. In the reaches of the route where the pipeline is actually in the Alkali or McHatton Creek channels, the pipe will be laid below the channel flowline. During construction, the BLM has asked that the incised channel banks be ‘laid back’ which would then increase the cross-sectional area and somewhat reduce the channel velocity. A lower channel velocity would increase concentration time slightly, and thus may also slightly reduce the downstream peak flow and the floodplain path.

The project component that could be impacted by a 100-year flood would be the pipeline in the lower reaches of Alkali Creek. To prevent impacts, the pipeline will be buried below the channel bottom. Should a significant storm event scour the channel bottom and expose the pipeline, the fused-joint, HDPE pipe to be used has proven flexibility, tensile and beam strength. If the channel bottom is scoured, exposing and leaving the pipe unsupported, it will be a simple maintenance matter to ‘push’ the bank top back in over the pipe to restore the channel section and secure the pipeline.

IV. Project Implementation Plan

The partner’s goal is to secure all funding commitments for the project in 2017 and complete construction in 2018. The following are the major milestones for the project identified in chronological order:

1. Secure funding commitments
2. Finalize project design and, concurrently, approvals from BLM and ACOE
3. Concurrently, finalize contract specifications and bid documents
4. Bid and award project construction contract; pre-order (reserve production spot for long-lead materials such as pipeline)
5. Contractor finalizes ordering materials, mobilizes, commences project construction
6. Project construction
7. Project finalization, testing, acceptance
8. Project utilization, commencement of monitoring

V. Project Time Schedule³

1	Present - 01/31/2018	Secure funding commitments
2	12/01/2017 - 03/31/2018	Finalize design; obtain BLM and USACE project approvals
3	02/01/2018 - 03/31/2018	Finalize contract specifications and bid documents
4	04/01/2018 - 04/30/2018	Bid construction contract; award contract; pre-order materials
5	05/01/2018 - 05/31/2018	Contractor finalizes ordering materials, mobilizes, commences
6	06/01/2018 - 09/30/2018	Construction
7	10/01/2018 - 10/31/2018	Project finalizations, testing, acceptance
8	Spring 2019	Project utilization, monitoring

VI. Monitoring Plan

Buckhorn will control diversions as provided in the Partners Agreement. Flows will be monitored using recording digital flow meters to be installed in the Abrams Creek channel immediately upstream of the JPO Ditch Diversion (total flows) and at the JPO Ditch Diversion (diverted amount). Reporting periods will be established by agreement among the partners but will likely occur weekly during critical or highly variable flow periods (e.g., spring runoff and late season low-flow periods) and semi-weekly during more stable, less critical flow periods.

In addition to monitoring flows, the partners expect to measure progress in meeting the project's goals by comparing baseline conditions with conditions after pipe installation and initiation of JPO Ditch bypass protocols under the Partners Agreement. Following construction and bypass implementation, surveys will be conducted annually for the first years and biannually for the following 5 years. Surveys will evaluate biological effects of increased water availability and may include:

- Physical habitat changes - including wetted widths, pool frequency, depths, and presence of sediment;
- Stream temperature – two stream temperature probes (one upstream and one downstream of the JPO Ditch) have been installed and will be monitored;
- Macroinvertebrate surveys – samples have been collected and will be compared with future samples to evaluate changes in macroinvertebrate community health. Surveys will evaluate forage availability and presence of sediment tolerant species in response to changes in water management in Abrams Creek;
- Fish surveys – will evaluate population fitness through documentation of fish abundance (fish per acre) and age-class diversity (presence and number of individuals in multiple age-classes); fish condition including length (growth potential) and relative weight (body condition and plumpness); and seasonal presence and distribution of cutthroat trout throughout the stream.

VII. Qualifications of the Applicant

³ Assumes Buckhorn District will “front” costs for items 2 and 3 based on the District's evaluation of funding status.

Buckhorn Valley Metropolitan District No. 1 was created in 2000 with an annual revenue of about \$650,000. The District is only 1/3 built-out, so its revenues will increase over the build-out period of the next ten years. Buckhorn District directors include 3 experienced construction industry professionals with several decades of combined experience. The District's management team includes a civil engineer with 45 years of worldwide site, pipeline and drainage experience, an infrastructure contractor with 30 years of local works, and the senior project manager who has been actively operating the JPO water source for 17 years. Their oversight will assure that the project is completed on-time and on-budget, and with strict accordance with the design specifications and plans. The District will let the construction contract on a fixed price basis to the best qualified contractor with the lowest fixed price bid, whose qualifications meet the District's specifications. The materials to be used are well-established for this type of use, including within the Buckhorn District's on existing pipeline network of over 55,000 linear feet. District and engineering personnel will inspect construction during the entire construction sequence. A performance and maintenance guaranty will be delivered to the District upon commencement of construction. Buckhorn will work closely with CPW and Trout Unlimited to ensure that the goals of the project are met and are adequately monitored and evaluated.

VIII. Coordination Plan and Public Involvement

The primary sponsors of the project are CPW, Buckhorn District and Trout Unlimited. Partners also include the Eagle River Watershed Council (ERWC), who is providing significant assistance in fundraising and will be primarily responsible for public outreach and education on the project, and BLM, who has committed \$10,000 to the project.

ERWC will raise awareness about this historic project and its numerous and varied benefits within the community through a variety of means, including newspaper and enewsletter articles, radio interviews and a Watershed Wednesday presentation on the topic. The Watershed Council will also provide site visits to the project to discuss the successful implementation of the collaborative initiative and will provide a forum for similar opportunities throughout the watershed.

The project enjoys wide state and local support. Letters of support have been provided by Senator Bennet, State Representative Diane Mitch Bush, BLM, the US Forest Service, Eagle County's Board of County Commissioners, the Town of Eagle, and the Town of Gypsum, among others. Letters of support are attached as Appendix D. The Town of Gypsum has committed \$100,000 to the project and additional funding is expected from other local governmental entities. The project was also the subject of supportive local paper articles – see Appendix E.

IX. Appendices (Including maps, legal documents, letters of support, other materials)

Appendix A - June 28, 2016 Agreement between Buckhorn District and TU (Partners Agreement)
Appendix B - Project location map, floodplain map, ownership map
Appendix C - Project Scope of Work
Appendix D - Letters of Support
Appendix E – Vail Daily Articles “Deal Struck to Protect Native Trout in County” (July 19, 2016) and "Plan to Save Native Fish Moving Forward" (September 10, 2016)

3.4 Evaluation Criteria



Section 3.4: Evaluation Criteria

The following criteria will be used to evaluate applications to the Fish and Wildlife Resources Fund. How well an application meets these criteria will be deduced from the technical narrative, so ensure that the following issues are addressed within the narrative.

Urgency/Need **15 points**

- Urgency or timeliness of the project to protect fish & wildlife resources.
- Need for funding and CWCB support.
- *Especially reflected in Narrative Sections 1.0 and 2.0*

Project Benefits **15 points**

- What are the statewide benefits of the project?
- What are the physical and biological benefits of the project to natural resources at the local level?
- What are the social benefits of the project to the local community, including factors such
 - Use of volunteers where appropriate,
 - Educational opportunities.
- *Especially reflected in Narrative Section 2.0*

Technical Merit/Soundness of Proposal **30 points**

- If the proposed project or planning effort is implemented, will it have a significant impact on improving the health of the river system or the target fish and wildlife?
- Is the proposal well thought out and will the proposal implementation steps really accomplish the stated goals of the proposal?
- Once designed and constructed, will the project mitigate the potential adverse impacts on the adjacent 100-year floodplain? Explain.
- Once constructed, will the project be able to withstand the impacts of a 100-year flood? Explain how.
- Will the applicant(s) have the financial resources to repair any damages sustained by the project during a flood greater than a 100-year flood?
- *Especially reflected in Narrative Sections 3.0, 4.0, 5.0 and 6.0*

Organizational Capacity **20 points**

- Applicant organization's history of accomplishments in similar projects.
- Capacity of available staff to accomplish the proposed project.
- *Especially reflected in Narrative Section 7.0*

Coordination/Public Involvement **20 points**

- Applicant's history of working cooperatively with community organizations and local, state and federal agencies.
- List of partners and how they will contribute to the project (letters of support and commitment).
- Are all necessary permits and permission secured or identified?
- *Especially reflected in Narrative Section 8.0*

3.5 Project Budget

Section 3.5: Grant Application Budget

Task	Description	Target Start	Target End Date	Requested Funds	Other Funds Cash	Other Funds In Kind	Total
1	Permitting	9/1/2017	6/1/2018	\$0	\$25,000	\$15,000	\$40,000
2	Final Design and Construction Plans	9/1/2017	6/1/2018	\$0	\$60,000	\$0	\$60,000
3	Project Construction	7/1/2018	07-01-19	\$467,500	\$595,500	\$0	\$1,063,000
4	Monitoring	9/1/2017	7/1/2019	\$0	\$10,000	\$20,000	\$30,000
5	Administration	9/1/2017	11/1/2019	\$82,500	\$56,450	\$40,000	\$178,950
Total				\$550,000	\$706,950	\$75,000	\$1,371,950

<u>Funding Source</u>	<u>Cash</u>	<u>In-Kind</u>	<u>Total</u>	<u>Status</u>
Bureau of Reclamation Cooperative Watershed Grant	\$90,000	\$0	\$90,000	<i>Pending</i>
Eagle River Chapter of TU	\$5,000	\$0	\$5,000	Secured
Buckhorn District	\$0	\$25,000	\$25,000	Secured
Trout Unlimited	\$0	\$50,000	\$50,000	Secured
Native Species Conservation Fund	\$40,000	\$0	\$40,000	Secured
Western Native Trout Initiative	\$30,000	\$0	\$50,000	<i>Pending</i>
Bureau of Land Management	\$10,000	\$0	\$10,000	Secured
Alpine Bank – Eagle County	\$500	\$0	\$500	Secured
Other Private grants	\$35,739	\$0	\$76,239	<i>Pending</i>
Town of Gypsum	\$100,000	\$0	\$100,000	Secured
Other Local governments	\$40,000	\$0	\$60,000	<i>Pending</i>
Individual donors	\$31,000	\$0	\$80,000	<i>Pending</i>
CWCB WSRA grant	\$364,711	\$0	\$364,711	Secured
Subtotal Matching Funds	\$746,950	\$75,000	\$1,007,239	
FWRP Request	\$550,000	\$0	\$550,000	
Total Funding Sources	\$1,296,950	\$75,000	\$1,371,950	

3.6 Application Checklist



Section 3.6: Application Checklist

This checklist is intended to help ensure that the final grant application is full and complete.

Grant Package

- ☒ Are there three correctly formatted hard copies of the complete application?
- ☒ Is it compiled in the order shown below?
- ☒ Is there an electronic version of the application?

Applicant Information

- ☒ Are all sections completed on this form?

Project Summary Form

- ☒ Are all sections completed on this form?

Technical Narrative

- ☒ Is the narrative complete, with all eight sections addressed?
- ☒ Is it in 11-point font or larger, one-inch margins or larger, no more than five pages?
- ☒ Are project selection criteria addressed adequately in your technical narrative?

Budget

- ☒ Is a complete budget included, showing sources and uses of funds?

Appendices

Maps

- ☒ Is a project vicinity map included?
- ☒ Is a project map with land ownership included?
- ☒ Are other maps included?

Legal Documents

- ☒ Are important legal documents included?

Analysis of Flood Impacts

- ☒ Is a floodplain map showing the pre-project and post-project 100-year floodplain boundaries included?
- ☒ Is an engineering analysis of the project's ability to withstand a 100-year flood included?

Other Documents

- ☒ Are all other supporting documents included, with five copies of all?

**A - June 28, 2016 Agreement between Buckhorn District and TU
(Partners Agreement)**

AGREEMENT

This agreement (the "Agreement") is entered this 28 day of June, 2016, between Buckhorn Valley Metropolitan District No. 1 (the "District") and Trout Unlimited, Inc. ("Trout Unlimited"), for the purpose of partnering on a project designed to improve flows in Abrams Creek for the benefit of its native cutthroat trout fishery while preserving the District's ability to fully utilize its decreed water rights. The District and Trout Unlimited may collectively be referred to herein as the "Parties").

A. Recitals

1. Trout Unlimited is a non-profit, section 501(c)(3) corporation, which mission is to conserve, protect and restore North America's cold water fisheries and their watersheds.
2. The District 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, and is authorized pursuant to § 32-1-1001(1)(d)(I), C.R.S., to enter into contracts affecting its affairs.
3. Abrams Creek contains a Core Conservation population of native, Green-Lineage cutthroat trout (*Oncorhynchus clarkii pleuriticus*). This population is the only known aboriginal cutthroat population in the Eagle River watershed and it possesses a unique genetic characteristic -a rare mitochondrial haplotype - which is not found in any other known cutthroat trout populations.
4. The District owns J.P.O Ditch No. 2 which diverts water from Abrams Creek. The JPO Ditch No. 2 is decreed a total of 3.0 cfs under Civil Action 548 (1.0 cfs for irrigation) and Civil Action 841 (2.0 cfs for irrigation and domestic use) in Water District 37, Division 5 ("JPO Ditch No. 2 water rights").
5. 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. Preliminary estimates are that as much as 40 percent of the water diverted does not reach the irrigated lands due to ditch leakage. The District also diverts water at times from Abrams Creek during free river conditions for storage and plans to continue that practice.
6. The goals of Trout Unlimited and the District are to improve flows in Abrams Creek for the benefit of its native cutthroat fishery by improving the efficiency of the District's diversion and delivery system without impairing the District's JPO Ditch No. 2 water rights and the use thereof or its long term ability to operate and maintain its diversion and delivery system.

NOW THEREFORE, in consideration of the premises and the mutual promises and covenants set forth herein, the Parties agree as follows:

B. Project Description

1. Subject to the terms and conditions of this Agreement, the Parties propose to pipe portions of the JPO No. 2 Ditch to improve the efficiency of delivery of water to the District's irrigated lands



and reduce diversions from Abrams Creek for the benefit of the cutthroat trout fishery (the "Project").

- a. New diversion works and a pipeline for the JPO Ditch No. 2 shall be designed and engineered to increase diversion efficiency and water carriage efficiency without impairing the District's JPO Ditch No. 2 water right and use thereof, and without impairing the District's long term ability to operate and maintain the diversion and pipeline system.
 - b. The location of the point of diversion for the JPO Ditch No. 2 will remain the same unless otherwise agreed to by the Parties.
 - c. Subject to the District's determination of the optimal design of the Project, it is foreseen that the pipeline will generally follow the existing ditch alignment unless an alternate alignment is agreed to by the Parties, which approval will not be unreasonably withheld.
 - d. The Project will use the appropriately sized diameter pipeline as needed to accommodate delivery of the JPO Ditch No. 2 water right and the JPO Ditch No. 1 water right owned by the District and which diverts water out of Hernage Creek before being combined with water diverted under the JPO Ditch No. 2 water right for delivery to the District (i.e. a total capacity adequate to carry 7 c.f.s). Certain sections of the pipeline may vary in diameter to accommodate the physical situation.
2. Immediately upon completion of construction of the Project, the District will leave in Abrams Creek 40 percent of the amount of water that is physically available at the JPO Ditch No. 2 diversion point, except for instances when that 40 percent will result in less than 1.25 cfs in the Creek, in which case diversions under the JPO Ditch No. 2 water right will be limited or stopped in order to leave up to 1.25 cfs in the Creek. For purposes of example only, if there is 2 cfs available at the JPO Ditch No. 2 headgate, the District may only divert 0.75 cfs under its JPO Ditch No. 2 water right while leaving 1.25 cfs in the Creek, but if there is 4 cfs available at the JPO Ditch No. 2 headgate, up to 2.4 cfs may be diverted and delivered to the District through the pipeline under the JPO Ditch No. 2 water right and 1.6 cfs shall be left in Abrams Creek. Under this Agreement, 5 cfs of flow at the JPO Ditch No. 2 headgate is required to divert the full 3.0 cfs decreed to the JPO Ditch No. 2 water right. This Agreement shall have no impact on the amount of water the District may divert under the JPO Ditch No. 1 water right. The District's obligations under this paragraph will be met even if the Project, as built, results in efficiencies of less than 40 percent. As part of the Project, measuring devices will be installed as needed to ensure that the provisions of this paragraph are being met.
 3. A fish screen will be installed as part of the Project. The final design of the diversion and fish screen will be determined at the Project design stage, with input from Trout Unlimited and Colorado Parks and Wildlife.
 4. During high flows periods in Abrams Creek at the diversion structure and to allow for periodic flushing flows beneficial to the cutthroat trout fishery, the District agrees that in some years it will further reduce or curtail diversions under the JPO Ditch No. 2 water rights for up to 7 days so that flows in Abrams Creek are higher during that time, so long as it can be done without causing material injury to the District's use of its JPO Ditch No. 2 water rights. The District



agrees to cooperate with Trout Unlimited on determining the frequency, timing and amount of such flushing flows that meet the goals set forth in paragraph A.6.

C. Parties' Responsibilities

1. Securing adequate funding for the Project is a condition precedent to the other obligations set forth in this Agreement. Trout Unlimited is responsible for seeking \$1.2 million in funding for the Project through application for grants and/or donations. The District will be responsible for seeking funding in addition to the \$1.2 million, if any, as may be needed to complete the Project, provided that any financial obligations of the District hereunder are subject to annual appropriations as provided herein. The terms of any grants, donations or other funding must be reasonably acceptable to both Parties. Funding will be sought for Project design, permitting, engineering, construction, maintenance, and other costs associated with the design, approval and construction of the Project. Funding may be used to reimburse costs already incurred in the permitting and design of the Project but only if permitted under the terms of the grants and/or donations. Should Trout Unlimited or the District be unable to raise the necessary funds within 24 months of the date of this Agreement, then the Parties may agree to extend this Agreement for a mutually acceptable period. If no such extension is agreed to, then this Agreement shall automatically be rendered null and void and be of no further force and effect and the parties hereto shall have no obligations under this Agreement. The foregoing provision shall be self-effectuating.
2. Provided funding is obtained, the District will be responsible for (1) determining the optimal design of the Project, (2) design, plans and specifications to meet the Project goals set forth in this Agreement, and (3) contracting for construction and overseeing the construction of the Project in a manner consistent with this Agreement and with the terms of the grants and/or donations obtained to pay for the Project.
3. The Project shall be designed, constructed and maintained in a manner consistent with the goals set forth in paragraph A.6 of this Agreement. Trout Unlimited shall have the right to review Project design and construction for consistency with this Agreement and with the terms and conditions of any grant and/or donation for which Trout Unlimited is the fiscal agent or sponsor, provided, however, the District shall have the sole responsibility and authority for (a) determination of the appropriate Project design, construction methods, and materials, (b) location of all facilities, (c) contract letting and supervision of construction contracts, and (d) operation and maintenance of the Project. Design, construction, operation and maintenance of the fish screen contemplated under paragraph B.3 will be reasonably consistent with the recommendations of Colorado Parks and Wildlife. Project expenditures incurred by the District that are inconsistent with the terms and conditions of this Agreement and/or of any grant and/or donation for the Project will be the sole responsibility of the District.
4. Contracts with the company and/or engineers responsible for design and construction of the Project shall include adequate warranty and insurance provisions, and other appropriate provisions acceptable to the Parties.
5. Securing all necessary local, state and federal permits and approvals with conditions mutually acceptable to the Parties is also a condition precedent to the Project and the other obligations set forth in this Agreement. Trout Unlimited will seek funding, in the amount specified in a



scope of work obtained by the District and reasonably acceptable to Trout Unlimited, for all such necessary permits and approvals, which will be part of the \$1.2M being raised by Trout Unlimited. Trout Unlimited will assist the District in obtaining said permits and approvals for the Project before construction begins. The District will be the named applicant in said permits and approvals and will be responsible for the implementation of any and all terms and conditions of the permits and approvals. If permits and approvals acceptable to both Parties cannot be obtained with this funding within 12 months of the date of this Agreement, the Parties may agree to extend this Agreement for a mutually acceptable period. If no such extension is agreed to, then this Agreement shall automatically be rendered null and void and be of no further force and effect and the parties hereto shall have no obligations under this Agreement. The foregoing provision shall be self-effectuating.

6. The Parties understand this Project does not require a change of water rights and it is administrable by the State and Division Engineers without impairing the District's JPO Ditch No. 2 water rights and the use thereof. As part of the approvals described in paragraph C.5, above, which are a condition precedent of this Agreement, the District will seek to obtain a satisfactory approval of the Parties' understanding from the State and Division Engineers.
7. Once construction of the Project is completed, the District will be the exclusive owner of the Project infrastructure and will be responsible for the operation and maintenance of the Project including, but not limited to, the fish screen, maintenance of diversion structures and measuring devices to ensure that the District's obligations under this Agreement are met, and compliance with any terms and conditions imposed as part of the Project's permits and approvals. This Agreement shall not affect the District's discretion to continue its historical practice of diverting water under free river conditions at the JPO Ditch No. 1 and/or JPO Ditch No. 2, or to divert under new or changed water rights, so long as the District satisfies the terms of this Agreement.
8. The District will provide Trout Unlimited or its designee with such records including diversion records and stream flow measurements, so as to allow Trout Unlimited to monitor compliance with this Agreement. The District will also provide Trout Unlimited reasonable notice of any material issues related to implementation of the Project. Trout Unlimited will bear no responsibility for operation and maintenance of the Project or for compliance with conditions of the Project's permits and approvals under this Agreement.

D. Access

1. The District will grant access to JPO Ditch No. 1 and JPO Ditch No. 2, diversion structures, and other District facilities as may be reasonably necessary for the completion of the Project.
2. Once construction of the Project is completed, to the extent of the District's authority, the District will grant to Trout Unlimited and its authorized representatives access to the District's Project facilities as necessary to ensure that the provisions of paragraph B.2 are being met and the fish screen properly maintained.
3. The District will maintain District's access for operation and maintenance of the Project, to the extent practicable with the understanding that, at the time of this contract, the Project lies entirely on land owned by the US Bureau of Land Management.



E. Term/Termination

Prior to satisfaction of the conditions precedent set forth in paragraphs C.1, C.5, and C.6 above, either party may terminate this Agreement by giving the other party written notice as provided under paragraph F. Once the conditions precedent set forth in paragraphs C.1, C.5, and C.6 above have been satisfied, the term of this Agreement is in perpetuity.

F. Notices and Representatives

The following are the primary contacts for each party. All notices and communications regarding the Project will include the named individuals, the preferred form of communication being email. Either party may from time to time designate by written notice substitute or additional contacts for the party.

District
Buckhorn Valley Metropolitan Districts No. 1
Attn: President
P.O. Box 5127
0044 Indian Heights Way
Gypsum, CO 81637
jvhill.co@gmail.com

Trout Unlimited
Attn: Project Manager
P.O. Box 1544
Pagosa Springs, CO 81147
mwhiting@tu.org

Copy to:

Icenogle Seaver Pogue, P.C.
Attn: Jennifer L. Ivey
4725 South Monaco Street, Suite 225
Denver, Colorado 80237
Telephone: 303.867.3003
Facsimile: 303.292.9101
JIvey@isp-law.com

G. General Provisions

1. No provision, covenant or agreement contained in this Agreement, nor any obligations herein imposed upon the District shall constitute or create an indebtedness or debt of the District within the meaning of any Colorado constitutional provision or statutory limitation.
2. The District does not intend to hereby to create a multiple-fiscal year direct or indirect debt or other financial obligation whatsoever. The performance of those obligations of the District hereunder requiring budgeting and appropriation of funds are subject to annual budgeting and appropriations and if such appropriations are not available in any given year, the obligations of this Agreement requiring said appropriations will not be enforced in that year. The District's obligation to forego water diversions as set forth in paragraphs B.2 and B.4 shall be unaffected by this provision.
3. The terms of this Agreement are severable, and should any term or provision hereof be declared invalid or become inoperative for any reason, including without limitation by judicial order, administrative order, and/or change in applicable law, such invalidity or change in a term or

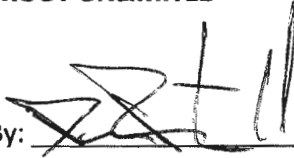


provision shall not affect the validity of any other term or provision hereof, unless such an interpretation impairs the ability to achieve one or more of the goals set forth in Paragraph A.6, in which case the Agreement will be revised as needed to best accomplish those goals. No waiver of any of the provisions of this Agreement shall be deemed to constitute a waiver of any other provision of this Agreement, nor shall such waiver constitute a continuing waiver unless otherwise expressly provided herein, nor shall the waiver of any default hereunder be deemed to be a waiver of any subsequent default hereunder.

4. This Agreement shall be governed by and construed in accordance with the laws of the State of Colorado, and venue for any dispute hereunder shall lie in the Eagle County District Court.
5. The headings, captions and titles contained herein are intended for convenience and reference only and are not intended to construe the provisions hereof.
6. This Agreement contains the entire agreement between the Parties, and no statement, promise or inducement made by either party or the agent of either party that is not contained in this Agreement shall be valid or binding.
7. Nothing in this Agreement or in any actions taken by the Parties pursuant to this Agreement shall be deemed a waiver of the District's sovereign immunity under the Colorado Governmental Immunity Act, §§ 24-10-101, *et seq.*, as amended from time to time.
8. The Parties may not assign or delegate their respective right, duties, and obligations hereunder absent the written consent of the other party.
9. All provisions herein, including the benefits and burdens, shall extend to and be binding upon the Parties' respective heirs, legal representatives, successors, and assigns.
10. This Agreement is a covenant that runs with and burdens the District's JPO No. 2 water rights to the extent not terminated pursuant to paragraphs C.1, C.5, or C.6. The District shall record this Agreement within the appropriate clerk and recorder office(s) within ten (10) days after it is executed by both Parties. The District shall provide notice to Trout Unlimited of its intent to sell or lease any portion of the JPO Ditch No. 2 water right no less than thirty (30) days prior to any such sale or lease. If the Agreement is terminated pursuant to paragraphs C.1, C.5, or C.6, either Party may record a Notice of Termination of the Agreement.
11. This Agreement may be executed in multiple identical original counterparts constituting one agreement.
12. Modifications of this Agreement shall not be effective unless agreed to by the Parties in a written, properly executed amendment hereto.
13. Enforcement of this Agreement and all rights and obligations hereunder are reserved solely to the Parties. Any services or benefits which third parties receive as a result of this Agreement are incidental to the Agreement and do not create any rights for such third parties.
14. The Parties agree that the terms and conditions of this Agreement are enforceable by specific performance.




TROUT UNLIMITED

By: 

Title: Drew Peternell
Colorado Water Project
Director

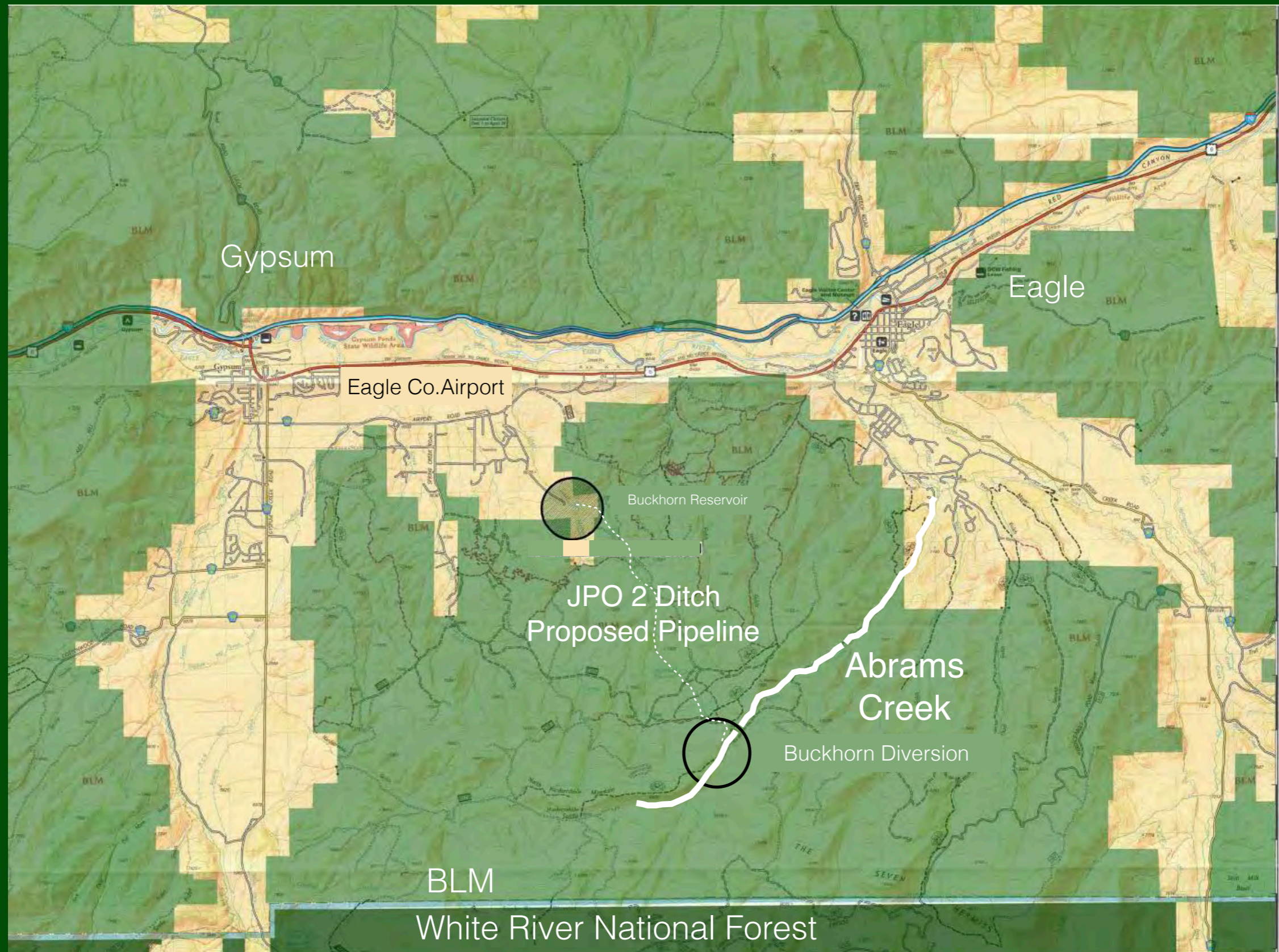
**BUCKHORN VALLEY METROPOLITAN
DISTRICT NO. 1**

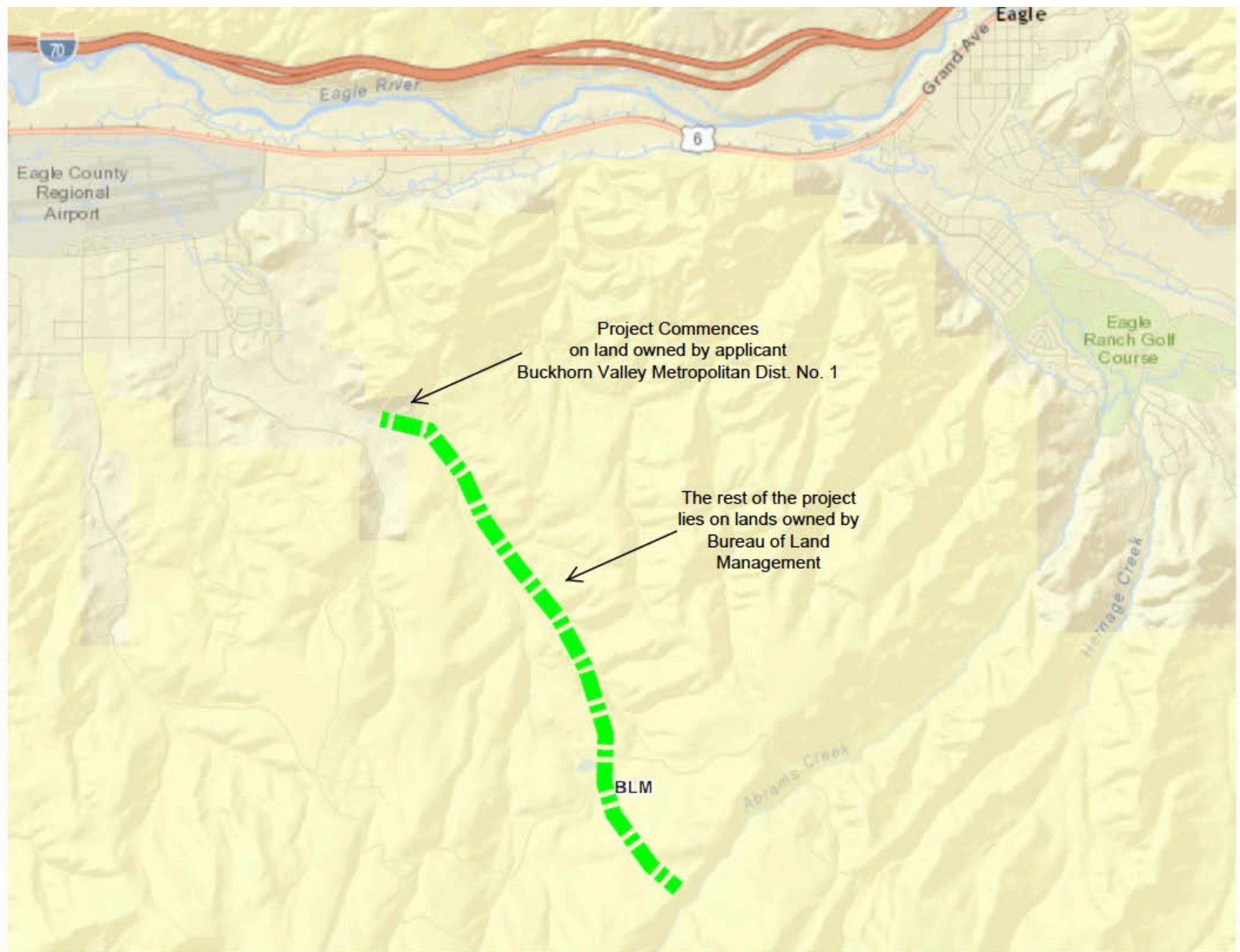
By: 

Title: President

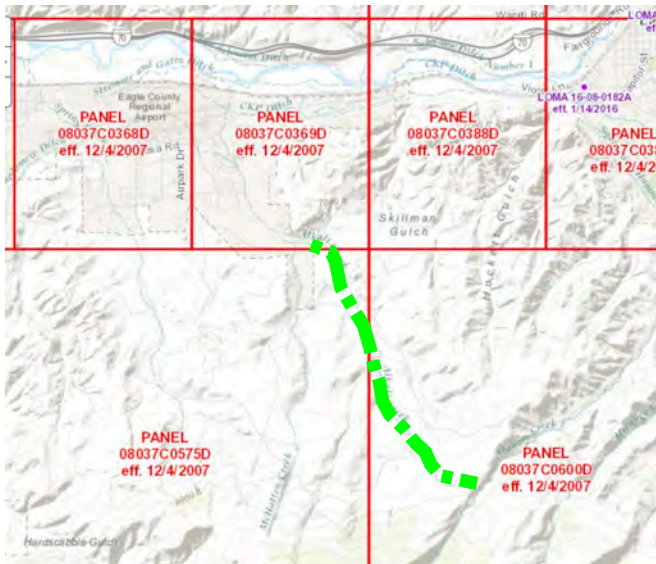
**B - Project Location Map, Ownership Map,
and Flood Plain Map & Analysis**

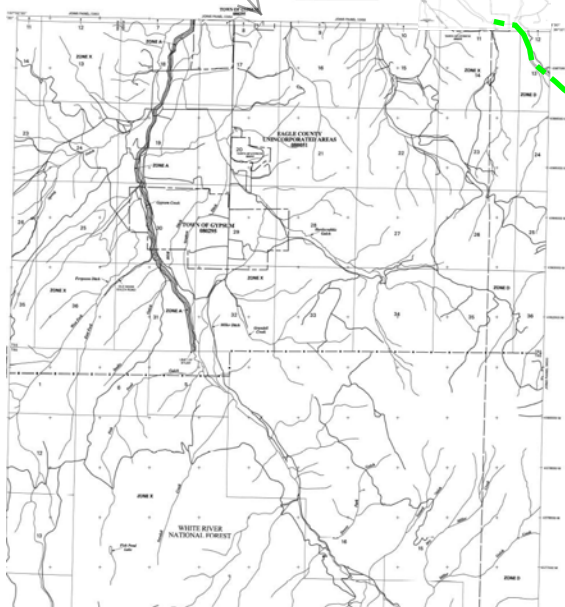
Location in Eagle County





PROJECT LOCATION WITH
LAND OWNERSHIP SHOWN





FIRM Panels: 05037C0600D

Map Effective Date: December 3, 2007

Map is Countywide, Not Printed

[Download a graphic of the map \(available if map panel is printed\)](#)

[Download county GIS data](#)

If Panel is not printed, the reason why:
INC. AREAS ZONE X, UNINC. AND FED.
AREAS ZONE D

Version: 1.1.1.0

Source Citation: 08037C_STUDY1

[Zoom to](#)

Ability of Project to Withstand 100 Year Flood Event

According to analyses conducted at the request of M, the project will have no adverse impacts on the 100-year floodplain and may actually slightly improve conditions. Currently, the open ditch can intercept overland flow in a significant event, which would concentrate and expedite the flow to the lower reaches of Alkali Creek. The project will "pipe" the ditch and the open ditch will be covered, slightly reducing impacts to the 100 year floodplain. In the reaches of the route where the pipeline is actually in the Alkali or McAtton Creek channels, the pipe will be laid below the channel lowline. During construction, the M has asked that the incised channel banks be laid back which would then increase the cross-sectional area and somewhat reduce the channel velocity. A lower channel velocity would increase concentration time slightly, and thus may also slightly reduce the downstream peak flow and the floodplain path.

C - Project Scope of Work

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 Ditch 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.

Operations Manager. 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 Gonçalves, 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

Description of Task: 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

Description of Task: 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.

Method/Procedure: 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.

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

Task 3 – Construction of Project

Description of Task: 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 ¼ mile of paved public street. The contractor will have ample room also to start pre-assembly. 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 by 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>)

Deliverables: Final report describing project as-built.

Task 4 – Monitoring

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

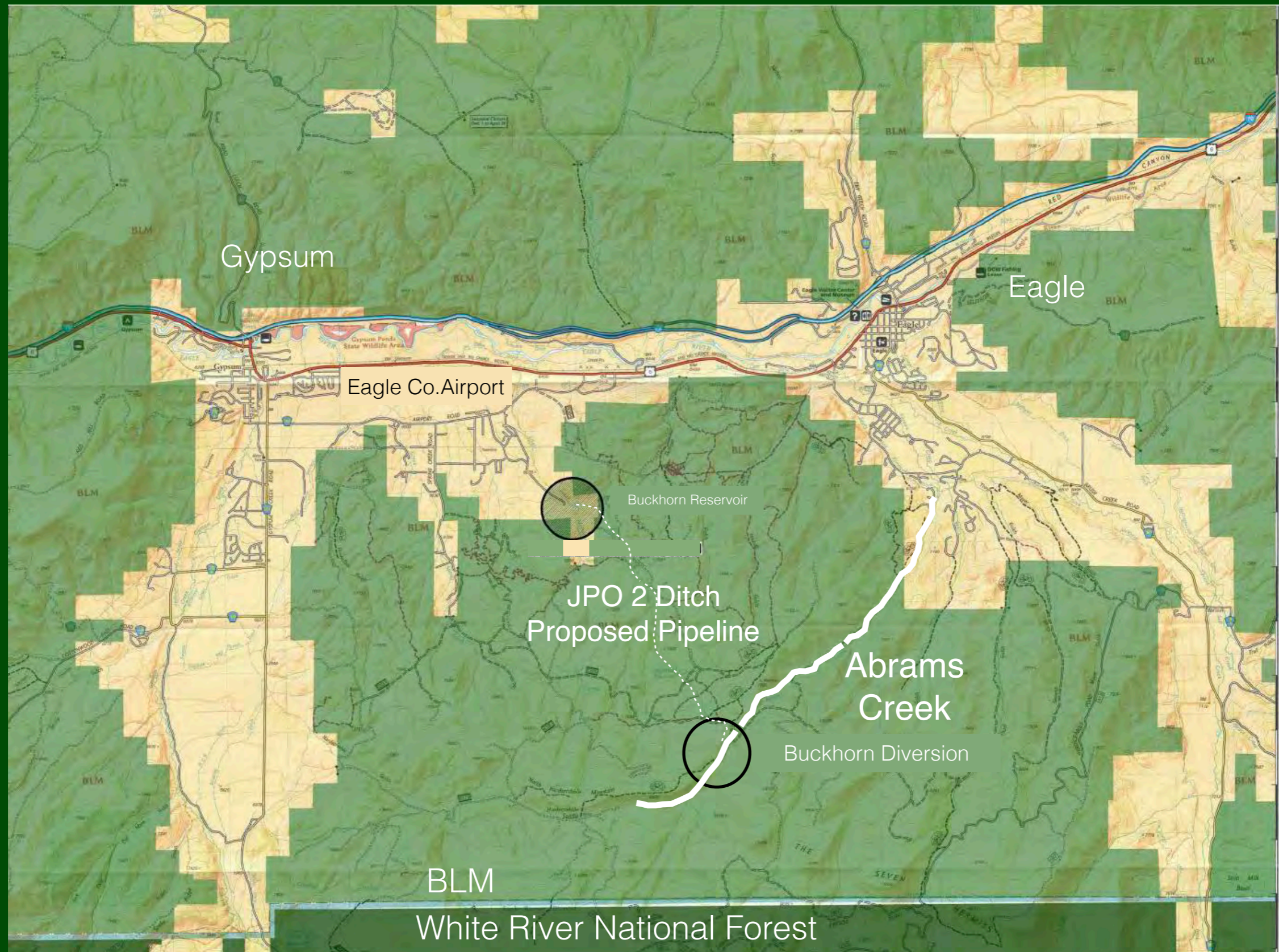
Method/Procedure: Develop a monitoring plan to measure flow improvement and its effects. The plan will include evaluation of physical habitat (including wetted widths, pool frequency, depths, and sediments); stream temperature; macroinvertebrate surveys; and fish surveys.

Deliverables: Monitoring Plan

Task 5 – Administration

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

Location in Eagle County



Looking North from above Abrams Headwaters



Abrams Upstream Channel Flume



Abrams Diversion to JPO Ditch



JPO Flume Below Diversion



Prototype for Fish Screen to be Installed



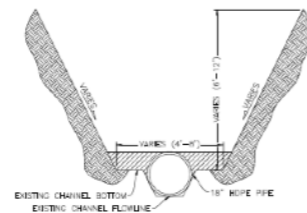
Typical JPO Sections to be Piped



Pipeline Details



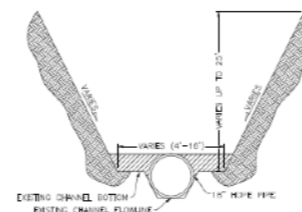
- NOTES:**
1. PIPE TO BE TRENCHED INTO EXISTING CHANNEL BOTTOM.
 2. CHANNEL TO BE RESTORED TO EXISTING GRACES.
- STA: 10+00 TO 11+00**



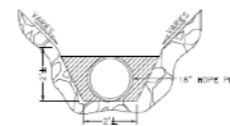
- NOTES:**
1. PIPE TO BE LAID APPROXIMATELY IN EXISTING CHANNEL FLOWLINE WHICH IS NOT NECESSARILY CENTERED IN THE CHANNEL.
 2. EXISTING SIDE SLOPES VARY FROM NEAR-VERTICAL TO APPROXIMATELY 2:1.
 3. SIDE SLOPES TO BE DECREASED AND SOIL TO BE BORROWED FROM SIDE SLOPES TO BURY PIPE AND FILL CHANNEL BOTTOM.
- STA: 11+00 TO 45+00**
STA: 52+00 TO 60+00
STA: 118+00 TO 129+00
STA: 130+00 TO 143+00
STA: 151+00 TO 165+00



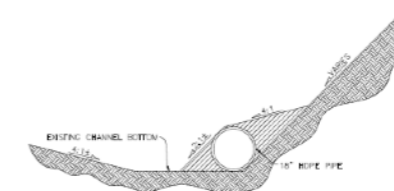
- NOTES:**
1. PIPE TO BE TRENCHED INTO EXISTING CHANNEL BOTTOM.
 2. CHANNEL TO BE RESTORED TO EXISTING GRACES.
- STA: 45+00 TO 52+00**



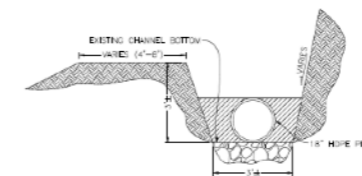
- NOTES:**
1. PIPE TO BE LAID APPROXIMATELY IN EXISTING CHANNEL FLOWLINE WHICH IS NOT NECESSARILY CENTERED IN THE CHANNEL.
 2. EXISTING SIDE SLOPES VARY FROM NEAR-VERTICAL TO APPROXIMATELY 2:1.
 3. SIDE SLOPES TO BE DECREASED AND SOIL TO BE BORROWED FROM SIDE SLOPES TO BURY PIPE AND FILL CHANNEL BOTTOM.
- STA: 60+00 TO 108+00**



- NOTES:**
1. PIPE TO BE LAID IN EXISTING CHANNEL BOTTOM AND BACKFILLED.
 2. CHANNEL AND SURROUNDING BATH IS ALMOST EXCLUSIVELY BEDROCK. MODIFICATIONS TO CHANNEL WILL REQUIRE A ROCK HAMMER.
- STA: 108+00 TO 118+00**
STA: 143+00 TO 151+00
STA: 190+00 TO 201+00



- NOTES:**
1. PIPE TO BE LAID APPROXIMATELY AGAINST STEEP BANK AND BACKFILLED.
 2. EXISTING RIGHT SIDE SLOPE VARIES FROM NEAR-VERTICAL TO APPROXIMATELY 2:1.
 3. SIDE SLOPES TO BE DECREASED AND SOIL TO BE BORROWED FROM SIDE SLOPES TO BURY PIPE AND FILL CHANNEL BOTTOM.
- STA: 125+00 TO 130+00**



- NOTES:**
1. PIPE TO BE LAID IN EXISTING CHANNEL BOTTOM AND BACKFILLED.
 2. EXISTING SIDE SLOPES VARY FROM NEAR-VERTICAL TO APPROXIMATELY 3:1.
 3. SIDE SLOPES TO BE DECREASED AND SOIL TO BE BORROWED FROM SIDE SLOPES TO BURY PIPE AND FILL CHANNEL BOTTOM.
 4. CHANNEL IS ALMOST EXCLUSIVELY BEDROCK. MODIFICATIONS TO CHANNEL WILL REQUIRE A ROCK HAMMER.
- STA: 165+00 TO 190+00**
STA: 201+00 TO 278+00



Buckhorn Reservoir
Terminus of JPO Ditch

D - Letters of Support

MICHAEL F. BENNET
COLORADO

COMMITTEES:
AGRICULTURE, NUTRITION, AND FORESTRY
FINANCE
HEALTH, EDUCATION, LABOR,
AND PENSIONS

United States Senate
WASHINGTON, DC 20510-0609

WASHINGTON, DC:
458 RUSSELL SENATE OFFICE BUILDING
WASHINGTON, DC 20510
(202) 224-5852

COLORADO:
1127 SHERMAN STREET
SUITE 150
DENVER, CO 80203-2388
(303) 455-7600
<http://www.bennet.senate.gov>

February 13, 2017

Irene Hoiby
Bureau of Reclamation
PO Box 25007 MC: 84-27852
Denver, CO 80225

Dear Ms. Hoiby:

I am pleased to support the Eagle River Watershed Council's application to the Bureau of Reclamation for a WaterSMART Cooperative Watershed Management Program - Phase II Grant. If awarded funds will be used for the Abrams Creek Cutthroat Trout Restoration Project that will improve the habitat for a Core Conservation population of Green-Lineage cutthroat trout population in Abrams Creek.

This application has strong regional support from area experts and organizations including, the Colorado Parks and Wildlife Department, Buckhorn Valley Water District, Eagle County Commissioners, Eagle Valley Land Trust, the Town of Gypsum and Trout Unlimited/Eagle County.

Supporters of this project have shared with me the importance of this habitat to the survival of the only known aboriginal cutthroat trout population in the Eagle River watershed and one of the few remaining indigenous populations left in the Upper Colorado River. Funding will assist in the implementation of an instream flow agreement reached with the owner of the JPO Ditch. Recovery of this cutthroat trout population is a good first step in protecting this species, and ensuring it will not need to be listed as an Endangered Species.

I encourage you to give the Eagle River Watershed Council's application every appropriate consideration consistent with all applicable laws and regulations.

Sincerely,



Michael F. Bennet
United States Senator

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,

A handwritten signature in black ink, appearing to read "Diane Mitsch Bush", is enclosed in a rectangular box.

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



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

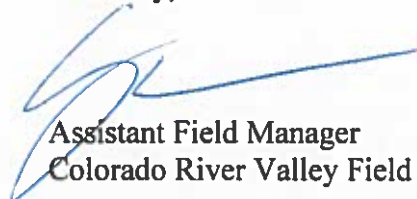
To Whom It May Concern:

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

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

Sincerely,

Jill H. Ryan
Chair

Kathy Chandler-Henry
Commissioner

Jeanne McQueeney
Commissioner

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

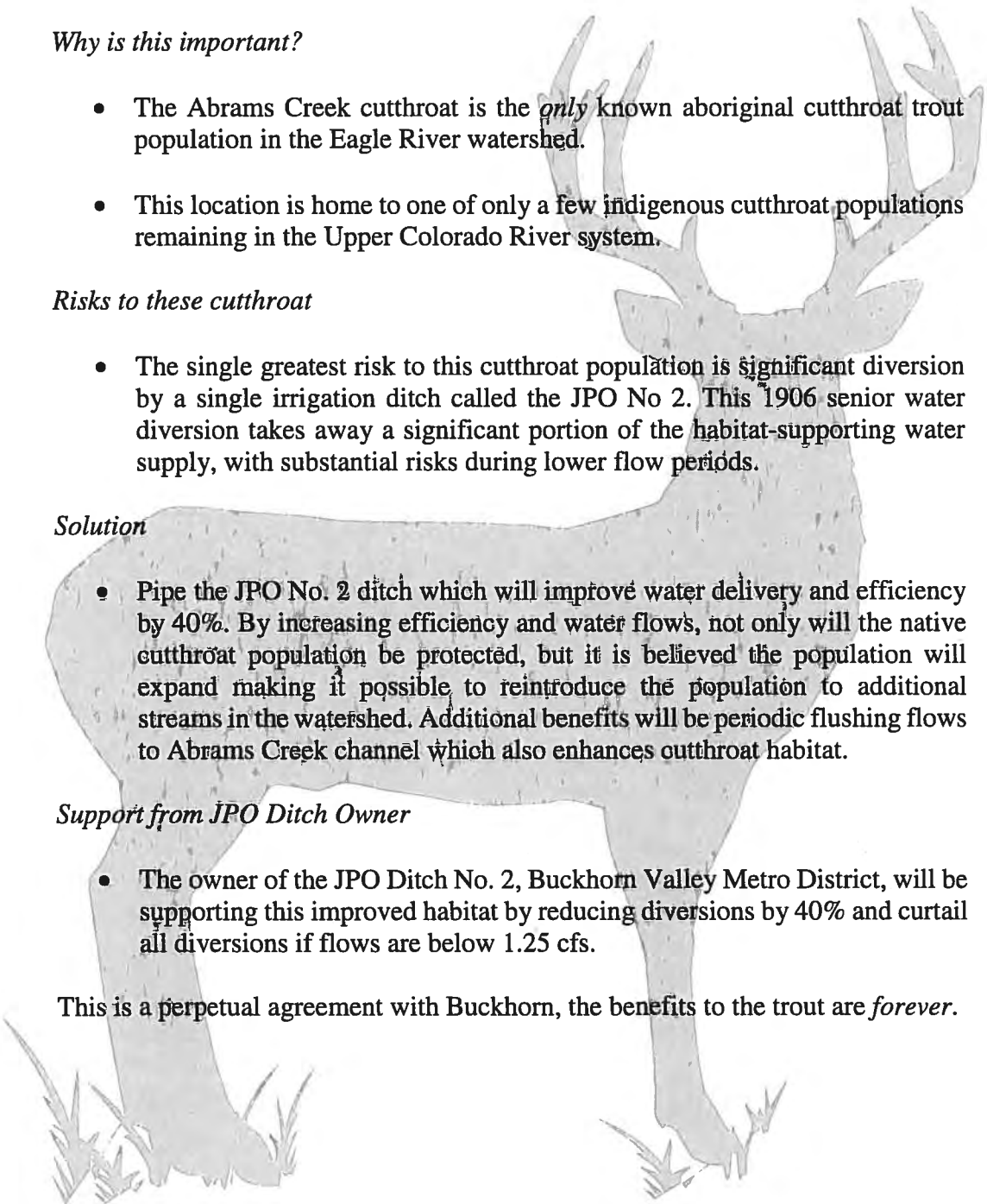
Asst. Town Manager
Frances Barela

Town Clerk
Danette Schlegel

Finance Officer
Mark Silverthorn

Sales Tax Auditor
Lynn Trudeau

Special 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

A handwritten signature in black ink, appearing to read "Jeff Shroll". The signature is written in a cursive, flowing style.

Jeff Shroll, Town Manager



May 16, 2017

To Whom It May Concern,

The Town of Eagle strongly supports the Eagle River Watershed's efforts regarding 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.

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

Sincerely,

Tom Boni
Town Planner/ Acting Town Manager

Cc: Mayor McKibbin



COLORADO

Parks and Wildlife

Department of Natural Resources

Glenwood Springs Area Office
0088 Wildlife Way
Glenwood Springs, CO 81601
P 970.947.2920 | F 970.947.2936

February 15, 2017

To Whom It May Concern,

Colorado Parks and Wildlife (CPW) enthusiastically supports the Abrams Creek Cutthroat Trout project in Eagle County, Colorado.

The project is aimed at protecting and improving the resiliency of native cutthroat in Abrams Creek, the *only* known aboriginal cutthroat trout population in the Eagle River Watershed. As well, it is one of very few indigenous populations remaining in the Upper Colorado River watershed.

Abrams Creek cutthroat trout are distinct from other cutthroat populations. Their genetic "fingerprint", a reflection of adaptation, is likely indicative of a unique tolerance toward warmer temperatures and drought conditions developed in their relatively low elevation habitat. These kinds of adaptations make this population particularly important for reintroduction efforts in the face of our changing climate.

The largest limitation to Abrams Creek is a significant diversion by an antiquated irrigation ditch (JPO No 2). This longstanding water right (1906) diverts a significant portion of the habitat-supporting water supply, especially during lower flow periods. Fish entrainment also occurs due to lack of permanent fish screen. The project will pipe the rudimentary ditch, improving water delivery/efficiency by 40% and install a self-maintaining fish screen. In turn, Buckhorn Irrigation District (owner of the diversion rights) will reduce diversions proportionally and curtail all diversions if the flows are below 1.25 cfs. Furthermore, an increased In-Stream Flow (ISF) water right will protect the additional water to benefit the cutthroat population.

Additionally, other enhancements are expected to support the cutthroat, including an agreement to support periodic flushing flows in Abrams Creek, increased habitat connectivity with more water available during lower flow periods, improved fish and macroinvertebrate (trout food) habitat, and eliminating the loss of individuals down the ditch. An agreement between Trout Unlimited and Buckhorn to improve flow in Abrams Creek due to diversion improvement has set a precedent of cooperation between resource users and trout advocates to benefit these trout *in perpetuity*.

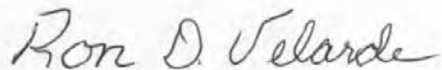
These efforts to increase diversion efficiency and augment stream flows, ensures this native cutthroat population will be protected - making it possible to reintroduce and expand these fish to additional streams in the watershed and aid in the recovery of the species.



I respectfully encourage your support of this project, a joint effort of local and national nonprofit organizations, the ditch owner (Buckhorn), CPW, and the Bureau of Land Management (BLM). If you have any questions about the project, please contact Kendall Bakich, the CPW Aquatic Biologist intimately involved in the support and protection of the Abrams Creek cutthroat trout through management and conservation actions, public outreach, and fostering the relationships that have culminated in the project outlined above.

Thank you for your time and consideration.

Sincerely,

A handwritten signature in cursive script that reads "Ron D. Velarde". The signature is written in dark ink and is positioned above the typed name.

Ron D. Velarde
Northwest Regional Manager
Colorado Parks and Wildlife



United States
Department of
Agriculture

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 13, 2017

To Whom It May Concern,

RE: Abrams Creek Cutthroat Trout Project Grant Request

American Rivers strongly supports 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.

Currently, the greatest barrier to expanding and strengthening this population is a significant diversion by a single irrigation ditch (JPO No 2). This very senior (1906) diversion diverts a significant portion of the streams native water supply, especially during lower flow periods. That seriously limits the available habitat for these very rare fish.

This 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*.

Increasing efficiency and flows will also make direct habitat restoration and expansion possible. Not only will the native cutthroat trout population be protected, but the population may grow - making it possible to reintroduce this unique population to other streams within the Eagle River watershed.

I strongly encourage your support of this long-term, joint effort of local and national nonprofit organizations, the ditch owner (Buckhorn), Colorado Parks & Wildlife and BLM.

Sincerely,
Ken Neubecker

Associate Director, Colorado River Basin Program
American Rivers
24 S. Meadow View Ct.
Glenwood Springs, CO 81601
(970) 230-9300

Board of Directors

Dr. Tom Steinberg, *President Emeritus*

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Sustaining Council

Kelly and Sam Bronfman

The Precourt Family

Barbara Krichbaum and Kent Erickson

Jody and David Smith

The George Family Foundation

Tara and Bob Levine

Pam and Ben Peternell

Jim Daus

Executive Director

jdaus@evlt.org

Jessica Foulis

**Stewardship and Outreach
Manager**

jfoulis@evlt.org

Nancy Glass

Office Manager

nglass@evlt.org

Mailing Address

**Post Office Box 3016
Edwards, CO 81632**

Physical Address

**(Wells Fargo Building, Edwards)
34215 Hwy. 6, Suite 205
Edwards, CO 81632**

970.748.7654

www.evlt.org



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 in 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,

A handwritten signature in cursive script that reads "Jessica Foulis".

Jessica Foulis, Stewardship and Outreach Manager



Drew Peternell, Director, Colorado Water Project

February 15, 2017

To Whom It May Concern:

Trout Unlimited strongly supports the Abrams Creek cutthroat trout project. The Abrams Creek cutthroat trout is the only known aboriginal cutthroat trout population in the Eagle River watershed and one of the few indigenous populations left in the upper Colorado River basin. This lineage of trout possess a unique haplotype that is genetically more distinct than other populations, making a significant contribution to the genetic diversity of cutthroat trout species. Abrams Creek cutthroat are also distinctive in that 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.

State and federal biologists have determined that low stream flows are a limiting factor for the Abrams Creek population. Water diversions from the JPO Ditch significantly reduce Abrams Creek flows, sometimes drying up portions of the creek within the cutthroat trout habitat. In light of the importance of the species, Trout Unlimited negotiated an agreement with Buckhorn Water District, the owner of the JPO Ditch, that would leave 40 percent of water physically available to the JPO Ditch in Abrams Creek and would preclude all diversions from Abrams Creek at the JPO Ditch if flows fall below 1.25 cfs.

This arrangement – which would exist in perpetuity – will be possible only if sufficient funds are obtained to pipe portions of the JPO Ditch so as to improve the water delivery efficiency of the ditch. We urge you to support this effort to not only improve the Abrams Creek cutthroat trout population, but also create the opportunity for re-introduction of the species in nearby watersheds.

Sincerely,

Drew Peternell

Trout Unlimited: America's Leading Coldwater Fisheries Conservation Organization

331 H Street, Suite C, Salida, Colorado 81201
(303) 204-3057 • drew.peternell@tu.org • www.tu.org



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

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,

A handwritten signature in black ink that reads "Kent Rose". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kent Rose
Eagle Ranch Wildlife Committee

Porzak Browning & Bushong LLP
A t t o r n e y s • a t • L a w
2120 13th Street, Boulder, CO 80302

Glenn E. Porzak
Michael F. Browning
Steven J. Bushong
Kristin Howse Moseley
Kevin J. Kinnear
Karen L. Henderson
Cori A. Hach

303 443-6800 Tel.
303 443-6864 Fax.
www.pbblaw.com

February 6, 2017

Re: Abrams Creek Cutthroat Trout Restoration Project

To Whom It May Concern,

This letter is to express support for the Abrams Creek Cutthroat Trout Project. This Project is designed to increase flow in Abrams Creek, which is home to a unique subspecies of cutthroat trout. The Abrams Creek cutthroat is the only known aboriginal cutthroat trout population in the Eagle River watershed, and is one of the last remaining indigenous cutthroat populations in the Upper Colorado River basin. Currently, the single greatest limitation on this trout's available habitat is a lack of water.

The Buckhorn Valley Metropolitan District (the "District") owns the JPO Ditch No. 2, which diverts up to 3.0 cfs out of Abrams Creek for use within the District. These diversions are important for the District, but result in reducing the useable trout habitat by approximately one-half. The Abrams Creek Cutthroat Trout Project entails piping the JPO Ditch No. 2 to improve water delivery efficiency in return for an agreement by the District to leave 40% of the available water in Abrams Creek to support the trout. Further, if the 40% will result in less than 1.25 cfs being left in Abrams Creek, the District has agreed to further limit its diversions or stop them all together to achieve as close to 1.25 cfs as possible in the Creek. This ensures that the trout will be protected even in times of water shortage.

This project presents a unique opportunity for collaboration between the District (as the owner of the ditch and water rights), nonprofit organizations, Colorado Parks & Wildlife, and the BLM. This mutually beneficial project will help protect the native Abrams Creek Cutthroat and allow its population to expand, making it possible to reintroduce the population to additional streams in the watershed.

The District is not only contributing the water to the project, it has also provided legal and engineering services to help facilitate the project. We hope you will join us in supporting this important project to protect our native fish species.

Sincerely,

Porzak Browning & Bushong LLP



Steve Bushong
Water Counsel for Buckhorn Valley Metropolitan District

Greetings,

The Board of Directors of the Buckhorn Valley Metropolitan District is writing to express our complete support for the Abrams Creek Cutthroat Trout Project, and to respectfully request that your group lend all available support.

The genesis of this project dates back almost two decades, when the Colorado Parks and Wildlife field officers first identified the unique, aboriginal strain of trout found in Upper Abrams. At that time, the control of Buckhorn's water rights was held by agricultural interests, and they had no interests in 'sharing' the water, which diversion right dates back to 1906.

Interest in the project was reinvigorated around 2010, when the current board was approached again by CPW. This board became interested, and now, all this time later, the team of CPW, Trout Unlimited (TU), and Buckhorn's staff, board, lawyers and engineers arrived at the solution to help the Trout that is before you.

Beyond the countless hours of meetings, telecoms, emails, the CPW+TU+Buckhorn team have expended well over \$100,000 and unmeasured more tens of thousands in staff and volunteer time. Recently, the Eagle River Watershed Council has become involved to assist with local awareness and project implementation.

The proposed solution allows this Board to fulfill its duty to preserve the irrigation water needed in the Buckhorn, while leaving ample water in Abrams Creek to preserve, enhance and expand the cutthroat trout habitat.

Here are some of the reasons we invested in this project, and why we hope you will, too:

The Abrams Creek cutthroat is the *only* known aboriginal cutthroat trout population in the Eagle River watershed, and one of only a few indigenous populations remaining in the Upper Colorado River system.

To supply the irrigation needs in Buckhorn, the JPO diversion takes away a significant portion of the habitat-supporting water supply, especially during lower flow periods. But, if the miles of JPO ditch are piped, the leakage losses will be reduced significantly, perhaps as much as 40%. While the 40% is merely an estimate, the Buckhorn has agreed to permanently reduce diversions by the full 40%.

Perhaps, most significantly, Buckhorn will curtail all diversions if the flows are below 1.25 cfs. Thus, at critical low flow periods, Buckhorn will leave the *entire* flow for the Trout. This is particularly significant to the Buckhorn, because we have agreed to pump all the water for irrigation requirements during these curtailment periods, at substantial costs, running into thousands per month.

And, we have agreed to coordinate with CPW and TU for periodic provision of flushing flows to Abrams Creek channel, thereby enhancing the cutthroat habitat by refreshing the stream channel.

Very importantly, the Buckhorn has agreed to a perpetual contract, so the benefits to the trout are *forever*.

Sincerely,

Buckhorn Valley Metropolitan Buckhorn No. 1



John V. Hill, President

E - Appendix E – Vail Daily Articles “Deal Struck to Protect Native Trout in County” (July 19, 2016) and "Plan to Save Native Fish Moving Forward" (September 10, 2016)

Daily staff report
newsroom@vaildaily.com

July 19, 2016

Deal struck to protect native trout in county

EAGLE COUNTY — Trout Unlimited, Colorado Parks and Wildlife and the Buckhorn Valley Metropolitan District No. 1 have announced plans for an ambitious restoration project on Abrams Creek to preserve a rare population of cutthroat trout threatened in part by reduced flows during irrigation season.

The small population of native Colorado River cutthroat trout in Abrams Creek is genetically unique and the only native trout population in the Eagle River watershed. Colorado Parks and Wildlife has called the population the “highest priority” for cutthroat conservation efforts in western Colorado.

Under the agreement, the partners will work to improve flow conditions for the cutthroat population while honoring the metro district’s water rights and irrigation needs. The increased flows are expected to increase the resident cutthroat trout population by enhancing quality habitat, improving food resources and boosting reproductive success.

“This is a great example of diverse water stakeholders coming together to find a pragmatic, collaborative solution,” said Mely Whiting, counsel for Trout Unlimited. “This agreement shows that we can manage water in ways that honor senior water rights while maintaining the health of our rivers and streams.”

Abrams Creek water rights

Abrams Creek is subject to water diversions that can remove a significant portion of the stream during the irrigation season, which begins every April 1. Abrams Creek’s natural flows range from 11 cubic feet per second to 0.5 cubic feet per second during the irrigation season. The district owns three cubic feet per second of senior water rights in Abrams Creek, which is diverted to irrigate lands in Buckhorn Valley.

An estimated 40 percent of the diverted water does not reach the irrigated lands due to leakage from the ditch. The partners propose to pipe portions of the ditch to improve the efficiency of delivery. These upgrades would reduce the Buckhorn’s diversions from Abrams Creek by an

estimated 40 percent, leaving an average of 300 acre-feet more water per year in Abrams Creek for the benefit of the cutthroat trout population. The district would also agree to cease diversions from Abrams Creek when flows in the creek drop below 1.25 cubic feet per second.

BENEFITS OF THE PROJECT

Among other benefits, increased flows are expected to:

- Increase habitat and riparian cover along approximately 3.5 miles of stream.
- Improve in-stream habitat connectivity and quality, allowing trout to more easily move to the best habitat and holding areas.
- Enhance sediment transport, which helps keep river cobble and spawning habitat clean and healthy.
- Increase aquatic insect productivity, improving cutthroat food resources.
- Create deeper pools for trout refuge.
- Maintain cooler water temperatures in lower Abrams.

In addition, a permanent fish screen will be installed at the point of diversion on Abrams Creek that will help protect the trout population by reducing losses due to entrainment in the ditch.

'BETTER CHANCE OF SURVIVAL'

"Summer and fall low flow periods are hard on cutthroat trout due to the increased water temperatures and limited pool and holding waters," said Kendall Bakich, aquatic biologist for Colorado Parks and Wildlife. "By decreasing the water diversions, we can increase stream flows and expand the amount of wetted habitat downstream of the diversion. This will give this high-value trout population a much better chance of survival."

"We're pleased to be able to work with Trout Unlimited and (Colorado Parks and Wildlife) on infrastructure improvements that will improve delivery of water while benefiting stream habitat," said Scott Green, board member of the metro district. "The district believes this project will be a win-win for everyone involved."

Successful completion of the project will require significant fundraising efforts and outreach to partners, potentially affected parties, and the public, as well as agency approvals from the Bureau of Land Management and the U.S. Army Corps of Engineers, among others.

Plan to save native fish moving forward

John LaConte laconte@vaildaily.com

September 10, 2016

GYPSUM — In 1906, Julius Olsen dug seven miles of ditch from Abrams Creek to the Buckhorn Valley area to provide water for his ranch. It was a remarkable feat at the time, and that ditch is still used today for the Buckhorn Valley neighborhood.

Equally remarkable, however, is the fact that the fish in Abrams Creek have managed to survive virtually unchanged since that time and long before, despite the large diversion created by Olsen's ditch and the introduction of other invasive fish into the state.

Abrams Creek runs into Brush Creek, which runs into the Eagle River in Eagle. In the Eagle River Watershed, Abrams Creek is the only area to contain a native, aboriginal fish population, unaffected by the introduction of rainbow trout, brown trout and brook trout to the area during the 19th and 20th centuries.

It's one of only a handful of indigenous populations left in the entire Upper Colorado River watershed, a fact that was recently uncovered through improvements in the field of genetic research.

Since making the discovery, Colorado Parks and Wildlife and the Buckhorn Valley Metro District have taken on an effort to preserve the Abrams Creek trout and as a result, the Metro District has set an example for the rest of the West to follow with it comes to thoughtful development, says Kendall Bakich, an aquatic biologist with Colorado Parks and Wildlife.

"We know that we're going to grow," says Bakich, "so if we can be thoughtful about that growth, and do it in a way that helps protect our resources with thoughtful engagement, thoughtful use and also thoughtfulness in what we should be protecting, hopefully we will have some balance to be able to live near the animals we love."

MODERN EFFICIENCY

In working with Colorado Parks and Wildlife and Trout Unlimited, the Buckhorn Valley Metro District has put together a deal that will protect the native trout in Abrams Creek for generations to come, while preserving the water rights they have to Abrams Creek.

"It's crazy to think a guy with a plow and a mule went up there and found water so far away from his land," Buckhorn Valley Metro District President John Hill said about Julius Olsen. "He dug all that ditch more or less by hand, some of it through rock, and brought the water over here to water his potato crop. So the water right is super senior because it goes back to 1906, it's among the oldest water rights on the Western Slope.

"Even though it was a great and very important cause, we weren't able to give away that water right," said Hill. "But through negotiation and a lot of study and engineering, we came up with a plan where everybody in the Metro District is actually better off because the water quality will be better, there's less maintenance required and the fish will get their water."

The plan is, simply, to improve efficiency.

Olsen's ditch, impressive as it is, leaks about 40 percent of its water before reaching the Buckhorn Valley neighborhood, none of which makes it back to Abrams Creek.

"With a pipe we can increase the efficiency of the delivery system so we can have as much water as we've had historically, but we'll leave a lot more water in the stream," said Jeff Bennett, the Buckhorn Valley Metro District manager. "Those fish are very important to the diversity of the entire watershed."

Bennett said the Metro District has had approximately 50 meetings on the issue throughout the past five years.

"And we did it without any courtroom battles," Hill said. "It's been a great partnership with Trout Unlimited and the DPW."

LOW ELEVATION CUTTHROATS

When Bakich took the aquatic biologist position with Colorado Parks and Wildlife in Glenwood Springs in 2007, she was already a fish enthusiast. A native Coloradan, she grew up fishing with her family in the Flat Tops area of the White River National Forest.

She never thought she would one day be working on a project as important as this one, however, she now says in looking back.

"The field of genetics has evolved so quickly ... it's now cheaper and it's easier and they have that new ways to look at the genome," she said. "We always knew Abrams Creek was a different population than most ... so we went back to Abrams Creek ... and what we found out was this was a green lineage fish which is the indigenous fish in this drainage ... we can see within a sub species how their DNA differs from each other and each mini drainage, because when they are isolated from other drainages they evolve in different ways and their genetics reflect that."

Basically, when they first saw cutthroats in Abrams Creek, biologists thought they were the same cutthroats found in other places relatively nearby, such as the Yampa River, but through genetic testing, they were able to prove the Abrams Creek cutthroat are a totally different and unique species.

In addition to being more distinct genetically, the Abrams Creek cutthroat "exist at a lower elevation than other cutthroat populations," says Bakich, "so that might be what lends to their genetic uniqueness, and it may speak to some adaptations they have to the warmer temperatures and lower quality conditions ... so they are a really important population, and they exist in this tiny stream."

A natural event, such as a wildfire or a landslide in the Abrams Creek area could easily wipe these fish out, Bakich said.

"So our goal is to keep the habitat in as good shape as we can improve it as much as we can," said Bakich. "They've been able to persist in an environment that has sub optimal conditions, so if they were given a creek with optimal conditions, I can only imagine how well they would do."

LETTERS AND DONATIONS

To make Abrams Creek function at a more optimal level for the cutthroat trout there, more than \$1 million will be needed to replace Olsen's ditch. Trout Unlimited has taken on the fundraising efforts for the project, and on Thursday, submitted a grant application to the National Fish and Wildlife Foundation for the ConocoPhillips Spirit of

Conservation and Innovation grant.

Since first learning about the Abrams Creek cutthroat, Mely Whiting, with Trout Unlimited, has been fascinated. Now at the point where they can bring the project to the public for support, "I'm thrilled," she says. "This is a really good deal to bring to philanthropists and investors, because it provides a permanent water supply for the fish out there."

As part of the agreement, The Buckhorn Valley Metro District will curtail all diversions if flows in the creek fall below 1.5 cubic feet per second, and the arrangement will become a covenant moving forward.

Support for the project is needed, both support of will and financial support. A crowd sourcing-type method will be forthcoming, says Whiting, but for now Trout Unlimited will direct all checks made out to Colorado Trout Unlimited with the subject "Abrams Creek project" to the project.

Letters can be emailed directly to Bakich at kendall.bakich@state.co.us (<mailto:kendall.bakich@state.co.us>); and check can be mailed to Colorado Trout Unlimited, 1536 Wynkoop Street, Suite 320, Denver, CO 80202.

POLICY NUMBER: 15

SUBJECT: **CONSIDERATION AND APPROVAL OF FISH AND WILDLIFE RESOURCES FUND APPLICATIONS FOR INSTREAM FLOWS AND RIVER RESTORATION PROJECTS.**

EFFECTIVE DATE: September 12, 2002

POLICY: The Colorado Water Conservation Board (CWCB) will accept applications throughout the year for grants from the Fish and Wildlife Resources Fund for the appropriation or acquisition of instream flow water rights and river restoration construction projects to mitigate the effects of the construction, operation, and maintenance of water diversion, delivery, and storage facilities.

Applications for mitigation grants from the Fish and Wildlife Resources Fund will be accepted for the following types of projects:

1. The appropriation or acquisition of water rights for the purpose of preserving or improving the natural environment to a reasonable degree to mitigate the impact of an existing water facility.
2. River restoration feasibility studies and construction projects that are designed to directly mitigate or significantly improve the environmental impacts of existing water facilities.

The CWCB may, in any year, approve grants to fund any project in the above categories that the Board deems worthy of funding through the Fish and Wildlife Resources Fund. In order to protect the long-term integrity of the Fish and Wildlife Resources Fund, instream flow and river restoration projects mitigating the impacts of existing water supply facilities will be limited to 40% of the Fish and Wildlife Resources Fund balance as of July 1, 2002.

The project applicant must have completed a fully executed funding contract with the CWCB within 2 years of the grant authorization by the CWCB, or the Board will consider de-authorization of the grant.

PURPOSE: To establish an approval process for instream flow and river restoration construction project grants from the Fish and Wildlife Resources Fund.

APPLICABILITY: This policy and procedure applies to applications for instream flow or river restoration construction project grants from the Fish and Wildlife Resources Fund.

PROCEDURE: Prior to a Board meeting, the CWCB staff will prepare for the Board's consideration a summary of the technical, financial, and institutional characteristics of each proposed instream flow water right appropriation or acquisition, river restoration feasibility study or construction project. Each application will be reviewed for conformity with the goals and

objectives of the CWCB Strategic Plan. Grant applications will be considered only in the following two categories:

1. The appropriation or acquisition of water rights for the purpose of preserving or improving the natural environment to a reasonable degree to mitigate the impact of an existing water facility.
2. River restoration feasibility studies and construction projects that are designed to directly mitigate or significantly improve the environmental impacts of existing water facilities.

The Board will consider and CWCB staff will evaluate and recommend to the Board grant applications for appropriation or acquisition of water rights to be held by the Board based on the following project types:

- Instream flow water rights that assist in the administration of compact-entitled waters, or address problems relating to compact-entitled waters,
- Instream flow water rights that facilitate the resolution of federal water rights issues, and
- Instream flow water rights that assist in the recovery of threatened or endangered wildlife species or the conservation of existing wildlife species within riparian ecosystems.

The Board will consider and CWCB staff will evaluate and recommend to the Board grant applications for river restoration feasibility studies and construction projects based on the following:

- Soundness of the project design, work plan or plan of study,
- The need for the proposed project,
- The need for financial assistance.
- Financial, technical, or administrative participation or coordination by all affected local governments.

NOTE:

Recognizing that future needs and responses to those needs cannot be predicted with certainty, the Colorado Water Conservation Board reserves the right to recommend for funding any instream flow acquisition, river restoration construction project, or study that it determines would mitigate the effects of an existing water supply facility and furthers the purposes of the Fish and Wildlife Resources Fund.

Approved by the CWCB
September 12, 2002
Agenda Item #16a

37-60-122.2. Fish and wildlife resources - legislative declaration - fish and wildlife resources fund - authorization.

(1) (a) The general assembly hereby recognizes the responsibility of the state for fish and wildlife resources found in and around state waters which are affected by the construction, operation, or maintenance of water diversion, delivery, or storage facilities. The general assembly hereby declares that such fish and wildlife resources are a matter of statewide concern and that impacts on such resources should be mitigated by the project applicants in a reasonable manner. It is the intent of the general assembly that fish and wildlife resources that are affected by the construction, operation, or maintenance of water diversion, delivery, or storage facilities should be mitigated to the extent, and in a manner, that is economically reasonable and maintains a balance between the development of the state's water resources and the protection of the state's fish and wildlife resources.

(b) Except as provided in this paragraph (b), the applicant for any water diversion, delivery, or storage facility which requires an application for a permit, license, or other approval from the United States shall inform the Colorado water conservation board, wildlife commission, and division of wildlife of its application and submit a mitigation proposal pursuant to this section. Exempted from such requirement are the Animas-La Plata project, the Two Forks dam and reservoir project, and the Homestake water project for which definite plan reports and final environmental impact statements have been approved or which are awaiting approval of the same, applicants for site specific dredge and fill permits for operations not requiring construction of a reservoir, and applicants for section 404 federal nationwide permits. If an applicant that is subject to the provisions of this section and the commission agree upon a mitigation plan for the facility, the commission shall forward such agreement to the Colorado water conservation board, and the board shall adopt such agreement at its next meeting as the official state position on the mitigation actions required of the applicant. In all cases the commission shall proceed expeditiously and, no later than sixty days from the applicant's notice, unless extended in writing by the applicant, make its evaluation regarding the probable impact of the proposed facility on fish and wildlife resources and their habitat and to make its recommendation regarding such reasonable mitigation actions as may be needed.

(c) The commission's evaluation and proposed mitigation recommendation shall be transmitted to the Colorado water conservation board. The board within sixty days, unless extended in writing by the applicant, shall either affirm the mitigation recommendation of the commission as the official state position or shall make modifications or additions thereto supported by a memorandum that sets out the basis for any changes made. Whenever modifications or additions are made by the board in the commission's mitigation recommendation, the governor, within sixty days, shall affirm or modify the mitigation recommendation which shall then be the official state position with respect to mitigation. The official state position, established pursuant to this subsection (1) shall be communicated to each federal, state, or other governmental agency from which the applicant must obtain a permit, license, or other approval.

(2) (a) Moneys transferred to the fish and wildlife resources fund pursuant to the provisions of section 37-60-121 (6) are hereby continuously appropriated to the Colorado water conservation board for the purpose of making grants pursuant to this subsection (2) and for offsetting the direct and indirect costs of the board for administering the grants. The interest earned from the investment of the moneys in the fund shall be credited to the fund.

(b) To the extent that the cost of implementing the mitigation recommendation made pursuant to subsection (1) of this section exceeds five percent of the costs of a water diversion, delivery, or storage facility, the board shall, upon the application of the applicant, make a mitigation grant to the applicant. The amount of the grant shall be sufficient to pay for the mitigation recommendation as determined by this section to the extent required above the applicant's five percent share. Any additional enhancement shall be at the discretion and within the means of the board. Under no circumstance shall the total amount of the grant exceed five percent of the construction costs of the project, or be disbursed in installments that exceed seventy percent of the amount of the grant during any fiscal year. Any mitigation cost in excess of ten percent of the construction costs of a project shall be borne by the applicant.

(c) An applicant may apply for an enhancement grant by submitting to the commission and the board an enhancement proposal for enhancing fish and wildlife resources over and above the levels existing without such facilities. The commission shall submit its recommendations on the proposal to the board for its consideration. The board, with the concurrence of the commission, may award a grant for fish and wildlife enhancement. Any such enhancement grant will be shared equally by the Colorado water conservation board's fish and wildlife resources fund and the division of wildlife's wildlife cash funds and other funds available to the division.

(d) For the purpose of this subsection (2), construction costs means the best estimate of the physical construction costs as fixed by the Colorado water conservation board as of the date of the grant application. Costs should be limited to design, engineering and physical construction and will not include the costs of planning, financing, and environmental documentation, mitigation costs, legal expenses, site acquisition or water rights.

(e) Species recovery grants from the fish and wildlife resources fund may be made for the purpose of responding to needs of declining native species and to those species protected under the federal "Endangered Species Act of 1973", 16 U.S.C. sec. 1531, et seq., as amended, in a manner that will carry out the state water policy.

(f) (Deleted by amendment, L. 2001, p. 692, § 28, effective May 30, 2001.)

(3) Decisions relating to the official state mitigation position made pursuant to paragraph (c) of subsection (1) of this section shall not be subject to judicial review.

(4) The board shall distribute mitigation and enhancement grants reasonably and equitably among water basins toward the end that those projects sponsored by beneficiaries east of the continental divide receive fifty percent of the money granted and those projects sponsored by beneficiaries west of the continental divide receive fifty percent of the money granted under this section.

(5) The general assembly hereby recognizes the role instream flows and river restoration projects play in mitigating the effects of the construction, operation, and maintenance of water diversion, delivery, and storage facilities. Therefore, the Colorado water conservation board and the operators of existing water diversion, delivery, or storage facilities projects are hereby authorized to apply directly to the board for moneys for projects to carry out the purposes of this section. The board is authorized to grant such moneys if it finds that such projects will further the purposes of this section.

Source: L. 87: Entire section added, p. 1297, § 5, effective July 13. **L. 97:** (1)(a) and (2)(a) amended and (2)(e) added, p. 1600, § 1, effective June 4. **L. 98:** (2)(f) added, p. 1004, § 5, effective May 27. **L. 99:** (2)(a) amended, p. 628, § 36, effective August 4. **L. 2001:** (2)(a), (2)(c), (2)(e), and (2)(f) amended, p. 692, § 28, effective May 30. **L. 2002:** (5) added, p. 456, § 28, effective May 23.