

**Water Supply Reserve Account – Grant and Loan Program**  
**Water Activity Summary Sheet**  
**September 11-12, 2014**  
**Agenda Item 13(o)**

**Applicant & Program Sponsor:** Trout Unlimited

**Water Activity Name:** Redburn Ranch Diversion Dam Project

**Water Activity Purpose:** Nonconsumptive & Agricultural Implementation

**County:** Montezuma

**Drainage Basin:** Southwest

**Water Source:** Dolores River

**Total Amount Requested:** \$148,500

**Source of Funds:** \$50,000 Southwest Basin Account; \$98,500 Statewide Account

**Matching Funds:** Basin Account Match (\$50,000) = 34% of total grant request  
Basin Account & Applicant Match (cash & in-kind: \$211,000) = 142% of total grant request  
Applicant Match (cash & in-kind: \$161,000) = 52% of total project costs  
(refer to *Funding Summary/Matching Funds*)

<b>Staff Recommendation:</b>
Staff recommends approval of up to \$50,000 from the Southwest Basin Account and \$98,500 from the Statewide Account to help fund the project titled: Redburn Ranch Diversion Dam Project.

**Water Activity Summary:** The Redburn Ranch is a large farm and ranch operation mid-way up the river between Dolores and Rico. The ranch was placed in a conservation easement with Montezuma Land Conservancy in 2006. The Ranch maintains a large cobble push-up dam that spans the main stem of the Dolores and requires repair with heavy equipment every year after spring runoff. This dam blocks fish passage for the majority of the year, except in the early spring when it is degraded by high flows until it is rebuilt again after the high water recedes. Fry (young fish) have been observed being stopped from moving downstream by the dam on multiple occasions and it is a barrier to fish migration upstream as well. At low water, the permeability of the cobble dam makes it difficult for the ranch to access its full water right, often requiring plastic to be placed on the face of the dam.

Trout Unlimited (TU) has been in discussions with the ranch manager for over a year and has completed an initial survey and a design, and has estimated work for three possible options. The dam is located on Forest Service Land just upriver from the Ranch. Forest Service personnel have been involved in the project from the beginning, support the project, and are helping to ensure any required analysis and permitting is streamlined.

The implementation of the project requires the replacement of the current cobble pushup dam with a series of four stepped large rock cross vein weirs capable of passing flood flows and sediment loads, allowing for fish and safe boat passage while ensuring the landowner's reliable access to their full water right, even at low water. The project also requires re-grading of the channel and importing and placing large cobble fill between the rock weirs to ensure channel stability. The head gate and

associated structure has begun to settle and needs to be reconstructed to work with the new diversion system.

**Discussion:**

No further discussion is required

**Issues/Additional Needs:**

No issues or additional needs have been identified.

**Threshold and Evaluation Criteria:**

The application meets all four Threshold Criteria

**Tier 1-3 Evaluation Criteria:**

- Tier 1: (a & b) This activity addresses consumptive needs by improving agricultural water deliveries and addresses nonconsumptive needs by improving fish connectivity and passage, and providing safe recreational boat passage. This activity also addresses the needs of multiple interests, such as agricultural interests of Redburn Ranch, recreational interests of Trout Unlimited, and recreational and environmental interest of the USFS. As funding contributors, the Natural Resource Conservation Service, the Southwestern Water Conservation District, the USFWS, Colorado Parks and Wildlife, and GOCO exhibit their support of this project.
- (c) This activity addresses the environmental and recreational gap as identified in the 2010 Southwest Basin Report Basinwide Consumptive and Nonconsumptive Water Supply Needs Assessment, and the 2014 Southwest Basin Implementation Plan.
- Tier 2: (d) The combined WSRA funding from the Statewide and the Basin accounts makes up half of the anticipated project budget and the largest single source of funds. Without the combined WSRA funds, the group has no other funding source to leverage the public and private funding sources against, and the project could not be completed.
- (e) 52% non-WSRA match provided by the applicant and 3<sup>rd</sup> parties represents a significant and appropriate commitment to the project.
- Tier 3: (f) The Redburn Ranch project helps sustain agriculture & open space by enhancing the viability of a working ranch and farm enterprise. This activity addresses the environmental and recreational gap by improving fish connectivity and passage, and providing safe recreational boat passage.
- (g) n/a
- (h) Project implementation may assist in the recovery of the blue headed sucker, a species of concern in Colorado.
- (i) A 52% non-WSRA or match provided by the applicant and 3<sup>rd</sup> parties provides a high level of benefit to Colorado.

(j) This activity compliments CWCB's Healthy Rivers Funds, and efforts by CWCB's Lake and Stream Protection Section.

**Funding Summary/Matching Funds:**

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
WSRA Southwest Basin Account	\$50,000	n/a	\$50,000
WSRA Statewide Account	\$98,500	n/a	\$98,500
Southwest Water Conservation District	\$40,000	\$0	\$40,000
Natural Resources Conservation Service	\$40,000	\$0	\$40,000
USFWS	\$25,000	\$0	\$25,000
Colorado Parks and Wildlife	\$10,000	\$0	\$10,000
GOCO	\$15,000	\$0	\$15,000
Trout Unlimited	\$25,000	\$2,000	\$27,000
Redburn Ranch	<u>\$1,000</u>	<u>\$3,000</u>	<u>\$3,000</u>
<b>Total Study Costs</b>	<b>\$304,500</b>	<b>\$5,000</b>	<b>\$309,500</b>

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

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

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

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

**SOUTHWEST BASINS ROUNDTABLE**

**Michael Preston, Chair**

**c/o Dolores Water Conservancy District**

**P.O. Box 1150**

**Cortez, Colorado 81321**

**970-565-7562**

July 15, 2014

Mr. Craig Godbout  
Water Supply Management Section  
Colorado Water Conservation Board  
1580 Logan Street, Suite 600  
Denver, Colorado 80203

SUBJECT: Redburn Ranch Diversion Project - \$50,000 from Basin Account, \$98,500  
from Statewide Account

Dear Mr. Godbout:

The Southwest Basin Roundtable is pleased to recommend funding of \$50,000 from the Southwest Basin Account and \$98,500 from the Statewide account for the Redburn Ranch Diversion Project. The application was considered in detail and approved at the July 9, 2014 meeting of the Southwest Basin Roundtable. There was a quorum of Roundtable members present.

The proposal is an IPP and a multi-benefit project, giving it high priority in the Southwest Basin Implementation Plan framework. The proposed project, sponsored by Trout Unlimited, improves connectivity and fish habitat on the Dolores River above McPhee Reservoir while improving the reliability of irrigation deliveries to the participating ranch. As water management below McPhee Reservoir becomes increasingly focused on sensitive native fish species, the improvement in sports fishing that this project is intended to support provides a trout fishing alternative above McPhee Reservoir even during drought periods.

The completed Grant Application will be forwarded directly to you by the applicant. Please contact the applicant directly or me at 970-565-7562, [mpreston@frontier.net](mailto:mpreston@frontier.net), if you have questions or wish to discuss this application in more detail.

Sincerely,



Michael Preston

Southwest Basin Roundtable Chair



# COLORADO WATER CONSERVATION BOARD



## WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

Today's Date: 06/16/2014

Redburn Ranch Diversion Project

### Name of Water Activity/Project

Trout Unlimited

### Name of Applicant

South West Basin Roundtable

Amount from Statewide Account: \$98,500.00

Amount from Basin Account(s): \$50,000.00

Total WSRA Funds Requested: \$148,500.00

### Approving Basin Roundtable(s)

*(If multiple basins specify amounts in parentheses.)*

FEIN 38-1612715

### Application Content

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### Required Exhibits

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

### Appendices – Reference Material

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

## Water Supply Reserve Account – Application Form

Revised October 2013

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### **Instructions**

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

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

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

When completing this application, the applicant should refer to the WSRA Criteria and Guidelines available at: <http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf>

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

Craig Godbout - WSRA Application  
Colorado Water Conservation Board  
1580 Logan Street, Suite 200  
Denver, CO 80203  
[Craig.godbout@state.co.us](mailto:Craig.godbout@state.co.us)

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

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

1.	Applicant Name(s):	Trout Unlimited			
	Mailing address:	P.O.Box 841, Cortez CO 81321			
	FEIN #:	38-1612715			
	Primary Contact:	Matt Clark	Position/Title:	Backcountry Coordinator	
	Email:	mclark@tu.org			
	Phone Numbers:	Cell:	970-799-0274	Office:	970-799-0274
	Alternate Contact:	Matt Clark	Position/Title:	Backcountry Coordinator	
	Email:	mclark@tu.org			
	Phone Numbers:	Cell:	970-799-0274	Office:	970-799-0274

### 2. Eligible entities for WSRA funds include the following. What type of entity is the Applicant?

- ☐ Public (Government) – municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities and the local entity should be the grant recipient. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
- ☐ Public (Districts) – authorities, Title 32/special districts, (conservancy, conservation, and irrigation districts), and water activity enterprises.
- ☐ Private Incorporated – mutual ditch companies, homeowners associations, corporations.
- ☐ Private individuals, partnerships, and sole proprietors are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.
- ☒ Non-governmental organizations – broadly defined as any organization that is not part of the government.

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3. Provide a brief description of your organization

TU is the nation's oldest and largest cold water fisheries conservation organization. It is made up of more than 150,000 members and over 100 national staff, who work on the ground in their communities restoring and protecting streams and rivers to ensure that our children can enjoy healthy fisheries in their home waters.

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

5. Successful applicants will have to execute a contract with the CWCB prior to beginning work on the portion of the project funded by the WSRA grant. In order to expedite the contracting process the CWCB has established a standard contract with provisions the applicant must adhere to. A link to this standard contract is included in Appendix 3. Please review this contract and check the appropriate box.

☒

The Applicant will be able to contract with the CWCB using the Standard Contract

☐

The Applicant has reviewed the standard contract and has some questions/issues/concerns. Please be aware that any deviation from the standard contract could result in a significant delay between grant approval and the funds being available.

6. The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant.



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### Part II. - Description of the Water Activity/Project

1. What is the primary purpose of this grant application? (Please check only one)

☒

Nonconsumptive (Environmental or Recreational)

☒

Agricultural

☐

Municipal/Industrial

☐

Needs Assessment

☐

Education

☒

Other

Explain:

Dual purpose project, both Environmental and Agricultural

2. If you feel this project addresses multiple purposes please explain.

This project replaces an existing cobble pushup dam that bisects the upper Dolores River. It restores fish passage and connectivity to 45 miles of river and enables the farm and ranch to reliably access their full water right.

3. Is this project primarily a study or implementation of a water activity/project? (Please check only one)

☐

Study

☒

Implementation

4. To catalog measurable results achieved with WSRA funds can you provide any of the following numbers?

New Storage Created (acre-feet)

New Annual Water Supplies Developed, Consumptive or Nonconsumptive (acre-feet)

Existing Storage Preserved or Enhanced (acre-feet)

Length of Stream Restored or Protected (linear feet)

Length of Pipe/Canal Built or Improved (linear feet)

Efficiency Savings (acre-feet/year OR dollars/year – **circle one**)

Area of Restored or Preserved Habitat (acres)

Other -- Explain:

45 Miles of river reconnected, the primary project benefit.

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

Latitude:

37°34'36.4"N

Longitude:

108°17'39.8"W

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

The Redburn Ranch is a large farm and ranch operation mid-way up the river between Dolores and Rico. It is owned by Pat Redburn and managed by Bud Walker, who has been the ranch manager for over 30 years. The ranch was placed in a conservation easement with Montezuma Land Conservancy in 2006. This project is being brought forward jointly by TU and Redburn Ranch, with TU managing project funding and implementation, and oversight by Redburn Ranch.

The Ranch maintains a large cobble push-up dam that spans the main stem of the Dolores and requires repair with heavy equipment every year after spring runoff. This dam blocks fish passage for the majority of the year, excepting in the early spring from when it is degraded by high flows until it is rebuilt when the high water recedes. Fry (young fish) have been observed being stopped from moving downstream by the dam on multiple occasions and it is a barrier to fish migration upstream as well. At low water, the permeability of the cobble dam makes it difficult for the ranch to access its full water right, often requiring plastic to be placed on the face of the dam. Trout Unlimited (TU) has been in discussions with the ranch manager for over a year and has completed initial survey, design, and estimating work for 3 possible options as of Spring 2014. The dam is located on Forest Service Land just upriver from the Ranch. Forest Service personnel have been involved in the project from the beginning, support the project, and are helping to ensure any required analysis and permitting is streamlined.

This project would restore fishery connectivity to a total of 45 miles of the Dolores River upstream and downstream of the dam. It would also greatly reduce maintenance and upkeep of the diversion structure and ensure that Redburn's full water right could be accessed reliably. Additionally, the new structure would provide safe recreational boat passage and the in-stream habitat created by the project would enhance angling opportunity. This multi-benefit partnership project has no drawbacks and greatly enhances both the entire Dolores River fishery and agriculture use on a historic conserved ranch with a multitude of resource values.

The implementation of the project would require the replacement of the current cobble pushup dam with a series of 4 stepped large rock cross vein weirs capable of passing flood flows and sediment loads, allowing for fish and safe boat passage while ensuring the landowner's reliable access to their full water right, even at low water. The project also requires re-grading of the channel and importing and placing large cobble fill between the rock weirs to ensure channel stability. The head gate and associated structure has begun to settle and needs to be reconstructed to work with the new diversion system. The WSRA funding will be leveraged against other funding sources to complete engineering and design, and then construct the project.

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### Part III. – Threshold and Evaluation Criteria

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

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

The Redburn Ranch project in no way will diminish, impair, or injure any type of water rights or contracts and is fully compliant with Section 37-75-102 of the Colorado Revised Statutes. The project reconstructs an existing diversion structure and does not change diversion rates or water rights.

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

See attached letter from the Southwest Basin Roundtable.

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

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

This project assists in meeting both non-consumptive and consumptive needs identified in the SW basin assessment and report. These include: Actively encouraging projects to address multiple purposes; Protecting and enhancing environmental and recreational values that benefit local and statewide economies; encouraging multi-purpose projects that benefit both water users and native species. The project is also currently included in the SWBRT's list of projects to be incorporated in the Basin Implementation Plan. Please see attached letter from the SW basin Roundtable.

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

The current working estimate of required project funding is \$307,728.00 There would be a 200% match against the \$98,500.00 being requested from the WSRA Satewide account. \$50,000.00 of this is requested to come from basin funds, the remaining \$159,228.00 will come from other public and private sources, see attached Statement of Work, Detailed Budget, and Project Schedule.

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

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

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

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

- a. The water activity addresses multiple needs or issues, including consumptive and/or non-consumptive needs, or the needs and issues of multiple interests or multiple basins. This can be demonstrated by obtaining letters of support from other basin roundtables (in addition to an approval letter from the sponsoring basin).
- b. The number and types of entities represented in the application and the degree to which the activity will promote cooperation and collaboration among traditional consumptive water interests and/or non-consumptive interests, and if applicable, the degree to which the water activity is effective in addressing intrabasin or interbasin needs or issues.
- c. The water activity helps implement projects and processes identified as helping meet Colorado’s future water needs, and/or addresses the gap areas between available water supply and future need as identified in SWSI or a roundtable’s basin-wide water needs assessment.

### Tier 2: Facilitating Water Activity Implementation

- d. Funding from this Account will reduce the uncertainty that the water activity will be implemented. For this criterion the applicant should discuss how receiving funding from the Account will make a significant difference in the implementation of the water activity (i.e., how will receiving funding enable the water activity to move forward or the inability obtaining funding elsewhere).
- e. The amount of matching funds provided by the applicant via direct contributions, demonstrable in-kind contributions, and/or other sources demonstrates a significant & appropriate commitment to the project.

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

- f. The water activity helps sustain agriculture & open space, or meets environmental or recreational needs.
- g. The water activity assists in the administration of compact-entitled waters or addresses problems related to compact entitled waters and compact compliance and the degree to which the activity promotes maximum utilization of state waters.
- h. The water activity assists in the recovery of threatened and endangered wildlife species or Colorado State species of concern.
- i. The water activity provides a high level of benefit to Colorado in relationship to the amount of funds requested.
- j. The water activity is complimentary to or assists in the implementation of other CWCB programs.

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Continued: Explanation of how the water activity/project meets all applicable **Evaluation Criteria**.

**Please attach additional pages as necessary.**

See attached sheet for details.

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### Part IV. – Required Supporting Material

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

The affected water body is the Mainstem of the Dolores River, the project location is approximately 15.5 miles up river from the town of Dolores. The ranch has water rights with associated carriage water in the Gould & Moriaity Ditch. There are no issues, changes, etc. with this or any other water right associated with this project. This project will replace the existing diversion structure but will not change timing or amount of diversions. It will provide significant benefit to the ag producer and the Dolores River.

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

The diversion work is exempt from a Army Corps of Engineers permit.  
A Nationwide Permit may be required from the Army Corps of Engineers for riparian restoration work, dependent on final designs.  
The need for a US Forest Service special use permit is not expected due to the grandfathered permit on the existing diversion structure.

3. Statement of Work, Detailed Budget, and Project Schedule

The statement of work will form the basis for the contract between the Applicant and the State of Colorado. In short, the Applicant is agreeing to undertake the work for the compensation outlined in the statement of work and budget, and in return, the State of Colorado is receiving the deliverables/products specified. **Please note that costs incurred prior to execution of a contract or purchase order are not subject to reimbursement.** All WSRA funds are disbursed on a reimbursement basis after review invoices and appropriate backup material.

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

## **REPORTING AND FINAL DELIVERABLE**

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

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

## **PAYMENT**

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.



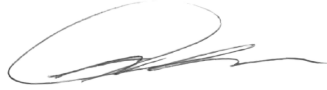
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The above statements are true to the best of my knowledge:

**Signature of Applicant:**



**Print Applicant's Name:** Matthew Clark

**Project Title:** Redburn Ranch Diversion Project

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

Craig Godbout – WSRA Application  
Colorado Water Conservation Board  
1580 Logan Street, Suite 200  
Denver, CO 80203  
[craig.godbout@state.co.us](mailto:craig.godbout@state.co.us)

July 30, 2014

To whom it may concern:

Redburn Flying R Ranch is in full agreement with Trout Unlimited on the ranches head gate / diversion project on the Dolores river.

Undersigned is the owner Pat Redburn and manager Vernon Walker Jr.

Signed:

owner: Pat Redburn

manager: Vernon Walker Jr.

# Statement of Work, Detailed Budget, and Project Schedule for the Redburn Ranch Project

## 1. *Statement of Work, Detailed Budget, and Project Schedule*

*The statement of work will form the basis for the contract between the Applicant and the State of Colorado. In short, the Applicant is agreeing to undertake the work for the compensation outlined in the statement of work and budget, and in return, the State of Colorado is receiving the deliverables/products specified. Please note that costs incurred prior to execution of a contract or purchase order are not subject to reimbursement. All WSRA funds are disbursed on a reimbursement basis after review invoices and appropriate backup material.*

**WATER ACTIVITY NAME – Redburn Ranch Diversion Project**

**GRANT RECIPIENT – Trout Unlimited**

**FUNDING SOURCE – WSRA State and SW Basin Funds**

## **INTRODUCTION AND BACKGROUND**

The Redburn Ranch is located about 15 miles up the Dolores River above the town of Dolores. The ranch was placed in a conservation easement with Montezuma Land Conservancy in 2006. The Ranch maintains a cobble push-up dam that spans the Dolores River and requires repair with heavy equipment every year after spring runoff. This dam blocks fish passage for the majority of the year. At low water, the permeability of the cobble dam makes it difficult for the ranch to access its full water right. This project proposes to replace the current dam with a series of 4 stepped large rock cross vane weirs, restoring fish passage to 45 miles of river, while ensuring the landowner's reliable access to their water right. This multi-benefit project partnership greatly enhances both the entire Dolores River fishery and agriculture use on a historic conserved ranch with a multitude of resource values. This project is being brought forward jointly by Trout Unlimited and Redburn Ranch, with TU managing project funding and implementation, and oversight by Redburn Ranch. The project is also currently included in the SWBRT's list of projects to be incorporated in the Basin Implementation Plan.

## **OBJECTIVES**

- Restore connectivity and fish passage to approximately 45 miles of the Dolores River
- Provide Redburn Ranch with reliable access to its full water right with no required annual in-channel construction
- Restore and enhance the channel and riparian zone in the project implementation area
- Provide safe recreational boat passage and enhanced fish habitat
- Create a strong partnership between consumptive and non-consumptive uses

## **TASKS**

### **TASK 1 - Channel Survey (Completed)**

Description of Task and Method/Procedure:

Basin Hydrology completed geomorphic field surveys consisting of channel cross-sections and a longitudinal profile in the fall of 2013. Ten cross sections and a 1,300 foot longitudinal profile were surveyed.

Field surveys were conducted to determine present-day geomorphic channel characteristics upstream, at, and downstream of the push-up dam feature. In order to identify “reference reach” conditions, the surveys were completed sufficiently upstream and downstream of the gravel dam to encompass channel dimensions and profile not significantly impacted by the backwater or grading activities associated with the diversion dam.

A survey of the Gould-Moriarity diversion and ditch system was also performed. This included the size, location and elevation of the various diversion system features and a longitudinal profile of the ditch for 400 feet downstream of the present-day point-of-diversion.

Deliverable:

A report containing drawings, calculations, and descriptions of the existing site and hydrologic conditions.

### **TASK 2 – Design Diversion Alternatives (Completed)**

Description of Task and Method/Procedure:

Basin Hydrology prepared and evaluated three detailed diversion alternatives. A plan sheet, a longitudinal profile sheet and cross sections were presented for each alternative. Locations and elevations of critical features were identified and the resulting layout was modeled using HEC-RAS to evaluate critical hydraulic parameters such as water elevation, cross sectional area, velocity and shear stress for various discharge levels. This iterative analysis provided important information on the alternative’s hydraulic characteristics upstream, at and downstream of proposed modifications. Based on the plan set for each alternative, a quantities and cost estimate was developed.

Although these alternatives provide adequate detail on various project components and represent viable alternatives to the present-day diversion system, additional hydraulic analyses will be required to finalize construction plans and specifications for the selected alternative, or any variation thereof.

Deliverable:

Plans, cross sections, and budget estimates.

### **TASK 3 – Select Diversion Alternative**

Description of Task and Method/Procedure:

The three provided diversion alternatives will be evaluated based on permitting, cost, durability, efficiency, etc. Variations and changes to the selected alternative will be evaluated as part of the process of determining the most appropriate, effective, and efficient option.

These options will be jointly evaluated by Basin Hydrology, Trout Unlimited, the landowner, the US Forest Service, and the the NRCS.

Deliverable:

Selection of final design option / direction and report on reasons for selection.

#### **TASK 4 – Finalize Design and Engineering of Diversion and Secure Authorizations**

Description of Task and Method/Procedure:

Project partners and sub-contractors will complete any and all necessary additional surveys, designs, engineering, planning, budgeting, reporting, permitting and NEPA compliance, and documentation required to commence project implementation.

Deliverable:

Final design and engineering plans, specifications, supporting documents, and budget.

#### **TASK 5 – Implement the Project**

Description of Task and Method/Procedure:

Construct the project as designed, meeting all project requirements, specifications, and outcomes.

Deliverable:

Completed project as designed and specified. Final report as required by CWCB.

#### **TASK 6 – Monitor Project for Design Compliance**

Description of Task and Method/Procedure:

Monitor project function and outcomes for two years to ensure project intent is achieved. Comply with any Army Corps of Engineers' permit as-built or monitoring requirements, if necessary. Perform additional work if necessary.

Deliverable:

Completed project as designed and specified.

#### **REPORTING AND FINAL DELIVERABLE**

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

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

## BUDGET

Provide a detailed budget by task including number of hours and rates for labor and unit costs for other direct costs (i.e. mileage, \$/unit of material for construction, etc.). A detailed and perfectly balanced budget that shows all costs is required for the State's contracting and purchase order processes. Sample budget tables are provided below. Please note that these budget tables are examples and will need to be adapted to fit each individual application. Tasks should correspond to the tasks described above.

Redburn Ranch Projected Project Budget						
		Labor	Other Direct Costs	Matching Funds	Total Project Costs	
Task 1 - Channel Survey						
	Field Surveys & Analysis	\$ 5,670			\$	5,670
	Totals	\$ 5,670	\$ -	\$ -	\$	5,670
Task 2 - Design Diversion Alternatives						
	Alternatives Development & Hydraulic Analyses	\$ 3,930	\$ -	\$ -	\$	3,930
	Quantity & Cost Estimates	\$ 500	\$ -	\$ -	\$	500
	Totals	\$ 4,430	\$ -	\$ -	\$	4,430
Task 3 - Select Diversion Alternative						
		\$ 1,500	\$ -	\$ -	\$	1,500
	Totals	\$ 1,500	\$ -	\$ -	\$	1,500
Task 4 - Finalize Design & Secure Authorizations						
	Finalize Design & Specs	\$ 12,000	\$ -	\$ -	\$	12,000
	USFS-required NEPA analysis	\$ 14,000	\$ -	\$ -	\$	14,000
	Secure Army Corps of Engineer authorization (if req'd)	\$ 2,000	\$ -	\$ -	\$	2,000
	15% Contingency	\$ -	\$ 4,200	\$ -	\$	4,200
	Totals	\$ 28,000	\$ 4,200	\$ -	\$	32,200
Task 5 - Implement the Project						
	equipment mobilization	\$ 15,000	\$ -	\$ -	\$	15,000
	construction staking, surveying & management	\$ 17,000	\$ 1,000	\$ -	\$	18,000
	structure rock & channel fill purchase & installation	\$ 82,155	\$ 64,116	\$ -	\$	146,271
	new diversion heading & sluice system	\$ 7,940	\$ 9,900	\$ -	\$	17,840
	riparian area construction & site reclamation	\$ 9,000	\$ 6,000	\$ -	\$	15,000
	Misc. contractor lodging, per-diem, mileage	\$ -	\$ 15,000	\$ -	\$	15,000
	15% Contingency	\$ -	\$ 34,817	\$ -	\$	34,817
	Totals	\$ 131,095	\$ 130,833	\$ -	\$	261,928
Task 5 - Monitor Project for Design Compliance						
		\$ 2,000	\$ -	\$ -	\$	2,000
	Totals	\$ 2,000	\$ -	\$ -	\$	2,000
Project Total Costs					\$	307,728
Remaining Costs					\$	297,628
Projected Funding Sources						
	Southwest Basin Roundtable			\$	50,000.00	
	Statewide WSRA Fund			\$	98,500.00	
	NRCS			\$	40,000.00	
	Southwest Water Conservation District			\$	40,000.00	
	US Fish & Wildlife Service			\$	25,000.00	
	Colorado parks and Wildlife			\$	10,000.00	
	GOCO			\$	15,000.00	
	Trout Unlimited			\$	25,000.00	
	Total			\$	303,500.00	
In-Kind Contributions						
	Redburn Ranch (equipment)			\$	3,000.00	
	Redburn Ranch (cash)			\$	1,000.00	
	TU volunteers			\$	2,000.00	
	Total			\$	6,000.00	
Project Total Funding				\$	309,500.00	

## SCHEDULE

*Provide a project schedule including key milestones for each task and the completion dates or time period from the Notice to Proceed (NTP). This dating method allows flexibility in the event of potential delays from the procurement process. Sample schedules are provided below. Please note that these schedules are examples and will need to be adapted to fit each individual application.*

Redburn Ranch Project Schedule														
detail.	7.14	8.14	9.14	10.14	11.14	12.14	1.15	2.15		8.15	9.15	10.15	11.15	12.15
TASK 1 – Channel Survey (Completed)														
TASK 2 – Design Diversion Alternatives (Completed)														
TASK 3 – Select Diversion Alternative														
TASK 4 – Finalize Design and Engineering of Diversion														
TASK 5 – Implement the Project														
TASK 6 – Monitor Project for Design Compliance														

## PAYMENT

*Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.*

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

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

- a) The Redburn Ranch project addresses multiple needs, including reconnecting 45 miles of important fish habitat, restoring and enhancing in-stream habitat on the project site, eliminating the annual disturbance of reconstruction of the dam with heavy equipment, enhancing angler opportunity at the project site, and allowing for safe recreational boat passage on the non-consumptive side, and securing the landowners ability to reliably access their full water rights on the consumptive side.
- b) The Redburn Ranch project represents a partnership between multiple interests, primarily Trout Unlimited and the Redburn Ranch. This collaboration between a consumptive user and a non-consumptive “user” demonstrates that win-win projects benefitting all aspects and uses of the river are possible, and indeed are the most productive and conflict free way to accomplish significant projects such as this. This project also address intra-basin needs, enhancing both the environment and recreation on the upper Dolores, which has been mapped in the SW Basin Needs Assessment as being in the highest tier of environmental and recreational aggregated sub-category values.

**Tier 2: Facilitating Water Activity Implementation**

- d) The combined WSRA funding from the Statewide and the Basin accounts makes up half of the anticipated project budget and the largest single source of funds. Simply put, without the combined WSRA funds, we have no other source of funding to leverage the other public and private funding sources against, and the project could not be completed.
- e) The 50% match of total WSRA funds by other direct and in-kind sources demonstrates a significant & appropriate commitment to the project. Many WSRA projects are funded at much higher levels; the Redburn Ranch project represents a significant return on investment to the WSRA, to CWCB, and to the SW Basin.

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

- f) The Redburn Ranch project helps sustain agriculture & open space by enhancing the viability of a working ranch and farm enterprise. It has been placed in a conservation easement, resides on a CO Scenic Byway, and used state funds to complete the easement. The project meets environmental or recreational needs as outlined above and elsewhere in this application.
- i) The Redburn Ranch project provides a high level of benefit to Colorado in relationship to the amount of funds requested. As stated above, the 50% match, or 66% match if you count the Basin funds, from other funding sources represents a significant return on investment to the State of Colorado.



## Redburn Ranch SW Basin Review Criteria

**The following will be used to evaluate a project submitted to the Southwestern Colorado Basin Roundtable:**

*Required:*

*A. Projects must be submitted on an application form used by the State IBCC and CWCB. All applicable sections must be completed.*

*B. Projects must address the values encompassed by the SW Basin Bylaws, especially the following goals and objectives:*

- Seek the involvement of all interested parties and stakeholders.*
- Propose methods or projects, both structural and non-structural, for meeting any future needs as well as utilizing any unappropriated waters.*
- Promote the protection, conservation, and use of water in the Southwestern Colorado Roundtable area.*
- Promote the socio-economic sustainability of the Southwestern Colorado Roundtable area.*
- Promote the protection and conservation of the natural environment, including the protection of open space.*

*C. Provide the financial details of the plan, including cost sharing and other possible funding sources. Give a financial overview and rough timeline for completion of the project.*

**To assist the Southwest Roundtable in determining whether and to what extent a proposed project meets the values set forth in the Bylaws, the following questions should be addressed separately as can reasonably be answered by the applicant.**

*1. What benefit(s) does the project provide? Are there multiple purposes?*

*Note: this does not mean that a single purpose project would be rejected, but for major funding requests, addressing multiple use needs would be an advantage.*

The Redburn Ranch project addresses multiple needs, including reconnecting 45 miles of important fish habitat, restoring and enhancing in-stream habitat on the project site, eliminating the annual disturbance of reconstruction of the dam with heavy equipment, enhancing angler opportunity at the project site, and allowing for safe recreational boat passage on the non-consumptive side, and securing the landowners ability to reliably access their full water rights on the consumptive side.

*2. Outline the steps needed for completion of the project. What permit issues must be overcome? How will funds acquired in this process be used to accomplish the final goal?*

Please see the attached Statement of Work, Budget and Schedule for steps needed to complete and how funds will be used. There are no permit issues to overcome as noted in the WSRA application.

*3. For prioritization of different proposals and assessment of the merits of the plan, can this project be physically built with this funding. Are further studies needed before actual construction is commenced(if the project anticipates construction)? Will these studies or additional steps delay the completion of the project substantially?*

This project cannot be built solely with WSRA funds, total WSRA funds requested, \$50k from the SW Basin Fund and \$98.5k from the State Fund are approximately 50% of the budget. The remaining 50% of the budget will come from other public and private sources. No further studies are needed, however final plans and specifications are needed. Final design will not delay the project. Please see the attached Statement of Work, Budget and Schedule for details.

*4. How does the proposal envision and anticipate support from its beneficiaries or from other sources in addition to the funding requested here? Would a loan reasonably address the needs of the applicant or, with a grant, should a recommendation be added to assess the future project status for ability to repay a portion of the grant?*

Please see the attached Statement of Work, Budget and Schedule for details about additional sources of funding. The ranch will be making a cash and in-kind contribution, Trout Unlimited has made and will continue to make cash contributions. Other sources such as NRCS, Fish and Wildlife Service, and private foundation grants are being sought. A loan would not address the needs of this project.

*5. What is the ability of the sponsor to pay for the project? What actions have been taken to secure local funding? Are there supporting factors which overcome the sponsor's inability to pay? (These could be related to basin water needs and compact considerations).*

TU has a proven track record raising funds for projects such as this. While all funding sources are not in place, we have several other pending grant applications and funding requests and are confident that the full project budget will be met within the project schedule.

*6. What alternative sources of water or alternative management ideas have you considered? Are there water rights conflicts involving the source of water for the project? If so, please explain.*

There are no water rights issues or conflicts associated with this project.

*7. How has public input been solicited and is there local support for the project? Have the beneficiaries solicited funding, letters or other documentation to demonstrate support?*

There is local support from recreation and environmental groups and support from the landowner and Forest Service, no letters were solicited.

*8. Is there opposition to the project? If there is opposition, how have those concerns been addressed?*

No opposition

*9. How does the project affect the protection and conservation of the natural environment, including the protection of open space?*

As outlined above and in other parts of this application, this project benefits the fishery, aquatic systems, the riparian corridor, recreation, and the operations of a ranch that is in a conservation easement.

*10. What is the impact of the proposed action on other non-decreed values of the stream or river? Non-decreed values may include things such as non-decreed water rights or uses, recreational uses and soil/land conservation practices.*

There are no impacts to any water rights or uses, it improves recreational uses, and benefits a host of non-consumptive “uses”.

*11. How does the project relate to **local** land use plans? If conflicts exist, how will these be addressed?*

It has no impact.

*12. Identify any intrabasin conflicts and how they will be addressed.*

Not applicable.

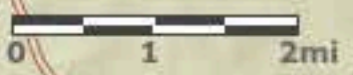
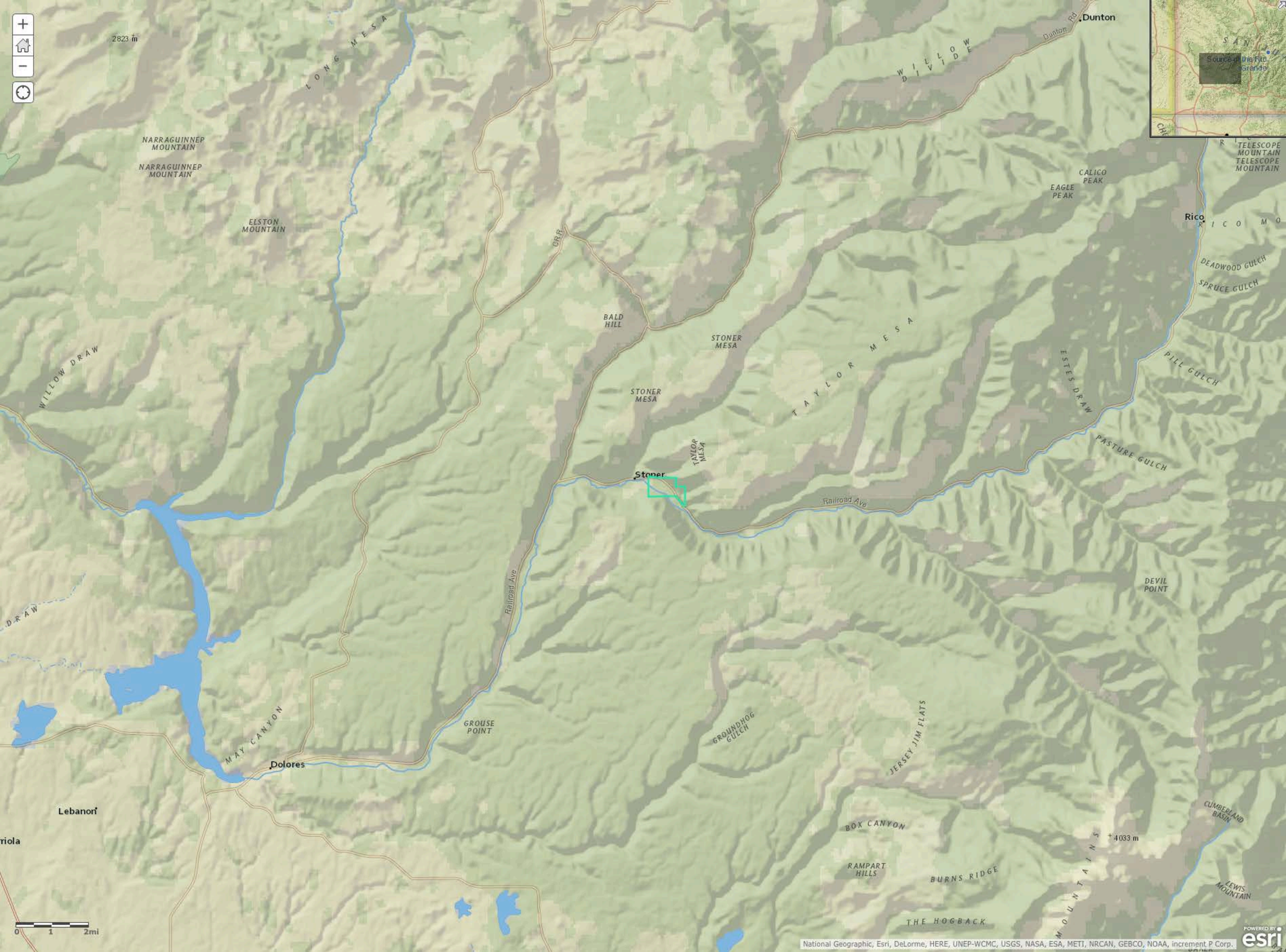
*13. Identify any interbasin impacts and how any conflicts would be addressed.*

Not applicable.

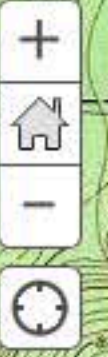
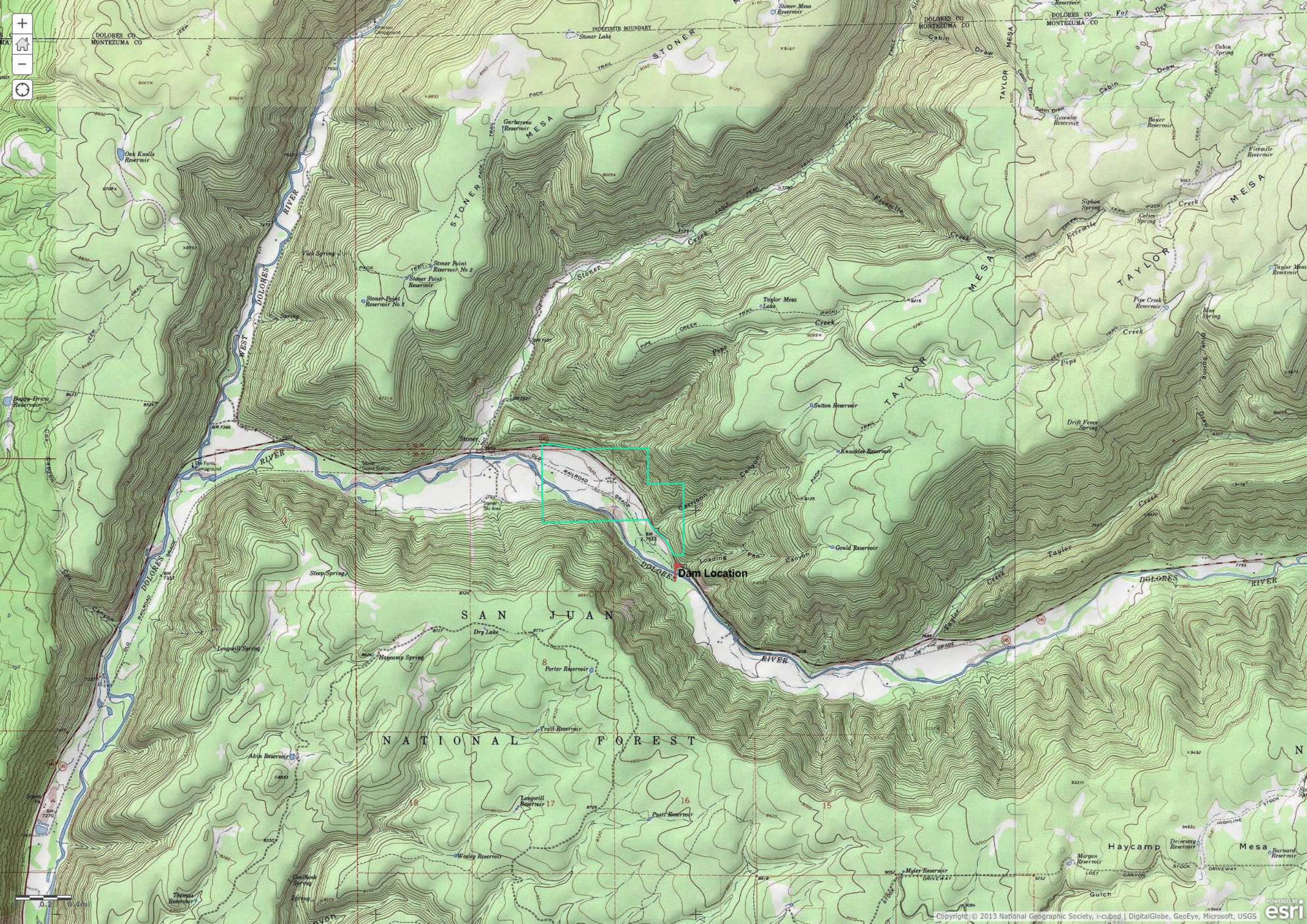
*14. How does the project support agricultural development or protect the existing agricultural economy?*

This project enhances the viability of a working ranch, allowing for timely and efficient withdrawals of their water rights to ensure their operation remains economically sound. It also reduces maintenance costs associated with maintaining the existing diversion.



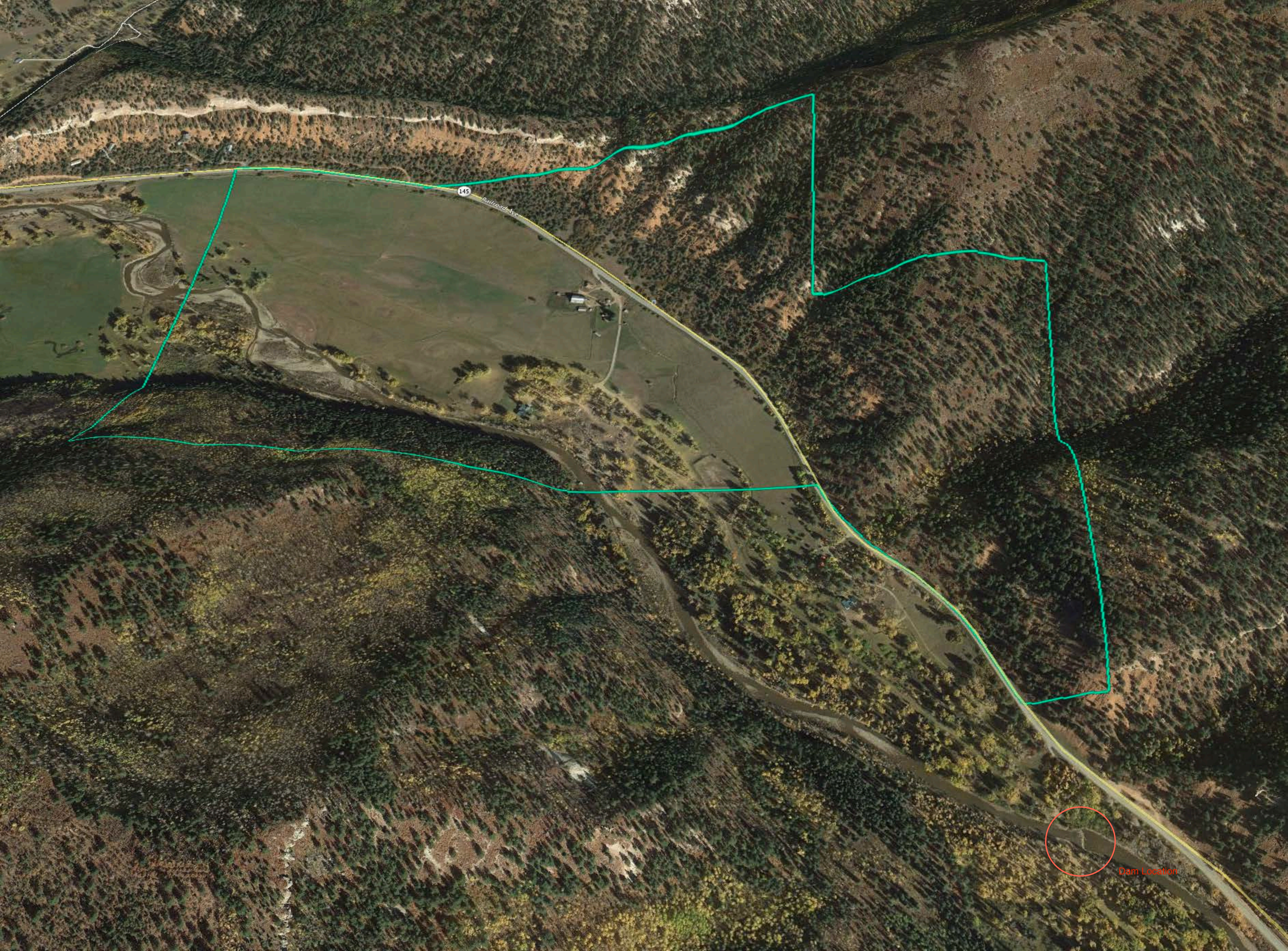






0.2 Miles





145

Railroad Ave

Dam Location