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

Applicant & Program Sponsor: Blue River Watershed Group (BRWG)

Water Activity Name: Tenmile Creek Restoration Project Phase II

Water Activity Purpose: Non-consumptive Structural Water Project

County: Summit

Drainage Basin: Colorado

Water Source: Tenmile Creek

Total Amount Requested: $275,000

Source of Funds: $13,750 Colorado Basin Account; $261,250 Statewide Account

Matching Funds: Basin Account Match ($13,750) = 5% of total grant request
Basin Account & Applicant Match ($178,750) = 65% of total grant request
Applicant Match ($165,000) = 37.5% of total project costs ($440,000)
(refer to *Funding Summary/Matching Funds*)

Staff Recommendation
Staff recommends approval upon the condition of addressing concerns specified below in the Issues/Additional Needs section of up to $13,750 from the Colorado Basin Account and $261,250 from the Statewide account to help fund the project titled: Tenmile Creek Restoration Project.

Water Activity Summary:
This project includes stream and floodplain restoration, soil amendment, wetlands creation, and revegetation in a heavily impacted reach of Tenmile Creek near the Copper Mountain ski area. Funding will be used for: 1) securing materials for restoration work such as soil amendment products and native plants; 2) producing construction drawings from a design that has already been completed; 3) excavation and earthmoving; 4) in-stream habitat improvements; 5) incorporating soil amendments; 6) planting native vegetation; 7) wetlands creation; 8) documentation of the project for outreach and monitoring; and 9) supporting project management and oversight by the Blue River Watershed Group.

The restoration area has been impacted by historic mining, timber harvest, ski area development, and railroad and highway construction. Development along Tenmile Creek has altered its course and narrowed its floodplain. Tenmile Creek has been altered by widespread deposition of sediments, including sediments from mining activity. The resulting morphology is a braided stream channel flowing over poorly vegetated alluvium. Additionally, direct inputs of storm water, traction sand, and petroleum products from State Highway 91 affect water quality in Tenmile Creek.

Discussion:
This is the second phase of the Tenmile Creek Restoration Project. The first phase was funded through the Water Supply Reserve Account ($350,000). This phase of the project will continue

immediately downstream of the previous project. The restoration effort is designed to enhance floodplain connectivity, fish habitat quality, scenery, and wetlands function by re-creating the stream morphology and floodplain characteristics that existed before mining and development. The project will increase sinuosity and length in the stream channel, increase pool habitat and cover for fish, and increase the total area of vegetated wetlands. The project will improve recreational opportunities and public access to Tenmile Creek. The project will create a vegetated buffer between the stream and State Highway 91, reducing stream sedimentation and flood damage to the highway. The project also incorporates an education and outreach component by using volunteers to plant riparian plant species.

Issues/Additional Needs:

- BRWG should work with CWCB Staff to ensure that geomorphic monitoring conforms to CWCB Measurable Results Program criteria.
- All proposed river channel work shall conform to the CWCB Rules and Regulations for Regulatory Floodplains in Colorado.

Threshold and Evaluation Criteria:
The application meets all four Threshold Criteria

Tier 1-3 Evaluation Criteria:
The application satisfies the Evaluation Criteria

Funding Summary/Matching Funds:

	Cash	**In-kind**	**Total**
WSRA Colorado Basin Account	$13,750	n/a	$13,750
WSRA Statewide Account	$261,250	n/a	$261,250
Climax Molybdenum	$25,000	$0	$25,000
Colorado DOT	$30,000	$0	$30,000
National Forest Foundation	$25,000	$0	$25,000
Cooper Mountain Resort	$0	$60,000	$60,000
USFS	$0	$15,000	$15,000
Blue River Watershed Group	$0	$10,000	$10,000
Total Project Costs	**$355,000**	**$85,000**	**$440,000**

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.

THE COLORADO BASIN ROUNDTABLE

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

March 30, 2014

Craig Godbout
Colorado Water Conservation Board
Water Supply Planning Section
1580 Logan Street, Suite 200
Denver CO 80203
(303) 866-3441, ext 3210 (office)
(970) 218-9407 (cell)
craig.godbout@state.co.us

Dear Craig:

The Colorado Basin Roundtable voted unanimously at its March 2014 meeting to approve a grant request to both the Statewide and Basin Accounts for the Phase II of the Tenmile Creek Restoration Project. The Statewide request is for $261,250 and the Basin request is for $13,750. The requestor is the Blue River Watershed Group.

This project includes stream and floodplain restoration, soil amendment, wetlands creation, and revegetation in a heavily impacted reach of Tenmile Creek near the Copper Mountain ski area and the intersections of I-70 and Colorado 91. Funding would be used for: 1) securing materials for restoration work such as soil amendment products and native plants; 2) producing construction drawings to field fit a design that has largely already been completed; 3) excavation and earthmoving; 4) in-stream habitat improvements; 5) incorporating soil amendments; 6) planting native vegetation; 7) wetlands creation; and 8) supporting project management and oversight by the Blue River Watershed Group. The BRWG is requesting $275,000.00 from a combination of the Basin and State Accounts for the Tenmile Creek Restoration Project and this is the amount of money necessary to complete the entire restoration plan. The total cost of the project is $440,000 and $165,000 is anticipated in cash and in-kind service, which leaves a balance of $275,000.

Sincerely yours,

Jim Pokrandt
Chair, Colorado Basin Roundtable

Attachment: CFWE grant applications

COLORADO WATER CONSERVATION BOARD

WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

Tenmile Creek Restoration Project

Name of Water Activity/Project

Blue River Watershed Group

Name of Applicant

Colorado Basin

Amount from Statewide Account: $261,250

Amount from Basin Account(s): $13,750

Total WSRA Funds Requested: $275,000

Approving Basin Roundtable(s)
(If multiple basins specify amounts in parentheses.)

Application Content

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)

Instructions

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

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

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

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

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:

Greg Johnson – WSRA Application
Colorado Water Conservation Board
1580 Logan Street, Suite 200
Denver, CO 80203
gregory.johnson@state.co.us

If you have questions or need additional assistance, please contact Greg Johnson at: 303-866-3441 x3249 or gregory.johnson@state.co.us.

Water Supply Reserve Account – Application Form
Revised December 2011

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

1.	Applicant Name(s):	Blue River Watershed Group		
	Mailing address:	PO Box 1626, Frisco, CO 80443		
	Taxpayer ID#:	20-1771307		
	Primary Contact:	Jim Shaw	Position/Title:	Treasurer
	Email:	jimandrosieski@msn.com		
	Phone Numbers:	Cell: 970-668-0895	Office:	
	Alternate Contact:	Jim Shaw	Position/Title:	Treasurer
	Email:	jim@zeoponix.com		
	Phone Numbers:	Cell: 970-485-2636	Office:	

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.
X	Non-governmental organizations – broadly defined as any organization that is not part of the government.

3. Provide a brief description of your organization

The mission of the Blue River Watershed Group, (BWRG), is to promote, protect and restore a healthy Blue River watershed through cooperative community education, stewardship, and resource management. The BRWG began as a gathering of concerned local citizens. The group began their work in the spring of 2004, with a primary emphasis on public education and involvement. Group members were encouraged by the attendance at their first public information sessions on basic water law and water issues. Formal articles of incorporation were officially recognized by the Colorado Secretary of State on October 20, 2004.

The group's steering committee met on December 2, 2004, and officially formed a board of directors, elected a chairperson and established by-laws. The group received 501 (c) (3) status from the IRS on September 8, 2005. Additional public information sessions were held in 2005 and 2006 on such topics as flood potential, the impact of snow-making, legislative issues related to water and various government projects affecting the Blue River.

The BRWG commissioned the Snake River Watershed Study in 2009. As as a result of the plan, three mine remediation projects in Peru Creek have received 319 Grant funds. Work commenced on this program in the fall of 2011 and was completed in 2013. An updated Snake River Watershed Plan was also prepared in 2013 highlighting the accomplishments. An Executive Director was contracted in late 2009 and the organization has utilized interns and seasonal personnel to supplement the staff. Now the group is proceeding to fulfill an official role as a non-profit by representing stakeholders and securing and administrating grant funds for restoration projects. A Colorado Watershed Restoration Program Grant and a Colorado Water Supply Reserve Account Grant have been received by the BRWG to complete the design of the Upper Swan River Restoration Project. This work was completed in early 2013.

The organization has a Board of Directors and an Advisory Board with members from the area who are very qualified and experienced in fields related to water and environmental issues. They are available to contribute their expertise to the projects as needed. The BRWG has many partnerships with other nonprofit and volunteer organizations, along with our own list of volunteers who are willing to lend support to our restoration work.

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

The Contracting Entity and the Applicant are the same.

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.

[X] 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.

There are no relevant TABOR issues that should have any effect on the applicant.

Part II. - Description of the Water Activity/Project

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

X	Nonconsumptive (Environmental or Recreational)
	Agricultural
	Municipal/Industrial
	Needs Assessment
	Education
	Other Explain:

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

It does not appear that the project addresses multiple purposes.

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

	Study	X	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)
1,200	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**)
3.0	Area of Restored or Preserved Habitat (acres)
	Other -- Explain:

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

Latitude: 39° 30′ 7.93″ Longitude: 106° 8′ 22.90″

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.

This project includes stream and floodplain restoration, soil amendment, wetlands creation, and revegetation in a heavily impacted reach of Tenmile Creek near the Copper Mountain ski area. WSRA funding would be used for: 1) securing materials for restoration work such as soil amendment products and native plants; 2) producing construction drawings to field fit a design that has largely already been completed; 3) excavation and earthmoving; 4) in-stream habitat improvements; 5) incorporating soil amendments; 6) planting native vegetation; 7) wetlands creation; and 8) supporting project management and oversight by the Blue River Watershed Group. The BRWG is requesting $275,000.00 from a combination of the Basin and State Accounts for the Tenmile Creek Restoration Project and this is the amount of money necessary to complete the entire restoration plan. The total cost of the project is $440,000.00 and $165,000.00 is anticipated in cash and in-kind service, which leaves a balance of $275,000.00.

The restoration area has been impacted by historic mining, timber harvest, ski area development, and railroad and highway construction. Development along Tenmile Creek has altered its course and narrowed its floodplain. As early as the 1860's, Tenmile Creek had been altered by widespread deposition of sediments, including sediments from mining activity. The resulting morphology is a braided stream channel flowing over poorly vegetated alluvium. Additionally, direct inputs of storm water, traction sand, and petroleum products from State Highway 91 affect water quality in Tenmile Creek. This project will enhance floodplain connectivity, fish habitat quality, scenery, and wetlands function by re-creating the stream morphology and floodplain characteristics that existed before mining and development. The project will increase sinuosity and length in the stream channel, increase pool habitat and cover for fish, and increase the total area of vegetated wetlands. The project will improve recreational opportunities and public access to Tenmile Creek. The project will create a vegetated buffer between the stream and State Highway 91, reducing stream sedimentation and flood damage to the highway.

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.[1]

The water activity will be consistent with Section 37-75-102 Colorado Revised Statutes and will comply with the existing water rights adjudication system. This project coincides with vegetation management undertaken by the US Forest Service and Copper Mountain Resort in an area immediately adjacent to Tenmile Creek. Water savings accomplished by the permanent clearing of 13 acres of pine forest immediately adjacent to the restoration area to create additional parking for Copper Mountain Resort more than offsets the amount of water that will be used to modestly increase cover by wetlands vegetation in the restoration project

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

The Colorado BRT will issue such a letter if and when the project is approved.

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

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

A letter of support from the Colorado Basin Roundtable Chair is requested.

d) Matching Requirement: For requests from the **Statewide Fund**, the applicants is required to demonstrate a **20 percent** (or greater) match of the request from the Statewide Account. Statewide requests must also include a minimum match of **5 percent** of the total grant amount from Basin Funds. 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)

This application requests $13,250 from the Colorado Basin Account and $261,750 from the Statewide Account for a total request of $275,000. A total of $165,000 is anticipated in cash and in-kind services, which adequately covers the required matching funds required for this grant request of $275,000.

Copper Mountain Resort, in kind	600 boulders onsite	$ 60,000
USFS, in kind	Willow stock	15,000
BRWG volunteers, in kind	Willow planting	10,000
Climax Molybdenum	Cash	25,000
Colorado DOT	Cash	30,000
National Forest Foundation	Cash	25,000
	TOTAL	$165,000

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

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.

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

Please attach additional pages as necessary

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

a) This project lies in the Colorado Basin, but would likely have minor effects to the South Platte Basin and the Metro Basin because Tenmile Creek is tributary to Dillon Reservoir and Green Mountain Reservoir which are used to provide or offset water diversions to the Front Range of Colorado. The restoration project coincides with vegetation management immediately adjacent to the restoration area that will make additional water available in Tenmile Creek. The restoration project itself would improve wetlands function, stream health and floodplain processes, and therefore has inherent benefits for downstream beneficial uses and water users.
b) Planning for this project has resulted in a unique partnership that brings together the mining industry and the ski industry, both with consumptive needs, to realize environmental benefits for non-consumptive uses. The project would have environmental, recreational, and economic benefits for the residents and visitors to Summit County, also a partner in this project. As such, the project represents a step toward cooperation and collaboration between consumptive and non-consumptive users.
c) N/A

Tier 2: Facilitating Water Activity Implementation

d) Funding from this account would ensure the implementation of this restoration project. The Blue River Watershed Group has submitted applications for funding to the National Forest Foundation's Ski Area Conservation Fund, the Climax Community Development Fund, the Walton Family Foundation, and CDOT. BRWG has had some success funding the project thus far and has completed a major portion of the work; however additional work remains to complete the project as originally envisioned. Funding from the Water Reserve Account would be leveraged to make use of significant commitments made by private entities to accomplish a project with benefits to residents and visitors of Colorado. Without the requested funds it is uncertain whether the project can be accomplished.
e) As described above and in Exhibit A, significant financial and in-kind contributions are anticipated by private entities. This demonstrates support and commitment to the project by various partners.

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

f) This project would enhance environmental and recreational uses of Tenmile Creek. Although the land is primarily National Forest with some private land, it is managed similar to county open space. This project would enhance public access to, and enjoyment of an area that is highly visible and lies in an important recreation cooridor.
g) N/A
h) This restoration project has the potential to directly or indirectly benefit several Colorado species of concern, including bald eagles, greenback cutthroat trout, mountain suckers, boreal toads, and northern leopard frogs.
i) Matching funds for this project include a $80,000 anticipated cash donation, in-kind donations of materials that have already been secured, and commitments for additional in-kind services. Securing the funding requested in this application would allow the Blue River Watershed Group

to make full use of the matching funds and complete this poject. The project area lies within sight of I-70 and Colorado Highway 91, both of which are busy with residents and visitors from out of state. This project is of high value to the State of Colorado because matching support is anticipated, because the project is located in a popular and highly visible place, and because the site has high potential for providing the environmental and recreational benefits that people have come to expect from mountainous areas in Colorado.

j) In addition to supporting environmental and recreational benefits identified as nonconsumptive uses, this project is compatible with other goals pursued by the CWCB, such as building capacity within a local watershed group, engaging local communities in protecting water for future generations, and restoring healthy rivers.

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 Environmental Assessment for the Tenmile Creek Facilities Improvements and Restoration Project was published in June of 2008 (USFS, 2008). The analysis considered changes in water availability associated with the Tenmile Creek restoration project as well as the expansion of a parking lot adjacent to Tenmile Creek. The analysis found that the clearing of 13 acres of mature pine forest between Tenmile Creek and Highway 91 to expand the parking lot would permanently make available 5.2 acre feet of additional water. The analysis also found that planting willows and lengthening the stream would result in evaporative losses proportional to increases in the acreage of willow cover, and changes in the extent of open water. The 2008 analysis considered a worst case scenario in which the evaporative losses would exceed the additional water made available through forest clearing, however, based on the final design an increase in water availability is expected. Implementation of the final design would actually decrease the extent of open water (by narrowing the channel) and modestly increase the amount of new willow coverage leading to evaporative losses totaling 1.1 acre feet for the restoration project itself. Considering the restoration project and the water made available by tree clearing adjacent to Tenmile Creek for the parking lot expansion the net effect to water availability is an increase of 4.1 acre feet. Based on this accounting, all the water needed to support vegetation associated with the restoration project, plus some additional, is provided through vegetation management immediately adjacent to the restoration area.

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

The "Environmental Assessment for the Tenmile Creek Facilities Improvements and Restoration Project" was published in June of 2008 (USFS, 2008). The Decision Notice and Finding of No Significant Impact were published in a separate document in September of 2008. A web page with links to these documents can be accessed at by typing the following into your web browser: http://www.fs.fed.us/nepa/nepa_project_exp.php?project=19064

This project will require a modification to an existing permit from the US Army Corps of Engineers, Regulatory Branch. Initial contact with the USACE was initiated on December 1st, 2011. This project was authorized under a Nationwide Permit 27 issued on June 27th of 2013. The permit authorized the Tenmile Creek Restoration Project, however, modifications to the Phase 2 final design are expected, which will require a modification to the permit. The modified permit is expected to be issued before construction.

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.

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

Signature of Applicant:
/s/ Jim Shaw

Print Applicant's Name:
Jim Shaw

Project Title: Tenmile Creek Restoration Project

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

Greg Johnson – WSRA Application
Colorado Water Conservation Board
1580 Logan Street, Suite 200
Denver, CO 80203
gregory.johnson@state.co.us

Exhibit A

Statement of Work

WATER ACTIVITY NAME – Tenmile Creek Restoration Project

GRANT RECIPIENT – Blue River Watershed Group

FUNDING SOURCE –
Colorado Basin account: $13,750. Water Supply Reserve account: $261,250.

INTRODUCTION AND BACKGROUND
Provide a brief description of the project. (Please limit to **no more than 200 words**; this will be used to inform reviewers and the public about your proposal)

This is an ongoing project that includes stream and floodplain restoration, soil amendment, wetlands creation, and revegetation in a heavily impacted reach of Tenmile Creek near the Copper Mountain ski area. With major support from the CWCB, the Blue River Watershed Group implemented Phase 1 of the restoration project in 2013. Envisioned as a single project to be completed in 2013, the project had to be broken into two phases because funding from sources other than the CWCB was less than anticipated. Phase 1, now complete, included the restoration of 1,600 feet of stream channel and the rehabilitation of 3 acres of associated stream banks, wetlands and floodplains. Phase 2 focuses on restoring an additional 1,200 feet of stream channel and 3 acres additional stream bank, wetland and floodplain rehabilitation. Tenmile Creek has been impacted by historic mining and other development that has altered its course, narrowed its floodplain and caused changes in channel morphology, soil quality and wetlands abundance. Water quality is also affected by direct runoff from State Highway 91. Phase 2 would address all of these issues with a particular emphasis on highway impacts. This would be the last of the restoration work envisioned for Tenmile Creek.

OBJECTIVES
List the objectives of the project

1. Re-create desirable stream and floodplain characteristics believed to have existed before early mining practices
2. Create a stream channel with morphology resembling reference conditions for a stream in a broad sub-alpine valley
3. Convey water and sediment delivered from upstream without major channel change
4. Allow periodic flooding sufficient to support vigorous wetland and riparian habitat
5. Improve habitat for fish and other aquatic species
6. Reduce direct discharge of highway runoff into Ten Mile Creek

TASKS

TASK 1 – Contracting and project management

Description of Task

This task includes all of the project management, coordination, contracting, financial oversight, and progress reporting that would be accomplished by the Blue River Watershed Group (BRWG).

Method/Procedure

The Blue River Watershed Group, with help from other partners, would identify and retain contractors to complete major tasks, as described below, and would coordinate with volunteer groups for willow planting. BRWG would negotiate and oversee all contracts and volunteer agreements, track and report on progress for each task, and manage all financial aspects of the project.

Deliverable

This effort will produce written agreements with every contractor involved in implementing the restoration project. Additionally, this effort will produce detailed accounting documents and progress reports.

TASK 2 – Phase 2 final design, layout, and construction drawings

Description of Task

This task includes final design modifications for Phase 2, completion of construction drawings and all survey, staking and layout needed to complete the project. Ecological Resource Consultants, who completed this task for Phase 1, would be hired to complete this task.

Method/Procedure

This work would be contracted out to Ecological Resource Consultants (ERC). Major components of the restoration design have been completed and much of the design work completed for Phase 1 is directly applicable to Phase 2. Final design for Phase 2 is essentially a field fit of the same design components that have already been built in Phase 1. ERC would work with the US Forest Service to lay out the remaining construction work that would occur on National Forest land and land owned by Copper Mountain Resort. ERC would then produce final construction drawings depicting the details of the design. The drawing set would then become the basis for all contract work to follow.

Deliverable

This effort would produce the drawing set and construction plans that would be used during all phases of construction including staging, erosion control, floodplain and stream channel construction, wetlands creation, soil amendment, and re-vegetation. Stakes and control points would be established on the ground to facilitate actual construction.

TASK 3 – Floodplain excavation

Description of Task
Excavate and re-contour floodplain sediments to specified elevations.

Method/Procedure
This work is to be accomplished using heavy equipment. All equipment and operators would be contracted.

Deliverable
This would create the floodplain surfaces that will be reclaimed and re-vegetated, and in some cases converted to wetlands.

TASK 4 – Fill sorting, handling, and placing

Description of Task
Sort excavated material to optimize fill quality that would be used for channel and floodplain restoration.

Method/Procedure
This work is to be accomplished using heavy equipment and a gravel sorter. All equipment and operators would be contracted.

Deliverable
This would produce quality fill to be used to establish desired elevations on the site and to create the desired roughness of the new channel bed.

TASK 5 – Stream channel excavation

Description of Task
Excavate new channel on desired alignment and construct bed and banks to achieve designed geometry, elevation, and roughness specifications.

Method/Procedure
This work is to be accomplished using heavy equipment. All equipment and operators would be contracted.

Deliverable
This would create the basic template of a new stream channel that lies on the desired alignment, floods its banks when desired, and resembles reference conditions for stream pattern, geometry, width, and depth.

TASK 6 – In-stream habitat improvements

Description of Task

Line portions of the new channel with a low permeability soil liner to ensure excessive surface water is not lost to groundwater. Install boulders below and above grade to achieve vertical and lateral channel stability.

Method/Procedure

This work is to be accomplished using heavy equipment. All equipment and operators would be contracted. Low permeability soil would be compacted into native sands and gravels exposed during channel excavation. Sorted gravels and cobbles would then be placed to create the channel bed. Boulders would be placed sparingly to achieve grade control and lateral control in critical places, and to create naturally functioning fish habitat features. Because boulders would be used sparingly, and because many boulders would be installed below grade or be concealed by revegetation efforts, the stream is expected to have a natural appearance and not appear artificially constructed.

Deliverable

This would ensure that the new stream channel remains wet during low flows, stays in the desired alignment during high flows, and has the structural complexity needed to create quality habitat for aquatic organisms.

TASK 7 – Wetlands creation

Description of Task

Plug and line existing overflow channels and abandoned portions of the main channel to specified elevations with clean, sorted materials.

Method/Procedure

This work is to be accomplished using heavy equipment. All equipment and operators would be contracted. Low permeability soil would be compacted into native sands and gravels in the beds of certain existing overflow channels where wetlands are to be created. A layer of coarse native rock would be applied above the bentonite and then the site would be ready for additional fill and soil amendment to create wetlands.

Deliverable

This would create a perched water table near the surface in order to support created wetlands.

TASK 8 – Soil Amendment

Description of Task

Spread sorted soil materials on site and incorporate a mixture of organic and mineral soil amendments.

Method/Procedure

This work is to be accomplished using heavy equipment. All equipment and operators would be contracted. A soil amendment recipe has been determined for the site based on local soil characterization and testing. Amendments would include compost, fine mineral soil, and a zeolite to

increase water retention. These products would be mixed on site and incorporated into native sands and gravels.

Deliverable

This would create desired soil properties to ensure successful re-vegetation of the site.

TASK 9 – Willow planting

Description of Task

Transplant existing vegetation where possible, secure native willow cuttings from local sources and plant willow cuttings in stream banks according to design specifications.

Method/Procedure

This would be accomplished by teams of volunteers. Local sources have been identified on National Forest lands for securing willow clippings. Willows would be cut, bundled, and transported to the restoration site by volunteers. Volunteers would then work with hand tools or cooperatively with equipment operators to plant willow wattles, brush layers, and individual plugs according to design.

Deliverable

This would ensure the establishment of willow stands along the new stream banks and in created wetlands.

TASK 10 – Shrub, grass and tree planting/ transplanting

Description of Task

Plant native riparian trees and shrubs as specified throughout the flood plain and spread native grass seed at specified application rates. Native plant materials are available from a nursery that is growing stock from seeds collected on site (for shrubs) or in other areas on the White River National Forest.

Method/Procedure

This would be accomplished through a planting contract (for planting containerized trees and shrubs and for transplanting trees and shrubs in disturbance areas) and through volunteer effort (for direct native grass seeding).

Deliverable

This would establish the desired native plant community on disturbed areas near the stream that would not be flooded often enough to support true wetland species

TASK 11 – Reporting, monitoring and photography

Description of Task

This task includes all of the work needed to prepare a final report, produce a slide show documenting the project, and initiate pre and post-construction monitoring procedures.

Method/Procedure

This would be accomplished through cooperation with project partners. The USFS would establish photo points to document the various phases of the restoration project before, during, and after construction. The USFS would also produce a slide show that can be posted on the web.

Deliverable

A final report would be prepared that documents all phases of the project from design to completion. This would provide a record on which to gauge the success of the project and provide a basis for any additional work, if needed. The report would be produced in hardcopy and electronic format. Additionally, photos shot during construction would be edited into a short slide show appropriate for web viewing.

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.

Total Costs				
Task	(Requested) Labor and equipment	Other Direct Costs	Matching Funds (If Applicable)	Total Project Costs
Task 1 - Contracting and project management	$ 25,000			$ 25,000
Task 2 – Final design, layout and construction drawings	$ 35,000			$ 35,000
Task 3 – Floodplain excavation	$ 25,000		$ 10,000	$ 35,000
Task 4 – Fill sorting, handling	$ 25,000		$ 15,000	$ 40,000
Task 5 – Stream channel excavation	$ 25,000		$ 15,000	$ 40,000
Task 6 – In-stream habitat improvements	$ 10,000		$ 10,000	$ 20,000
Task 7 – Wetlands Creation	$ 30,000		$ 10,000	$ 40,000
Task 8 – Soil amendment	$ 25,000	$ 50,000	$ 10,000	$ 85,000
Task 9 – Willow Planting				$ -
Task 10 – Shrub, grass and tree planting/ transplanting	$ 5,000	$ 20,000	$ 10,000	$ 35,000
Task 11 - Reporting, monitoring, photography, and slide show production				$ -
In-Kind Contributions			$ 85,000	$ 85,000
Total Costs:	$ 205,000	$ 70,000	$ 165,000	$ 440,000

			Labor						
Project Personnel:	Project Manager	Treasurer	Hydraulic Engineer (contract)	Ecologist (Contract)	Surveyor plus laborer (contract)	Excavator, loader, dump truck, three operators and three crew (contract)	Planting crew (contract)		Total Costs
Hourly Rate:	$ 45	$ 40	$ 50	$ 50	$ 60	$ 500	$ 200		
Task 1 – Contracting and project management	$ 20,000	$ 5,000							$ 25,000
Task 2 - Final design, layout, and construction drawings			$ 13,000	$ 15,000	$ 7,000				$ 35,000
Task 3 – Floodplain excavation						$ 35,000			$ 35,000
Task 4 – Fill sorting, handling and placing						$ 40,000			$ 40,000
Task 5 – Stream channel excavation						$ 40,000			$ 40,000
Task 6 – In-stream habitat improvements						$ 20,000			$ 20,000
Task 7 – Wetlands Creation						$ 40,000			$ 40,000
Task 8 – Soil amendment						$ 35,000			$ 35,000
Task 9 – Willow Planting									
Task 10 – Shrub, grass and tree planting/ transplanting							$15,000		$ 15,000
Task 11 - Reporting, monitoring, photography, and slide show production									
Total Hours:	444	125	260	300	117	420	75		
Cost:	$ 20,000	$ 5,000	$ 13,000	$ 15,000	$ 7,000	$ 210,000	$ 15,000		$285,000

Other Direct Costs					
Item:	Materials	Materials	In-kind materials donated	In-kind materials donated	Total, excluding donated materials
Units:	Compost topsoil and zeolite; applied per acre	Native trees, shrubs and grasses; planted per acre	Boulders, delivered	Willow cuttings; per acre planted	
Unit Cost:	$ 16,667	$ 6,667	$ 100	$ 7,500.00	
Task 1 – Contracting and project management					
Task 2 - Final design, layout, and construction drawings					
Task 3 – Floodplain excavation					
Task 4 – Fill sorting, handling and placing					
Task 5 – Stream channel excavation					
Task 6 – In-stream habitat improvements			600		
Task 7 – Wetlands Creation					
Task 8 – Soil amendment	3				
Task 9 – Willow Planting				2	
Task 10 – Shrub, grass and tree planting/ transplanting		3.0			
Task 11 - Reporting, monitoring, photography, and slide show production					
Total Units:	3.0	3.0	600	2	
Total Cost:	$ 50,000.00	$ 20,000	$ 60,000.00	$ 15,000.00	$ 70,000

In-Kind Contributions (If Applicable)						
Materials			Boulders	Willow stock		
Project Personnel:					Volunteers for willow planting (10 people)	
Hourly Rate:					$ 200	Total
Task 1 – Contracting and project management						
Task 2 - Final design, layout, and construction drawings						
Task 3 – Floodplain excavation						
Task 4 – Fill sorting, handling and placing						
Task 5 – Stream channel excavation						
Task 6 – In-stream habitat improvements			$ 60,000			
Task 7 – Wetlands Creation						
Task 8 – Soil amendment						
Task 9 – Willow Planting				$ 15,000	$ 10,000	
Task 10 – Shrub, grass and tree planting/ transplanting						
Task 11 - Reporting, monitoring, photography, and slide show production						
Total Hours:					$ 50	
Total Cost:			$ 60,000	$ 15,000.00	$ 10,000	$ 85,000.00

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.

Task	Start Date	Finish Date
Task 1 - Contracting and project management	Upon NTP	NTP + 1 year
Task 2 – Final design, layout and construction drawings	6/2/2014	7/31/2014
Task 3 – Floodplain excavation	8/1/2014	9/30/2014
Task 4 – Fill sorting, handling	8/1/2014	9/30/2014
Task 5 – Stream channel excavation	8/1/2014	9/30/2014
Task 6 – In-stream habitat improvements	8/1/2014	9/30/2014
Task 7 – Wetlands Creation	8/1/2014	9/30/2014
Task 8 – Soil amendment	8/1/2014	9/30/2014
Task 9 – Willow Planting	6/2/2014	6/2/2015
Task 10 – Shrub, grass and tree planting/ transplanting	6/2/2014	6/2/2015
Task 11 - Reporting, monitoring, photography, and slide show production	6/2/2014	6/2/2015

NTP = Notice to Proceed

PAYMENT

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Figure 1: Conceptual design for Phase 2 stream restoration work at Tenmile Creek.

Tenmile Creek restoration project (Phase 1)

Selected images showing conditions before and after construction

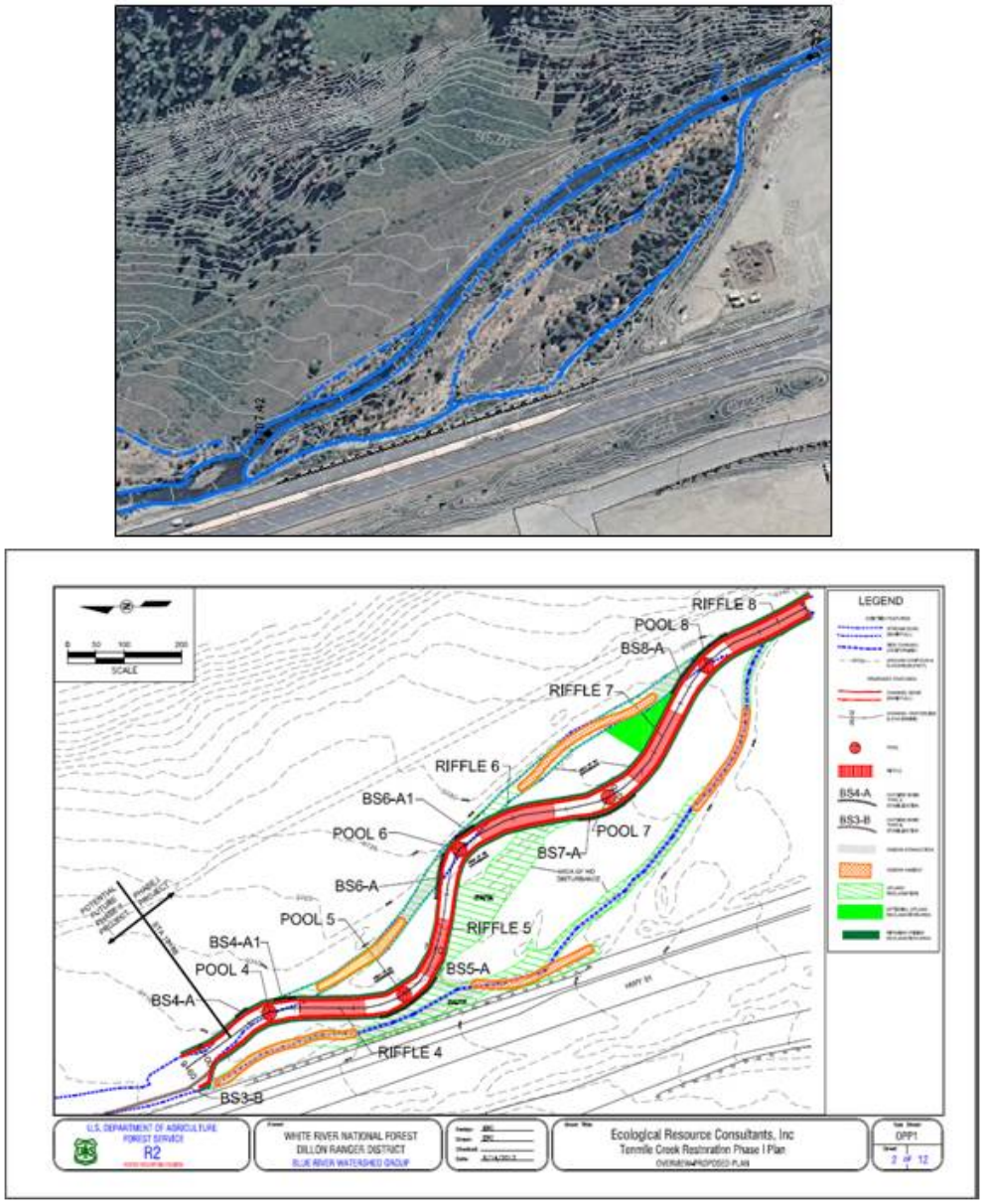

Figure 1: Tenmile Creek; ortho-photo overview of restoration area (above) and site plan for restoration work (below).

Figure 2: Tenmile Creek; Riffle 5 before construction (above) and after construction. Note soil amendment on far side of Tenmile Creek. This picture is before seeding and shrub planting planned for spring of 2014.

Figure 3: Tenmile Creek; Pool 5 before construction (above) and after construction (below). This picture is before seeding and shrub planting planned for spring of 2014.

Figure 4: Tenmile Creek; Pool 6 during construction (above) and after water was turned in to the new channel (below). This picture is before seeding and shrub planting planned for spring of 2014.

Figure 5: Tenmile Creek; Pool 5 as seen from State Highway 91 before construction (above) and after construction (below). This picture is before seeding and shrub planting planned for spring of 2014.

Figure 6: Tenmile Creek; Pool 5 panorama showing soil amendment and oxbow connection. Note a small amount of water flowing into oxbow feature at bottom left. This picture is before seeding and shrub planting planned for spring of 2014.

Figure 7: Tenmile Creek; Riffle 8 and pool 8 after construction. This picture is before seeding and shrub planting planned for spring of 2014.

Figure 8: Tenmile Creek; Fisheries technician releasing a trout rescued from the old channel shortly after turning water into the new channel. Note that the turbidity in the water is the temporary result of turning water in to the new channel. Pictured location is pool 5. This picture is before seeding and shrub planting planned for spring of 2014.