Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
March 16-17, 2016
Agenda Item 14(o)

Applicant & Fiscal Agent:	Lake Fork Valley Conservancy
Water Activity Name:	Lake Fork of the Gunnison River Enhancement Project
Water Activity Purpose:	Nonconsumptive
County:	Gunnison
Drainage Basin:	Gunnison
Water Source:	Lake Fork of the Gunnison River
Amount Requested/Source of Funds:	$23,295 Gunnison Basin Account $209,653 Statewide Account $232,948 Total Grant Request
Matching Funds:	Basin Account Match ($23,295) = 10% of total grant request (meets 5% min); Applicant / 3rd Party Match ($367,522) = 158% of total grant request with pending funds; 66% without pending funds (meets 25% min); Basin Account & Applicant Match ($390,817) = 168% of total grant request with pending funds; 76% of total grant request without pending funds (meets 25% min) (refer to *Funding Summary/Matching Funds* section)

Note: Application identifies an incorrect total project cost of $733,545 with land acquisition and $499,045 without land acquisition. Actual total is $600,470 with land acquisition and $376,674 without land acquisition.

Staff Recommendation:

Staff recommends approval of up to $23,295 from the Gunnison Account; and $209,653 from the Statewide Account to help fund the project titled: Lake Fork of the Gunnison River Enhancement Project.

Water Activity Summary: The Lake Fork Valley Conservancy began a planning process in 2009 to restore over 7,500 linear feet of the Lake Fork Gunnison River in Lake City. Phase I improvements were completed in October 2014. This work included 3,300 linear feet at a cost of $500,000. Phase II covers 3,400 linear feet. Major project components include in-channel improvements, re-vegetation of riparian areas, installation of interpretive river trail system, and acquisition of properties and easements to create an open space river park. River channel and re-vegetation efforts will enhance aquatic and riparian habitats, stabilize banks, improve hydraulic function, and improve recreational experiences. Acquisition of properties for an open space river park will help preserve key riparian communities that are considered relatively rare, protect the floodway, and increase public access.

Specific objectives include increasing fish habitat quality to result in a 50% increase in trout biomass, improve hydraulic function to maintain existing base flood elevations, facilitate the transport of sediment to maintain flood capacity, stabilize banks to protect property, and improve recreational access and safety.

Discussion: This project is a Tier 1 Identified Project and Process (IPP) in Table 18 Proposed Project List) of the Gunnison BIP. It also aligns with Chapters 6.6 (Environmental and Recreational Projects and Methods) and 7.1 (Watershed Health and Management) of the Colorado Water Plan. The project has the potential to improve ecological and flood resilience in the Lake City reach of the Lake Fork of the Gunnison River.

Issues/Additional Needs:

- The applicant should provide staff with a detailed monitoring plan that describes vegetative monitoring methodologies.

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

Tier 1-3 Evaluation Criteria:
This project has undergone review and evaluation and staff has determined that this request satisfies the Evaluation Criteria. Further analysis of the project, and how the project will meet Tiered Evaluation Criteria, is provided by the applicant in the WSRA Application.

Funding Summary/Matching Funds:

Funding Sources	**Cash**	**In-kind**	**Total**
CWCB WSRP (confirmed)	$19,950	$0	$19,950
Upper Gunnison Water Conservancy District (confirmed)	$12,500	$0	$12,500
DWP FIF (confirmed)	$33,000	$0	$33,000
Lake Fork Valley Conservancy (confirmed)	$43,695	$0	$43,695
Upper Gunnison Water Conservancy District (pending)	$47,500	$0	$47,500
American Rivers (pending)	$23,300	$0	$23,300
EPA Five Star (pending)	$37,377	$0	$37,377
Gates Family Foundation (pending)	$105,000	$0	$105,000
Trail Volunteers	$0	$3,500	$3,500
Town of Lake City	$0	$4,200	$4,200
Silver River	$0	$37,500	$37,500
Subtotal matching	$322,322	$45,200	$367,522
WSRA Gunnison Basin Account	$23,295	n/a	$23,295
WSRA Statewide Account	$209,653	n/a	$209,653
Total Project Costs	**$555,270**	**$45,200**	**$604,470**

CWCB Project Manager: Chris Sturm

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 Gunnison Basin Roundtable
501 Palmer Street
Delta, CO 81416

February 9, 2016

Mr. Craig Godbout
Water Supply Management Section
COLORADO WATER CONSERVATION BOARD
1313 Sherman St., Room 718
Denver, CO 80203

Re: WSRA Grant Request: Lake Fork Valley Conservancy – Lake Fork of the Gunnison River Enhancement Project

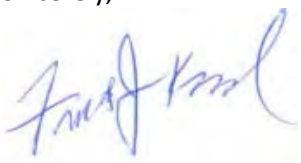
Dear Mr. Godbout:

This letter is presented to advise you that the grant application submitted by the Lake Fork Valley Conservancy for $31,373 from Basin Account funds and $282,361 in Statewide Account funds from the Water Supply Reserve Account for the Lake Fork of the Gunnison River Enhancement project was reviewed by the Gunnison Basin Roundtable and its Project Screening Committee and was approved by a unanimous vote of the Gunnison Basin Roundtable during our meeting on February 1, 2016.

This water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes. The requirements/language from the statute is provided in Part 3 of the Criteria and Guidelines.

This activity will address municipal needs by protecting a critical flood plain area, restoring the area to a functioning riparian zone and floodway. The activity will designate the area as an open space river park, increase public access, provide flood protection for a state highway embankment, and improve recreational uses for residents and visitors.

Sincerely,



Frank J. Kugel
Vice Chair

cc: Hugh Sanburg (e-mail)
Tom Alvey (e-mail)

Town of Lake City

P. O. Box 544
230 North Bluff Street
Lake City, Colorado 81235
970 • 944-2333

December 28, 2015

Gunnison Basin Rountable
Chairperson: Hugh Sanburg
Colorado Water Conservation Board
1313 Sherman St., Rm 718 Denver, CO. 80203

Dear Mr. Sanburg,

On behalf of the Board of Trustees of the Town of Lake City, I wish to express our strong support for the Lake Fork Valley Conservancy (LFVC) to apply for Phase II project implementation grants for the Lake Fork of the Gunnison River Enhancement Project. We were partners during Phase I of the project and are very pleased with the outcomes, which improved both the quality of the river and expanded recreational opportunities for our residents and visitors alike. The Town and LFVC developed the newly constructed terrace at the confluence of the Lake Fork and Henson Creek into a highly visited recreational area that has significantly enhanced the aesthetic quality and usability of the Lake Fork Memorial Park.

We are committed to the following roles in the project:

1. Provide permission to work on all Town streets and alleys and other properties that intersect the project river area.
2. Provide sites for interpretive river panels along the public trail system through Town.
3. Provide in-kind support for equipment time for construction and revegetation, and interpretive panel installation.
4. Work with the LFVC to develop a long term maintenance plan for restoration structures and recreation sites.

We see great value in a project that both improves our Town's natural resources and also increases public recreational opportunities. We hope that with financial assistance we can achieve the goals set forth through a collaborative and supportive public process.

Sincerely,

Bruce Vierheller

Bruce Vierheller
Mayor, Town of Lake City

COLORADO WATER CONSERVATION BOARD

WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

Today's Date: 12/28/2015

Lake Fork of the Gunnison River Enhancement Project

Name of Water Activity/Project

Lake Fork Valley Conservancy

Name of Applicant

Gunnison Basin

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

Amount from Statewide Account: $209,653

Amount from Basin Account(s): $23,295

Total WSRA Funds Requested: $232,948

FEIN: 84-1487921

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. In addition, the applicant should also refer to the Supplemental Scoring Matrix applied to Evaluation Criteria Tiers 1-3 for Statewide Account requests.

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

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

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

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

1.	Applicant Name(s):	**Lake Fork Valley Conservancy**		
	Mailing address:	PO Box 123 Lake City, CO 81235		
	FEIN #:	84-1487921		
	Primary Contact:	Camille Richard	Position/Title:	Executive Director
	Email:	c.richard@lfvc.org		
	Phone Numbers:	Cell: 970-209-5509	Office:	970-209-5238
	Alternate Contact:		Position/Title:	
	Email:			
	Phone Numbers:	Cell:	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 Lake Fork Valley Conservancy is a non-profit 501(c)3 organization with a mission to facilitate long term environmental and economic sustainability in the headwaters of the Colorado River Basin, focusing on the Lake Fork of the Gunnison and Cebolla Creek valleys. We support and implement collaborative actions that foster land conservation, ecosystem health, and resilient communities. In its 15 year history, LFVC and its partners have successfully implemented a number of restoration and conservation initiatives, including remediation of nine abandoned mine sites, protection of 156 acres of wetlands at Lake San Cristobal, and completion of Phase I of this river project. Total income over the life of the organization exceeds $2.4 million. Previously the Lake Fork Watershed Stakeholders, LFVC became a fully functioning 501(c)3 non-profit corporation in 2010 and has had direct fiscal oversight of over $500,000 in grants and donations out of the above total. This includes project and fiscal oversight of Phase I construction for the River Project, primarily funded by the CWCB Water Supply Reserve Account. The organization has an effective Board of Directors with sound fiscal policies in place and is fully insured.

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

N/A

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 affecting this project.

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.

This project addresses municipal needs by protecting a critical flood plain area adjacent to the sewage treatment facility. LFVC is working to acquire this area and restore it to create a functioning riparian zone and floodway and designate it as an open space river park, which will also serve to increase public access and offer high quality recreation for residents and visitors.

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)
3400	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**)
5	Area of Restored or Preserved Habitat (acres)
50%	Other -- Explain: Percentage increase in trout biomass

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

Latitude: 38.025532 Longitude: -107.314362

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.

Over the past century, the Lake Fork of the Gunnison and Henson Creek in Lake City, CO, have been significantly modified by channelization, heavy metals, and failure of upstream tailings dams. These changes have led to steep, eroding banks, declining trout populations, and a shallow, braided channel. The Lake Fork Valley Conservancy (LFVC) began a planning process in 2009 to restore over 7,500 linear feet of river through Town. LFVC, in partnership with the Town of Lake City, completed Phase I improvements on lower Henson Creek and at the confluence with the Lake Fork in October 2014, using funds from Colorado Water Conservation Board, Upper Gunnison River Water Conservancy District, Colorado Parks and Wildlife, and local donations. This work covered 3,300 linear feet of river with a combined investment of $449,320 for both planning and implementation.

The goal of the Lake Fork of the Gunnison River Enhancement Project is to enhance and protect the ecological health and recreational quality of the Lake Fork of the Gunnison and its main tributary, Henson Creek, in the vicinity of Lake City.

Project objectives are to:
1) Increase fisheries habitat and riparian quality;
2) Improve river hydraulics;
3) Improve bank stability to protect private and public riverfront assets; and,
4) Provide quality recreational experiences via improved fishing and boating opportunities, safer access to its banks, educational opportunities, and reduction in trespass.

Phase II of the River Project covers 3,400 linear feet of the Lake Fork from Lake City Area Medical Center downstream past the Town sewage treatment facility. Major project components include in-channel improvements and revegetation, installation of an interpretive river trail system with public/private signage, and acquisition of properties and easements to create an open space river park.

River channel improvements and revegetation will enhance aquatic and riparian habitats, stabilize banks, improve hydraulics, and improve recreational experiences for anglers and boaters. The interpretive river trail system will help to increase knowledge and appreciation of the river's rich cultural and natural history and reduce trespass. Acquisition of properties for an open space river park will help preserve key riparian communities that are considered relatively rare, protect an important floodway through Town, and increase the amount of river available to the public.

Total project cost is $600.470. LFVC is requesting $232,948 from CWCB WSRA. LFVC has confirmed cash and in-kind funding of $154,345 and pending grants totaling $213,177.

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]

[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

The project is not anticipated to impact any existing 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 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.

This application was submitted to the Gunnison Basin Roundtable on January 1, 2016 for consideration at their February meeting. The Roundtable participants provided input as attached.

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.

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

Several matching funds have been procured and are pending for this project (see detailed budget in Statement of Work). Our matching funds will cover revegetation work, interpretive river trail system, and acquisition of land and easements for an open space river park, activities that complement the river channel construction work. We have confirmed cash and in-kind match of $154,345 and pending grants totaling $213,177, or 62% of total project cost ($600,470). If land acquisition costs are removed (see budget summary table), our cost match equals 36% of total project cost ($363,220) of which 19% is already confirmed funding (Table 1). This amount does not include Gunnison Basin Roundtable, which would contribute

---

or in any manner amend the existing water rights adjudication system. The General Assembly affirms the state constitution's recognition of water rights as a private usufructuary property right, and this article is not intended to restrict the ability of the holder of a water right to use or to dispose of that water right in any manner permitted under Colorado law. (2) The General Assembly affirms the protections for contractual and property rights recognized by the contract and takings protections under the state constitution and related statutes. This article shall not be implemented in any way that would diminish, impair, or cause injury to any property or contractual right created by intergovernmental agreements, contracts, stipulations among parties to water cases, terms and conditions in water decrees, or any other similar document related to the allocation or use of water. This article shall not be construed to supersede, abrogate, or cause injury to vested water rights or decreed conditional water rights. The General Assembly affirms that this article does not impair, limit, or otherwise affect the rights of persons or entities to enter into agreements, contracts, or memoranda of understanding with other persons or entities relating to the appropriation, movement, or use of water under other provisions of law.

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

10% of total WSRA funds ($23,295). Table 1 shows match percentages looking at total project costs with and without land acquisition.

Even if we are unable to procure the pending grants listed in the budget, we will still be able to complete restoration work for the bulk of the stream segment, prioritizing the highly degraded north end that has sustained significant damage from flooding in recent years (Figure 4).

Table 1. Confirmed and Pending Match Sources – Percentage of total Project Cost

SOURCE	With land acquisition		Without land acquisition	
	Amount	*Percentage*	*Amount*	*Percentage*
STATEWIDE WSRA	$209,653	35%	$209,653	58%
GUNNISON BASIN WSRA	$23,295	4%	$23,295	6%
TOTAL CONFIRMED CASH MATCH	$109,145	18%	$61,895	17%
TOTAL PENDING CASH MATCH	$213,177	35%	$74,131	17%
TOTAL IN_KIND	$45,200	8%	$7,700	2%
TOTAL PROJECT COST	$733,545	100%	$499,045	100%

Match sources are the following:

1) LFVC received a grant from the CWCB Watershed Restoration Program of $19,950 to complete the engineered design for 4250 linear feet of river through town. The LFVC matched this amount with $13,500. The design report will be completed in early 2016. In addition, LFVC will cover costs for permitting of $500. Prior to this grant, CWCB has invested $384,060 in Phase I of this project.
2) The LFVC has raised over $43,000 through their "Build a Trout a Home" fundraising initiative.
3) Upper Gunnison River Water Conservancy District has provided $12,500 toward land appraisals, river construction and interpretive trail design. LFVC will be submitting a proposal to UGRWCD in February to help cover property acquisition costs, approximately $50,000.
4) LFVC submitted a proposal to American Rivers to cover revegetation costs, or $23,400. We will know outcome by end of January 2016.
5) LFVC will be submitting a proposal to EPA Urban Waters/Five Star Restoration Program to help cover river channel construction, for a total of $37,377.
6) The Town of Lake City will provide equipment and labor toward revegetation and trails work estimated at $4,200.
7) The Hinsdale County Trails Commission will provide 175 hours of labor toward construction of 1500 feet of river trail at the newly created open space park. This group maintains all trail systems throughout Lake City and up Henson Creek.
8) LFVC has received confirmation of a CPW Fishing is Fun grant in the amount of $33,000 to help partially cover property acquisition costs. Final contracting will be completed this coming spring.
9) Gates Family Foundation has given the green light to submit a proposal to cover remaining property acquisition costs. The proposal will be submitted in September with a decision in December, 2016.
10) The Gunnison Basin Roundtable will commit 10% of the total WSRA grant amount, or $23,295.

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. The

applicant should also refer to the Supplemental Scoring Matrix applied to Evaluation Criteria Tiers 1-3 for Statewide Account requests. WSRA grant requests for projects that may qualify for loans through the CWCB loan program will receive preference in the Statewide Evaluation Criteria if the grant request is part of a CWCB loan/WSRA grant package. For these CWCB loan/WSRA grant packages, the applicant must have a CWCB loan/WSRA grant ratio of 1:1 or higher. Preference will be given to those with a higher loan/grant ratio.

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

a. 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).
b. 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

a. The water activity helps sustain agriculture & open space, or meets environmental or recreational needs.
b. 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.
c. The water activity assists in the recovery of threatened and endangered wildlife species or Colorado State species of concern.
d. The water activity provides a high level of benefit to Colorado in relationship to the amount of funds requested.
e. The water activity is complimentary to or assists in the implementation of other CWCB programs.

Environmental and Recreational Values

The project will significantly increase the environmental and recreational amenities for this stretch of river. Fisheries habitat will be improved resulting in greater fish biomass, public access to the river will be safer and of higher quality, boating opportunities will be expanded, and appreciation for our river assets will be promoted. In addition, the physical improvements of the river will complement the chemical remediation occuring in the upper reaches of the watershed by repairing a degraded stretch of river impacted by tailings impoundment breaks and channelization.

The river through the entire project area is a significant segment in the Gunnison Basin's Environmental and Recreational Non-Consumptive Needs Assessment. Henson Creek has been identified as a significant stream segment in the, primarily for environmental criteria (Table 2). Henson is listed on the EPA's 303 (d) list of impaired streams for Cd and Zn (sculpin) and is recommended for environmental remediation, which is underway through cleanup of abandoned mines in the upper watershed. Cleanup of several sites in upper Henson have been completed as of summer of 2015 with significant reduction in metal loading. To complement this work, Phase I river enhancement along lower Henson Creek and the confluence with the Lake Fork was completed in 2013-2014 and successfully addressed the physical impacts from tailings impoundment breaks in the 1960's and 1970's. Attachment 1 is our inspection report from Phase I.

Table 2. Summary of Non-consumptive Needs Assessment for Henson and the Lower Lake Fork.

	Henson Creek	Lake Fork of the Gunnison (in Town)
Attribute 2 - Aquatic-Dependent State Endangered, Threatened, and Species of Concern (including conservation agreement species)		
c. Flannelmouth Sucker	YES	YES
d. Bluehead Sucker		YES
Attribute 3 - Rare Aquatic-Dependent Plants and Significant Riparian/Wetland Plant Communities		
b. Significant Riparian/Wetland Plant Communities (B2 ranked Blue Spruce-Poplar-Alder)	YES	YES
Attribute 4 - Special Value Waters (CWCB instream flow waters, WQCD Outstanding Waters, Wilderness Area Waters, Eligible/Suitable Wild and Scenic)		
b. CWCB Instream Flows	YES	YES
Attribute 5 - Whitewater and Flat-water Boating		
a. Kayaking	YES	
b. Rafting and Kayaking		YES
Attribute 6 - Riparian/Wetland Wildlife Viewing and Waterfowl Hunting		
a. Wildlife Viewing and Waterfowl Hunting		YES
Attribute 7 - Significant Cold and Warm-Water Fishing		
b. River and Stream Fishing		YES

In addition, the Lake Fork, which includes the segment through Lake City, is listed in the needs assessment as significant for recreational purposes and is recommended for stream flow augmentation for fisheries (Table 2). While not actually augmenting flows to the Lake Fork as recommended in the needs assessment, the project will complement CWCB's in-stream flow right by improving the physical habitat for fisheries. Construction of in-channel structures in the Lake Fork will enhance pool development along the river, improving the ability for fish to overwinter and survive drought conditions. This combined with revegetation improves survivability of fish at current in-stream flow rights levels. Enhancements completed during Phase I of the proposed segments and subsequent phases of restoration on the Lake Fork downstream will also help replace up to two miles of Gold Metal waters lost with the construction of Blue Mesa Reservoir. Both rivers also offer good boating opportunities.

The Lake Fork Valley Conservancy has prioritized both chemical and physical improvements to Henson and the Lake Fork as part of its ten-year stewardship plan. Funding from CWCB will make a significant difference for facilitating an important resource management action as identified in the plan. This action, combined with LFVC's work to improved water quality in this impaired stream through abandoned mine cleanup, effectively addresses both the chemical and physical impacts to this river, thereby improving fisheries habitat.

The LFVC has also identified the importance of designating river front lands as conservation areas. Acquisition of properties for an open space river park will help reestablish key riparian communities that are considered relatively rare, protect an important floodway through Town, and increase the amount of river available to the public. The restoration of this area will enhance habitat and create a mid-town corridor for wildlife that travel through town from surrounding forests.

Economic and social importance of the Lake Fork River

The project provides a high benefit to Colorado in relation to the amount of funds requested. Lake City is one of three signature tourist towns connected by the Alpine Loop, the core of the BLM's Alpine Triangle Recreational Management Zone, a 186,000 acre area that draws over 300,000 tourists per year. Consequently, a significant portion of the income of local residents is derived from tourism and services to seasonal home owners. The project reach lies along both the Alpine Loop and Silver Thread Byways. It is also upstream of the Curecanti National Recreation Area. Improving the recreational value of the river through Town only enhances the visitor experience, translating into improved economic conditions for local residents and state coffers.

The interpretive river trail system will help to increase knowledge and appreciation of the river's rich cultural and natural history (See Figure 2). The target audiences are local residents and their children and the numerous seasonal visitors who are repeat visitors to Lake City. Youth and children will be actively introduced to the river trail through formal education programs through the school, the local child care center and the County Public Health Department that runs a youth program in the summer. These programs provide outreach activities to local kids whose parents work and are often unable to participate in many recreational activities.

To date, river users have not really understood where the public-private interface exists and trespass inevitably results. LFVC will clearly demarcate private and public land boundaries along the river using signage. This effort will help to reduce potential conflicts and improve support of local land owners for current and future restoration efforts.

The area proposed for open space protection is the first place people see when they arrive from the north, and is currently an eyesore due to past disturbances. Improving this area creates a highly aesthetic public space that visitors experience as they travel along the Byways, and facilitates a more favorable impression of Lake City as a gateway to the Alpine Loop.

Project participants and beneficiaries

The project arose from five years of feasibility and planning work with the local community and other stakeholders to define project objectives and activities. Key partners and beneficiaries are highlighted here.

Table 3. Project participants and beneficiaries

Organization/Entity	**Roles/Benefits**
Lake Fork Valley Conservancy (LFVC)	LFVC serves as the fiscal agent and coordinating entity for the project to ensure timely completion of project milestones. LFVC benefits by having gained valuable project management and transaction experience and achieves a major milestone in their 10 year strategic plan.
Town of Lake City (TLC)	TLC gains public access that will facilitate the continuance of their public trail system to link to BLM's Waterdog Trails. Subsequent river channel improvements reduce flood risk in this area. Public access and improved river in turn attracts more visitors to the area and improves the local economy.
Town and County residents and visitors	Locals and visitors alike will enjoy a more aesthetically pleasing river front, safer access along its banks, a trail system that offers environmental education as well as exercise, and better fishing and boating experiences.
River front land owners	Private land owners along this stretch will benefit from public funding to help with the high costs of river repair in this area. They will also have a more aesthetically pleasing river front with better fishing.
Colorado Water Conservation Board	CWCB has invested over $400,000 in planning and implementation for this river project since 2009 and will benefit from seeing this project through to completion with Phase II funding.
Gunnison Basin Round Table	GBRT has invested $28,906 in this project for Phase I. The work addresses their priorities as identified in their non-consumptive needs assessment.
UGRWCD	UGRWCD has annually supported the LFVC since 2008 and invested over $48,000 in the river project.
CO Division of Parks and Wildlife	DPW has been involved in planning for this project since 2009. Their Fishing is Fun program provided $25,000 toward the confluence construction and revegetation in Phase I and will provide $33,000 toward access easements. CPW will hold all public access easements.
Lake City Community School	The LFVC has been engaged with the school for environmental education since 2008. The school will benefit by having a living outdoor laboratory for their students.
Hinsdale County Trails Commission	The Trails Commission will assist LFVC with trail construction and long-term maintenance. They will oversee future riverfront trail construction along this stretch post construction and acquisition.

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 Lake Fork of the Gunnison watershed (HUC 14020002, stream segment COGUUG29) is located in southwestern Colorado, draining 432 square miles on the northeast side of the San Juan Mountains, and is wholly contained within Hinsdale and Gunnison Counties. The Lake Fork is a subunit of the 7,930 square mile Upper Gunnison Watershed (HUC 14020001). The Lake Fork's principal tributary, Henson Creek (stream segment COGUUG30), joins at Lake City and creates a third order stream from this confluence to the river's terminus at Blue Mesa Reservoir, approximately 30 miles downstream. Stream flows in the watershed are seasonally high in May and June due to snowmelt runoff. Flows on the Lake Fork near its terminus range from less than 50 CFS in the winter months to a historic recorded high of 2,700 CFS in May 1984. Stream geomorphological types in the watershed range from A1 (Rosgen classification) in the headwater tributaries to C4 on the lower Lake Fork, with sections of braiding stream channel (D4) in relatively wide valleys. Stream stability ranges from high in entrenched reaches with a stable riparian community to low in reaches with high bed load deposition and/or active stream bank erosion. The majority of Henson Creek and the Lake Fork in the vicinity of Lake City have been channelized, but downstream much remains undisturbed as water flows through relatively inaccessible shallow canyons in the lower watershed.

The Lake City Town Ditch has a decree for an absolute water right of 5.0 cfs with an adjudication date of May 9, 1973, later negotiated to run from 5/1 to 10/1. This equates to a total of 1,517 ac ft/yr. According to the Water Division engineer, water in the ditch was first appropriated for beneficial use on June 8, 1872, but this date is highly suspect due to the fact that Lake City and Hinsdale County were not even settled until 1874. This water right is the single largest right owned by the Town of Lake City and can serve as a source of augmentation water under certain circumstances. Prior to Phase I construction, the ditch was not fully utilized due to restrictions at the head-gate at lower flows. This has been rectified with in-channel improvements and ditch cleaning during Phase I (see Monitoring report in Attachment 1).

The CWCB has an in-stream flow right on the Lake Fork from its confluence with Henson Creek downstream to Blue Mesa Reservoir. The appropriation date is 3/17/1980 and the right ranges from 25 cfs from 10/1 to 4/30 for the winter, while the summer flow is 45 cfs from 5/1 to 9/30. The Town of Lake City's ditch right is senior to this one, but even so, it is not expected that full use of the ditch will adversely impact the CWCB in-stream right except maybe during extreme drought conditions. Channel and riparian improvements will in fact improve fisheries habitat, and thereby complement the existing in-stream flow right. The Town of Lake City is committed to controlling ditch intake during drought conditions so as not to adversely affect in-stream flow rights.

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

A detailed topographic and cross section survey has been performed of the active channels of the Lake Fork and Henson Creek project reaches to identify bankfull channel geometry, slope, thalweg, pools, riffles, bank height and elevations and scour and deposition features. This topographic data is being used for channel enhancement design. In addition, LIDAR 2' contour and aerial photo data was captured to assist with 100-year floodplain modeling and mapping.

The geographic setting of the project reaches in the volcanic geology of the San Juan Mountains creates conditions of high suspended and bedload sediment that substantially affect the character and behavior of the streams as well as their responses to impacts including historic channelization and proposed enhancements. In order to understand these sediment conditions and sediment transport study was performed over two runoff seasons during high flow conditions. Both suspended sediment and bedload materials were captured along with stream discharge in order to determine the size and quantity of materials that are transported through the river system at various discharges. This information has been incorporated into the channel design helping to understand why certain river features have developed and in identifying the size of materials that must be transported through the system.

Bankfull and 100-year flows have been modeled for the project reaches using HEC-RAS. The current FEMA floodplain maps were created in the 1980's and there has been substantial development within the floodplain through Lake City as well as encroachment along the river. The modeling effort is assisting with enhancement design by identifying the impacts of the proposed features on flood levels as well as identifying the hydraulics of the system that affect sediment transport.

Riparian surveys of Henson Creek and the Lake Fork were completed by the Colorado Natural Heritage Program in 2008 (Figure 7). The riparian corridor of lower Henson is identified as a site of high biodiversity significance, chosen for an excellent (A-ranked) occurrence of the globally vulnerable (G3/S3) thinleaf alder - Drummond's willow tall shrubland (*Alnus incana - Salix drummondiana* shrubland) and a good (B-ranked) occurrence of the globally vulnerable (G3/S3) narrowleaf cottonwood - blue spruce / thinleaf alder riparian woodland (*Populus angustifolia - Picea pungens / Alnus incana* woodland).

Baseline fish shock and macro-invertebrate data have also been collected prior to construction.

Several community outreach events have been held in town to educate residents about the project. One on one meetings with all land owners along the river have been held. We also completed a public survey and received over 100 responses (25% response rate). Overall opinion and support of the project is high, especially in regard to protecting banks and improving fisheries.

A NEPA was completed in June 2013 for the project as part of the USACE permitting process. BLM staff committed their time to this over the winter, using data already collected by the LFVC.

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 10 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.

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

Signature of Applicant: 

Print Applicant's Name: Camille Richard, Executive Director, Lake Fork Valley Conservancy

Project Title: Lake Fork of the Gunnison River Enhancement Project

Date: 12/28/2015

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

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

Exhibit A

Statement of Work
Date: December 28, 2015

WATER ACTIVITY NAME: **Lake Fork of the Gunnison River Enhancement Project**

GRANT RECIPIENT: **Lake Fork Valley Conservancy**

FUNDING SOURCE: **Statewide Water Supply Reserve Account**

INTRODUCTION AND BACKGROUND

Over the past century, the Lake Fork of the Gunnison and Henson Creek in Lake City, CO, have been significantly modified by channelization, heavy metals, and failure of upstream tailings dams. The Lake Fork Valley Conservancy (LFVC) began a planning process in 2009 to restore over 7,500 linear feet of river through Town. LFVC, in partnership with the Town of Lake City, completed Phase I improvements on lower Henson Creek and at the confluence with the Lake Fork in October 2014. This work covered 3,300 linear feet of river with a combined investment of over $500,000.

Phase II of the River Project covers 3,400 linear feet of the Lake Fork from the Lake City Area Medical Center downstream through town past the sewage treatment facility. Major project components include in-channel improvements and revegetation, installation of an interpretive river trail system with public/private signage, and acquisition of properties and easements to create an open space river park. River channel improvements and revegetation will enhance aquatic and riparian habitats, stabilize banks, improve hydraulics, and improve recreational experiences for anglers and boaters. The interpretive river trail system will help to increase knowledge and appreciation of the river's rich cultural and natural history and reduce trespass. Acquisition of properties for an open space river park will help preserve key riparian communities that are considered relatively rare, protect an important floodway through Town, and increase the amount of river available to the public.

OBJECTIVES

The overall goal of the Lake Fork River Enhancement Project is to improve the ecological health and recreational quality of Henson Creek and the Lake Fork River in the vicinity of Lake City.

Specific objectives are the following:

1) Increase fisheries habitat quality resulting in a 50% increase in brown and rainbow trout biomass;
2) Improve the hydraulics of the river to maintain existing or even reduce base flood elevation and facilitate effective bed load movement;
3) Improve bank stability to protect private and public assets along the river;
4) Provide quality recreational experiences along the river via increased public access, improved fishing and boating opportunities, and safer access to the river.

PROJECT TASKS

TASK 1 – Project Design and Permitting

Description of Task

A 60% engineered design plan for river channel and riparian improvement has been completed for Phase II of the river project. Detailed design drawings are attached to this proposal and costs are contained in the attached budgets. The attached design sheets cover the entire Phase II area from the confluence of Henson and the Lake Fork, but the segment covered under this funding request is shown in Sheets 5-9. A final design report will be completed in early 2016 and will include hydraulic analysis and floodplain modeling that conforms to both FEMA's Guides and Specs for Flood Hazard Mapping and the CWCB Rules and Regulations for Regulatory Floodplains in Colorado. This will be completed by our design engineer, Brett Jordan from HydroGeo Designs, out of Buena Vista, CO. Design details, construction drawings and construction work be combined into a design-build program for Phase II with our contractor, WEBCO, Inc. HydroGeo Designs sub-contracts with WEBCO to form a highly effective Design Build team, which successfully completed Phase I for the LFVC.

Method/Procedure

1) In-channel Engineered Design (60% Completion), to include:
    a. Hydraulic Analysis modeling
    b. Design Report and Drawings
2) Hinsdale County Flood plain and US Army Corps of Engineers permit applications submitted.

Deliverables

Deliverables will include submittal of two hard copies of report and drawings as well as an electronic copy, with maps delivered in AutoCAD format. Report includes details cost estimates for construction. Approved permits will be submitted with first semi-annual report.

TASK 2 - In-Channel Construction

Description of Task

In-channel construction will occur along 3,400 linear feet of the Lake Fork from the Lake City Area Medical Center through town to below the sewage treatment facility north of town (Figure 1 and Sheets 5-9 in Attachment 2 – Design Drawings). Construction work will be completed by our existing contractor, WEBCO, Inc., with construction oversight by Brett Jordan, HydroGeo Designs.

Method/Procedure

1) Mobilize equipment and labor.
2) Procure all materials for construction.

3) Oversee construction of channel structures.

Deliverables

Deliverables are construction of 3 cross vanes, 21 vanes, 3 J hooks, 10 boulder habitat clusters, and 226 linear feet of floodplain sills. In addition, 4,010 cubic yards of river will be reshaped and the old levees downstream of 8½ Bridge will be removed (see Figures 3-5). In addition, any shrubs and trees disturbed during reshaping will be transplanted to newly created floodplains (see Task 3).

TASK 3 – Revegetation

Description of Task

Areas previously denuded and those impacted from construction will be revegetated with native willows, poplars, alder and spruce, to bring back the natural riparian community that previously existed here and that is of high biodiversity significance in the state. Where appropriate we will work with the land owners to manage vegetation so that it provides bank stabilization without compromising their river front views. In areas where live vegetation must be moved to reshape the channel and banks, these materials will be transplanted to newly constructed flood plain. This was done with great success in Phase I with 100% survivability of transplants. In addition to transplanting, we had very high natural recruitment as a result of sedimentation from two successive years of flooding in 2014 and 2015 (see inspection report in Attachment 1). This precluded the need to do supplemental revegetation in the Phase I area, other than some landscaping work at the confluence terrace.

A grant was submitted to American Rivers in December 2015 to fund the cost of additional revegetation along the highly denuded area below 8½ Street Bridge (in oval area of Figure 1). This grant will cover costs for materials and labor to be provided by Wildlands Restoration Volunteers. This area will require intensive revegetation work beyond transplants and natural recruitment due to the significant amount of flood plain reconstruction that will take place here. If this grant does not come through, we will continue to search for funding to cover this vital project component.

Method/Procedure

1) Wildland Restoration Volunteers to prepare a revegetation plan.
2) Mobilize Town equipment and volunteer labor.
3) Procure all materials for construction.
4) Oversee revegetation.

Deliverables

Deliverables will be planting of 1000 saplings along the river, 20 large trees planted at the open space park, localized areas seeded and mulched.

TASK 4 – Interpretive River Trail System

Description of Task

1) *Design and install an interpretive trail system along Phase I and Phase II sections of the river.*

LFVC will coordinate the design and implementation of an interpretive trail system along existing and new trails along Henson Creek and the Lake Fork. This system will help to increase knowledge of river systems and appreciation for the asset this river provides the community. LFVC plans to implement an environmental education program with local youth and adults using the interpretive trail, once constructed. Youth and children will be actively introduced to the river trail through formal education programs through the school, the local child care center and the County Public Health Department that runs a youth program in the summer.

LFVC has already completed design of 14 plaques and will install these in the late spring of 2016. In addition, we have completed an accompanying guide that will be published for summer visitors. We will design an additional 6 plaques once completion of new phase of river work is complete.

2) *Install signage that clearly demarcates public and private lands along the river in Town.*

To date, river users have not really understood where the public-private interface exists and trespass inevitably results, especially if recreational use increases with river enhancements. Public access signage will be installed to guide users to public portions of the river. This effort will help to reduce potential conflicts and improve support of local land owners for current and future restoration efforts.

Method/Procedure

1) Install 14 plaques that have already been designed (see Figure 2 for examples)
2) Complete design and install 6 additional plaques
3) Prepare a trails guide for all 20 plaques with public river access map
4) Install 20 public access/private property signs along river

Deliverables

1) 20 interpretive plaques along the river trail
2) Up to 20 private/ public demarcation signs
3) 1000 printed trail guides

TASK 5 – Open Space River Park land and easement acquisition

Of the entire Phase II project area (confluence downstream), the highest priority area is below the 8½ Street Bridge at the north end of town, with private parcels owned by the Main Family, Brad Griffith, and Silver River Estates. In the early 1980's, temporary berms were constructed at the north end of town to divert flood waters from the highway so that the Colorado Department of Transportation could engineer the slope beneath to withstand high flows, completed in the 1990's. High flows from 2011 to

2015 have now eroded much of the berm on the northwest side of the river, threatening private property and creating a highly unstable and braided channel (Figure 4). To date no construction has occurred here and most of the critical properties in the flood plain are currently on the market (approximately 8 acres). This area has great potential for restoration through the removal of the berms, realignment of the channel, and reestablishment of riparian forest and wetland vegetation, as visualized in Figure 5. With public access and ownership, this area will also give residents and tourists greater access to the river, which is currently limited, and protect an important flood zone within the town of Lake City.

Method/Procedure

1) *Complete appraisal of private properties and easements/donations*

LFVC hired Arnie Butler, Conservation Appraiser out of Grand Junction, to complete appraisals for the parcels in this area. Final appraisals are expected in January 2016. He will be providing appraised values for total land purchase, donated land, and easements (Figure 6).

2) *Complete transaction for donation of approximately 1.5 acres of Silver River parcel to the LFVC.*

This step entails initiating a sub-division process with Hinsdale County, which requires a survey. Once the sub-division is complete, the land will be transferred to LFVC, who in turn will restore the area and donate to the Town of Lake City to add to their park system. In addition to the land donation, Silver River will also donate a public access easement approximately 250 linear feet and 25 feet wide along their river. This will allow LFVC, and the Hinsdale County Trails Commission to construct a connector trail linking the system in town to the BLM Waterdog trail.

3) *Purchase of Main parcels*

LFVC will purchase all of Block 3 and 2 lots of Block 13 that belong to the Main family (approximately 3.5 acres). We await final appraisal values before settling on a purchase price. This property will be restored and then eventually turned over to the Town of Lake City to add to their park system.

Deliverables

1. Appraisal reports.
2. Approximately 5 acres of land acquired (title transfer) for open space park.
3. Approximately 250 linear feet of public access easement (25 feet wide) procured along northeastern side of Silver River stream side (Figure 6).

TASK 6 – Post Construction Monitoring

Description of Task

Prior to Phase I construction, LFVC selected seven cross-section locations in the project reach. At each cross section the following was done: 1) identify and monument cross section end points; 2) perform detailed survey of each cross section; 3) perform a pebble count at each cross section; and, 4) establish

photo points at each cross section (upstream, downstream and left and right bank directions. Standard Operating Procedures used for items 1-4 are from CDPHE's Measurable Results Project, also used by CWCB).

After completion of channel construction and revegetation activities, the entire project area (Phase I and Phase 2) will be monitored in late summer and fall of 2018. The above methods will be repeated at the same locations. Also, an assessment of structures will be conducted using CDPHE's Structural Assessment SOP. In addition, sapling survival rate will be assessed via counts, and macro-invertebrate sampling will be conducted using BLM's Utah BugLab protocols (so we can compare to data collected in 2009-2010). These sampling protocols are compatible with Colorado Water Quality Control Division protocols. Macro sampling protocols can be found at http://www.usu.edu/buglab/MonitoringResources/MonitoringProtocols/#item=26

LFVC and the Town will continue to monitor structures annually for three years following completion of the project (summer/fall 2019-21), documenting the condition of treatments and identifying problems that may develop. These monitoring protocols will be incorporated into the Town of Lake City's Master River Recreation Plan. Costs for river maintenance and monitoring will be paid for via the LFVC's annual fundraisers, which is matched by the Town of Lake City (total is a minimum of $2000 annually). Periodic maintenance (average every five years) is planned just below the confluence of the Lake Fork and Henson to remove bed load that will accumulate during years of high flow (bank full or higher). This has been incorporated into the engineered design. In-channel structural maintenance will be dealt with as needed (e.g. after larger flood events).

The most effective way to monitor our progress in outreach is to monitor both quantitative use of the outreach materials (number of brochures taken from access points, and from the Chamber of Commerce), and qualitative satisfaction with the various outreach programs, via interviews with teachers, children, tourists, and partner entities.

Deliverables

1) Pre-survey data analysis and summary was submitted in earlier CWCB project reports.
2) Post-survey data analysis and summary will be submitted with final project report in March 2019. Follow-up post-project monitoring reports will be maintained at the LFVC office and copies sent to CWCB.

TASK 7 - Project oversight and administration

Description of Task

This task involves the coordination of project activities and administration of grants. It includes fulfillment of reporting requirements and efficient and timely financial reports.

Method/Procedure

1) Completion of Project Implementation Plan and contract.
2) Project reports submitted semi-annually and one final project report.

3) Prepare quarterly reimbursement requests (or as needed).

Deliverables

Deliverables include: timely and effective reports and financials, which include five semi-annual reports and one final report (March 2019). Reimbursement requests will be made quarterly, or more frequently during times of high expenditures, if necessary.

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.

Project Budget Summary

Task Description	Total Cost	WSRA	*Confirmed Cash Match*				*Pending Cash Match*				*In-kind Match*		
			CWCB WSRP	UGRWCD	DPW FiF	LFVC	UGRWCD	American Rivers	EPA Five Star	Gates Family Foundation	Trails Volunteers	Town of Lake City	Silver River
							Due 2/28/16	submitted	due 2/2/16	due 4/1/16			
Task 1: Project Design and Permitting													
Design Consultant (HydroGeo Designs)	$33,450	$0	$19,950			$13,500							
Permits	$500	$0				$500							
TOTAL	*$33,950*	$0	*$19,950*			*$14,000*							
Task 2: In-Channel Construction													
HydroGeo Design - Construction Oversite	$30,000	$24,255				$2,745			$3,000				
WEBCO, INC	$218,270	$177,693		$2,250		$16,500			$21,827				
TOTAL	*$248,270*	*$201,948*		*$2,250*		*$19,245*			*$24,827*				
Task 3: Revegetation													
materials	$10,800	$0						$10,800					
Wildland Restoration Volunteers	$10,000	$0						$10,000					
TOTAL	*$20,800*	*$0*						*$20,800*					
Task 4: Interpretive River Trail, signage, new trail construction													
Design Consultant	$1,500	$0							$1,500				
Construction equipment, labor, materials	$13,750	$0				$5,950			$7,800				
in-kind contribution	$7,700	$0									$3,500	$4,200	
TOTAL	*$22,950*	*$0*				*$5,950*			*$9,300*		*$3,500*	*$4,200*	
Task 5: Flood Plain Open Space Acquisition													
Appraisals	$12,000	$0		$10,000		$2,000							
land and easement acquisition	$212,500	$0			$30,000		$45,000			$100,000			$37,500
closing costs and survey	$5,000	$0			$3,000	$2,000							
TOTAL	*$229,500*	*$0*		*$10,000*	*$33,000*	*$4,000*	*$45,000*			*$100,000*			*$37,500*
Task 6: Post construction Monitoring													
HydroGeo Designs	$10,000	$10,000											
LFVC	$3,000	$3,000											
TOTAL	*$13,000*	*$13,000*											
Task 7: Project oversite and administration - contracting, semi-annual reports, Final report, accounting													
LFVC	$32,000	$18,000		$250		$500	$2,500	$2,500	$3,250	$5,000			
TOTAL	*$32,000*	*$18,000*		*$250*		*$500*	*$2,500*	*$2,500*	*$3,250*	*$5,000*			
TOTAL PROJECT COST	**$600,470**	**$232,948**	**$19,950**	**$12,500**	**$33,000**	**$43,695**	**$47,500**	**$23,300**	**$37,377**	**$105,000**	**$3,500**	**$4,200**	**$37,500**
STATEWIDE WSRA	**$209,653**	34.91%											
GUNNISON BASIN WSRA	**$23,295**	3.88%											
TOTAL CONFIRMED CASH MATCH	**$109,145**	18.18%											
TOTAL PENDING CASH MATCH	**$213,177**	35.50%											
TOTAL IN_KIND	**$45,200**	7.53%											
		100.00%											
TOTAL PROJECT COST WITHOUT LAND ACQUISITION	**$363,220**	**$232,948**	**$19,950**	**$2,250**	**$0**	**$39,695**	**$0**	**$23,300**	**$37,377**	**$0**	**$3,500**	**$4,200**	**$0**
STATEWIDE WSRA	**$209,653**	57.72%											
GUNNISON BASIN WSRA	**$23,295**	6.41%											
TOTAL CONFIRMED CASH MATCH	**$61,895**	17.04%											
TOTAL PENDING CASH MATCH	**$60,677**	16.71%											
TOTAL IN_KIND	**$7,700**	2.12%											
		100.00%											

PERSONNEL

	Project Personnel (paid):	LFVC Project Manager	HydroGeo Designs	Trails Design Consultant	Wildland Restoration Volunteers	VISTA volunteer	Administrative Assistance	Total Costs
Task	*Hourly Rate:*	*$50*	*$125*	*$25*	*lump sum*	*$20*	*$15*	
1	Project Design and Permitting	$0	$33,450	$0	$0	$0	$0	$33,450
2	In-Channel Construction	$0	$30,000	$0	$0	$0	$0	$30,000
3	Revegetation	$0	$0	$0	$10,000	$500	$0	$10,500
4	Interpretive River Trail	$0	$0	$1,500	$0	$1,000	$0	$2,500
5	Open Space Acquisition	$0	$0	$0	$0	$0	$0	$0
6	Post Construction Monitoring	$3,000	$10,000	$0	$0	$1,000	$0	$14,000
7	Project oversite and administration	$24,000	$0	$0	$0	$500	$3,000	$27,500
	Total Hours:	*540*	*588*	*60*	*LS*	*150*	*200*	
	TOTAL	**$27,000**	**$73,450**	**$1,500**	**$10,000**	**$3,000**	**$3,000**	**$117,950**

OTHER DIRECT COSTS

Task Description		office support*	mileage	meals for volunteers	permitting fees	rock/gravel/ weed barrier	construction	trees, saplings, seed, mulch	plaques	signs	land and easement appraisals	land purchase	survey and closing costs	TOTAL
# Units:		*lump sum*	*mile*	*lump sum*	*lump sum*	*see table below*	*see table below*	*see table below*	*each*	*each*	*lump sum*	*lump sum*	*lump sum*	
Unit Cost:			*$0.50*			*see table below*	*see table below*	*see table below*	*$500*	*$50*				
Task 1	Project Design and Permitting	$0	$0	$0	$500	$0	$0	$0	$0	$0	$0	$0	$0	**$500**
Task 2	In-Channel Construction	$0	$750	$0	$0	$116,460	$101,810	$0	$0	$0	$0	$0	$0	**$219,020**
Task 3	Revegetation	$0	$0	$250	$0	$0	$0	$10,800	$0	$0	$0	$0	$0	**$11,050**
Task 4	Interpretive River Trail	$1,000	$0	$250	$0	$1,750	$0	$0	$10,000	$1,000	$0	$0	$0	**$14,000**
Task 5	Open Space Acquisition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$12,000	$175,000	$5,000	**$192,000**
Task 6	Post Construction Monitoring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Task 7	Project oversite and administration	$750	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$750**
	TOTAL	**$1,750**	**$750**	**$500**	**$500**	**$118,210**	**$101,810**	**$10,800**	**$10,000**	**$1,000**	**$12,000**	**$175,000**	**$5,000**	**$437,320**

* office support includes copies, map printing, publications, phone, supplies

IN-CHANNEL CONSTRUCTION - 60% DESIGN COST ESTIMATE										
CONSTRUCTION TASK	**UNIT**	**QUANTITY**	**COST/UNIT**	**TOTAL COST ITEM**	**EST ROCK CUYD/EA**	**TOTAL CUYD**	**ROCK COST/EA ($120.00/CUYD)**	**ROCK COST TOTAL**	**LABOR COST/EA**	**LABOR COST TOTAL**
CROSS VANE	EA	3	$ 16,400.00	$ 49,200.00	95	285	$ 11,400.00	$ 34,200.00	$ 5,000.00	$ 15,000.00
J HOOK	EA	3	$ 9,200.00	$ 27,600.00	50	150	$ 6,000.00	$ 18,000.00	$ 3,200.00	$ 9,600.00
BOULDER VANE	EA	21	$ 3,120.00	$ 65,520.00	16	336	$ 1,920.00	$ 40,320.00	$ 1,200.00	$ 25,200.00
BED SILL	LF	226	$ 100.00	$ 22,600.00	0.75	169.50	$ 90.00	$ 20,340.00	$ 10.00	$ 2,260.00
HABITAT CLUSTERS	EA	10	$ 675.00	$ 6,750.00	3	30	$ 360.00	$ 3,600.00	$ 315.00	$ 3,150.00
GRAVEL EXCAVATION/ RESHAPING/TRANSFER/LEVEE REMOVAL - BETTER ACCESS	CUYD	4010	$ 10.00	$ 40,100.00						$ 40,100.00
TRANSPLANTS	LS	1	N/A	$ 2,000.00						$ 2,000.00
MOBILIZATION	LS	1	N/A	$ 2,500.00						$ 2,500.00
MAINTANANCE PHASE I STRUCTURES	HR	10	$ 200.00	$ 2,000.00						$ 2,000.00
TOTAL				**$ 218,270.00**		**970.50**		**$ 116,460.00**		**$ 101,810.00**
				TOTAL OVERALL COST		TOTAL ROCK CUYD		TOTAL ROCK COST		LABOR COST TOTAL

REVEGETATION AND TRAILS CONSTRUCTION				
CONSTRUCTION TASK	**UNIT**	**QUANTITY**	**COST/UNIT**	**TOTAL COST ITEM**
GRAVEL FOR TRAILS	TON	100	$ 10.00	$ 1,000.00
WEED BARRIER TRAILS	LF	1500	$ 0.50	$ 750.00
LARGE TREES	EA	20	$ 250.00	$ 5,000.00
SAPLINGS	EA	1000	$ 2.00	$ 2,000.00
SEED AND MULCH	LS			$ 1,000.00
FENCING	LS			$ 2,800.00
INTERPRETIVE PLAQUES (includes installation)	EA	20	$ 500.00	$ 10,000.00
PRIVATE PROPERTY SIGNAGE (includes installation)	EA	50	$ 20.00	$ 1,000.00
TOTAL				**$ 23,550.00**

In-Kind Contributions (labor, easements, land donation)

		Town Public Works equipment	Trail volunteers	Silver River	TOTAL
	unit cost:	*$140*	*$20*	*appraisal value*	
Task 1	Project Design and Permitting	$0	$0	$0	**$0**
Task 2	In-Channel Construction	$0	$0	$0	**$0**
Task 3	Revegetation	$0	$0	$0	**$0**
Task 4	Interpretive River Trail	$4,200	$3,500	$0	**$7,700**
Task 5	Open Space Acquisition (land donation and easement)	$0	$0	$37,500	**$37,500**
Task 6	Post Construction Monitoring	$0	$0	$0	**$0**
Task 7	Project oversite and administration	$0	$0	$0	**$0**
	TOTAL	**$4,200**	**$3,500**	**$37,500**	**$45,200**

SCHEDULE

TASK DESCRIPTION	TIMEFRAME
Task 1: Project Design and permitting	
a) Completion of 60% engineered design	Sept 2015 – February 2016
b) Flood plain, USACE permits	February – April 2016
Task 2: In channel construction	
a) Mobilize equipment/ materials	Sept 2016
b) in-channel construction	Oct-Nov 2016/spring-fall 2017
Task 3: Revegetation	
a) Design completed by Wildlands Restoration Volunteers	NTP+ 90 days
b) Revegetation	Fall of 2016 and 2017
Task 4: Interpretive River Trail System	
a) Install existing plaques (14 already designed)	NTP + 60 days
b) Install public/private boundary signs c) Complete design of 6 additional plaques	September 2016 – February 2017
d) Install new plaques (6)	June 2017
e) Complete interpretive trail guide	May 2017
f) Construct new trail in open space park area	Summer 2017
Task 5: Open Space River Park land and easement acquisition	
g) Appraisals	September 2015 – January 2016
h) Survey of Silver River subdivision	February 2016
i) Complete sub-division process	February – April 2017
j) Complete land purchase	Summer 2016
k) Complete easement transaction	Summer 2016
Task 6: Pre-and Post-Construction Monitoring	
a) post construction channel/pebble count surveys	Aug-Sept 2018
b) post-construction vegetation and macroinvertebrate surveys	Aug-Sept 2018
c) post-project structure assessment	Sept 2018
Task 7: Project oversight and administration	
a) project coordination	Throughout Project
b) reimbursement requests	15 days after end of each quarter or as needed
c) semi-annual reports	Every 6 months. First report due 6 months from NTP
d) final report	Mar 31, 2019

Figure 1. Comprehensive River Enhancement Project Area. Phase II is in the white portion of the figure. The area for the open space river park is in the oval. Construction work to be completed under this funding request is downstream (north) of the arrow, covering 3,400 linear feet of river.

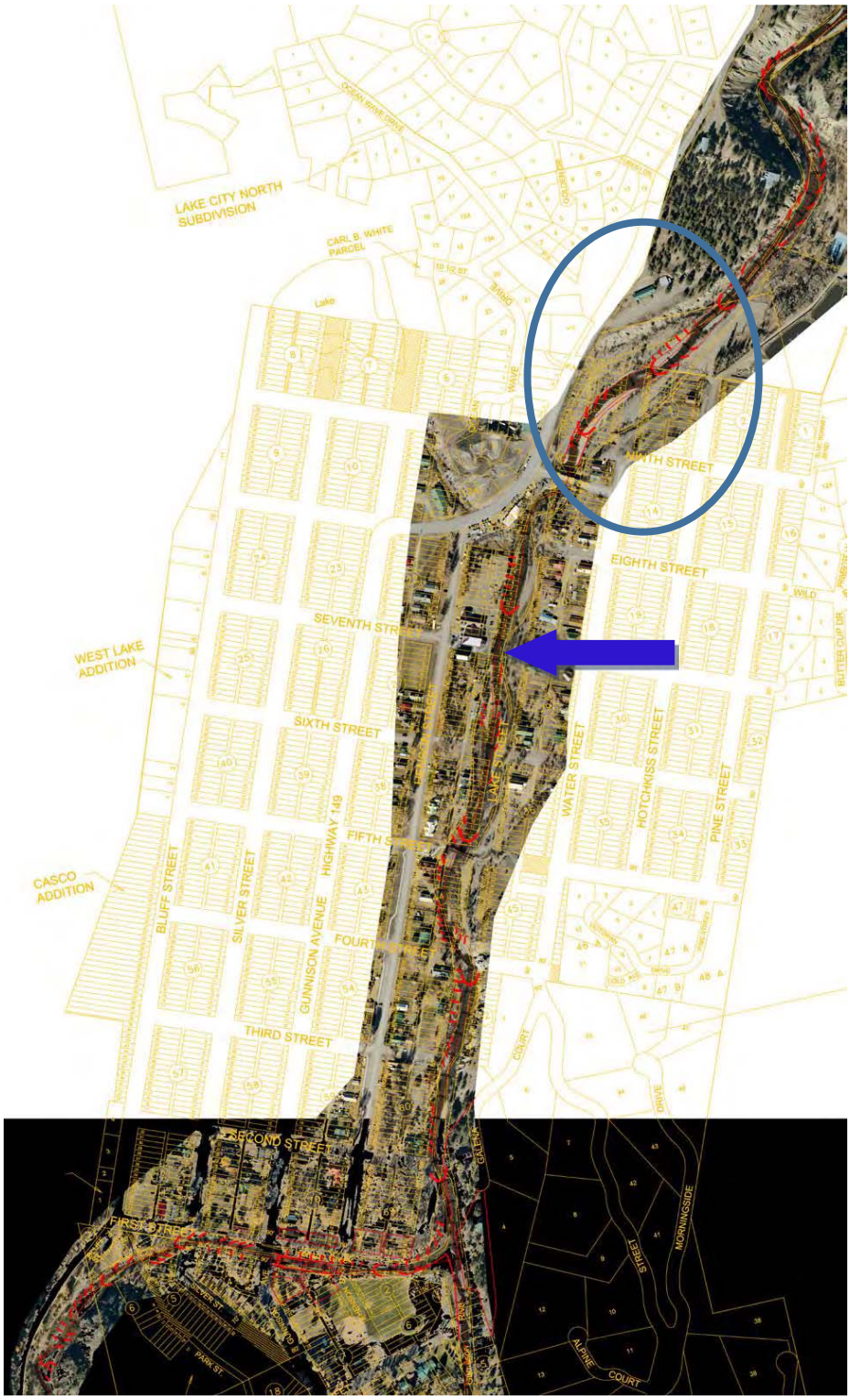
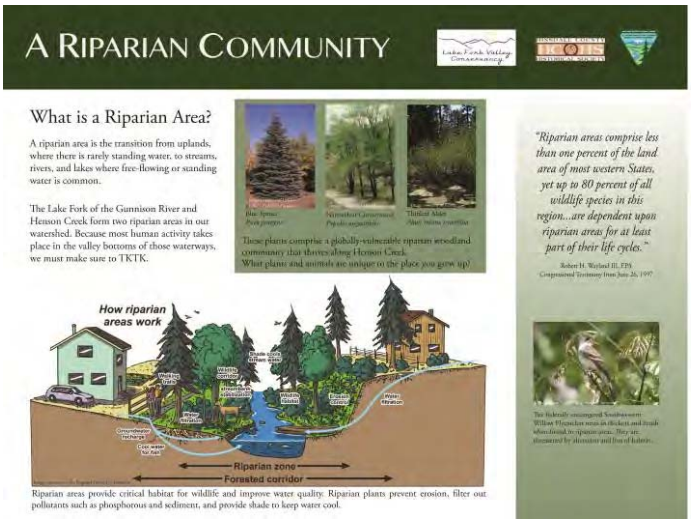


Figure 2. Examples of completed interpretive plaque designs. 14 will be installed in 2016.



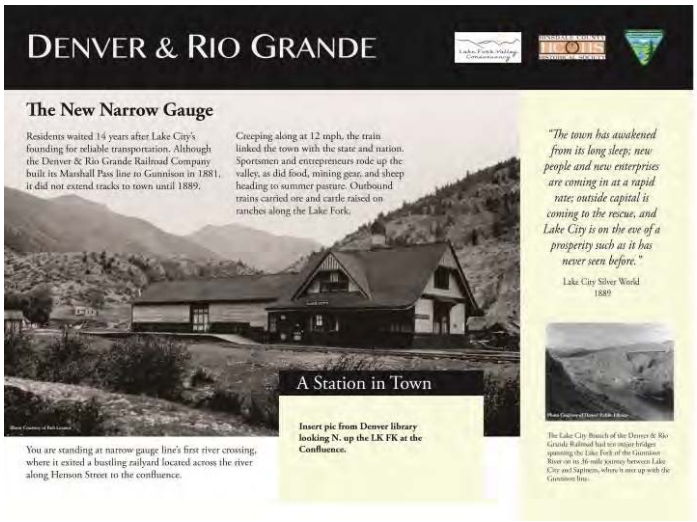


Figure 3. Channelization along the river through placement of gravel berms in the 1980's.

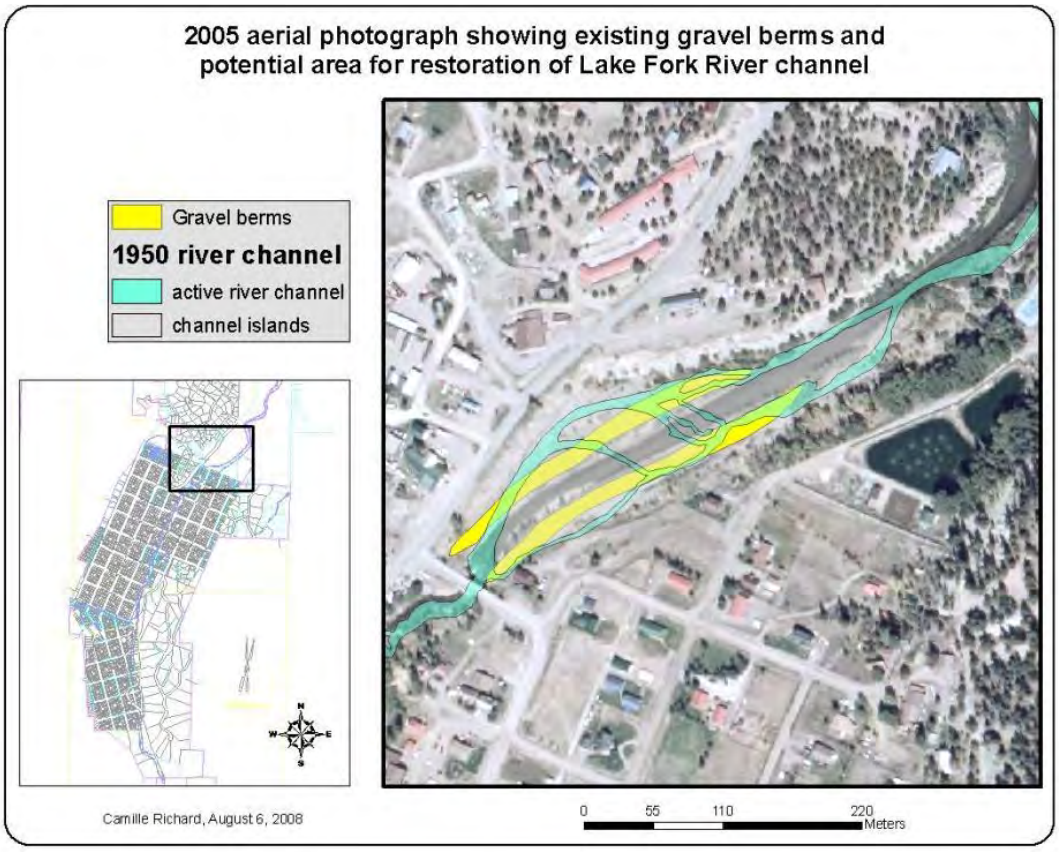
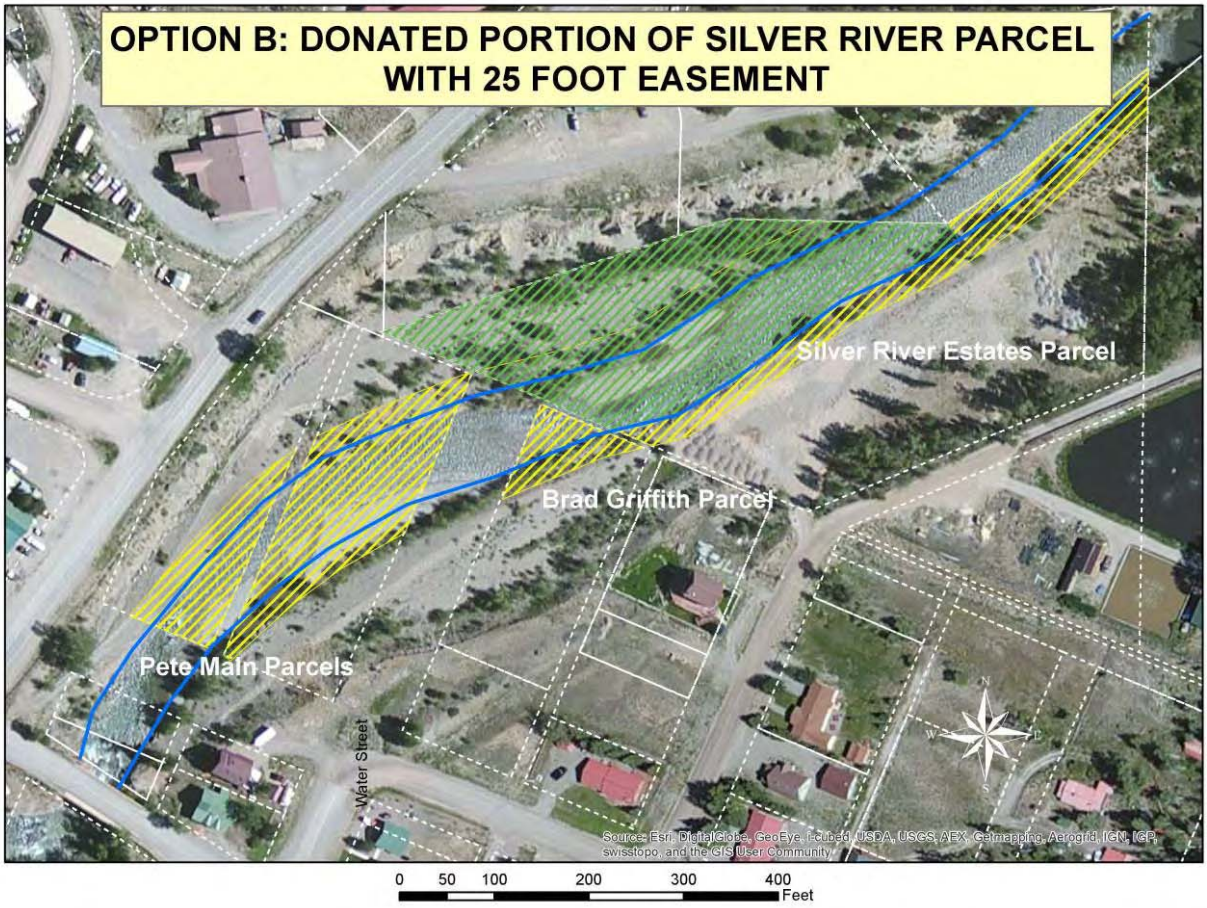


Figure 4. Photos of area pre-flood (2009) and post-flood (2014).

Figure 5. A graphical rendition of improvements on the Lake Fork below the 8 ½ Street Bridge in Lake City with trail and revegetation within the proposed open space river park.

Figure 6. Green area shows donated land offered by Silver River Estates. They will also be donating a public access easement along the eastern side of the river. LFVC plans to purchase the parcels owned by Pete Main.



LIST OF ATTACHMENTS:

1) Ditch flow data and HydroGeo Designs Inspection Report
2) Design Drawings for in-channel improvements
3) Letters of Support