

Water Supply Reserve Fund – Grant and Loan Program
Water Activity Summary Sheet
September 18-20, 2018
Agenda Item 12(m)

Applicant & Grantee: Lefthand Watershed Oversight Group

Water Activity Name: Fish Passage and Education on Left Hand Creek

Water Activity Purpose: Environmental/Recreational/Agricultural & Education and Outreach

County: Boulder

Drainage Basin: South Platte

Water Source: Left Hand Creek

Amount Requested: \$25,000 South Platte Basin Account
\$25,000 Statewide Account
\$50,000 Total request

Matching Funds: Applicant & 3rd Party Match (cash) = \$49,165
• 196% of the Statewide Account request (meets 10% min)
Basin Account Match = \$25,000
• 100% of the Statewide Account request (meets 10% min)
Total Match (Applicant/3rd Party & Basin Account) = \$74,165
• 296% of the Statewide Account request (meets 50% min)

Staff Recommendation:

Staff recommends approval of up to \$25,000 from the South Platte Basin Account; and \$25,000 from the Statewide Account to help fund the project titled: Fish Passage and Education on Left Hand Creek.
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Water Activity Summary: WSRF grant funds, if approved, will assist the Lefthand Watershed Oversight Group to hire a consultant team to implement a fish passage feasibility study and to support Lefthand Watershed Oversight Group staff in leading the stakeholder outreach and engagement portion of the study, as well as the education initiative. This multi-objective project will address protection/enhancement of the environment and water-based recreation through the fish passage study while also promoting education and outreach about stream connectivity through the education initiative.

This project aims to support education, knowledge sharing, and dialogue about the context of the 28-mile-long Left Hand Creek Watershed as a “working river” in order to better understand, explain, and compare potential solutions for improving fish passage and stream connectivity by:

1. Exploring on-the-ground solutions for restoring stream connectivity in Left Hand Creek to support fish passage and appreciation of the creek while meeting the goals and needs of water owners, and engaging key stakeholders as needed; and
2. Developing an education initiative focused on educating our community about why diversions are needed and the realities and complexities of living on a working river using information learned from (1) above, input from key stakeholders, compelling illustrative educational materials, and digital and social media platforms.

Discussion: This effort will assist the South Platte Basin Roundtable achieve their goals to: Protect and enhance environmental and recreational attributes (S.5.5); Fully recognize the importance of, and support the development of, environmental and recreational projects and multipurpose projects that support water availability for ecologically and economically important habitats and focus areas (1.9.7); Facilitate effective South Platte communications and outreach programs that complement the state's overall program (S.5.9) as outlined in the South Platte Basin Implementation Plan, while also assisting Colorado achieve the Watershed Health, Environment, and Recreation goals (Chapter 10, Section F), and Education, Outreach, and Innovation goals (Chapter 10, Section H) as highlighted in Colorado's Water Plan.

Issues/Additional Needs: No issues or additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components: General Eligibility, Entity Eligibility, Water Activity Eligibility, and Eligibility Based on Match Requirements.

Evaluation Criteria: This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to Basin Roundtable Chair's Recommendation Letter and the WSRF Grant Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>	<u>Status</u>
Trout Unlimited	\$10,000	\$0	\$10,000	Pending
Healthy Rivers Fund Grant	\$13,000	\$0	\$13,000	Pending
St. Vrain Left Hand Water Conservancy District	\$5,000	\$0	\$5,000	Secured
DOLA CDBG Disaster Recovery	\$16,165	\$0	\$16,165	Secured
Landowner Donations	\$5,000	\$0	\$5,000	Secured
Sub-total	\$49,165	\$0	\$49,165	
WSRF South Platte Basin Account	\$25,000	n/a	\$25,000	Secured
WSRF Statewide Account	\$25,000	n/a	\$25,000	
Total	\$99,165	\$0	\$99,165	

CWCB Project Manager: Craig Godbout

South Platte Basin Roundtable
Garrett Varra, Chair
July 11, 2018

Craig Godbout
Water Supply Planning Section
Colorado Water Conservation Board
1313 Sherman St., Room 718
Denver, CO 80203

**RE: Approval Recommendation for the Lefthand Watershed Oversight Group Water Supply Reserve Fund Grant
Application: Fish Passage and Education on Left Hand Creek**

Craig,

I am writing to recommend approval of the project, "Fish Passage and Education on Left Hand Creek" submitted by Lefthand Watershed Oversight Group for the Water Supply Reserve Statewide Fund Grant. The South Platte Basin Roundtable recommended funding for this project at the July 10th, 2018 meeting. A quorum of members was present at the meeting. The funding request is for \$25,000 from the basin fund and \$25,000 from the statewide fund. This project is well aligned with South Platte Basin Roundtable Basin Implementation Plan and Colorado Water Plan priorities related to collaboration, multi-benefit approaches, education, and environment.

The primary goal of this project is to support education, knowledge sharing, and dialogue about the context of Left Hand Creek as a "working river" to better understand, explain, and compare potential solutions for improving fish passage and stream connectivity in Left Hand Creek Watershed. Lefthand Watershed Oversight Group aims to help make Left Hand Creek a healthier working river by: (1) completing a fish passage study that addresses the goals and needs of water owners; and (2) developing an education initiative focused on explaining why diversions are needed and the context of Left Hand Creek as working river.

This multi-beneficial approach addresses protection and enhancement of the environment through the fish passage study while also promoting education and outreach about stream connectivity through the education initiative. The results of the feasibility study, combined with a better informed constituency through the education initiative, are key for achieving the level of negotiation and compromise needed to improve health in Left Hand Creek while protecting water rights.

We feel that Lefthand Watershed Oversight Group has done a good job bringing the appropriate stakeholders to the table to deliver a successful project that is well aligned with the goals of the South Platte Basin Roundtable.

We believe that this project should be funded, and the Roundtable looks forward to working with Lefthand Watershed Oversight Group to build resiliency into the Left Hand Creek Watershed.

Sincerely,



Garrett Varra



Last Update: August 3, 2017

Colorado Water Conservation Board

Water Supply Reserve Fund Grant Application

Instructions

All WSRF grant applications shall conform to the current [2016 WSRF Criteria and Guidelines](#).

To receive funding from the WSRF, a proposed water activity must be approved by a Roundtable(s) **AND** the Colorado Water Conservation Board (CWCB). The process for Roundtable consideration and recommendation is outlined in the 2016 WSRF Criteria and Guidelines. The CWCB meets bimonthly according to the schedule on page 2 of this application.

If you have questions, please contact the current CWCB staff Roundtable liaison:

Arkansas

Ben Wade
ben.wade@state.co.us
303-866-3441 x3238

Gunnison | North Platte | South Platte | Yampa/White

Craig Godbout
craig.godbout@state.co.us
303-866-3441 x3210

Colorado | Metro | Rio Grande | Southwest

Megan Holcomb
megan.holcomb@state.co.us
303-866-3441 x3222

WSRF Submittal Checklist (Required)

X	I acknowledge this request for funding was recommended for CWCB approval by the sponsoring Basin Roundtable(s).
X	I acknowledge I have read and understand the 2016 WSRF Criteria and Guidelines .
X	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract . ⁽¹⁾
Exhibit A	
X	Statement of Work ⁽²⁾ (Word – see Exhibit A Template)
X	Budget & Schedule ⁽²⁾ (Excel Spreadsheet – see Exhibit A Template)
X	Letters of Matching and/or Pending 3 rd Party Commitments ⁽²⁾
Exhibit C	
	Map ⁽²⁾
	Photos/Drawings/Reports
X	Letters of Support
	Certificate of Insurance ⁽³⁾ (General, Auto, & Workers' Comp.)
Contracting Documents	
	Certificate of Good Standing ⁽³⁾
	W-9 ⁽³⁾
	Independent Contractor Form ⁽³⁾ (If applicant is individual, not company/organization)
	Electronic Funds Transfer (ETF) Form ⁽³⁾

(1) Click "Grant Agreements". For reference only/do not fill out or submit/required for contracting

(2) Required with application if applicable.

(3) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.

Last Update: August 3, 2017

Schedule		
CWCB Meeting	Application Submittal Dates	Type of Request
January	December 1	Basin Account; BIP
March	February 1	Basin/Statewide Account; BIP
May	April 1	Basin Account; BIP
July	June 1	Basin Account; BIP
September	August 1	Basin/Statewide Account; BIP
November	October 1	Basin Account/BIP

Desired Timeline	
Desired CWCB Hearing Month:	September
Desired Notice to Proceed Date:	Immediately after award and contracting is complete

Water Activity Summary		
Name of Applicant	Lefthand Watershed Oversight Group	
Name of Water Activity	Fish Passage and Education on Left Hand Creek	
Approving Roundtable(s)	Basin Account Request(s) ⁽¹⁾	
South Platte Basin Roundtable	\$25,000	
Basin Account Request Subtotal	\$ 25,000	
Statewide Account Request ⁽¹⁾	\$ 25,000	
Total WSRF Funds Requested (Basin & Statewide)	\$ 50,000	
Total Project Costs	\$ 99,165.00	

(1) Please indicate the amount recommended for approval by the Roundtable(s)

Last Update: August 3, 2017

Grantee and Applicant Information	
Name of Grantee(s)	Lefthand Watershed Oversight Group
Mailing Address	P.O. Box 1074, Niwot, CO 80544-0210
FEIN	20-1248361
Grantee's Organization Contact ⁽¹⁾	Jessie Olson
Position/Title	Executive Director
Email	jolson@lwog.org
Phone	(303) 746-7937
Grant Management Contact ⁽²⁾	Jessie Olson
Position/Title	Executive Director
Email	jolson@lwog.org
Phone	(303) 746-7937
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	

(1) Person with signatory authority

(2) Person responsible for creating reimbursement invoices (Invoice for Services) and corresponding with CWCB staff.

Description of Grantee
Provide a brief description of the grantee's organization (100 words or less).
<p>Since 2005, Lefthand Watershed Oversight Group (LWOG), a nonprofit organization based in Boulder County, has been working to restore and protect Left Hand Creek Watershed for future generations. LWOG was founded as a watershed protection group to implement local mine clean-up activities. Since 2016, LWOG secured over ten million dollars to implement twenty flood recovery projects. These projects were designed to reduce flood risks, stabilize streambeds and banks, restore the ecological health of the watershed, and improve human health and safety. Today, LWOG strives to carry our mission under four programs: Watershed Science, Stewardship, Restoration, and Outreach and Education.</p>



Last Update: August 3, 2017

Type of Eligible Entity (check one)	
	Public (Government): municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. 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, any organization that is not part of the government
	Covered Entity: as defined in Section 37-60-126 Colorado Revised Statutes

Type of Water Activity (check one)	
X	Study
X	Implementation

Category of Water Activity (check all that apply)		
X	Nonconsumptive (Environmental)	
X	Nonconsumptive (Recreational)	
X	Agricultural	
	Municipal/Industrial	
	Needs Assessment	
X	Education & Outreach	
	Other	Explain:

Location of Water Activity	
Please provide the general county and coordinates of the proposed activity below in decimal degrees . The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Countries	Boulder County
Latitude	40° 7' 47" N
Longitude	105° 16' 52" W

Last Update: August 3, 2017

Water Activity Overview

Please provide a summary of the proposed water activity (200 words or less). Include a description of the activity and what the WSRF funding will be used for specifically (e.g. studies, permitting, construction). Provide a description of the water supply source to be utilized or the water body affected by the activity. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, area of habitat improvements. If this project addresses multiple purposes or spans multiple basins, please explain. The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, and Schedule.

This project aims to support education, knowledge sharing, and dialogue about the context of the 28-mile-long Left Hand Creek Watershed as a “working river” in order to better understand, explain, and compare potential solutions for improving fish passage and stream connectivity by:

1. Exploring on-the-ground solutions for restoring stream connectivity in Left Hand Creek to support fish passage and appreciation of the creek while meeting the goals and needs of water owners, and engaging key stakeholders as needed; and
2. Developing an education initiative focused on educating our community about why diversions are needed and the realities and complexities of living on a working river using information learned from (1) above, input from key stakeholders, compelling illustrative educational materials, and digital and social media platforms.

CWCB funding will be used to hire a consultant team to implement a fish passage feasibility study and to support Lefthand Watershed Oversight Group staff in leading the stakeholder outreach and engagement portion of the study, as well as the education initiative. This multi-objective project will address protection/enhancement of the environment and water-based recreation through the fish passage study while also promoting education and outreach about stream connectivity through the education initiative.

Last Update: August 3, 2017

Measurable Results		
To catalog measurable results achieved with WSRF funds please provide any of the following values.		
		New Storage Created (acre-feet)
		New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
		Existing Storage Preserved or Enhanced (acre-feet)
Potential to be determined by Task 1.		Length of Stream Restored or Protected (linear feet)
		Efficiency Savings (indicate acre-feet/year OR dollars/year)
Potential to be determined by Task 1.		Area of Restored or Preserved Habitat (acres)
		Length of Pipe/Canal Built or Improved
X	Other	Explain: Measureable results will be cataloged by the number of realistic conceptual alternatives for fish passage implementation projects we identify. Monitoring throughout the project to quantify results will include surveys of stakeholder and community response to conceptual alternatives; development and wide distribution of educational materials measured by numbers of handouts developed and number of users reached, and surveys of stakeholder and community response to ditch tour and workshop.

Water Activity Justification
<p>Provide a description of how this water activity supports the goals of Colorado's Water Plan, the most recent Statewide Water Supply Initiative, and the respective Roundtable Basin Implementation Plan and Education Action Plan ⁽¹⁾. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).</p> <p>For applications that include a request for funds from the Statewide Account, the proposed water activity shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan criteria for state support (CWP, Section 9.4, pp. 9-43 to 9-44;) (Also listed pp. 4-5 in 2016 WSRF Criteria and Guidelines).</p>

Last Update: August 3, 2017

Water Activity Justification

This project supports goals within Colorado's Water Plan, Statewide Water Supply Initiative, South Platte Roundtable Basin Implementation Plan, and South Platte Roundtable Basin Education Action Plan, related to protecting and enhancing the environment and water-based recreation and promoting education and outreach that emphasizes Water Plan priorities. Below we summarize goals achieved in each plan.

Colorado's Water Plan

1. *Section 6.2 (Measurable Outcomes for South Platte, pg. 6-50). Fully recognize the importance of, and support the development of, environmental and recreational projects and multipurpose projects that support water availability for ecologically and economically important habitats and focus areas. **Measurable outcome 2:** Protect and enhance economic values to local and statewide economies derived from environmental and recreational water uses, such as fishing... **Measurable outcome 3:** Protect, Maintain, and Improve Conditions of Streams, Lakes, Wetlands, and Riparian Areas to Promote Self-Sustaining Fisheries and Functional Riparian and Wetland Habitat...*

Our project meets these goals by leveraging our relationships with water rights owners, private landowners, and key stakeholders to fill information gaps about fish passage feasibility (and subsequently environmental and recreational benefits) on a watershed which is primarily privately owned and therefore difficult to access. See response under SPBRT for more details.

2. *Section 6.6 (pg. 6-157) Goals: "Support development of multipurpose projects and methods that benefit environmental and recreational water needs as well as water needs for communities or agriculture." "Understand, protect, maintain, and improve conditions of streams, lakes, wetlands, and riparian areas to promote self-sustaining fisheries and functional riparian and wetland habitat to promote long-term sustainability and resiliency." "Maintain watershed health by protecting or restoring watersheds that could affect critical infrastructure and/or environmental and recreational areas."*

Left Hand Creek serves as the primary source of drinking water for 20,000 customers of the Left Hand Water District, as well as a source of irrigation water for farmers and ranchers. Our multipurpose project will meet this goal by exploring on-the-ground solutions for restoring stream connectivity in Left Hand Creek to support fish passage and appreciation of the creek while meeting the goals and needs of water owners.

3. *Section 7.1 (pg. 7-10) **Actions:** "Coordinate statewide watershed-coalition and partnership plans, projects, monitoring, and adaptive management strategies."*

Our project will directly contribute to these actions, by providing key information to support St. Vrain and Left Hand Water Conservancy District's \$300,000 stream management planning effort Management Plan which is partially funded by the Colorado Water Conservation Board and the South Platte Basin Roundtable. Lastly, our watershed coalition led approach is well aligned with this goal.



Last Update: August 3, 2017

Water Activity Justification

4. Section 9.5 (pg. 9-53) Goals: *“Colorado’s Water Plan provides technical and financial assistance for high-quality, balanced, and grassroots water education and outreach efforts that inform Coloradans about the issues so that they may engage in determining Colorado’s water future.”*

Our project will involve developing an education initiative focused on increasing the awareness of the limitations of Colorado’s water supply, and educating our community about why diversions are needed and the realities and complexities of living on a working river using information learned from exploring on-the-ground solutions for restoring stream connectivity, input from key stakeholders, compelling illustrative educational materials, and digital and social media platforms. Lastly, our watershed coalition led approach for water education and outreach is well aligned with the grassroots water education and outreach efforts described in this goal.

Statewide Water Supply Initiative

Section 8 Recommendation 1, 3, 5, 6, and 8 (pg. 8-1):

1. *“Actively encourage projects to address multiple purposes, including municipal, industrial, environmental, recreational, agricultural, risk management, and compact compliance needs.”*
2. *“Continue to lead the dialogue and foster cooperation among water interests in every basin and between basins for the purpose of implementing solutions to Colorado’s water supply challenges.”*
3. *“Support meeting Colorado’s nonconsumptive water needs by working with Colorado’s water stakeholders to help: Promote recovery and sustainability of endangered, threatened, and imperiled species in a manner that allows the state to fully use its compact and decreed entitlements; protect or enhance environmental and recreational values that benefit local and statewide economies; encourage multi-purpose projects that benefit both water users and native species; pursue projects and other strategies, including CWCB’s Instream Flow Program, that benefit consumptive water users, the riparian and aquatic environments, and stream recreation; and recognize the importance of environmental and recreational benefits derived from agricultural water use, storage reservoirs, and other consumptive water uses and water management;*
4. *“Evaluate multi-purpose projects or packages of projects to develop new water supplies for use on the West Slope and the Front Range.”*

This project will address multiple purposes via a fish passage study and education initiative including environmental, recreational, agricultural, and education needs. Through both the fish passage study and education initiative this project will foster cooperation among water owners and stakeholders about water supply challenges for fish passage and stream connectivity, leading to recommendations for solutions that will benefit environmental, recreational, and agricultural aspects of our watershed. We will assess existing conditions and explore opportunities for improvement, including which structures are impassible, which reaches have flow issues, and what types of potential design or operational changes may be possible and practical, as well as water owners’ perspectives for each potential option. This information will be used to guide our education initiative and explain the



Last Update: August 3, 2017

Water Activity Justification

realities and opportunities associated with a working river.

South Platte Basin Implementation Plan (SPBRT)

Below we specify which SPBRT goals and WSRF Funding Category (either Category 4 or 5 is noted) our project will achieve.

1. (Category 4) *S.5.5 Protect and enhance environmental and recreation attributes.*
Recommendation: Fill existing data gaps regarding protection of environmental and recreational attributes...
2. (Category 4) *1.9.7 Fully recognize the importance of, and support the development of, environmental and recreational projects and multipurpose projects that support water availability for ecologically and economically important habitats and focus areas.* **Measurable outcome 2:** Protect and enhance economic values to local and statewide economies derived from environmental and recreational water uses, such as fishing... **Measurable outcome 3:** Protect, Maintain, and Improve Conditions of Streams, Lakes, Wetlands, and Riparian Areas to Promote Self-Sustaining Fisheries and Functional Riparian and Wetland Habitat...
3. (Category 4) *4.5.2 Cooperative and Multi-Purpose Projects: There are various other types of projects that can assist in protecting or enhancing environmental and recreational attributes...*
Examples of cooperative or multi-purpose projects include: Diversion structure modification to continue operations benefiting the consumptive use, while maintaining flows or connectivity for environmental and recreational attributes near the diversion structure.
4. (Category 4) *4.6.3 Environmental and Recreational Impacts and Benefits from Multi-Purpose Project: Multipurpose projects can address consumptive and environmental and/or recreational needs ... Cooperative multi-purpose projects can help to maintain and enhance environmental and recreational attributes.*
5. (Category 4) *5.5.5 Protect and Enhance Environmental and Recreation Attribute: Environmental and recreational specific projects can be implemented to enhance and protect attributes to contribute to healthier rivers and increase economic benefits...*
6. (Category 5) *5.5.9 Facilitate effective South Platte communications and outreach programs that complement the state's overall program...* **Recommendations:** Design and implement an intensive education, participation and outreach program designed to generate a lasting baseline of public awareness and support.
7. (Category 5) *4.1.3 Suggested Activities: 2015 and Beyond. This section outlines the South Platte Basin's joint strategic communications plan.* **Key elements include:** leverage existing basin resources, complement existing state efforts, as well as develop and maintain basin specific outreach tools and approaches.
8. (Category 5) *5.5.9 Facilitate South Platte Communications and Outreach Programs...*
Implementation and success of future projects will require public support.

Our project meets these goals by (1) leveraging our relationships with water rights owners, private landowners, and key stakeholders to fill information gaps about fish passage feasibility (and subsequently environmental and recreational benefits) on a watershed which is primarily privately owned and therefore difficult to access; and (2) using an education-based approach that includes the use of compelling visuals and digital and social media to get our community excited and engaged about understanding complex water supply challenges and potential solutions. This project is multi-

Last Update: August 3, 2017

Water Activity Justification

objective because it will address protection/enhancement of the environment and water-based recreation through the fish passage study while also promoting education and outreach about stream connectivity through the education initiative. The education initiative will foster a more engaged and informed community better prepared to face the realities and embrace the opportunities involved in living, working, or recreating on a healthy working river. The fish passage feasibility study will provide information about existing conditions and explore opportunities for improvement, including which structures are impassible, which reaches have flow issues, and what types of potential design or operational changes may be possible and practical based on the needs and goals of water owners. Together, these efforts will help provide information and opportunity for collaboration to guide the future of Left Hand Creek as a healthy working river. This project will also leverage basin resources by providing key information to support St. Vrain and Left Hand Water Conservancy District's \$300,000 stream management planning effort Management Plan which is partially funded by the Colorado Water Conservation Board and the South Platte Basin Roundtable. Lastly, this project will build a strong foundation of support for future implementation through our engagement with water owners and education initiative. See response below (Education Action Plan) regarding approaches for building strong public support.

South Platte Basin Implementation Education Action Plan

1. *Overall goals of the Education and Outreach Committee of the South Platte Basin Roundtable include a focus on educating and engaging the public, decision-makers and elected officials on the scope and purpose of the BIP and the State Water Plan, with an overarching theme of focusing on solutions-oriented water supply planning.*

This project will help achieve this goal by use of compelling visuals and digital and social media to get our community excited and engaged about understanding the complex water supply challenges and potential solutions. Our approach of combining illustrative and visually compelling materials with relevant information sharing platforms will ensure the highest chance of success in reaching and engaging and educating diverse audiences about a complicated subject matter. In this way, the education initiative will foster a more engaged and informed community better prepared to face the realities and embrace the opportunities involved in living, working, or recreating on a healthy working river.

(1) Access Basin Implementation Plans or Education Action Plans from Basin drop down menu.



Last Update: August 3, 2017

Matching Requirements: Basin Account Requests	
Basin (only) Account grant requests require a 25% match (cash and/or in-kind) from the Applicant or 3 rd party and shall be accompanied by a letter of commitment as described in the 2016 WSRF Criteria and Guidelines (submitted on the contributing entity's letterhead). Attach additional sheet if necessary.	
Contributing Entity	Amount and Form of Match (note cash or in-kind)
Total Match	
If you requested a Waiver to the Basin Account matching requirements, indicate the percentage you wish waived.	

Matching Requirements: Statewide Account Requests	
Statewide Account grant requests require a 50% match as described in the 2016 WSRF Criteria and Guidelines. A minimum of 10% match shall be from Basin Account funds (cash only). A minimum of 10% match shall be provided by the applicant or 3 rd party (cash, in-kind, or combination). The remaining 30% of the required match may be provided from any other source (Basin, applicant, or 3 rd party) and shall be accompanied by a letter of commitment . Attach additional sheet if necessary.	
Contributing Entity	Amount and Form of Match (note cash or in-kind):
Cash – CWCB WSRF Grant – South Platte Basin Roundtable (Approved)	\$ 25,000
Cash – Trout Unlimited - Embrace a Stream (Pending)	\$ 10,000
Cash – Healthy Rivers Grant (Pending)	\$13,000
Cash – St. Vrain Left Hand Water Conservancy District (Approved)	\$ 5,000
Cash – Department of Local Affairs Community Development Block Grant – Disaster Recovery (CDBR-DR) Legacy Project (Received)	\$16,165
Cash - Landowner Donations (Received)	\$ 5,000
Total Match	\$ 74,165.00
If you requested a Waiver to the Statewide Account matching, indicate % you wish waived. (Max 50% reduction of requirement).	

Last Update: August 3, 2017

Related Studies

Please provide a list of any related studies, including if the water activity is complimentary to or assists in the implementation of other CWCB programs.

The project complements the St. Vrain and Left Hand Water Conservancy District's \$300,000 Stream Management Plan (funded partially by the Colorado Water Conservation Board and the South Platte Basin Roundtable) by taking a focused look at on-the-ground solutions related to fish passage, as compared to the stream management plan's more encompassing, broad-scale approach. Looking at both a regional and local scale simultaneously will allow for the development of solutions that are scientifically sound and realistic.

The project builds on the impacts of Lefthand Watershed Oversight Group's current work implementing restoration and stewardship projects. Since 2015, Lefthand Watershed Oversight Group has successfully implemented 20 flood recovery projects to restore the physical components of the stream to improve habitat, water delivery reliability, and more. Ten projects are complete, and the rest are on-going. This project will build upon those efforts by assessing options to improve flow for fish. In November 2017, Lefthand Watershed Oversight Group completed a [Regional Stream Stewardship & Recovery Handbook](#) to engage our community in watershed stewardship by offering a compelling educational resource. This project will build upon that effort by extending water-based educational resources to include water supply and working-river subject matter.

This project is also well aligned with recommendations in the Left Hand Creek Master Plan and research by Colorado Parks and Wildlife (CPW). The Left Hand Creek Watershed Master Plan (AMEC, 2014) identified concerns with overall ecosystem health, particularly in the Plains reaches of Left Hand Creek due in part to diversion structures that act as barriers to fish movement as well as reducing flow in Left Hand Creek. According to the CPW, Left Hand Creek and St. Vrain Creek "are two of the last refuges for a number of state threatened and endangered fish species." (Richer, Kondratieff, and Swigle, 2015). To address issues with fish passage, the Master plan identified the following two important steps: (1) work with Left Hand Ditch Company to identify potential funding sources for retrofitting the diversion structures with fish passage or replacing them altogether; and (2) identify the demand at each diversion to help determine if the structure can be replaced with a multi-purpose structure.

Additional research shows that Left Hand Creek is a good example of a Colorado Front Range creek that provided excellent habitat for fish species in its natural state, and still supports important populations of these fish. These species generally include small-bodied fish such as minnows, darters, and suckers (Myrick 2014). A part of Left Hand Creek near Longmont supported eight native fish species in 2007 (Boulder County, 2012). Among these species are probable populations of johnny darter, plains topminnow, common shiner, and stonecat (Boulder County, 2013a; 2013b). The challenges posed by diversions and by damage from the 2013 flood have resulted in reaches of Left

Last Update: August 3, 2017

Related Studies

Hand Creek being designated as one of five Priority I flood-affected northern Front Range streams for re-establishment of fish passage (Richer, Kondratieff, and Swigle, 2015). This project will address these challenges and recommendations in the Master Plan through a combination of technical study and community education.

References:

Boulder County, 2012, Lagerman-Imel-AHI Open Space Complex Management Plan, June 19, 2012.

<https://assets.bouldercounty.org/wp-content/uploads/2017/03/lagerman-imel-ahi-management-plan.pdf>, accessed 4-23-18.

Boulder County, 2013a, Criteria for Designating Critical Wildlife Habitat (Area 14).

<https://assets.bouldercounty.org/wp-content/uploads/2017/03/bccp-designating-critical-wildlife-habitat-20131112.pdf>, accessed 4-23-18.

Boulder County, 2013b, Critical Wildlife Habitat Descriptions.

<http://www.bouldercounty.org/doc/landuse/bccp-whabitat-desc.pdf>, accessed 2013.

Dodds, W.K., Keith Dido, M.R. Whiles, K.M. Fritz, and W.J. Matthews, 2004, Life on the Edge: The Ecology of Great Plains Prairie Streams. Bioscience, Vol. 54, No. 3, March 2004, pages 205-216.

<https://academic.oup.com/bioscience/article/54/3/205/223066>, accessed 4-23-18.

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Richer, E.E., M.C. Kondratieff, and B.D. Swigle, 2015, Post-Flood Recovery Assessment and Stream Restoration Guidelines for the Colorado Front Range. Colorado Parks and Wildlife, 26 p.

<https://cpw.state.co.us/Documents/Research/Aquatic/pdf/PostFloodAssessmentandGuidelines.pdf>, accessed 4-23-18.



Last Update: August 3, 2017

Previous CWCB Grants

List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving RT(s); 4) CWCB board meeting date; 5) Contract number or purchase order

Lefthand Watershed Oversight Group

Emergency Watershed Protection (EWP) Assistance Phase II – 2013, Colorado Flood Recovery Project: Plains Reaches: N 41st Street, Haystack, N 63rd Street, N 73rd Street, and N 81st Street
CTPDAA2017-1652

CWCB awarded 12.5% of total project funding

Lefthand Watershed Oversight Group

Emergency Watershed Protection (EWP) Assistance Phase II – 2013, Colorado Flood Recovery Project: Foothills Reaches: Upper Left Hand/Streamcrest/Ranch
CTPDAA2017-1635

CWCB awarded 12.5% of total project funding

Lefthand Watershed Oversight Group

PDAA5000 grant fundraising support for watershed
POGG1 PDAA 201700000843

CWCB awarded 10% of total capacity funding

Lefthand Watershed Oversight Group

Project: Building a Legacy in Left Hand Creek Watershed
CWCB January 2018 Board Meeting
Contracting is currently in progress

Lefthand Watershed Oversight Group

Project: Stewardship through Community Science
CWCB May 2018 Board Meeting
POGG1,PDAA,201900000060

Tax Payer Bill of Rights

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.

As LWOG is a non-profit organization, TABOR issues will not affect our application.

Last Update: January 9, 2018

Colorado Water Conservation Board	
Water Supply Reserve Fund	
<u>Exhibit A - Statement of Work</u>	
Date:	May 1, 2018
Water Activity Name:	Fish Passage and Education on Left Hand Creek
Grant Recipient:	Lefthand Watershed Oversight Group
Funding Source:	
<p>Water Activity Overview: (Please provide brief description of the proposed water activity (no more than 200 words). Include a description of the overall water activity and specifically what the WSRF funding will be used for.</p> <p>This project aims to support education, knowledge sharing, and dialogue about the context of the 28-mile-long Left Hand Creek Watershed as a “working river” in order to better understand, explain, and compare potential solutions for improving fish passage and stream connectivity by:</p> <ol style="list-style-type: none"> 1. Exploring on-the-ground solutions for restoring stream connectivity in Left Hand Creek to support fish passage and appreciation of the creek while meeting the goals and needs of water owners, and engaging key stakeholders as needed; and 2. Developing an education initiative focused on educating our community about why diversions are needed and the realities and complexities of living on a working river using information learned from (1) above, input from key stakeholders, compelling illustrative educational materials, and digital and social media platforms. <p>CWCB funding will be used to hire a consultant team to implement a fish passage feasibility study and to support Lefthand Watershed Oversight Group staff in leading the stakeholder outreach and engagement portion of the study, as well as the education initiative. This multi-objective project will address protection/enhancement of the environment and water-based recreation through the fish passage study while also promoting education and outreach about stream connectivity through the education initiative.</p>	
<p>Objectives: (List the objectives of the project)</p> <ol style="list-style-type: none"> 1. With regular input from water owners, develop conceptual alternatives (e.g. style/type of passage structure best suited for each barrier site) to allow for fish passage and stream connectivity while maintaining full decreed diversion capabilities and understand owner response to alternatives. 2. Improve knowledge among community members and stakeholders about diversions, fish populations, and the context associated with a “working river” by developing relevant educational materials using compelling illustrative methods and digital and social media platforms. 	

Last Update: January 9, 2018

Tasks
Provide a detailed description of each task using the following format:
<u>Task 1 - Fish Passage Feasibility Study</u>
Description of Task:
<p>1.1. Research of existing information</p> <ul style="list-style-type: none"> • Research and incorporate existing information pertaining to fish passage viability and flow. Determine any species of concern in the study area, particularly native fish species that are currently or have historically been found in Left Hand Creek. Gather available information on habitat requirements necessary for these species to succeed, as well as their natural habitat ranges, spawning behavior, etc. This information should be utilized later to prioritize fish passage installation at specific barriers to extend native fish species ranges and provide necessary habitat requirements. • Include information from existing sampling events, satellite imagery, maps, planned or ongoing studies, and existing databases from Colorado Parks and Wildlife, Forest Service, etc. when possible. <p>1.2. Biological Assessment</p> <ul style="list-style-type: none"> • Supplement information collected in Task 1.1 with field visits to quantify fisheries composition, historical and current population sources, relative abundance, and spatial distribution surveys of fish, as well as entrainment considerations. • Organize data from all site evaluations in order to process the feasibility and need for fish passage at each potential barrier location. • Collaborate with Colorado Parks and Wildlife, U.S. Forest Service, and other for technical guidance as appropriate. <p>1.3. Passage Assessment</p> <ul style="list-style-type: none"> • Identify, evaluate, and map instream structures and barriers to fish passage and flow. Barriers may include not only irrigation diversion structures and culvert crossings, but also grade control structures, driveways, and others. • Develop or modify a Fish Passage Barrier Evaluation Form to ensure the same information is collected at each potential barrier site. Visit and photograph all potential barriers to fish passage in the Left Hand Creek project area. Evaluate each site for factors such as height, length, plunge pool depth, minimum velocity, etc. Collect relevant information to supplement gaps in existing information identified under Subtask 1.1. • Information collected should identify and explain when and why some reaches are dry at times. • Collaborate with Colorado Parks and Wildlife, U.S. Forest Service, and other for technical

Tasks

guidance as appropriate.

1.4. Evaluation of Needs

- Evaluate technical, legal, operational, structural, permitting, and economic issues for adequate fish passage and flow in known impaired reaches.
- Example factors to consider include physical structure of diversions, culvert crossings, grade control structures, driveways, etc.; water flow rates, delivery demands, and water rights; pressure from predatory fish populations; available habitat; permitting challenges; funding limitations; willingness of private landowners to participate; and engagement with local stakeholders.
- Data used to inform this task may include field dimensions, water depths, water surface elevations, historical flow data, available water for flow augmentation, engineering drawings, etc.

1.5. Assessment of opportunities

- Assess opportunities, propose strategies, and recommend locations for fish passage and returning flow to impaired reaches based on hydraulic controls, regulatory constraints, landowner's needs/water rights, habitat ranges and needs of the identified species of concern, and construction considerations, the need for fish passage installation at potential barriers should be organized and ranked by priority level.
- Identify associated risks, benefits, and +/- 30% cost estimates of fish passage installation at barrier sites based on field visits and site evaluations.
- Take into account areas where recent restoration projects included design elements to improve flows and aquatic habitat.

1.6. Stakeholder outreach and engagement

- Bring water owners to the table throughout the entire task to ensure their needs and values are understood and addressed, particularly for key aspects and findings of the study. Check in with water owners regularly to ensure they are closely involved in the entire process.
- Engage stakeholders (see list below) as needed throughout the process, facilitating communication between stakeholder and consultant team, coordinating site visits, and responding to questions and requests.
- Assess, document, understand, and report response to proposed options.
- Initial key stakeholder list includes Left Hand Ditch Company, Left Hand Water District, Colorado Parks and Wildlife, US Forest Service, St. Vrain and Left Hand Water Conservancy District, Boulder County, City of Boulder, Trout Unlimited, property owners, recreational users, and agricultural users. However additional stakeholders will be identified and

Last Update: January 9, 2018

Tasks
<p>contacted at project onset, and throughout project duration.</p>
<p>Method/Procedure:</p>
<p>Lefthand Watershed Oversight Group will hire an experienced consultant team to implement subtasks 1.1-1.5 in collaboration with key stakeholders and water rights owners such as Left Hand Ditch Company, Left Hand Water District, St. Vrain and Left Hand Water Conservancy District, Colorado Parks and Wildlife, and others (see subtask 1.6 for initial list).</p> <p>Lefthand Watershed Oversight Group will also work as part of the team to lead subtasks 1.6 to ensure that water owners and stakeholders are engaged and involved as needed and appropriate throughout the entire study. Lefthand Watershed Oversight Group is specially committed to regular check-ins with water rights owners to ensure that the study is moving in a direction that is agreeable to ensure the best likelihood of project success. Lefthand Watershed Oversight Group is the most qualified team to lead the outreach and engagement portions of this task based on our experience working with more than 12 diverse stakeholders and more than 100 private landowners in the watershed to successfully complete restoration, stewardship, and watershed science projects summarized in the Executive Summary provided with our grant application.</p>
<p>Grantee Deliverable: (Describe the deliverable the grantee expects from this task)</p>
<p>The deliverable will include a Fish Passage Feasibility Report detailing all information collected from site visits, as well as the prioritization of fish passage structure installation, conceptual solutions, pros/cons of installation at each barrier location, and water owner and stakeholder perspectives on different options and considerations. This document will include necessary exhibits to communicate fish passage options at different sites. Data collected from the study will also be posted on Lefthand Watershed Oversight Group's online database.</p>
<p>CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)</p>
<p>CWCB will receive the report described above with an executive summary summarizing process, lessons learned, and anticipated next steps.</p>



Last Update: January 9, 2018

Tasks
Provide a detailed description of each task using the following format:
<u>Task 2 – Education and Outreach</u>
Description of Task:
<p>1.1. Educational materials</p> <ul style="list-style-type: none">• Develop educational materials (e.g. informational handouts and maps) with input from Left Hand Ditch Company, St. Vrain and Left Hand Water Conservancy District, and others about ditch operations.• Examples of topics include benefits of ditches, ditch ecology, history of the watershed, map of ditches, information about known fish populations, and the “working river” aspects of Left Hand Creek, but more topics will be identified through communication with stakeholders, water owners, landowners, and others.• Work with graphic designer to ensure education materials are professionally designed to be illustrative and visually robust to reach a wide audience. <p>1.2. Ditch tour</p> <ul style="list-style-type: none">• Facilitate/host tour of Left Hand Ditches led together with Left Hand Ditch Company and St. Vrain and Left Hand Water Conservancy District. This involves working with the ditch company to identify appropriate times and locations, renting bus for shuttles to different sites, coordinating event activities, advertising the event, etc. <p>1.3. Fish feasibility results workshop</p> <ul style="list-style-type: none">• Host one workshop focus on sharing information learned from the feasibility study to engage wider community in realities of the “working river” aspects of Left Hand Creek.• Workshop should involve key stakeholders (see subtask 1.6) and entities such as the Colorado Water Trust and Colorado Water Conservation Board. <p>1.4. Digital and social media campaign</p> <ul style="list-style-type: none">• Expand our reach using Lefthand Watershed Oversight Group’s digital and social media platforms to share information and educational materials developed under subtask 2.1
Method/Procedure:



Last Update: January 9, 2018

Tasks
Lefthand Watershed Oversight Group will lead efforts to develop content for education materials and hire a graphic designer to help with design and ensuring that material are professional and illustrative. Lefthand Watershed Oversight Group will work directly with water owners, stakeholders, and community members to determine appropriate and interesting topics for educational handouts. We will build from and modify our initial list of topics (see subtask 1.1) which was developed based on our experience working with more than 12 diverse stakeholders and more than 100 private landowners in the watershed to successfully complete restoration, stewardship, and watershed science projects summarized in our grant application (see Executive Summary). We will also lead efforts to plan, schedule, coordinate, and advertise the ditch tour (see Subtask 1.2) and workshop (see Subtask 1.3). We will also coordinate presentations from Left Hand Ditch Company and St. Vrain and Left Hand Water Conservancy District at the ditch tour and presentations from the consultant team hires for Task 1 at the workshop.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Lefthand Watershed Oversight Group will develop multiple educational handouts on topics such as benefits of ditches, ditch ecology, history of the watershed, map of ditches, information about known fish populations, and the “working river” aspects of Left Hand Creek. Additional topics will be identified through the project. These materials will be shared widely on our website (www.lwog.org), mailing list, and social media platforms. Deliverables also include a ditch tour and fish passage study results workshop.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
CWCB will receive copies of all education materials, as well as copies of all digital and social media outreach. CWCB Staff will be invited to participate and engage in the ditch tour and workshop, particularly serving as potential key stakeholders in the workshops, and CWCB will receive summary reports of ditch tour and workshop results including attendance summaries and surveys of stakeholder and community response to each event.

Repeat for Task 3, Task 4, Task 5, etc.

Budget and Schedule
Exhibit B - Budget and Schedule: This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in <u>excel format</u> . A separate <u>excel formatted</u> Budget is required for engineering costs to include rate and unit costs.

Reporting Requirements
Progress Reports: The grantee shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status 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. The CWCB may withhold reimbursement until satisfactory progress reports have been submitted.
Final Report: At completion of the project, the grantee shall provide the CWCB a Final Report on the grantee's letterhead that: <ul style="list-style-type: none">Summarizes the project and how the project was completed.Describes any obstacles encountered, and how these obstacles were overcome.

Last Update: January 9, 2018

Reporting Requirements
<ul style="list-style-type: none"> • Confirms that all matching commitments have been fulfilled. • Includes photographs, summaries of meetings and engineering reports/designs.
Payments
<p>Payment will be made based on actual expenditures, must include invoices for all work completed and must be on grantee's letterhead. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.</p> <p>The CWCB will pay the last 10% of the <u>entire</u> water activity budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the water activity and purchase order or contract will be closed without any further payment. Any entity that fails to complete a satisfactory Final Report and submit to CWCB within 90 days of the expiration of a purchase order or contract may be denied consideration for future funding of any type from CWCB.</p>
Performance Requirements
<p>Performance measures for this contract shall include the following:</p> <p>(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Grant Guidelines, the CWCB will pay out the last 10% of the budget when the final deliverable is completed to the satisfaction of CWCB staff. Once the final deliverable has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.</p> <p>(b) Accountability: Per the Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per the Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.</p> <p>(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.</p> <p>(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.</p>

**COLORADO**Colorado Water
Conservation Board

Department of Natural Resources

Colorado Water Conservation Board**Water Supply Reserve Fund****EXHIBIT B - BUDGET AND SCHEDULE - Direct & Indirect (Administrative) Costs****Date: May 1, 2018****Water Activity Name: Fish Passage and Education on Left Hand Creek****Grantee Name: Lefthand Watershed Oversight Group**

Task No. ⁽¹⁾	Description	Start Date ⁽²⁾	End Date	Matching Funds (cash only) ⁽³⁾	WSRF Funds (Basin & Statewide combined) ⁽³⁾	Total
1	Fish Passage Feasibility Study	9/31/2018	9/31/2023	\$33,762	\$35,000	\$68,762
2	Outreach and Education Initiative	9/31/2018	9/31/2023	\$15,403	\$15,000	\$30,403
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
Total				\$49,165	\$50,000	\$99,165

(1) The single task that include costs for Grant Administration must provide a labor breakdown (see Indirect Costs tab below) where the total WSRF Grant contribution towards that task does not exceed 15% of the total WSRF Grant amount.

(2) Start Date for funding under \$100K - 45 Days from Board Approval; Start Date for funding over \$100K - 90 Days from Board Approval.

(3) Round values up to the nearest hundred dollars.

- Reimbursement eligibility commences upon the grantee's receipt of a Notice to Proceed (NTP)
- NTP will not be accepted as a start date. Project activities may commence as soon as the grantee enters contract and receives formal signed State Agreement.

The CWCB will pay the last 10% of the entire water activity budget when the Final Report is completed to the satisfaction of the CWCB staff project manager. Once the Final Report has been accepted, the final payment has been issued, the water activity and purchase order (PO) or contract will be closed without any further payment. Any entity that fails to complete a satisfactory Final Report and submit to the CWCB with 90 days of the expiration of the PO or contract may be denied consideration for future funding of any type from the CWCB.

- Additionally, the applicant shall provide a progress report every 6 months, beginning from the date of contract execution
- Standard contracting procedures dictate that the Expiration Date of the contract shall be 5 years from the Effective Date.

Fish Passage and Education on Left Hand Creek - Detailed Budget

		Consultants					LWOG Staff					Consultants and other direct costs			TASK TOTALS	CWCB Request - Basin & Statewide	Other Matching Funds (All Cash)	Assumptions
		Principal	Project Manager	Specialist	Graphic Designer		Executive Director	Project Manager	Outreach Coordinator	Watershed Scientist		Bus Rental	Office supply, printing, and poster board					
		\$ 160	\$ 130	\$ 110	\$ 125	Subtotal	\$ 56.00	\$ 38.99	\$ 23.22	\$ 43.37	Subtotal	Lump sum	Lump Sum	Subtotal				
		Estimated Hours					Estimated Hours					Estimated Cost Per Task						
Task 1 - Fish Passage Feasibility Study																		
1.1 Research of existing information	\$ 5,340.00	4	15	25		\$ 5,340.00					\$ -			\$ -	5,340.00			Based on quotes received
1.2 Biological Assessment	\$ 9,480.00	8	25	45		\$ 9,480.00								\$ -	9,480.00			Based on quotes received
1.3 Passage Assessment	\$ 5,890.00	4	15	30		\$ 5,890.00					\$ -			\$ -	5,890.00			Based on quotes received
1.4 Evaluation of considerations	\$ 17,400.00	10	75	55		\$ 17,400.00					\$ -			\$ -	17,400.00			Based on quotes received
1.5 Assessment of opportunities	\$ 18,500.00	10	75	65		\$ 18,500.00					\$ -			\$ -	18,500.00			Based on quotes received
1.6 Stakeholder outreach and engagement	\$ 12,151.60	5	10	10		\$ 3,200.00	40	80	80	40	\$ 8,951.60			\$ -	12,151.60			Based on hours per task expected
Task Subtotal	\$ 68,761.60					\$ 59,810.00					\$ 8,951.60			\$ -	68,761.60	\$ 35,000.00	\$ 33,761.60	
Task 2 - Outreach and Education Initiative																		
1.1 Educational materials	\$ 13,027.40				40	\$ 5,000.00	10	60	60	40	\$ 6,027.40		\$ 2,000.00	\$ 2,000.00	13,027.40			Based on quotes received for graphic design work.
1.2 Ditch tour	\$ 8,543.20	2	6	6	8	\$ 2,760.00	10	40	40	40	\$ 4,783.20	\$ 1,000.00		\$ 1,000.00	8,543.20			Based on one tour with bus rental.
1.3 Fish feasibility results workshop	\$ 5,591.60	3	6	6	8	\$ 2,920.00	10	20	20	20	\$ 2,671.60			\$ -	5,591.60			Based on one workshop and donated space (e.g. pulic library).
1.4 Digital and social media campaign	\$ 3,241.20					\$ -	10	10	80	10	\$ 3,241.20			\$ -	3,241.20			
Task Subtotal	\$ 30,403.40					\$ 10,680.00					\$ 16,723.40			\$ 3,000.00	30,403.40	\$ 15,000.00	\$ 15,403.40	
TOTAL						\$ 70,490.00					\$ 25,675.00			\$ 99,165.00	\$ 50,000.00	\$ 49,165.00		

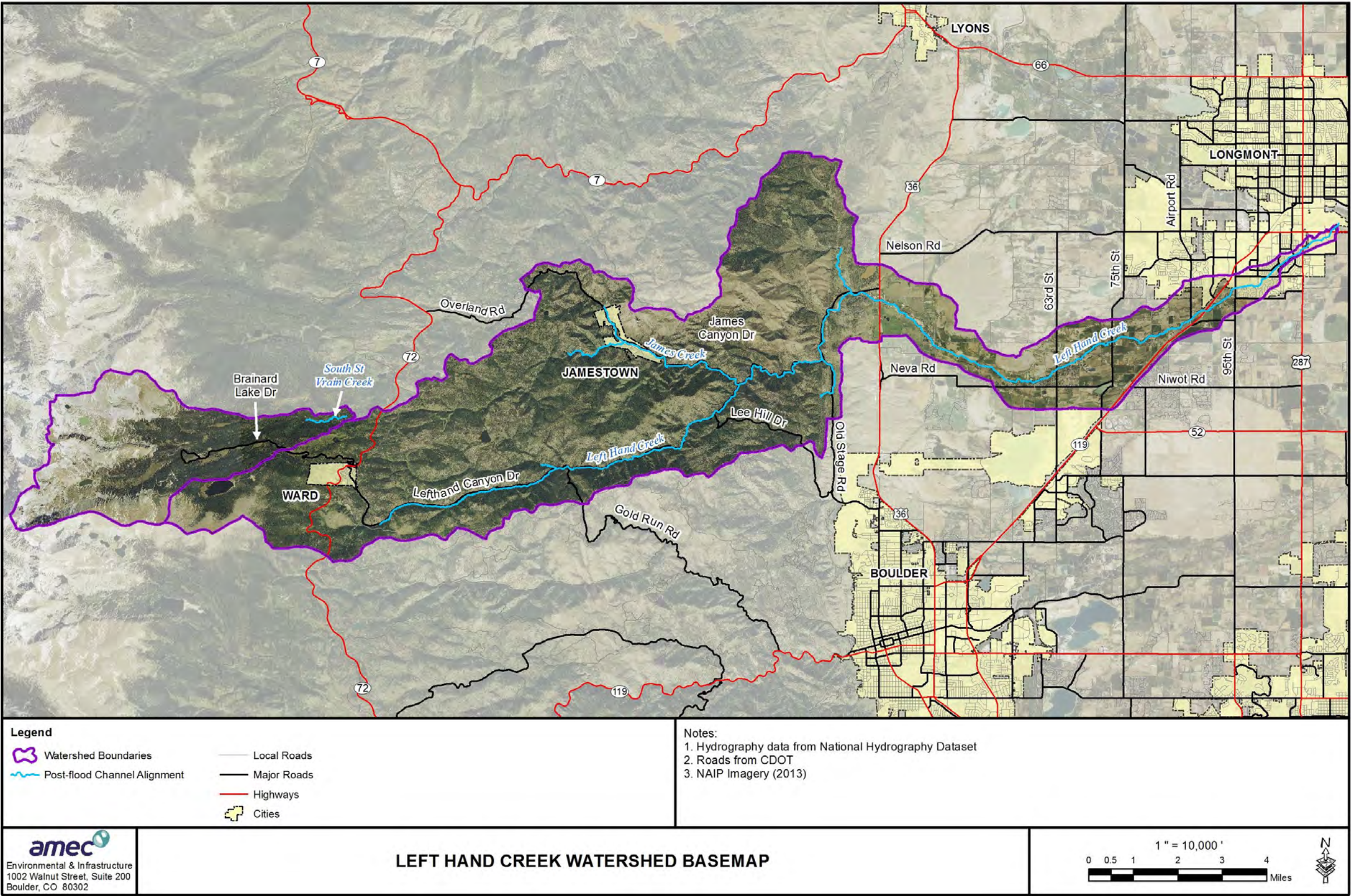


Figure 1. Left Hand Creek Watershed Study Area

Yana Sorokin

From: noreply@smapply.io
Sent: Saturday, July 14, 2018 11:20 AM
To: Yana Sorokin
Subject: Thank you for your application



Thank you for submitting your Embrace A Stream application!

We are excited to work with you to continue to bring the TU coldwater conservation mission to life through the coming months. Your Embrace A Stream Regional Representative will be in communication with you to keep you aware of the process.

If you have questions or concerns, please do not hesitate to reach out to your Embrace A Stream Regional Representative.

Thank you!

You are receiving this email from [Trout Unlimited](#) - Trout Unlimited.

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Application: 6142516732

Yana Sorokin - ysorokin@lwog.org

Embrace A Stream

Summary

ID: 6142516732

Status: Submitted

Last submitted: Jul 14 2018 11:19 AM (MDT)



Application Form

Completed - Jul 14 2018

Application Form

Applicant:

(Format: ### - Example Chapter or ## - Example Council)

Boulder Flycasters

Project Title:

Fish Passage in Left Hand Creek

State:

CO

Region: Southern Rockies

Project Location:

(e.g. Stream, Watershed, City, State - GPS coordinates if available)

Left Hand Watershed, Boulder County, CO

Salmonid Species and Threatened/Endangered Status:

(if applicable)

(No response)

Are you seeking funding assistance for land conservancy?

No

Please indicate which conservation strategy your project best fits with:

Responses Selected:

Reconnect (Passage barrier removal, Instream flow enhancement, Water law advocacy - surface or groundwater, etc...)

Restore (Watershed and habitat restoration projects, Policy to provide restoration incentives and funding, Improved hatchery design, Private landowner stewardship recognition, etc...)

Sustain (Youth education, Trout in the Classroom, Coalition building, Chapter or Council Strengthening, etc...)

Date initial contact made with regional EAS Committee Representative:

Apr 10 2018

Amount Requested from Embrace-A-Stream:

\$10,000

Beginning Date of Proposed Project:

Sep 1 2018

Ending Date of Proposed Project:

Mar 30 2020

Has chapter received EAS funds before?

Yes

If so, indicate project(s), year(s) and amount(s) for last five years:

No funding was received in the last five years.

Has chapter submitted final reports for all projects outlined above? If yes, include date(s) submitted.

Yes

To help with EAS publicity please list the names of three or four local and state newspapers:

Boulder Daily Camera, Longmont Times Call, Left Hand Valley Courier

1. Executive Summary

In 300 words or less, please note the project name and location, name of the applicant TU chapter or council, amount requested, matching funds, background or purpose of the project, goals and objectives, proposed actions or methods, anticipated scope of impact, and partners. The executive summary should be brief and to the point. The EAS Committee will refer to it frequently during the review process.

Left Hand Creek provides tremendous value for our community, including ecological, recreational and agricultural benefits. In addition, ditches are celebrated for bringing water to places that would otherwise be dry. However, diverted water results in diminished stream flows, posing challenges for ecosystem health.

This project will address this challenge by completing a fish passage feasibility study to assess opportunities for improvement, including which structures are impassible, which reaches have flow issues, and what types of potential design or operational changes may be possible and practical. This study will prioritize sites and provide cost estimates for proposed options. A complimentary project that this not included in this request is an education initiative highlighting results of the fish passage study.

A key aspect of this project is engaging water owners to ensure the study is addressing their goals and needs. This approach builds the strongest foundation for obtaining future funding to implement realistic projects to improve, modify, or remove fish passage barriers and improve ecological health of the creek. While the technical analysis will provide information needed to implement projects, engagement of water owners will build understanding and support needed for the project to succeed.

Timing is key for this approach. Stakeholders in Left Hand Creek Watershed recently completed more than ten flood restoration projects. This achievement has triggered a momentum of collaboration among groups with competing values for the creek. Capitalizing on this momentum will ensure the highest probability of success in addressing this challenge.

This unique opportunity to fill information gaps about fish passage in a watershed which is primarily privately owned and difficult to access may be lost if this project is delayed. Further, capitalizing on momentum and engagement of a non-TU audience for this project will help increase awareness and support of coldwater conservation among a non-TU audience.

2. Background

In 1,000 words or less, describe the issue or opportunity being addressed. If applicable describe project location, including name of water body and salmonid species. Please show how this issue or opportunity

has other regional or national significance. If the project is part of a TU National initiative, please explain the extent of coordination with TU National staff. If this project has received EAS funding in previous years, please provide a brief update of progress to date.

Left Hand Creek Watershed, located three miles north of Boulder, Colorado, in the Front Range of the Rocky Mountains flows has an interesting history as a “working river.” The 28-mile-long watershed carries more water than it would in its natural state, thanks to Colorado’s historic first inter-basin transfer, the Left Hand Ditch. First dug in 1861, this diversion brings water from South St. Vrain Creek to James Creek, a Left Hand Creek tributary, just west of the town of Ward.

Ditches and diversions in our watershed that deliver water for agriculture provide economic value for our community. Left Hand Creek also contains many unique ecological, recreational, and historical resources. From wildlife habitat and local trout hotspots for anglers, to trails, cycling routes, and historic sites Left Hand Creek enhances our community’s quality of life. However, diverted water often results in diminished stream flows, posing challenges for wildlife, ecosystem health, and recreation, as well as people who rely upon the creek.

Why Left Hand Creek?

Diminished stream flows in Left Hand Creek mean that sections of the creek become too dry to support healthy fish populations, which require connected habitats and adequate water. Due to these challenges and additional damage caused by unprecedented floods in 2013, the plains reach of Left Hand Creek has been designated as one of five priority I flood-affected northern Front Range streams for re-establishment of fish passage for native species. These native species generally include small-bodied fish such as minnows, darters, and suckers. Today, Left Hand Creek and St. Vrain Creek are two of the last refuges for a number of state threatened and endangered fish species (Colorado Parks and Wildlife).

The mountain reaches of Left Hand Creek and its main tributary, James Creek, provide cold water habitat suitable for trout. The primary species found in these reaches is brown trout (*Salmo trutta*), an introduced trout species that is able to sustain its population without stocking. The brown trout fishery in Left Hand Creek is a popular recreational resource among front range fishers. Anglers also catch some brook trout (*Salvelinus fontinalis*) in these reaches. Occasionally these species and rainbow trout (*Oncorhynchus mykiss*) have been stocked in the creek, but little or no stocking has occurred since the 2013 flood. Trout movement in Left Hand Creek is curtailed by structures that are difficult for them to surmount.

The native trout species in the watershed was greenback cutthroat trout (*Oncorhynchus clarkii stomias*), but they have been replaced by introduced trout. The potential exists for small headwater reaches in the

watershed to host this native trout, but this may require creating an intentional barrier to fish passage to keep non-natives out of the reach, and removal of the non-natives prior to re-stocking, or other solutions which will be identified by the fish passage feasibility study.

In addition to their impact on fish passage and ecological health, diminished flows also hinder enjoyment and aesthetic appreciation of Left Hand Creek by our community. However, due to Left Hand Creek's role as a working river, solutions for improving fish passage must take into account existing water rights and the value in diverting water for agriculture. Therefore, addressing the possibility of restoring and improving stream flows for fish passage requires education, engagement, and a complex analysis of technical, legal, operational, structural, economic, and ecological considerations, as well as input from water owners and diverse stakeholders with unique values and perspectives.

Why Now ?

Left Hand Creek is well positioned for an implementation project to improve fish passage due to the extensive restoration work completed on the creek. Since 2015, more than ten restoration projects have been implemented along the watershed and ten new projects are underway (see sample photos attached). These projects are designed to restore the ecological health of the watershed and improving fish habitat was a key goal. This new project, including EAS funding, will help build on the impact of those efforts by assessing options to improve flow for fish to access this habitat.

The success of these recently completed restoration projects has also triggered a notable momentum of collaboration among groups with competing values and uses for the creek. To complete restoration projects Lefthand Watershed Oversight Group, the non-profit who led the restoration work and who Boulder Flycasters is partnering with on this project, worked with more than 12 stakeholders, including water owners and government agencies, and more than 100 private landowners. This required collaboration, negotiation, and compromise among these diverse groups, including including Left Hand Ditch Company who owns all of the diversions on Left Hand Creek. The momentum gained is demonstrated by support for this project from water owners, stakeholders, and community members, including Left Hand Ditch Company.

Budget Considerations

Funding for this project comes from diverse sources, including the Colorado Water Conservation Board. EAS funding is critical to round out the budget and incorporate TU leadership in this important regional planning effort which may be used as case study for other similar efforts to incorporate water owner participation and education in fish passage studies. Through EAS, this project provides a unique opportunity for TU to help lead this process and collaborate with the diverse stakeholders involved,

including Lefthand Watershed Oversight Group and Left Hand Ditch Company. Although EAS makes up a relatively small portion of the total project budget, it will provide a unique opportunity to share knowledge and costs as part of a larger effort.

3. Goals and Objectives

In *350 words or less*, briefly describe the purpose of the project, resulting benefits for coldwater conservation and the TU organization, including scope of impact. Also describe any economic benefits that will result from your work. Please also:

- Note the overall **goal** of the project. (e.g. restore critical habitat for a certain species of endangered salmonid, build a local constituency to promote protection of a certain resource, improve the scientific understanding of an issue to improve river or fishery management, etc...)
- List the specific **conservation objectives** for the project. (e.g. restore X amount of habitat by Y method, educate X number of people through Y means, fill X information gap through Y research methods, influence local or state governing body to adopt X policy/law to protect Y habitat or fish, etc...)
- List the specific **TU strengthening objectives** for the project. (e.g. recruit X new leader or members by method Y, develop an actionable plan for a conservation campaign, increase TU coverage in local media by X%)

The overall goal of this project is to improve the ecological health of Left Hand Creek by improving fish passage in key areas that will allow fish, including wild trout and native plains species, to access quality habitat. However, achieving this goal requires planning to ensure that feasible and appropriate approaches are selected. We propose to work toward this goal by completing a fish passage study with input from water owners that will provide information about existing conditions and opportunities for improvement, including which structures are impassible, which reaches have flow issues, and what types of potential design or operational changes may be possible and practical. This study will prioritize sites for fish passage and provide cost estimates for proposed options with input and review from key stakeholders such as the Colorado Water Conservation Board.

This project will contribute directly to cold water conservation by filling critical knowledge gaps about fish passage possibilities in Left Hand Creek, and the associated costs and benefits. Information gained will be used to prioritize implementation projects, obtain funding for future implementation projects, and provide initial designs and cost estimates to inform future implementation projects. The results of the feasibility study, combined with a better informed constituency through the separately funded education initiative, are key for achieving the level of negotiation and compromise needed to improve fishery health in Left Hand Creek. This project will contribute to strengthening TU objectives through ownership and participation in a collaborative stakeholder process that will impact the future of Left Hand Creek.

4. Work Plan

In 650 words or less, describe the **actions** or **methods** you will use to implement your proposal. Make sure to include plans for implementing both the conservation and strengthening TU objectives. If applicable explain the scientific or technical methods utilized in the project. Note if the project uses innovative or unique solutions to address fisheries problems or if the results can be transferred elsewhere. Please also include:

- A **timeframe** or **schedule** of when major activities will occur, including a list of any permits that will be obtained.
- The **role of TU** leaders, volunteers, or staff in the project and the names and qualifications of key participants. EAS projects require that TU volunteers have significant involvement.
- The **role of other partners** in the project and the names and qualifications of key participants.
- An **outreach plan** to disseminate project results to TU, project partners, and especially the general public.
- A description of how you will measure or **evaluate** project outcomes. Explain the scientific or technical methods used to evaluate project results, including the **indicators** (an indicator is a specific, measurable target or goal) for project success. Grant recipients will be required to evaluate the outcomes of their projects by measuring these indicators before and after their project.

Boulder Flycasters will work together with Lefthand Watershed Oversight Group to hire and oversee an experienced consultant to implement technical aspects of the study. This project meets conservation and TU strengthening objectives by filling critical knowledge gaps and developing conceptual alternatives related to improving fishery health and abundance in Left Hand Creek, while engaging and informing diverse stakeholders. The fish passage study is expected to take 18 months, starting in September 2018.

Technical Methods, Unique Solutions, and Transferrable Results

This approach will be a helpful case study for other working rivers striving to find a balance between meeting human needs and supporting ecosystem health while working together with water owners. Our team will document and share lessons learned. Lastly, in hiring a consultant for the study we will emphasize the need for creative and innovating technical solutions that explore new and interesting ideas for ensuring the creek health.

Roles and Partners

Boulder Flycasters will lead the fish passage study project with Lefthand Watershed Oversight Group. TU Volunteers will participate in project management, consultant selection, review of deliverables, and stakeholder collaboration throughout the study. We will partner with many individuals and organizations

with an interest in water resources along Left Hand Creek. Specific project partners include Left Hand Ditch Company and St. Vrain and Left Hand Conservancy District, who have written letters of support for the project and volunteered to host a ditch tour. Colorado Parks and Wildlife expressed interest in providing guidance on fish passage criteria and sampling locations. Funding sources for this project includes the Colorado Water Conservation Board and others (see budget table). Support from EAS with focus on coldwater conservation would provide an important balance of partners with diverse values and will benefit the project process and outcome.

Boulder Flycaster will be involved throughout the entire project process to ensure our needs and values are understood and addressed. By partnering with a watershed coalition on this project, TU can build relationships with coalition partners, and leverage their existing relationships to build TU credibility in the community to better facilitate passage projects. This partnership will lead to greater recognition of TU in this community. This recognition may lead to increased TU membership and identification of new leadership in the community.

Outreach Plan

Due to their relationships with stakeholders in the community, outreach will be led by Left Hand Watershed Oversight Group with close participation from Boulder Flycasters throughout the entire process. Outreach will include bringing key stakeholder and particularly water owners to the table throughout the entire study to ensure their needs and values are understood and addressed for key aspects and findings of the study. A key aspect of our outreach plan is assessing, documenting, understanding, and reporting responses to proposed options to ensure we understand the support for various proposed alternatives.

Left Hand Watershed Oversight Group is also implementing a separately funded complimentary project that will include a public workshop and educational ditch tour. A key aspect of that project and outreach plan is the development of professionally designed educational materials. Example topics include results of the fish passage study, an interactive map of Left Hand Creek, known fish populations, complexities of a working river, and others. Combined, these educational and outreach elements will help disseminate project results to a wide and diverse audience. Our outreach plan also includes disseminating information using digital and social media platforms as described in the Communications Plan.

Measurable Outcomes

The performance of this project will ultimately be measured by our ability to recommend realistic conceptual alternatives for fish passage implementation projects that have strong water owner understanding and support. Monitoring throughout the will include surveys of stakeholder responses to

conceptual alternatives. To quantify the impact of participant understanding and support of fish passage options, surveys will be conducted at the onset and conclusion of the project to assess whether the process impacted attitude and opinions about fish passage.

5. Communications Plan

In 650 words or less, provide a brief outline for how the applicant will broadcast information about the project and EAS award to their local community. A robust communications plan will include press releases, social media posts, website updates, and posts to the blog on TU's homepage. We ask that successful applicants submit no fewer than two updates throughout the course of the EAS funded project to Leadership Development Manager, Lisa Beranek at eas@tu.org.

Our team's robust communications plan includes raising awareness about Left Hand Creek and the greater watershed, circulating useful and relevant information, and regularly sharing the benefits and beauty of this ecosystem using websites, email campaigns, Facebook, and Instagram. The target audience is diverse and ranges from private landowners along Left Hand Creek, to the Boulder and Longmont communities who live outside the watershed but recreate in the canyons and parks, as well as interested students and adult volunteers from outside the watershed.

Everyone benefits from Left Hand Creek being a resilient and protected stream, so therefore the plan involves communicating with a wide range of people through multiple social media platforms and using tested protocols for broadcasting information about this TU project and EAS award. Boulder Flycasters and Lefthand Watershed Oversight Group will distribute information multiple times a week through Facebook and Instagram.

Both Facebook and Instagram provide a great opportunity to update the community on the health of the stream, inform followers of current education and outreach projects such as a tour of the Left Hand Ditches, and share photos taken by community members. If we are funded, we will be sure to utilize [#embraceastream](#) when posting project updates to all of our social media posts. We also regularly email our listservs. We will utilize Salsa (Flycasters) and MailChimp (Lefthand) where we can succinctly manage our campaigns and lists of landowners, recreationalists, or interested volunteers.

A final and critical piece to our communications plan is the Boulder Flycaster (www.boulderflycasters.org) and Lefthand Watershed Oversight Group (www.lwog.org) websites. Both websites are regularly updated with topical news and information. This ranges from weekly updates on watershed activities to information about the ecological health of the watershed and opportunities about how someone can get involved. The style of writing used on both websites can also be directly transferred to a blog posts to be shared by TU on Facebook and Instagram.

6. Budget Form

The budget is intended to assist applicants in writing project budgets and explaining project costs.

Applicants are required to indicate total project costs, as well as EAS costs and non-EAS expenses. Please be as specific as possible when describing your project expenses and keep in mind that there must be a one-to-one match to qualify for an EAS grant. EAS looks favorably upon cash contributions from the chapter and other partnering organizations, as well as projects with high expected returns to justify the cost of the project.

Total project costs can be defined in terms of cash gifts, personnel and costs of materials and services. Applicants must identify all other contributors and indicate the type and amount of matched costs (e.g., \$500 cash, U.S. Forest Service). Estimates of direct cash costs and in-kind contributions to EAS must be specified in the categories below:

- Personnel/Consultant Fees – Outline specific tasks, work to be performed by personnel/consultants, and the basis for their fees. Total fees should be broken down according to the amount of time spent on the project (e.g., hourly, weekly, or monthly rates). Trainers and facilitators are allowable expenditures. **Sponsoring professionals cannot be persons receiving money directly from an EAS grant.**
- Volunteer Labor – Identify all sources of volunteer labor, both TU and non-TU. Donated professional services can be valued at current market rates. General volunteer labor may be valued according to the most recent determination of the value of volunteer time by Independent Sector. As of 2018, this is \$24.14/hour.
- Contracts - Identify all work to be completed by contract. If a commitment to contract a particular vendor has been made prior to application for funding, explain how the vendor was selected, type of contract, deliverables, time frame, cost, and basis for the cost.
- Materials/Equipment – Please specify unit costs and quantities for materials and equipment. Identify specific materials and/or equipment necessary to complete the project. Costs are to be estimated according to the average market value of the equipment. Consumable office supplies may be included under the equipment category. Purchasing high cost capital equipment (chainsaws, waders, computers) is highly discouraged - rental of such items should be considered instead. Equipment for on-going stream and watershed monitoring projects will be considered given adequate justification of their need and lack of ready availability. EAS does not fund computer equipment, software, newsletters, or websites, unless given compelling rationale for how such tools are linked to the conservation objectives.
- Other Expenses - Identify any other specific costs associated with the project. Please note that transportation costs for volunteer labor (i.e., lodging, mileage and gas expenses) are not eligible for EAS funding. Travel may be counted as match at \$0.545/mi.

1. Paid Personnel / Consultants / Contractors

	Funds requested from EAS	Matching Funds Offered	Source of those funds*	Total
Paid Personnel / Consultants / Contractors	10000.00	58716.60	----Colorado Water Conservation Board - South Platte Basin Round Table \$17,500 (Received); ---- Department of Local Affairs Community Development Blok Grant - Disaster Recovery - \$14,665.00 (Received); ---- Private landowners - \$5,000 (Received); ----Boulder Flycasters Match - \$1,500 (Committed); ---- Colorado Water Conservation Board - Statewide Fund \$17,500 (Pending, recommended by Roundtable); ---- Healthy Rivers Fund Grant - \$2,596.60 (Pending)	68716.60

2. In-Kind Labor

	Volunteer Hours	Matching Funds Offered	Source of those funds*	Total
Fed/State/Local Gov't**	0	0	0	0

	Volunteer Hours	Matching Funds Offered	Source of those funds*	Total
TU Volunteers*** \$24.14/hr multiplied by # of hrs	108	2607.12	Boulder Flycasters volunteer time for project management, consultant selection, deliverable review, and stakeholder collaboration	2607.12

	Volunteer Hours	Matching Funds Offered	Source of those funds*	Total
Other Volunteers*** (landowner, Scouts, etc.) \$24.14/hr multiplied by # of hrs	0	0	0	0

3. Materials/Equipment

	Funds requested from EAS	Matching Funds Offered	Source of those funds*	Total
Purchases	0	0	0	0.00

	Funds requested from EAS	Matching Funds Offered	Source of those funds*	Total
Rentals	0	0	0	0.00

	Funds requested from EAS	Matching Funds Offered	Source of those funds*	Total
Donations****	0	0	0	0.00

4. Other Expenses

	Funds requested from EAS	Matching Funds Offered	Source of those funds*	Total
Other	0	0	0	0.00

TOTAL PROJECT COST:

\$ 2607.12

Notes: Please provide detailed itemizations for each EAS cost. Where applicable, please specify unit costs and quantities for materials, equipment, consultant, and contractor time, etc. Attach additional pages if necessary.

*Identify type & amount of contribution & name of contributor.

** Place value of Agency labor in “Matched Cost & Name of Contributor” column.

*** Place value of TU and “Other” volunteer labor in “Matched Cost & Name of Contributor” column.
Dollar value of volunteer time for most recent year as determined by Independent Sector.

****Identify type & amount of donation & name of donor.



Upload ‘Before’ Pictures

Incomplete



Visual Aids

Completed - Jul 14 2018

Maps, diagrams, before photographs, etc. can be very helpful in explaining a proposed project and are highly encouraged. Applicants can upload these files along with their online submission.

HistoricalAreaTop

Filename: HistoricalAreaTop.pdf Size: 3.2 MB

Trout Video

Filename: Trout_Video.pdf Size: 222.2 kB

Map from lefthand-creek-watershed-master-plan

Filename: Map_from_lefthand-creek-watershed-master-plan.pdf Size: 440.2 kB

Photos from 2017-Annual-Report-Final-Web-version

Filename: Photos_from_2017-Annual-Report-Final-W_4jqaYVH.pdf Size: 217.3 kB



Signatures

Completed - Jul 14 2018

Authorization and signatures from your TU project contact, sponsoring professional, TU Chapter President, TU Council Chair (if applicable) and landowner(s) (if applicable) are mandatory. The signatures can be uploaded to accompany your online submission.

For projects located in states with TU Councils, the Council Chair must approve the application. **Applications without all required signatures will be ineligible for funding and automatically rejected.**

Please download our template Signatures form here.

Signature page - signed

Filename: Signature_page_-_signed.pdf **Size:** 50.5 kB



LEFTHAND WATERSHED
oversight group

Trout Video

This video shows trout caught in a ditch in Left Hand Creek. The video was taken by Gabe Turek, TU Boulder Flycaster Member and Lefthand Watershed Oversight Group Board Member.

<https://www.dropbox.com/s/gym7tf8vb57hnjf/Trout%20in%20a%20ditch%20in%20Left%20Hand%20Creek.MOV?dl=0>

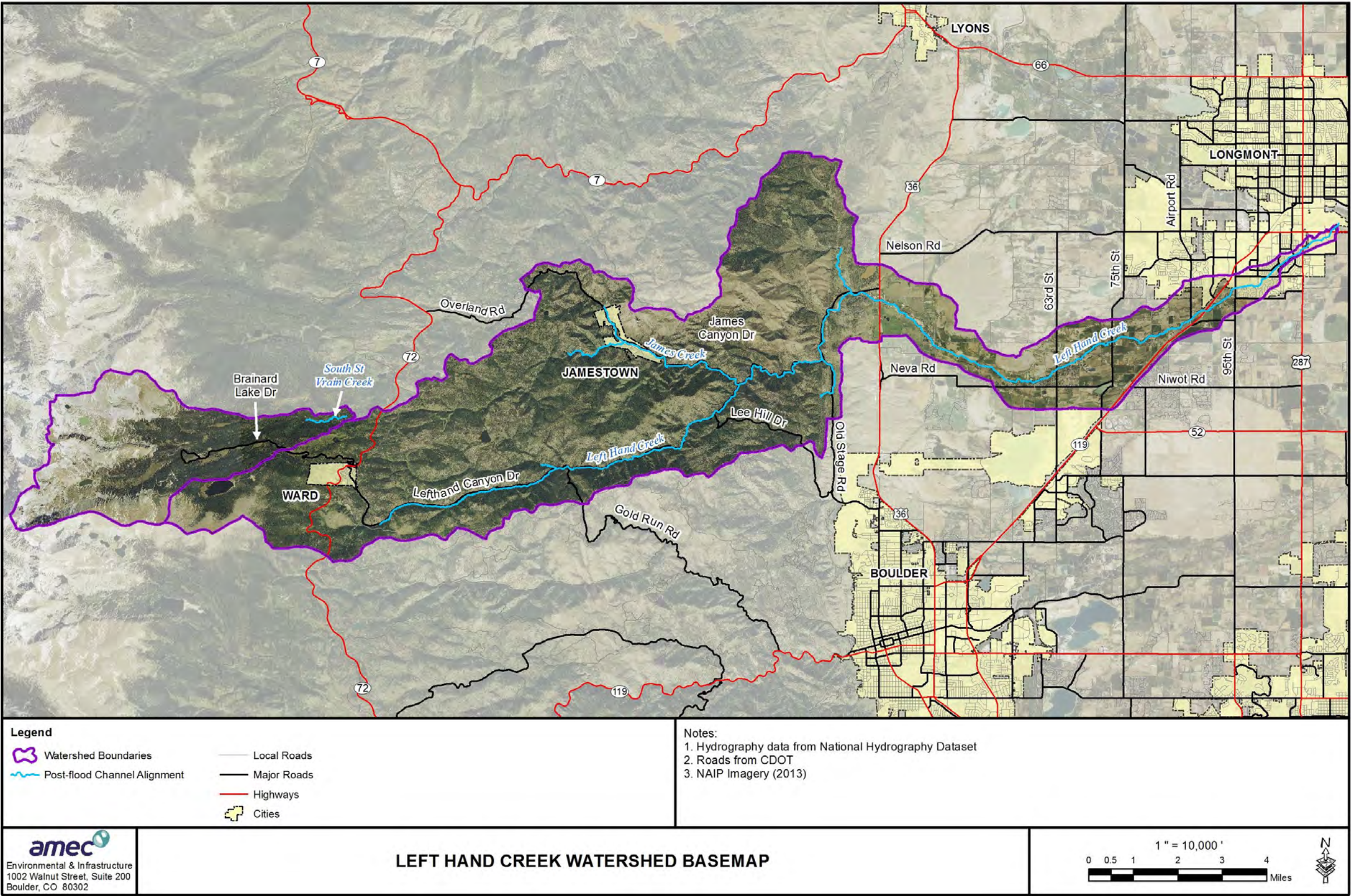


Figure 1. Left Hand Creek Watershed Study Area

RESTORATION

By the Numbers

CONSTRUCTION

- 10,524 feet of banks stabilized
- 72 stream restoration structures (e.g. root wads, cross vanes, boulder-cobble toe, etc.) implemented
- 10,952 feet of stream recovered
- 66 private properties restored

VOLUNTEER HOURS

4,428 volunteer hours =
\$104,323.68 of in-kind volunteer labor thanks to help from our partners, Wildland Restoration Volunteers!



Xilinx volunteers planting shrub seedlings at the Streamcrest Project site.

63rd ST., BEFORE



63rd ST., AFTER



RANCH, BEFORE



RANCH, AFTER



REVEGETATION

- 3,591 woody species
- 4,024 wetland plants
- 12,372 willow and cottonwood live stakes
- 22 acres seeded with native vegetation

PROJECT OVERSIGHT

- 19 weeks of construction
- 140 meetings with private landowners

“The care for the environment that existed (owls nesting, noxious plant removal, etc.) and the patience and willingness of the people involved to make sure that every homeowner felt 100% comfortable with the project. Great job. I love what you’re doing!”

— Donna and Eric Schult,
63rd Street landowners



The Foothills Project was awarded the Contractors Association Environmental Excellence Award.



Embrace A Stream Proposal Signatures

Your signature below shows that you have reviewed the Embrace A Stream funding proposal. You are aware that the proposed project occurs within your council/chapter area and that the proposed project is consistent with your understanding of project scope and/or proposed partnership responsibilities.

TU Project Contact: (Person to contact if there are questions about the proposal. Cannot also be sponsoring professional.)

Name: Robert McCormack Email: troutrobert@gmail.com Phone: 201-213-7295

Signature:  Date: 7/3/2018

Sponsoring Professional: (Agency official responsible for project oversight, if applicable. Sponsoring professionals CANNOT also be a funded consultant.)

Name: _____ Email: _____ Phone: _____


Title: _____ Agency: _____

Signature: _____ Date: _____

TU Chapter President:

Name: Robert McCormack Email: troutrobert@gmail.com Phone: 201-213-7295

Address/City/State/Zip Code: PO Box 541 Boulder, CO 80306

Signature:  Date: 7/3/2018

TU Council Chair: (For states with a TU council - executive directors not eligible.)

Name: _____ Email: _____ Phone: _____

Signature: _____ Date: _____

Landowner: (if applicable)

Name: _____ Email: _____ Phone: _____

Signature: _____ Date: _____

**COLORADO HEALTHY RIVERS FUND
GRANT APPLICATION**

Project Title:

Fish Passage and Education on Left Hand Creek



Submitted by:

LEFTHAND WATERSHED OVERSIGHT GROUP
6800 Nimbus Road, Longmont CO 80503 (office)
P.O. Box 1074, Niwot, CO 80544-0210 (mailing)
303.530.4200 | www.lwog.org

1.0 PROJECT PROPOSAL SUMMARY SHEET

1.1 Project Title : Fish Passage and Education on Left Hand Creek

1.2 Contact Person name, email address, and phone number Jessica J. Olson, Executive Director; 303.746.7937; jolson@lwog.org

1.3 Project Location: Left Hand Creek Watershed, from upstream of Highway 119 (Diagonal Highway) to the headwaters, Boulder County, Colorado

1.4 Grant Type: Planning Grant

1.5 Brief Description of the Project

The primary goal of this project is to support education, knowledge sharing, and dialogue about the context of Left Hand Creek as a “working river” in order to better understand, explain, and compare potential solutions for improving fish passage and stream connectivity. To achieve this goal, Lefthand Watershed Oversight Group will leverage a momentum of collaboration among diverse stakeholders that was gained from successful completion of restoration projects on Left Hand Creek. This momentum is critical for achieving the level of negotiation and compromise needed to ensure the health of our working river. This project will also provide key information to support a stream management planning effort led by the St. Vrain and Left Hand Water Conservancy District (see Section 4.3).

As a working river, Left Hand Creek provides economic, ecological, and recreational value for our community. Diversions and ditches throughout the watershed are celebrated for bringing water, habitat, and life to places that would otherwise be dry. However, diverting water from the creek can impact the health of a river. In Left Hand Creek, fish populations are impacted by structures and diversions which limit flow in certain reaches and impede fish passage. We aim to address this challenge and work towards making Left Hand Creek a healthier working river by:

- (1) Exploring on-the-ground solutions for restoring stream connectivity in Left Hand Creek to support fish passage and appreciation of the creek while meeting the goals and needs of water owners; and
- (2) Developing an education initiative focused on educating our community about why diversions are needed and the realities and complexities of living on a working river using information learned from (1) above, input from key stakeholders, compelling illustrative educational materials, and digital and social media platforms.

Together, these efforts will help provide information and opportunity for collaboration about the future of Left Hand Creek as a healthy working river. The education initiative (2) will foster a more engaged and informed community better prepared to face the realities and embrace the opportunities involved in living, working, or recreating on a healthy working river. The fish passage feasibility study (1) will provide information about existing conditions and explore opportunities for improvement, including which structures are impassible, which reaches have flow issues, and what types of potential design or operational changes may be possible and practical.

1.6 Grant Request/Amount Cash Match Funding In-kind Match Funding Project Sponsor(s)

Cash Match: 87% (%); In-Kind Match: _____ (%); Grant Request: 13,000 (k)

2.0 APPLICANT QUALIFICATIONS

2.1 Identify the lead project sponsor and all cooperators.

Lefthand Watershed Oversight Group is the lead project sponsor. Our responsibilities on this project will include: administering all project funding; managing the project to ensure compliance with grant requirements, scope, timelines, and budget; hiring consultants to complete work as needed; leading outreach and engagement efforts associated with the fish passage feasibility study; and leading the project education initiative. We are well qualified to lead the outreach, engagement, and education portions of this project based on our experience working with more than 12 diverse stakeholders and more than 100 private landowners in the watershed to successfully complete restoration, stewardship, and watershed science projects summarized in Table 3.1,

The mission of the Lefthand Watershed Oversight Group is to assess, protect, and restore the quality of our watershed, and to serve as a hub for watershed issues through the fostering of stakeholder collaboration. As a coalition of watershed stakeholders, we partner with many individuals and organizations with an interest in water resources along Left Hand Creek. Some of our most significant relationships are with the landowners and residents that live along the creek, Left Hand Water District (LHWD), Boulder County, City of Longmont, St. Vrain and Left Hand Water Conservancy District, Town of Jamestown, Town of Ward, James Creek Watershed Initiative, U.S. Forest Service, and Left Hand Ditch Company. All of these entities are represented on our Board of Directors.

Below we list additional lead cooperators and their roles and contributions as they pertain directly to this project. Cooperators marked with an asterisks (*) are also represented on our Board of Directors.

Table 2.1 Summary of Project Cooperators

Cooperator	Role/Contribution
Left Hand Ditch Company *	Volunteer co-host for Left Hand Ditch Tour.
St. Vrain Left Hand Water Conservancy District*	Cash contributor (pending) and volunteer co-host for Left Hand Ditch Tour. Also, see Section 4.3 regarding Stream Management Plan.
Trout Unlimited Boulder Flycaster Chapter*	Cash contributor through Embrace a Stream Grant (pending).
South Platte Roundtable	Cash Contributors through CWCB Water Supply Reserve Fund Grant (pending)
Private Landowners* +	Cash Contributors (received).
Colorado Parks and Wildlife (CPW)	Technical assistance (pending). CPW has expressed interest in providing guidance on fish passage criteria and sampling locations not previously visited. However, key staff are on leave until early May, so more information and a letter of support are currently in progress.
U.S. Forest Service	Technical assistance regarding aquatic ecology.

+ Please note that donations are from both community members and board member landowners.

2.2 What information is the project sponsor using to develop the proposed plan or project?

The Left Hand Creek Watershed Master Plan (AMEC, 2014) identified concerns with overall ecosystem health, particularly in the Plains reaches of Left Hand Creek due in part to diversion structures that act as barriers to fish movement as well as reducing flow. While the upper reaches of the creek ranked better in overall ecosystem health, there was still a concern about critical habitat. According to Colorado Parks and Wildlife Left Hand Creek and St. Vrain Creek “are two of the last refuges for a number of state threatened and endangered fish species.” (Richer, Kondratieff, and Swigle, 2015).

To address issues with fish passage, the Master Plan identified two important steps: (1) Work with Left hand Ditch Company to identify potential funding sources for retrofitting the diversion structures with fish passage or replacing them altogether; and (2) Identify the demand at each diversion to help determine if the structure can be replaced with a multi-purpose structure. Additional research shows that the challenges posed by diversions and by damage from the 2013 flood have resulted in reaches of Left Hand Creek being designated as one of five Priority I flood-affected northern Front Range streams for re-establishment of fish passage for native species (Richer, Kondratieff, and Swigle, 2015).

2.3 Specify in-kind services or cash contribution (match) amount for the activities proposed.

Cash Match: 87% (%); In-Kind Match: _____ (%);

3.0 ORGANIZATIONAL CAPABILITY

3.1 What is the applicant organization's history of accomplishments in the watershed?

Since 2005, Lefthand Watershed Oversight Group has been working to ensure a healthy and resilient Left Hand Creek Watershed for future generations. Our history of accomplishments is summarized below (Table 3.1 and Attachment 4) and also demonstrated by the diverse letters of support and financial contributions (Table 2.1, Section 6.0, and Attachment 1) that we received for this project.

Table 3.1: Summary of Accomplishments

Project/Accomplishment Summary	Partner Organizations/Agencies
Since 2005, Lefthand Watershed Oversight Group has been conducting project-specific and watershed-wide monitoring to better understand trends in water quality, water quantity, and stream health. We collaborate with stakeholders to collect data to ensure the effectiveness of flood recovery restoration, mine-related cleanup, and activities affecting stream health and water quality.	RiverWatch, Environmental Protection Agency (EPA), Trout Unlimited, Left Hand Water District, and Boulder County.
Since 2015, Lefthand Watershed Oversight Group has successfully secured 100% of the funding needed to design and implement restoration projects at twenty sites along Left Hand Creek Watershed. Ten projects are complete, and the rest are on-going. These projects are designed to reduce future flood risks, stabilize the streambed and banks, restore the ecological health of the watershed, and improve the human health and safety for landowners living along Left Hand Creek and its tributaries.	Boulder County, Left Hand Ditch Company, Left Hand Water District, and landowners. Funded by Natural Resources Conservation Service (NRCS) Emergency Watershed Protection (EWP) Program and the Colorado DOLA Community Development Block Grant – Disaster Recovery (CDBG-DR).
In November 2017, Lefthand Watershed Oversight Group completed a Regional Stream Stewardship & Recovery Handbook to engage our community in stewardship by offering a compelling educational resource using simple flow chart-style tools and workshops.	Full list of collaborators in available in the handbook . Funded by CDBG-DR.

Project/Accomplishment Summary	Partner Organizations/Agencies
In January 2018, Lefthand Watershed Oversight Group started a new project which includes development of a conceptual model, adaptive management framework, and citizen science pilot project for our recently completed restoration project sites.	City of Boulder Open Space and Mountain Parks, Boulder County Parks and Open Space, and U.S. Forest Service. Funded by CDBG-DR.
In January 2018, Lefthand Watershed Oversight Group was awarded funding to use our adaptive management framework (defined above) to monitor ten recently completed river restoration projects to ensure the long term success of recently restored areas which face on-going maintenance needs and dynamic watershed processes.	TBD (Project is in initiation stage). Funded by Colorado Water Conservation Board (CWCW) Watershed Restoration Grant Program, and donations from individuals and corporations.
In March 2018 Lefthand Watershed Oversight Group secured funding to implement our adaptive management framework on a few City of Boulder project sites.	City of Boulder Open Space and Mountain Parks

3.2 What level of staffing will be directed toward the implementation of the proposed project/planning effort?

As demonstrated in 6.0 Budget, Lefthand Watershed Oversight Group will allocate the equivalent of 17% of one person's staff time (0.17 FTE) across two years to this project, including managing the fish passage feasibility study, leading outreach associated with the fish passage feasibility study, and leading the education initiative. Currently, all four LWOOG staff members will be involved in this project leveraging experience in ecology, watershed science, hydrology, education, outreach, stakeholder engagement, and project management. Below we provide brief resumes for each member of the active project team.

Jessie Olson, Executive Director: Jessie is a restoration ecologist who has worked professionally in the field of ecological restoration since 2003, overseeing restoration and land management projects with non-profits, land trusts, and in the private sector. She holds a Master's degree in Landscape Architecture and Environmental Planning from U.C. Berkeley, where she focused on river and wetland restoration design and planning. Key experience includes non-profit management, ecological restoration, stakeholder engagement, community outreach, and stewardship.

Yana Sorokin, Project Manager: Yana is an ecosystem ecologist with seven years of experience. She has a Master's degree in Plant Ecology from the University of Wyoming. She is a skilled project manager with background in ecology and climate change with focus on communicating technical concepts to non-technical audiences. Yana led the development of Lefthand Watershed Oversight Group's Stewardship handbook. Key experience includes ecology, stewardship, and community outreach.

Glenn Patterson, Watershed Scientist: Glenn is LWOOG's Watershed Scientist and has been working to track and report trends in water quality and watershed health in Left Hand Creek since 2010. Glenn earned a Ph.D. in Watershed Science from Colorado State University. Prior to joining LWOOG he worked as a hydrologist with the U.S. Geological Survey for 30 years. He teaches six water-related courses at three universities. Key experience includes watershed education, hydrology, geomorphology, water quality, watershed science, monitoring, and data analysis.

Meg Parker, Outreach Coordinator: Meg is an Environmental Scientist with experience in watershed related community engagement and outreach. Most recently, Meg worked on the Truckee River in Reno, Nevada engaging the entire community in watershed management. Meg earned her B.S. in Environmental Science and Sustainability from Cornell University. Key experience includes education, outreach, communication, watershed science, and environmental science.

3.3 Will the applicant organization utilize community volunteers in the project? If so, how many and in what capacities?

As part of the education portion of this project, Lefthand Watershed Oversight Group will co-host a tour of the Left Hand Ditches. Left Hand Ditch Company and St. Vrain Left Hand Water Conservancy District have both volunteered to co-host this tour with Lefthand Watershed Oversight Group.

4.0 EFFECTIVENESS OF PROPOSAL

4.1 Provide a brief description of the watershed and the issues in the watershed as they relate to the project.

Left Hand Creek Watershed, located three miles north of Boulder, Colorado, in the Front Range of the Rocky Mountains flows has an interesting history as a “working river.” The 28-mile-long watershed carries more water than it would in its natural state, thanks to Colorado’s historic first inter-basin transfer, the Left Hand Ditch. First dug in 1861, this diversion brings water from South St. Vrain Creek to James Creek, a Left Hand Creek tributary, just west of the town of Ward.

Today, Left Hand Creek provides tremendous economic value for our community. Water diverted from the creek provides irrigation for agricultural land in Boulder County that would otherwise be unable to support crops and livestock. Left Hand Creek also contains many unique ecological, recreational, and historical resources. From wildlife habitat and local trout hotspots for anglers, to trails, cycling routes, and historic sites that influenced western water law, Left Hand Creek enhances our community’s quality of life. However, diverted water often results in diminished stream flows, posing challenges for wildlife, ecosystem health, and recreation, as well as people who rely upon the creek.

Diminished stream flows in Left Hand Creek mean that sections of the creek become too dry to support healthy fish populations, which require connected habitats, adequate water, and water in certain areas at particular times (e.g. water for spawning) to thrive. Diminished flows also hinder ecological health, enjoyment, and aesthetic appreciation of Left Hand Creek by our community. However, due to Left Hand Creek’s role as a working river, the importance of protecting existing water rights and diverting water for agriculture cannot be understated.

Therefore, addressing the possibility of restoring and improving stream flows requires education, engagement, and a complex analysis of technical, legal, operational, structural, economic, and ecological considerations, as well as input from water owners and diverse stakeholders with unique values and perspectives. With this in mind, Lefthand Watershed Oversight Group recognizes the need for a strategic approach to ensure that our working river is both meeting human needs and supporting ecosystem health.

We believe that this strategic approach must be grounded in community education and engagement, because before our community can work together to find solutions, we must work together to understand the challenges. To meet our goal of supporting education, knowledge sharing, and dialogue

about the context of Left Hand Creek as a “working river,” we have identified two objectives below. Our success in meeting these objectives is described in Section 5.3.

1. With regular input from water owners, develop conceptual alternatives (e.g. style/type of passage structure best suited for each barrier site) to allow for fish passage and stream connectivity while maintaining full decreed diversion capabilities.
2. Improve knowledge among community members and stakeholders about diversions, fish populations, and the context associated with a “working river” by developing relevant educational materials using compelling illustrative methods and digital and social media platforms.

4.2 Discuss the budget, the schedule, and deliverables for the proposed project and demonstrate that they are realistic.

Within the two year project, the fish passage study will take 18 months, and the education initiative will take two years. Approximately 70% of the budget is allocated towards the fish passage study which requires both technical analysis and stakeholder engagement. Approximately 30% of the budget is allocated toward the education initiative which will be informed by the fish passage study.

Both budget and schedule are realistic because each was developed based on quotes received from consultants who completed similar projects, our experience with stakeholder engagement, and through previous contracts and projects of similar nature. Both the budget and schedule were also developed to allow enough time and opportunity to engage and respect the schedules of stakeholders who may be participate in this project as volunteers, outside of their regular jobs and work hours.

Deliverables for the Task 1 include a Fish Passage Feasibility Study Final Report including a summary of owner feedback about potential alternatives. Deliverables for Task 2 include educational materials that will be shared on digital and social medial platforms on topics such as benefits of ditches, ditch ecology, history of the watershed, map of ditches, known fish populations, etc. Additional topics will be identified during the project. Deliverables also include a ditch tour and fish passage study results workshop.

4.3 Discuss the multi-objective aspects of the project and how they relate to each other.

This project is multi-objective because it will address protection/enhancement of the environment and water-based recreation through the fish passage study while also promoting education and outreach about stream connectivity through the education initiative. Our multi-objective approach is also well-aligned with the South Platte Basin Roundtable priorities within the Colorado Water Plan.

The project complements the St. Vrain and Left Hand Water Conservancy District’s \$300,000 Stream Management Plan (funded partially by the Colorado Water Conservation Board and the South Platte Basin Roundtable) by taking a focused look at on-the-ground solutions related to fish passage, as compared to the stream management plan’s more encompassing, broad-scale approach. Looking at both a regional and local scale simultaneously will allow for the development of solutions that are scientifically sound and realistic. The project also builds on the impacts of Lefthand Watershed Oversight Group’s current work implementing 20 flood recovery projects to restore the physical components of the stream necessary to improve habitat, water delivery reliability, and more by assessing options to improve flow for fish.

5.0 EVALUATION AND MONITORING PLAN

5.1 Describe storage, management and reporting of project data.

All reports developed and data collected will be stored and shared on Lefthand Watershed Oversight Group's website. Lefthand Watershed Oversight Group is developing a web-accessible database as part of a separately funded community science project, and data collected for this project will be stored and managed on this database. Reports will be shared widely using our digital and social media platforms.

5.2 Describe any scientific models used as part of the project or state that no models will be used.

Relevant models will be identified as needed during the fish passage feasibility study.

5.3 Describe the organization's proposed monitoring plan for measuring the long-term performance of the project.

The performance of this project will ultimately be measured by our ability to recommend realistic conceptual alternatives for fish passage implementation projects that have strong water owner understanding and support. Monitoring throughout the project to ensure that we are meeting this goal will include surveys of stakeholder and community response to conceptual alternatives; development and wide distribution of educational materials measured by numbers of handouts developed and number of users reached, and surveys of stakeholder and community response to ditch tour and workshop.

5.4 Describe long-term funding plans for operation and maintenance of restoration activities and for ongoing monitoring, if any. Not applicable for planning and education project.

6.0 BUDGET (Detailed budget and summary are available in Attachment 2.)

	Healthy Rivers Grant	Trout Unlimited - Embrace a Stream	CWCB WSRF Grant - Basin Roundtable	St. Vrain Left Hand Water Conservancy District	CDBR-DR Legacy Project	Landowner Donations	Match Total (Cash)	Total
<i>Status</i>	<i>This request</i>	<i>Pending</i>	<i>Pending</i>	<i>Pending</i>	<i>Received</i>	<i>Received</i>		
Task 1 - Fish Passage Feasibility Study	\$ 2,596.60	\$ 10,000.00	\$ 35,000.00	\$ -	\$ 16,165.00	\$ 5,000.00	\$ 66,165.00	\$ 68,761.60
Task 2 - Outreach and Education Initiative	\$ 10,403.40	\$ -	\$ 15,000.00	\$ 5,000.00	\$ -	\$ -	\$ 20,000.00	\$ 30,403.40
	\$ 13,000.00	\$ 10,000.00	\$ 50,000.00	\$ 5,000.00	\$ 16,165.00	\$ 5,000.00	\$ 86,165.00	\$ 99,165.00

7.0 ATTACHMENTS

Attachment 1: Letters of Support

Attachment 2: Detailed Budget

Attachment 3: References

Attachment 4: 2017 Annual Report

Attachment 1

Letters of Support*

*Please note that while letters are addressed to Colorado Water Conservation Board and South Platte Basin Roundtable, they are written for this same project.



April 24, 2018

South Platte Basin Roundtable
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

The Left Hand Water District is pleased to write in support of the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by Lefthand Watershed Oversight Group (LWOG), entitled **"Fish Passage and Education on Left Hand Creek."** Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a "working river."

The District has contributed substantial time and financial resources in the creation and ongoing support of LWOG. Our Board of Directors has been impressed with how Lefthand Watershed Oversight Group has brought together the appropriate stakeholders and has continually proven that they can be successful. Moving beyond the many structural projects completed to recover from our regions mining legacy, and more recently the 2013 flood, the proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within in recent and on-going flood recovery restoration project areas (2) develop an education initiative and materials focused on engaging and educating the community about the realities and complexities of living on a "working river" or hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.

LWOG has put in the work to create a great network of community support which puts the organization in a unique position to pull together private and public property owners, local governments, and water rights holders. Through the collaborative efforts of LWOG's staff and volunteer board, we see the potential for finding successful solutions at an all-time high. We urge you to put a high priority on this funding request, and look forward to working with Lefthand Watershed Oversight Group to build resiliency into Left Hand Creek Watershed.

Sincerely,

Left Hand Water District
Christopher Smith, P.E.
General Manager

Left Hand Ditch Company

P.O. Box 229 Niwot, Co. 80544 (Office: 303-652-9965)

4/30/2018}

South Platte Basin Roundtable
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

Left Hand Ditch Company is pleased to write in support of the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by Lefthand Watershed Oversight Group (LWOG), entitled "**Fish Passage and Education on Left Hand Creek.**" Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a "working river."

Lefthand Watershed Oversight Group recently completed 10 flood recovery restoration projects along Left Hand Creek and have 10 more projects underway, working with over 100 private landowners. While these projects take a great step forward in restoring the physical components of the project site, flow or stream connectivity restoration has yet to be completed. The proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within in recent and on-going flood recovery restoration project areas (2) develop an education initiative and materials focused on engaging and educating the community about the realities and complexities of living on a "working river" or hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.

We feel that LWOG has done a good job bringing the appropriate stakeholders to the table and developing a proposal that will result in implementation of a successful project that is well aligned with the goals of the South Platte Basin Round Table and the stakeholders. By completing this project, LWOG will increase its effectiveness in improving the watershed health and contributing to implementing the water plan. Timing of this project is particularly well-suited as LWOG can take advantage of the 20 on-going project areas and engagement with over 100 private residents to complete a project that takes all points of view into consideration.

We urge you to put a high priority on this proposed project, and look forward to working with LWOG to build resiliency into Left Hand Creek Watershed.

Sincerely,


Terry L. Plummer
Vice President of
Maintenance & Operations



PUBLIC WORKS & NATURAL RESOURCES

(303) 651-8416 | LONGMONTCOLORADO.GOV/PWNR

April, 27 2018

South Platte Basin Roundtable
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

The City of Longmont supports the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by Lefthand Watershed Oversight Group (LWOG), entitled **"Fish Passage and Education on Left Hand Creek."** Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a "working river."

Lefthand Watershed Oversight Group recently completed 10 flood recovery restoration projects along Left Hand Creek and have 10 more projects underway, working with over 100 private landowners. While these projects take a great step forward in restoring the physical components of the project site, flow or stream connectivity restoration has yet to be completed. The proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within the recent and on-going flood recovery restoration project areas (2) develop an education initiative and materials focused on engaging and educating the community about the realities and complexities of living on a "working river" or hybrid ecosystem. While the focus of this project is on the Left Hand Creek Watershed, the project can be transferable regionally and could be applied and modified as needed by other Colorado watersheds.

We feel that LWOG has done a good job bringing the appropriate stakeholders to the table and developing a proposal that will result in implementation of a successful project that is well aligned with the goals of the South Platte Basin Round Table and the stakeholders. By completing this project, LWOG will increase its effectiveness in improving the watershed's health which will contribute to implementing the water plan. Timing of this project is particularly well-suited, as LWOG can take advantage of the 20 on-going project areas and engagement with over 100 private residents which will take all points of view into consideration.

We urge you to put a high priority on this proposed project, and look forward to working with LWOG to build resiliency into the Left Hand Creek Watershed.

Sincerely,

A handwritten signature in blue ink that reads "James E. Angstadt". The signature is written in a cursive, flowing style.

James E. Angstadt
Director of Engineering Services
City of Longmont



Transportation Department

2525 13th Street, Suite 203 • Boulder, Colorado 80304 • Tel: 303.441.3900 • Fax: 303.441.4594

April 26, 2018

South Platte Basin Roundtable
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

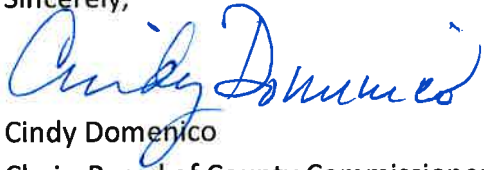
Boulder County is writing in support of the grant application being submitted by the Lefthand Watershed Oversight Group (LWOG) to the South Platte Basin Round Table Water Supply Reserve Fund, entitled **"Fish Passage and Education on Left Hand Creek."** Completion of this project is important to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a river with multiple uses, including ecological functions.

Since the September 2013 flood event, Boulder County and LWOG have completed several flood recovery restoration projects along Left Hand Creek. While these projects have stabilized the channel, restored the natural floodplain, and revegetated the stream corridor, comprehensive stream connectivity restoration has yet to be completed. The proposed project under consideration aims to: (1) identify options for restoring stream connectivity and fish passage within recent and on-going flood recovery restoration project areas; and (2) develop an education initiative focused on engaging and educating the community about the realities and complexities of living on a hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.

LWOG has played an important role in restoring the Left Hand Creek Watershed through the flood recovery process and is prepared to continue successful project implementation of the **"Fish Passage and Education on Left Hand Creek"** project, which is well aligned with the goals of the South Platte Basin Round Table and its stakeholders. By completing this project, LWOG will increase its effectiveness in improving the watershed health and contributing to the implementation of the state water plan.

Boulder County supports this application and encourages you to fully fund it. Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read "Cindy Domenico". The signature is fluid and cursive, with the first name "Cindy" written in a larger, more prominent script than the last name "Domenico".

Cindy Domenico
Chair, Board of County Commissioners



April 26, 2018

South Platte Basin Roundtable
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

The Boulder Flycasters are pleased to write in support of the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by Lefthand Watershed Oversight Group (LWOG), entitled **"Fish Passage and Education on Left Hand Creek."** Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a "working river."

The Boulder Flycasters are a Chapter of Trout Unlimited, North America's premier coldwater conservation group, and Colorado Trout Unlimited, a leading conservation group in our state. A 501c3 corporation, the Flycaster's mission is to conserve, protect, and restore coldwater fisheries and their watersheds. We currently have near 1,500 members in the Boulder area and implement our mission with outreach events, youth education, and conservation projects. Boulder Flycasters have been involved in many conservation projects over the years. In the last five years we have implemented major stream and riparian habitat improvements on Middle Boulder Creek, South Boulder Creek, and Jenny Creek in the upper Boulder Creek watershed.

As a result of the devastating flood in September 2013, many streams along the Front Range sustained overwhelming damage. Left Hand Creek is one such waterway that suffered. Much has been accomplished on Left Hand Creek since the flood to restore and repair the flood's damage. Lefthand Watershed Oversight Group recently completed 10 flood recovery restoration projects along Left Hand Creek and have 10 more projects underway, working with over 100 private landowners. While these project take a great step forward in restoring the physical components of the project site, flow or stream connectivity restoration has yet to be completed. The proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within in recent and on-going flood recovery restoration project areas (2) develop an education initiative and materials focused on engaging and educating the community about the realities and complexities of living on a "working river" or hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.



We feel that LWOG has done a good job bringing the appropriate stakeholders to the table and developing a proposal that will result in implementation of a successful project that is well aligned with the goals of the South Platte Basin Round Table and the stakeholders. By completing this project, LWOG will increase its effectiveness in improving the watershed health and contributing to implementing the water plan. Timing of this project is particularly well-suited as LWOG can take advantage of the 20 on-going project areas and engagement with over 100 private residents to complete a project that takes all points of view into consideration.

We urge you to put a high priority on this proposed project, and look forward to working with LWOG to build resiliency into Left Hand Creek Watershed.

Sincerely,

A handwritten signature in black ink, appearing to be "Robert McCormack", with a stylized loop at the end.

Robert McCormack
President, Boulder Flycasters
PO Box 541
Boulder, CO 80306
cell-201-213-7295
troutrobert@gmail.com
Boulderflycasters.org



Thursday, April 26, 2018

South Platte Basin Roundtable
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

I am pleased to write in support of the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by Lefthand Watershed Oversight Group (LWOG), entitled **“Fish Passage and Education on Left Hand Creek.”** Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a “working river.”

Lefthand Watershed Oversight Group recently completed 10 flood recovery restoration projects along Left Hand Creek and have 10 more projects underway, working with over 100 private landowners. While these projects take a great step forward in restoring the physical components of the project site, flow or stream connectivity restoration has yet to be completed. The proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within in recent and on-going flood recovery restoration project areas, and (2) develop an education initiative and related materials focused on engaging and educating the community about the realities and complexities of living on a “working river” or hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.

I feel that LWOG has done a good job bringing the appropriate stakeholders to the table and developing a proposal that will result in implementation of a successful project that is well aligned with the goals of the South Platte Basin Round Table and the stakeholders. By completing this project, LWOG will increase its effectiveness in improving the watershed health and contributing to implementing the water plan. Timing of this project is particularly well-suited as LWOG can take advantage of the 20 on-going project areas and engagement with over 100 private residents to complete a project that takes all points of view into consideration.

We urge you to put a high priority on this proposed project and look forward to working with LWOG to build resiliency into Left Hand Creek Watershed.

Sincerely,

Chris J. Wiorek
Resident along Left Hand Creek

April 26, 2018

South Platte Basin Roundtable
Colorado Water Conservation
Board 1313 Sherman St., Room
721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

We are pleased to write in support of the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by Lefthand Watershed Oversight Group (LWOG), entitled **“Fish Passage and Education on Left Hand Creek.”** Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a “working river.”

Lefthand Watershed Oversight Group recently completed 10 flood recovery restoration projects along Left Hand Creek and have 10 more projects underway, working with over 100 private landowners. While these project take a great step forward in restoring the physical components of the project site, flow or stream connectivity restoration has yet to be completed. The proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within in recent and on-going flood recovery restoration project areas (2) develop an education initiative and materials focused on engaging and educating the community about the realities and complexities of living on a “working river” or hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.

We feel that LWOG has done a good job bringing the appropriate stakeholders to the table and developing a proposal that will result in implementation of a successful project that is well aligned with the goals of the South Platte Basin Round Table and the stakeholders. By completing this project, LWOG will increase its effectiveness in improving the watershed health and contributing to implementing the water plan. Timing of this project is particularly well-suited as LWOG can take advantage of the 20 on-going project areas and engagement with over 100 private residents to complete a project that takes all points of view into consideration.

We urge you to put a high priority on this proposed project, and look forward to working with LWOG to build resiliency into Left Hand Creek Watershed.

Sincerely,

Patricia M. Cypher, LWOG Board of Directors, Town of Ward, Colorado

April 27,2018

South Platte Basin Roundtable

Colorado Water Conservation Board

1313 Sherman St., Room 721

Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

I am pleased to write in support of the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by Lefthand Watershed Oversight Group (LWOG), entitled **“Fish Passage and Education on Left Hand Creek.”** Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a “working river.” As a 35 year resident along Left Hand Creek, I have witnessed the pressure of development and the 2013 flood event has taken on the overall health of the ecosystem. An overall entire ecosystem to the management of the waterway from peak to eventually the flow into the St. Vrain creek represents the best future approach to improve the operational management of the working rivers.

Lefthand Watershed Oversight Group recently completed 10 flood recovery restoration projects along Left Hand Creek and have 10 more projects underway, working with over 100 private landowners. While these project take a great step forward in restoring the physical components of the project site, flow or stream connectivity restoration has yet to be completed. The proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within in recent and on-going flood recovery restoration project areas (2) develop an education initiative and materials focused on engaging and educating the community about the realities and complexities of living on a “working river” or hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.

I feel that LWOG has done a an excellent job for the stakeholders tin developing a proposal that could manage a successful project that is well aligned with the goals of the South Platte Basin Round Table and the stakeholders. By completing this project, LWOG will increase its

effectiveness in improving the watershed health and contributing to implementing the water plan. Timing of this project is particularly well-suited as LWOG can take advantage of the 20 on-going project areas and engagement with over 100 private residents to complete a project that takes all points of view into consideration.

We urge you to put a high priority on this proposed project, and look forward to working with LWOG to build resiliency into Left Hand Creek Watershed.

Sincerely,

Rick Kauvar

LWOG Board of Directors

Creek Resident since 1983

April 26, 2018

South Platte Basin Roundtable
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

As a landowner along Lefthand Creek and a Lefthand Watershed Oversight Group (LWOG) Board member, I am pleased to write in support of the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by LWOG, entitled **"Fish Passage and Education on Left Hand Creek."** Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a "working river."

Lefthand Watershed Oversight Group recently completed 10 flood recovery restoration projects along Left Hand Creek and have 10 more projects underway, working with over 100 private landowners. While these project take a great step forward in restoring the physical components of the project site, flow or stream connectivity restoration has yet to be completed. The proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within in recent and on-going flood recovery restoration project areas (2) develop an education initiative and materials focused on engaging and educating the community about the realities and complexities of living on a "working river" or hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.

I feel that LWOG has done an excellent job bringing the appropriate stakeholders to the table and developing a proposal that will result in implementation of a successful project that is well aligned with the goals of the South Platte Basin Round Table and the stakeholders. By completing this project, LWOG will increase its effectiveness in improving the watershed health and contributing to implementing the water plan. Timing of this project is particularly well-suited as LWOG can take advantage of the 20 on-going project areas and engagement with over 100 private residents to complete a project that takes all points of view into consideration.

I urge you to put a high priority on this proposed project.

Sincerely,

Sue Schauffler

Attachment 2
Detailed Budget



Fish Passage and Education on Left Hand Creek - Summary Budget						
Task No.	Task Description	Start Date	End Date	Grant Funding Request	Match Funding	Total
1	Task 1 - Fish Passage Feasibility Study			\$ 2,596.60	\$ 66,165.00	\$68,761.60
2	Task 2 - Outreach and Education Initiative			\$ 10,403.40	\$ 20,000.00	\$30,403.40
Total				\$13,000	\$86,165	\$99,165.00

Fish Passage and Education on Left Hand Creek - Detailed Budget

		Consultants					LWOG Staff					Consultants and other direct costs						Assumptions
		Principal	Project Manager	Specialist	Graphic Designer		Executive Director	Project Manager	Outreach Coordinator	Watershed Scientist		Bus Rental	Office supply, printing, and poster board		TASK TOTALS	Healthy Rivers Request	Other Matching Funds	
		\$ 160	\$ 130	\$ 110	\$ 125	Subtotal	\$ 56.00	\$ 38.99	\$ 23.22	\$ 43.37	Subtotal	Lump sum	Lump Sum	Subtotal				
		Estimated Hours					Estimated Hours					Estimated Cost Per Task						
Task 1 - Fish Passage Feasibility Study																		
1.1 Research of existing information	\$ 5,340.00	4	15	25		\$ 5,340.00					\$ -			\$ -	5,340.00			Based on quotes received
1.2 Biological Assessment	\$ 9,480.00	8	25	45		\$ 9,480.00								\$ -	9,480.00			Based on quotes received
1.3 Passage Assessment	\$ 5,890.00	4	15	30		\$ 5,890.00					\$ -			\$ -	5,890.00			Based on quotes received
1.4 Evaluation of considerations	\$ 17,400.00	10	75	55		\$ 17,400.00					\$ -			\$ -	17,400.00			Based on quotes received
1.5 Assessment of opportunities	\$ 18,500.00	10	75	65		\$ 18,500.00					\$ -			\$ -	18,500.00			Based on quotes received
1.6 Stakeholder outreach and engagement	\$ 12,151.60	5	10	10		\$ 3,200.00	40	80	80	40	\$ 8,951.60			\$ -	12,151.60			Based on hours per task expected
Task Subtotal	\$ 68,761.60					\$ 59,810.00					\$ 8,951.60			\$ -	68,761.60	\$ 2,596.60	\$ 66,165.00	\$ -
Task 2 - Outreach and Education Initiative																		
1.1 Educational materials	\$ 13,027.40				40	\$ 5,000.00	10	60	60	40	\$ 6,027.40		\$ 2,000.00	\$ 2,000.00	13,027.40			Based on quotes received for graphic design work.
1.2 Ditch tour	\$ 8,543.20	2	6	6	8	\$ 2,760.00	10	40	40	40	\$ 4,783.20	\$ 1,000.00		\$ 1,000.00	8,543.20			Based on one tour with bus rental.
1.3 Fish feasibility results workshop	\$ 5,591.60	3	6	6	8	\$ 2,920.00	10	20	20	20	\$ 2,671.60			\$ -	5,591.60			Based on one workshop and donated space (e.g. pulic library).
1.4 Digital and social media campaign	\$ 3,241.20					\$ -	10	10	80	10	\$ 3,241.20			\$ -	3,241.20			
Task Subtotal	\$ 30,403.40					\$ 10,680.00					\$ 16,723.40			\$ 3,000.00	30,403.40	\$ 10,403.40	\$ 20,000.00	\$ -
TOTAL		\$ 70,490.00					\$ 25,675.00					\$ 99,165.00						

Fish Passage and Education on Left Hand Creek - Match Budget

	Healthy Rivers Grant	Trout Unlimited - Embrace a Stream	CWCB WSRF Grant - Basin Roundtable	St. Vrain Left Hand Water Conservancy District	CDBR-DR Legacy Project	Landowner Donations	Match Total (Cash only)	Total
<i>Status</i>	<i>This request</i>	<i>Pending</i>	<i>Pending</i>	<i>Pending</i>	<i>Received</i>	<i>Received</i>		
Task 1 - Fish Passage Feasibility Study	\$ 2,596.60	\$ 10,000.00	\$ 35,000.00	\$ -	\$ 16,165.00	\$ 5,000.00	\$ 66,165.00	\$ 68,761.60
Task 2 - Outreach and Education Initiative	\$ 10,403.40		\$ 15,000.00	\$ 5,000.00	\$ -	\$ -	\$ 20,000.00	\$ 30,403.40
	\$ 13,000.00	\$ 10,000.00	\$ 50,000.00	\$ 5,000.00	\$ 16,165.00	\$ 5,000.00	\$ 86,165.00	\$ 99,165.00

Attachment 3

References

References

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- Myrick, Chris, 2014, An Introduction to Colorado Front Range Fishes. Presentation given at FEMA Fish Passage Workshop, January 8, 2014, Berthoud, Colorado. <https://fema.connectsolutions.com/fishpassage/>, accessed 4-23-18.
- Richer, E.E., M.C. Kondratieff, and B.D. Swigle, 2015, Post-Flood Recovery Assessment and Stream Restoration Guidelines for the Colorado Front Range. *Colorado Parks and Wildlife*, 26 p. <https://cpw.state.co.us/Documents/Research/Aquatic/pdf/PostFloodAssessmentandGuidelines.pdf>, accessed 4-23-18.
- AMEC, 2014, Left Hand Creek Watershed Master Plan. <https://lwog.org/wp-content/uploads/2017/05/final-left-hand-creek-watershed-master-plan2.pdf>, accessed 4-23-18.

Attachment 4
2017 Annual Report

Annual Report

2017





COVER: Brilliant fall colors on Left Hand Creek, *Meg Parker*
THIS PAGE: Left Hand Canyon Palisades under blue skies in
early fall, *Glenn Patterson*



Christopher Smith, Board President



Jessie Olson, Executive Director

Proudly Rooted in Watershed Protection

Dear Friends of Left Hand Creek,

Lefthand Watershed Oversight Group (LWOG) has been proudly rooted as a watershed protection group since 2005. The early years of the organization were marked with a focus on water quality and mine related clean up activity. The 2013 flood was a catalyst for change for many in the Front Range, including LWOG. In 2014 we were selected as the organization to oversee implementation of the Left Hand Creek Watershed Master Plan. With that came the leadership opportunity to secure and oversee millions of dollars for stream restoration projects on private property.

Today, four years after the flood, we are proud to have successfully completed 10 flood recovery river restoration projects on over 70 private properties, completed a Regional Stream Stewardship Handbook, launched a new website, completed a five-year strategic plan, and grown from one part time employee to the equivalent of three full time employees.

As a thriving watershed coalition, we are excited about our future work to protect and restore tomorrow's river. We know that the success of our recently completed projects will only continue into tomorrow if we invest in long-term stewardship of our project sites today. For this reason, we launched our Stewardship Partners Campaign in 2017. As of writing this, we are just \$90,000 shy of reaching our \$480,000 goal. Thank you to everyone that has contributed so far! If you have not yet, please consider investing in tomorrow's river by donating today.

As we move into 2018, we are looking forward to growing our Watershed Science, Stewardship, and Education and Outreach Programs to ensure the community has the knowledge, tools, and skills needed to help protect and restore the watershed for future generations.

Thank you for your continued support!

Christopher Smith
President, Board of Directors

Jessie Olson
Executive Director

Who We Are

Since 2005, Lefthand Watershed Oversight Group has encouraged the community to protect and restore Left Hand Creek Watershed for future generations. As a stakeholder driven, non-profit, non-governmental, organization located in Boulder County, Colorado, we serve the community by:

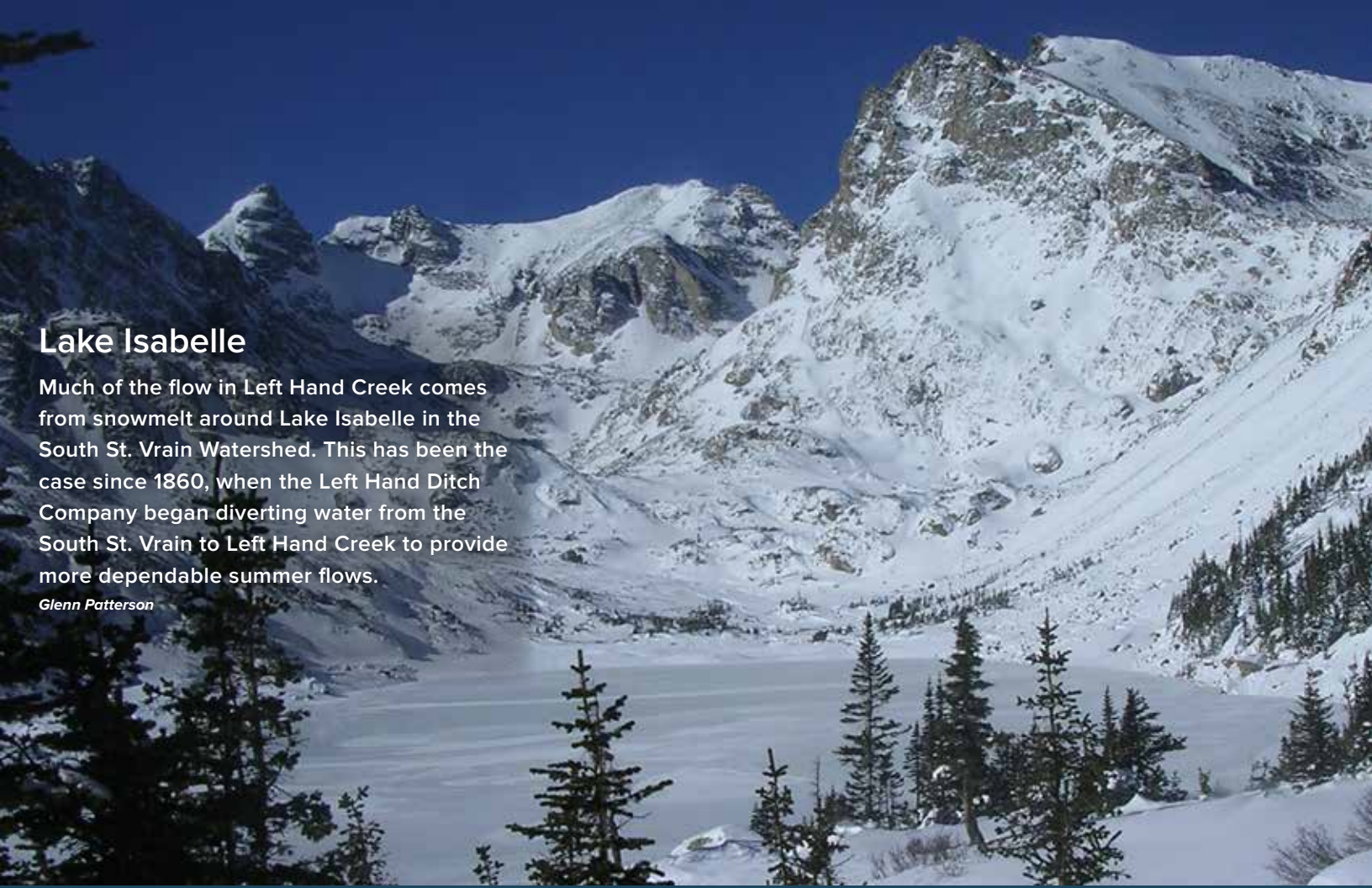
- Monitoring and protecting water quality and important water sources for over 20,000 residential and agricultural water users,
- Managing restoration projects, and
- Striving to build a strong stewardship ethic within the community.



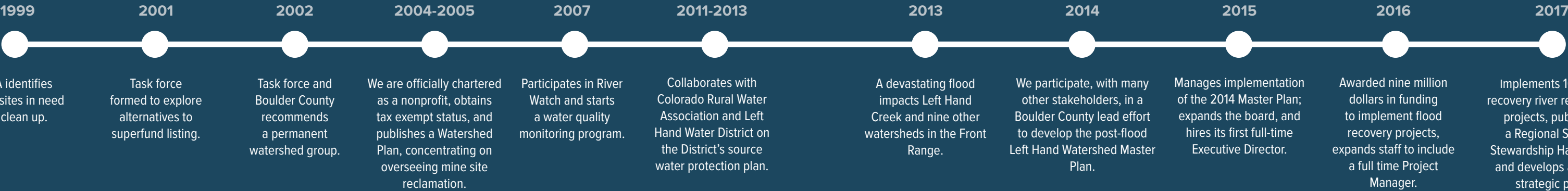
Lake Isabelle

Much of the flow in Left Hand Creek comes from snowmelt around Lake Isabelle in the South St. Vrain Watershed. This has been the case since 1860, when the Left Hand Ditch Company began diverting water from the South St. Vrain to Left Hand Creek to provide more dependable summer flows.

Glenn Patterson

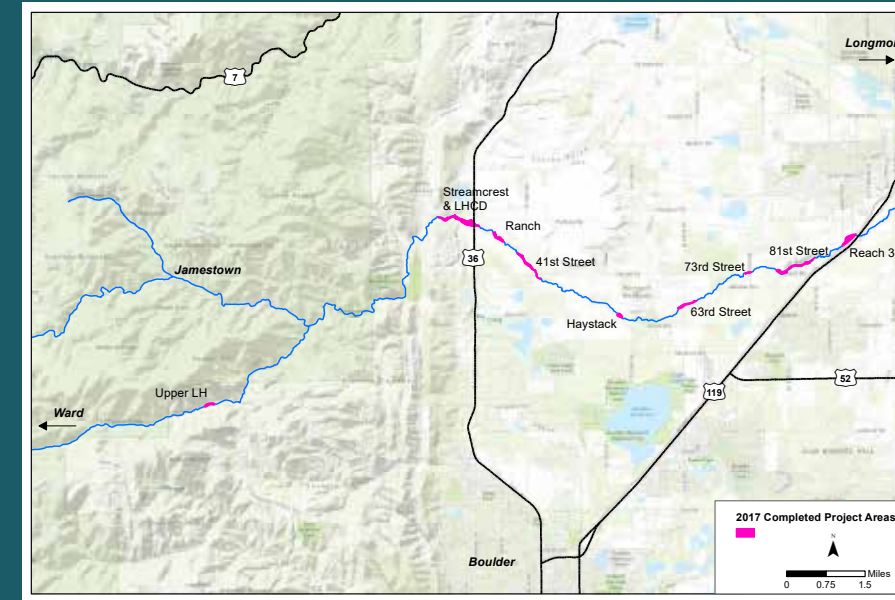


History of Lefthand Watershed Oversight Group



Our Restoration Program addresses urgent and discrete problems and concerns identified through our Watershed Science Program; to enhance multiple benefits such as water quality, ecological function, flood resilience, agricultural efficiency, recreational access, and improving the natural character of the watershed. As part of this program we facilitate and lead watershed planning and implementation projects, consistent with applicable laws, property rights, water rights, local policies and procedures, management plans, and master plan guidance. We strive to implement projects that are transferable and repeatable across communities.

Construction underway at the 41st Street Project site. Large logs were buried into the banks to provide bank stabilization and erosion control using natural materials.



RESTORATION Highlights

This year we completed 10 restoration projects on 70 private properties in response to damage cause by the 2013 floods. Project planning, design, and construction costs exceeded seven million dollars. The projects were designed and implemented to reduce future flood risks, stabilize damaged streambed and banks, restore the ecological health of the watershed, and ensure human health and safety. Our staff procured and managed engineering, construction, and revegetation consultants and contractors to implement the work. We worked together with land owners to ensure that projects were designed and implemented for the long term benefit of the creek and community. Upon completion these projects improve overall quality, health, and long-term resilience of the watershed.

PROJECT FUNDERS

- Colorado Water Conservation Board (CWCB)
Colorado Emergency Watershed Protection Program
- Colorado Division of Local Affairs (DOLA)
Community Development Block Grant for Disaster Recovery (CDBG-DR)

AT LEFT: Map of 2017 Completed restoration project areas; Team members from Otak, Flywater and IronWoman planning for the work ahead at the Streamcrest Project site; Team members from LWOG, ACC and Enginuity enjoying a sunny day at the 41st Street Project site.

RESTORATION

By the Numbers

CONSTRUCTION

- 10,524 feet of banks stabilized
- 72 stream restoration structures (e.g. root wads, cross vanes, boulder-cobble toe, etc.) implemented
- 10,952 feet of stream recovered
- 66 private properties restored

VOLUNTEER HOURS

4,428 volunteer hours =
\$104,323.68 of in-kind volunteer labor thanks to help from our partners, Wildland Restoration Volunteers!



Xilinx volunteers planting shrub seedlings at the Streamcrest Project site.



REVEGETATION

- 3,591 woody species
- 4,024 wetland plants
- 12,372 willow and cottonwood live stakes
- 22 acres seeded with native vegetation

PROJECT OVERSIGHT

- 19 weeks of construction
- 140 meetings with private landowners

“The care for the environment that existed (owls nesting, noxious plant removal, etc.) and the patience and willingness of the people involved to make sure that every homeowner felt 100% comfortable with the project. Great job. I love what you’re doing!”

— Donna and Eric Schult,
63rd Street landowners



The Foothills Project was awarded the Contractors Association Environmental Excellence Award.

We conduct project-specific and watershed-wide monitoring to better understand trends in water quality, water quantity, and stream health. Since inception we have collected water quality data via River Watch monitoring. We collaborate with stakeholders to collect data to ensure the effectiveness of flood recovery restoration, mine-related cleanup and other activities affecting stream health and water quality.

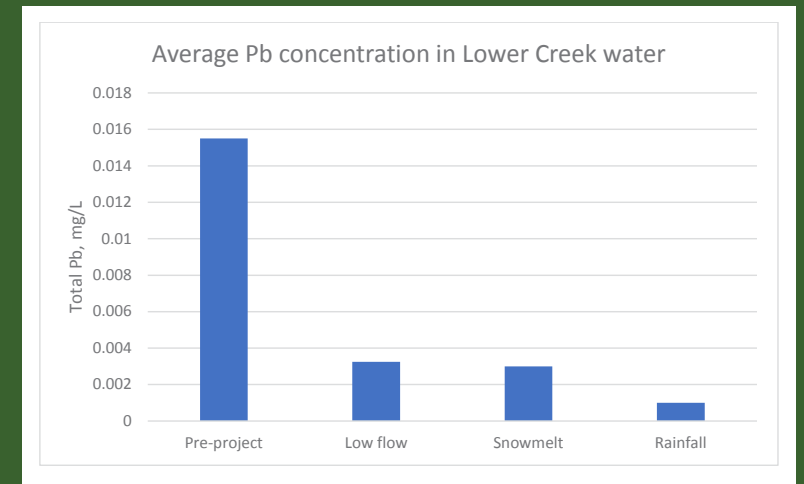
Glenn Patterson, PhD, is our Watershed Scientist who has worked with LWOG since 2010.

WATERSHED SCIENCE Highlights

In 2017, we expanded monitoring services in collaboration with other entities interested in Left Hand Creek, on a fee-for-service basis. LWOG worked with Trout Unlimited and the U.S. Forest Service to conduct an assessment of the decrease in lead contamination following restoration of an informal recreational shooting area on Lower Creek, a tributary to Left Hand Creek. Samples of stream water and bottom sediment were collected from Lower Creek and Left Hand Creek during snowmelt runoff, rainfall runoff, and low flow. The samples were analyzed for total lead and suspended sediment. Results showed a clear, major decline of about 75% in concentrations of total lead in the samples of Lower Creek water collected after the completion of the restoration project, compared to those collected prior to the restoration project (see below right).



Glenn Patterson collecting a water sample in Left Hand Creek.



Concentrations of total lead in Lower Creek water, averaged among the four sampling sites, prior to and after the restoration project.

WATERSHED SCIENCE By the Numbers

TASK	2016	2017
Water-quality samples	114	165
Water-quality analyses	346	543
Benthic macro-invertebrate samples	12	6
Photo-monitoring points established	65	30
Photos taken from photo monitoring points	235	319
Reaches assessed using		
Stream Visual Assessment Protocol version 2	3	6

NOTES: In 2017, LWOG continued river watch sampling, and photo monitoring of restoration sites. In addition, we collaborated with the University of Colorado- Boulder graduate students as part of their class, Applied Stream Ecology. LWOG staff assisted graduate students in collecting data to help assess differences between restored and unrestored sites. More information about this study can be found: <https://lwog.org/wp-content/uploads/2018/03/2017-CU-Left-Hand-Creek-Field-Project-Report.pdf>

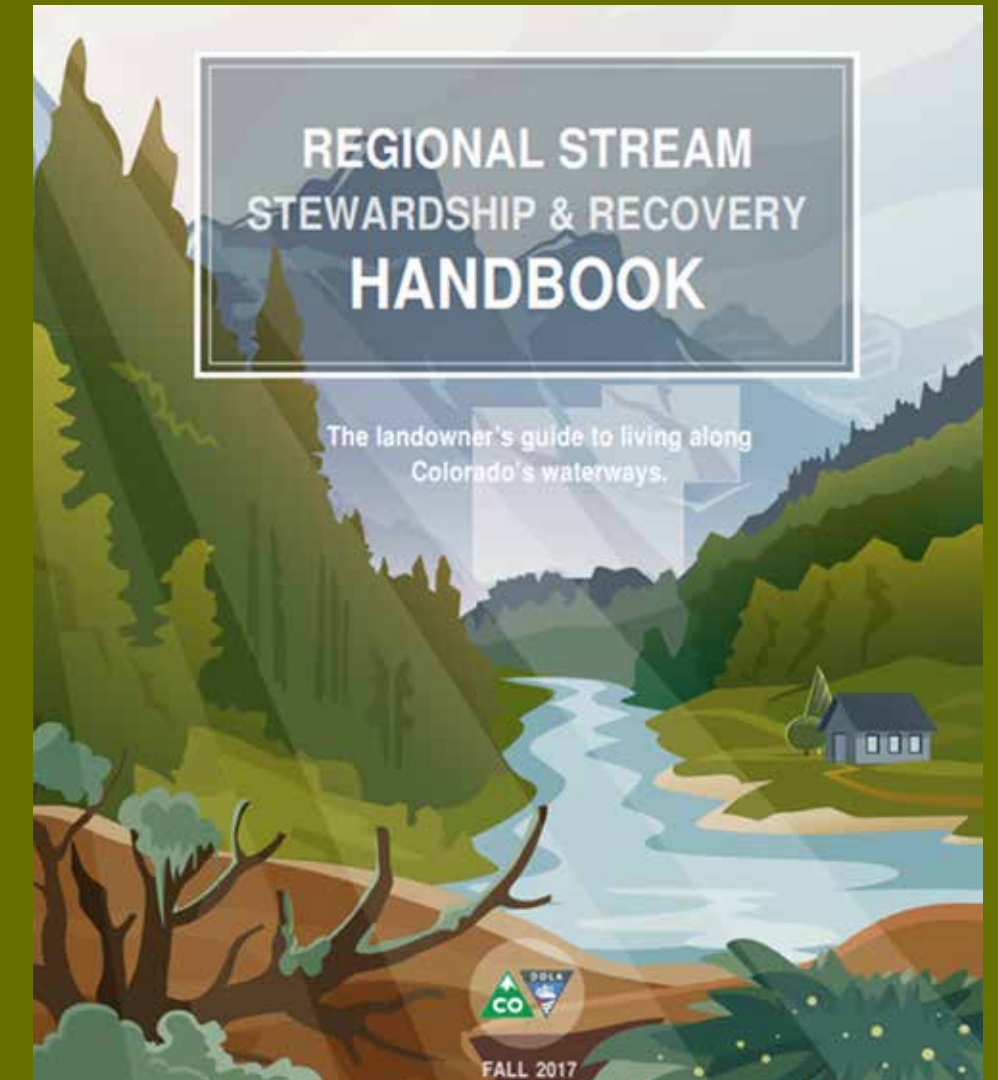
Our Stewardship Program

Our Stewardship Program strives to build a community-wide stewardship ethic to support the health and resilience of our watershed for future generations. We work towards this goal by helping our community members become informed, involved, and invested in watershed stewardship through participation in monitoring and protection of recently restored areas of the watershed. We emphasize an adaptive management approach throughout all of our stewardship projects, so that we learn through the process of stewardship, and adjust stewardship actions based on what's learned. Using this community-base and adaptive approach, we aim to carry out creative and innovative stewardship projects that have value and transferability throughout the state.

Xilinx volunteers plant at a plains reach project site.

STEWARDSHIP Highlights

This year we completed the Regional Stream Stewardship & Recovery Handbook, an educational resource for private landowners to better understand their streamside properties in the context of the larger watershed. The Regional Stream Stewardship & Recovery Handbook serves as a resource for landowners to learn about their streamside properties, including appropriate stewardship solutions to address weeds, erosion, or other issues; information about how individual properties matter in the context of the watershed, environment, and others living along the creek; and reference guides for implementing stewardship projects.



Lefthand Watershed Group's Outreach and Education Program is integral to all other programs. Under this program, we facilitate stakeholder communication, and strive to serve the needs of landowners and other stakeholders, with strong public and financial support. Activities include leading volunteer events, organizing and leading public meetings, engaging community members in restoration projects, and responding promptly to community concerns and questions about the watershed.

Micro Motion volunteers removing invasive plants at a project site.



EDUCATION AND OUTREACH Highlights

In 2017 we increased awareness within the community of watershed related resources. Highlights include:

- Launching a new website! With the new site we are able to easily distribute information to our stakeholders and continue to “serve as a hub for watershed issues.”
- Watershed wide mailers. Residents living along a stream corridor in Boulder County received an LWOG Regional Stream Stewardship & Recovery Handbook postcard.
- Hosting 12 outreach and volunteer events including Pint Nights, Stewardship Handbook workshops and celebrations, volunteer restoration events, and more!
- Presenting at ten partner events and board meetings.
- Hosting 160 landowner meetings for our Plains and Foothills projects.
- Creating Instagram and Facebook accounts https://www.instagram.com/lefthand_watershed/, <https://www.facebook.com/LefthandWatershedOversightGroup>

AT LEFT: Board member, Gabe Tuerk and his sons sharing Lefthand Watershed Group information at the Boulder Farmers Market; Xilinx volunteers smiling after a great day of planting.

In 2017, LWOG's strategic planning committee and Board of Directors developed a strategic plan to define the organizational priorities and strategies for the next five years, considering the recent organizational transformation and long-term sustainability goals of the organization. One of the primary themes in this plan includes an effort to ensure we protect the significant investment made in the watershed through recently completed restoration projects, and ensure these projects remain successful and beneficial well into the future. To that end, we've named this section, "Tomorrow's River."

Board member, Rick Kauvar and aquatic biologist, David Rees studying benthic macroinvertebrates.

“In the end we will conserve only what we love;
we will love only what we understand;
and we will understand only what we are taught.”

— Baba Dioum, Senegalese conservationist, in a 1968 paper

Stewardship Through Community Science

LWOG is currently developing a watershed conceptual model and adaptive management framework to help understand the expected trajectory of “tomorrow’s river” and define the monitoring and stewardship needs. LWOG staff will be working with consultants and community scientists to monitor sites, detect issues, and respond to issues as they arise. By involving community in monitoring and stewardship, we aim to build socioecological resilience by educating and empowering our community in scientific discovery, conservation, and integrated watershed management through participatory learning. To accomplish this goal, we are planning to develop a robust community science plan that is comprehensive, effective, and builds upon lessons from existing citizen science efforts worldwide. To extend our reach, we will provide convenient tools that allow citizen scientists to collect and share information. The outcome will be an improved level of public awareness and understanding of watershed issues through learning by doing.



Lauren Duncan collecting a water quality sample.



Catherine Hoy collects water for water quality samples.



Upper Left Hand Creek before the 2013 flood, Jim Fields

2017 Financial Summary

REVENUE	
State and Federal Grants	\$8,419,758
Local Agency Partner Contributions	\$53,702
Donations (Individuals & Corporations)	\$13,842
Fee for Service	\$5,791
In Kind (Office Space)	\$32,108

Total Revenue \$8,525,201

EXPENSES	
Program Expenses	\$8,421,091
Fundraising Expenses	\$17,036
In Kind (Office Space)	\$32,108

Total Expenses \$8,470,235

Net Income \$54,966

Donors and Funding Partners

Grants

Colorado Water Conservation Board (CWCB) *(\$2,390,617.57)*

Colorado Department of Local Affairs (DOLA) Community Development Block Grant for Disaster Recovery (CDBG-DR) *(\$5,603,507.35)*

Water Champion \$20,000+

Left Hand Water District* *(since inception)*

Watershed Protector \$10,000-\$19,999

Burns & McDonnell *(2018)*

Garney Construction *(2018)*

River Partner \$5,000-\$9,999

Colorado Division of Reclamation Mining & Safety *(2018, 2017)*

Community Foundation Rubin Conduff Family Fund *(2016)*

Dewberry Engineers Inc. *(2018)*

Huy Lam *(2016)*

Mark Schueneman *(2016)*

St. Vrain & Left Hand Water Conservancy District *(2018, 2017, 2015)*

Steward

\$2,500-\$4,999

Anonymous Donor

Boulder County *(since inception)*

City of Longmont *(2018, 2015)*

Jim & Sandi Fitzgerald* *(2017)*

Left Hand Ditch Company *(2018, 2017, 2015)*

Lucky's Market *(2016)*

Suzanne Sophocles *(2017)*

Bear

\$1,000-\$2,499

Diane Schmitz *(2016)*

Enginuity Engineering Solutions *(2017)*

Rod Schone* *(2017)*

Heron

\$500-\$999

David Pestalozzi *(2017)*

Diane Schmitz *(2017)*

Kathy Peterson *(2017)*

Northern Water *(2017)*

Otak, Inc. *(2017)*

Trout

\$200-\$499

Aiy'm & Donna Fellman *(2016)*

Anonymous Donors *(2)*

Jim & Sandi Fitzgerald *(2016)*

John & Kimberly McNeil *(2017)*

Kathy Peterson *(2016)*

Nelson Holton *(2017)*

Van Lier Roofing *(2016)*

Dragonfly

\$1-\$199

Anonymous Donors *(7)*

Caroline Bradford *(2017, 2016)*

Christopher Smith *(2017)*

Gabriel & Julie Tuerk *(2017, 2016)*

George Gerstle *(2017)*

Glenn & Margaret Patterson *(2017, 2016)*

Harry Tuerk *(2017)*

Jessie Olson *(2017, 2016)*

Jim Petri and Chris Owens *(2016)*

John Brumder & Billie Myers *(2016)*

Josh Nims *(2017)*

Ken & Barbara Lenarcic *(2017, 2016)*

Michael O'Hara *(2016)*

Rod Schone *(2016)*

Sean Cronin *(2017, 2016)*

Sue Schauffler *(2017, 2016)*

Suzanne Sophocles *(2016)*

Teri Morelli *(2016)*

Weeks Wellness Chiropractic *(2016)*

Yana Sorokin *(2017)*

Fee for Service

Left Hand Water District *(2017)*

Trout Unlimited *(2017)*

**Includes in kind donations*



Exposed bedrock in Left Hand Creek at the Streamcrest Project site, *Glenn Patterson*

Other Partners

Contractors & Consultant Partners

American Civil Constructors, Inc.

– Mountain West

Biohabitats, Inc.

Enginuity Engineering Solutions, LLC

ERO Resources Corporation

Flywater, Inc.

Great Ecology

Green Tree Bookkeeping

Greener Pastures Consulting

Iron Woman Construction and Environmental Services, LLC

Left Hand Excavating

Matrix Design Group, Inc.

Miller Ecological Consultants, Inc.

Olsson Associates

Otak, Inc.

Painted Tails Creative

Professional Wetlands Consulting, Inc.

Resilient Watershed Partners

THK Associates, Inc.

Wildlands Restoration Volunteers

Interns & Graduate Student Partners

Catherine Hoy *(Intern)*

Brian Sechler *(Intern)*

Elsa Culler *(CU grad student)*

Mathew Jones *(CU grad student)*

Isabel Schroeter *(CU grad student)*



Board of Directors and staff at the Ranch Project site.

Board of Directors

Voting Board Members

Left Hand Water District
Landowner, Upper Left Hand
Landowner, Oxford Road
Landowner, City of Longmont
James Creek Watershed Initiative
Boulder County
Town of Jamestown
Landowner, Streamcrest
City of Longmont
Town of Ward
Landowner, 41st Street
St. Vrain and Left Hand Water Conservancy District
Left Hand Ditch Company

Christopher Smith, President
Sue Schauffler, Vice-President
Chris Wiorek, Secretary
Kathy Peterson, Treasurer
Colleen Williams
Julie McKay
Ken Lenarcic
Mark Schueneman
Monica Bortolini
Pat Cypher
Rick Kauvar
Sean Cronin
Terry Plummer

Ex-officio Board Members

U.S. Forest Service
Colorado Division of Reclamation and Mine Safety
Trout Unlimited, Boulder Flycasters Chapter
Landowner, Brigadoon Glen
Landowner, City of Longmont
Landowner, Oxford Road

Christopher Carroll
Erica Crosby
Gabriel Tuerk
Gregory Ames
Jim Bryant
Larry Germann

Staff

Jessie Olson
Yana Sorokin
Glenn Patterson
Meg Parker

Executive Director
Project Manager
Watershed Scientist
Outreach Coordinator

Join us in protecting
and restoring
Left Hand Watershed at:
www.lwog.org

Lefthand Watershed
Oversight Group
P.O. Box 1074
Niwot, CO 80544-0210
303-530-4200



Yana Sorokin

From: Jessica Olson
Sent: Monday, May 14, 2018 4:19 PM
To: Sean Cronin
Cc: Terry Lance; Yana Sorokin
Subject: RE: grant funding request

Great news! Thanks, Sean. We will be sure to be in touch after receiving notice of the grant.

Best,

Jessie

Jessica J. Olson
Executive Director
Lefthand Watershed Oversight Group | LWOG
303.530.4200 (office) | 303.746.7937 (cell)
jolson@lwog.org | www.lwog.org

From: Sean Cronin <sean.cronin@svlhwcd.org>
Sent: Monday, May 14, 2018 4:10 PM
To: Jessica Olson <jolson@lwog.org>
Cc: Terry Lance <office@svlhwcd.org>
Subject: RE: grant funding request

Jessie,

I am happy to report the St. Vrain and Left Hand Water Conservancy District Board of Directors approved the \$5,000 request. If the grant is awarded to LWOG and the \$5,000 match is still necessary, please send the District an invoice.

Thanks!

Sean

Sean T. Cronin | Executive Director
www.svlhwcd.org

From: Jessica Olson <jolson@lwog.org>
Sent: Wednesday, May 2, 2018 12:28 PM
To: Sean Cronin <sean.cronin@svlhwcd.org>
Subject: grant funding request

Hi Sean- I'm attaching the funding request for matching grant funds for our project titled "Fish Passage and Education on Left Hand Creek." Please don't hesitate to reach out if you have any questions or need additional information.

Thanks,

Jessie

Jessica J. Olson

Executive Director

Lefthand Watershed Oversight Group | LWOG

6800 Nimbus Road, Longmont CO 80503 (office)

P.O. Box 1074, Niwot, CO 80544-0210 (mailing)

303.530.4200 (office) | 303.746.7937 (cell)

jolson@lwog.org | www.lwog.org



COLORADO

Department of Local Affairs

Community Development Block Grant -
Disaster Recovery

May 24, 2017

Christopher Smith, President
Lefthand Watershed Oversight Group
PO Box 1074
Niwot CO 80544

RE: CDBG-DR Watershed Resilience Pilot Program Project Application

Dear Mr. Smith:

The Department of Local Affairs (DOLA) and Colorado Water Conservation Board (CWCB) Watershed Resilience team has completed its review of your application for a Community Development Block Grant - Disaster Recovery (CDBG-DR), Watershed Resilience Pilot Program grant. I am pleased to offer a full grant award for your application in the amount of up to \$2,000,000 so that Left Hand Creek may benefit from the watershed resilience work outlined in the application. You have also been awarded Privately Owned and Non-Profit Ditch Company funding for the New Hinman Ditch Company's headgate repair/replacement project in the amount of up to \$5,250.

The Lefthand Watershed Oversight Group will be the fiscal administrator and primary project manager of these projects. The Watershed Program Technical Assistance Team will also support you in various capacities throughout the project development and construction.

No grant funds should be obligated before a grant contract is fully executed. Expenditures made prior to the contract being fully executed cannot be reimbursed by the State. In addition, federal regulations prohibit obligating or expending CDBG-DR funds until an environmental review has been completed and funds formally released by the State. Based on the project applications, all project sites must undergo a Categorical Exclusion Subject to 58.5 (CEST) level of review, however, this level is subject to change pending further analysis. The State has contracted with Ageiss, Inc. to help you with the environmental review process. You may choose Ageiss or any other firm, at your own expense, to assist you with the environmental review process, but completed reviews will still be required to go through Ageiss for final review. Ageiss' contact information is dola-support@ageiss-inc.com. See also dola.colorado.gov/environmentalreview for more information on the environmental review process.

Congratulations on the receipt of this award. Please contact KC McFerson, CDBG-DR Watershed Program Manager at 303-864-7887 or kc.mcferson@state.co.us or your DOLA Regional Manager, Don Sandoval, at 970-679-4501 or don.sandoval@state.co.us for more information on how to proceed.

Sincerely,

Irv Halter
Executive Director, DOLA

Cc: Dave Bowman, DOLA; KC McFerson, DOLA; Don Sandoval, DOLA; Chris Sturm, CWCB; Jessie Olson, LWOG;
Ron Robl, New Hinman Ditch Co.





6800 Nimbus Road, Longmont, CO 80503
(303) 746.7937 • jolson@lwog.org

August 1, 2018

Craig Godbout
Colorado Water Conservation Board (CWCB)
1313 Sherman Street
Denver, CO 80203

Dear Craig,

The Lefthand Watershed Oversight Group is excited to submit our application for the Water Supply Reserve Fund – Statewide Account Grant. Our project, entitled “Fish Passage and Education on Left Hand Creek,” is vital to our community as we continue to build resiliency in the Left Hand Creek Watershed for future generations.

The primary goal of this project is to support education, knowledge sharing, and dialogue about the context of Left Hand Creek as a “working river” to better understand, explain, and compare potential solutions for improving fish passage and stream connectivity in our watershed. We believe that our mission and the goals of this project are well aligned with WSRF priorities in four main respects:

- **Collaborative:** Collaboration is key to our mission and the success of this project. Therefore, the scope includes integrating water owners in the fish passage study process and key stakeholders and community members in the education initiative.
- **Addresses an identified water gap:** Our approach is well-aligned with South Platte BIP priorities in the categories of collaboration, multi-benefit approaches, education, and environmental benefits.
- **Demonstrates sustainability:** Our project integrates the human and ecological needs of our watershed by exploring ways that our working river can balance these sometimes conflicting priorities. We address protection and enhancement of the environment through the fish passage study while promoting education and outreach about stream connectivity through the education initiative.
- **Fiscally and technically feasible:** Our community has demonstrated their support of this project by providing \$51,165 in match funds. With these funds committed or in-hand, Lefthand Watershed Oversight Group is ready to hit the ground running using our cost-effective, coalition-based approach.

Thank you for considering our request and we look forward to hearing from you soon.

Sincerely,

A handwritten signature in black ink, appearing to read "JO", is placed below the word "Sincerely,".

Jessie Olson
Executive Director
[Lefthand Watershed Oversight Group | LWOG](https://www.lwog.org)
303.530.4200 (office) | 303.746.7937 (cell)
jolson@lwog.org | www.lwog.org



April 24, 2018

South Platte Basin Roundtable
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

The Left Hand Water District is pleased to write in support of the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by Lefthand Watershed Oversight Group (LWOG), entitled **"Fish Passage and Education on Left Hand Creek."** Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a "working river."

The District has contributed substantial time and financial resources in the creation and ongoing support of LWOG. Our Board of Directors has been impressed with how Lefthand Watershed Oversight Group has brought together the appropriate stakeholders and has continually proven that they can be successful. Moving beyond the many structural projects completed to recover from our regions mining legacy, and more recently the 2013 flood, the proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within in recent and on-going flood recovery restoration project areas (2) develop an education initiative and materials focused on engaging and educating the community about the realities and complexities of living on a "working river" or hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.

LWOG has put in the work to create a great network of community support which puts the organization in a unique position to pull together private and public property owners, local governments, and water rights holders. Through the collaborative efforts of LWOG's staff and volunteer board, we see the potential for finding successful solutions at an all-time high. We urge you to put a high priority on this funding request, and look forward to working with Lefthand Watershed Oversight Group to build resiliency into Left Hand Creek Watershed.

Sincerely,

Left Hand Water District
Christopher Smith, P.E.
General Manager

Left Hand Ditch Company

P.O. Box 229 Niwot, Co. 80544 (Office: 303-652-9965)

4/30/2018}

South Platte Basin Roundtable
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

Left Hand Ditch Company is pleased to write in support of the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by Lefthand Watershed Oversight Group (LWOG), entitled "**Fish Passage and Education on Left Hand Creek.**" Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a "working river."

Lefthand Watershed Oversight Group recently completed 10 flood recovery restoration projects along Left Hand Creek and have 10 more projects underway, working with over 100 private landowners. While these projects take a great step forward in restoring the physical components of the project site, flow or stream connectivity restoration has yet to be completed. The proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within in recent and on-going flood recovery restoration project areas (2) develop an education initiative and materials focused on engaging and educating the community about the realities and complexities of living on a "working river" or hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.

We feel that LWOG has done a good job bringing the appropriate stakeholders to the table and developing a proposal that will result in implementation of a successful project that is well aligned with the goals of the South Platte Basin Round Table and the stakeholders. By completing this project, LWOG will increase its effectiveness in improving the watershed health and contributing to implementing the water plan. Timing of this project is particularly well-suited as LWOG can take advantage of the 20 on-going project areas and engagement with over 100 private residents to complete a project that takes all points of view into consideration.

We urge you to put a high priority on this proposed project, and look forward to working with LWOG to build resiliency into Left Hand Creek Watershed.

Sincerely,


Terry L. Plummer
Vice President of
Maintenance & Operations



ST. VRAIN AND LEFT HAND WATER CONSERVANCY DISTRICT

9595 Nelson Road, Suite 203 • Longmont, CO 80501 • 303-772-4060 • www.svlhwcd.org

May 1, 2018

South Platte Basin Roundtable
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Needs Committee,

The St. Vrain and Left Hand Water Conservancy District (District) is pleased to write in support of the South Platte Basin Roundtable (SPBRT) Water Supply Reserve Fund application being submitted by Lefthand Watershed Oversight Group (LWOG), entitled **"Fish Passage and Education on Left Hand Creek."** Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a "working river".

Lefthand Watershed Oversight Group recently completed 10 flood recovery restoration projects along Left Hand Creek and have 10 more projects underway, working with over 100 private landowners. While these projects are a great step forward in restoring the physical components of the project site, flow or stream connectivity restoration has yet to be completed. The proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within recent and on-going flood recovery restoration project areas (2) develop an education initiative and materials focused on engaging and educating the community about the realities and complexities of living on a "working river".

While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds. This project also will feed nicely into the District's Stream Management Plan, that has already been partially funded by the SPBRT.

The District believes this project aligns with the goals and values of the SPBRT Basin Implementation Plan and Colorado's Water Plan. For these reasons, the District fully supports this application and feels it should be given strong consideration for funding by the SPBRT.

Sincerely,

A handwritten signature in blue ink, appearing to read "Sean T. Cronin".

Sean T. Cronin
Executive Director



PUBLIC WORKS & NATURAL RESOURCES

(303) 651-8416 | LONGMONTCOLORADO.GOV/PWNR

April, 27 2018

South Platte Basin Roundtable
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

The City of Longmont supports the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by Lefthand Watershed Oversight Group (LWOG), entitled **"Fish Passage and Education on Left Hand Creek."** Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a "working river."

Lefthand Watershed Oversight Group recently completed 10 flood recovery restoration projects along Left Hand Creek and have 10 more projects underway, working with over 100 private landowners. While these projects take a great step forward in restoring the physical components of the project site, flow or stream connectivity restoration has yet to be completed. The proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within the recent and on-going flood recovery restoration project areas (2) develop an education initiative and materials focused on engaging and educating the community about the realities and complexities of living on a "working river" or hybrid ecosystem. While the focus of this project is on the Left Hand Creek Watershed, the project can be transferable regionally and could be applied and modified as needed by other Colorado watersheds.

We feel that LWOG has done a good job bringing the appropriate stakeholders to the table and developing a proposal that will result in implementation of a successful project that is well aligned with the goals of the South Platte Basin Round Table and the stakeholders. By completing this project, LWOG will increase its effectiveness in improving the watershed's health which will contribute to implementing the water plan. Timing of this project is particularly well-suited, as LWOG can take advantage of the 20 on-going project areas and engagement with over 100 private residents which will take all points of view into consideration.

We urge you to put a high priority on this proposed project, and look forward to working with LWOG to build resiliency into the Left Hand Creek Watershed.

Sincerely,

A handwritten signature in blue ink that reads "James E. Angstadt". The signature is fluid and cursive, with the first name "James" and last name "Angstadt" being more prominent than the middle initial "E.".

James E. Angstadt
Director of Engineering Services
City of Longmont



Transportation Department

2525 13th Street, Suite 203 • Boulder, Colorado 80304 • Tel: 303.441.3900 • Fax: 303.441.4594

April 26, 2018

South Platte Basin Roundtable
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

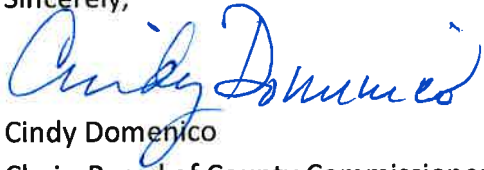
Boulder County is writing in support of the grant application being submitted by the Lefthand Watershed Oversight Group (LWOG) to the South Platte Basin Round Table Water Supply Reserve Fund, entitled **"Fish Passage and Education on Left Hand Creek."** Completion of this project is important to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a river with multiple uses, including ecological functions.

Since the September 2013 flood event, Boulder County and LWOG have completed several flood recovery restoration projects along Left Hand Creek. While these projects have stabilized the channel, restored the natural floodplain, and revegetated the stream corridor, comprehensive stream connectivity restoration has yet to be completed. The proposed project under consideration aims to: (1) identify options for restoring stream connectivity and fish passage within recent and on-going flood recovery restoration project areas; and (2) develop an education initiative focused on engaging and educating the community about the realities and complexities of living on a hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.

LWOG has played an important role in restoring the Left Hand Creek Watershed through the flood recovery process and is prepared to continue successful project implementation of the **"Fish Passage and Education on Left Hand Creek"** project, which is well aligned with the goals of the South Platte Basin Round Table and its stakeholders. By completing this project, LWOG will increase its effectiveness in improving the watershed health and contributing to the implementation of the state water plan.

Boulder County supports this application and encourages you to fully fund it. Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read "Cindy Domenico". The signature is fluid and cursive, with the first name "Cindy" written in a larger, more prominent script than the last name "Domenico".

Cindy Domenico
Chair, Board of County Commissioners



April 26, 2018

South Platte Basin Roundtable
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

The Boulder Flycasters are pleased to write in support of the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by Lefthand Watershed Oversight Group (LWOG), entitled **"Fish Passage and Education on Left Hand Creek."** Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a "working river."

The Boulder Flycasters are a Chapter of Trout Unlimited, North America's premier coldwater conservation group, and Colorado Trout Unlimited, a leading conservation group in our state. A 501c3 corporation, the Flycaster's mission is to conserve, protect, and restore coldwater fisheries and their watersheds. We currently have near 1,500 members in the Boulder area and implement our mission with outreach events, youth education, and conservation projects. Boulder Flycasters have been involved in many conservation projects over the years. In the last five years we have implemented major stream and riparian habitat improvements on Middle Boulder Creek, South Boulder Creek, and Jenny Creek in the upper Boulder Creek watershed.

As a result of the devastating flood in September 2013, many streams along the Front Range sustained overwhelming damage. Left Hand Creek is one such waterway that suffered. Much has been accomplished on Left Hand Creek since the flood to restore and repair the flood's damage. Lefthand Watershed Oversight Group recently completed 10 flood recovery restoration projects along Left Hand Creek and have 10 more projects underway, working with over 100 private landowners. While these project take a great step forward in restoring the physical components of the project site, flow or stream connectivity restoration has yet to be completed. The proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within in recent and on-going flood recovery restoration project areas (2) develop an education initiative and materials focused on engaging and educating the community about the realities and complexities of living on a "working river" or hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.



We feel that LWOG has done a good job bringing the appropriate stakeholders to the table and developing a proposal that will result in implementation of a successful project that is well aligned with the goals of the South Platte Basin Round Table and the stakeholders. By completing this project, LWOG will increase its effectiveness in improving the watershed health and contributing to implementing the water plan. Timing of this project is particularly well-suited as LWOG can take advantage of the 20 on-going project areas and engagement with over 100 private residents to complete a project that takes all points of view into consideration.

We urge you to put a high priority on this proposed project, and look forward to working with LWOG to build resiliency into Left Hand Creek Watershed.

Sincerely,

A handwritten signature in black ink, appearing to be "Robert McCormack", with a stylized loop at the end.

Robert McCormack
President, Boulder Flycasters
PO Box 541
Boulder, CO 80306
cell-201-213-7295
troutrobert@gmail.com
Boulderflycasters.org



Thursday, April 26, 2018

South Platte Basin Roundtable
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

I am pleased to write in support of the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by Lefthand Watershed Oversight Group (LWOG), entitled **“Fish Passage and Education on Left Hand Creek.”** Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a “working river.”

Lefthand Watershed Oversight Group recently completed 10 flood recovery restoration projects along Left Hand Creek and have 10 more projects underway, working with over 100 private landowners. While these projects take a great step forward in restoring the physical components of the project site, flow or stream connectivity restoration has yet to be completed. The proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within in recent and on-going flood recovery restoration project areas, and (2) develop an education initiative and related materials focused on engaging and educating the community about the realities and complexities of living on a “working river” or hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.

I feel that LWOG has done a good job bringing the appropriate stakeholders to the table and developing a proposal that will result in implementation of a successful project that is well aligned with the goals of the South Platte Basin Round Table and the stakeholders. By completing this project, LWOG will increase its effectiveness in improving the watershed health and contributing to implementing the water plan. Timing of this project is particularly well-suited as LWOG can take advantage of the 20 on-going project areas and engagement with over 100 private residents to complete a project that takes all points of view into consideration.

We urge you to put a high priority on this proposed project and look forward to working with LWOG to build resiliency into Left Hand Creek Watershed.

Sincerely,

Chris J. Wiorek
Resident along Left Hand Creek

April 26, 2018

South Platte Basin Roundtable
Colorado Water Conservation
Board 1313 Sherman St., Room
721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

We are pleased to write in support of the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by Lefthand Watershed Oversight Group (LWOG), entitled **“Fish Passage and Education on Left Hand Creek.”** Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a “working river.”

Lefthand Watershed Oversight Group recently completed 10 flood recovery restoration projects along Left Hand Creek and have 10 more projects underway, working with over 100 private landowners. While these project take a great step forward in restoring the physical components of the project site, flow or stream connectivity restoration has yet to be completed. The proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within in recent and on-going flood recovery restoration project areas (2) develop an education initiative and materials focused on engaging and educating the community about the realities and complexities of living on a “working river” or hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.

We feel that LWOG has done a good job bringing the appropriate stakeholders to the table and developing a proposal that will result in implementation of a successful project that is well aligned with the goals of the South Platte Basin Round Table and the stakeholders. By completing this project, LWOG will increase its effectiveness in improving the watershed health and contributing to implementing the water plan. Timing of this project is particularly well-suited as LWOG can take advantage of the 20 on-going project areas and engagement with over 100 private residents to complete a project that takes all points of view into consideration.

We urge you to put a high priority on this proposed project, and look forward to working with LWOG to build resiliency into Left Hand Creek Watershed.

Sincerely,

Patricia M. Cypher, LWOG Board of Directors, Town of Ward, Colorado

April 27,2018

South Platte Basin Roundtable

Colorado Water Conservation Board

1313 Sherman St., Room 721

Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

I am pleased to write in support of the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by Lefthand Watershed Oversight Group (LWOG), entitled **“Fish Passage and Education on Left Hand Creek.”** Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a “working river.” As a 35 year resident along Left Hand Creek, I have witnessed the pressure of development and the 2013 flood event has taken on the overall health of the ecosystem. An overall entire ecosystem to the management of the waterway from peak to eventually the flow into the St. Vrain creek represents the best future approach to improve the operational management of the working rivers.

Lefthand Watershed Oversight Group recently completed 10 flood recovery restoration projects along Left Hand Creek and have 10 more projects underway, working with over 100 private landowners. While these project take a great step forward in restoring the physical components of the project site, flow or stream connectivity restoration has yet to be completed. The proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within in recent and on-going flood recovery restoration project areas (2) develop an education initiative and materials focused on engaging and educating the community about the realities and complexities of living on a “working river” or hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.

I feel that LWOG has done a an excellent job for the stakeholders tin developing a proposal that could manage a successful project that is well aligned with the goals of the South Platte Basin Round Table and the stakeholders. By completing this project, LWOG will increase its

effectiveness in improving the watershed health and contributing to implementing the water plan. Timing of this project is particularly well-suited as LWOG can take advantage of the 20 on-going project areas and engagement with over 100 private residents to complete a project that takes all points of view into consideration.

We urge you to put a high priority on this proposed project, and look forward to working with LWOG to build resiliency into Left Hand Creek Watershed.

Sincerely,

Rick Kauvar

LWOG Board of Directors

Creek Resident since 1983

April 26, 2018

South Platte Basin Roundtable
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

RE: Letter of Support for the Lefthand Watershed Oversight Group Project for Fish Passage and Education on Left Hand Creek

Dear Selection Committee,

As a landowner along Lefthand Creek and a Lefthand Watershed Oversight Group (LWOG) Board member, I am pleased to write in support of the South Platte Basin Round Table Water Supply Reserve Fund application being submitted by LWOG, entitled **“Fish Passage and Education on Left Hand Creek.”** Completion of this project is vital to our community as we work to improve watershed health and educate the public on the realities and complexities of living on a “working river.”

Lefthand Watershed Oversight Group recently completed 10 flood recovery restoration projects along Left Hand Creek and have 10 more projects underway, working with over 100 private landowners. While these project take a great step forward in restoring the physical components of the project site, flow or stream connectivity restoration has yet to be completed. The proposed project under consideration aims to (1) identify options for restoring stream connectivity and fish passage within in recent and on-going flood recovery restoration project areas (2) develop an education initiative and materials focused on engaging and educating the community about the realities and complexities of living on a “working river” or hybrid ecosystem. While the focus of this project is on Left Hand Creek Watershed, the project has regional transferability and could be applied and modified as needed by other Colorado watersheds.

I feel that LWOG has done an excellent job bringing the appropriate stakeholders to the table and developing a proposal that will result in implementation of a successful project that is well aligned with the goals of the South Platte Basin Round Table and the stakeholders. By completing this project, LWOG will increase its effectiveness in improving the watershed health and contributing to implementing the water plan. Timing of this project is particularly well-suited as LWOG can take advantage of the 20 on-going project areas and engagement with over 100 private residents to complete a project that takes all points of view into consideration.

I urge you to put a high priority on this proposed project.

Sincerely,

Sue Schauffler