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    Jessie Olson
President, Board of Directors  Executive Director

Proudly Rooted in Watershed Protection
Who We Are

Since 2005, Left Hand 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.

History of Left Hand Watershed Oversight Group

1999
EPA identifies mine sites in need of cleanup.

2001
Task force formed to explore alternatives to superfund listing.

2002
Task force and Boulder County recommend a permanent watershed group.

2004-2005
We are officially chartered as a nonprofit, obtain tax exempt status, and publish a Watershed Plan, concentrating on overseeing mine site reclamation.

2007
Participates in River Watch and starts a water quality monitoring program.

2011-2013
Collaborates with Colorado Rural Water Association and Left Hand Water District on the District’s source water protection plan.

2013
A devastating flood impacts Left Hand Creek and nine other watersheds in the Front Range.

2014
We participate, with many other stakeholders, in a Boulder County lead effort to develop the post-flood Left Hand Watershed Master Plan.

2015
Manages implementation of the 2014 Master Plan; expands the board, and hires its first full-time Executive Director.

2016
Awarded nine million dollars in funding to implement flood recovery projects, expands staff to include a full-time Project Manager.

2017
Implements 10 flood recovery river restoration projects, publishes a Regional Stream Stewardship Handbook, and develops a 5 year strategic plan.

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
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.

This year we completed 10 restoration projects on 70 private properties in response to damage caused 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 streambeds 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)

RESTORATION Highlights

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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!

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 fell 100% comfortable with the project. Great job. I love what you’re doing!”
– Donna and Eric Schult, 63rd Street landowners

Xilinx volunteers planting shrub seedlings at the Streamcrest Project site.

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

**WATERSHED SCIENCE Highlights**

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**WATERSHED SCIENCE By the Numbers**

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

NOTES: In 2017, LWOG continued river watch 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

Glenn Patterson collecting a water sample in Left Hand Creek.
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-based and adaptive approach, we aim to carry out creative and innovative stewardship projects that have value and transferability throughout the state.

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.
Our Education and Outreach Program

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

EDUCATION AND OUTREACH

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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.”

“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, Sengalese 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 Duncker collecting a water quality sample.

Catherine Hoy collects water for water quality samples.
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 (GOLA) Community Development Block Grant for Disaster Recovery (CDBG-DR) ($5,620,507.35)

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 (2018)
Mark Schueneman (2016)

Steward
$2,500-$4,999
Anonymous Donor
Boulder County (since inception)
City of Longmont (2018, 2015)
Jim & Sandi Fitzgerald* (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)
Oak, Inc. (2017)

Trout
$200-$499
Aiy’m & Donna Fellman (2016)
Anonymous Donors (4)
Jim & Sandi Fitzgerald (2016)
John & Kimberly McNiel (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 Genstle (2017)
Glenn & Margaret Patterson (2017, 2016)
Harry Tuerk (2017)
Jessie Olson (2017, 2016)
Jim Petri & Chris Owens (2016)
John Brumder & Billie Myers (2016)
Josh Nims (2017)
Ken & Barbara Lenarcic (2017, 2016)
Michael O’Hara (2016)
Rod Schone (2016)
Sean Crain (2017, 2016)
Sue Schaufller (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

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.
Miter Ecological Consultants, Inc.
Olsson Associates
Otak, Inc.
Painted Talia Creative
Professional Wetlands Consulting
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)

Exposed bedrock in Left Hand Creek at the Streamcrest Project site, Glenn Patterson
Voting Board Members
Left Hand Water District  Christopher Smith, President
Landowner, Upper Left Hand  Sue Schauffler, Vice-President
Landowner, Oxford Road  Chris Wiorek, Secretary
Landowner, City of Longmont  Kathy Peterson, Treasurer
James Creek Watershed Initiative  Colleen Williams
Boulder County  Julie McKay
Town of Jamestown  Ken Lenarcic
Landowner, Streamcrest  Mark Schueneman
City of Longmont  Monica Bortolini
Town of Ward  Pat Cypher
Landowner, 41st Street  Rick Kauvar
St. Vrain and Left Hand Water Conservancy District  Sean Cronin
Left Hand Ditch Company  Terry Plummer

Ex-officio Board Members
U.S. Forest Service  Christopher Carroll
Colorado Division of Reclamation and Mine Safety  Erica Crosby
Trout Unlimited, Boulder Flycasters Chapter  Gabriel Furtek
Landowner, Brigadoon Glen  Gregory Ames
Landowner, City of Longmont  Jim Bryant
Landowner, Oxford Road  Larry Germann

Board of Directors

Staff
Jessie Olson  Executive Director
Yana Sorokin  Project Manager
Glenn Patterson  Watershed Scientist
Meg Parker  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

Reach 3B Project site in the fall, Glenn Patterson