



2015

GEOS
INSTITUTE

Annual Report



From the Desk of the Executive Director Tonya Graham



Dear Friends,

2015 may very well be remembered as the year the conversation about climate change turned. From the Pope's encyclical and congressional address to the rejection of the Keystone Pipeline

and the breakthrough agreements at the COP21 meeting in Paris, change is afoot on the issue of climate change.

As 2016 unfolds, we will see if we have indeed reached a national and global tipping point on climate change. But this we know - we have been working for many years with allied NGOs and civic organizations to drive this conversation forward, and we welcome this shift!

Our task now is to channel this swell of energy around climate change into actions that are effective and integrate the needs of people, wildlife, and ecosystems. We must think critically and invest wisely in long-term solutions that address both the cause and impacts of climate change in ways that strengthen the fabric of our communities while restoring and sustaining nature.

At the Geos Institute, we take this call to smart, effective action seriously. We are delighted that we seem to be nearing the tipping point on the issue of climate change and have doubled down on our commitment to producing climate change solutions that matter. Thank you for joining us in this work.

Warmly,

Tonya Graham

From the Desk of the Chief Scientist Dominick A. DellaSala, Ph.D.

Dear Supporters,

Last December in Paris, 195 countries (including the U.S.) agreed in principle to keep global warming levels below the dangerous 4°F increase that is predicted in this century. The Paris Climate Change Agreement also includes a provision for each nation to “*enhance and maintain*” forests as carbon “*sinks*.”

We cannot stabilize global warming without the help of forests in absorbing our carbon dioxide pollution. And we cannot prepare for expected droughts in places without maintaining the clean water provided by intact watersheds on our public lands. The agreements also emphasize ways for preparing communities for future unavoidable climate disruptions.

The Paris agreement represents a unique moment in history to include forests in global efforts to safeguard the climate, biodiversity, and clean water.

The Geos Institute is uniquely positioned to work with the Obama Administration on its climate change commitments. Our work with local communities and municipalities is helping to reduce the costs and impacts of climate change. And our work on the Tongass rainforest in Alaska is demonstrating how those forests are critical to climate change remediation for Alaskans.

Working with scientists and partner organizations, we are making a major push this year to influence the President's climate change agenda in ways that matter most to forests, watersheds, and future generations.

Thank you for your continued support.

Dominick A. DellaSala



Geos Institute



PHOTO: KEITH HENTY

Leading the way to climate change solutions that matter.

By “solutions that matter,” we mean solutions that work for people and nature, address the causes and impacts of climate change, and endure well into the future.

We have three core initiatives to help decision-makers create ecologically responsible solutions to today’s most pressing climate problems:

ClimateWise® helps local leaders respond to climate change.

Forest Legacies helps forest managers respond to climate change.

Working Waters helps water managers respond to climate change.

After 35 Years, Chris Bratt Steps Down



Chris Bratt has much praise for the Geos Institute staff, calling them “the John Muirs of the future.” Bratt says, *They have a vision, where the ecology is more important than the money that can be made from our streams, forests and natural systems. Geos Institute has the scientists, the leadership, and the ideas to keep the world safer for future generations. I hope that people become more aware of their work and give their financial support.*

Christopher Bratt, tireless board member and advocate for streams and forests since the 1970’s, has stepped down from the Geos Institute Board. His contributions came in so many forms, all given with energy, dedication, and love.

In 1975 Chris moved his family to the Applegate and soon started opposing the nearby BLM clearcutting and aerial herbicide spraying. He helped found Thompson Creek Residents for Ecological Education (TREE), and began his lifelong conversation with the BLM.

Chris became TREE’s Board rep in a coalition of grassroots groups, called Headwaters. He also worked with the Applegate Partnership, Applegate River Watershed Council, and NW Coalition for Alternatives to Pesticides.

Bratt still likes to tell stories and sing at community events in southern Oregon. He and his guitar will remain a mainstay at Geos Institute gatherings well into the future.

Thank you, Chris, for your many decades of inspired service and for mentoring Geos Institute staff and board members along the way. Our success is due, in large part, to what we have learned by the example you continue to set in the world.

ClimateWise®

Dr. Marni Koopman

Since 2009, Geos Institute has been conducting climate change science assessments and holding ClimateWise workshops across the U.S., from Florida to California. In 2015, we were thrilled to have the opportunity to work on preparing for climate change in our own corner of the world – Ashland, Oregon. In recent years, Ashland has been hit with a series of reminders that climate change isn't something in the future – climate change is here and now. Our town, like other towns throughout the nation, is starting on the long path of taking action on climate change. And we are asking the questions other communities ask. What type of action should we take? How do we know what works? Who should



be involved? Where do we get help? These questions all need to be answered, and Ashland has decided to take a Whole Community approach that engages all sectors and brings diverse perspectives together to develop effective solutions.

Geos Institute worked with Rogue Climate and many other local partners to get the planning process rolling in true Ashland fashion, with theater, local food, engaging science, storytelling, and community building. Our coalition held the Ashland Climate Challenge Kickoff, with more than 350 residents participating. We also inspired Climate Week – an additional 10 days of climate related art, movies, speakers, and other events.



Ashland Climate Challenge Kickoff

PHOTO: KEITH HENTY

Geos Institute is continuing to implement Whole Community climate change planning throughout the Rogue Valley. We are completing an in-depth science assessment to look at extreme events like heat waves and drought. We will poll residents to determine what the appropriate greenhouse gas emissions targets are for our community. And we will share ideas among the cities of Southern Oregon that are beginning to take action on climate change. If you live in Southern Oregon, watch for this information in 2016.



Residents participate in the Ashland Climate Challenge Kickoff.

THANK YOU TO:

The Oregon Shakespeare Festival, Full Circle Realty, Bear Creek Bicycle, Sharpe Energy Solutions, Ashland Electric Bikes, True South Solar, the City of Ashland, Pacific Domes, Clif Bar, Mix, Pangea, Live at the Armory, and numerous other local businesses and non-profits for their generous support.

Our local work nests within our larger effort to influence the way communities approach climate change preparation nation-wide. That larger effort includes partnering with other leaders in the field to develop best practices, sharing information about Whole Community solutions to climate change,



PHOTO: KEITH HENTY

Claudia Alick speaking at Ashland Climate Challenge Kickoff.

and providing tools that communities can use to increase their resilience.

In 2016, we are introducing our ClimateWise webinar series for professional associations and local community leaders. The webinar series features leading scientists and adaptation practitioners sharing information on climate science, vulnerability assessments, tools and resources, and topics such as equity, communication, and outreach.

Our team will continue to work with other leaders in the adaptation field to address the question of how to help communities prepare for climate change at scale – nationwide. This ongoing effort involves designing a service system that organizes the governmental, private, and non-profit tools available to local leaders.

Finally, we are working on a book explaining the basic idea of Whole Community adaptation and an interactive tool that local leaders can use to get started in their communities. Both of these are expected to be released in 2016.

Working Waters

Cathy Kellon

Working Waters is dedicated to ensuring safe, clean water for people, plants, and animals in a changing climate. We partner with municipal water managers and other stakeholders to restore watershed health and to make restoration a tool they can feel confident in employing to solve water challenges.

In 2015, Geos Institute's Freeways for Fish program surpassed its long-term goal of restoring native fish access to over 1,200 river miles in the Rogue River Basin. By healing damaged habitat, removing outdated infrastructure, and restoring natural water flow patterns, the Rogue River Basin and its salmon are now better prepared for the impacts of climate change.

Surpassing this restoration goal also marked an inflection point for us. As we helped recover native fish habitat over the past thirteen years, we discovered that towns and water utilities were also reaping the benefits of cleaner water as a result of our projects.



Drinking water supplies continue to be impacted by climate change, and towns are looking for innovative ways to meet these challenges. Protecting and enhancing water at its source is a first line of defense in meeting the basic needs of people and nature, especially as climate conditions

change. So, in 2015, we wrapped up our final projects under the Freeways for Fish program and formally launched our Working Waters initiative to help restore water quality for communities, as well as fish.

We are building on our years of restoration success in the Rogue Basin to help managers of public drinking water systems throughout the Pacific Northwest. Upcoming projects will help protect watersheds region-wide as a key strategy for adapting to the uncertainties of a changing climate.

Source Water Program 2015 Accomplishments

- Transitioned our successful Freeways For Fish program to focus on municipal watersheds.
- Launched the Drinking Water Providers Partnership with the Forest Service, a coalition that also includes the Oregon Department of Environmental Quality, the US Environmental Protection Agency, the Washington Department of Health, and the US Bureau of Land Management.
- Announced the first call for grant proposals under the Drinking Water Providers Partnership, and received 20 applications for source watershed restoration and conservation projects in Oregon



Salmon habitat in a tributary of the Illinois river.

PHOTO KEVIN SCHAFER

and Washington. We anticipate awarding up to \$660,000 in early 2016.

- Earned a seat on the Environmental Protection Agency's National Drinking Water Advisory Council.



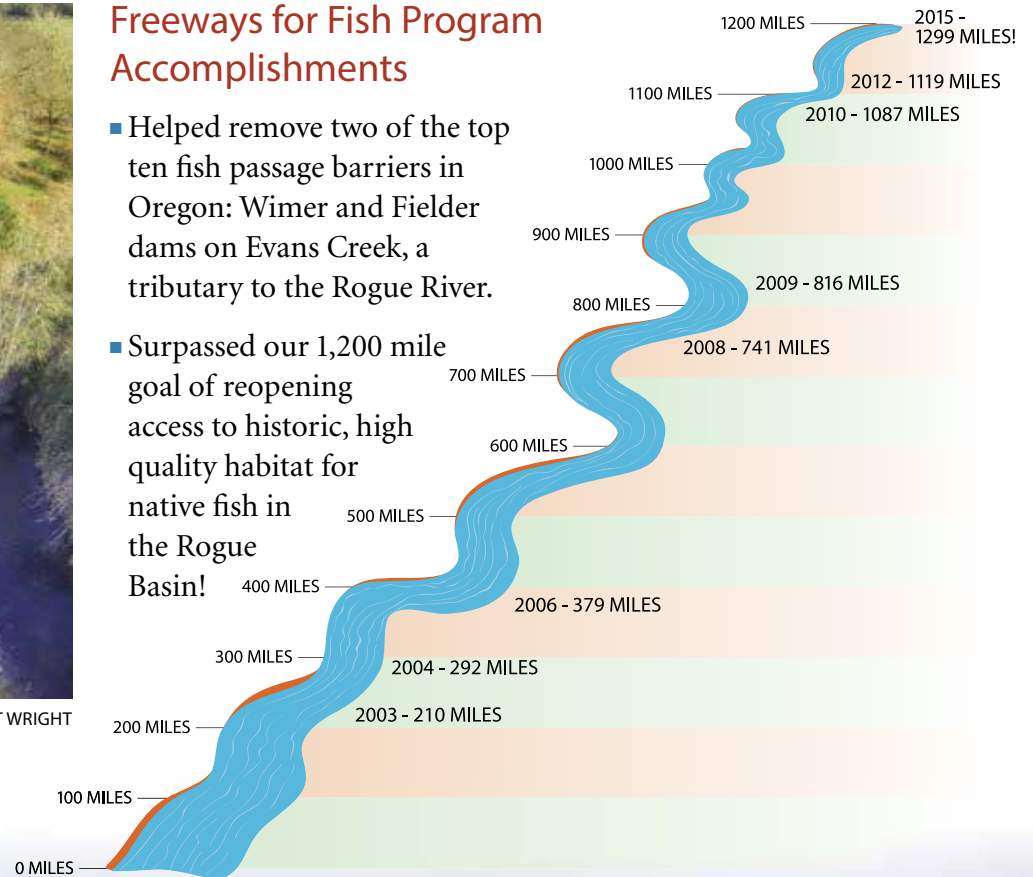
Wimer Dam before removal, Evans Creek

PHOTO: SCOTT WRIGHT

Below: Rogue River, Southern Oregon

Freeways for Fish Program Accomplishments

- Helped remove two of the top ten fish passage barriers in Oregon: Wimer and Fielder dams on Evans Creek, a tributary to the Rogue River.
- Surpassed our 1,200 mile goal of reopening access to historic, high quality habitat for native fish in the Rogue Basin!



2016 is shaping up to be a great year. We are partnering with water managers, academic institutions, towns, and agencies to put restoration projects on the ground and conduct research that will answer important management questions about the costs, risks, and effectiveness of restoration versus grey infrastructure (concrete, steel, and chemicals).

Our long-term goal is to make it easier for water managers to know where restoration can be used most effectively in addressing water challenges. From small coastal towns to high desert urban hubs, Working Waters is helping communities in the Pacific Northwest address the challenges of a changing climate through restoration.

Forest Legacies

Dr. Dominick DellaSala

The Forest Legacies initiative helps forest managers address the challenges of changing climate conditions. Our team publishes peer-reviewed science, helps scientists communicate with decision makers, and supports policies that address climate change on public lands.



young forests to document how much young forest would be available to replace timber demand for old-growth forests. Working with Alaskan timber mills, the Forest Service, and Mater Engineering, we are now conducting a study to demonstrate the economic feasibility of this strategy. In 2016 we will use this information to encourage President Obama to speed up the transition out of old-growth logging as part of his climate change legacy.

Tongass National Forest

The old-growth rainforests of the Tongass National Forest in Southeast Alaska store more carbon than any other national forest in the country. Tongass forests filter atmospheric carbon dioxide and store excess carbon in the trees, foliage, and soils. Plus, they support world-class salmon and diverse wildlife populations (think eagles and brown bears).

Geos Institute has been leading an effort to protect irreplaceable old-growth rainforests on the Tongass that could provide a win-win solution to decades of controversy around old-growth logging. Logging jobs and old-growth forests can both be sustained by shifting logging operations to non-controversial, previously logged young forests in order to offset the need for old-growth logging. We started by completing the first comprehensive inventory of



Kalmiopsis watersheds need protection

PHOTO: DOMINICK DELLASALA

Kalmiopsis Climate Refuge

Southwest Oregon's Kalmiopsis area is a botanical mecca and has some of the best wild salmon runs and largest roadless areas in the Pacific Northwest. In published science research, we have identified the Kalmiopsis as a valuable climate refuge, meaning it is an area that we believe will continue to provide suitable habitat conditions for plants and wildlife as the climate changes.

In 2015, we worked with local organizations to help protect Kalmiopsis rivers from industrial-scale nickel mining. The Bureau of Land Management is in the process of withdrawing areas from mineral entry to provide temporary protection. Oregon Senators Ron Wyden and Jeff Merkley and Representatives Jared



Tongass National Forest

PHOTO: DOMINICK DELLASALA

Huffman and Peter DeFazio introduced landmark legislation to protect Kalmiopsis watersheds, but this effort is stalled in Congress.

In 2016, we are working with D.C. decision makers to secure long-term protection of this important climate refuge.

Pacific Northwest

Geos Institute has a long history of upholding the 1994 *Northwest Forest Plan* as a global model for ecosystem management. Without the Plan's restrictions on logging on public lands, most of the old-growth forests we have today would be gone.

When the agencies began to prepare in 2015 for a revision process, we documented the Plan's accomplishments over the last twenty years. Going forward, we will make sure the Forest Service and BLM use the best available science as they consider amending the Plan.



Pacific Northwest Forest

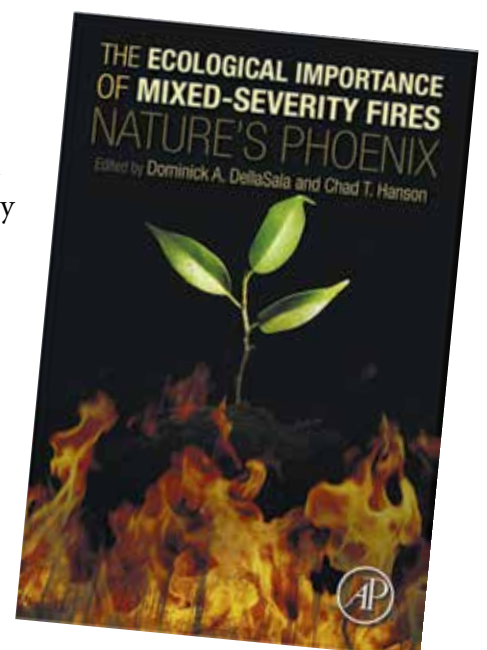
PHOTO: DOMINICK DELLASALA

Coexisting with Wildfire

Wildfire is nature's phoenix, because ecosystems and countless species depend on periodic fire for renewal. There are ways to coexist with fire that minimize risks to homeowners and firefighters and allow fires to burn safely in the backcountry.

In 2015, Geos Institute worked with members of Congress in supporting legislation to reduce fire-risks to homeowners, let fires burn under safe conditions in the backcountry, keep firefighters out of harm's way, and contain fire suppression costs.

We also worked with 27 scientists in publishing *The Ecological Importance of Mixed-severity Fires: Nature's Phoenix*. The book is being used to promote sensible fire management approaches that solve issues for both human safety and ecological health in a changing climate.



Staff



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Vicki Tripoli, Ph.D. – retired scientist

Jack Williams, Ph.D. – Trout Unlimited

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Freshwater Trust

Kresge Foundation

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Meyer Memorial Trust

Oregon Community Foundation

Oregon Watershed Enhancement Board

Osprey Foundation

Sweetgrass Foundation

Weeden Foundation

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Why I Volunteer for the Geos Institute

by Geos board member *Camila Thorndike*

I know of no other organization that deftly executes both climate mitigation and adaptation work in such a holistic, nature-oriented culture of thought and practice. The Geos Institute team goes where few NGOs dare. We all know we need a complete turning of the way our cities, farms, forests, and lives intersect with the cycles and systems that support human existence. The Geos Institute is making that turning possible, from healthy streamflows, to cross-sector urban planning, to green infrastructure in a time of turbulence. I am proud to support an organization delivering real hope for our future!



Camila Thorndike

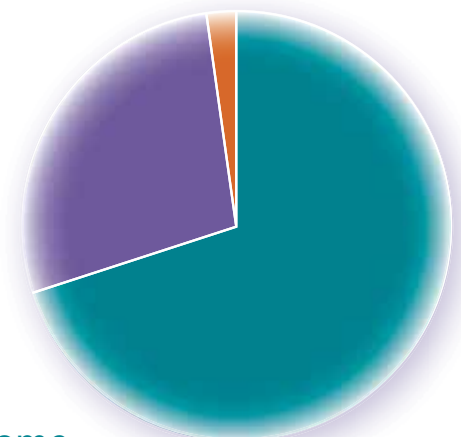
Financial Snapshot 2015

These financial figures are derived from unaudited financial statements. All figures are prepared using the accrual basis of accounting.

Support and Revenue	
Support and Revenue	
Grants	\$1,074,727
Donations	\$433,095
Earned Revenue	\$26,468
Total Support and Revenue	\$1,534,290

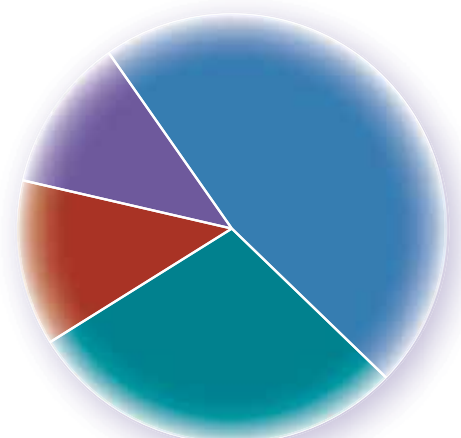
Expenditures	
Direct Program Services	\$1,372,296
Programmatic Support Services	\$85,439
Organization Resource Development	\$94,712
Total Expenditures	\$1,552,446

Net Assets, Beginning of Year	\$836,277
Net Assets, End of Year	\$815,393



Income

- Grants
- Donations
- Earned Revenue



Expenses

- Working Waters
- Forest Legacies
- ClimateWise
- Program Support



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