

Message from Chair and Executive Director



George Greene
Chair



Chad Hughes
Executive Director

The past year was one of growth and challenges. ERA continues to monitor streams throughout the Elk Watershed, expanding our CABIN and hydrometric station network to better understand the health of fish habitat and aquatic ecosystems. We have expanded our reach in the community through a variety of events, public presentations, online presence, infographics, and volunteer engagement. This outreach effort strengthened “Elk River Alliance” as a household name in the Elk Valley community. While maintaining existing programs, we have built up two ambitious long-term initiatives: the Cottonwood Restoration Program and the Elk River Watershed Monitoring Collaborative. Getting major programs off the ground isn’t easy! But we made significant strides in setting shared objectives, building partnerships with stakeholders, and engaging diverse interest groups.

Our greatest challenge continues to be resourcing non-project work, and building capacity to carry out large scale projects. Despite these challenges, the Elk River Alliance continues to punch above its weight, thanks to the work of our staff, board members, volunteers, and community supporters. We would like to extend a special thank you to our organisational funders, including local businesses and companies, without whom we would not be able to keep our lights on and doors open. We would also like to express our gratitude to organisations that have donated time and resources to help us act on our program goals. In 2023 we aim to focus on fundraising, staff capacity and volunteer opportunities to support our expanding programs. We look forward to an exciting year ahead!

Become a Member!

[elkriveralliance.ca/
become-a-member](http://elkriveralliance.ca/become-a-member)



Membership

In 2022, ERA changed from lifetime membership to an annual membership model to create active member engagement, and demonstrate ongoing community support. Throughout 2022, outreach at events, summer markets, summer camp registrations, and our newsletter has paid off with over 150 active memberships! We are incredibly grateful to all our new members who enable us to demonstrate that the Elk River has dedicated community support.



Thank you to our community

Our community really showed up for us this year, through volunteering, event attendance, and local business donations. We would like to extend a special thank you to local and regional organisations for providing the organisational funding that powers our day-to-day activities: Teck, Big Bang Bagels, the Local Life (Elk Valley Remax), Fernie Distillers, Elk Valley Thrift Society, as well individual donors. We would also like to thank the many, many organisations who have donated merchandise or time to help us improve our community engagement!



 **215**
Volunteers

 **885**
Volunteer hours

 **+150**
Members

EDUCATION AND OUTREACH



9 Events
365 Attendees



4166 Social Media
Engagements



10
Infographics



3 Videos

Pulse of the River

As part of our Community Based Water monitoring program, we produced a video looking at land-use impacts on water in the Elk Valley. We interviewed Yaq̓it ʔa·knuq̓it 'it councillor and spiritual advisor Kyle Shottanana, biologist Stella Swanson, ERA founder Lee-Anne Walker, and ERA Ecologist Kaileigh McCallum. The video emphasises the importance of monitoring water to identify changing water quality as pressures increase on our rivers and streams.

Funders

Real Estate Foundation of BC, Healthy Watersheds Initiative, Watersheds BC, and the Government of BC Gaming Fund

Camps

Our annual Elk River Discovery Camp aims to provide a fun outdoor learning experience for kids aged 7-14. This year's discovery camp was an absolute blast, with 80 happy campers attending 5 week-long camps. Activities included rafting, fishing, hiking, cliff jumping, and cultural learning from Ktunaxa knowledge holders. The popularity of our camp allowed us to add additional camp dates and include an overnight component in 2023.

Funders

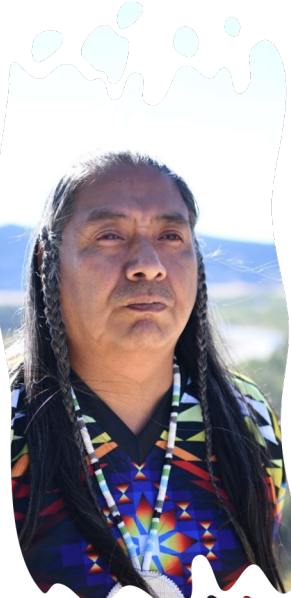
Fernie Fox

Shoreline Cleanup

The flagship event is an annual effort to bring together the Elk Valley community to collect garbage from our river banks. This year was a great success, with over 100 people from Fernie, Sparwood, and Elkford collecting 82 bags of garbage. The most common item, as usual, was cigarette butts.

Funders

Big Bang Bagels



Signage

In 2022 our volunteers helped us install 4 signs around Fernie, and 1 in the Mt. Fernie Provincial Park. The signs cover information about fish biology and fish handling techniques, stormwater pollution, the impacts of building rock dams, and Ktunaxa interpretive content. In 2023 we are working with Tourism Fernie, the City of Fernie, and the Fernie Trails Alliance to develop new signs along Fairy Creek, and at river access locations.

Funders

City of Fernie, Fernie Trails Alliance, Tourism Fernie, Fortis BC, Freshwater Fisheries Society of BC, Columbia Basin Trust, Real Estate Foundation of BC, Watersheds BC, BC Gaming Fund, TD Friends of the Environment Foundation

Whirling Disease

Whirling disease is present in the neighbouring Crowsnest Watershed, and the chance of spread into the Elk River Watershed is high. This education program aims to inform river users of the risks of whirling disease spread, and methods of spread prevention. We installed 5 educational signs, produced a video, designed and distributed pamphlets, created an informational web page, and talked to hundreds of people at market stalls about stopping the spread whirling disease.

Funders

Freshwater Society of British Columbia, Columbia Basin Trust

Interpretive Kiosks

Our interpretive kiosk at Fernie Sunday Markets and Wednesday Socials was busy engaging with locals and visitors. This year we talked to over 900 people about our programs, community concerns, and Elk River recreation. This was also an opportunity for us to recruit members, collect donations, and sell some merch.



WATER MONITORING AND RIPARIAN RESTORATION

Restoration Sites



1300 Plants
Planted



60 student
volunteers

ERA's restoration program has focused on floodplain and riparian restoration. Currently, ERA is working on three sites: the Hosmer wetland, Morrissey Meadows Conservation Property, and Big Ranch (north of Sparwood).

In 2023 our cottonwood restoration program is kicking off in full force, and will see the planting of thousands of cottonwood live stakes, and the construction of protective exclusion fencing at the Big Ranch and Morrissey Meadows properties.

Funders

Columbia Basin Trust, Fish and Wildlife Compensation Program, Fortis BC, Nature Conservancy Canada



Temperature Monitoring

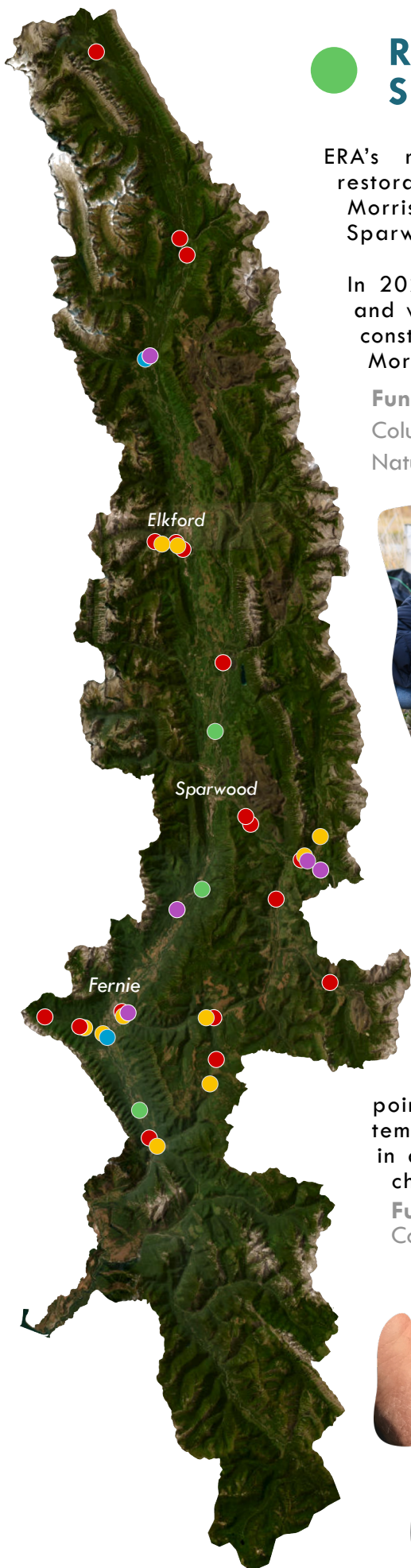


19 active
loggers

Temperature dictates vital ecological processes like dissolved oxygen content and the metabolic rate of animals. Aquatic species have thermal tolerance limits, outside of which reproductive and survival rates decrease. Fish species, like the Westslope cutthroat trout, have an upper thermal tolerance limit of 20-25°C, at which point heat stress results in increased mortality rates. ERA monitors temperatures at 19 sites throughout the Elk River and tributary streams in an effort to provide long-term data to track the impacts of climate change on stream temperature.

Funders

Columbia Basin Trust



WATER MONITORING AND RIPARIAN RESTORATION

Community Based Water Monitoring



10 sites monitored



4 staff & volunteers trained

ERA continued its flagship program, assessing biological, chemical, and geophysical parameters on five non-mine-affected tributaries in the Elk River Watershed. We use the Canadian Aquatic Biomonitoring Network (CABIN) protocols which compares creeks of interest to reference sites that are away from major human impacts. In 2023 we trained two of our staff members and two volunteers in CABIN methodology, which involved a two day course run by our friends at Living Lakes Canada.

Funders

Real Estate Foundation of BC, Healthy Watersheds Initiative, Watersheds BC, and the Government of BC Gaming Fund



Tubifex Monitoring



5 new sites monitored

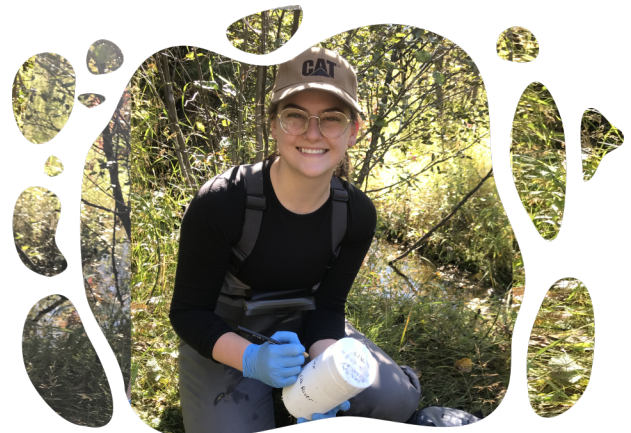


2 volunteers trained

In 2022 we began monitoring for the *Tubifex tubifex* worm (the intermediate host for whirling disease). By mapping the spatial extent of its presence in the watershed we can get an idea of the risk of whirling disease spread to the Elk River watershed, and identify future monitoring sites. This program will continue for the next three years, and aims to engage local community members in stewardship activity.

Funders

Freshwater Society of British Columbia, Columbia Basin Trust



Hydrometric Monitoring



2 new hydrometric stations



14 people trained

Long-term measurements of stream flow are vital for understanding the impacts of land-use and climate change. In 2022 year we installed two new hydrometric monitoring stations at Lizard Creek and Forsyth Creek. These stations record water level and temperature at 15 minute intervals throughout the year, and complement already existing Water Survey of Canada stations. We also held a training session, led by Jonathan Jeffrey of the Ministry of Environment, for 14 people to learn how to assess water level and perform in-stream flow measurements. In 2023 we aim to install another 3 hydrometric stations in the Elk Valley and expand training opportunities.

Funders

Columbia Basin Trust, Canadian Wildlife Federation, Living Lakes Canada





Elk River Watershed Monitoring Collaborative

About the Collaborative

The Monitoring Collaborative is a partner-based initiative with the goal to share and collect data for a large-scale understanding of the Elk River Watershed. This year, nine organisations have signed-on to the Program Charter and 20 organisations are now allocating staff time to build the Program. Partners approved the Program's adaptive monitoring framework, the early years monitoring priorities, the monitoring questions and the indicators needing to be tracked to "take the pulse of streams". In 2023, Partners intend to build their fundraising plan to secure a long-term sustainable source of funding.

Initial Monitoring Priorities

Climate change driven flooding and drought

Provide information to increase our understanding of time trends and spatial patterns of extreme flows to support effective planning, mitigation, and management decisions.

Indicators: water flow, water turbidity, and water temperature

Fish Habitat

Provide fish habitat quality/ quantity information to understand and help safeguard fish habitat throughout the watershed.

Indicators: water flow, water temperature, water column turbidity, water chemistry, and benthic invertebrates (CABIN method).

Ktunaxa Land and Water Uses

Yaqit ʔa'knuqti'it to lead and govern monitoring results coming out of this program, to support the recognition, protection, and restoration of Ktunaxa land and water uses in the Qukin ʔamakʔis.

Indicators: traditional Ktunaxa land and water uses and current Ktunaxa land and water use.

Scan to watch video



Elk Valley Land Use Presentation

In December of 2022 the Monitoring Collaborative hosted a presentation on land-uses and environmental impacts for 80 community members. Information presented included current extent of forestry, mining, and urban development and how each of these activities exert pressures on the ecosystem. After the presentation the community engaged in a lively question/discussion period addressing their environmental concerns. The presentation was recorded in high quality video, and can be viewed using the QR code to the right.



Monitoring Collaborative Partners



Ministry of
Environment and
Climate Change Strategy



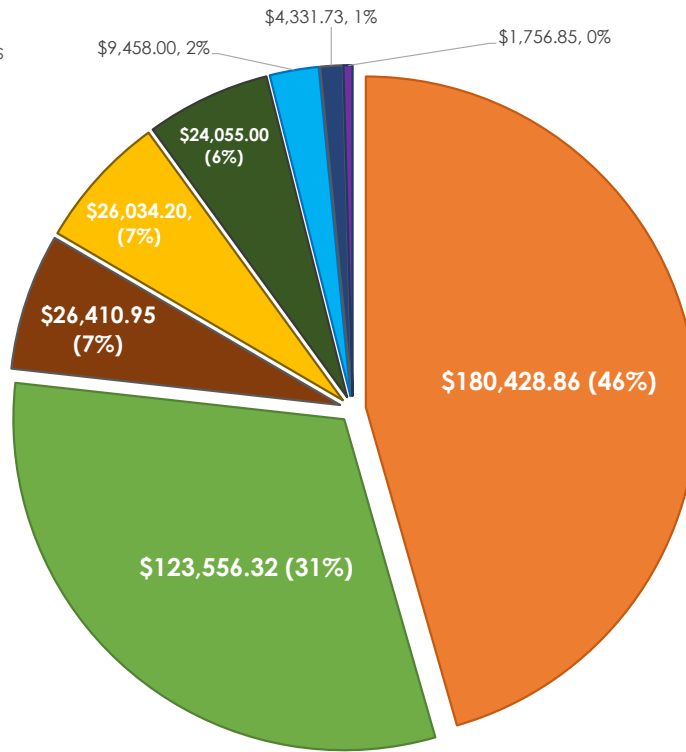
Yaqit ʔa'knuqti'it



ERA 2022 FINANCIALS

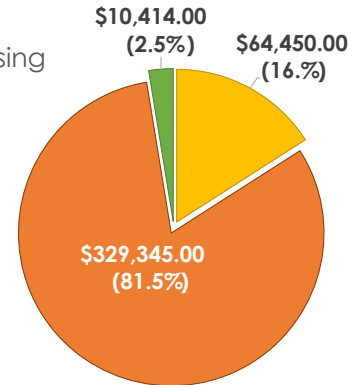
INCOME | \$ 396,031.91

- Foundations, Trusts, and Non-profits
- Corporate Donations
- Provincial Grants
- Sale of Goods and Services
- Local Business Donations
- Federal Grants
- Other
- Private Donations



EXPENSES | \$ 404,209.00

- Program and Projects
- Administration and Management
- Fundraising



ABOUT US

Operating since 2010, the Elk River Alliance is a community-based water charity that connects people to the Elk River using science, education, and community collaboration to ensure sustainable stewardship of the Elk River watershed.



OUR GOALS

Facilitate dialogue, collaboration and community engagement across the watershed, undertaking education to promote environmental literacy and awareness.

Collect, interpret and use scientific data to protect and restore the Elk River watershed.

Promote safe and environmentally responsible use of the Elk River.

TEAM

Chad Hughes	Executive Director
Kaileigh McCallum	Ecologist
Anne-Caroline Kroeger	Program Manager
Evgeni Matveev	Outreach and Education Coordinator
Ayla Bennett	Camp Director
Danis Jasmer	Camp Coordinator
Josh Dube	Summer Youth
Dorothea Davidson	Summer Youth

BOARD OF DIRECTORS

George Greene	Chair, Fundraising Working Group Lead
Ashlee Jollymore	Vice-Chair
Danielle Wiess	Treasurer
Patty Vednais	Director & Secretary
Lee-Anne Walker	Founder & Director, Communication & Education Working Group Lead
Stella Swanson	Director and Technical Working Group Lead
Jason Gravelle	Director
Kevin Atherton	Director
Marie Wilfong	Membership & Volunteer Working Group Lead

CONTACT

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ORGANISATIONAL FUNDERS










\$100+ COMMUNITY DONORS






PROGRAM & PROJECT FUNDERS

- Columbia Basin Trust
- Fish & Wildlife Compensation Program
- Fortis BC
- Real Estate Foundation of BC
- Healthy Watersheds Initiative
- Living Lakes Canada
- Nature Conservancy Canada

- Watersheds BC
- Province of British Columbia
- Canadian Wildlife Federation
- TD Friends of the Environment Foundation
- Big Bang Bagels
- City of Fernie
- Teck

- Fernie Fox Hotel
- Freshwater Fisheries Society of BC
- Habitat Conservation Trust Foundation
- Tourism Fernie
- Government of Canada
- Vancouver Foundation

PARTNERS & SUPPORTERS

Barkside
BC Parks
Canadian Food Inspection Agency
Canyon Raft Company
CARO Analytical Services
City of Elkford
City of Fernie
City of Sparwood
CLEAR
College of the Rockies
East Kootenay Community Credit Union
East Kootenay Invasive Species Council
Eldho's Independent Grocer
Elk River Guiding Company
Ferne Distillers

Ferne Legion
GearHub
GPI Chartered Professional Accountants
Hajibabaei Lab, University of Guelph
Home Hardware
Jon Bisset
Kootenay Conservation Program
Kootenay Fly Shop
Ktunaxa Nation Council
Living Lakes Canada
MacHydro
Mark Locki
Ministry of Environment and Climate Change Strategy

Ministry of Forests, Lands and Natural Resource Operations
Mugshots
Nature Conservancy Canada
Pina Viola
Save on Foods
Stewart Rood
STREAM
Tobacco Plains Band
Tourism Fernie
Trevor Haldane

