



RESTORATION
MONITORING
OUTREACH



ELK RIVER ALLIANCE
ANNUAL REPORT

20
24



LAND STATEMENT

The Elk River Alliance is fortunate to work on the traditional land and waters of Yaq̓it̓ ʔa knuq̓it̓ First Nation, in partnership with ʔakanuxunikʔamakʔis the People from where the water comes out of the mountain, within Qukin ʔamakʔis – the Land of the Raven

MESSAGES FROM THE CHAIR & EXECUTIVE DIRECTOR

In 2024, the ERA team welcomed several new faces and made strides in delivering on ambitious restoration, monitoring, outreach, fundraising, and collaboration goals.

I would like to thank the Board of Directors for dedicating their time to guiding the direction of the Elk River Alliance. I would also like to thank the staff for their hard work, going above and beyond to make sure our programs deliver impactful results.

I am very grateful to all of our program funders who believe in our mission and back the on-the-ground work we do. Finally, the work of the Elk River Alliance would not be possible with the Elk Valley community. ERA members, donors, volunteers, business partners, and community supporters are what makes our small team exceed expectations.

CHAD HUGHES
Executive Director

In 2024, the ERA team focused on delivering key programs: riparian restoration, river and tributary hydrology, water quality and fish habitat monitoring, and community outreach. These efforts advanced scientific knowledge to inform decision makers, community understanding, and our profile in the watershed. And we ended the year with a surplus of \$13,000 on \$589,000 in total spending, increasing our solid reserves to \$68, 270.

On behalf of the Board, I thank Chad Hughes and the entire ERA staff for their hard and effective work, along with the many volunteers who supported what we do. I also extend heartfelt thanks to Board members Lee- Anne, Erin, Jason, Ashlee, Kevin, and newcomers Marsha Clarke and Keegan Street for their leadership. Special appreciation to Ashlee Jollymore, who is stepping down after years of dedicated Board work.

GEORGE GREENE
Board Chair

VISION

A healthy river ecosystem that sustains the Elk Valley for present and future generations.

MISSION

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.



POWERED BY COMMUNITY SPIRIT

ERA was started by a group of passionate citizens and community is at the heart of everything we do.

Our goal is not only to monitor and restore our waterways, but to mobilize passionate community members in joining our mission. This year, volunteers spent 3,624 hours collecting trees for streamside restoration, monitoring water quantity and quality, and assisting fundraising and education efforts. We are grateful to our local partner organizations, including schools, colleges, and businesses, who organize volunteer days with students and staff. ERA volunteer work helps the Elk Valley community connect to the land and water, and meaningfully contribute to ecosystem health. Moreover, it is valuable hands-on work experience for youth and early-career environmental workers; we are proud of all our volunteers who entered the environmental sector this year!

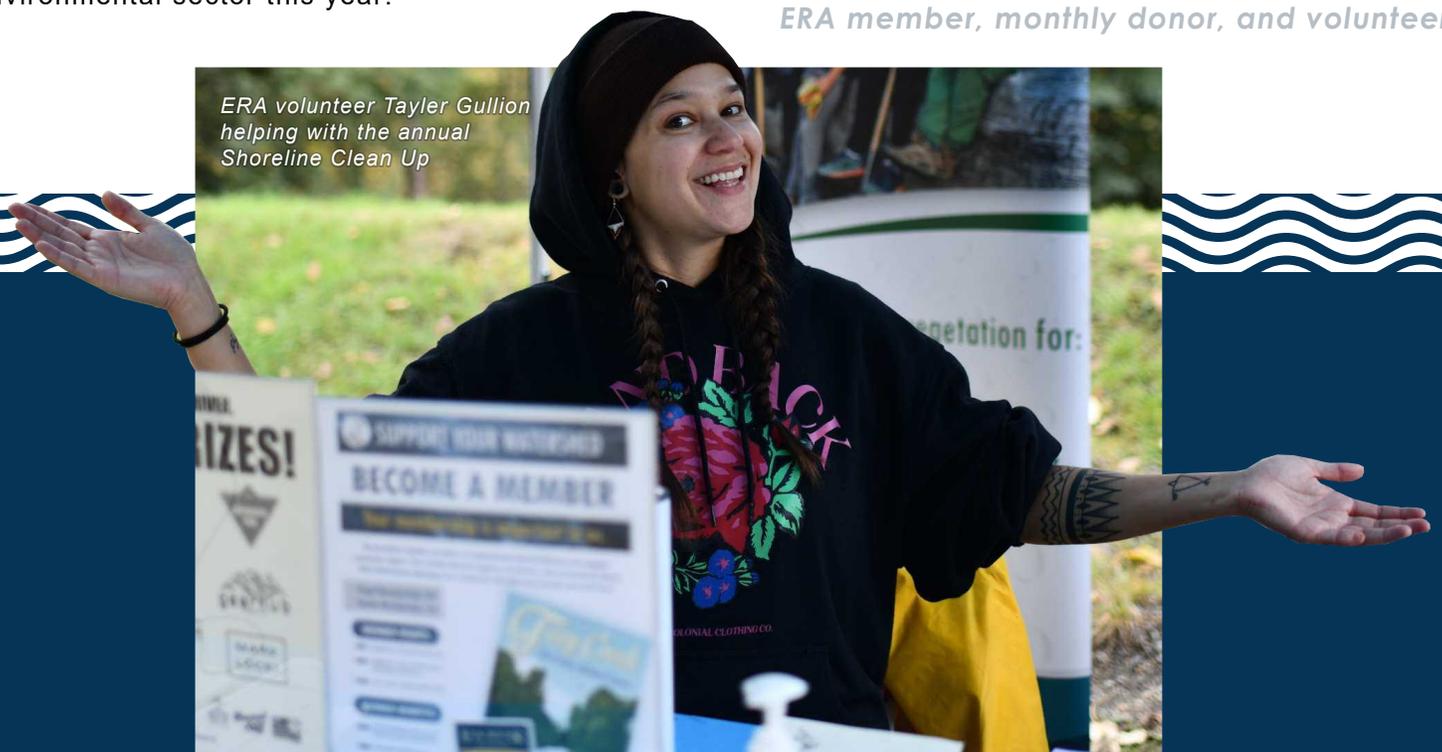
As a not-for-profit organization, the Elk River Alliance relies on member support to ensure that we represent our community. We maintained a steady membership of ~130 members throughout the year. Memberships not only allow community members to guide ERA activities, but help to demonstrate to decision makers and funders that ERA has community support. As a thank you, ERA members get early bird access to the Elk River Discovery Camp.

"I think it's incredibly important to have a non-biased advocate for the health of the river and its watershed. As an avid river user, I'm proud to support the ERA and highly value what they bring to my community."

Ali Preece

ERA member, monthly donor, and volunteer

ERA volunteer Tayler Gullion helping with the annual Shoreline Clean Up





Learn More:
[elkriveralliance.ca/
cottonwood-restoration](http://elkriveralliance.ca/cottonwood-restoration)

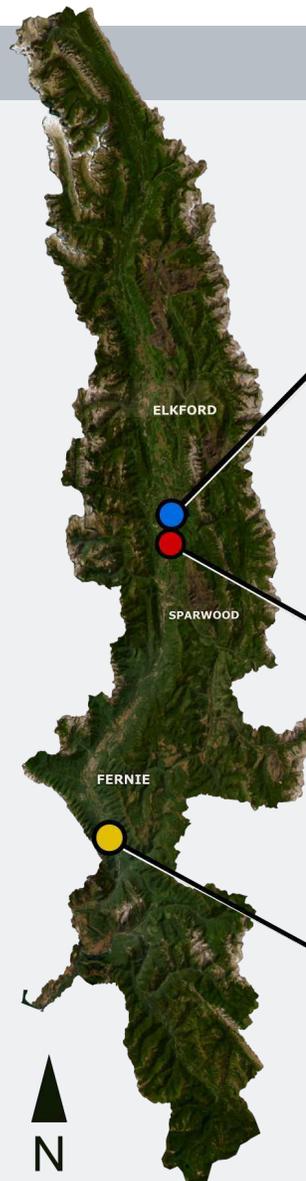
RESTORING STREAMSIDE HABITAT

The Elk River Alliance is running a multiyear, landscape level restoration program to improve riparian areas deforested through agriculture and development. We aim to plant over 20,000 native plants by 2027, with over 9,000 planted by 2024.

Black cottonwood (*Populus trichocarpa*) are beautiful deciduous trees native to North America, well known for releasing fluffy seeds that fall like snowflakes in the early summer. They thrive in moist environments, and especially in the Elk Valley flood plain.

Streamside vegetation is vital for healthy waters; unfortunately, land-uses such as urban development, agriculture, and infrastructure often compete for space with cottonwood forests. According to a report done by Keefer Ecological for ERA, an estimated 50% of cottonwood forest in the Elk Valley floodplain has been lost. ERA is currently focusing efforts on 3 key sites that are rapidly eroding into the Elk River.

RESTORATION SITES



Big Ranch
Nature Trust BC



Elk Valley Lodge
Private Land



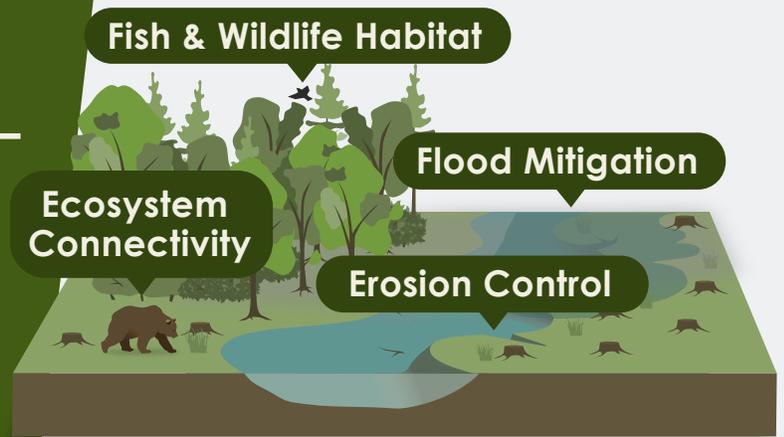
Morrissey Meadows
Nature Conservancy
Canada

IMPACT 2024

- 289 Volunteers
- 1,257 Volunteer Hours
- 1.5 km of Fencing Installed
- 8,000+ Trees/Shrubs Planted
- 9,200+ Livestakes Collected

BENEFITS OF RIPARIAN VEGETATION

The transitional area between land and water is called the "riparian zone". Close to water, plants that rely on high moisture can thrive (e.g., cottonwood trees, willows, alders, dogwood, saskatoons, etc.). A healthy riparian zone benefits terrestrial and aquatic ecosystems, provides natural flood mitigation, and stabilizes streambanks against rampant erosion.



Restoration technician Chris Bush explaining livestock methodology to ERA volunteer Ali Preece



A healthy ecosystem means, to me, that future generations can still enjoy and use the land as I am doing today"

Monica, Restoration Volunteer

PROGRAM PROGRESS

Site Assessment **COMPLETE**

Conduct a valley-wide assessment of cottonwood extent and riparian zone degradation to determine areas in most need of restoration. Conduct site visits to evaluate efficacy of restoration efforts.

Land Securement **COMPLETE**

Collaborate with land owners and partner organisations to put in place agreements for restoration efforts. Once sites are chosen, site-specific restoration prescriptions are developed to guide restoration efforts and ensure maximum success.

Fencing & Planting **IN PROGRESS**

Install fence plots to prevent browsing by herbivores. Engage volunteers to collect livestock from existing groves for replanting in deforested areas. Plant livestock and seedlings using diverse methods, including a water-jet stinger, fascines, and backfilling spike holes.

Monitoring & Maintenance **2026+**

Monitor plants to determine survivorship and growth rates. Maintain fencing to ensure it keeps out herbivores. After 10-20 years, remove fencing.

PROGRAM FUNDERS

Fortis BC RBC Tech for Nature Freshwater Fish and Wildlife Compensation Program
TD Friends of the Environment Foundation Nature Trust of BC SKC Farm Fencing
Nature Conservancy Canada Habitat Conservation Trust Columbia Basin Trust
Regional District of the East Kootenays Environment and Climate Change Canada

MONITORING

Learn More:
[elkriveralliance.ca/
community-based-water-monitoring/](http://elkriveralliance.ca/community-based-water-monitoring/)

IMPACT 2024

- 15 Volunteers
- 153 Volunteer Hours
- 5 Hydrometric Sites
- 19 Temperature Sites
- 11 Water Quality Sites

COMMUNITY BASED WATER MONITORING

ERA has engaged the community in water monitoring since 2013. Our monitoring sites record long term temperature, flow, and water quality data with sites spanning from the Elk River headwaters in the north down to Morrissey Creek in the south.

The Elk River watershed stressors include coal mining, forestry, urban development, and climate change. While the Elk River watershed is the subject of intensive study by mining companies and affiliated groups, ERA monitors sites that are not impacted by mining. Important streams, such as Lizard Creek, are not monitored by other organizations and ERA data has allowed some understanding of the changes in biodiversity throughout the last decade. Monitoring work is a long term process, but with sustained effort ERA hopes to understand how land use and climate change impacts affect stream quality. Using high quality data, more salient decisions can be made about recreational or industrial stream use.

CABIN: ASSESSING STREAM HEALTH



Restoration technician Sarai Saldana taking notes during CABIN monitoring

For over a decade, ERA has used the **Canadian Aquatic Biomonitoring Network (CABIN)** protocol to assess stream health.

This nationally recognized method relies on the collection of diverse chemical, biological, and geophysical measures to understand stream biodiversity. Streams of interest are compared to non-impacted “reference sites” to determine if there is a statistical difference. In 2024, ERA added a third Lizard Creek site in response to striking changes in stream morphology. We also released the 2023 water monitoring report, showing that Lizard Creek, Morrissey Creek, and Coal Creeks are “divergent” or different from reference conditions.



"The fieldwork I did with ERA helped build practical skills and confidence that supported my transition into environmental consulting."

Cameron,
Hydrometric Volunteer



CBWM coordinator Fynley Kuijt measuring flow at Lizard Creek, with assistance from Aleshia Conley

UNDERSTANDING TEMPERATURE

Changes in stream temperature guide biological processes, alter water chemistry, and shape biodiversity.

Climate change is projected to significantly increase stream temperatures, affecting the ability of aquatic life to survive. ERA staff and volunteers are monitoring these potential changes by collecting long-term data on temperature in fish-bearing streams across the watershed. 2024 marked the 5th year of ERA's stream temperature monitoring project, with data from 19 sites across the Elk River Watershed monitored year-round at hourly intervals.

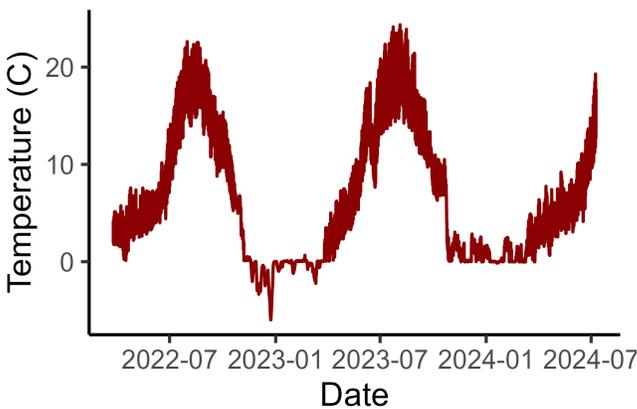


HYDROMETRIC STATIONS

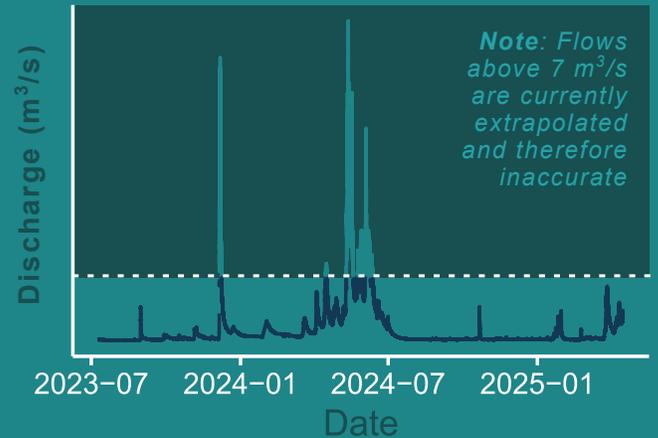
Long-term streamflow data are essential in understanding local hydrology.

ERA has a network of hydrometric monitoring stations to measure water level and temperature at 15-minute intervals. By combining water level with manual measurements of stream dimensions and flow, we can calculate stream flow volume. In 2024, ERA was donated a new Acoustic Doppler Current Profiler (thanks to the help of Xylem, Mike Wrigglesworth, & the Flathead Rivers Alliance), a state-of-the-art piece of equipment to measure high flow conditions when streams are too dangerous to wade in. This will improve our ability to measure discharge under higher flows, which are currently extrapolated and unconfirmed.

Water Temperature at Lower Morrissey Creek (MOR001)



Discharge at Lower Morrissey Creek (MOR001)



PROGRAM FUNDERS

BC Gaming Grant

Vancouver Foundation

Eco Canada

TC Energy

Real Estate Foundation of BC

Regional District of the East Kootenays

Sontek Xylem

Living Lakes Canada

Columbia Basin Trust



 @elkriveralliance
 /elkriveralliance

IMPACT 2024

- 267 Students Reached
- 5 Interpretive Signs Designed
- 100 Summer Campers
- 12 Fernie Fix Articles
- 907 People at Interp Kiosks

COMMUNITY EDUCATION AND ENGAGEMENT

We believe a community that values water and aquatic science will be more engaged in environmental action. We work to understand community concerns, conduct research, and use diverse outreach methods to provide accurate information.

ERA runs educational programming to improve environmental literacy. Our engagement specialists reach the community through public events, online content, school programs, interpretive kiosks, signage, articles, and summer camps. ERA is a trusted watershed voice and many organizations partner with us to improve watershed messaging. Content on key issues (such as selenium or whirling disease) have become a top resource for locals and beyond. The Elk River Discovery Camp is a summer staple with many happy campers returning year after year.

INTERPRETIVE SIGNAGE

ERA interpretive signage familiarizes locals and visitors with Elk Valley ecosystems by presenting information in an engaging and clear manner.

In 2024, ERA designed 4 signs in collaboration with Tourism Fernie which will be installed at boat launches along the Elk River. An additional sign was designed as part of a City of Fernie funded project to add to the existing interpretive signage network within Fernie, with three additional signs to be added in 2025.

SHORELINE CLEAN UP

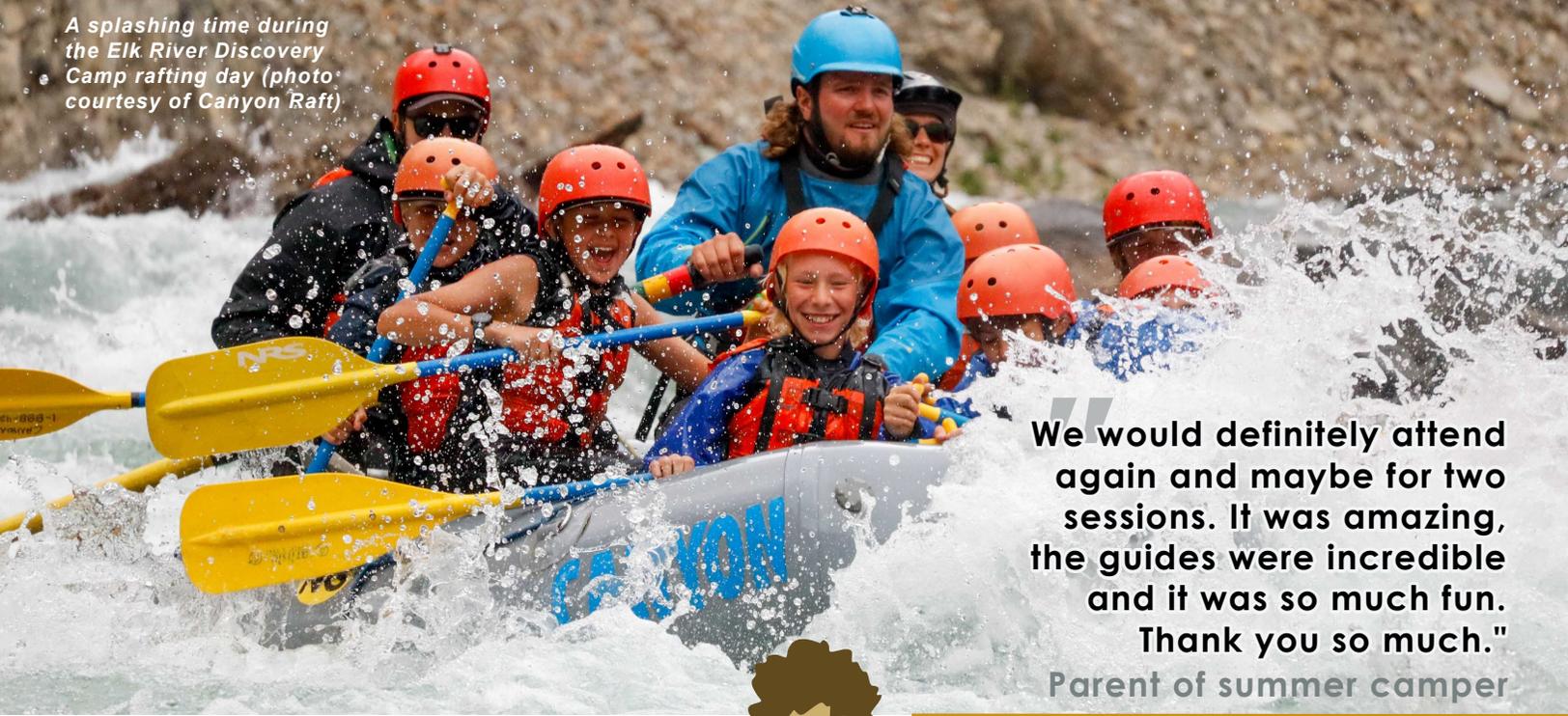
The Elk River Shoreline Clean Up is one of ERA's flagship stewardship events.

Every World Rivers Day ERA rallies the community to come together and collect trash from stream banks. This year, we had a record turn out of 608 people, largely thanks to a strong participation from schools in Sparwood, Elkford, and Fernie. Together, the Elk Valley community removed 9983 pieces of trash! As always, cigarette butts and food wrappers took the title of most common item collected.



ERA volunteer Bill shows haul at the Elk River Shoreline Clean Up

A splashing time during the Elk River Discovery Camp rafting day (photo courtesy of Canyon Raft)



“We would definitely attend again and maybe for two sessions. It was amazing, the guides were incredible and it was so much fun. Thank you so much.”
Parent of summer camper

SCHOOL EDUCATION

ERA educators collaborate with Elkford, Sparwood, and Fernie schools to conduct in-class presentations with hands-on experiments that emphasize river ecology.

After a successful pilot program, the school education program kicked off in 2024. Our educators present students with place-based examples of watershed science that cater to the BC curriculum. Presentation topics include Elk Valley Landforms, the Survival Needs of the Westslope Cutthroat Trout, Land Uses in the Elk Valley, and Environmental Careers.

THE WATER COLUMN

ERA staff write a monthly column in the Fernie Fix focusing on watershed matters. In 2024, columns focused on river safety, environmental careers, fun facts about water critters, and key ERA programs.

Read articles: ferniefix.com



ELK RIVER DISCOVERY CAMP

Discover the wonders of the Elk River through this unforgettable day-camp full of thrilling fun and outdoor adventure!

Youth ages 7-10 and 10-14 spend time outside rafting, fishing, hiking, swimming, paddle boarding, camping, and learning about science and Indigenous perspectives on watershed health. In 2024, ERA organized 6 camps for 100 campers. Want to make sure to get in the camp? ERA members get early bird access to registration!

elkriveralliance.ca/camps



PROGRAM FUNDERS

- | | | |
|-----------------------------------|------------------------------------|--|
| Tourism Fernie | Fernie Fix | TD Friends of the Environment Foundation |
| Telus Friendly Futures Foundation | Parks Enhancement Fund | City of Fernie |
| Canyon Raft | Freshwater Fisheries Society of BC | Big Bang Bagels |
| Outdoor Recreation Council of BC | RBC Future Launch | Columbia Basin Trust |

HARNESSING COMMUNITY SUPPORT

As a registered charity, the Elk River Alliance relies on dedicated community support to fund our programs.

In 2024, ERA strengthened partnerships with local businesses, non-profits, and community members. Additionally, ERA added new stickers and a shirt design to fundraise for our programs.

BOTTLE DRIVE

In the Fall of 2024, ERA took one week per month to sort bottles donated at the transfer station, a fundraising program organized by Twin Meadows Animal Rescue. Thanks to the dedication of staff, volunteers, and school groups, we raised \$3,956.

GHOSTRIDER CONCESSION

The Ghostrider hockey games are a community staple, and Elk Valley Dolphin swim club manage concession sales, with profits going to local non-profits. ERA volunteers operated 3 concession stands and raised \$2,398!

RIVER FLOAT

Rooftop Roasters developed a highly popular blend of coffee to support ERA. The "River Float" flies off the shelves, and \$4 from each bag is donated to ERA.



RAFT RACE

For over 2 decades, Canyon Raft has organized an annual raft race, with proceeds supporting ERA summer camps. In 2024, the race raised \$2,880! ERA is grateful to the support from Canyon Raft, Tunnel 49, and all local businesses that donated prizes.

ELK VALLEY THRIFT SOCIETY

The Sparwood Thrift Store is run by volunteers, and proceeds go to local charities. Marie Wilfong has volunteered many hours at the thrift store, and raised \$3000 for ERA!

5 FOR FERNIE

The Local Life (Sharon Taylor Re/Max Elk Valley) continued the program to contribute 5% of proceeds from real estate sales to local charities, including the Elk River Alliance. In 2024, this initiative raised \$900 for ERA.

FUNDRAISING



Donate:
elkriveralliance.ca/donate

IMPACT 2024

220 Volunteer Hours

\$50,000+ in Community Support

11 Fundraising Events

15 New Sticker Designs

1 New Shirt Design

★ ★ ★

SUPPORTER FEATURE ONE FOR THE RIVER

For over 3 years, Big Bang Bagels has donated \$1 from every disposable cup of coffee to ERA. This program brings in about \$20,000 per year for our organization, supporting the Shoreline Clean Up, summer camps, educational programs, and community outreach.

ARE YOU A MONTHLY SUPPORTER?

Your donations help us be a voice for the river. Just \$10/month can significantly increase our capacity to address community concerns, develop educational content for schools and community, and keep our summer camps affordable. If the Elk River is important to you, consider becoming a monthly donor.

elkriveralliance.ca/donate



"We love this river, it makes the town. [ERA] just seemed like the obvious place to donate money when we're trying to make a difference."

Carolyn Doyle
Big Bang Bagels co-owner



ERA added fun new stickers and a wildlife shirt to our roster! We are grateful to our partners at Ski Base and the Fernie Tourism Center for helping us vend the merch and raise money for our programs.

COMMUNITY SUPPORTERS

- Community Foundation of the Kootenay Rockies
- East Kootenay Community Credit Union
- Eldho's Independent Grocer
- Twin Meadows Animal Rescue
- Canadian Tire
- Fernie Distillers
- Fernie Chamber
- Kootenay Fly Shop
- Elk Valley Dolphins

- FWA Guiding
- Fernie Legion
- Sharon Taylor Re/Max
- Johnson & Johnson
- Rooftop Coffee Roasters
- GearHub
- Big Bang Bagels
- Ski Base
- Canyon Raft

- Tunnel 49
- Elk River Guiding
- Guides Hut
- Edge of the World
- Fernie Bottle Depot
- Home Hardware

COLLABORATIVE



Elk River
Watershed
—
Qukin
ʔamakʔis

Collaborative Monitoring Program

The Elk River Watershed Collaborative Monitoring Program strives to unite diverse knowledge holders and vested interest groups in understanding the Elk River Watershed.

Since 2021, ERA has served as the Program Coordinator, bringing together representatives from Indigenous bands, non-profits, scientists, industry, and local knowledge holders. In 2024, Kat Hartwig (Executive Director, Living Lakes Canada) took over the Steering Committee chair role from George Greene, and Caitlin Henneker joined ERA as Program Manager.

DATA OVERVIEW REPORT

In an ongoing effort to understand the impacts of land uses and extent of knowledge in the Elk River, the Monitoring Working Group continued work on a watershed knowledge report. The report aims to combine diverse publicly accessible data sources on parameters relevant to mining, forestry, and development. Report publication is scheduled for late 2025.

PUBLIC ENGAGEMENT

Building on the foundations of the Elk Valley Land and Water Symposium, the Collaborative organized the Knowing Water symposium. This event featured 5 speakers, representing knowledge from Indigenous, municipal, provincial, and non-profit sectors. After presentations, the panel of speakers answered watershed questions from the audience.



Councillor Kyle Shottanapa speaks at the Knowing Water symposium

COLLABORATIVE PARTNERS

FUNDERS 2024



Ministry of Environment and Climate Change Strategy



OUR TEAM



CHAD
Hughes



ANNE-CAROLINE
Kroeger



EVGENI
Matveev



CHRIS
Bush



SARAI
Ramirez-Saldaña



FYNLEY
Kuijt



CAITLIN
Henneker



ALESHIA
Conley



FINLAY
Thomson



TAHLIA
Russell



JENNIFER
O'Donnell



AYLA
Treadwell



CYNTHIA
Fraser

SEASONAL STAFF
ADAM Jones
AMANDA Hansen
SAMANTHA Saban
KAYLA Zamara

OUR BOARD



GEORGE Greene



KEVIN Atherton



LEE-ANNE Walker



MARSHA Clarke



JASON Gravelle



ASHLEE Jollymore



KEEGAN Street



ERIN Webber

2024 ORGANISATIONAL DONORS

\$50,000+



MONTHLY DONORS

ALI PREECE
ANIE RADISH
CHAD HUGHES
ANNE KROEGER

\$10,000+



\$5,000+

Dickhout Family Foundation

\$1,000+

Elk Valley Thrift Society
Cummins Creek Containers

\$500+

Alison Preece
Radish & Patch
Sharon Taylor (Re/Max)

\$100+

Aaron Bowden
Brian White
Chad Hughes
David Falldien
Genus Capital Management
Graham Preston

Lee-Anne Walker
Harrison Kloke
J Michael Perez
Neil Macdonald
Randal Macnair
TH Gregg
Anonymous

2024 PARTNERS

AmbassadorWILD
Amateur Rafting Society of Excellence
BC Parks
Canadian Wildlife Federation
Canyon Raft Company
CARO Analytical Services
District of Elkford
City of Fernie
Claris Media
Collective for Lower Elk Aquifer Restoration
College of the Rockies (Fernie Campus)
CP Rail
District of Sparwood
East Kootenay Invasive Species Council
Elk River Guiding Company
Elk Valley Regional Land Trust
Elkford Secondary School
Fernie Legion

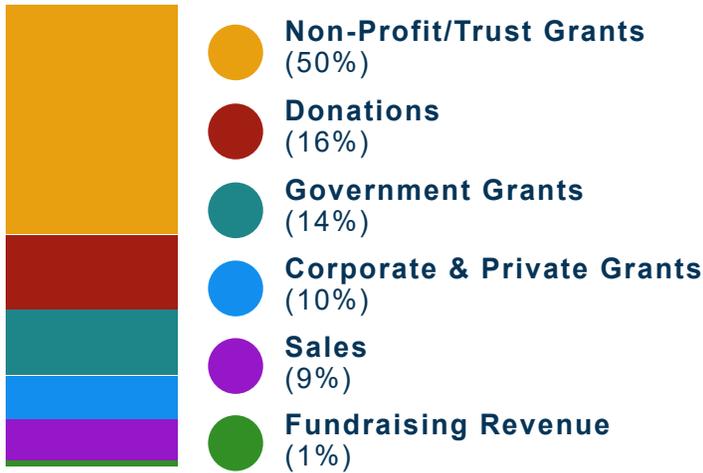
Fernie Trails Alliance
Fernie Secondary School
Flathead Rivers Alliance
Frank J. Mitchell Elementary
GPI Chartered Professional Accountants
Isabella Dicken Primary School
Jason Trochessett
Jon Bisset
Jon Jeffrey
Katy Fraser
Kootenay Conservation Program
Kootenay Discovery School
Kootenay Fly Shop
Ktunaxa Nation Council
Living Lakes Canada
Lotic Environmental
Machydro
Mike Wrigglesworth

Nature Conservancy Canada
Nature Trust of BC
Nupqu
Roal Roads University
Shaggy Designs
SKC Farm Fencing
SonTek (Xylem Inc.)
Stella Swanson
Stewart Rood
StillWater Consulting
Tourism Fernie
Trevor Haldane
Tunnel 49
Hajibabaei Lab (STREAM)
Wildsight Elk Valley
Yaqit̓ ʔa knuq̓ti 'it̓

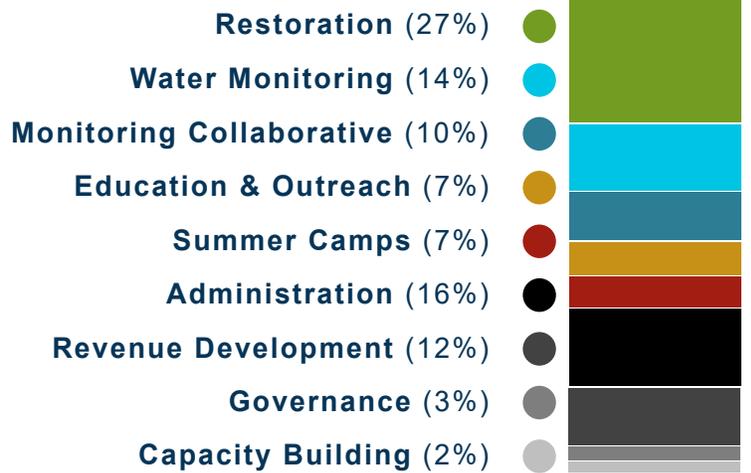
2024 FINANCIALS

"In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of Elk River Watershed Alliance as at January 31, 2025, and the results of its operations and cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations." -GPI Chartered Professional Accountants, Fernie B.C.

INCOME: \$602,000



EXPENSES: \$589,000



2024 PROGRAM FUNDERS



2024 IMPACT SUMMARY



875
YOUTH
REACHED



138
MEMBERS

8,048
TREES
PLANTED

1.5
km
FENCING
INSTALLED



1,006
VOLUNTEERS
CONTRIBUTED
3,624
HOURS

35
WATER
QUALITY &
QUANTITY
SITES
MONITORED



9,983
TRASH
ITEMS
COLLECTED AT CLEAN UP

