



lake windermere
ambassadors
healthy water for healthy communities

2019 Annual Report

www.lakeambassadors.ca

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Thank you to our funders and supporters

Columbia Basin **trust** **LUSH**



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EXECUTIVE SUMMARY

The Lake Windermere Ambassadors are a society of community volunteers and cross-sector stakeholders representing local business, recreation, tourism, commercial marinas, water stewardship, ecological conservation, second homeowners, year-round residents, First Nations, two local governments, and youth. The Ambassadors evolved from foundations created by the highly successful Lake Windermere Project which ran from 2005-2010. Since 2010, our organization has been monitoring water quality and working with stakeholders in the Lake Windermere watershed in pursuit of our vision.

Our mandate is the protection of Lake Windermere in perpetuity. We aim to achieve this through our Vision and Mission Statements:

Vision: *An ecologically healthy Lake Windermere with balanced management approaches that support recreation and traditional uses, high fish and wildlife values, and economic prosperity in the region.*

Mission: *Through collaboration of representatives of key community sectors, the Lake Windermere Ambassadors will serve as a resource for future projects benefiting the health of Lake Windermere.*

The Lake Windermere Ambassadors have been designated the Lake Management Committee by the Regional District of the East Kootenay and the District of Invermere. The primary role of the Lake Management Committee is to assist each district in implementing the recommendations in the Lake Windermere Management Plan and providing comment on development referrals.

This report details highlights and project work completed from January to December 2019.

Healthy water for healthy communities

MESSAGE FROM THE PROGRAM COORDINATOR

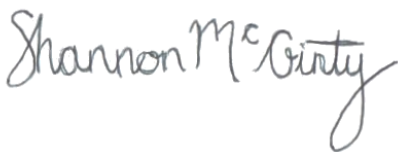
The Lake Windermere Ambassadors have undergone many projects over the past eight years, and this year was no different. As Lake Windermere faces new threats, challenges, and opportunities we adapt our programming to match them. In 2019 the Ambassadors engaged the community through outreach and education, monitored water quality and quantity, and built and maintained partnerships with a variety of water stewardship organizations to improve both our programming and assist in theirs.

The Ambassadors main focus has been community outreach and education; this allows all of our other work to have a meaningful impact. This year we employed a variety of methods to reach as much of the community as possible. We used many traditional methods, including newsletters, articles in the paper and Farmers Market outreach, along with some more involved methods including free summer camps, boat launch outreach, and signage installations. Through each method we were able to share the importance of Lake Windermere to our community and provide direction on keeping the lake healthy.

Our next largest focus area is on water quality and quantity monitoring. We were able to expand our monitoring program this year to include water quantity which hasn't been included in previous years. Although we are still developing this side of the program we were able to collect a full season's worth of input data on Windermere and Abel Creeks. As the understanding of water quality is ever expanding we too are adapting our program to be relevant and useful to the Lake Windermere watershed.

As a new addition to The Ambassadors in late 2018, I was excited for the 2019 year, and prepared to do a lot of learning. Moving into 2020 I am continuing to learn, but optimistic that I will be able to continue to improve on The Ambassadors programming. We are planning to publish a ten-year State of the Lake Report, complete an updated Sensitive Habitat Inventory Map, improve public access, and continue to grow our outreach and education this year, along with our ongoing programming.

I am truly honoured to be a part of The Ambassadors and to be able to contribute to the work being done to protect and improve this critical resource in our community.



Shannon McGinty, BSc.
*Lake Windermere Ambassadors
 Program Coordinator*



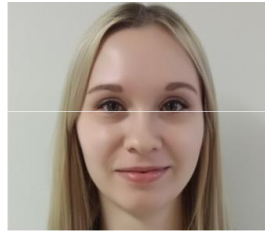
THE TEAM



Paul Christy
President



Shawn Ridsdale
Vice President



Jennifer Beverley
Secretary



Taoya Schaefer
Treasurer



Gurmeet Brar
Director at Large



Paola Albano
Director at Large



Max Fanderl
Director at Large



Katie Watt
Director at Large



Shannon McGinty
Program Coordinator



Keri Malanchuk
Water Stewardship Intern

Local Government Advisors



Susan Clovechok
Regional District of East Kootenay



Ute Juras
District of Invermere

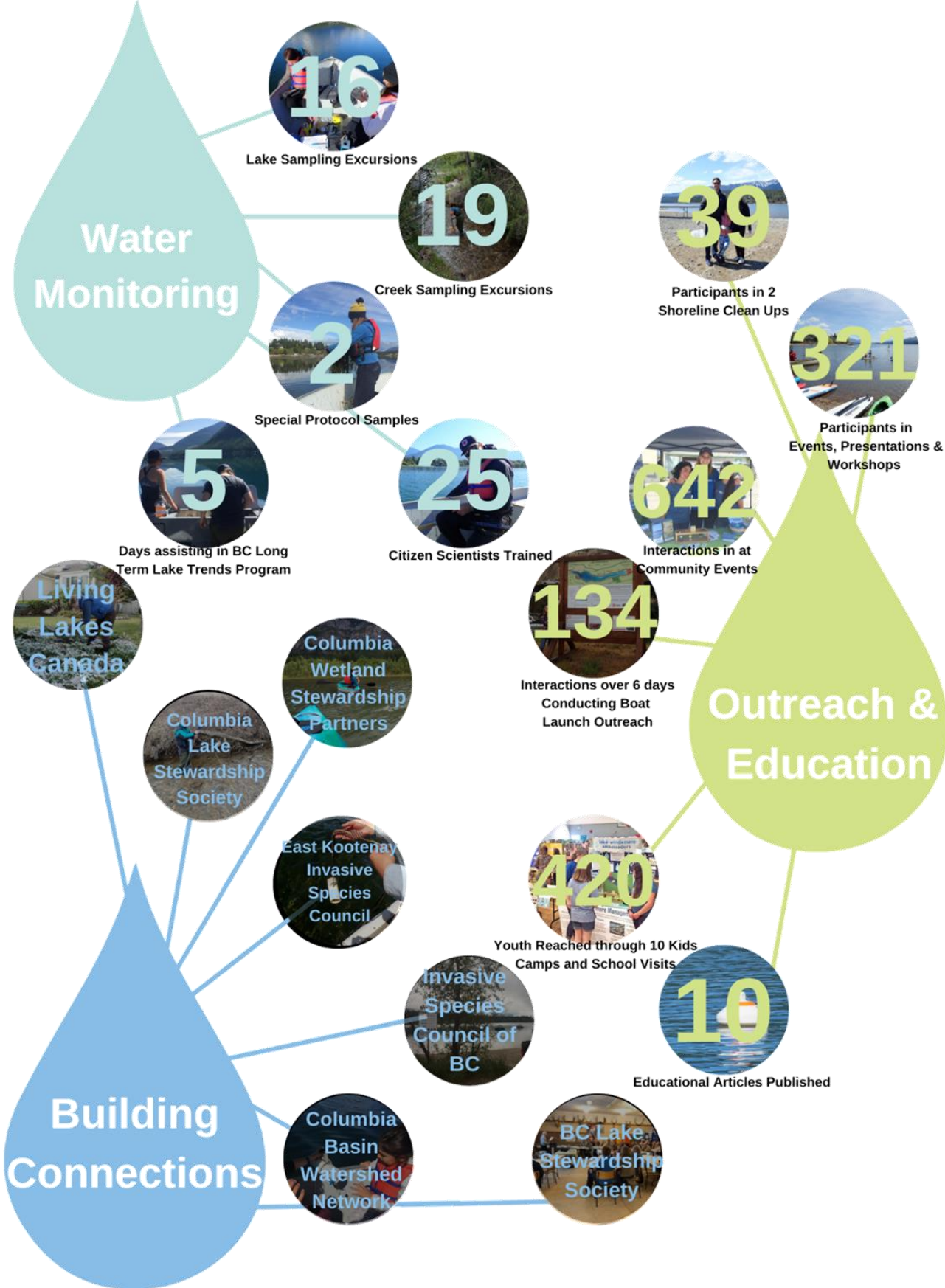


Mark Thomas
Shuswap Band



VACANT
Akisqnuq First Nation

HIGHLIGHTS



PROJECT WORK

The Ambassadors focussed this year's work in three main project areas: Outreach and Education; Water Monitoring; and Building Connections. Through each avenue, we were able to meet our work plan goals and see success in our program.

Outreach and Education

In 2019 the Ambassadors engaged with the community through a many methods of outreach. We had an overall impression reaching approximately 6,500 community members and visitors; we directly interacted with 1,556 individuals. Below is a list of every thing we did and participated in this year to connect with the community:

- Whiteway Outreach
- Snowflake Festival
- Invermere Coffee and Tea Festival
- Winter Whiteway Clean Up
- 8th Annual General Meeting
- Spring Shoreline Clean Up
- JA Laird Shoreline Clean Up
- Wings Over the Rockies Creek Sampling Demonstrations
- 2nd Annual Paddle Palooza
- Laird Environmental Education Fair
- Presentation at 2020 BC Budget Consultations
- Farmers Markets
- Boat Launch Outreach
- Educational signage installations
- Canada Day Festival
- Free Kids Summer Camps
- Valley Appreciation Day
- Community Paddle Night
- Lake Windermere Aquathon
- Salmon Festival
- BC Rivers Day Paddle and Film
- Kootenay Conservation Program Annual Fall Gathering
- BC Lake Stewardship Society Annual Meeting
- Columbia River Treaty Negotiation Update Meetings
- Columbia River Transboundary Conference
- Vancouver International Film Fest
- Windermere Valley Ski Swap
- Toby Creek Nordic Ski Club Annual General Meeting
- Columbia Basin Watershed Network Annual Meetings
- Community Water Quality Presentation
- Water Quality Presentation to District of Invermere Mayor and Council
- Online presence
- Educational Articles
- Columbia Basin Alliance for Literacy Presentation
- Columbia Valley Community Foundation Annual General Meeting
- Classroom Presentation at Eileen Madson Primary
- Partnership with Wildsight on Know Your Watershed education
- LakeKeepers Workshop



Boat Launch Outreach and Educational Signage Installations



This year the Ambassadors were able to bring a project that began in 2017 to completion, although the effect of the project will continue for the foreseeable future. In 2019, the Ambassadors published our updated Green Boating Guides. These include information for boaters, both motorized and non-motorized, of how to minimize your impact while still enjoying the lake. We handed out 63 Green Boating Packages (include the Green Boating Guide, and other relevant information), and have many more to hand out next year!

Paired with the education we were able to install a large lake map sign, provided in part by the District of Invermere and the Sign Artist, and four Clean, Drain, Dry signs, provided by the Invasive Species Council of BC. The large lake sign can be found adjacent to Pete’s Marina at the public Athalmer Motorized Boat Launch, while the Clean, Drain, Dry signs are located at:

- Public Athalmer Motorized Boat Launch
- Public Athalmer Non-Motorized Boat Launch
- Bayshore Boat Launch
- Windermere Beach

Overall we found the public to be receptive to the education being provided and often interested in learning more about the health of the lake, changes over the past few years, public access opportunities, enforcement of zoning and structures on the lake, and plant growth in the lake.



Free Kids Summer Camps

2019 was the second year that we ran free kids summer camps. We were able to expand our offering to six public camps held at James Chabot Provincial Park, and two at Shady Brook Resort in July and August. Our camps covered a variety of topics all related to the Lake Windermere watershed. We had 87 kids participate over the whole summer, some of that being repeat attendees at multiple camps. Providing we continue to have the capacity, we will continue to run these camps for the community.



Educational Articles

From April to November we published monthly articles in the Newspaper and a couple supplementary articles on our website. These articles ranged in topics but aimed to provide the community with information related to Lake Windermere and watershed health. The table below outlines articles published and topics covered:

Date	Location	Title	Author
April 18, 2019	Columbia Valley Pioneer	Critters of the Lake	Shannon McGinty
May 16, 2019	Columbia Valley Pioneer	Slow Down to Avoid Watery Conflicts	Shawn Ridsdale
May 23, 2019	Columbia Valley Pioneer	Finding Fish	Shannon McGinty
June 13, 2019	www.lakeambassadors.ca	All Plastics Lead to the Ocean	Keri Malanchuk
June 27, 2019	Columbia Valley Pioneer	Just What are we Testing for in These Waters?	Shannon McGinty
July 11, 2019	Columbia Valley Pioneer	What is Swimmers Itch?	Shannon McGinty
August 8, 2019	www.lakeambassadors.ca	Mooring Buoy Info	Keri Malanchuk
August 22, 2019	Columbia Valley Pioneer	What's in your Sunscreen	Shannon McGinty
September 12, 2019	Columbia Valley Pioneer	Not so Golden to have Goldfish in the Lake	Shannon McGinty
October 17, 2019	Columbia Valley Pioneer	Columbia River Treaty Meeting to Come to Town	Shannon McGinty
November 14, 2019	Columbia Valley Pioneer	Watching our Water Foot Print	Shannon McGinty

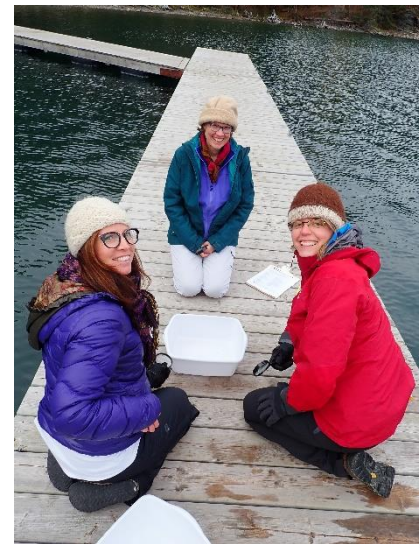
In addition to these articles, we published weekly “Pulse Checks” from April to September highlighting the findings from that week’s water monitoring and providing education on water monitoring parameters.

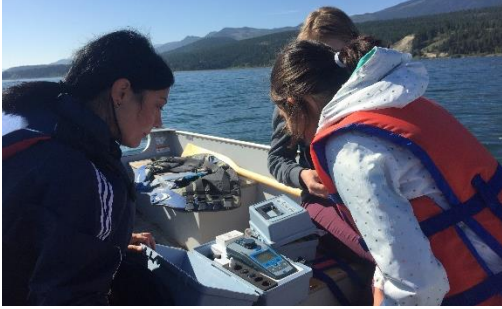
Lake Keepers Workshop

In partnership with the BC Lake Stewardship Society (BCLSS), we hosted a Lake Keepers Workshop in late October 2019. This workshop focussed on:

- Lake Ecology
- Lake Monitoring – Parameters & Program Design
- Care and Management of Lakes and Riparian Areas
- Aquatic Plants
- Watershed Assessments & Planning
- Invasive Species

Ten individuals completed the two-day workshop that consisted of one full day in class and one day in the field. We were lucky enough to have Norm Zirnhelt of BCLSS host and lead the workshop, and Jess Paloposki of the East Kootenay Invasive Species Council provide a guest presentation on the effects of invasive species and mitigation efforts.



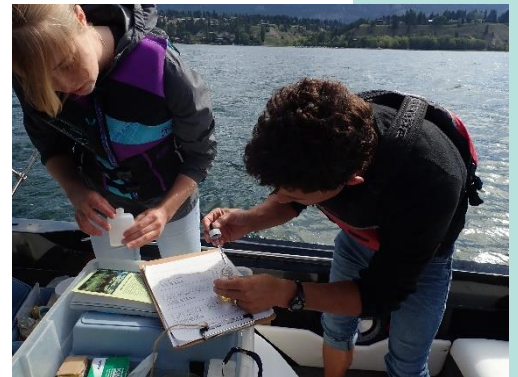


Water Monitoring

2019 marked the ninth year of sampling for the Lake Windermere Ambassadors, with baseline data collected for four years prior during the Lake Windermere Project. This year we were able to continue our annual program, and expand to cover more areas becoming more pertinent in a changing climate. The program continued to focus on the lake, tributaries, and beaches.

Lake Windermere Monitoring

Our 2019 sampling season began with our participation in the [BC Government Long Term Lake Trends](#) project on April 19, 2019, collecting detailed freshet data. We then continued our weekly Lake Monitoring starting on May 21, 2019 through to September 24, 2019. During this time, we completed 18 excursions, and trained 25 citizen scientists, who gave a total of 84.5 volunteer hours. Our standard sampling regime was conducted in accordance with recommendations from the Ministry of Environment in the updated Water Quality Objectives for Lake Windermere, released November 2010. This includes weekly measurements of specific conductivity, pH, temperature, dissolved oxygen, and turbidity. Weekly field observations for air temperature, water depth, water clarity, wind speed and direction, and cloud cover were also recorded. Lastly, total and dissolved phosphorous were tested monthly. A continuous water temperature logger was installed near Fort Point to collect more accurate and representative water temperature data.



In addition to our standard sampling regime, we completed two special protocol excursions, and monitored for invasive mussels. The two special protocol excursions were an Aquatic Invasive Plant survey on September 17, 2019, and a Water Bird Survey on October 10, 2019. Monitoring for invasive mussels was done with Substrate Samplers installed at six locations on the east side of the lake, Lakeview Meadows, Terra Vista Community Association, Akiskinook Resort, Windermere Public Beach, Cardiff Cove Marina, and Lakeshore Campground. Through this sampling, no invasive species were found to be present in Lake Windermere.

Results and interpretations from all lake sampling will be shared in our 2019 Water Quality Report, and will be used toward completing our 2020 State of the Lake Report. Both reports will be shared locally, provided to stakeholder groups, made available online

(our website, social media, and Ministry of Environments Eco-Catalogue), and through presentations and community outreach.

Tributary Monitoring

Similar to lake monitoring we monitored two tributaries that flow into Lake Windermere. Windermere Creek and Abel Creek received weekly monitoring from May 22, 2019 to September 4, 2019, plus one final collection on October 18, 2019. Our sampling protocol followed the Columbia Basin Water Quality Monitoring Project's protocols, which are closely aligned to the Canadian Aquatic Biomonitoring Network's sampling methodology. Weekly measurements taken include streamflow, specific conductivity, pH, temperature, dissolved oxygen, and turbidity. Weekly field observations for air temperature, wind speed and direction, and cloud cover were also recorded. Total and dissolved phosphorous were tested monthly, and invertebrate samples were collected monthly for eDNA analysis. Both Windermere and Abel creek have HOBO Water Level Loggers on them collecting continuous data.



This data is currently being shared through our [Data Portal](#) website, and will be used in the 2020 State of the Lake Report.



Public Beach Monitoring

In collaboration with the Interior Health Authority, we collected weekly beach water quality samples from Kinsmen, James Chabot, and Windermere Beach May 13, 2019 to August 19, 2019 (excluding long weekends). Samples were analyzed for *E.coli* through the Interior Health Authority laboratories. All public beaches met Ministry of Environment objectives for total *E. coli* counts throughout the summer season.

Building Connections

Much of the work we do is not possible without the support and collaboration with other similar groups. We work with other groups both locally and at a provincial level. Some key projects we received support with this year include:

- Living Lakes Canada Ground Water Monitoring Project providing data sharing opportunities to better understand the flow of water into and out of Lake Windermere
- Columbia Wetlands Stewardship Partners water sample collections to be analyzed for groundwater analysis
- East Kootenay Invasive Species Council providing both educational opportunities and collecting water samples on Lake Windermere to monitor for invasive species



- Columbia Basin Watershed Network providing Summer Mapping Program and Equipment Replacement Grants

Lake Management Committee

From everything in this report to installation of the Slow/No Wake Buoys in Taynton Bay, recommendations to local government and increasing public access opportunities the Ambassadors continue to complete work related to the implementation of the non-regulatory Lake Windermere Management Plan. We did not receive any referrals from the District of Invermere or Regional District of East Kootenay for development and crown land tenure applications on the foreshore of Lake Windermere in 2019. We are confident that we will continue to receive these as they do come in, and will respond to each accordingly.

Financials

The fiscal year for the Ambassadors runs from October 1st to September 30th each year. This year the Ambassadors saw comparable income and spending to previous years, with an annual cash flow of approximately \$94,000 supporting this program.

Full financial statements can be found online at lakeambassadors.ca or can be requested from our office at info@lakeambassadors.ca (250) 341 6898.



CONCLUSIONS

2019 was another successful year for the Lake Windermere Ambassadors completing our education, outreach, and monitoring duties as the Lake Management Committee while continuing to grow and expand our programming where appropriate.

ACKNOWLEDGEMENTS

The work we do could not happen without our collaborators, partners, and mentors:

- Adventure Paddle School
- AG Valley Foods
- Akiskinook Resort
- Akisqnuq First Nation
- BC Lakes Stewardship Society
- Black Star Studios
- Café Allium
- Cardiff Cove Marina
- Canada Summer Jobs
- Canadian Freshwater Alliance
- Columbia Basin Trust
- Columbia Basin Watershed Network
- Columbia Lake Stewardship Society
- Columbia River Paddle
- Columbia Valley Community Foundation
- Columbia Valley Escape Rooms
- Columbia Wetlands Stewardship Partners
- Community Donors
- District of Invermere
- Fairmont Pizza and Ice Cream
- Fire Vixen
- East Kootenay Invasive Species Council
- Gerrys Gelati
- Golden Eye Ecological Services, Rachel Darvill
- Hearth2Homes
- Home Hardware
- Hopkins Harvest
- Invasive Species Council of BC
- Invermere Bakery
- Katie Watt, 2018-19 Whiteway Ambassador
- Keri Malanchuck, Water Stewardship Assistant
- Kootenay Conservation Program
- Kootenay River Runners
- Lakeshore Resort
- Lakeview Meadows
- Lake Windermere Aquathon Society
- Leo Burrito
- Living Lakes Canada
- LUSH Charity Pot
- Om Organics
- Our Committed Board of Directors
- Peppis Pizza
- POLIS
- Pynelogs Cultural Centre
- Rainbow Donkey Kids Clothing
- RBC Foundation
- Real Estate Foundation of BC
- Regional District of East Kootenay
- Shady Brook Resort
- Sign Artist
- Shuswap Indian Band
- Terra Vista Community Association
- Toby Creek Nordic Ski Club
- Ullr Bar
- Wildsight Invermere
- Windermere Community Association