

# **2022 ANNUAL SUMMARY**

Fraser Valley Invasive Species Society

# Prepared by:

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Fraser Valley Invasive Species Society

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# Introduction

The Fraser Valley Invasive Species Society (FVISS) is a non-profit society committed to reducing the negative impacts caused by invasive species. We are one of a network of regional invasive species councils throughout the province and work closely with these other councils and the Invasive Species Council of BC.

### **Mission Statement**

#### **FVISS Mission Statement:**

The Fraser Valley Invasive Species Society is dedicated to taking action to reduce the impacts of invasive species in the Fraser Valley through education, coordination, and on-the-ground operations.

# The purposes of the FVISS are:

- 1. To raise awareness and educate about invasive species and their impacts;
- 2. To prevent the further introduction and spread of invasive species in the area;
- 3. To promote coordinated and collaborative management of invasive species;
- 4. To work towards the control/containment of highly invasive non-native species;
- 5. To provide a conduit for information and a source of expertise on invasive species; and
- 6. To develop and maintain a comprehensive inventory of invasive species within the Fraser Valley.

# **Goals and Objectives**

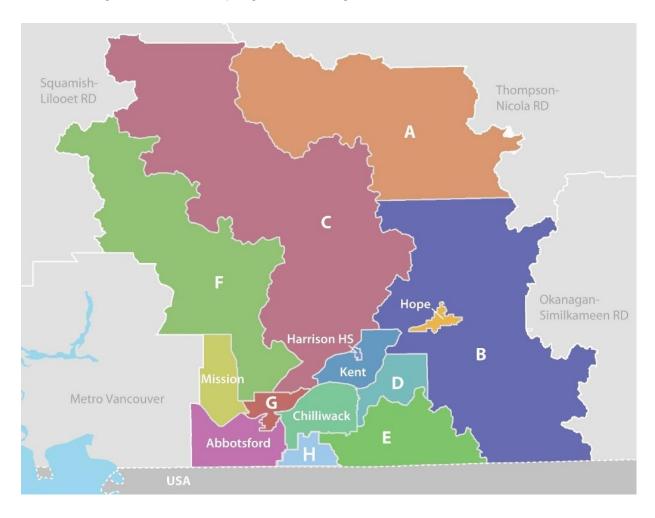
The goals of FVISS are for the organization to:

- a. Be a recognized leader on invasive species in the Fraser Valley;
- b. Facilitate collaboration between land managers that results in less land infested with invasive species in the Fraser Valley;
- c. Increase involvement by Fraser Valley residents and businesses in invasive species prevention and action; and
- d. Be a well-functioning, resilient organization



# **Project Area**

The FVISS operates within the boundaries of the Fraser Valley Regional District, which includes six municipalities (City of Abbotsford, City of Chilliwack, City of Mission, District of Hope, District of Agassiz-Kent, and Village of Harrison Hot Springs) as well as eight electoral areas (A, B, C, D, E, F, G, and H).



The Fraser Valley Invasive Species Society is grateful to live, work, and play on the traditional, ancestral and unceded territory of the Stó:lō Coast Salish peoples. We hope our work towards managing invasive species will contribute to the ongoing stewardship of the land, which the Stó:lō have been doing since time immemorial.



# **Program Highlights**

In 2022, we continued to work towards developing invasive species programs with partners that raised awareness and encouraged management action.

# Some highlights include:

- Starting a pilot project for 50-50 cost-share program for knotweed treatments for residents in Abbotsford, Chilliwack, and Electoral Areas C, D, E, G and H, funded by the Fraser Valley Regional District (FVRD) and administered by FVISS to encourage knotweed treatments on private land;
- Completing a post-flood survey for Yellow Flag-iris (YFI) in Cultus Lake, which is a continuation
  of work initiated in 2021 but in 2022 included a thorough survey of the Cultus Lake and
  tributaries to help determine source of YFI into the lake. This work was conducted with the
  StrongerBC Fraser Valley Action Team, the second year which this jobs training program has
  been held in the Fraser Valley;
- Supporting of The Knotweed Lab, a research group out of Trinity Western University led by Dr.
  David Clements, whose students re-surveyed the Chilliwack-Vedder River post-flood to
  compare the spread of knotweed since the initial survey was completed in 2019. Additional
  tributaries were also surveyed, with additional knotweed projects by students expected in the
  future:
- Beginning FVISS's support of Friends of Bell Slough in their invasive plant management in Bell Slough, with anticipated annual YFI seedpod removal efforts and potentially increased surveying for YFI throughout the Chilliwack Slough network;
- Completing a Reed Canary Grass survey with new partner, the Skagit Environmental Endowment Commission, a survey conducted on the Canadian side of the border which was analogous to work being done on the USA side. Due to road washouts from the atmospheric river events, work required helicopter transport to access the site at the Ross Lake picnic area;
- Continuing the invasive mussel lake monitoring program, funded by the Habitat Conservation Trust Foundation (HCTF) and the Ministry of Environment and Climate Change, which saw 5 lakes monitored in 2022 with no positive detections found;
- Continuing of the tansy ragwort and other invasive species Curbside Pickup program through the partnership with FVRD;
- Continuing of the knotweed letter mail-out program, which has been conducted in City of Mission, reminding private property owners with knotweed on their property to take management action. In 2022, this letter mail-out program is newly also being conducted by District of Kent;
- Hiring of an Outreach Coordinator position, whose role served to increase FVISS's social media reach, create new table displays and a Fraser Valley invasive plant guide, and conduct targeted education via door-to-door outreach; and
- In summary for 2022, 1,820 sites were visited, resulting in 2,130 surveys, 314 mechanical treatments (19.44 ha), and 922 chemical treatments (16.51 ha) conducted on 991 sites (35.96 hectares) throughout the Fraser Valley.



# Coordination and Awareness

In 2022, the Fraser Valley Invasive Species Society raised public awareness of invasive flora and fauna species. This included providing information about invasive species, their impacts, and how invasive species can be managed. The FVISS also worked to raise awareness around efforts that residents of the Fraser Valley can do to limit the spread of and the impacts of invasive species throughout the region.

The FVISS attended and hosted several events in 2022, made multiple updates to the website, and created new outreach materials. The FVISS was also involved with additional workshops, field tours and field events.

Staff also attended multiple training and professional development events including the ISCBC annual forum, NAISMA conference, First aid and other safety training, webinars, education and communication workshops, and the annual RISO field tour held in Penticton in September 2022.

Education and Outreach	#	# Attendees
Direct Public Inquiries (via email, phone calls, social media)	-	239
Door-to-door targeted outreach	-	87
Information Tables/Attendance at Public Events	5	155
Weed walks and Weed pulls	4	55
Pesticide Applicator Course	1	26
Presentations to targeted audiences and events (ie. schools, gardeners, roadside crews)	3	94
Newsletters	2	184
Social media posts	117	-
Outreach materials created	2	-
Outreach materials distributed	300	-

Coordination and Strategic Planning Meetings	#	# Attendees
Annual General Meeting	1	20
Land Manager Updates Meeting	1	15
Partner Coordination/Other strategic planning Meetings	32	-
RISO Monthly/Bi-annual outreach meetings	12	<del>-</del>
RISO Field Tour	1	-



# Events, Workshops, and Meetings

The FVISS was present at 16 events, presentations/workshops, and other outreach in 2022, either hosting them or participating. Outreach activities in 2022 included FVISS-hosted invasive species walks and plant pulls, booth events, collaborative invasive removal events, and workshops. FVISS was present for additional outreach activities in a variety of locations across the Fraser Valley:

Dates	Event	Category
April 19-21	Pesticide Applicators Course	Workshop/Course
April 8-10	Bradner Flower Show	Table Display
May 14	City of Chilliwack Invasive Plant Walk	Weed Walk/Weed Pull
May 15	City of Chilliwack Invasive Plant Pull	Weed Walk/Weed Pull
May 22	World Turtle Day - Sardis Park	Table Display
May 28	Cultus Lake walk with Cultus Lake Stewards	Weed Walk/Weed Pull
June 23	Great Blue Heron Nature Reserve Anniversary Event	Table Display
June 15	Royal Roads - Seabird Island Ecological Restoration	Workshop/Course
	Class - Guest Speaker	
Aug 21	Silverdale Summer Market	Table Display
July 14	Bell Slough Paddle Day and YFI Seedpod Clipping	Weed Walk/Weed Pull
June 16	Mission Roadside Crew Training	Presentation
April 23	MESS Green Living Community Event	Table Display
Aug 6-20	Tansy Ragwort Curbside Pick Up Event	Other Targeted Outreach
July-Aug	Knotweed Cost Share Door to Door Outreach	Other Targeted Outreach
Aug 20	Columbia Valley Tansy Ragwort Drop Off Event	Other Targeted Outreach
Oct 21	Catalyst BC Science Teachers Pro-D Day Workshop	Presentation



### Materials and Signage

In 2022, the FVISS produced new outreach materials, including a new common invasive species identification guide, and a stuffed "goldfish in the wild" display item. In addition, the FVISS also printed new FVISS brochures that provided information on the society, and information on common invasive species in the Fraser Valley.

As in previous years, the FVISS continued to distribute materials produced by the Invasive Species Council of BC. The FVISS also revamped our materials for display tables, including making print out pages that can be displayed on a tabletop display board. These included pages with true and false and trivia questions, where individuals can quiz their own knowledge of invasive species, invasive plant and animal profiles, and guess the invasive species pages.

Overall, around 300+ brochures and other materials were given out at the booth events the FVISS attended. The outreach materials given out all focused on invasive plants or animals, how to manage invasives, or promoted behavioural change programs—actions that members of the public can do to prevent the spread of invasives, and limit their negative impacts.

### Programs that FVISS promoted included:

- Plantwise (ISCBC Grow Me Instead Brochures)
- Clean Drain Dry (ISCBC Clean Drain Dry Brochures, rack cards, stickers, float key chains)
- Play Clean Go (Play Clean Go Boot Brushes)
- Don't Let it Loose (stickers, rack cards)

#### Other outreach materials distributed:

- Japanese Beetle (stickers, wallet cards, rack cards, temporary tattoos)
- Brown Marmorated Stink Bugs (wallet cards, rack cards)
- Knot on my Property (stickers)











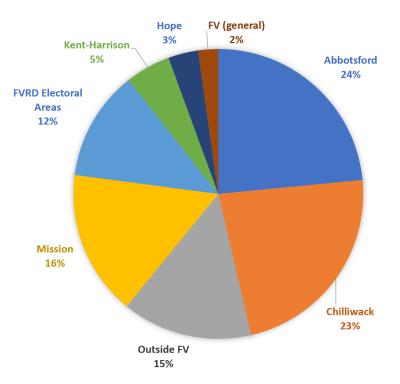


# **Public Inquires**

FVISS received 239 calls from the general public in 2022. Most inquiries came from Chilliwack and Abbotsford.

The most common questions were:

- Reporting Sites
  - 50% knotweed sites
  - 14% giant hogweed sites
- Invasive Plant Control Information
- Invasive Plant Identification Help
- Invasive Plant Pick Up Program
- Invasive Species and Legislation



#### Website and Social Media

The FVISS website had many updates in 2022, including new blog posts, event pages, and new plant profile pages. In 2022, our mailing list increased to a total of 184 subscribers, with 698 Facebook followers and 791 Instagram followers. During 2022, FVISS posted 87 Facebook posts, and 60 Instagram posts. Our 2022 total website page views were 49,328, and our social media total reach was 81,561 on Facebook and 7,108 on Instagram.













# **On-the-Ground Operations**

The on-the-ground field operations of invasive plant management was conducted in 2022 with two subcontractors: Drinkwater Environmental Services and Morrow BioScience.

# **Invasive Plants**

There were over 2,130 invasive plant site surveys completed, with 1,820 sites visited. Treatments were done on 991 sites: 314 mechanical treatments (19.44 ha), and 922 chemical treatments (16.51 ha) for a total of 35.96 hectares treated throughout the Fraser Valley. Numbers include re-visits and multiple treatments on individual sites. 10% of treated sites were monitored each year with no compliance issues. No Provincial EDRR assistance was requested during the project term. All data was entered into IAPP. No biocontrol agents were released in 2022. See following maps showing site survey, chemical treatment and mechanical treatment locations completed by the FVISS within the Fraser Valley.

#### Species Treated

A total of 39 species were treated in 2022. The top ten species treated were: Knotweeds, wild chervil, tansy ragwort, giant hogweed, scotch broom, blueweed, Himalayan blackberry, common tansy, spurge laurel, and hoary alyssum.

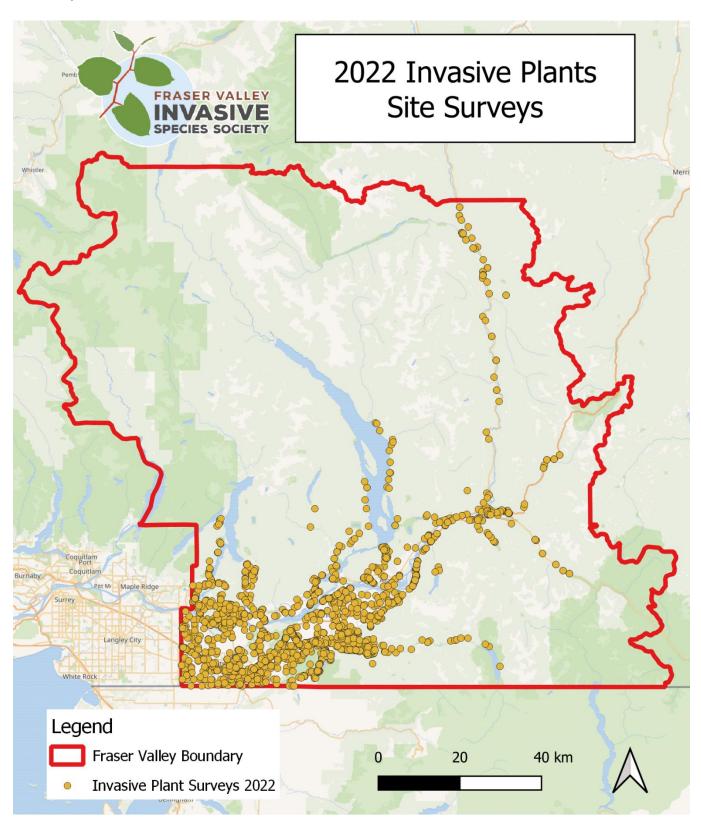




List of invasive plant species, number of sites, and total area treated by FVISS

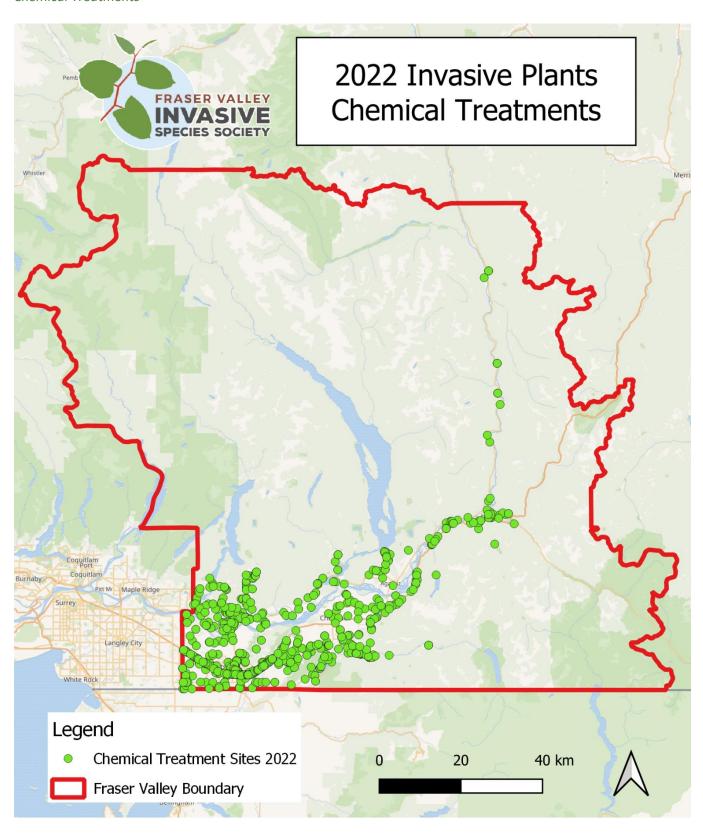
· ·	of sites, and total area treated by F  Chemical Treatment		Mechanical Treatment	
Invasive Plant Species	Total Area (ha)	Total # sites	Total Area (ha)	Total # sites
Bladder campion (SILE VUL)	0.1116	1	-	-
Blueweed (ECHI VUL)	-	-	0.262	18
Bohemian knotweed (FALL BOH)	1.1264	71	-	-
Bull thistle (CIRS VUL)	0.0273	3	-	-
Butterfly bush (BUDD DAV)	0.0655	5	1.0106	3
Canada thistle (CIRS ARV)	0.1855	5	-	-
Chicory (CICH INT)	0.4081	8	-	-
Common bugloss (ANCH OFF)	-	-	0.0101	2
Common hawkweed (HIER VUL)	0.0392	2	-	-
Common tansy (TANA VUL)	0.5376	13	-	-
Curled dock (RUME CRI)	0.05	1	-	-
Cutleaf blackberry (RUBU LAC)	-	-	0.0006	1
Cypress spurge (EUPH CYP)	-	-	0.05	1
Dalmatian toadflax (LINA DAL)	-	-	0.3499	9
Daphne / spurge laurel (DAPH LAU)	-	-	0.0219	12
English holly (ILEX AQU)	-	-	0.0253	3
English ivy (HEDE HEL)	-	-	0.0025	2
Field bindweed (CONV ARV)	0.1214	2	-	-
Giant hogweed (HERA MAN)	0.005	1	6.4508	32
Groundsel (SENE VUL)	0.05	1	-	-
Himalayan blackberry (RUBU ARM)	0.3867	10	0.0054	5
Himalayan knotweed (POLY POL)	0.0688	9	-	-
Hoary alyssum (BERT INC)	0.194	2	0.109	10
Japanese knotweed (FALL JAP)	3.8446	535	0.021	2
Mouse ear hawkweed (HIER PIL)	0.0025	1	-	-
Mullein (VERB THA)	0.2801	6	-	-
Orange hawkweed (HIER AUR)	0.0204	1	-	-
Oxeye daisy (LEUC VUL)	0.1886	4	-	-
Himalayan balsam (IMPA GLA)	0.0735	1	0.1	1
Queen anne's lace (DAUC CAR)	0.057	2	-	-
Scentless chamomile (MATR PER)	0.0003	1	-	-
Scotch broom (CYTI SCO)	0.2872	12	0.124	9
Shiny geranium (GERA LUC)	0.4638	11	-	-
Spotted knapweed (CENT BIE)	0.2641	4	-	-
St. John's wort (HYPE PER)	0.2936	9	-	-
Tansy ragwort (SENE JAC)	-	-	1.4843	99
Western goat's-beard (TRAG DUB)	0.0965	2	-	-
Wild chervil (ANTH SYL)	7.0845	196	9.417	105
Yellow hawkweed (HIER PRA)	0.1779	3	-	-
Total	16.5117 ha	922 sites	19.4444 ha	314 sites



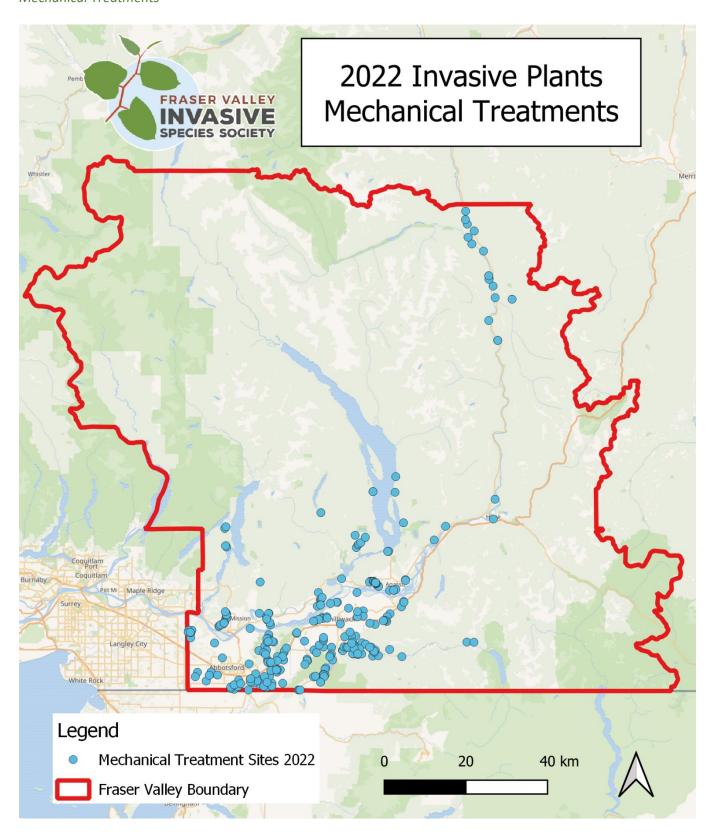




### **Chemical Treatments**







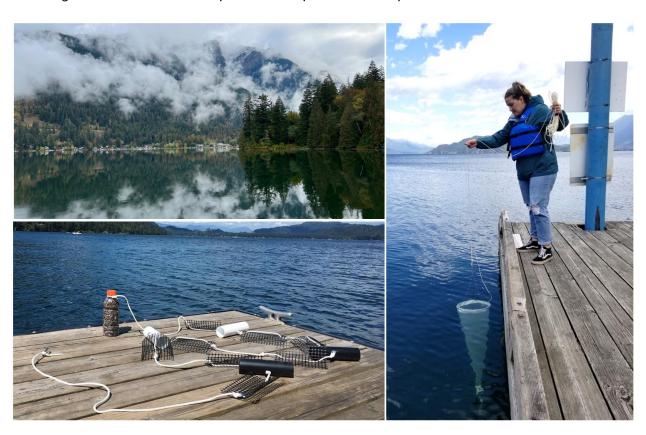


# **Other Species**

#### Invasive Mussel Lake Monitoring

The FVISS received funding from the Habitat Conservation Trust Foundation Invasive Mussel Lake monitoring program in 2022. 2022 was the 5<sup>th</sup> year that the FVISS has completed lake monitoring in the Fraser Valley for invasive zebra and quagga mussels. This sampling included collecting water samples for veliger mussel monitoring and installing and monitoring artificial substrate samplers for adult dreissenid mussels. FVISS monitored five waterbodies, including Cultus Lake, Silver Lake, Kawkawa Lake, Harrison Lake and the Fraser River at Island 22 Regional Park. These waterbodies were sampled monthly from May to October 2022. Eight substrate samplers were installed, and 30 water samples were collected.

No invasive adult mussels or veligers were found in 2022. Funding for this work was provided by the BC Ministry of Environment and Climate Change, Fisheries and Oceans Canada and Habitat Conservation Trust Foundation. FVISS aims to continuing monitoring Fraser Valley waterbodies in future years for zebra and quagga mussels. In addition, FVISS will continue to promote the Clean Drain Dry program, to encourage boaters to reduce the spread of all aquatic invasive species.



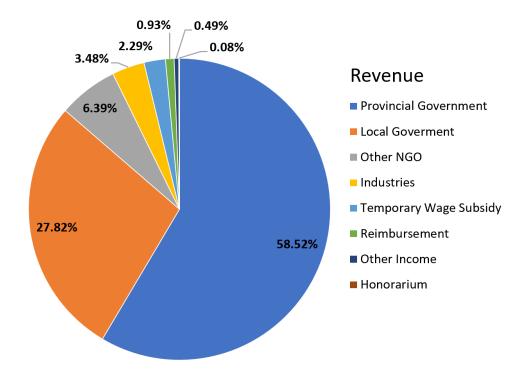


# Revenue and Expenditures

#### Revenue

FVISS's revenue in 2022 was \$523,270.05, mainly from our partners through service agreements.

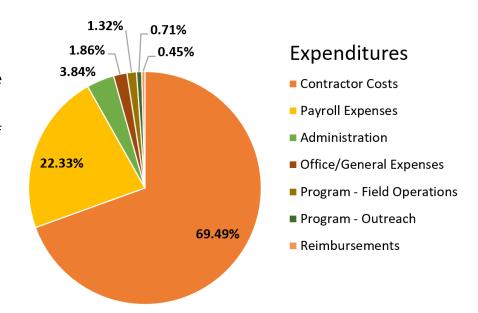
Provincial and local government invasive plant management programs continue to be the main revenue source for FVISS.



# **Expenditures**

FVISS's expenditures in 2022 was \$391,050.00.

Most of FVISS's expenditures were to invasive plant management contractors. Other expenses included day-to-day operations of the society, and program costs.





# Acknowledgements

The accomplishments of FVISS are only possible due to our dedicated staff and Board of Directors, our generous funding partners, fellow environmental non-profits in the valley, our expert contractors, and our hardworking volunteers. Thank you to everyone for your support!

### 2022 Board of Directors

The FVISS Board of Directors are a volunteer group of representatives from different fields who contribute their time to help guide the direction of the FVISS.

Victoria Brookes Chair AAFC Agassiz (retired)

Nichole Marples Treasurer Langley Environmental Partners Society

Ken Schwaerzle Local Dairy farmer

Janne Perrin Miami River Streamkeepers, Chilliwack Field Naturalists

Alida Janmaat University of the Fraser Valley (Biology)

Steve Clegg City of Chilliwack

### 2022 FVISS Staff

The FVISS consists of one part-time staff member (the Executive Director), and a summer student to help with outreach throughout the region where funding is available.

Kathy Ma Green Executive Director

Kaitlin Baril Outreach Coordinator







#### 2022 Funders and Partners



























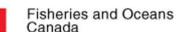












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