



Education & Outreach Activities

Ghost River Watershed

2024

Sharlene Fritz
Ghost Watershed Alliance Society
AGM - November 23, 2024
The Crossing at Ghost River





Waiparous
Creek
Provincial
Recreation
Area
May 2024

Why do we do this work?

Connecting with people is vital to achieving our vision of the Ghost Watershed being a biologically rich headwaters ecosystem that supplies abundant clean water maintained through stewardship and holistic management.

What is our approach?

- Meet people where they're at
- Get out of the way – let nature reveal its own secrets
- Connect people's hearts and minds with the beauty and science of the Ghost



*Waiparous Creek Provincial Recreation Area
May 2024*

What is our approach?

- Offer chances for people to use their hands & movement to learn
- Rely on people's curiosity, expertise & willingness to help
- Be organized
- Keep it fun!



*Ghost Public Land Use Zone
October 2024*

What do we emphasize?

Centered on three themes:

- Source Water Protection
- Indicator Species
- Leave No Trace



Calgary City Hall
June 2024

High Level Review of 2024

- Schools
- Walks in the Watershed
- CreekWatch
- Work with Partners
- GIS
- Human Footprint



*Anti-Ghost Hike
June 2024*

Dashboard

- Met in person with **800+** people
- Benefited from **265+** hours of direct volunteer time
- Planned, delivered and followed up on **23** single events
- Engaged with **18** partner organizations or individuals
- Hosted or met **11** school or youth groups in the watershed
- Attended **8** indoor events with presentations or a booth



Schools



*Ghost Reservoir Provincial Recreation Area
May 2024, Photo: M. Kloosterman*

Mitford School Grades 5/6

Manachaban Grade 8
WILD program

Cochrane High Grade 10
ROAMS

Calgary Girls Charter
School Grade 5

Foundations for the Future
(FFCA) High School

Girl Guides of Canada



Chances to Discover



*Waiparous Creek
Provincial Recreation Area
May 2024*

Moments to Lead



*Waiparous Creek
Provincial Recreation Area
May 2024*

Opportunities to Give Back



*Waiparous Creek Provincial Recreation Area
May 2024, Photos: M. Krainer*

Terrific teens



*Waiparous Creek Provincial Recreation Area
May 2024, Photos: M. Krainer*

Walks in the Watershed

- Survey
- First of the season: Restoration Sites



*Ghost Public Land Use Zone
June 2024*

Anti-Ghost Loop

- Dr. Eva Enkelmann, U of C
- Geology theme



*Don Getty Wildland Provincial Park
June 2024*

The Crossing

- Emma Stroud, Friends of Fish Creek; Rowan Rampton, Cows and Fish
- Wildflower theme



*The Crossing at Ghost River
July 2024
Photo at left: M. Chong*





Beavers at Brewster's Meadows

- Holly Kinas, Miistakis Institute
- Kevin Stanton, local outfitter
- Beaver theme



*Ghost Public Land Use Zone
August 2024, Photo at right: H. Kinas*

CreekWatch Citizen Science



How Healthy is Our Creek?

www.creekwatch.ca

Group SWAS Date (mm/dd/yy) 08, 13, 2024
 Creek GHOST RIVER City/Town WALPAROUS
 Location RICHARDS Rd. BRIDGE Program CREEK WATCH
 Volunteer Name DAMAR (DAGNY) KURIL Supervisor Sharlene Fritz

Site ID	Test Site #1		Test Site #2		Test Site #3	
	Site Location		Site Location		Site Location	
Physics	Date	<u>Aug 13/2024 DK</u>	Date	<u>Aug 13/2024 DK</u>	Date	<u>Aug 29/24 BKL</u>
	Time	<u>12:12 PM 49</u>	Time	<u>3:50 PM 4:20</u>	Time	<u>12:07</u>
	Indicators	Sample #1 Sample #2	Sample #1 Sample #2	Sample #1 Sample #2	Sample #1 Sample #2	
Chemistry	Air Temperature (°C)	<u>23.7°C</u>	<u>18°C</u>	<u>22°C</u>		
	Water Temperature (°C)	<u>10.9°C</u>	<u>11.1°C</u>	<u>11.8°C</u>		
	Turbidity (NTU)	<u><10 NTU</u>	<u><10 NTU</u>	<u><10 NTU</u>		
	Dissolved Oxygen (mg/L)	<u>7 drops + 8 drops</u>	<u>9 drops</u>	<u>7 drops</u>		
Biology	Ammonia Nitrogen (mg/L)	<u>0</u>	<u>0</u>	<u>0</u>		
	Phosphorous (mg/L)	<u>0</u>	<u>0</u>	<u>0</u>		
	pH	<u>7.6</u>	<u>7.8</u>	<u>8</u>		
	Chloride (mg/L)	<u>2 drops</u>	<u>2 drops</u>	<u>2 drops</u>		
Biology	Mayfly Nymph (PS)					
	Stonefly Nymph (PS)					
	Caddisfly Larva (MPT)					
	Midge Larva (PT)					
	Water Boatman (PT)					
# Invertebrates Total						
# Invertebrate Types Total						
Observations and Notes Land Use, Pollution, Activities, Bank Vegetation, Aquatic Plants, Birds, Animals, Flow Level, Water Color, Algae * we did oxygen, see email.		<u>Live pit with many cig. butts x empty cider can. See photo. Approx 15 ft from water's edge.</u>	<u>No events today. Cloudy after a rain shower. beautiful rosehips. And some garbage, of course.</u>			
Invertebrates		PS = Pollution Sensitive	MPT = Moderately Pollution Tolerant	PT = Pollution Tolerant		
River Health Scale		#1 or #2 = Unhealthy	#3 = Borderline Healthy	#4 or #5 = Healthy		

I cleaned up
the live pit.



Richards Road Bridge and Benchlands above berm
 Summer 2024, Photo at left: D. Kuril; Photos at center and right: K. Landra

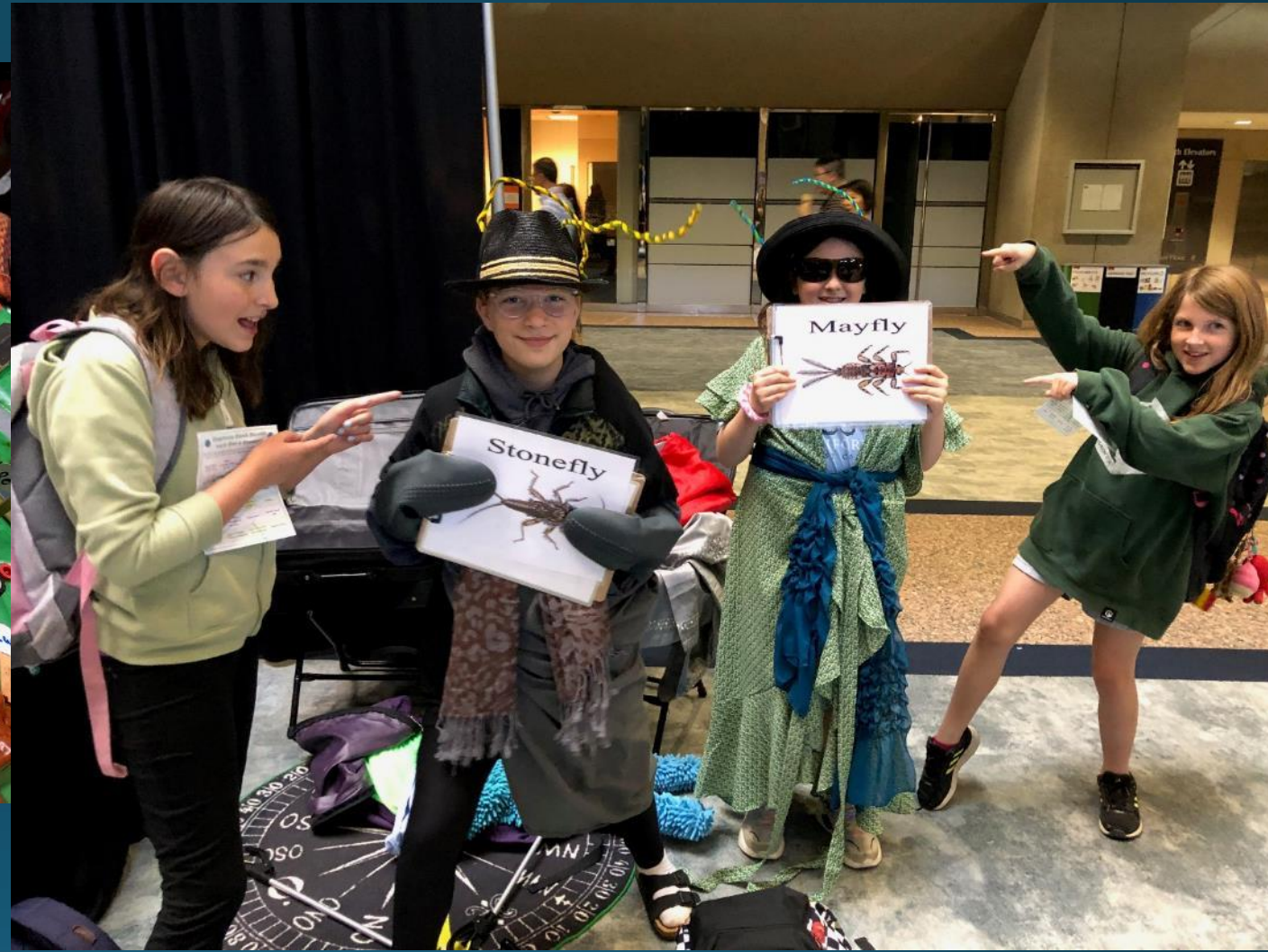
Calgary ATV Riders Association Rides4Smiles



Ghost Airstrip Provincial
Recreation Area
September 2024,
Photo at left: N. Johnson

Partners





City of Calgary
Mayor's Environment Expo

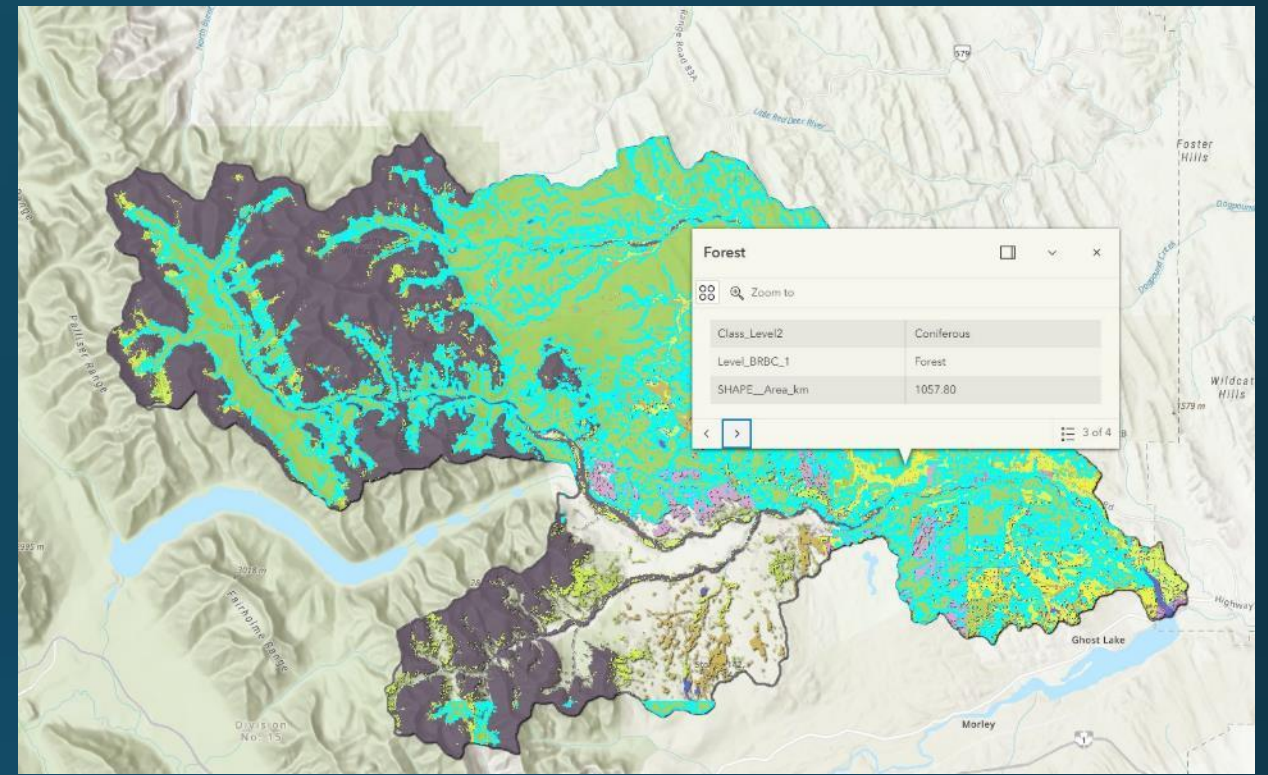
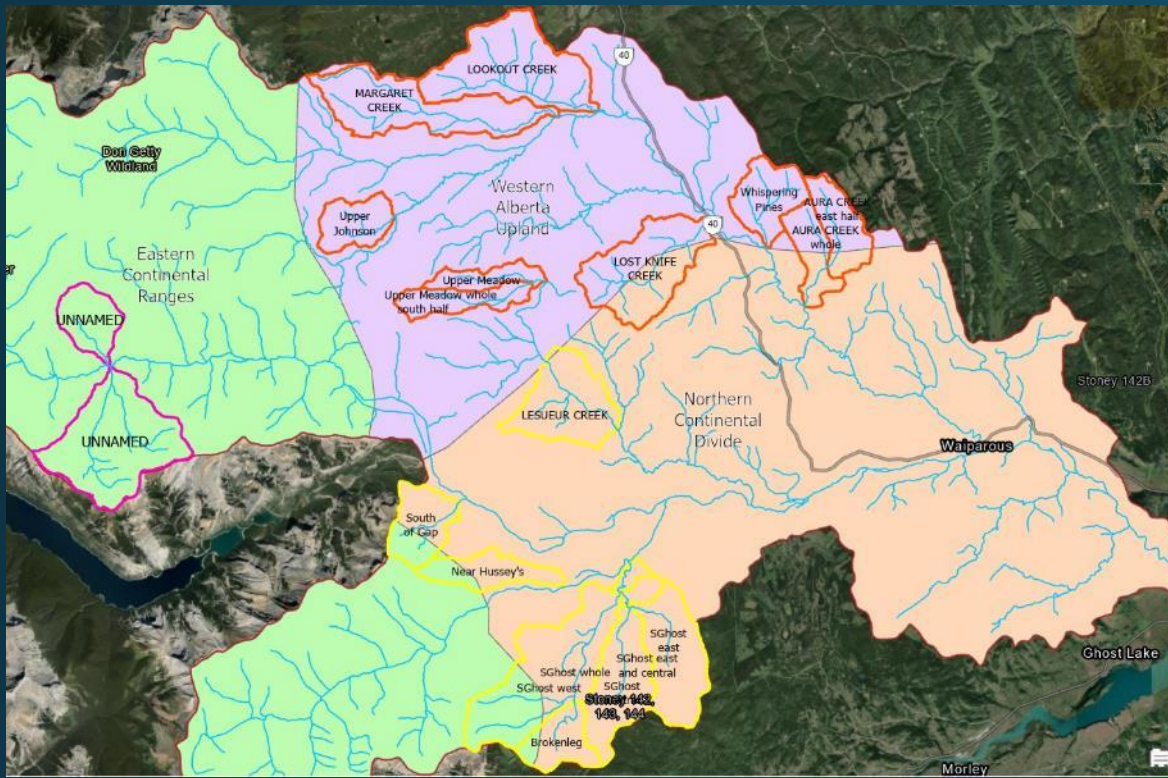
Calgary City Hall
June 2024



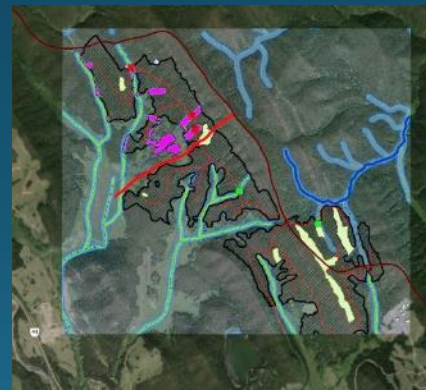
- Two-day event
- City Hall Atrium
- 350+ students and adult supervisors
- "Watershed Partner" section



*Calgary City Hall
June 2024*



*Alberta Biodiversity
Monitoring Institute
GoGeomatics Expo
October 2024
Human Footprint Datasets
for Landscape Management
Planning in the Ghost
Region*



Geographic Information Systems (GIS)

Secret Sauce

Main ingredients

- the incredible, varied and infinitely fascinating natural features of the Ghost
- GWAS executive director
- GWAS board of directors
- our VOLUNTEERS!
- local community members
- partners
- grant funding



*Waiparous Creek Provincial Recreation Area
May 2024*

Visionary Funders



Fisheries and Oceans
Canada

Pêches et Océans
Canada



Bow River
Basin Council

Calgary



View from Black Rock Mountain, Ghost River in valley bottom



*Waiparous Creek Provincial Recreation Area
October 2024, Photo: C. Widmer*

The top half of the image features a close-up, slightly blurred view of teal-colored water with gentle ripples and waves. The bottom half of the image is a solid, dark teal background.

Thank you!

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www.ghostwatershed.ca