



Education & Outreach Activities

Ghost River Watershed

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

2024





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.



Waiparous Creek

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,
Miistikis
Institute
- Kevin
Stanton,
local
outfitter
- Beaver
theme



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

CreekWatch Urban Stormwater Monitoring		How Healthy is Our Creek? www.creekwatch.ca				
Group	GWAS	Date (mm/dd/yy)	08, 13, 2024			
Creek	GHOST RIVER	City/Town	NAIPAROUS			
Location	RICHARD'S Rd. BRIDGE	Program	CREEK WATCH			
Volunteer Name	DAEMAR (DAGNY) KURIL	Supervisor	Sharlene Fritz			
Site ID	Test Site #1	Test Site #2	Test Site #3			
Site Location	RRB	RRB	RRB			
Date	Aug 13, 2024	DK	Aug 21, 2024	DK	Aug 29/24	BLK
Time	AM 10:18 11:49	Total 35	AM 10:20 11:20	Total 30	AM 10:07	Total
Indicators	Sample #1	Sample #2	Sample #1	Sample #2	Sample #1	Sample #2
Air Temperature (°C)	23.7°C	18°C	22°C			
Water Temperature (°C)	10.9°C	11.1°C	11.8°C			
Turbidity (NTU)	<10 NTU	<10 NTU	<10 NTU			
Dissolved Oxygen (mg/L)	7 drops + 8 drops	9 drops	7 drops			
Ammonia Nitrogen (mg/L)	0	0	50			
Phosphorous (mg/L)	0	0	0			
pH	7.6	7.8	8			
Chloride (mg/L)	2 drops	2 drops	2 drops			
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						
* re-did oxygen, see email.	fire pit with many cig. butts & an empty cider can. See photo. Apprx 15ft from water's edge.					
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 firepit.					

Ghost Watershed Alliance Society

CreekWatch Citizen Science



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

- Two sites on the Ghost River
- May to Oct
- Volunteer driven
- 28 sampling events
- Weekly tests for dissolved oxygen, water and air temperature, turbidity, pH, chloride, ammonium nitrogen and phosphorous



*Richards Road Bridge
May 2024*

Calgary ATV Riders Association *Rides4Smiles*

Partners



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



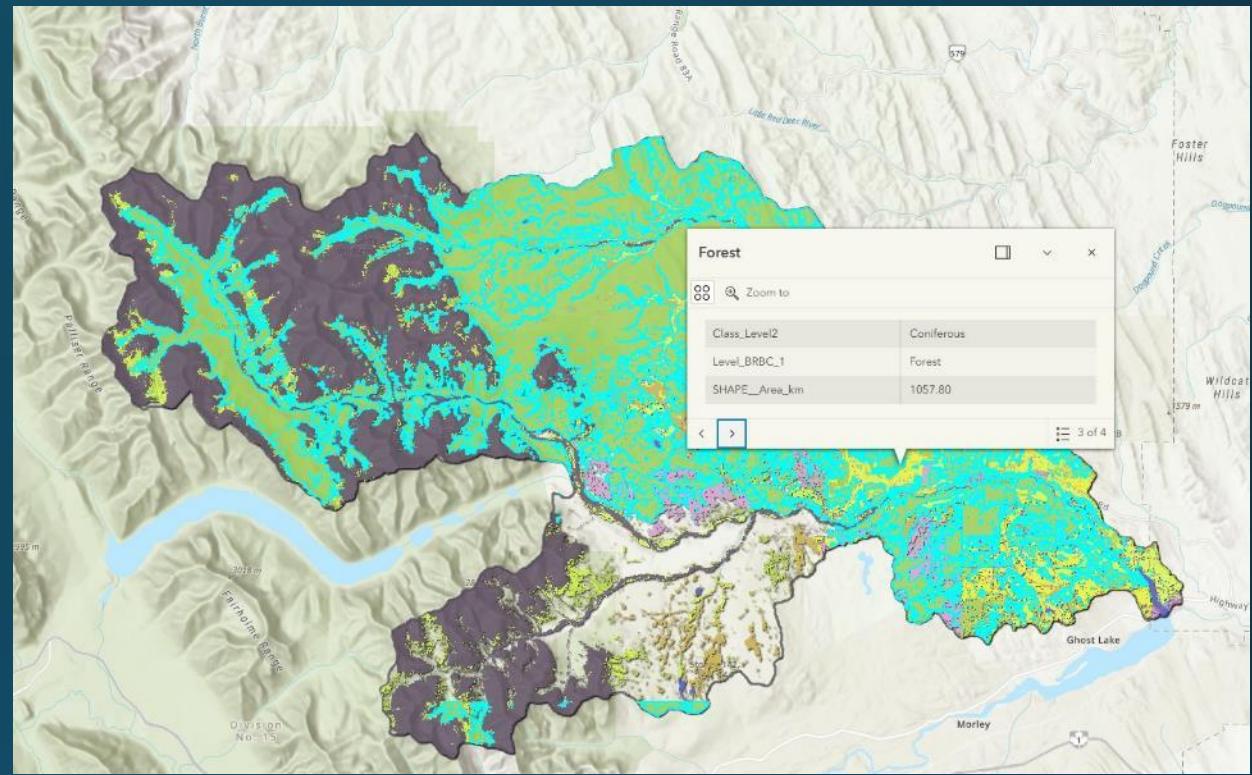
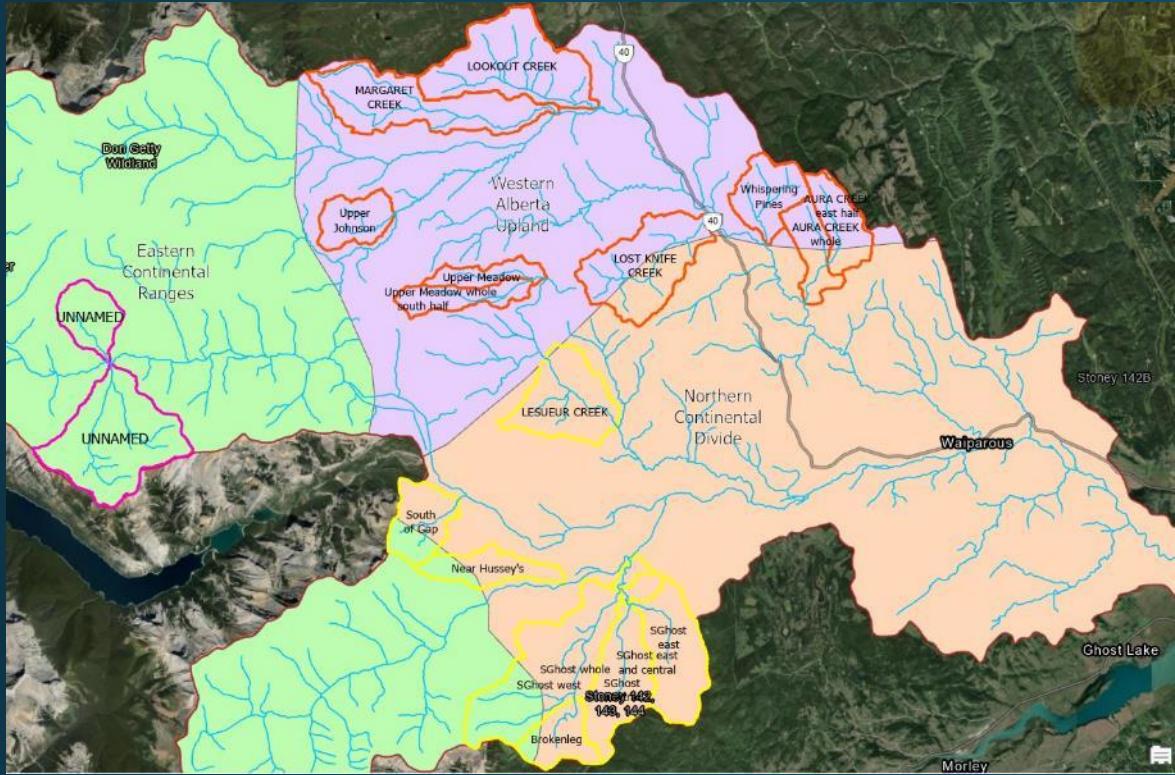
City of Calgary *Mayor's Environment Expo*

Calgary City Hall
June 2024

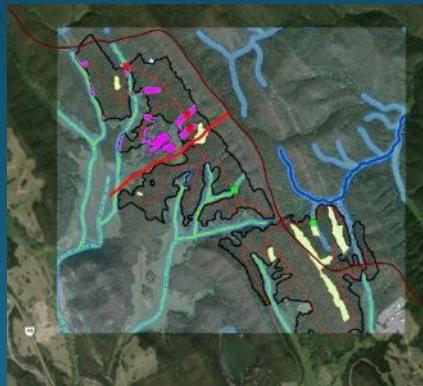
- Two-day event
- City Hall Atrium
- 350+ students and adult supervisors
- “Watershed Partner” section



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



View from Black Rock Mountain, Ghost River in valley bottom



Fisheries and Oceans
Canada

Pêches et Océans
Canada





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



Thank you!

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www.ghostwatershed.ca