

Ghost Watershed  
Alliance Society



# 2025 Watershed Education Outreach & Science

GWAS AGM  
November 8, 2025  
Beaupre Hall  
Sharlene Fritz





# Opening Gates

(with permission of course)

- Children and Youth
- Tours and Hikes
- Expos and Exhibits
- Science
- Other Activities



# CHILDREN & YOUTH

	Manachaban (Cochrane School)	Mitford (Cochrane School)	FFCA (Calgary School)	Girl Guides of Canada
Age	Grade 8	Grade 6	Grade 11	11–15-year-olds Guides and Pathfinders
Participants	25 students, 6 parents and teachers	84 students, 17 parents, 3 teachers	19 students, 2 teachers	24 girls
Support	3 volunteers	4 volunteers	Restoration specialist	Camp leaders
Theme	Meet the Neighbours	Voice of the Ghost River	Water and Wildlife	More than Meets the Eye
Days	1 in May	4 in May	2 in October	1 in May, 1 in Sept
Location	Scout Camp	Ghost Reservoir and Waiparous Campground PRAs	Four Mile Creek, bridge over Waiparous Creek (G17-2)	Camp Mockingbird, Waiparous Valley Road

# Grade 8 Manachaban Scout Camp

Photo: student



# Grade 6 Mitford Waiparous Campground PRA

Photo: N. Johnson



# Grade 6 Mitford

Photo: S. Fritz



# Grade 11 FFCA Waiparous Campground PRA

Photo: S. Fritz



# Guides

## Waiparous Creek

Photo: S. Fritz



# TOURS & HIKES

	<b>City of Calgary staff</b>	<b>Junior Forest Wardens</b>	<b>Department of Fisheries and Oceans</b>	<b>Walks in the Watershed</b>
<b>Participants</b>	3 City staff from water resources	7 young women and their 2 leaders, GoA AFP staff	2 staff from Edmonton	3 & 7 community members
<b>Location</b>	Waiparous PRA to 2021 restoration site	Waiparous PRA, West Whispering Pines	Johnson Creek, West Whispering Pines	West Whispering Pines; Lesueur Ridge
<b>Purpose</b>	Tour restoration sites	See real world examples of stewardship and stream crossing projects	Tour restoration sites	Tour restoration sites; hike 8km ridge loop
<b>Month</b>	May	July	September	June; Sept

# City of Calgary West Whispering Pines Creek restoration sites

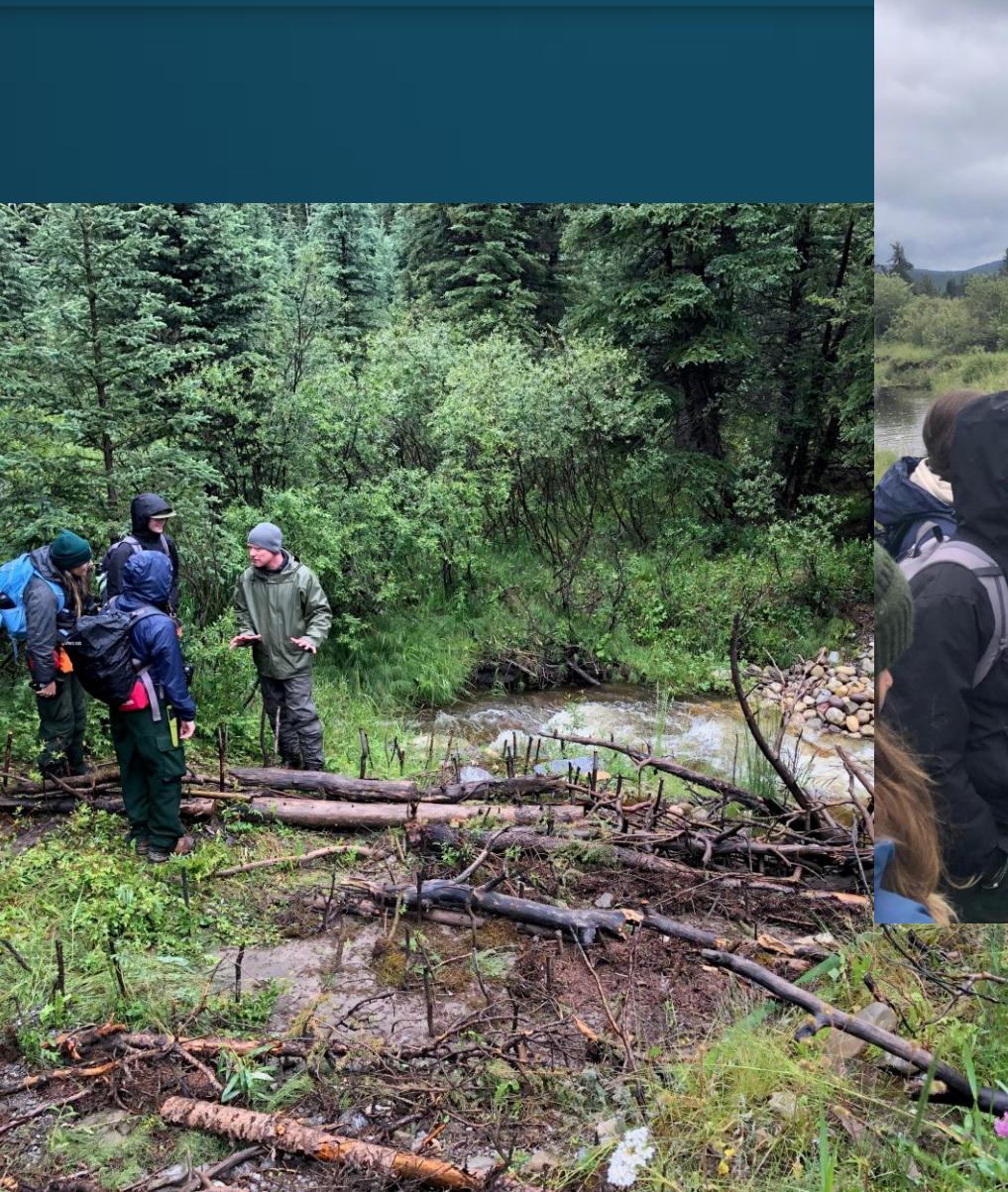
Photo: S. Fritz



# Junior Forest Wardens

## West Whispering Pines Creek stream crossings and restoration sites

Photos: S. Fritz



# Department of Fisheries and Oceans Johnson Creek restoration sites

Photo: S. Fritz



# Lesueur Ridge loop hike

Photo: S. Fritz



# EXPOS & EXHIBITS

	<b>City of Calgary Mayor's Environment Expo</b>	<b>SAIT World Water Day</b>	<b>Living in the Natural Environment – MD of Bighorn</b>
<b>Age</b>	Mainly elementary school age	Post-secondary students and young professionals	Mainly adults from the surrounding area
<b>Participants</b>	350+ children, youth and adults	25+ visited our booth	20+ visited our booth
<b>Support</b>	City; 3 volunteers	SAIT	MD of Bighorn; 2 volunteers
<b>Location</b>	City Hall Atrium	Heritage Hall	Cochrane Ranchehouse
<b>Purpose/Theme</b>	Watershed partners	Celebrate water work	Raise awareness of work done in the environment
<b>Month</b>	2 days in June	March	February

# City of Calgary Mayor's Environment Expo

City Hall Atrium

Photo: S. Fritz



# City of Calgary Mayor's Environment Expo

City Hall Atrium

Photo: S. Fritz



# SCIENCE

	CreekWatch Citizen Science	Stream temperature logging	Canadian Aquatic Biomonitoring Network
Participants	14 volunteers	5 volunteers	8 volunteers
Location	Ghost River at Richards Rd Bridge and at Benchlands	9 sites	11 sites
Purpose/Theme	Collect chemical and physical water quality parameters	Collect baseline temperature data	Collect benthic macroinvertebrates and other data in the protocol
Month	At least once weekly from mid-May to mid-October	Install in June/July, retrieve in October/November	Late August/early September

# CreekWatch

## Ghost River at Richards Road bridge

Photo: K. Landra



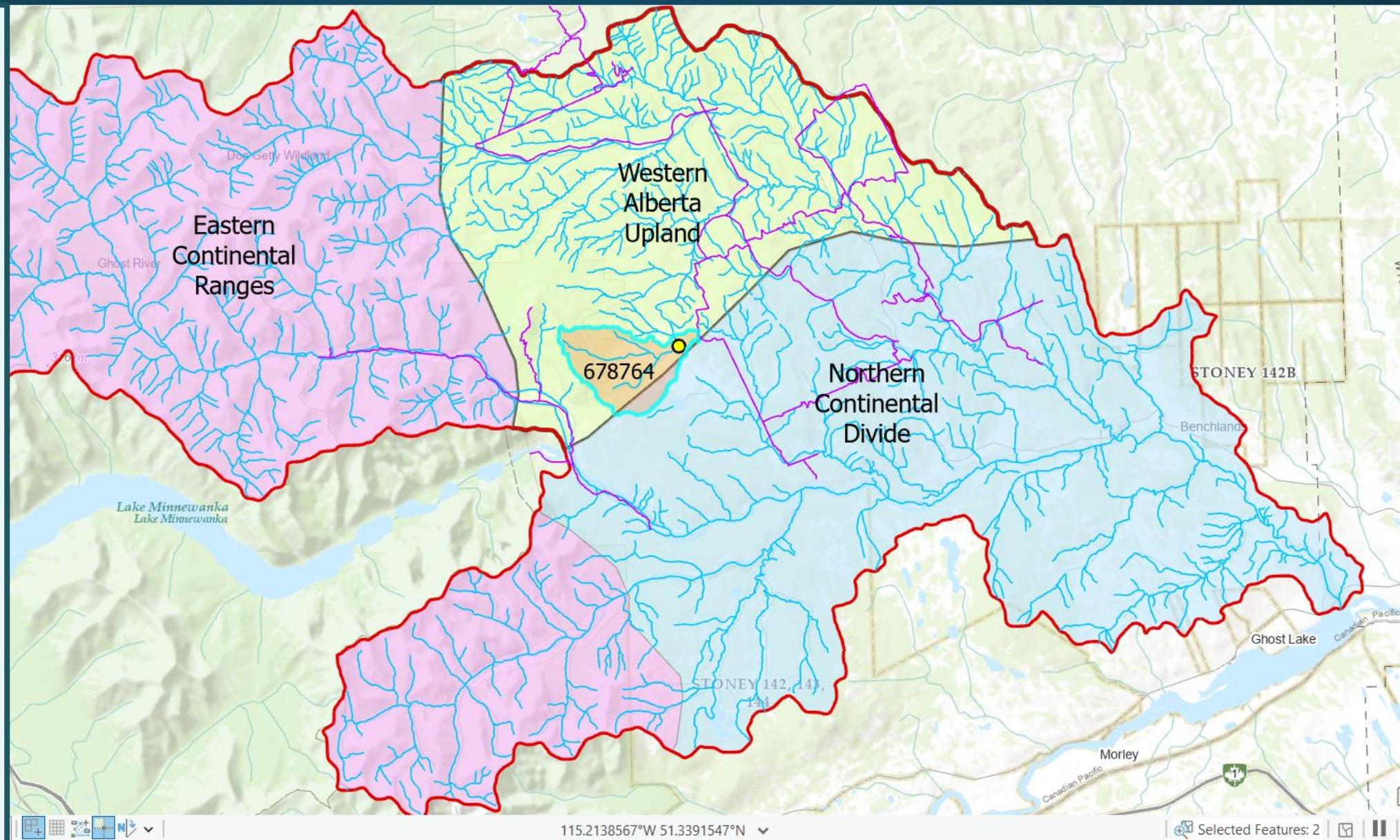
# CreekWatch Ghost River at Richards Road bridge

Photo: C. Jones



# Canadian Aquatic Bio-monitoring Network (CABiN) Reference Condition Model

Map: S. Fritz  
Scale: 1:175,000



# CABiN Sampling Upper Meadow Creek

Photo: S. Fritz



# Stream Temperature Logging Training

Photo: S. Fritz



# GWAS Temperature Logger Data Analysis Part 1

## S. Fritz, April 2025

## 2024 - Summary

Please refer to the report for project details.



Logger Location	Data start	Data end	Maximum °C	Minimum °C	# Days above 15 °C	# Days above 18 °C
Johnson at mouth	August 2	October 18	16.26	0.04	3	0
Lookout near mouth	August 1	October 18	19.90	1.54	4	3
Margaret near mouth	July 25	October 9	18.14	1.80	8	1
Meadow near mouth	August 2	October 28	17.63	0.13	9	0
Ghost River at Benchlands	August 4	October 10	16.99	4.29	20	0

# Overview

## Data begins

August 2, 2024

## Data ends

October 18, 2024

## Maximum

16.26 °C (August 2)

## Minimum

0.04 °C (October 18)

## Days above 15 °C

3 (0 above 18 °C)

## Range

16.22 °C

## Logger ID

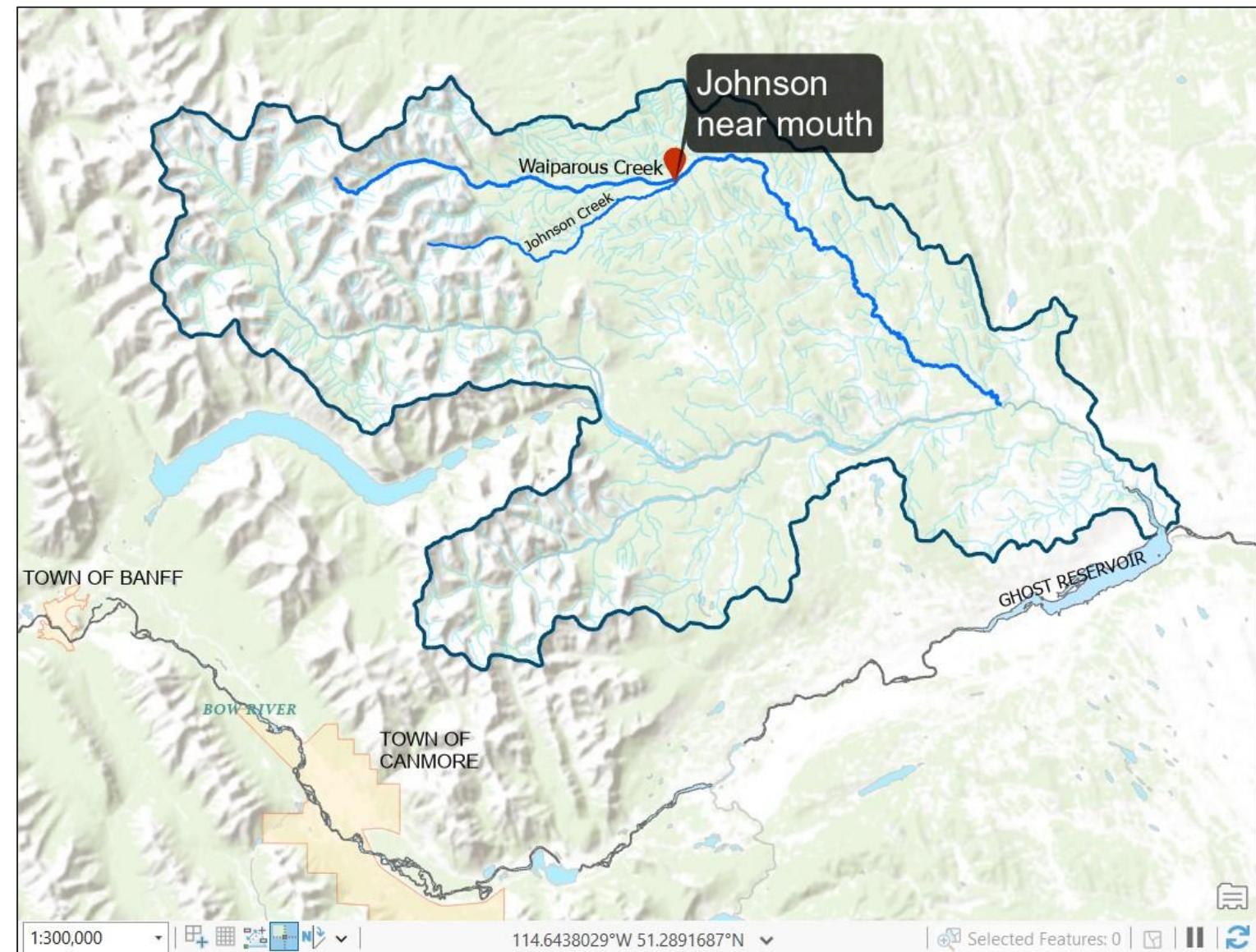
#21304497

## Logging interval

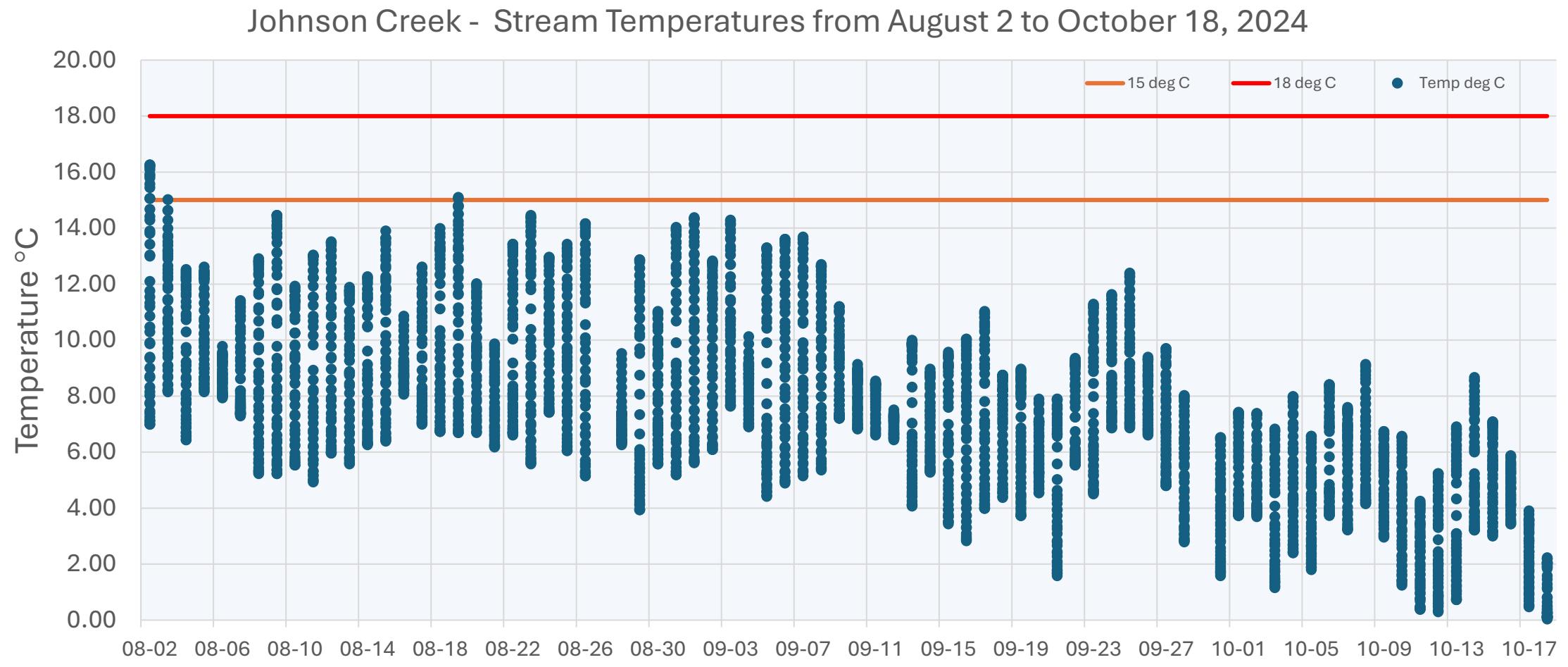
30 minutes

2024

Johnson Creek

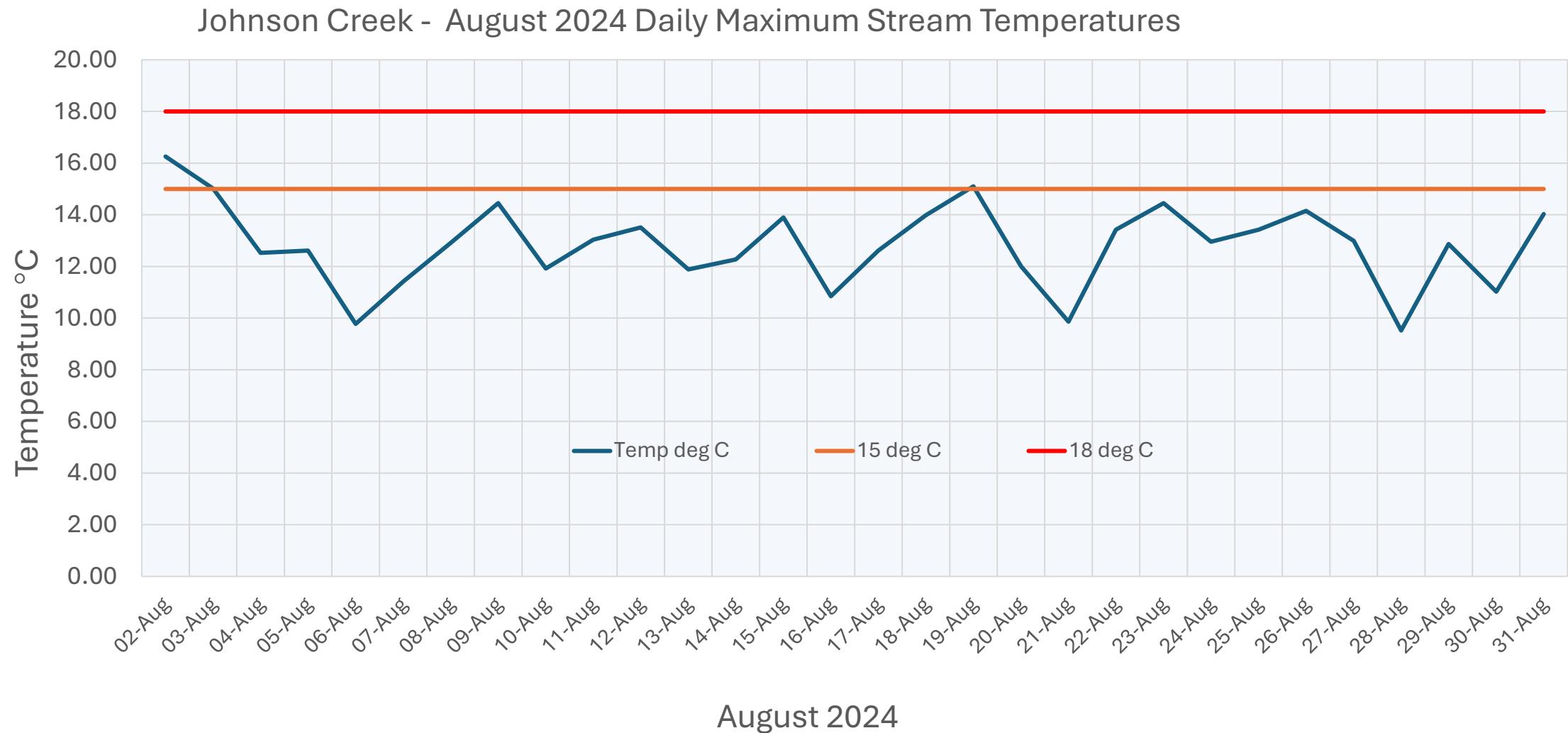


# Johnson Creek



August 2 to October 18, 2024

# Johnson Creek



## Overview

### Data begins

June 29, 2023

### Data ends

September 26, 2023

### Maximum

17.03°C (August 17)

### Minimum

4.12 °C (September 22)

### Days above 15 °C

18 (0 above 18 °C )

### Range

12.91 °C

### Logger ID

#21304507

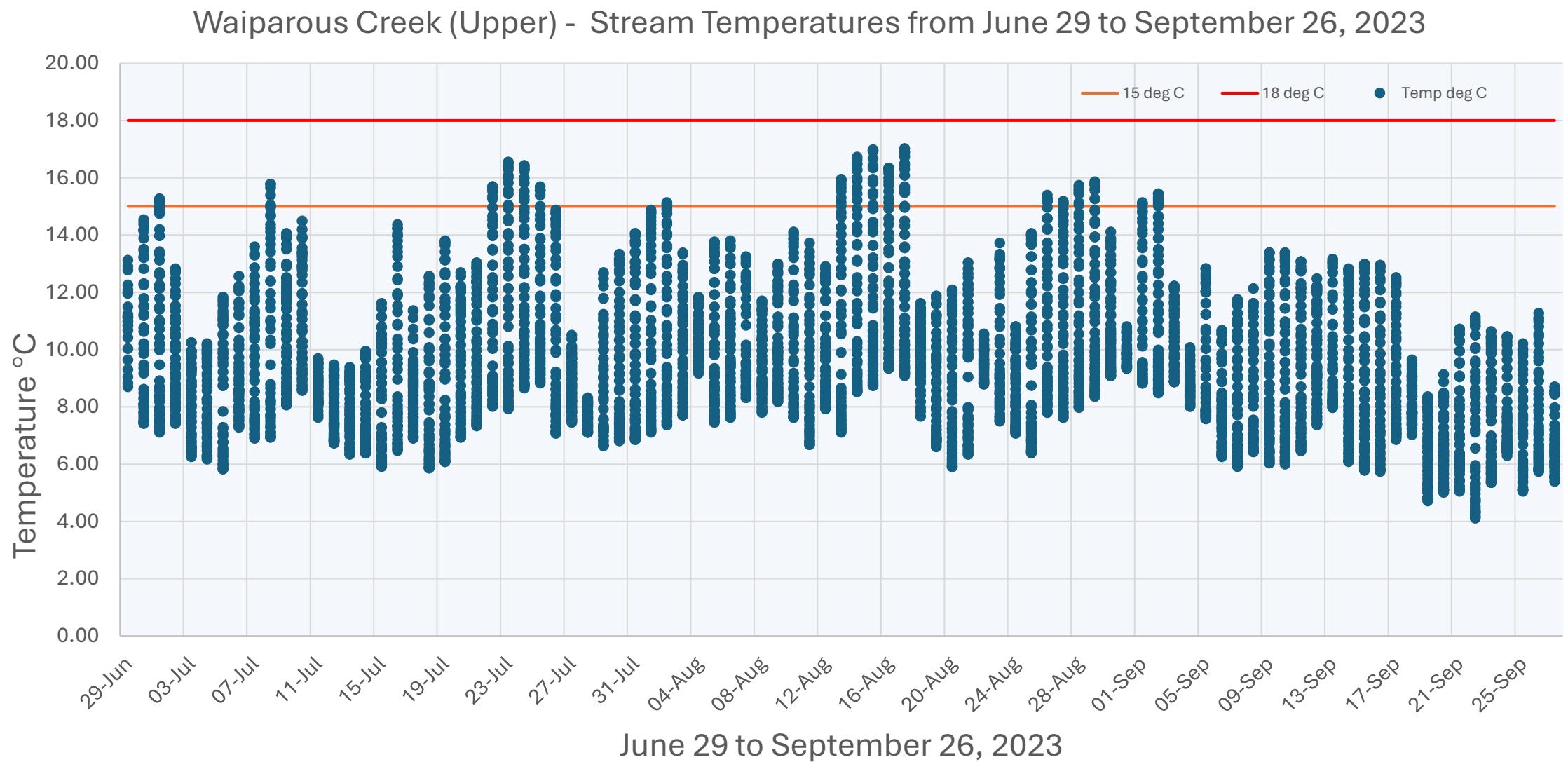
### Logging interval

30 minutes

# 2023 Waiparous West (Upper)

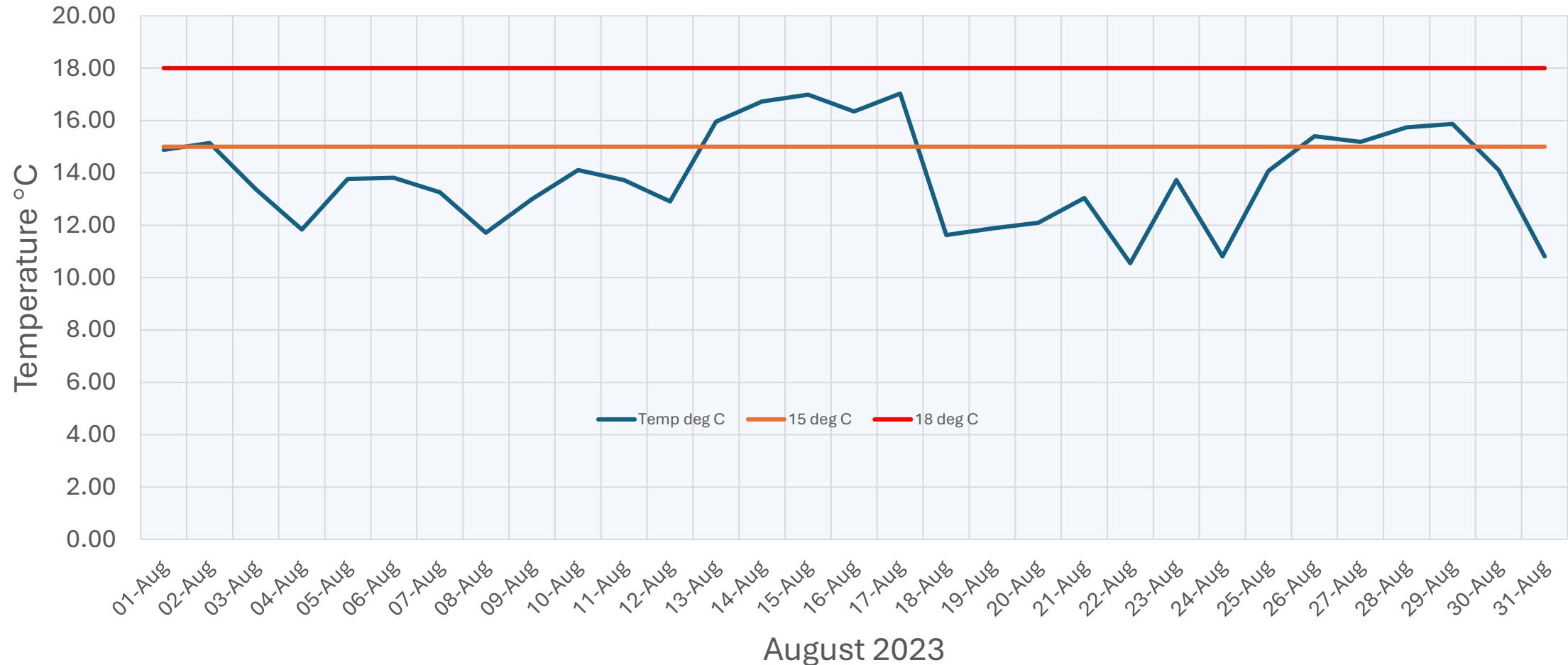


# Waiparous West



# Waiparous West

Waiparous West – August 2023 Daily Maximum Stream Temperatures



## Overview

### Data begins

Sept. 22, 2022

### Data ends

December 3, 2023

### Maximum

21.32 °C (July 23, 2023)

### Minimum

-0.99 °C (Dec 11, 2022)

### Days above 15 °C

93

41 above 18 °C; 12 above 20 °C

### Range

20.33 °C

### Logger ID

#21115791

### Logging interval

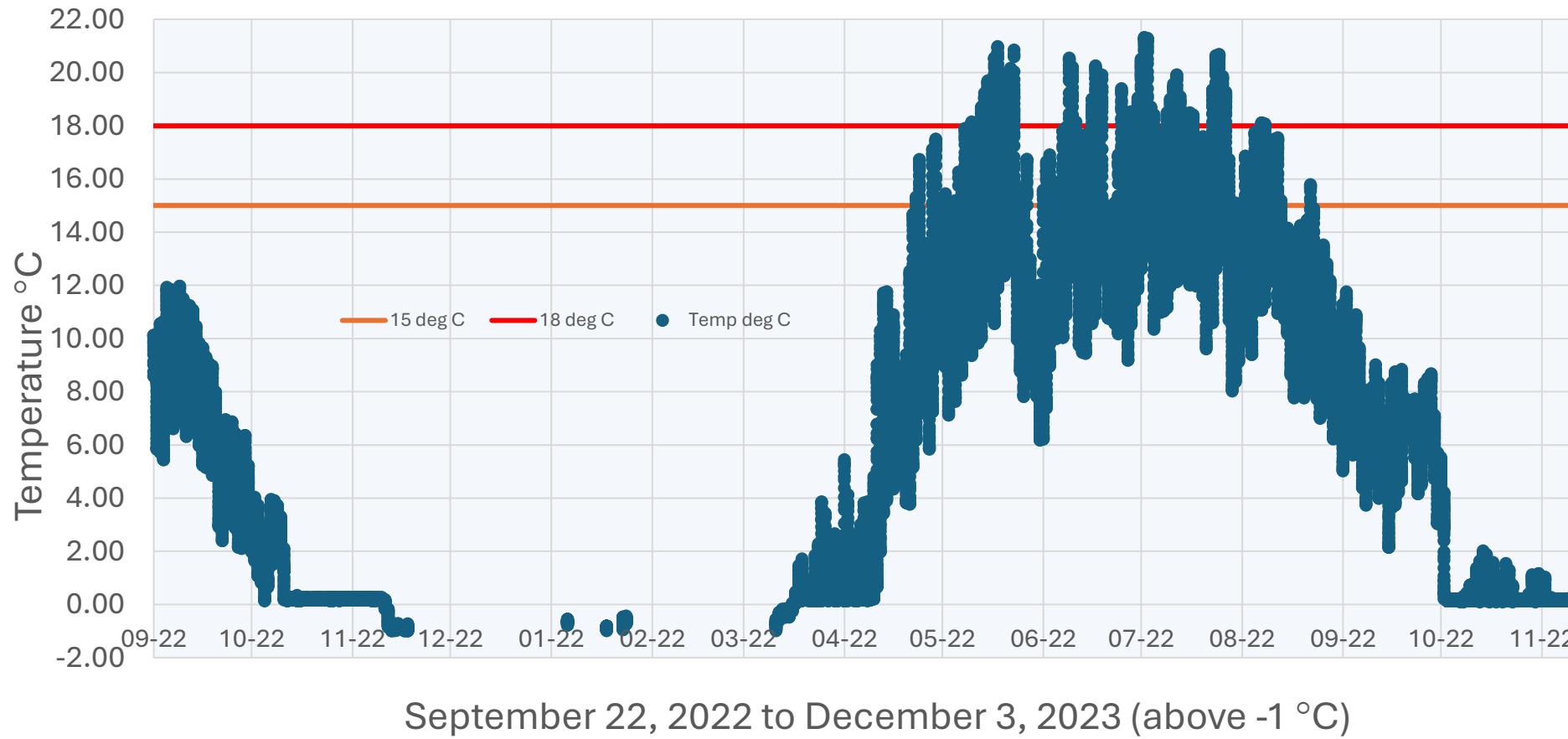
30 minutes

# 2022/23 Waiparous near mouth

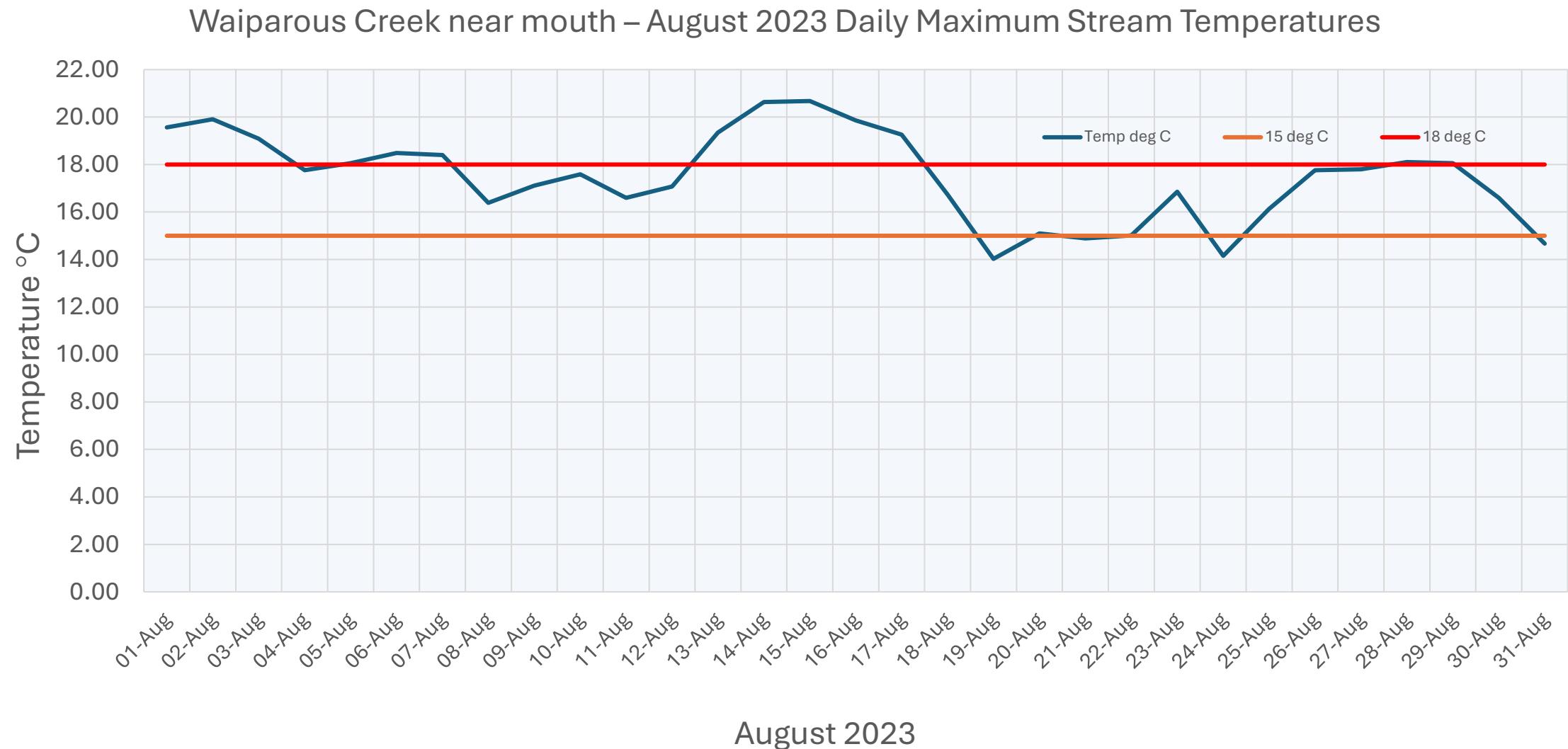


# Waiparous near mouth

Waiparous Creek above confluence - Stream Temperatures from  
September 22, 2022 to December 3, 2023



# Waiparous near mouth



## Other Activities:

- Presented at the Outdoor Recreation Council of Alberta's (ORCA) AGM
- Organized a BRBC GIS Community of Practice online learning session
- Worked on a Restoration interactive online tool (ESRI Experience Builder)
- Worked to revamp the website
- Wrote a letter to Alberta Forestry and Parks to voice support for the Firearms-Use Restriction Zones

Photo: S. Fritz



# Standing Ovation

- Marina Krainer (Executive Director)
- Board of Directors
- Jon Berlie (Restoration Specialist)
- Volunteers
- Partners
- Funders



Photo: S. Fritz





# You're in Volunteer Country!



- Penny MacMillan
- Nancy Johnson
- Judy Hill
- Cal Hill
- Keith Landra
- Marg Landra
- Dagmar Kuril
- Libby Graham
- Susan Parker
- Brenda Bunton
- Cheryl Wauthier
- Colleen Jones
- Cheryl Walker
- Barbara Brown
- Dan Brown
- Aaron Boulton-Chaykowski
- Leah Boulton-Chaykowski
- Norah Boulton-Chaykowski
- Francis Tang
- Al MacLaughlin
- Joanne MacLaughlin
- Emma Chong
- Nicolai Semenoff
- Arnd Salinski
- Karoliina Munter
- Bob McAlpine
- Karen Laustsen
- Bill Motherwell
- Dan Pichette
- Sarah Leete
- Cole McBride
- Sydney Holmberg
- Amy Berlando
- Louis-Philippe Larochelle
- Kaitlin Mercier
- Bryan Hennessey
- Mike Murray
- Simone Murray
- Lily Yu
- Gabriel Smith
- Daniel Daragan
- Daniela Daragan
- Katelyn Cook
- Mehar Imran
- Crystal Kersey
- Alex Vial
- Nate Hoskin
- Mark Hoskin
- Rick Tuza
- Sandi Tuza
- Pierce Laing
- Alana Main
- Ryan Lee
- Tyra-Lee Parks
- Alex Mowat
- Sloane Young
- Grace Laird
- Braedon Winder
- Regan Ingram
- Renee Lazor
- Frankie Holubowich
- Sherry Norton
- Geoffrey Norton
- Alex Whale
- Rowan Maher
- Hans Sergei Urbano
- Dayanna Barbosa
- Diego Rodriguez
- Andy Gisseth Castro Motta
- Hannah Roberts
- Cody Hopkins
- Grace Lamas

# Visionary Funders



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada



*View from Black Rock Mountain, Ghost River in valley bottom. S. Fritz*

Thank  
you!

sharlene@ghostwatershed.ca

