

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

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

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



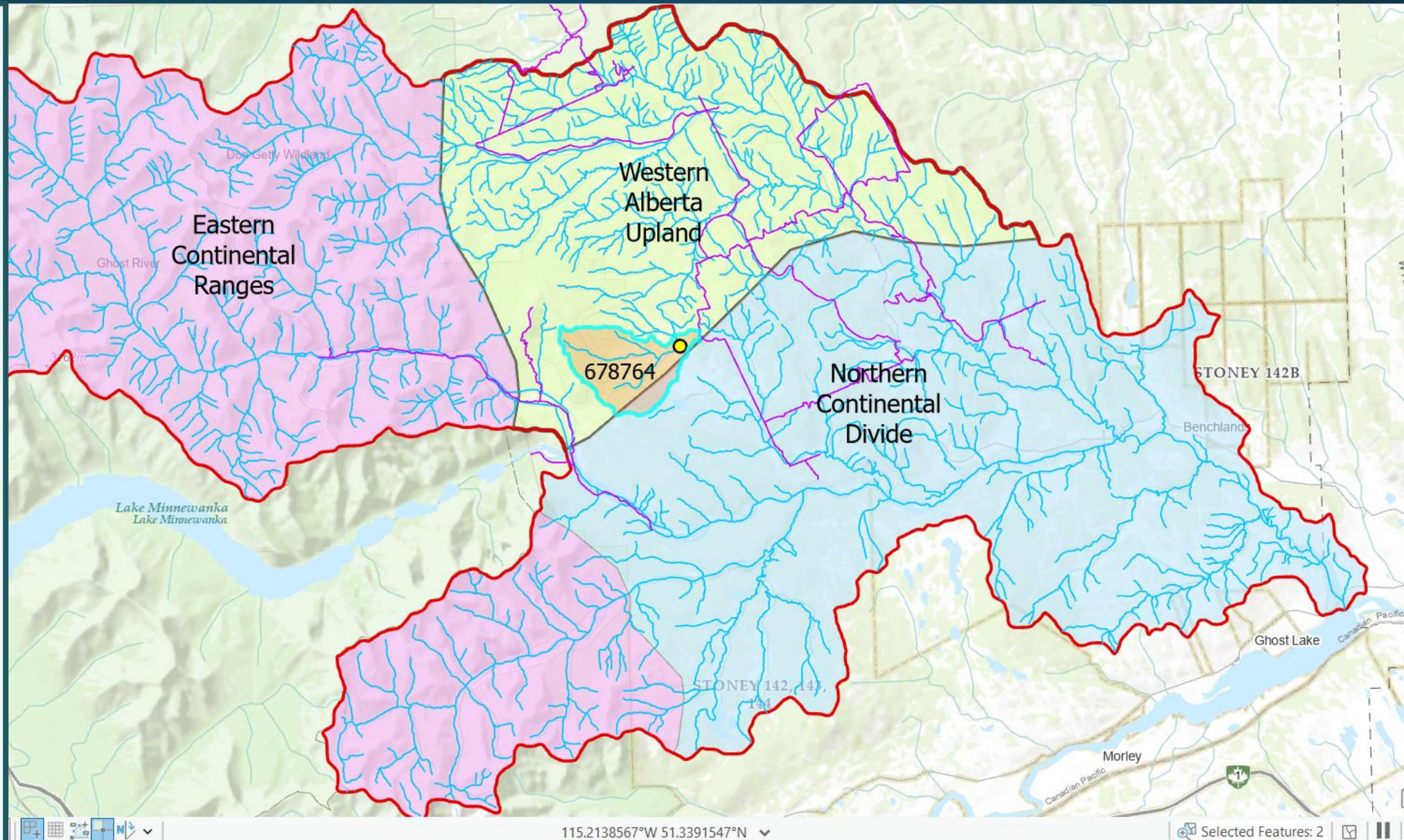
CreekWatch Ghost River at Richards Road bridge

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

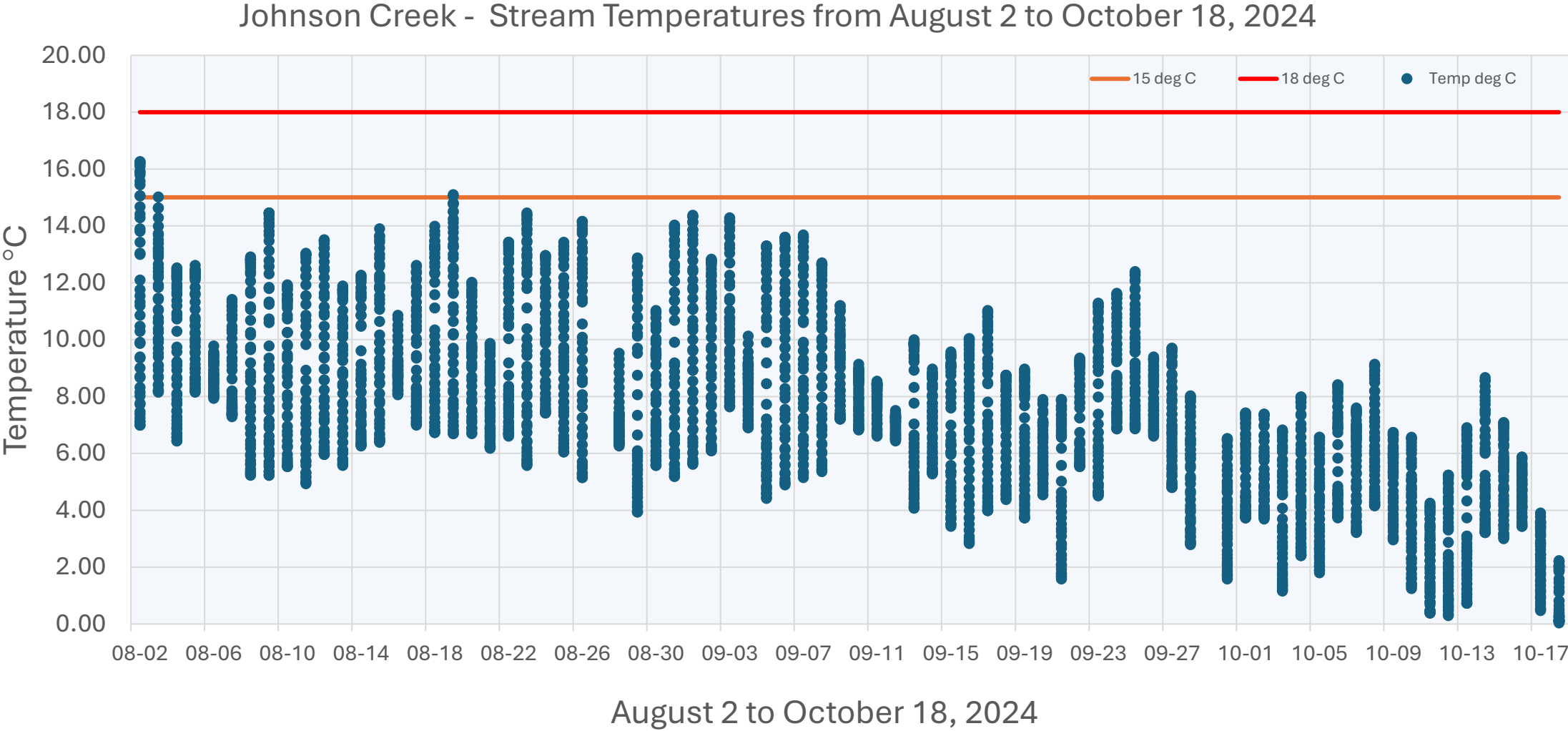
30 minutes

2024

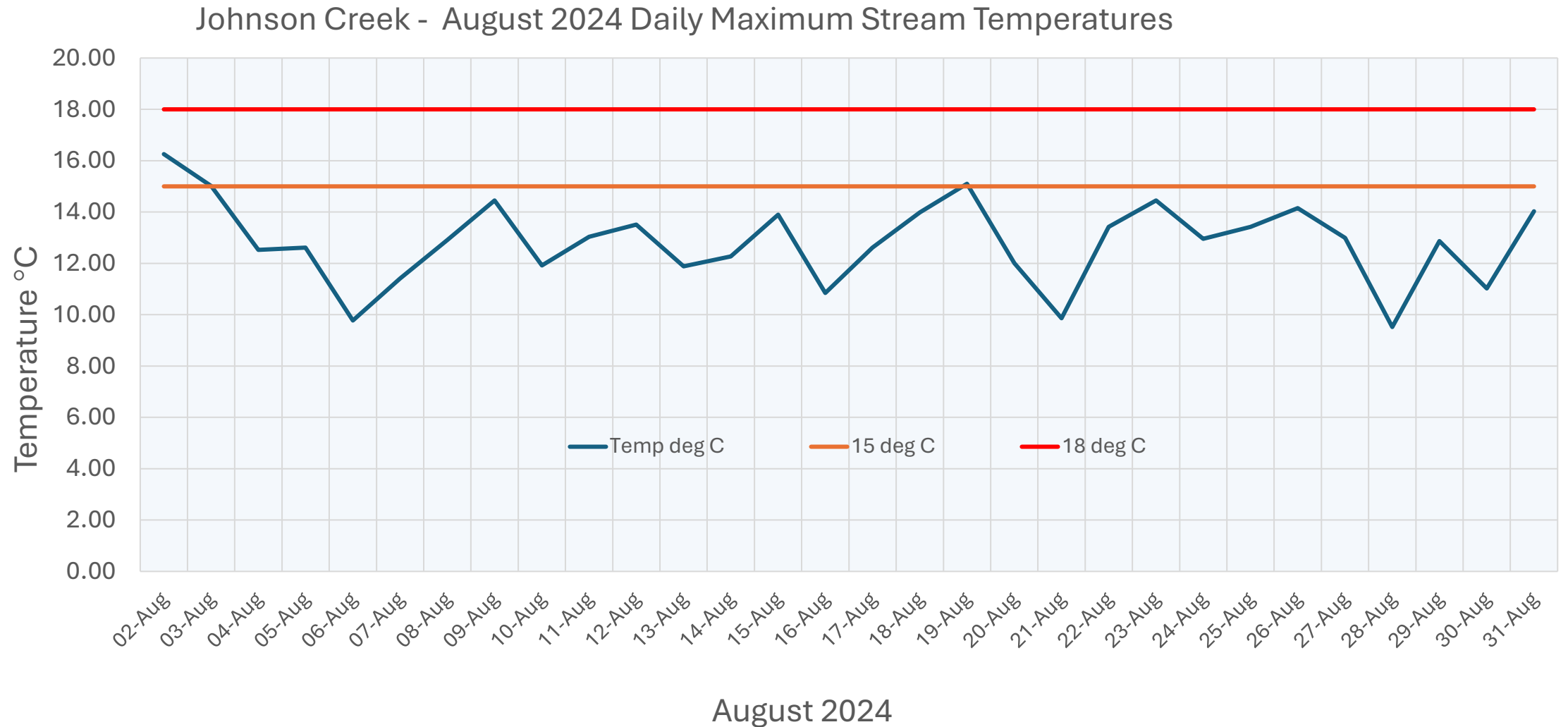
Johnson Creek



Johnson Creek



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

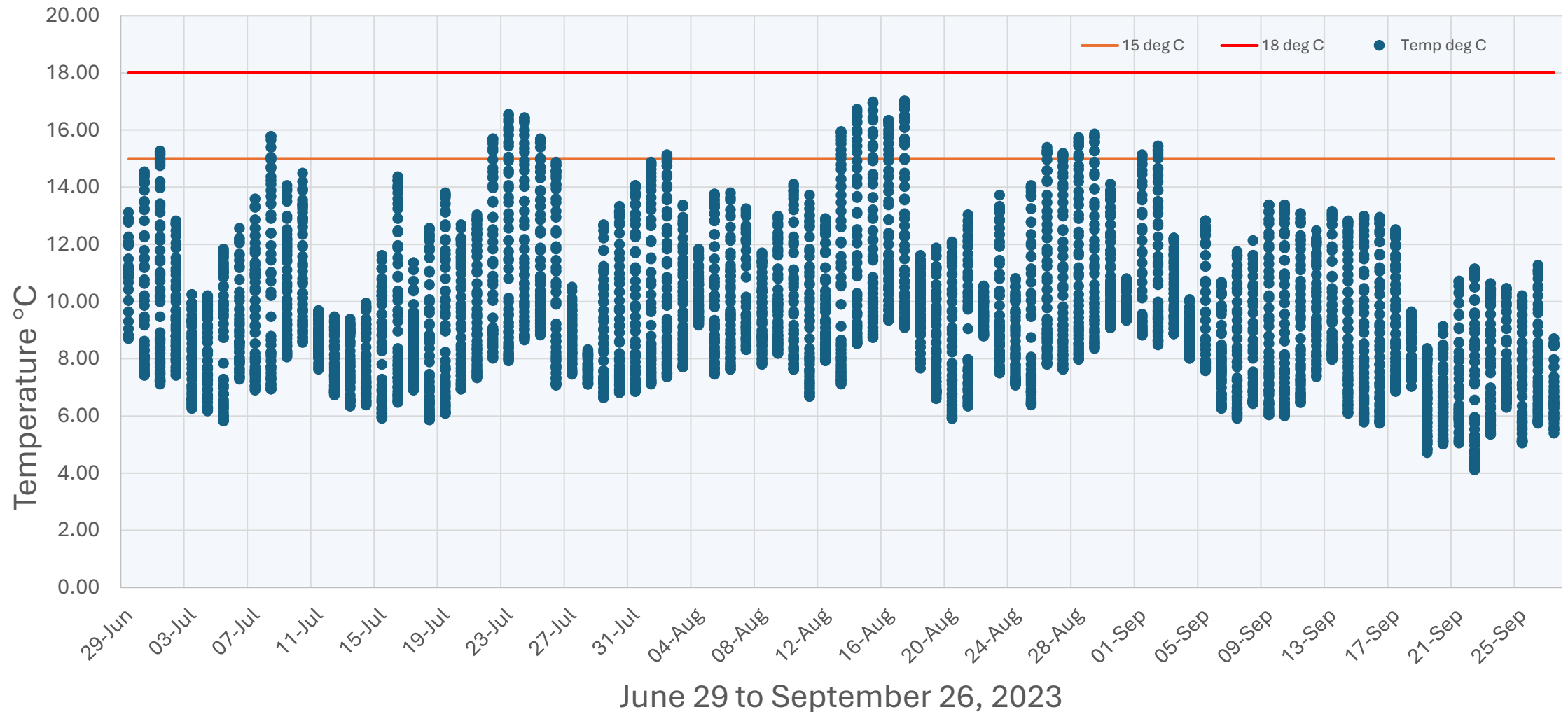
30 minutes

2023 Waiparous West (Upper)



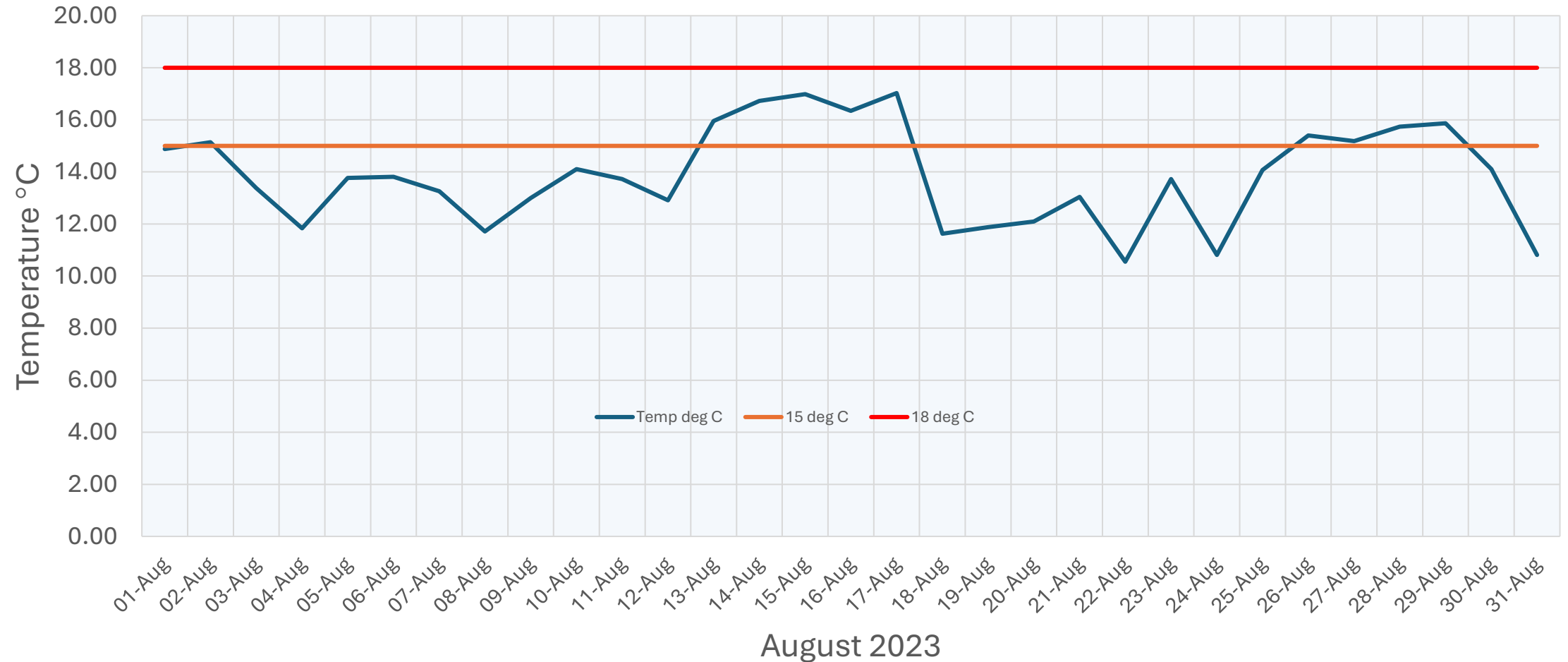
Waiparous West

Waiparous Creek (Upper) - Stream Temperatures from June 29 to September 26, 2023



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

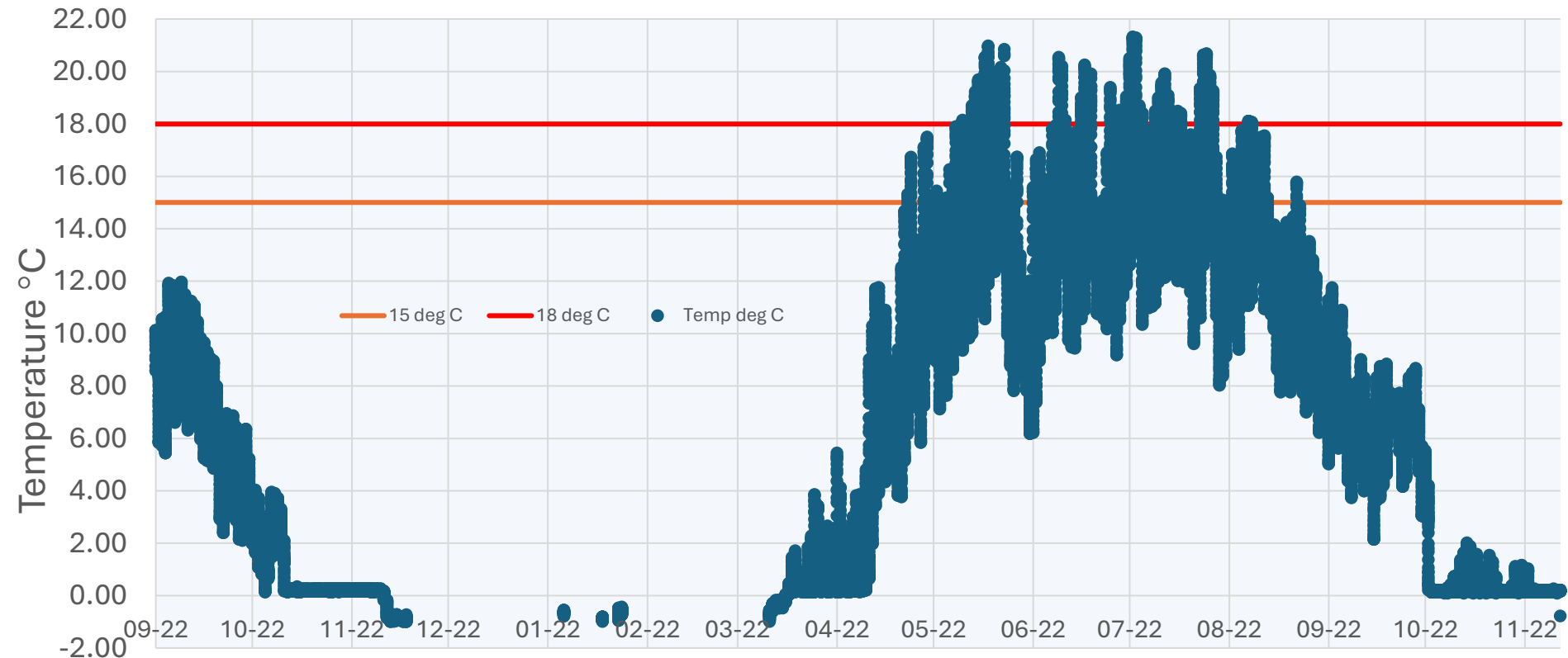
30 minutes

2022/23 Waiparous near mouth



Waiparous near mouth

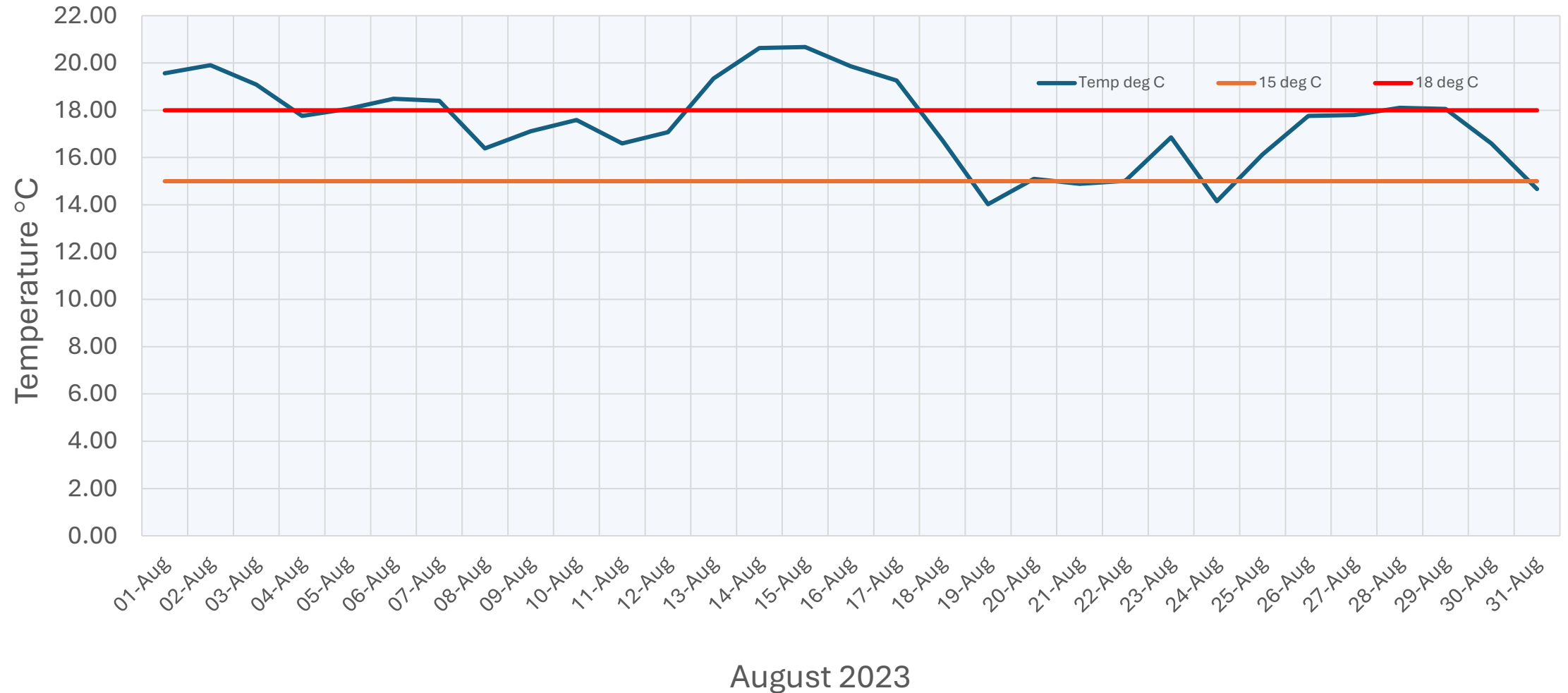
Waiparous Creek above confluence - Stream Temperatures from
September 22, 2022 to December 3, 2023



September 22, 2022 to December 3, 2023 (above -1 °C)

Waiparous near mouth

Waiparous Creek near mouth – August 2023 Daily Maximum Stream Temperatures



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



**WAIPAROUS CREEK
TRIBUTARY**

**You're in
native trout
country!**



Species at Risk Area



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 Giseth Castro Motta
- Hannah Roberts
- Cody Hopkins
- Grace Lamas

Visionary Funders



Fisheries and Oceans
Canada

Pêches et Océans
Canada



Bow River
Basin Council

Calgary



Alberta Conservation
Association



Land
Stewardship
Centre

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

sharlene@ghostwatershed.ca

