



Water we up to?

OUR 2022 ANNUAL REPORT

Contents

- 3 Messages from our co-directors
- 5 About us & metrics
- 11 Water literacy
- 16 Projects & regions
- 25 Data
- 28 Championing community science
- 31 People
- 35 Thanks!

Water Rangers' HQ is located in Val-des-Monts, Quebec and Ottawa, Ontario on the traditional unceded territory of the Algonquin Anishnaabeg People.



Messages from our co-directors



It's been an exciting and challenging year: we've grown so much, especially in BC, QC, and the UK. With all the challenges of running a non-profit, I'm so thankful to Gabi and Laura for riding these waves with me!

One theme that continues to surface is our optimistic and proactive approach to water stewardship. My hope is that this impact report will help you believe that positive change for water is possible, and further, that you can be part of it.

See you on the water!
Kat Kavanagh, Executive Director

Messages from our co-directors



I'm surprised at the amount of hope I'm feeling going into 2023, and that's thanks to the growth and impact of community-based water monitoring. Our collective state of mind could be discouraged. Instead, we're witnessing individuals and communities coming together, harnessing the anxiety and worry they have for their beloved lakes, rivers, and ocean for real and impactful action.

The Team at Water Rangers also has a lot to do with my hopefulness. With Kat at the helm, this talented team is always creating new and better tools for collective action and water literacy, and have a boundless energy to collaborate.

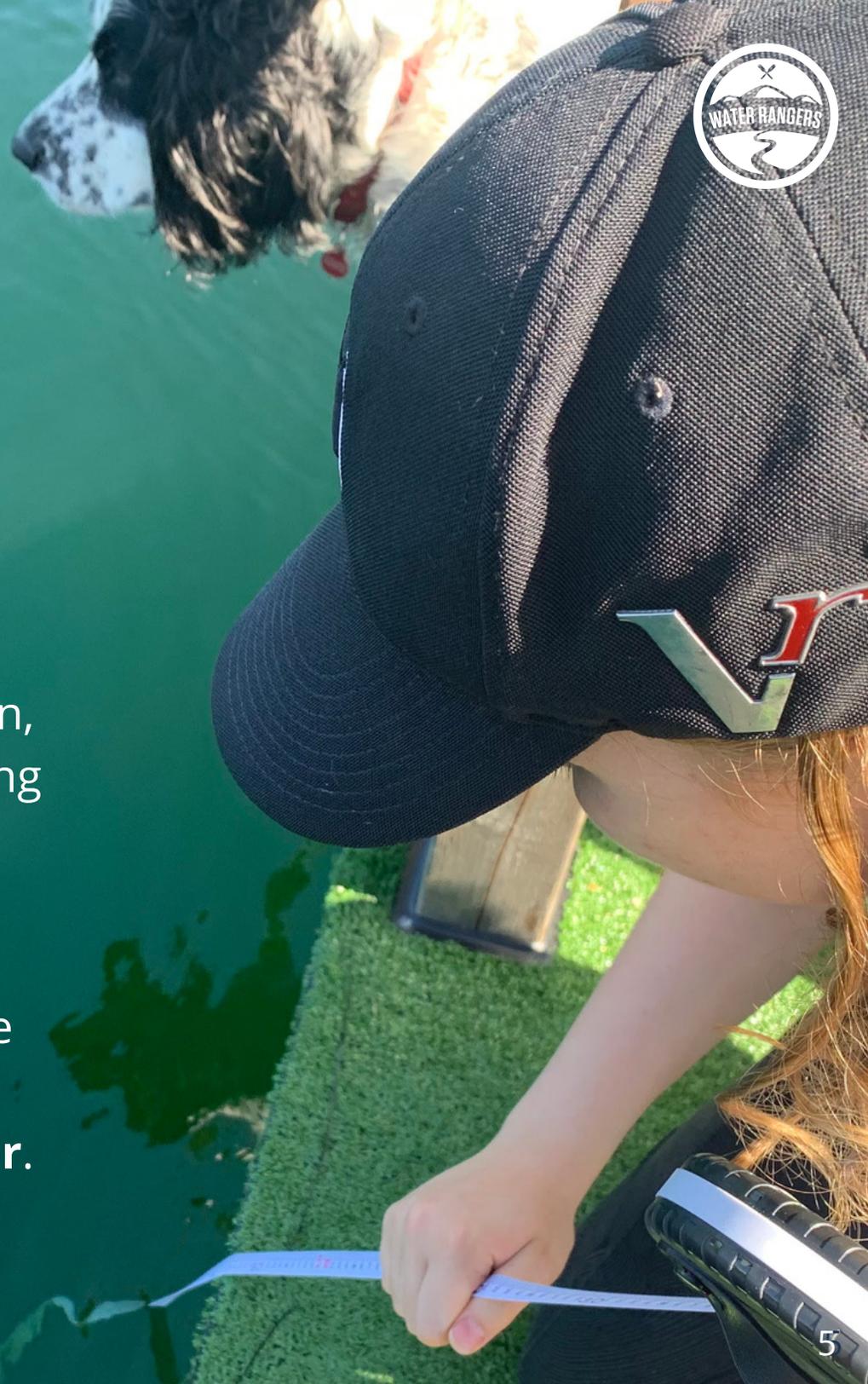
We are looking forward to what this year will bring in terms of cooperation, optimism, and as always, getting our hands wet outside with people across Canada. Let's get to work!

See you on the water!
Gabi Parent-Doliner, Director

Water Rangers builds easy-to-use, affordable tools to crowd-source water quality data.

With climate change intensely impacting our rivers, lakes, and ocean, we need people on the ground looking out for the health of our water systems for them to be resilient.

At Water Rangers, we connect people to science so they can help take care of our most precious resource: **water**.



Our impact

LEARN

Create space for just about anyone to understand water's complexity and importance with the training resources they need to teach others.

Youth education

Community-based monitoring

TEST

Provide tools that allow anyone to have a hands-on and joyful water testing experience, emphasizing the importance of following data standards.

Water quality testkits

Data collection platforms

ACT

Transform humanity's relationship with water and inspire people to take further steps in protecting local waterways through the power of collective action.

Water stewardship

Leadership

Our testkits are made with love

Lovingly assembled in Val-des-Monts at Water Rangers' founding spot by the lake, know that every testkit and logo has been thought out. This year, we welcomed Jonas and Simon to the warehouse crew, and Will remains the one who keeps us all in line while maintaining the best quality! We're constantly improving our testkits, and this year was no different. Our biggest joy of the year was our new conductivity meters. They're now bilingual, and their boxes have more instructions for new water testers!

A special shout out to Community Forward Fund and Thrive Impact for helping us with financing our store this year. Their help has been integral in helping this non-profit grow its impact!



200,000+

Water quality datapoints

20,000+

people trained in water monitoring

5,500+

locations monitored

3,500+

water quality testkits distributed

27 countries

share data on our platform

200+ groups

use our platform to manage
and share data

Getting social in 2022

Our message is clear: communities care about their waterways. We share stories and encourage our volunteers on social media and it makes our day to see you out on the water!

133,000

Pageviews on our website

23

Blog posts + tons of new content & videos

265,000

Reach on Facebook, Twitter, LinkedIn, and Instagram

828

New followers across all platforms



In real-life!

We loved meeting you in-person this year.



Experience the 'Ripple Effect'

The 2022 testing season featured our water testing expert series. With seven episodes and over 1,000 viewers, it's been a great way to highlight our amazing partners!

Official Selection:
Frozen River
Film Festival



Official Selection:
Festival of Ocean
Films & World
Water Film
Festival

Films by the talented Graham Perry. Top row: Lawrence Gunther (Blue Fish Canada), Annie Michaud (Niagara College), Les Scientifines (with Université de Montréal). Bottom row: Bay Area Restoration Council, Thames Bluewater Métis Council, University of Regina

Water literacy

We established our education program in 2018, the same year we designed the first iteration of our water quality testkits. Our mission is to lower barriers to science so that anyone can participate in water quality monitoring and help make evidence-based decisions about water.

Promoting science education!

Water Rangers just began its fourth year as a PromoScience grant recipient. Highlights to date:

15,400

Youth trained, including 2,300 Indigenous youth

418

Water testkits distributed

642

Educators participated in the program!

100k

People reached on social media



We acknowledge the support of the Natural Sciences and Engineering Research Council of Canada (NSERC).

Nous remercions le Conseil de recherches en sciences naturelles et en génie du Canada (CRSNG) de son soutien.



Collaborators in water literacy!

We LOVE being part of outdoor education collaboratives. This year, we worked closely with the following education networks and learning institutes:

- Water First
- Outdoor Learning Store Network
- #NatureForAll
- Canadian Ocean Literacy Coalition
- Ocean Bridge (Ocean Wise)
- Learning for Sustainable Future



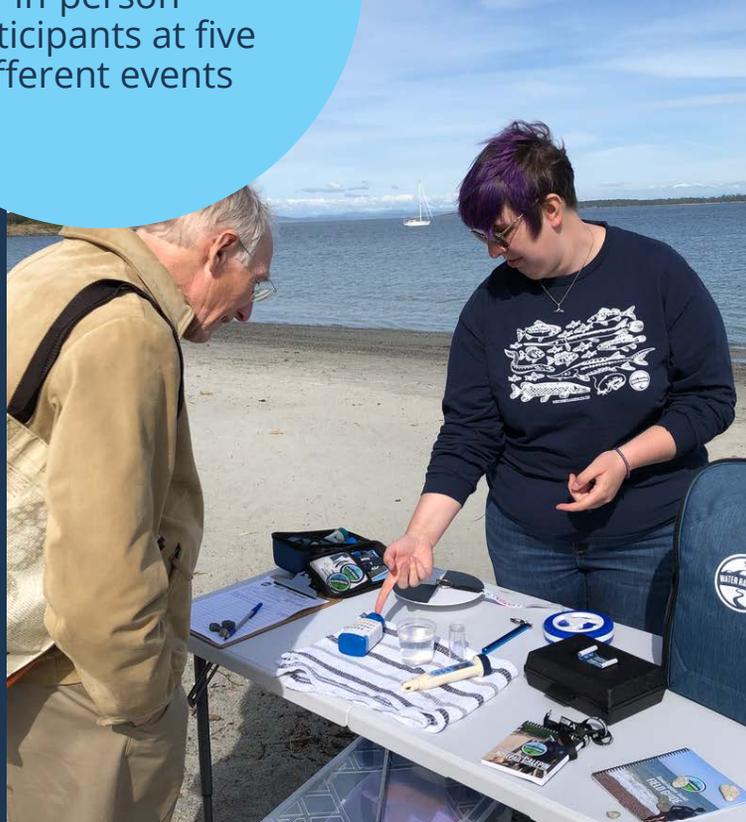
Ocean literacy

In 2022, we were the freshwater partner on the Ocean Week Canada project, led by the Canadian Ocean Literacy Coalition. As part of this, we hosted 5 public Ocean Week Canada events!

Dive deeper at oceanweekcan.ca



320
In-person participants at five different events



Ocean Week Tinykits

Engaging people across Canada to celebrate our ocean during World Ocean Week!

194 applicants

110 Tiny testkits

23,982 social media reach



Projects

Water Rangers works closely with several organizations and institutes that work to protect Canada's freshwater and empower people with the tools they need to connect with freshwater science. We love collaborating and are proud to highlight how we are always stronger working together! Here are a few highlights.

British Columbia

Thrive Impact Fund invested in Water Rangers to help us grow in BC, and what a year it was!

We welcomed nine new BC-based groups onto our data platform. We nurtured 28 new and old collaborations, expanding water monitoring programs in the province and the use of our testkits at the same time!

28

Collaborators in British Columbia

3,625

New datapoints added in 2022





Saskatchewan

2022 was the second year of our 5-year collaborative project with Dr. Kerri Finlay at the University of Regina. Thanks to our community-based volunteers, we're now monitoring 70 lakes across the province.

[Read this story.](#)

249

Locations
sampled across
Saskatchewan

78

Active water testers
sampling 952
times in 2022



Allô Québec!

Laura led our efforts to grow Water Rangers' operations in Québec.

Highlights

- Featured on *Les années lumières*
- Invited speaker at the first Forum on participatory science in Quebec
- Collaborations supported and developed with: OBVAJ, COVABAR, Héritage Laurentien, Université de Montréal, Les Scientifines, and more!

101

Water testkits distributed, supporting 10 new collaborators

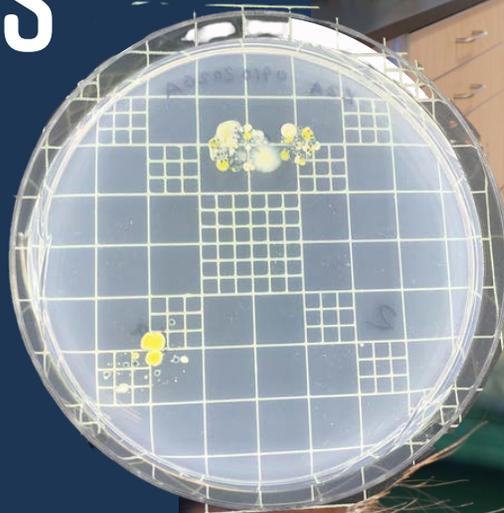
2,000

People trained in QC

Micro Rangers

In collaboration with the Brun Lab at Université de Montréal and Les Scientifines, we promoted community engagement in important research on antimicrobial resistance.

[Read this story.](#)



"We were introduced to Water Rangers this week by the Big Canoe Project in Meaford (south Georgian Bay). We really like the program so we have just ordered a kit for ourselves. We love where we live and want to help keep it healthy!"

Sharing the joy!



United Kingdom

Thanks to the growing enthusiasm of water champions there and the generosity of local funds, we now have 3 UK groups (River Wey Trust, Zero Guildford, and Tewkesbury Nature Reserve) regularly collecting water quality data! *Our wrap-up event* featured more than 50 new water testers getting trained. We've trained over 200 people, including local youth groups and volunteers who have organized a local water treatment plant tour.

71

Sample locations

200+

Water testers trained

2000+

Datapoints recorded

28

Registered data collectors





United States

Our growth in the US in 2022 was so exciting. Groups like Florida's Lake Cane, Illinois' Winter Chloride Watchers, and Mississippi Water Stewards continue to be monitoring and data champions.

We're also working with the Outdoor Learning Store and Chemetrics (the fabulous creators of our favourite dissolved oxygen test) to help us expand our reach in the United States. Watch this space!



River Institute

It was another incredible year to collaborate with our friends at the River Institute. Not only did Emma, our summer student, help collect data alongside researchers, but Kat (our ED) also helped with their changemaker's series, while Gabi, Laura, and Baptiste helped organize a session and booth as part of their symposium in the Fall!

River Rapport's calls to action



Data

Water Ranger's web app and iOS field data app facilitate the reuse of and access to data for communities, decision-makers, and research bodies. As water data champions, our overarching goal is to contribute to the culture change by fostering excellence and appreciation of community-based water monitoring data.



Gabi and Kat working on the new data platform... watch this space. Due to launch in 2023!

Data Champions

Water Rangers was the 2022 recipient of the Digital Research Alliance of Canada's Data Champions' grant. Our work here is to align our data platform's structure to that of the US EPA's WQX water quality data standard. As a follow-on from that work, we're building the next version of our data platform.



**Digital Research
Alliance** of Canada

**Alliance de recherche
numérique** du Canada

DataStream

In 2021, Water Rangers and DataStream began an official collaboration to address barriers in making community collected data openly available for decisions and action in freshwater stewardship. Data from Water Rangers is automatically shared to the 5 DataStream platforms. We also worked to align our data infrastructure to enhance interoperability between our platforms.

50

Groups connecting their datasets through our systems (automatically!)

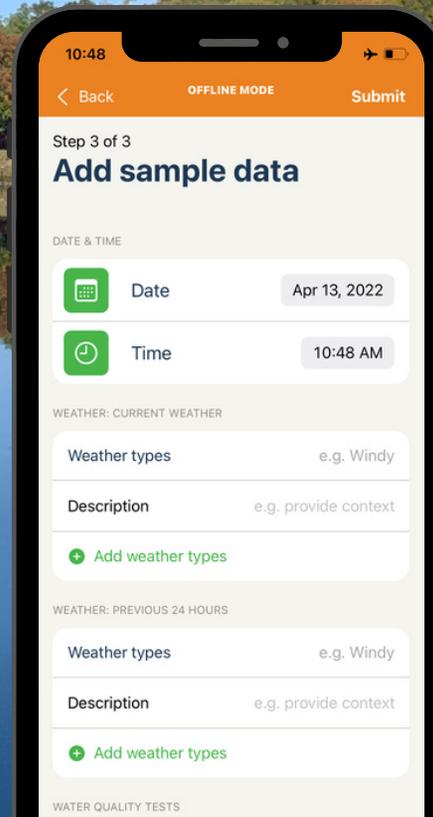
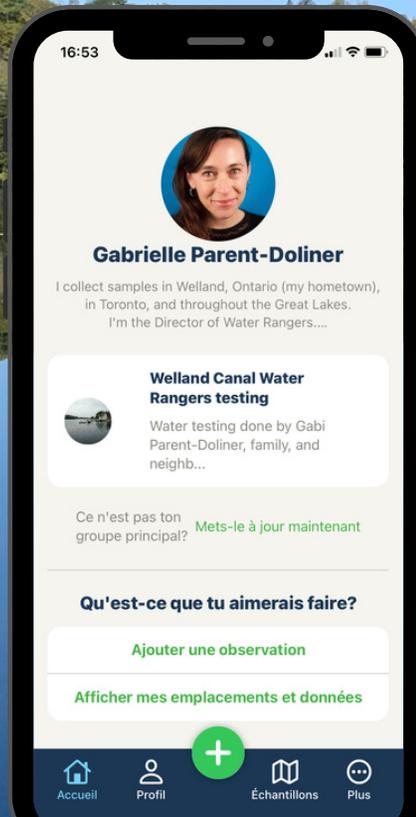
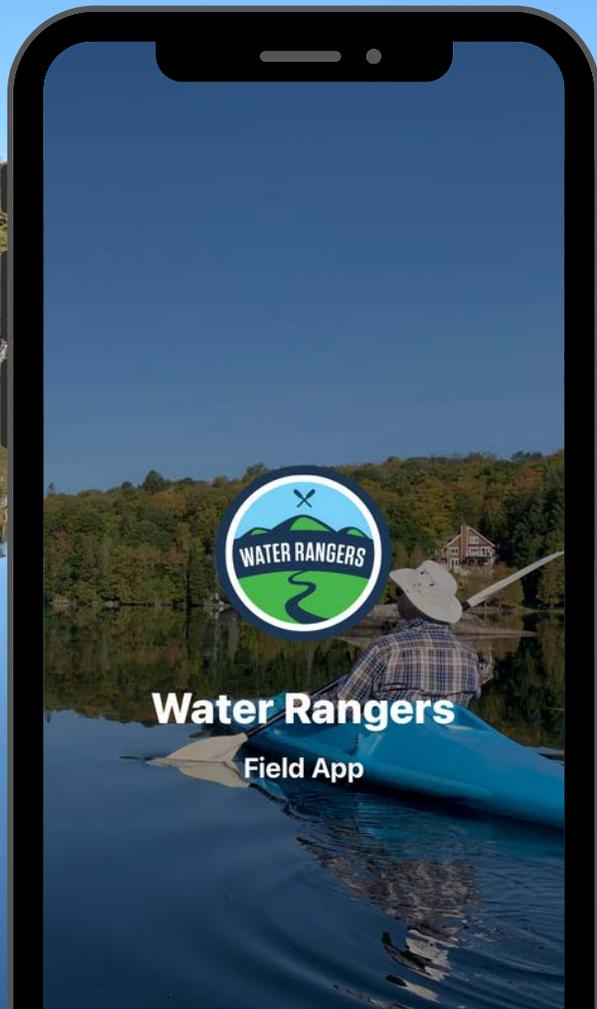
54,000

Datapoints shared to DataStream

Have you downloaded our new iOS field app yet?

In 2022 we rebuilt our iOS app to help you better collect data in the field (even if you're offline!)

[Download the iOS app](#)



Championing community science and Indigenous ways of knowing

Water Rangers is committed to Truth and Reconciliation as one of our organization's priority objectives. Over the past year, our team was involved in various initiatives to support First Nation, Inuit, and Métis groups and communities in community-based water monitoring.



Making space at the table

Highlights from 2022

- Water Rangers works with 25+ Indigenous nations and Indigenous-led programs across Turtle Island.
- Water Rangers staff all completed OCAP (ownership, control, access, possession) training for First Nations' data management.
- In 2022, we co-organized the Community-based Water Monitoring pre-conference with Indigenous collaborators.



Spotlight: Thames Bluewater Métis Council

In June, Water Rangers was invited to the Thames Bluewater Métis Council's first-ever Rendez-vous. Our staff and volunteers organized a demo of the testkit with the Métis, set up a booth at the event, and filmed interviews as part of [this video](#) with the President of the Métis Nation of Ontario and other council and community members.

[Read this story](#)

People

It all comes down to our staff and our volunteers.

Our team

Thanks to our core team, Kat, Gabi, Laura, Emelia, Will, and Jonas. We were also lucky enough to have coordinators Luke, Roxanne, Freddy, Graham, and Baptiste join us last year.



Top row: Kat, Gabi, Laura, Roxanne, Will, Freddy, Simon, Jonas, Luke. Bottom row: Graham, Baptiste, Emelia

Our incredible summer students



Thanks to Michael, Belle, Emilee, Emma and Cassidy for their impactful work!

Thank you, volunteers!

Our movement is thriving because of our passionate volunteers. This year, we gave a special shout-out to the "G.R.O.A.T"... that's the "Greatest Ranger of All Time (for that month)."

Shout out to the 2022 testing season GROATs:

- [Winter Chloride Watchers](#)
- [Utta Gagel, Cariboo Heights Forest Preservation Society](#)
- [Organisme de bassin versant Abitibi-Jamésie - OBVAJ](#)
- [Kerri Finlay, University of Regina](#)
- [Sarah Blenis, Hammond River Angling Association](#)
- [Don and Heather Ross, County Sustainability Group](#)
- [Alistair Young, River Wey Trust, UK](#)



Thanks!



Much gratitude to our funders.

- NSERC PromoScience
- Data Champions
- Canadian Ocean Literacy Coalition
- DataStream
- Government of Ontario
- ECO Canada
- Research Council
- Thrive Impact Fund
- Community Forward Fund
- Career Launcher
- LUSH
- Canada Summer Jobs
- Science Literacy Week
- Science Odyssey
- Our board of directors
- + our generous individual donors!

A special thank you to our outgoing Board Treasurer, Matt Blostein, who helped us on our Board of Directors for the past 6 years!



See you on
the water!

