



Rural Water Watch Board of Directors'
Report of Activities 2023

www.ruralwaterwatch.org



Report of Activities 2023

2023 Board of Directors

Courtney Bonner, MPlan; President

Courtney graduated from Dalhousie University with a Bachelor of Arts in Social Anthropology, a Master of Planning, and now works as a Project Manager with expertise in Business Analysis and Change Management. As a life-long Nova Scotian and well-owner herself, Courtney has developed a passion for water issues and education and is devoted to breaking down barriers to water testing and treatment.



Lauchie MacLean, PhD; Sec./Treas.

Lauchie is an Environmental Specialist at Health Canada with an expertise in hydrogeochemistry and environmental impact assessment. He is a Professional Geologist with over 22 years of experience working in a variety of environments across Canada, from the Cape Breton Highlands to the High Arctic. Growing up on the shores of Cape Breton Island sparked his early connection with water, a bond that has strengthened as he has deepened his understanding of water's complex role in shaping our environment and well-being.



Dave Redden, B. Eng. MASC, PhD Can., VP

Dave has a background in environmental consulting and recently returned to the Centre for Water Resources Studies at Dalhousie University to pursue a PhD. His research focuses on the use of environmental DNA to study cyanobacteria in Nova Scotian lakes. Dave grew up in Nova Scotia and spent ample time on and around water and cultivated an understanding of the significance of water on our lives. This understanding drives him to continue learning about our relationships with water and how we can ensure that all Nova Scotians have access to safe drinking water.



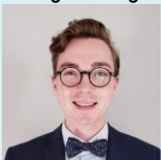
Fatou Secka, B. Eng., MASC, EIT; Director

Fatou is an Engineer in Training with a MASC in Water Resources Management and a B. Eng. in Environmental Engineering. She passionately integrates environmental sustainability with engineering. Fatou is currently a Research Engineer at a renewable energy company, where she leverages her expertise to contribute to impactful and sustainable solutions. Originally from The Gambia, Fatou combines her passion, education, and professional experience to drive initiatives providing water and sustainable energy solutions for communities.



Kyle Rauch, B. Eng., MASC, PhD Can., Director

Kyle Rauch has a Bachelor of Engineering in Environmental Engineering and MASC in Civil Engineering from Dalhousie University. His focus through his degrees has been on water and wastewater treatment processes with a particular interest in UV disinfection of common pathogens. Kyle is currently enrolled in a PhD at the Centre for Water Resources at Dalhousie where he studies how UV LEDs can be used to increase the effectiveness and sustainability of disinfection in municipal wastewater treatment facilities.



Fred Bonner, MASC, MURP, P. Geo.; Co-founder RWW and Executive Director

Fred has a BSc (Hon) in Geology, a MASC in Water Resources and Master of Urban and Rural Planning (MURP). He is Professional Geologist and a Fellow of Geoscientists Canada. Fred has 40 years' experience in the areas of geoscience, resource management (water, minerals) sustainability, environmental management and stewardship, rural planning and working in communities. He is a past president of APGNS and currently sits on their Equity, Diversity, Inclusion and Accessibility Committee.





Report of Activities 2023

This year Rural Water Watch continued to work on projects to support our goals to educate rural residents about well water health and to address the barriers residents face regarding water quality testing and other activities to protect their families.

We kicked-off 2023 with the development of our “What’s in your water?” campaign. These water information displays are designed for public spaces like libraries and community centres or any rural gathering place. Four displays were set-up in public libraries in Nova Scotia. Each display consists of a poster, a bookmark and rack cards to take home with tips on well health and drinking water quality. Special thanks to Jeff Mercer, Christina Pottie and David Trueman (South Shore Public Libraries) for their continued support and advice, as well as Sarah Burchill (Halifax) and Denise Corey (Cumberland) for their valuable assistance.



The poster (enlarged next page) highlights four important components of drinking water protection; **Test** your water, **Protect** the well area, **Maintain** your well, and **Treat** if needed. These activities work together to reduce the chance of drinking water contamination and potential health impacts. The rack card is enlarged on page 5.



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Rural Water Watch Association

What's
in
your
water?



Things you can do now to protect yourself and your family from illnesses caused by contaminants in your well water.

Test your water!



Protect the well area!



Treat if needed!



Maintain your well!



More information is provided in the handout below.

Visit us at www.ruralwaterwatch.org



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RURAL WATER WATCH ASSOCIATION
WHAT'S IN YOUR WATER?

YOU CAN'T SEE, SMELL, OR TASTE:

TEST YOUR WATER REGULARLY Bacteria Viruses Parasites Metals

PROTECT YOUR WELL AREA

- Keep the well clear of leaves & wood piles that attract pests like insects & rodents.
- Remove sources of food (compost, flowers, garbage) that attract animals.
- Keep pets & wildlife away from the well area.
- Keep all household liquid waste, chemicals, & fuel far away from the well area.

MAINTAIN YOUR WELL

- Check and fix well damage (cracks & holes) & Ensure covers & caps are securely in-place.
- The ground should slope away from the well & gaps between the ground & the well should be filled to reduce the chance of contamination entering the well from surface water.
- Contact well diggers or drillers for assistance.

TREAT IF NEEDED

- You need to know the chemical, physical & biological condition of your well water to treat it properly.
- There is a wide variety of treatment options available from point of entry (whole house) to point of use (single faucet) treatment options.

TURN OVER FOR MORE INFORMATION AND LINKS →

Rack card front

WELL WATER TESTING
KNOW WHAT TO DO

DID YOU KNOW?

- The NS Government recommends to test the chemical & physical properties of well water **every 2 years**.
- It is recommended to test for bacteria **every 6 months**.

WHAT YOU NEED

- Water sample collection bottle and laboratory (requisition) form.
- Sample collection instructions from lab or government. Check with your local lab.
- Sample handling instructions like when to collect samples & hours of operation.

WHERE TO GO

- Most NS Health locations (hospitals and centres) offer sample bottle pick-up & drop-off service. Call for specific directions.
- Find your nearest location at www.nshealth.ca/water-testing or call 211.
- Some municipal offices provide pick-up and drop off services. Call or visit your local office.

MORE INFO & LINKS Find useful links to government resources sample collection instructions, a water quality interpretation tool, maps & videos at: <https://www.ruralwaterwatch.org/resources>

KEEP CARD FOR FUTURE REFERENCE!

Rack card back

There were two objectives in creating these information rack cards. Firstly, we wanted to increase the distribution of non-digital information to help address the challenge of information access. Some residents in Nova Scotia do not have access to a computer, smart phone or the internet. Secondly, the post-card size format is convenient and easily distributed through a variety of venues and methods like libraries, volunteer drop-off or Canada Post. We hope these cards will find homes on fridges, etc. and serve as friendly reminders for residents to test their water regularly and take care of their wells through the helpful tips.



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Healthy Wells Workshops

One of our main activities is the delivery of water education workshops at public venues. We organized and delivered Healthy Wells Workshops in several communities, at public libraries and community centres.

Healthy Wells Workshop



Rural Water Watch Association

Join us to learn how to keep your well healthy. Learn about common issues with water quality and quantity, as well as how to test your well for bacteria and metals. We will also discuss local concerns like the impacts of climate change and introduce you to resources to help you manage and protect your well water.

June 24th, 11:00 Greenville Community Hall

For more information contact

Email:

Phone:

GLOBAL WATER CELEBRATION

You are invited a global water celebration featuring a workshop, film, and dance performance.

The Healthy Wells Workshop with Fred Bonner of Rural Water Watch will help you manage and protect your well water supply. You will learn about water quality and be encouraged to ask questions about keeping your well healthy.

Ripples and Reflections documentary will help you to think globally. You will learn about dance and water, and how we must care for it

Watch the Global Water Dance as it is done 'round the world and join in! In partnership with Global Water Dances and Rural Water Watch.

Musquodoboit Harbour Public Library
Saturday, June 10
2:00-4:30 PM

The poster features three logos at the bottom: Halifax Public Libraries (a colorful grid), Rural Water Watch (the 'rww' logo), and Global Water Dances (a globe with water splashes).



Well Checks

This year we also worked with community volunteers to undertake well checks with residents. We educated participants about well and well-area issues that may impact water quality.



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Healthy Wells Day 2023

We promoted Health Wells Day through a series of social media and email posts. The goal for this year was to reinforce the work we have been undertaking through public libraries and networking events.



Healthy Wells Day

OCTOBER 15, 2023

Healthy Wells Day is an annual campaign to remind well owners to test their wells for water quality. Did you know...



50% of property owners have not tested for chemical quality



Dug wells are highly susceptible to bacterial contamination from surface runoff, animals & household chemicals



75% of private wells are in high-risk areas for metal contamination due to Nova Scotia's geology



Exposure to bacteria & metals can cause sickness & long-term disease



You cannot taste, see or smell contaminants



Regular water testing is the **ONLY** way to know if your water is safe to use. Visit www.ruralwaterwatch.org for more information about Healthy Wells Day & well water safety tips.



Report of Activities 2023

Promotion & Partnerships

To create more awareness about Rural Water Watch, we created promotional materials (like the brochure shown here) to highlight the work of the Association.

DID YOU KNOW?

- Roughly 46% of Nova Scotians use groundwater supplied by private wells for drinking and other household use.
- Well owners are responsible for maintaining their wells and the quality of their drinking water.
- You can't see, smell, or taste contaminants.
 - Bacteria
 - Viruses
 - Parasites
 - Metals
- 50% of property owners have not tested for chemical quality.
 - Uranium (U)
 - Lead (Pb)
 - Mercury (Hg)
 - Chlorine (Cl)
 - Fluoride (F)
 - Nitrate (NO₃)
 - Nitrite (NO₂)
 - Ammonia (NH₃)
 - Iron (Fe)
 - Copper (Cu)
 - Zinc (Zn)
 - Manganese (Mn)
 - Sulfate (SO₄)
 - Calcium (Ca)
 - Magnesium (Mg)
- Dug wells are highly susceptible to bacterial contamination from surface runoff, animals & household chemicals.
- Exposure to bacteria & metals can cause sickness & long-term disease.
- 75% of private wells are in high-risk areas for metal contamination due to NS's geology.
 - Uranium (U)
 - Asbestos (As)
 - Manganese (Mn)

Got questions?

WEBSITE
www.ruralwaterwatch.org

EMAIL
ruralwaterwatch@gmail.com

NUMBER
(902) 233-4261

FACEBOOK
www.facebook.com/ruralwaterwatch

Rural Water Watch Association

WELL WATER QUALITY PROTECTION EDUCATION

ABOUT US

The Rural Water Watch Association is a Canadian educational charity that works in rural Nova Scotia on well water issues with a focus on marginalized communities. We educate communities about the need to regularly test well water quality, to protect themselves from potential contaminants and illness and to learn about ways to protect and manage their water supplies.

Rural Water Watch undertakes education and capacity building activities in communities, such as workshops, meeting with individual residents, and community sampling events. Through these activities, residents learn about wells, water quality/quantity, how to test drinking water, understand the results, protect the area around the well from contamination from domestic animals and wildlife waste or household chemicals, and check for maintenance issues like holes or missing well caps.

RWW maintains close partnerships with various institutional, non-profit and government organizations to promote access to healthy drinking water. We are always interested in sharing information, building partnerships with organizations, and working in communities.

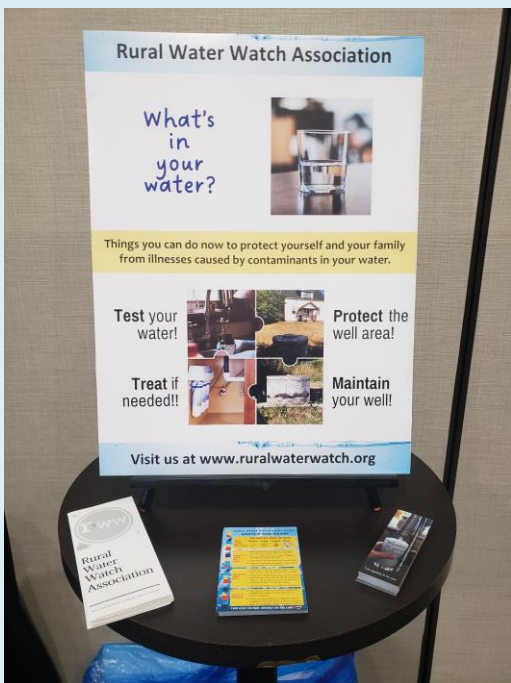
HEALTHY WELLS DAY

Each year, RWW hosts an awareness campaign called Healthy Wells Day on the third Sunday in October. The mission of Healthy Wells Day is to remind Nova Scotians to take a moment to think about their well water. We remind people to test their well water regularly and check the water system. Other awareness activities include community sampling events and online presentations on a range of topics - like climate change impacts to groundwater, by guest speakers and subject experts.

OUTREACH

Many of our community members face barriers to testing and accessing information. To help reduce some barriers, we partnered with the Halifax and South Shore Public Libraries in 2023 to set-up "What's in Your Water?" information displays at several branches.

Take-home information cards and bookmarks provide answers to many questions people have about their well water and highlights additional resources available in the province. The goal of water information displays is to nudge people to test their water.



In November we attended the NS Community Health Boards conference (CHB) which is supported by the NS Health Authority. The conference was well attended, and we had numerous attendees stop at our table to pick up information and chat about water issues in their area.



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Promotion & Partnerships

Rural Water Watch is partnering with the Centre for Water Resources Studies on a climate adaptation planning project under a grant from the Sustainable Communities Challenge Fund. We will mainly be assisting with community outreach.



Centre for Water Resources Studies

486 followers

6mo •



The #CWRS Hydrology team, in partnership with Rural Water Watch, was awarded funding under the Sustainable Communities Challenge Fund to advance climate adaptation plans. A project led by Dr. Barret Kurylyk, Dr. Rob Jamieson & Dr. Lauren Somers will receive \$343,300 in funding for research on climate change impacting groundwater entering rural communities. The fund was announced by provincial Environment and Climate Change Minister Timothy Halman on Thursday. Congratulations to the team! Learn more:



Outreach Coordinator or Research Associate: Climate Change Impacts on Community and Private Groundwater Supply in Nova Scotia

The Centre for Water Resources Studies at Dalhousie University and [Rural Water Watch](#) are seeking applications for a 12- to 15-month outreach coordinator focused on community engagement for a project related to the impacts of climate change on groundwater.

Project description: This outreach coordinator position is part of a project addressing the impacts of climate change on groundwater resources in Nova Scotia, where almost half of the residents and many vulnerable communities rely on groundwater for drinking water. The project is led by



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Projects & Activities 2024

- Increase connections with public libraries in NS, health centres, schools and NGOs to distribute healthy wells information.
- Undertake comparative analysis between at-home water test kits vs lab analysis for bacteria screening with the Centre for Water Resource Studies (CWRS) at Dalhousie University.
- Work with partners to increase the number of water testing events in communities.
- Increase the number of presentations delivered in 2024.
- Assist CWRS researchers with community outreach activities associated with their project on Climate Change Impacts on Groundwater in Nova Scotia.



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THANK YOU!!

Supporters and Partners:

Apex Sales

Nova Scotia Provincial Library

South Shore and Halifax Public Libraries

Dalhousie Centre for Water Resource Studies

NS Environment and Climate Change

NS Natural Resources

Thanks to Troy Lawrence, Wanda Doucette and Louise Delisle for their community project assistance and volunteer Courtney Gilfoy for her work on our communications plan and social media posts!