

IMPACT REPORT

2022

The future of water depends
on solutions developed today

ESTABLISHED BY



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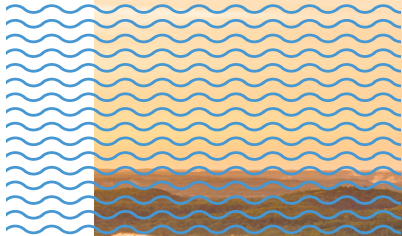


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OPENING REMARKS

Thankfully, unlike the past two years of searching for the silver linings of social isolation, my reflection at the end of 2022 is more about the wonders of gathering with family and friends again, discovering new places, and connecting with water across Canada.

This summer our family ventured beyond the borders of British Columbia and did a road trip to Ontario and back. **The trip took us through 14 watersheds and 3 drainage basins, and we went swimming, paddling, and played in as many of them as we could.**

We were awed by the vastness of Lake Superior with its sandy beaches, the escarpments of the South Saskatchewan River where the buffalo hunt traditionally took place, the unique features of the Badlands where dinosaurs once roamed, the multi-coloured confluence of the Yoho and Kicking Horse Rivers high in the Rockies, the majestic flow of the Columbia River, the winding South Thompson River through the semi-arid desert, and the mighty Fraser River with its steep canyons and nutrient rich delta.

It was humbling to experience the immensity of this country and so many of its waterways. Thanks to our WaterRangers Kit (2015 AquaHacking winner), we also tested water quality along the way. **My children measured pH, conductivity, and oxygen levels with enthusiasm and curiosity.**

In the moments when my personal and professional worlds merged, I knew the ‘why’ of our work.

Since the start of AquaAction, we have been improving and growing our programming to increase positive outcomes for freshwater. This year was no exception. In the following pages, you’ll read about our new approach to regional partnerships for the Challenge, the refined understanding of the Alumni community we are gaining, and the insights from the newly launched AquaEntrepreneur program.

So many things stand out for me. To name a few – **water truly is at the center of the SDGs:** water tech enterprises within our community are actively working on virtually every UN sustainable development goal; **water innovation development requires a tailored approach** enabling a supported space for water innovation testing is critical for implementation; innovative **water entrepreneurs are going to be important drivers of a new, blue, and clean economy:** reported secured-investments and employment figures have doubled since last year for the alumni community.

These impacts, and more, also make clear for me the ‘why’ of our work. Thank you for being part of this movement.



Kariann Aarup,
General Manager,
AquaAction

OPENING REMARKS

The climate crisis is a water crisis. From flooding to drought and forest fires, 97% of all climate change impacts are connected to water. This year, these extreme events continue to be my biggest teachers.

Canada is warming faster than the global average and holds more than 20% of the world's freshwater, yet there is no collective focus on this crisis, which is worsening daily.

We do need to achieve net zero and embrace alternative energy. However, we also desperately need to focus on solutions for how **climate change is impacting us right now**, and for the new climate reality we are starting to face due to already high levels of greenhouse gases in the atmosphere.

Our focus must be on freshwater, the second most vital source of life after oxygen.

For too long, we have been complacent, lulled by a false sense of water abundance in Canada. Candidly, **I very much regret my own lack of awareness and inaction until these past few years. It took my children, nephews, and nieces to sound the alarm bell within our family and wake us.**

We now know better and the time to act is upon us.

Our family launched AquaAction as a **catalyst to engage young innovators to help us solve the freshwater crisis**. Through these efforts we are seeing entrepreneurial young Canadians hard at work to make a tangible difference on critical issues, such as aging municipal infrastructure, water quality data deficiency, microplastics, blue-green algae, invasive species, drinking water quality, E. coli detection, and far more. These are solutions that benefit us here at home, and they can also have impact globally.

We are encouraged by these outcomes. And we're eager to see more of them.

At AquaAction, we have bold plans to grow our programs, embed our initiatives across Canada, and ensure that there is a **deep well of water entrepreneurs who are primed to provide the solutions we need** in order to face the climate crisis.

But we cannot do this alone. We call on you to join us in supporting the next generation of innovators.

Let's take AquaAction, together.



**François de Gaspé
Beaubien**

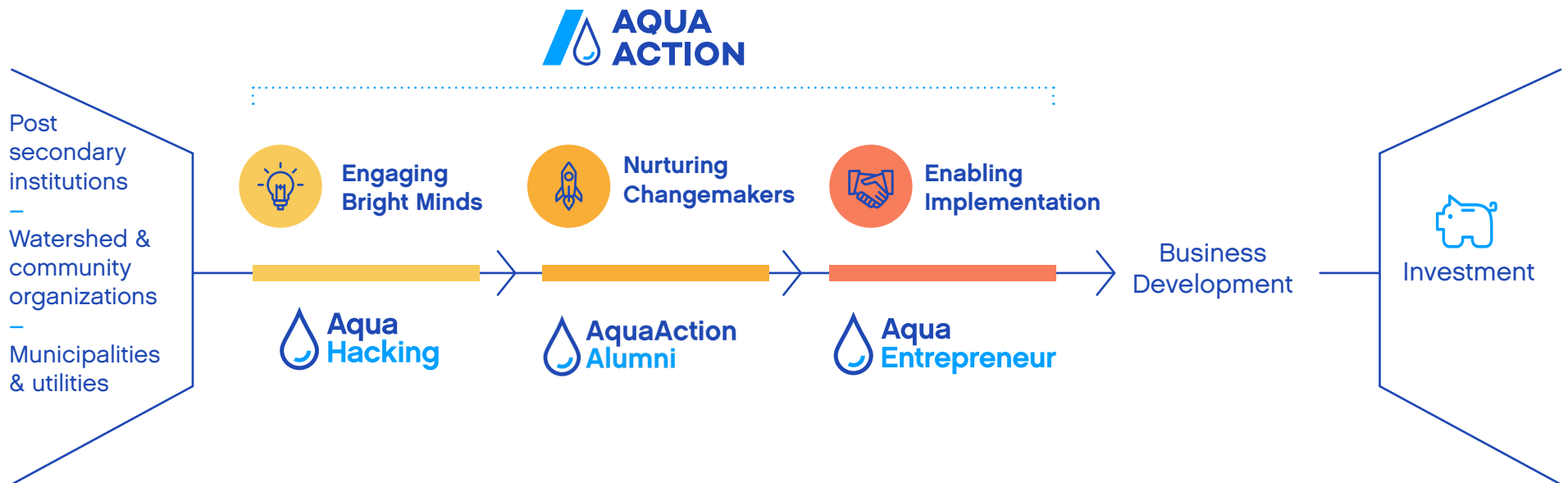
Chair, AquaAction

HOW WE CREATE IMPACT

Since day one, AquaAction's mission has been to positively impact freshwater health by enabling innovative tech-based solutions from early concept development through to implementation.

Our suite of programs has evolved based on what we've observed and learned over the years. The **AquaHacking Challenge**, **AquaAction Alumni**, and **AquaEntrepreneur** are designed to build upon one another, each filling a gap in the water tech innovation cycle.

In the next pages, you will learn more about each program and read the stories of three early-stage nextGen- start-ups within the AquaAction community of water change-makers.





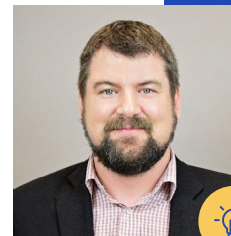
Engaging bright minds

AquaHacking engages nextGen innovators as they solve freshwater issues in Canada, from source-water protection, to climate impact mitigation, to improved water management.

In 2022, we took time to reflect on our flagship program to have a more sustainable impact on water. From this, we developed a bold **5-year plan** to establish a **multi-year recurring programming** across Canada in partnership with regional water leaders.

We will start rolling this out with our partners in Atlantic Canada and Quebec in 2023!

- In Atlantic Canada, where we've launched the **2023 AquaHacking Challenge**, we are partnered with Saint Mary's University Entrepreneurship Centre and the Atlantic Water Network.
- In Quebec, we have partnered with Réseau Environnement, Stratégies Saint-Laurent, and ROBQV to deliver **AquaHacking Québec** from 2023 to 2026.



"AquaHacking is the type of interdisciplinary competition that allows students and young people to apply their knowledge to practical, real-world situations. We are proud to partner with AquaAction to bring this great competition back to Atlantic Canada."

– Michael Sanderson, Director, SMUEC, SMU and Co-host of AquaHacking Atlantic Canada



Nurturing a network of changemakers

The AquaAction Alumni program unites water-minded innovators from across Canada to support their entrepreneurial endeavours by **facilitating connections** amongst their peers and with expert advisors, **organizing educational and networking events**, and **identifying opportunities** unique to the water tech sector.

Over eight years of AquaAction programs, there are

28

active start-ups
in the Alumni
community

86%

of start-ups have
incorporated

54%

include a female
co-founder



“Participating in Startupfest 2022 as a member of the AquaAction Alumni community allowed us to greatly expand our network. We had the incredible opportunity to meet with potential investors and incubators.”

– Clément Bouland, Co-founder, Bello Solutions



ALUMNI IMPACT AT A GLANCE

ECONOMIC IMPACT

In 2022, these companies reported:

\$4.9M
in investments
More than double in 2021

\$6M
in annual
operating
budgets

\$3.8M
in salaries
3x greater than the value
reported in 2021

76 JOBS
More than double the number
reported in 2021

30,000
volunteer hours
50% increase from 2021

The faces of the
future of water



SOCIAL IMPACT

AquaAction Alumni start-ups are engaging Canadians to be active stewards for freshwater.

15,400
volunteers engaged

123,600
volunteer hours

dedicated by co-founders to the
development of the start-up

1.9M
individuals educated about water issues
as a direct result of AquaAction Alumni start-ups' outreach
and education efforts



ALUMNI IMPACT AT A GLANCE

CONTRIBUTIONS TO SUSTAINABLE DEVELOPMENT GOALS

81% of start-ups

reported that they are directly addressing SDG 6: Ensure access to water and sanitation for all

6 CLEAN WATER
AND SANITATION



78% reported that they are also working on more than one SDG objective including (but not limited to)

13 CLIMATE
ACTION



Take urgent action to combat climate change and its impacts **56%**

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



Build resilient infrastructure, promote sustainable industrialization and foster innovation **41%**

14 LIFE
BELOW WATER



Conserve and sustainably use the oceans, seas and marine resources **41%**

HERE ARE FOUR TANGIBLE EXAMPLES



Smartrek's (AquaEntrepreneur Québec 2022) solution allows for improved response rate to address new water leaks in real-time by increasing the frequency of data reception via cellphone from

2x to 280x per day



Water Rangers' (AquaHacking 2015) community members have collected and shared results from over

44,253 water quality samples



EMO3's (AquaEntrepreneur Québec 2022) solution resulted in the complete elimination of recurring biocides in water treatment representing

4,000 litres
(1,000 gallons) per year



Geosapiens' (AquaHacking 2018) solution has resulted in the modelling of

37,000
sub-watersheds to
assess flood risk

ALUMNI IN THE MEDIA

Geosapiens receives nearly **\$300,000 in funding from the Canadian Space Agency** to develop innovative approaches that use Earth observation data to better manage floods through prevention and crisis management.

CISION, January 27, 2022



[READ ARTICLE](#)



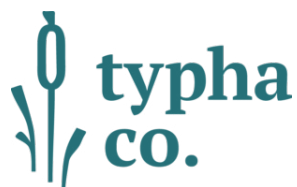
[READ ARTICLE](#)

Equator, Geosapiens, and Blue Lion Labs receive seed funding and are **ranked amongst the 38 most promising new Canadian cleantech companies** by Sustainable Development Technology Canada.

SDTC, December 9, 2021

Typha Co. closes the circle on Lake Winnipeg pollution.

Supply Chain Manitoba, August 2022



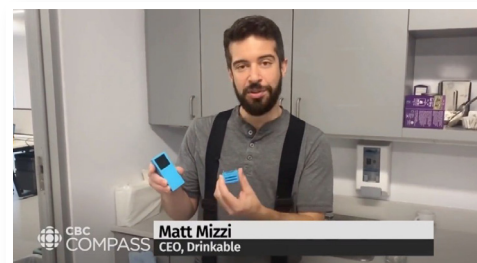
[READ ARTICLE](#)



Naysan Saran of **CANN Forecast** named one of the top five female AI entrepreneurs in Montreal.

CScience, May 27, 2022

[READ ARTICLE](#)



Drinkable featured in a journalistic report at CBC Compass.

CScience, May 27, 2022

[WATCH VIDEO](#)





Introducing solutions to municipalities

AquaEntrepreneur was launched this year in Quebec. It's focus on enabling water tech start-up to understand and **access the municipal market** and **pilot their technologies** is critical in achieving solution-implementation.

Participating enterprises receive expert business and technical coaching and interested municipalities are engaged from across the province. We received \$2 M in funding from the Government of Québec's Ministry of Economy and Innovation, based on the outcomes of a smaller scale pilot conducted in Montreal, in which local start-ups were able to improve their business models, establish new partnerships, and initiate beta-test opportunities.

Six Quebec-based water-tech enterprises are part of this year's first cohort, and as we learn and improve upon the program, we look forward to expanding to other regions across Canada.

Stay tuned and check AquaAction's website for up-to-date program reports.



"My participation in the program helped me bring my pilot project to fruition, thanks to the quality coaching I received from business experts and the program organizers."

– Aziz Gherrou, Founder, ChemBrains



Above, AquaEntrepreneur Cohort 1, Below : MEI Funding Announcement with The Honorable Pierre Fitzgibbon, François de Gaspé Beaubien and Karim Benessaïh from La Presse.



START-UP SUCCESS

Clean Nature has travelled through the full suite of AquaAction programming since the 2019 **AquaHacking Challenge**, through the **Alumni Program** and now are part of **AquaEntrepreneur**.



Their critical artificial intelligence decision-making tool helps reduce the impact of road salt run-off on freshwater streams and lakes.



DID YOU KNOW? 7,700 North American lakes are endangered by the runoff of salt used to de-ice roads in winter.



Claudie Ratté-Fortin, Patricia Gomez & Anne Carabin



SEPT 2019

Won second place in the Great Lakes Challenge; received **\$15,000** in seed funding



JAN 2020

Secured a spot in the Spektrum incubator

WINTER 2020

Connections facilitated with City of Montreal to discuss potential pilot projects



JUNE 2020

Won the WWF-Canada Generation Water Tech Challenge



DEC 2020

Co-founder Anne Carabin wins the Relève Eau André-Perrault Award



SEPT 2022

Selected as part of the first-ever cohort of companies



“It is a pleasure to be part of the AquaEntrepreneur program! It is helpful to be guided through the process and to have the opportunity to adapt our solution to the municipal market.”

START-UP SUCCESS

From their 5th place finish at the **AquaHacking Challenge** in 2020, Drinkable has been a rising star in the **AquaAction Alumni** community, with their affordable, water quality testing device.



SEPT 2020

Won fifth place in the Atlantic Canada Challenge; received **\$2,500** in seed funding



SEPT 2020

Secured a spot in the Emera IdeaHUB incubator

JUNE 2022

Selected by Sustainable Development Technology Canada as one of 16 emerging Canadian companies to receive funding as part of a **\$1.6M** seed funding envelope



NOV 2022

Won **\$55,000** prize from BioInnovation Challenge



DID YOU KNOW? Private well owners don't currently have an easy and affordable way to test the quality of their drinking water.



Anita Taylor, Robert Afari, Matt Mizzi & Lee Scully

"Thanks to our AquaHacking seed funding award, we invested in 3D printing for our prototype, website design/development, organizational software, coffee/lunch meetings with potential advisors, legal considerations, and app design subscription. It was a small push to help us make our first steps as a company."

– Drinkable Water Solutions

START-UP SUCCESS

Ecotime Solutions has been in the fast lane since their 2nd place finish in the **AquaHacking Challenge** in 2021, through **AquaAction Alumni** and incubation, to the **AquaEntrepreneur** Montreal pilot program. Their recent win of the Quebec Circular Economy Prize foreshadows good things to come for this young start-up!



SEPT 2021

Won second place in the Rivière des Mille Îles Challenge; received **\$15,000** in funding



“Our participation in the program helped us better understand the market sector, which led directly to a study with one of the largest cities in Québec. The ecosystem of support including quality coaching and access to professionals helped us evolve as a company. Being part of AquaEntrepreneur Montreal made a big difference for us.”

– Ecotime



SPRING 2021

Secured a spot in the Esplanade incubator program



AUG 2021

Participated in the Montreal 2021 cohort



DID YOU KNOW? Rooftops in Quebec receive on average 1,000 litres of rainfall per year, which is lost as run-off.



Timothé Roy-Bouchard & Eddy Dureuil



MAY 2022

President and co-founder
Timothé Roy-Bouchard awarded the André-Perrault Water Succession Award by the Centre d'Interprétation de l'Eau



OCT 2022

Won the Quebec Circular Economy Prize



IN PERSON AGAIN IN 2022



**Salon des technologies
environnementales du Québec (STEQ)**
May 17-18 QC

MTL Connecte
October 20
Montréal, QC



**Sommet international de l'innovation
en villes médianes (SIiViM)**
October 25-27
Thetford-Mines, QC



**Site visit with alumni & Challenge
partners in Halifax,**
December 1, Halifax, NS



Great Lakes Public Forum
September 27
Niagara Falls, ON



Startup Community Awards 2022
December 1
Montréal, QC

SHARING THE STORY OF THE VALUE OF WATER

Action comes from awareness. In 2022 we made a concerted effort to raise water awareness.

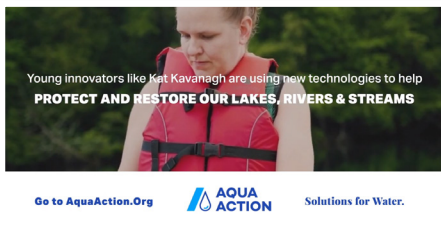
WORLD WATER DAY

March 22

AquaAction deployed a multi-platform campaign. We released three short videos highlighting water issues that affect every Canadian.



[WATCH VIDEO](#)



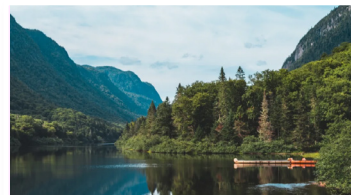
[WATCH VIDEO](#)



We got the message about water out across Canada through 18,491,365 impressions!

Editorial article written by François de Gaspé Beaubien in La Presse

[READ ARTICLE](#)



EARTH DAY

April 22

AquaAction launched a public relations campaign to raise awareness for our cause and spread the word about the water crisis facing Canada.



[WATCH VIDEO](#)

TED TALK

October 22

AquaAction's Chair, Francois de Gaspé Beaubien, took to Brentwood College School's stage to talk about the water crisis we are all facing.



THE PEOPLE OF AQUAACTION

It takes an ecosystem of people and organizations to do the work we do. Each of us plays an essential and interconnected role to achieve the positive impacts for freshwater that we so urgently need.

We are motivated by the momentum around AquaAction's work, and we thank you all – from the water that runs through our veins, to the water that runs through the inland and coastal waterways – for your support, encouragement, and unwavering commitment.

OUR TEAM



Kariann Aarup,
General Manager



Dominique Monchamp
Senior Advisor



Laurence Basso,
Communications
Coordinator



Anne-Pascale Richardson
AquaHacking
Program Manager



Sylvie Charbonneau,
AquaEntrepreneur
Program Director



Mélissa Dick,
Impact
Acceleration
Manager



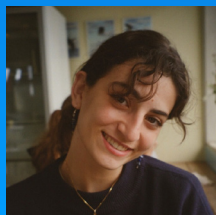
Alejandro Martinez-Ramos,
Start-up Community
Coordinator



Vittoria De Palma,
Controller



Léa Baroud,
Communications
Intern



Myriam de Lenoncourt,
Communications
Intern



Syfax Farez,
Database Analyst
Intern



Aidan Price Gallagher, Donor
Development &
Outreach Intern



OUR BOARD



François de Gaspé Beaubien, Chair, AquaAction

Chairman & CCO, Zoom Media



Nan-B de Gaspé Beaubien, Founding Chair, AquaAction
Co-Chair and Founder, de Gaspé Beaubien Foundation



Simon Olivier, Lead Director of the Board, AquaAction

Senior Partner, Cycle Capital and lead of BleulImpact Fund

“We have underinvested in the water sector. The recent climate crisis forces us to spark innovation. Water has no substitute – with AquaAction, we propel sustainable technological solutions to ensure freshwater’s future and raise awareness about the water crisis.”

– Simon Olivier



Barrie Laver, CPA, CA. ICD.D

Managing Director, Venture Capital & Private Equity, Royal Bank of Canada



Blaine Favel, Founder of First Peoples Pipeline
CEO, Kanata Earth



Pierre-Marc Sarrazin, President, Corporate Finance & Treasury, Ovivo

“I am involved with AquaAction because of its core mission, which contributes to two of my great passions: entrepreneurship and environmental protection. It is very rewarding to make a lasting difference through the creation and acceleration of innovative start-ups developing solutions to water-related problems.”

– Pierre-Marc Sarrazin



Matt Price Gallagher, President & CEO, Watercluster Scientific



Allen Lalonde, Former IBM Canada Senior Innovation Executive

“AquaAction is notably different from other environmental initiatives. It addresses the priority challenges facing water through technology innovation and broad engagement, leading to new solutions that grow businesses, create new jobs, and leave a legacy of youth empowerment.”

– Allen Lalonde

OUR PARTNERS

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Worldwide Experts in Water Treatment



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