

IMPACT REPORT

2023



Établie par / Established by



Fondation
de Gaspé Beaubien
Foundation

Propulsée par / Powered by



RBC
Tech for
Nature.

Accélérée par / Accelerated by



Worldwide Experts in Water Treatment
Experts mondiaux en traitement de l'eau



OUR MISSION IS TO RESTORE FRESHWATER HEALTH IN NORTH AMERICA

- ✓ Engaging **young innovators**
- ✓ Empowering youth as they turn their solutions into **clean-tech start-ups**
- ✓ Developing **job skills and competencies** for a **blue economy**
- ✓ Enabling **commercial adoption and economic expansion**

Water is life.



FONDATION DE GASPÉ BEUBIEN

A Family's Mission to Protect our Freshwater

The de Gaspé Beaubien family, a prominent Canadian family, established the Fondation de Gaspé Beaubien in 1990 to reflect the family's deep commitment to the community by focusing their projects on families in business and entrepreneurship. In 2012, the young generation of the family has brought the adults and the elders in environment, particularly focusing on water conservation and management. Headed by Philippe and Nan-b de Gaspé Beaubien, the family's multi-generational involvement in water-related issues is not just philanthropic but also deeply personal and driven by a sense of responsibility towards future generations.

The de Gaspé Beaubien family made their mark in the Canadian business world through various ventures, most notably in media, magazines, and broadcasting. However, their passion for environmental issues, especially water, led them to pivot their focus towards this critical area. The foundation's work in water conservation and management is diverse, encompassing initiatives like supporting research in water management, advocating for sustainable water practices, and raising awareness about the importance of preserving water resources through their charity, AquaAction.

The Fondation de Gaspé Beaubien's approach to water conservation is holistic. They understand that water issues are interconnected with various aspects of society and the environment. Therefore, their initiatives often involve collaborations with different stakeholders, including governments, businesses, communities, and other non-profit organizations, to create a more sustainable impact.



Dominique Moncahmp

Directrice General, Fondation
de Gaspé Beaubien



Fondation
de Gaspé Beaubien
Foundation



CONTENTS

Forward.....	4
The AquaAction Team & Board of Directors.....	7
A Year of Impact	8
Economic Impact.....	7
Environmental Impact	11
Social Impact	14
Notable Highlights.....	17
Policy Impact	19
AquaAction Programming	20
The AquaHacking Challenge	21
The 2023 Innovation Challenges	22
The AquaEntrepreneur Program	28
The 2023 Cohorts	29
The AquaAction Community	33
Awareness and Job Skills Development	35
The AquaAction Changemakers	37
Our Partners	41
Looking Ahead	43

A YEAR OF ENVIRONMENTAL & ECONOMIC ACTION

Water is the essence and sustenance of all life, forming the very bedrock of our existence and prosperity. Freshwater is central to our survival, driving the functions and services that underpin our societal fabric. By 2030, the global demand for freshwater will exceed supply by 40%.

According to a [2023 WWF report](#), in the first ever estimate of the economic value associated with water and freshwater ecosystems, 60% of global GDP (or \$58 trillion) runs on freshwater, which underscores the "irreplaceable" role this resource plays in supporting food security and human health.

The escalating water and climate crises underscore the criticality of freshwater to the national economy and security. Extreme droughts, rampant wildfires, atmospheric rivers, and the rapid depletion of ice packs and glaciers serve as harbingers of a dire need for immediate and robust action. Water scarcity is rapidly becoming a national security concern as the availability of this vital resource dwindles.

At AquaAction, our mission is galvanized by this pressing urgency. There's a strong optimism in the innovative spirit being applied to water management. We are witnessing an unprecedented wave of creativity from NextGen innovators and entrepreneurs who are embedding environmental values at the core of their endeavors. By developing groundbreaking freshwater technologies, they are not just bolstering communities and ecosystems but also ensuring the economic framework is both sustainable and regenerative.

We are proud to present AquaAction's annual impact report, a testament to the transformative ideas and technologies developed by our partner entrepreneurs. Their drive towards a more climate-resilient reality is not only admirable but vital. This year, we continue to be inspired by their unwavering dedication to the restoration and preservation of our freshwater resources.

The climate crisis is unequivocally a water crisis. The narratives within this report offer hope and a call to action. We invite you to draw inspiration from these achievements and to participate in [#TakingAquaAction](#), propelling us forward, one innovative solution at a time.



Soula Chronopoulos,
President



François de Gaspé Beaubien
Founding Chair,
AquaAction

Gratitude sets the tone for this Impact Report from the AquaAction Foundation. As the Chair of this organization, I extend my heartfelt appreciation to you, the reader, for your concern and engagement with the critical issue of our freshwater crisis.

The urgency of our mission cannot be overstated. Every drop of water is precious, yet our global freshwater supply faces a multitude of challenges. Did you know that the average person unwittingly consumes 5 grams of microplastics each week through water consumption alone? Imagine, that's akin to digesting a credit card's worth of plastic every seven days, or a stack of 52 credit cards per year. These microplastics insidiously infiltrate our vital organs, contributing to health risks such as arterial plaque buildup. This alarming fact is just one facet of the myriad challenges threatening our freshwater resources.

However, amid these daunting realities, there is reason for hope. We are inspired by the tenacity and ingenuity of young tech entrepreneurs who are actively developing solutions to our freshwater crisis. Their innovations offer promising avenues for addressing and mitigating the challenges we collectively face, from reducing ground water contamination to ensuring we have viable data through infield samples across Canada and now the US.

By engaging with AquaAction, you become a vital part of this movement for positive change. Your support empowers us to nurture and amplify the efforts of these visionary innovators, catalyzing real-world impact (over 80 companies solving water issues in our portfolio and growing!). Together, we can and will overcome the freshwater crisis that looms before us.

Join us in the fight for water health. Together, we possess the collective power to effect transformative change. As you peruse this report, consider the profound difference we can make when we unite in purpose. With deep gratitude, I thank you for your unwavering commitment to our cause and for joining us on this journey toward a sustainable future.

A CALL TO ACTION FOR OUR FUTURE

NAN-B DE GASPÉ BEAUBIEN

As I approach 2025 and my 90th year, my thoughts converge around wondering if all the work and effort of AquaAction will be sufficient to awaken citizens to our water crisis before I depart this earth.

My grandchildren awakened me to the impending water crisis 10 years ago and convinced me that our Foundation should take on this cause because my generation had left them a terrible legacy which they were going to have to clean up.

It has been 10 years since that call to action and all of us associated with AquaAction have worked long and hard to accomplish all that you will read in this impact report. We are extremely proud of these accomplishments, but we are also cognizant of all that still needs to be done.

I, and all my family members, will continue to devote their time and effort to restore freshwater health in North America. Our incredible team at AquaAction will continue to work long hours helping our young entrepreneurs with their groundbreaking solutions to freshwater issues, and our partners, who believe in our work will continue to support us.

I would ask each of you that every time you see and smell another forest fire, another heavy rainstorm that floods your streets and overwhelms the infrastructure, another time that you are asked to boil your water or read about another drought ...you stop and consider how this water crisis is affecting your life.

We need your help. Please join us at AquaAction.



Nan-B de Gaspé Beaubien
Founding Chair, AquaAction

THE AQUAACTION TEAM



Soula Chronopoulos
President



Kariann Aarup
VP Program
Development & Impact



**Anne Pascale
Richardson**
Director, AquaHacking
Challenge Program



Laila Benameur
Director, AquaEntrepreneur
Program



Kayla Menu-Courey
Director of Business
Development



Jean-Sébastien Gasse
Director of Digital
Platforms and IT Strategy



Stefania del Torso
AquaEntrepreneur
Program Coordinator



Juliette Dufresne
Program Coordinator



Patricia Dorne
Senior Consultant and
Coaching Community
Lead



**Sophie-Catherine
Huneault**
Social Media
Coordinator



Marilou Filliol
Marketing Communications
Coordinator



Vittoria De Palma
Controller

BOARD OF DIRECTORS



Nan-B De Gaspé Beaubien
Founding Chair, AquaAction



François de Gaspé Beaubien
Founding Chair, AquaAction



Barrie Laver
Managing Director, Head Venture
Capital & Private Equity, RBC



Pierre-Marc Sarrazin
Vice-President, Corporate Finance,
Development & Treasurer, Ovivo



Kevin Chan
Global Policy Campaign
Strategies Director, Meta
Platformsv



Helen Sheridan
Chief Human Resources
Officer, STEMCELL
Technologies



Daniel St-George
Associate Partner IBM



A YEAR OF IMPACT!

2023



JANUARY

AquaAction inks a 3-year deal with Northwestern Michigan College for the first Great Lakes AquaHacking Binational Challenge



US Expansion – AquaAction's US registration marks its new status as a North American charity

Typha Co. (AH '20) is featured in the news for their sustainable Agtech: Eating wall to fork! [Winnipeg Free Press](#)

FEBRUARY

The AquaEntrepreneur 2023 sees a recruitment spike, with 26 water tech companies joining Cohort 2, marking a 366% increase from 2022

OzeroSolutions (AH-BC '20) awarded the Young Professional Award at the Invasive Species Centre - [LINK](#)

SmartrekTechnologies (AE-QC '23) announces partnership with Veolia - [LINK](#)

MARCH

AquaAction welcomes **Juliette Dufresne** as Program Coordinator

Clean Nature (AH '21, AE-QC '22) announces their AquaEntrepreneur pilot project with the City of L'Assomption - [La Presse](#)

April

Cann Forecast (AH '16) announces their research project with nine Canadian municipalities - [link](#)

AquaEntrepreneur 2022 Celebration at Quebec Aquarium, showcasing over \$100M in revenue and 200+ new jobs, supported by Ministers Pierre Fitzgibbon, Christopher Skeete and 19 enterprises

May

AquaAction new board appointments for **Kevin S. Chan** (Meta Platforms) and **Helen Sheridan** (STEMCELL Therapeutics)

AquaActions develops national partnership with the Great Lakes & St-Lawrence Cities Initiative



June

Circulus Agtech (AE-QC '23) won \$100,000 at Spring Activator's Quebec Cleantech Investment Challenge. [Link](#)

Bello (AH '19) secures \$200,000 in funding on L'oeil du Dragon/Dragon's Den televised on ICI Radio-Canada! [LINK](#)

First binational Great Lakes AquaHacking Challenge opens

5 new startups are launched from Atlantic AquaHacking Challenge finale



July

AquaAction/Chairman **François de Gaspé Beaubien** is featured in Videotron's documentary *La course à l'or bleu | Vrai | Vidéotron* ([videotron.com](#))

Blue Lion Labs (AH '17), wins \$30,000 at The Next Big Thing pitch competition, a highlight of #OceanFest - [LINK](#)

AquaAction welcomes **Sophie-Catherine Huneault** as Social Media Intern

AUGUST

Collaboration with McGill Dobson Centre to launch an annual accredited course on Entrepreneurship with a focus on sustainability in retail, centered around water, for McGill University's Bensadoun School of Retail Business



McGill Dobson Centre
for Entrepreneurship

BUILDING INNOVATIVE COMPANIES WITH A PURPOSE

Hoola One Technologies (AE-QC '22) was honoured with the Youth Initiative Award [LINK](#)

[Sentiom \(AE-QC '23\)](#) and [Cisco Canada](#) launched a new intelligent building solution [LINK](#)

AquaAction welcomes **Laila Benameur** as AquaEntrepreneur Program Director and **Patricia Dorne** as Senior Consultant, leading the Coaching Community

SEPTEMBER

Sponsorship inked with Water Rangers, the first AquaHacking winners, stewarding WWF's Watershed Report

Stefania del Torso steps in as our new Program Coordinator

AquaHacking Great Lakes Challenge kicks off, drawing 36 startups and 160 contenders from 40 top universities for its inaugural binational competition

Quebec 2023 AquaHacking Finale lunches 5 innovative new startups!



[O'land Stations \(AH '19\)](#) achieves major milestone of saving 1 million plastic bottles with their solution! [LINK](#)

[Water Rangers \(AH '15, AE-QC '23\)](#) secures contract with the municipality of Val-des-Monts. [LINK](#)



OCTOBER

AquaEntrepreneur AquaCamp: A dynamic 2-day networking event at Centech, uniting municipalities, entrepreneurs, and investors.

[Ozero Solutions' \(AH-BC '20\)](#) stations are available in Val-d'Or! [LINK](#)

NOVEMBER

Our new cutting-edge educational platform and microcredit program is launched! Focused on **Freshwater and the Blue Economy**, this program designed to enhance job skills through our AquaHacking Challenge, now accredited by Northwestern Michigan College



*[Geosapiens \(AH-QC '18\)](#), with their national flood mapping strategy using AI, is all over the news! *La Presse* – **[Mieux gérer les risques d'inondation](#)***

DECEMBER

AquaEntrepreneur scales: The 2024 cohort attracts 34 companies (30% growth over 2022!)



AquaAction and entrepreneurs from CannForecast, X-telia, and BioAlert convened with David Cohen, US Ambassador to Canada.



80+

Active companies
in portfolio



North America

Coast to coast
programming



\$200M+

Revenue
generated
annually



>55%

Female
co-founders



270+

New jobs in the
blue economy



40M+

Capital raised



1000+

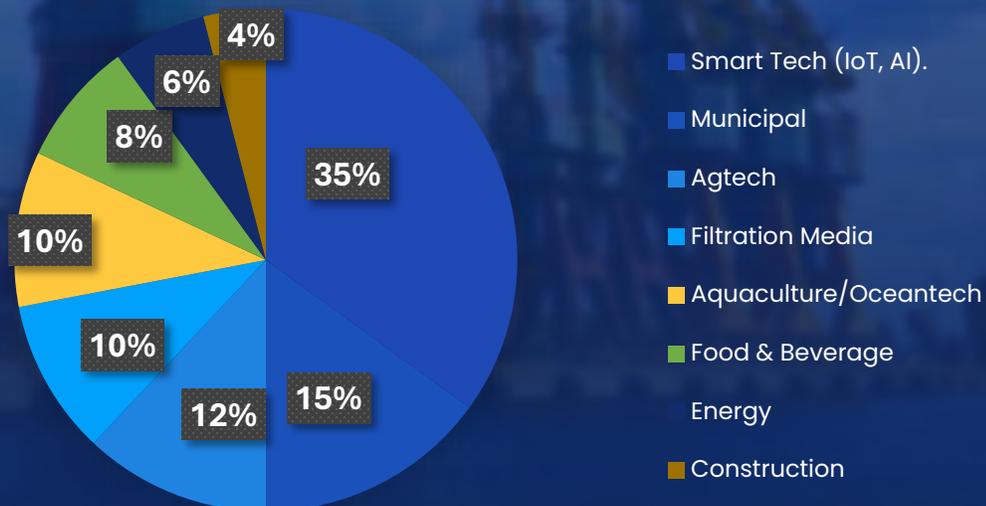
Commercial adoptions



90+

Investors

Industry Sectors





IMPACT BY THE NUMBERS

ENVIRONMENTAL IMPACT

The enterprises in the AquaAction community are deeply committed to making a positive difference for freshwater and the natural environment through the development and deployment of their solutions. Water technologies can be applied toward achieving several of the SDGs and we see that among a high percentage of the start-ups and scale-ups within our community.

QUANTITATIVE ACHIEVEMENTS

SDGS ADDRESSED



56%

SDG6

Water and sanitation



44%

SDG13

are working on NetZero and GHG emission reduction



58%

SDG9

Industry, innovation and infrastructure



36%

SDG14

Life below water



90%

reduction of groundwater contamination

and reduction of municipal water treatment load, and approximately 85% reduction in GHGs, linked to reduced manure storage and use of synthetic fertilizers

- Circulus AGtech



80%

reduction of freshwater wasted

in residential buildings, reduction of 1 tonne of GHGs per installation, and 15% saving on energy expenses

- Sentiom



Over 1 MILLION

plastic bottles saved

resulting in 100 tonnes of carbon emission reduction based on single use plastic bottle reductions

- O'Land Stations



Restoration of 32 ACRES

of wetlands

for freshwater pollution reduction in Ontario

- Water Rangers



« Over 200,000+ water quality data points have been captured on the Water Rangers platform, 25,000+ people have been trained on water quality testing, and 5,500+ water quality test kits have been distributed to citizens across North America. »

Kat Kavanagh
Water Rangers





« Our technology has recycled over 3.6 million litres of water and diverted 6 tonnes of waste from landfills; this has resulted in a 90% reduction in contamination rates and an 80% reduction in water discharge volume. »

Aziz Gherou
Chembrains



SOCIAL IMPACT

AquaAction is committed to creating an inclusive and diverse environment and we advocate equal opportunities where diversity of background, experience and viewpoint is valued.

OUR SOCIAL IMPACT IN 2023 INCLUDED:

50%
first-time founders
(entrepreneurs)

25%
of our founders
are **new arrivals to
North America**

**Over
40**

**academic
institutions**

engaged with our
programs across
North America,
increasing the number
of young innovators
that were inspired to
solve water
challenges

Most founders are women:

53%
of ALL respondents
across **all our
programs**
report at least 1
female founder

61%
of all of respondents
with enterprises
emerging **from the
AquaHacking
Challenge** report
at least 1 female
founder



Kariann Aarup
Vice President of
Program
Development &
Impact, AquaAction

“We continue to see that water tech attracts women innovators and entrepreneurs. It is not surprising really. In many Indigenous cultures, women inherit the role as water protectors for their communities. If through our programming we can foster that same sense of protector but in a new form, then we know we are on the right path with our work.”



«The personalized and tailored support we get from the AquaAction team ever since we graduated from the AquaHacking Challenge program has been phenomenal. They wield a tremendous network of contacts – local and international – and have been so open in sharing them with us, creating opportunities for us to pitch to potential new markets and clients. The latest was a networking and pitch session to the US trade commissioners and Ambassador to Canada. Being included in the AquaAction community of enterprises is an incredible benefit of having gone through one of their program streams.»



Naysan Saran,
Co-Founder and CEO,
CANN Forecast

Notable Highlights: Sponsors

Our sponsors at AquaAction are integral to the strides we're making in corporate sustainability; their generous backing fuels our initiatives that aim to safeguard water ecosystems. Their commitment not only empowers our projects but also reflects a shared dedication to nurturing a more sustainable future through meaningful and actionable support.

OVIVO joins forces with AquaAction at WEFTEC to demonstrate environmental, social and economic leadership

Ovivo, a long-time valued supporter of AquaAction, excels in delivering state-of-the-art water treatments, ensuring global access to clean water and enhancing environmental health. This year, AquaAction was invited to join Ovivo at WEFTEC in Chicago, to highlight these commitments by engaging with global industry leaders.

«To achieve global water security, we need bold ideas. Women have a critical role to play, and participating in AquaAction's programs can help them cultivate their solutions.

My advice to women in water: Be bold. Be passionate. Get your hands dirty. »

Elena Bailey,

Business Development Director,
Municipal and Industrial Division,
Ovivo North America

RBC Foundation, through RBC Tech for Nature, renews its multi-year support of AquaAction and includes us in their national Give \$100 Get \$100 campaign.

RBC Foundation has contributed millions in funding to projects that enhance sustainability and combat climate change effects. The national support from RBC Foundation, through RBC Tech for Nature, has been critical in driving our program reach across Canada as we seek to make an ever-increasing impact!

« RBC is committed to accelerating the transition to a greener economy by supporting new ideas, technologies and partnerships that solve pressing environmental challenges. We're proud to support AquaAction and their work around leveraging technology and data to find innovative solutions around freshwater in North America. »

Andrea Barrack,

Senior Vice President - Corporate
Citizenship and ESG at RBC

Xerxes joins AquaAction as a major sponsor

For over 50 years, Xerxes has been a pivotal force in advancing global infrastructure through highly engineered technologies, impacting key sectors like energy, automotive, and water management.

« As a proud partner of AquaAction, we are excited to engage with a new generation of brilliant students and young professionals that are just as hungry for innovation as we are at Xerxes. Participating as a water issue leader and as a member of the advisory committee of the AquaHacking Challenge has been incredibly enriching and rewarding.

In these roles, Xerxes is enabling the development of critical water solutions across North America, which is core to our business and our values. »

Jim Merchlewitz,

Sr. Manager, Technical Programs,
Stormwater Markets, Xerxes



Notable Highlights: Collaborations

AquaAction recognizes that complex issues require complex solutions, and for water solutions, we believe that we must all work together to accelerate progress and revolutionize the water sector as we know it. AquaAction is uniquely positioned as a bridge between multiple sectors: government, private, environmental, academic, and more. Through synergies, critical partnerships throughout the entrepreneurial journey, sharing of resources, and proactive exchanges, we achieve our goals faster.

New national partnership with McGill University Dobson Center for Entrepreneurship

We're excited to announce our vibrant new alliance with McGill University's Dobson Center for Entrepreneurship, renowned globally for its top-tier accelerator program. Participants of AquaHacking, AquaEntrepreneur, and the Dobson Sustainability Stream will now enjoy seamless access to premier incubation, acceleration, and market validation stages, setting the stage for a grand global investment tour and the dynamic AquaEntrepreneur commercial adoption program.

Marie-Josée Lamothe

Professor of Practice, Desautels Faculty of Management & Bensadoun School of Retail Management; Academic Director, McGill Dobson Centre for Entrepreneurship

Celebrating Our Proud Sponsorship of AquaHacking Champions, Water Rangers

Since their triumph in the inaugural AquaHacking Challenge, Water Rangers has been a dynamic force in championing freshwater stewardship across Canada, consistently engaging the community in conservation efforts. Their recent pledge to publish regular Watershed Reports reinforces their alignment with AquaAction's mission to transform innovative concepts into pragmatic solutions for our planet's protection. The new partnership unveiled in September between AquaAction and Water Rangers is a testament to this commitment, ensuring the continued inspiration and mobilization for the health of our water systems through precise data, active community involvement, and impactful communication.

« AquaAction is making this critical work possible. By investing and believing in these reports, they are helping Water Rangers empower communities to participate in gathering data, developing deep relationships with their watersheds, and, ultimately, having a positive impact on freshwater health. »

Gabrielle Parent-Doliner

Director, Water Rangers

New collaboration with the US Department of Commerce

AquaAction and the U.S. Department of Commerce have formed an alliance to strengthen water-focused sustainable entrepreneurship. Ambassador David Cohen and his team support entrepreneurs to expand into the U.S., through mentorship and connecting them with networks and investors, boosting green technology growth and underscoring mutual environmental commitments.

« As Chair of AquaAction's Steering Committee for the Great Lakes, I'm proud to see the strides we're making in fostering innovation for our waters. Collaborating with the U.S. Department of Commerce amplifies our mission, carving paths for entrepreneurs to introduce transformative environmental solutions across borders. »

David Ullrich

AquaAction Great Lakes Steering Committee Chair, Former senior executive for US EPA and Great Lakes Non-Profit



BOARD MEMBER SPOTLIGHT

Pierre-Marc Sarrazin: Catalyzing Change at AquaAction

At AquaAction, we are immensely grateful for the wisdom and leadership of our Board of Directors, and this year, we are proud to highlight the commitment of Pierre-Marc Sarrazin.

Pierre-Marc is Vice-President, Corporate Finance, Development & Treasurer of Ovivo, a global provider of water and wastewater treatment equipment headquartered in Montreal. He joined Ovivo in 2011 and he currently leads the mergers and acquisitions strategy, financing, treasury operations and investor relations.

Pierre-Marc enriches AquaAction with his time as well as his environmental engineering expertise. His fervent dedication to our mission of water sustainability and corporate responsibility goes far beyond his board duties, driving us toward meaningful environmental stewardship. His drive for eco-friendly operations, water conservation, and waste reduction are not just strategic moves—they are the embodiment of AquaAction's core values, deeply integrated into our day-to-day work. His encouragement of employee involvement in environmental protection is truly inspiring, fostering a culture where every team member feels responsible for our collective sustainability mission.

Pierre-Marc has helped guide us as we increase AquaAction's impact across North America. His passion for environmental protection has strengthened our resolve to create and accelerate startups with innovative solutions for water-related challenges.

Pierre-Marc Sarrazin's story is one of dedication not just to a role, but to a cause that is crucial for the wellbeing of our planet. We at AquaAction are not only thankful for his guidance but are also motivated by his commitment to make a lasting difference in the world of water sustainability.

A portrait of Pierre-Marc Sarrazin, a man with dark hair, wearing a dark blue blazer over a white shirt, smiling slightly. The background is a solid blue color.

Pierre-Marc Sarrazin, Vice-President,
Corporate Finance, Development &
Treasurer, Ovivo Inc., Board of Directors,
AquaAction

POLICY IMPACT

AquaAction continues to be a pioneering force in freshwater protection, making significant strides in the policy arena through strategic collaborations and innovative initiatives.

AquaAction is an active and engaged member of a very vibrant freshwater community in Canada and the United States. Through its affiliation with the Canadian Coalition for Healthy Waters, Working for Watersheds in BC, Forum for Leadership on Water (FLOW), and the Coalition Quebecoise pour les eaux intérieures, AquaAction is at the table helping to advance the shared thinking on the state of freshwater across North America. We learn so much from this engagement and value the deep commitment all member organizations demonstrate through their participation in these regional and national bodies.

AquaAction remains committed to pushing boundaries and catalyzing positive change in freshwater conservation, reflecting our unwavering dedication to a sustainable and resilient water future for all.



Coalition Québec



AQUA ACTION PROGRAMMING

Enabling a Sustainable Blue Economy
From Idea to Market



Ideation

Engaging Young Innovators,
Developing Talent,
Launching Sustainable Start-ups



Maturation

Nurturing Changemakers through our Partners:
Incubation, Acceleration, Validation



Growth

Enabling Adoption :
Commercialization & Market Expansion



In our mission to foster a blue and regenerative economy, AquaAction has established a robust continuum for our innovators, **seamlessly transitioning innovative ideas from inception to market realization**. Central to this mission is the generation of fresh ideas, where AquaAction provides essential resources, mentorship, and guidance, transforming nascent concepts into economic and environmental impact.

We actively support research and development, collaborating with environmental NGOs, industry, academic institutions, and researchers to enhance the practicality and market-readiness of these innovations. Community engagement is a cornerstone of our strategy, where we rely on our incubation community to mature our innovators to market readiness, where we work with them to **enable adoption of their technologies across any industry that touches water**.

Crucial this year is our new **partnership with McGill University's Dobson Center for Entrepreneurship**, where we have seamlessly aligned our programming to ensure an end to end journey from ideation through to the Dobson's international funding tour for to start-ups along with market integration for measurable and sustainable impact.

AquaAction's approach aligns with **creating an economy that is both economically viable and environmentally restorative**.

Our long-term vision is continuously assessed for impact, ensuring sustained contributions to a sustainable future.

THE AQUAHACKING CHALLENGE



Where it Begins: **The AquaHacking Innovation Challenges** Across US & Canadian Watersheds



8-10 Months

Work with our networks to recruit young entrepreneurs to apply for the program.

Participant Recruitment

On-site skills development, research, and experiential learning.

Immersive Training & Competency Development

SEMI-FINAL



« Not only is the AquaHacking Challenge a catalyst for innovation, but it is also a gateway for young women and new arrivals to Canada to enter the clean tech sectors. »



Anne Pascale Richardson
Director, AquaHacking Challenge Program

« The AquaHacking Challenge - Great Lakes far exceeded expectations in both the impact to the participants as entrepreneurs and the development of future technology based solutions. I feel inspired that the future of the Great Lakes will remain a pure ecosystem for future generations. »



Ed Bailey
Director of Operations, the Marine Center, Northwestern Michigan College

THE 2023 INNOVATION CHALLENGES

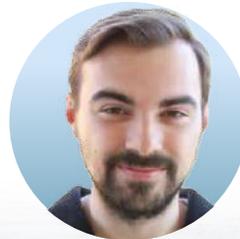
In 2023, the AquaHacking Challenge was active in three regions and participants were once again able to gather in person and benefit fully from the immersive experience of our Leadership Expedition. This weekend of wilderness, workshops, community, and stakeholder visits grounds the experience. Being part of the magnificence of the watershed helps drive home the why of the Challenge and how individual and collective efforts make a difference.

« We are at a critical point in history with the power to change our environment in profound ways. We need to work together to channel our intelligence and creativity in positive ways to find solutions for the future. Aqua Action has a vision to bring people and ideas together for this purpose. I am excited to be a part of this opportunity. »

« It was interesting to speak to other teams during the expedition, and see the parallels between us, such as the difficulties we encountered as we worked on our solution. It was a source of motivation for us to continue along the AquaHacking journey, because it's possible to overcome our weaknesses and obstacles. »



Michael Kerr,
Team Kamino



Simon Durand,
Team Géomage





Quebec

In 2023, AquaAction co-hosted the first of three annual Challenges in partnership with Le Regroupement des organismes de bassins versants du Québec (ROBVQ) and Réseau Environnement, who are members of our Quebec Steering Committee. We are grateful to have these highly respected organizations collaborating with us.

MEET THE AQUAHACKING CHALLENGE QUEBEC 2023 FINALISTS AND WINNERS

FOUNDERS

DESCRIPTION



Jean-Christophe Chapin

Modul'Eau and its turnkey service for mapping water quality in aquatic environments. A significant step forward in protecting and understanding the various sources of pollution in our waterways



**Sonia Mami /
Chayma Chaabani /
Ridha Guebsi**

AQUABOTS and its innovation seduced the jury and the public with real-time geolocalized data on water quality in urban waterways.



**Simon Durand /
Gaëlle Belleau-Magnat /
Éloïse Brassard /
Frédéric Diotte**

GÉOMAGE and its revolutionary decision-support tool for habitat management in the St. Lawrence River. A major contribution to the protection of aquatic ecosystems.



Youcef Amine / Hamza Mellakhi

Rêver Haut's Mapsense AI solution, which detects sensitive areas using satellite images. An innovative approach that opens up new prospects for water conservation.



**Anas EL ALEM /
Haythem Zidi /
Jimmy Poulin**

EnviroScientys and its intelligent probe, SWEEP, for real-time monitoring of snow cover and prediction of water availability. An essential step forward in optimizing water consumption.





« We are proud of our partnership with AquaAction. This collaboration amplifies Réseau Environnement's strength in mobilizing innovation in the service of water preservation and climate action. »

Mathieu Laneuville,
President of Réseau Environnement



« Our partnership with AquaAction is a fundamental element in our work in the water sector, bringing to the fore the know-how and ingenuity of young entrepreneurs. The solutions developed will benefit all Quebecers - now and in the future. AquaAction is an essential player in the water sector. »

Karine Dauphin,
General Manager, ROBVQ





Atlantic
Canada

In 2023 we returned to Atlantic Canada, building on partnerships established in 2020. Here we were able to engage with previous AquaHacking participants, who shared their own journeys and words of encouragement to a next wave of water innovators.

MEET THE AQUAHACKING CHALLENGE ATLANTIC 2023 FINALISTS AND WINNERS

FOUNDERS

DESCRIPTION

1st
place



by TechStar Digital Labs

**Kapil Sahni /
Shubhra
Singh**

The GREENHUT solution for the prevention of stormwater runoff is an innovative, do-it-yourself, intensive roofing solution for households provided with a local form of vegetation. It is eco-friendly, powered by green cement layering and can be customized in various sizes.

2ND
place



**Syfax Farez /
Nadah Ben-Yedder**

SÙ manufactures reusable & biodegradable drinking straws from invasive reed. Their solution will help solve the problem of single-use plastics related to drinking straws. It will also help preserve the Canadian wetlands by controlling the propagation of invasive reeds.

3RD
place



SEACYCLE
by Enactus SMU

**Jack Poirier /
Aneesa Hussain /
David Campbell**

Seacycle is a water filtration system designed to remove plastic waste ranging from water bottles, to microplastics by use of a gravity filter, while also generating automated water quality reports.

4TH
place



by Kamino

**Jonathan Brown /
Michael Kerr /
David Wager**

KAMINO provides STEM-The-Tide, a low-cost technology solution for private property owners to install and maintain green infrastructure aligned to municipal stormwater reconstruction projects. This solution uses real-time data from an Internet of Things mesh network that works offline to collect and monitor the performance of Low Impact Development.

5TH
place



**Pranav Mahajan /
Gaurav Bhatia**

as a service to watershed organizations and open databases using SenseH2O Water monitoring Station. The Cloud-based platform will allow for real-time monitoring and analysis of water quality data using web and mobile applications.





« We were thrilled to have AquaHacking return to Atlantic Canada this year. The program brings focus to freshwater and gives students from various disciplines the opportunity to engage and make a difference in some of the region's biggest freshwater challenges. We were proud to be partnering with AquaAction again and look forward to the next time! »

David Hodd

Executive Director Atlantic Water Network



« We have been engaged in the AquaHacking Challenge in various ways for over 5 years and every time we are, it is so inspiring to see the new wave of young innovators taking positive action for freshwater. This program is a valuable gateway to raise freshwater awareness among young Canadians, demonstrate the opportunity to have an impact and encourage others to do the same. »

Liz Hendriks

Vice-President, Restoration Conservation | WWF-Canada





FIRST BINATIONAL COMPETITION

Water knows no borders, and as of 2023, neither does AquaAction. This year we registered as a U.S.-based charity and established a partnership with Northwestern Michigan College to co-host the first of three annual binational AquaHacking Challenges for the Great Lakes. Currently active, and slated for completion in May 2024, the Challenge has already attracted 160+ participants from the US, Canada, and abroad!



THE AQUAENTREPRENEUR COMMERCIAL ADOPTION PROGRAM

The AquaEntrepreneur program is unique in that focuses on deploying innovative solutions and overcoming the barriers to achieving impact. In 2023 our cohort worked with aquariums, agriculture, microbrewing facilities, and the built environment, along with the very engaged municipal sector in Quebec.

Laila Benameur
Director, AquaEntrepreneur Program

8-10 Months



Laila Benameur
Director, AquaEntrepreneur Program

« At the heart of the AquaEntrepreneur program, there are game-changer entrepreneurs who are tackling today's most pressing water scarcity challenges, thanks to their world-changing innovations born in Quebec! »



THE 2023 COHORTS

This year's cohort of 16 enterprises received over 500 hours of expert coaching and were set on a path to adapt business models for new markets, establish new partnerships, and initiate beta-testing opportunities.



X-TELIA

SENTIOM



in 2023, the following enterprises from our first cohort were matched to municipal pilots, with many more in process in 2024!



Development of guIA, an innovative tool for smart decision-making that allows for a more efficient distribution of road salts in winter in order to reduce costs and environmental impact.



Offers sensors to monitor various water parameters such as temperature, pressure, chemical composition, and water flow, as well as a dashboard to synthesize the data into actionable information.



Provides solutions for soil decontamination from plastic pollution in order to preserve and restore affected ecosystems.



In-situ treatment system for septic tanks.



Assists organizations that extract, distribute, treat, and discharge water in optimizing their operations by improving the collection, management, and use of water-related data.



Offers innovative and eco-friendly ozone-based technological solutions for air and water purification.



In April of 2023, we celebrated Cohort 1 with a technology demonstration of one of the participants at the **Aquarium du Québec**, at the same time welcoming Cohort 2.

Our guests of honor included Minister **Pierre Fitzgibbon**, Minister **Christopher Skeete**, as well as three generations of the **de Gaspé Beaubien Family**: Nan-b, François, and Louis de Gaspé Beaubien.



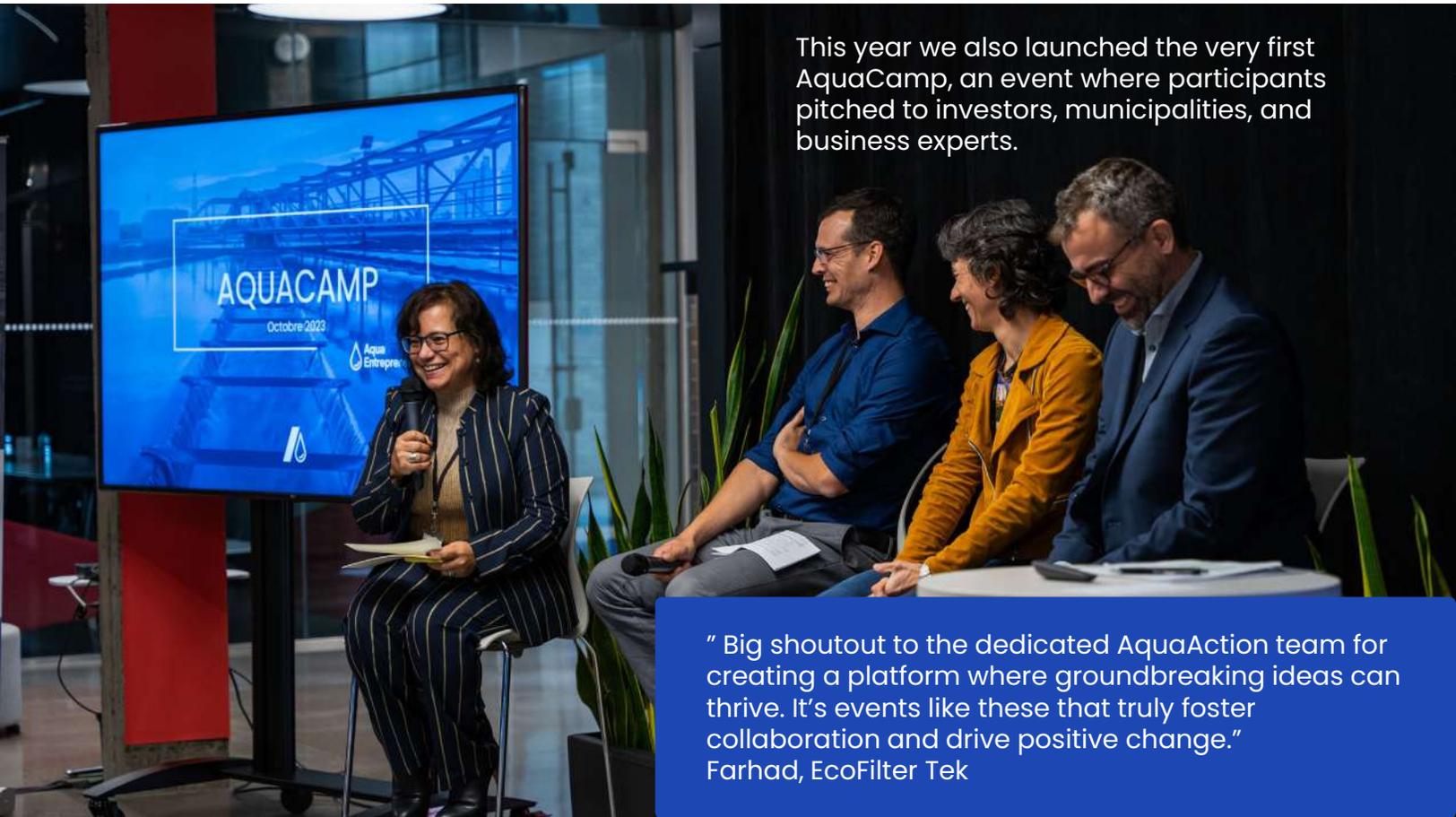
Minister Christopher Skeete



Minister Pierre Fitzgibbon



This year we also launched the very first AquaCamp, an event where participants pitched to investors, municipalities, and business experts.



“ Big shoutout to the dedicated AquaAction team for creating a platform where groundbreaking ideas can thrive. It’s events like these that truly foster collaboration and drive positive change.”
Farhad, EcoFilter Tek



Our coaches have been the key to the success of the AquaEntrepreneur program. Hailing from water intensive industries such as mining, health, pulp and paper among others, they are providing C-suite mentoring to our companies as they expand to new industries. Their technologies are impacting the water-constrained circular economy and building a more resilient future.





Thanks to my coach, our team updated our approach to sales

Laura Gilbert

Head of Community & Operations, Water Rangers



My coach's active listening, analytical skills and experience helped us refocus our business model, and contributed to the drafting of a very important application for financial assistance that will structure the further development of our company.

Carole Riopel

Co-Fondatrice d'EXO Tactik inc.



Aqua Entrepreneur



BEYOND THE PROGRAMS:

THE AQUAACTION COMMUNITY ECOSYSTEM

The enterprises that come through our programs are welcomed into the **AquaAction Community**, a diverse collective of 50+ enterprises at different stages of growth. This community is a living lab, where we deliver ongoing support and have the chance to explore and better understand what water tech startups need to thrive and grow.





“Thanks to AquaEntrepreneur and our coaches, we are developing an innovative pilot project with our municipal partner. This project will not only bring our idea to life, but it will also help us test its effectiveness, thus making a concrete contribution to improving water treatment and related aspects.»

– Mohand Amroun, CEO, Pergamon



AWARENESS AND TALENT DEVELOPMENT

Freshwater and the Blue Economy Microcredit McGill Bensadoun School of Retail Business Course

This year marked the launch of two significant initiatives, reinforcing our commitment to cultivating a sustainable Blue Economy and enhancing job skills tailored to this vital sector.

The first initiative, in collaboration with Northwestern Michigan College, introduced a groundbreaking micro-credential titled "Freshwater and the Blue Economy." This program underpins our AquaHacking program by providing a formal educational framework to acknowledge and validate essential competencies for the emerging Blue Economy. Participants who reach the AquaHacking Challenge finals are awarded micro-credits in three key areas: Thinking like an Entrepreneur, Innovation Mindset, and Great Lakes Sustainability. These credits are not only a testament to their newly acquired skills but are also transferable to existing degree programs or serve as recognized qualifications in the job market.

Our second initiative, developed in partnership with the McGill Dobson Centre for Entrepreneurship, involves the introduction of a third-year bachelor's business course at the Bensadoun School of Retail Management. The course focuses on Entrepreneurship and Sustainability in the Retail sector. This strategic collaboration is designed to enlighten and motivate the academic community about the circular economy. It integrates the principles of the Blue Economy into the business curriculum, thus informing and inspiring students to devise sustainable water management solutions. These solutions to inspire new water stewards and the development of sustainable enterprises and job opportunities within the water sector.

Both initiatives play a critical role in bridging the gap between entrepreneurship education and environmental sustainability, equipping students to lead innovation within the Blue Economy. The initiatives foster a profound understanding of water-related challenges and opportunities, inspiring the next generation to create a sustainable and resilient future. This educational endeavor is essential in advancing knowledge, promoting innovation in water sustainability, and preparing the emerging workforce with the necessary skills and insight to prosper in the sustainable Blue Economy.



TALENT DEVELOPMENT & JOB-READINESS

FRESHWATER AND THE BLUE ECONOMY CREDENTIAL:



3 microcredits
awarded



40 hours
of applied learning



Innovation Mindset:
Thinking Like an Entrepreneur



Innovation Mindset:
The Art of the Pitch



Great Lakes Water
Sustainability



The micro-credits are cumulative and transferable to certificates, diplomas or other job-ready qualifications



Accreditations for nextGen sustainable economy leaders



X-TELIA

Did you know that the average household's leaks can account for nearly 10,000 gallons of water wasted every year?

[Read more about X-Telia](#)



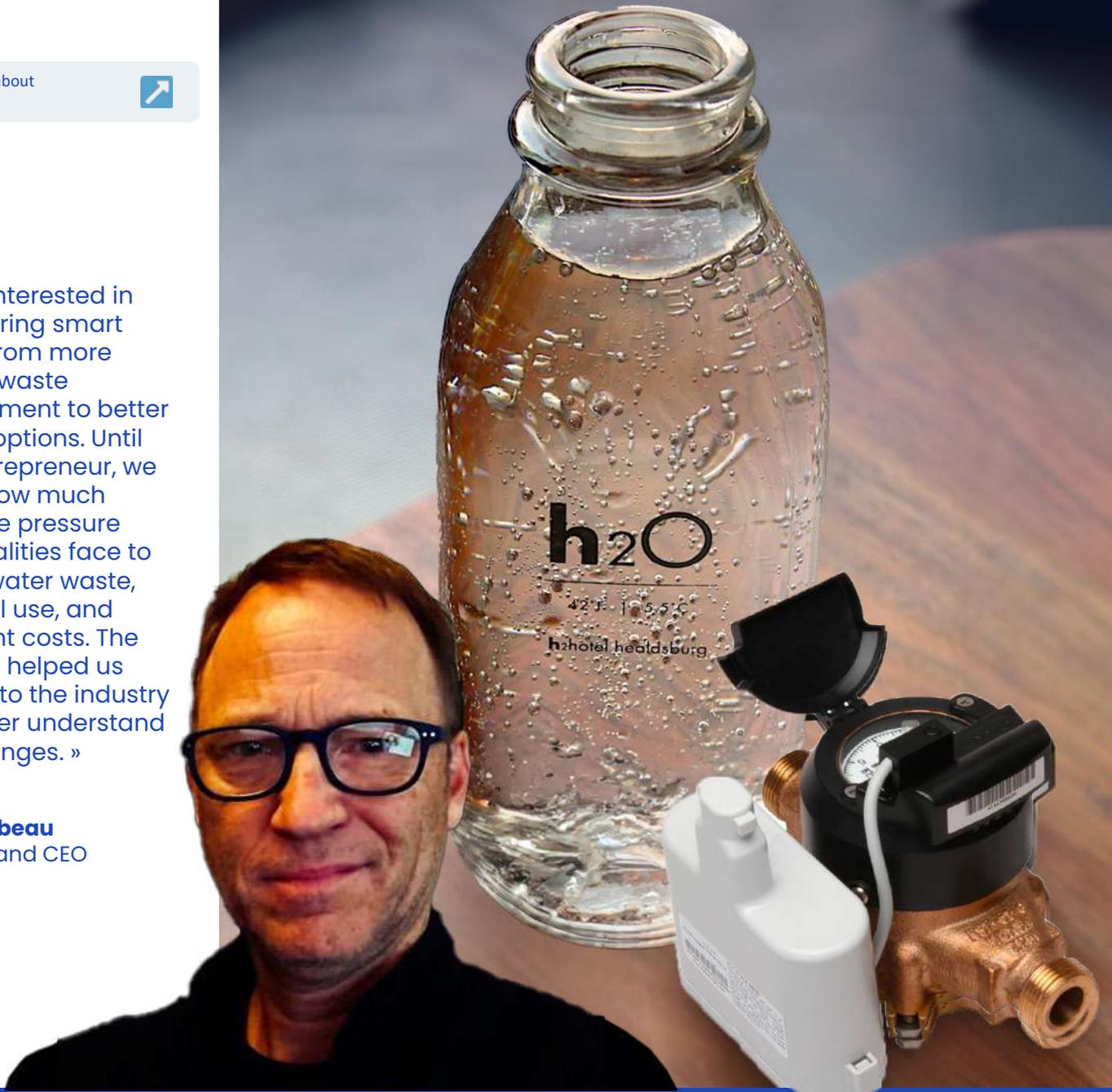
« We're interested in empowering smart cities – from more efficient waste management to better parking options. Until AquaEntrepreneur, we didn't know much about the pressure municipalities face to reduce water waste, chemical use, and treatment costs. The program helped us connect to the industry and better understand its challenges. »

Eric Bourbeau
Founder and CEO

X-Telia is bringing its expertise in IoT devices, particularly cloud-based networks, low power wireless sensors, and open data, to help municipal utilities conserve water and reduce demand. Using these tools, utilities can use real-time data to locate leaks and excessive water use at the source. The company participated in the 2023 AquaEntrepreneur cohort.

2023 MILESTONES

- ▶ Pivoted to focus on drinking water
- ▶ Developed a new water meter interface
- ▶ Attracted interest from several large North American cities
- ▶ Signed first US customer for this solution



Did you know that it takes only five days for Legionella to dip below safety standards? In just that time, cooling towers, hot water loops, tanks, fountains, and potable water can become the sources of deadly outbreaks.

« Our company is having success in industrial markets, but we were finding the municipal sector very challenging. AquaEntrepreneur gave our team the chance to present our solution to utilities and city managers, who gave us valuable feedback on how to position our offering to the market. We've since adapted our approach, and it has made a significant difference. »

Etienne Lemieux
CEO and Co-Founder

BioAlert Solutions has developed high frequency automated monitoring and control testing to detect and minimize the risks of Legionella outbreaks. The solution provides test results within four hours. It also helps operators reduce water use, consume fewer chemicals, and demand less energy. The company participated in the 2023 AquaEntrepreneur cohort.

2023 MILESTONES

- Increased international presence with sales in United States and Spain
- Proved scalability with fully remote installation
- Recognized by BGIS Global Supplier Innovation Award

Read more about
BioAlert Solutions





Did you know that people produce about 400 million tonnes of plastic waste every year? It is estimated that 75 to 199 million tonnes of plastic are currently found in our oceans

Read more about O'land Stations



“AquaEntrepreneur gave us the opportunity to explore the municipal market. We found incredible value in mentorship from our AquaCoach, whose expertise in PR, marketing, and sales made her a perfect match for O'land.”

Rachel Labbe Bellas
Founder and CEO

THE AQUAACTION CHANGEMAKERS

Meet some of the changemakers in the AquaAction community and learn about their inspiring journeys.

O'land Stations is on a mission to reduce waste from single-use plastics in order to protect the oceans and waterways we need for our future existence. As the winner of the 2019 AquaHacking Great Lakes Challenge, the company went on to provide water refilling solutions for major events and venues. In 2022, O'land participated in the AquaEntrepreneur cohort.

2023 MILESTONES

- Reached 1 million refill mark with clients and stations to date
- Piloted the solution in the United States and landed a major partner to be announced in early 2024, expanding reach across Canada from BC to PEI
- Hired new staff to support operations and marketing
- Transitioned from making small-batch orders to renting and selling to major international partners





Did you know that there is very limited data available about freshwater resources in Canada?

[Read more about EXO Tactik](#)



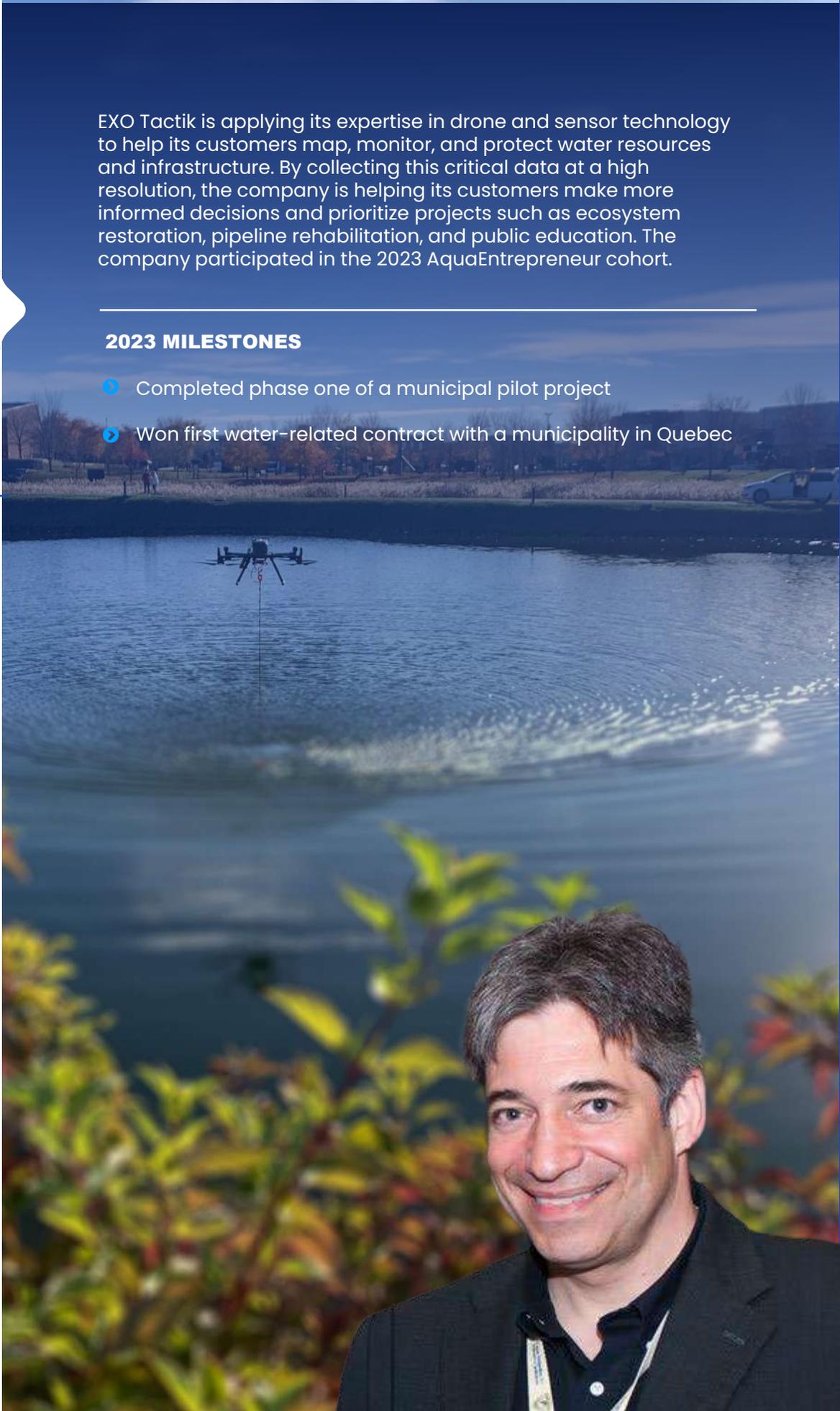
« Drones and sensors are still relatively untapped by municipalities, and new technologies usually signal risk. Participating in AquaEntrepreneur has helped us work with these customers on a pilot project to prove the value of gathering insights on water and how it can help them make better decisions to protect public and ecosystem health. »

Stephane Bouvier
President

EXO Tactik is applying its expertise in drone and sensor technology to help its customers map, monitor, and protect water resources and infrastructure. By collecting this critical data at a high resolution, the company is helping its customers make more informed decisions and prioritize projects such as ecosystem restoration, pipeline rehabilitation, and public education. The company participated in the 2023 AquaEntrepreneur cohort.

2023 MILESTONES

- Completed phase one of a municipal pilot project
- Won first water-related contract with a municipality in Quebec



OUR PARTNERS

Restoring freshwater health requires a vibrant ecosystem of people and partners. It is only by working together that we can hope to achieve our mission. We are proud of our deep collaborations across North America, and thank our partners that give their time so selflessly to our collective mission!



Governance, Steering / Advisory Committees



Water Issue Leaders



Academic Partners



OUR PARTNERS



Programming & Coaching Partners



Incubation Partners



Regional & National Fiscal Partners



LOOKING AHEAD TO 2024

2024 will mark our 10th year of programming and impact for freshwater.

Whereas 2023 was a year of transformation, 2024 will be a year of the next generation.

As well as expanding our programs across Canada and into the US, with recurring annual editions of the binational AquaHacking Challenge to embed the innovation mindset within every freshwater region, and taking AquaEntrepreneur beyond the pilot that it is in Quebec, we will develop new channels for the next generation of change agents to #TakeAquaAction.

We want to empower them and give them agency through a Youth Advisory Board and on-campus AquaAction Chapters, among many other opportunities.

Proud and encouraged by all that has been achieved to date, we are eager for what feels like a pivotal moment to galvanize the nextGen of water leaders, innovators and entrepreneurs.

Join us.





#TakeAquaAction



www.aquaaction.org

1275 Av. des Canadiens-de-Montréal,
Montréal, QC H3B 5E6