

Investment Readiness Case Study

Water Rangers

Author

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This case study is part of a social finance case studies series on investment readiness. Through a partnership with Investment Readiness Program (IRP), SI Canada is working with ten entities (SPOs non-profits, co-operatives, for-profit social enterprises) that have achieved investment readiness and provide them with an opportunity to share their journey and profile this work through a case study and a virtual event.

Organization's Mission

Water Rangers is a not-for-profit, social enterprise. We create accessible water-quality monitoring tools and data systems so that communities have a voice in protecting their waterways. Our mission is to ensure that every lake, river, stream, and sea has enough data to know whether or not they are healthy.

Water Rangers has empowered thousands of community scientists to test their local waterways and share their findings online. Together, they've contributed more than 200,000 datapoints in more than 5,500 locations.



Timeline

- ▶ May 2015: Water Rangers was founded during the Aquahacking competition, where technologists were asked to prototype innovative new technologies for waterways. This initial prize money was the seed funding that led to Water Rangers incorporation as a non-profit.
- ▶ August 2015: Water Rangers is officially incorporated and finds its home at Impact Hub Ottawa.
- ▶ June 2016: First testkits are tested in the field as part of the joint Impact Hub and WWF Ocean Week Wavemakers program.
- ▶ March 2017: First official Ontario testkit program grant is over-subscribed and those who can't participate ask to purchase testkits.
- ▶ January 2018: Through The Centre for Social Enterprise Development (CSED), in partnership with Alterna and Community Foundations of Ottawa, Water Rangers received a social enterprise grant and loan of \$10,000 to start up their social enterprise.
- ▶ January 2020: Water Rangers was a WWF Water Tech Challenge winner, and incubated at Climate Ventures.

- ▶ December 2021: Thrive Impact Fund invested in Water Rangers' expansion plans.
- ▶ September 2022: Community Forward Fund invested in Water Rangers' inventory asset.
- ▶ April 2023: Water Rangers was successful in accessing funding support from the Investment Readiness Program to work on legal documents, coaching, and strategic systems development.

How the initiative came about

Water Rangers was incorporated as a non-profit organization after the [AquaHacking](#) Challenge in 2015, an innovative tech competition that engages young Canadians to develop entrepreneurial skills and create solutions to freshwater issues. AquaHacking provided initial seed funding of \$12,000.

Water Rangers creates accessible water-quality monitoring tools and data systems to increase community knowledge and help advocate for protecting waterways. Water Rangers fully integrates the water testing experience in communities from collection to data sharing and education. They build on existing networks and partnerships, through a citizen-led approach.

Water Rangers offers:

- easy-to-use water quality test kits
- an open data platform
- water testing programs

Water Rangers' social enterprise focuses on designing and assembling curated water quality testkits. At first, much of the costs would be covered by personal loans and juggling grant funds for those testkits. Ensuring they had adequate supplies to fill orders has been a struggle, especially for a seasonal enterprise, and with the supply chain crisis in 2021, it became clear that they needed to access more capital to ensure they could meet demand and maintain their reputation.

In summer 2021, Water Rangers held over \$160,000 in inventory assets, which meant that any cash they had for engaging communities was tied up. Cashflow became a real struggle even though they were growing quickly. Water Rangers was looking for capital to finance their expansion to British Columbia, with a focus on Vancouver Island as a pilot region. The financial need was primarily linked to working capital to cover inventory increases and cash flow gaps. After being turned down by some financial institutions and receiving a request from Alterna for personal guarantees from volunteer Board members, Water Rangers was frustrated. At that point, Aquahacking made a connection to Thrive Impact Fund.

In December 2021, Thrive Impact Fund provided a flexible term loan of \$95,000 to help finance Water Rangers' expansion. In addition to financing, Water Rangers participated in the [Thriving Non-Profits](#) program

to develop their revenue diversification strategy and receive coaching on financial modelling.

Water Rangers was growing quickly and had additional working capital gaps, specifically for inventory. Thrive Impact Fund introduced Kat to Community Forward Fund.

In the fall of 2022, Community Forward Fund provided a \$40K revolving loan for inventory financing. This investment had a major impact on Water Rangers' ability to grow and thrive.

Through grants and earned income, overall revenue grew 47% and sales grew by 120% in 2022 alone. This growth came directly as a result of the investments from Thrive Impact Fund and Community Forward Fund.

Types of financial support sought out

Water Rangers received investments from AquaHacking, the Centre for Social Enterprise Development (CSED), Thrive Impact Fund and Community Forward Fund.

Thrive Impact Fund provided a flexible term loan consisting of three months of interest-only payments followed by blended principal and interest in equal monthly amounts. The total term is 39 months.

Community Forward Fund provided a revolving loan where interest is paid monthly. The term is reviewed every 12 months for renewal.

Barriers to accessing social finance

For a non-profit, accessing traditional financing like a line of credit for working capital and inventory comes with huge barriers. Even though we could show thriving sales, we struggled to even secure small amounts for credit cards without providing the same amount in collateral. Our first credit card had a \$1000 limit, with a \$1000 Guaranteed Investment Certificate (GIC) as collateral. Many times, we would need to make large inventory purchases on a personal credit card.

We were growing quickly but could not gain access to fairly priced capital that understood our governance model or our mission, and were viewed as risky. We were turned down by several financial institutions, even one that we had a small loan with that had been fully repaid. The front-of-line staff at the financial institutions were always enthusiastic, but once it went through the process, we were denied because we were a non-profit or because they required personal guarantees (Kat was willing to do this, but did not want to ask other employees or volunteer board members to take on this personal risk when they had a valuable inventory asset to leverage). Sometimes this process took months and felt like we were getting the runaround. The result is we were relying on high-cost personal credit cards and personal loans.

The grants that exist for business growth are exactly that, grants for business- non-profits are almost always

excluded. Grants for non-profits are smaller and are for new initiatives, not for growth. We fell into this overall capital gap hard. It's as if the system wants non-profits to stay small. Which is odd when non-profits are addressing such big challenges.

The government's involvement in the impact investing journey

We had a COVID relief line of credit, which was integral for survival. Once that was paid off, we were unable to access any other government credit programs.

Measuring impact

Water Rangers tracks a number of metrics and shares them in quarterly and annual impact reports. Our impact framework is based on three core themes, focusing on both quantitative and qualitative metrics:

- ▶ 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)

Thrive Impact Fund identified up to nine metrics to track alongside investees to share and report to investors. These metrics include enterprise milestones and UN SDG related outcomes, and are embedded into the loan agreement. Investees receive quarterly reporting and annual impact reporting.

Community Forward Fund also tracks impact across impact sectors, the community impact, and along the organization's chosen metrics, which were part of the loan application.

Incorporating diversity and inclusion into the venture

Our model is to lower barriers and for water testing to be inclusive to everyone. The testing kits are accessible in terms of price and ease of access, and communities such as First Nations and smaller communities are using the kits to get insights into their local waterways. Before Water Rangers, communities would have to research and purchase equipment themselves, or partner with research institutions or private companies.

Water Rangers staff and leadership have adopted, as one of our organization's main objectives, a commitment to working towards Truth and Reconciliation, including the United Nations Declaration on the Rights of Indigenous Peoples. We recognize and respect community-based data control as a mechanism to empower decisions going to self-determination and sovereignty. We also work on challenging our network of community scientists to work toward Truth and Reconciliation through our communication platforms and monthly challenges. Water Rangers supports the Assembly of First Nations National Water Declaration. Our tools serve and assist First Nations communities who want to achieve greater actual control over water decisions that impact them.

Water Rangers is committed to creating more and better spaces and opportunities for two-eyed seeing so that traditional First Nations knowledge is combined with the best of modern science. Water Rangers work with about 30+ Indigenous organizations and communities across Canada. Relationships vary from communities using Water Rangers' freshwater and ocean testkits, to collaborative work on projects through grants (Indigenous Guardians), to hiring youth in communities as First Nation water monitoring technicians. Water Rangers' digital tools and testkits are something that Indigenous communities make their own, for their own purposes and programs, and are designed for self-governance.

All Water Rangers full-time staff have received their certification in the First Nation principles of ownership, control, possession, and access (OCAP principles), and we are committed to ensuring data collection and management follow the First Nation OCAP principles.

Lessons learned from “investment readiness” journey

For one thing, creating a product is not as easy as one may think. It took a few years of developing, testing and refining to get to something that is effective and saleable.

Some other lessons learned during the investment readiness journey include:

- Having a good understanding of the number of allies and organizations that are interested in helping us do this work. This is key for morale and keeps us going.
- Exploring different revenue models. There's no right answer on which model would be best for you and your organization. However, exploring your options can pay off.
- Sharing your impacts. Celebrate the good! You need to gather data that shows you're making progress. It's motivating for your participants to show they're making a difference, but also for your funders and your staff.

Hopes for the future with regard to social finance

I'd like to wave a magic wand so the resources available to a business could also be available to non-profit social enterprises. I keep looking at what's on offer at national banks and with government funding for businesses, for example, and there tend to be active support, flexible financing and unrestricted operating funds available, and I think, "That's exactly what I need!"... but I cannot access these resources, supports and services.

Next steps for the social finance project

To grow! We're still growing fast and know the next investment needs to come in the next year. To look for investment to support our inventory needs and expand our digital resources to accommodate new customers, we've secured a grant from the Investment Readiness grant to work with a coach for strategic development and funding asks, as well as developing strategies for long-term clients and resellers.

We want to demonstrate and strengthen the full circle between testing, data, action and regeneration of our waterways. To do this, we need investment in our data platform, and time and space for deepening partnerships with university researchers that can help us validate our ideas.

Beyond innovation, we're expanding our reach to more communities across Canada and beyond. We know that to scale up our impact we'll need to get more investment!

Our Leadership Team



Kat Kavanagh (Executive Director), Gabi Parent-Doliner (Director), Laura Gilbert (Community & Operations Manager)