



**BC WATERSHED
SECURITY COALITION**

WATERSHED SECURITY

A BUSINESS CASE & INVESTMENT SOLUTION





EXECUTIVE SUMMARY

Watersheds are critical economic infrastructure, providing clean drinking water, reliable water for farms and local businesses, thriving salmon populations, and natural defences against water insecurity, including droughts, wildfires, and floods.

- **Building watershed security is an insurance policy for BC's economic growth plan.**

BC's watersheds are under increasing strain, creating significant risks for the provincial economy due to water supply disruptions, disaster costs, and loss of social cohesion.

- **Investing in watershed security is a proven economic strategy.**

Investments result in immediate regional employment while strengthening the critical watershed infrastructure that agriculture, industry, and communities depend on.

- **A revenue-generating solution exists.**

BC's industrial water rates are amongst the lowest in Canada and last reviewed over a decade ago. It's time to modernize these rates and direct funds back into the watersheds that underpin economic activity in BC.

- **The funding mechanism is ready.**

The BC Watershed Security Fund is operational and trusted. A pipeline of community-ready projects exists. Investment can move quickly, create jobs, and strengthen watershed security across British Columbia.

Inside this **BUSINESS CASE**

1. WHY INVEST? Watersheds as economic infrastructure

- Watersheds underpin the BC economy
- Watersheds in disrepair
- What's needed to build watershed security in BC

2. RETURN ON INVESTMENT: Jobs, certainty & reduced risk

- Immediate job creation and regional economic development
- Increased certainty for long-term economic growth
- Reduced financial risk & avoided disaster costs

3. INVESTMENT SOLUTION: Immediate revenue & impact

- New revenue opportunity: modernizing industrial water rates
- BC Watershed Security Fund: a high impact funding mechanism
- A funding model & investment strategy to build watershed security

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WATERSHEDS AS

ECONOMIC INFRASTRUCTURE



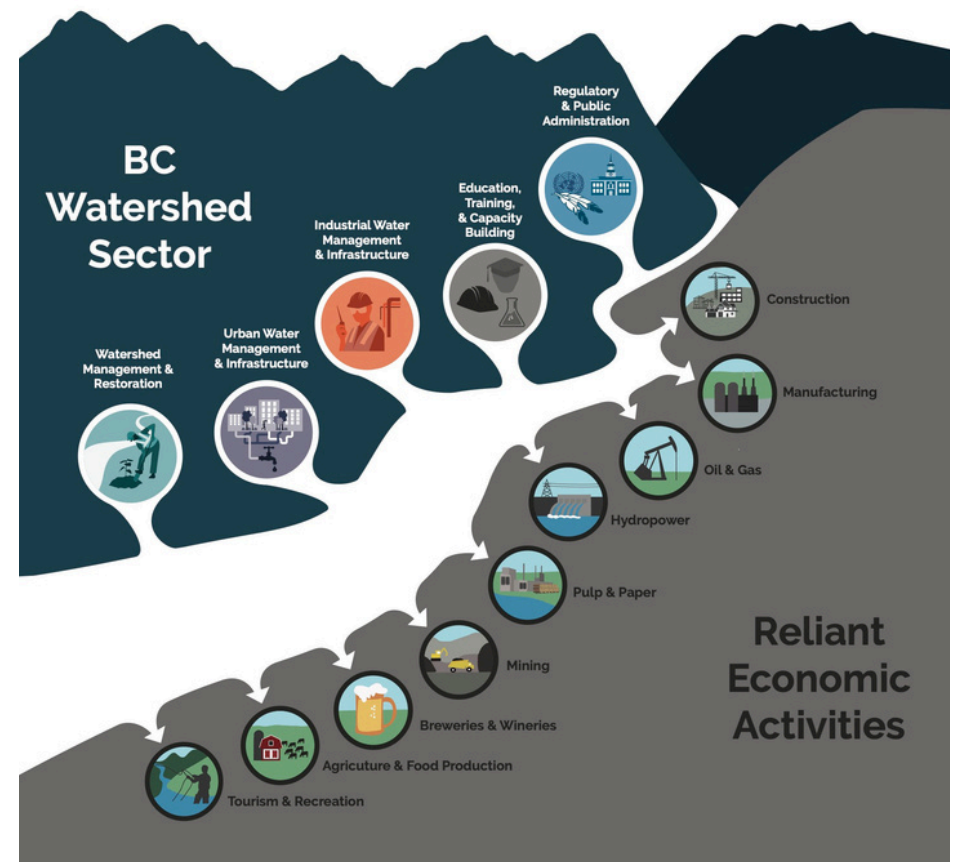
WATERSHEDS UNDERPIN THE BC ECONOMY

When watersheds are strong and healthy, industries operate, workers remain employed, and communities thrive.

The **Look West** strategy centres on sectors that are dependent on watershed security.

- Agriculture relies on predictable irrigation.
- Mining, forestry, and energy production require water access and certainty.
- Tourism and recreation depend on healthy rivers and fisheries.
- Communities depend on safe drinking water, flood protection, and functioning infrastructure.

Protecting and strengthening the health and security of our watersheds is essential to long-term economic growth, public safety, and resilient communities across B.C.



Source: Working for Watersheds: Opportunities for Growth in BC's Watershed Sector (2021)

WATERSHEDS IN DISREPAIR

Watershed insecurity
is accelerating
in BC.

Industrial water use is growing. Communities are expanding. Climate change is intensifying droughts, wildfire, and flood cycles.

Together, these pressures, in addition to decades of poor land-use planning, are straining the critical services provided by our watersheds.

As demand increases, the margin for error shrinks. In many regions, water allocation approaches or exceeds sustainable supply. Water scarcity and massive flood events are becoming more disruptive and costly. Water restrictions and regulatory intervention are becoming more common.

As economic development and trade diversification accelerate, pressure on already stressed watersheds will continue to grow. Without coordinated investment in watershed security, economic disruption and public costs will rise alongside that growth.

THE COSTS OF WATERSHED INSECURITY

In recent years, BC has experienced major economic impacts due to watershed insecurity including disrupted production, disaster recovery costs, business shut-offs, crop and cattle loss, and community states of emergency.

- **2021** – catastrophic Fraser Valley floods cost the BC economy up to \$17 billion.¹⁰
- **2022** – Sunshine Coast declares a state of water emergency, shutting off water to local businesses.¹¹
- **2022** – in northeast BC, water permits for the oil and gas sector were suspended due to drought.¹²
- **2023** – historical drought saw farmers lose cattle and crops, leading to government recovery payments of \$71 million.¹³
- **2024** – flooding in southern Vancouver caused \$110 million in insured damage to homes & businesses.¹⁴
- **2025** – record low flows in the Kiskatinaw River led Dawson Creek to pursue a \$100 million water pipeline to the Peace River.¹⁵

SUNSHINE COAST WATER CRISIS (2022)

Severe drought in the Chapman watershed on the Sunshine Coast led to BC's first emergency order restricting water use by non-essential large commercial users, including breweries, construction companies, recreation businesses, and irrigation for farming. Two other communities, McBride and Dawson Creek, have since declared states of water emergencies.

"My feelings are a small pang of panic, a sense of urgency and deep concern for my company, employees and community."

Brian Smith, Owner, Persephone Brewing Company (CBC News, Oct 17, 2022)

WHAT'S NEEDED TO BUILD WATERSHED SECURITY IN BC

There are three areas where current funding capacity to protect and restore watershed security is inadequate. Over the next 10 years, the total funding needed in these three areas is an estimated \$3 billion with an annual need of \$306 million.

INVESTMENT STREAM	DESCRIPTION	ANNUAL FUNDING NEED (MILL)
Rebuilding Natural Infrastructure <i>(high and med priority watersheds)</i> 	Restoring wetlands, riparian areas, headwaters, and floodplains strengthens the natural systems that store and regulate water. This reduces flood and drought impacts, protects drinking water, supports agriculture and contributes to community safety and climate resilience.	\$200
Strengthening Watershed Planning & Governance 	Local watershed boards and collaborative watershed plans build certainty for development by: aligning water use with supply, supporting difficult conversations that reduce conflict among users, driving proactive solutions, and advancing reconciliation at a community level.	\$50
Bolstering Monitoring & Knowledge Systems for Decision-Making 	Reliable and coordinated monitoring of water quantity and quality supports better decision-making across sectors. Access to timely data improves industry planning, strengthens regulatory certainty, and allows governments to anticipate and manage risks before they disrupt communities and economies	\$56

Source: Business Case for the BC Watershed Security Fund (2022)

Investing in these three streams is an insurance policy for successful economic growth, reducing risks to business development and the provincial economy, while generating immediate employment, advancing reconciliation, and supporting social cohesion.

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RETURN ON INVESTMENT

JOBS, CERTAINTY & REDUCED RISK



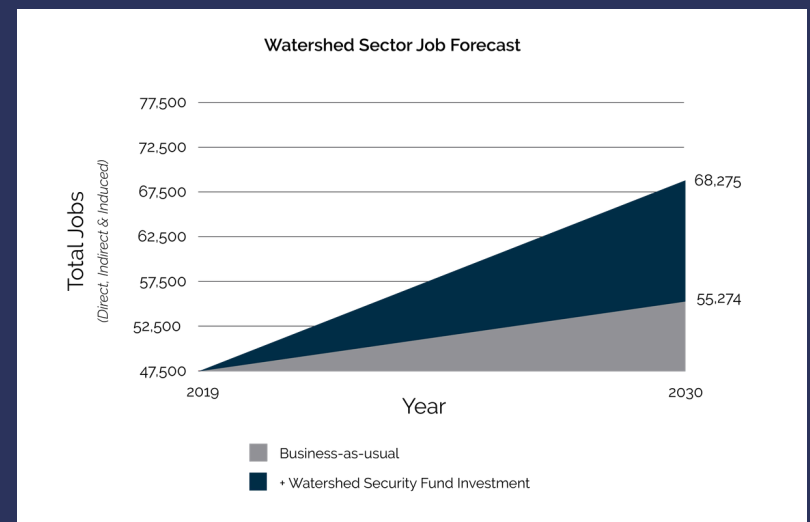
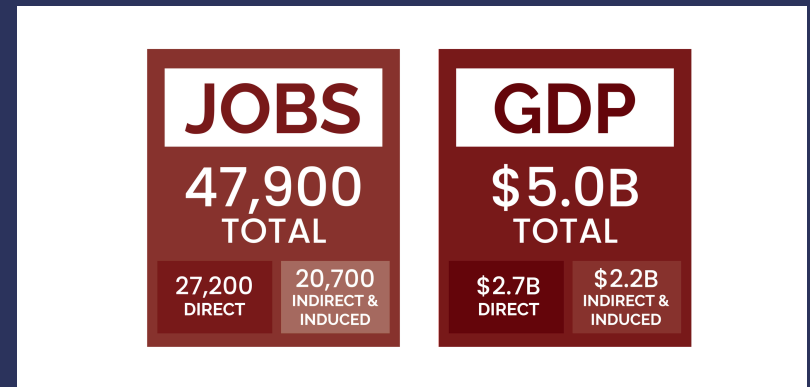
IMMEDIATE JOB CREATION & REGIONAL ECONOMIC DEVELOPMENT

Investment in building watershed security creates immediate, regionally distributed employment and increased economic activity in the local supply chain.

BC's watershed workforce already supports nearly 50,000 jobs and contributes \$5 billion to provincial GDP. Watershed work requires skilled labour across planning, heavy equipment operation, engineering, monitoring, restoration, project management and many other fields.

These jobs bridge across the rural-urban divide, are rooted in local communities and cannot be outsourced. They support workers in transition, young people entering the workforce, and resource dependent communities facing economic uncertainty.

Previous economic recovery funding through Stronger B.C. demonstrates that investments deliver this employment quickly. Economic forecasts indicate a sustained annual investment of \$100 million in watershed security will generate approximately 13,000 new family-supporting jobs over ten years and contribute \$1.3 billion to provincial GDP.



Source: Working for Watersheds: Opportunities for Growth In BC's Watershed Sector (2021)

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ECONOMIC CASE STUDY: HEALTHY WATERSHEDS INITIATIVE



The Healthy Watersheds Initiative created more than 1,500 jobs across BC in less than 2 years and was one of the few Stronger BC Economic Recovery programs reinvested due to its impact.

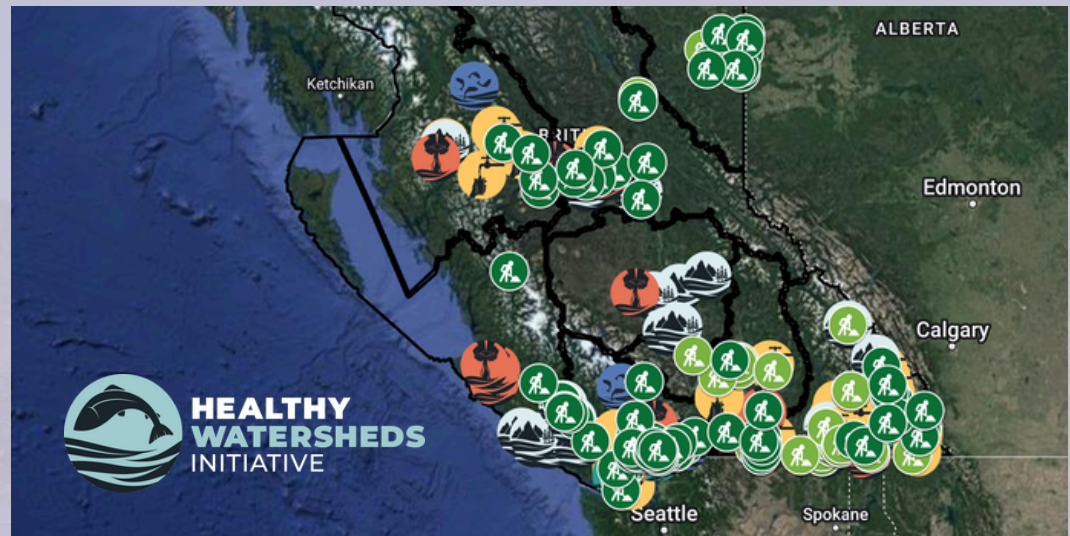


\$27 million invested through Stronger BC (2021–23) delivered immediate, measurable impacts:

- **1,517 jobs** created through **61 projects** rooted in local communities
- **Three-quarters of jobs filled by target populations**, including Indigenous people (32%), adults aged 30 or younger (26%), and/or women (46%).
- **Over 50% of projects provided training** in restoration, monitoring, data management and other fields
- **Local economies boosted** through wages, contractors, First Nation businesses, suppliers
- **Flood and drought costs reduced** and climate resilience built

ECONOMIC CASE STUDY: HEALTHY WATERSHEDS INITIATIVE

Regional Economic Development Examples



- **Clayoquot Sound Watershed Initiative** turned \$1 million into \$2 million to hire local staff and contractors
- **Bulkley-Morice Water Sustainability Initiative** contracted local farmers, providing an additional income for local landowners
- **Cowichan Sediment Removal Project** hired Cowichan-member construction companies
- **Slocan Valley Riparian Restoration Project** purchased plants and supplies from locally operated nurseries
- **Columbia Wetlands Project** increased local retail activity, including fuel sales

INCREASED CERTAINTY FOR LONG-TERM ECONOMIC GROWTH

Economic growth depends on certainty.

Industries require confidence that water supply will remain reliable and that regulatory decisions are based on clear data and coordinated planning.

Investment in watershed governance, restoration, and monitoring reduces business risk and strengthens that certainty:

- Clear watershed plans reduce conflict and improve alignment between economic development and sustainable water supply.
- Coordinated monitoring improves transparency and supports evidence-based decision-making by governments and businesses.
- Restored natural systems improve drought resilience, reduce flood risk, and stabilize water availability.

By strengthening watershed infrastructure, British Columbia improves the conditions for long-term investment, reduces the likelihood of disruptive emergency orders, and builds confidence in regional economic development.

Droughts, floods and storms could result in a total loss of \$108 billion to Canadian GDP between 2022 and 2050 – an average of 0.2% of GDP per annum.

Aquanomics: The economics of water risk and future resiliency (GHD, 2022)

Clear watershed plans reduce conflict and improve alignment between economic development and sustainable water supply.

ECONOMIC CASE STUDY: COLLABORATION CREATES CERTAINTY

Where watershed planning has been implemented, collaborative approaches between First Nations, local governments, farmers and industry have reduced uncertainty and supported shared solutions.

Farmers & First Nations Work Together for Food & Fish

In two of BC's most drought-prone watersheds - the Koksilah (Vancouver Island) and the Nicola (Southern BC) - local collaborative planning between First Nations and farmers has made it possible to continue irrigation while maintaining enough river flow for salmon, even as other watersheds have faced irrigation shut-offs due to low water levels. In the Fraser Valley, Farmers and First Nations are also working together to develop solutions to major flooding caused by increasingly frequent and intense atmospheric rivers.

Watershed Plans De-Risk Mining Investment

Collaborative watershed planning that sets clear water quality standards and maps protected watersheds is critical to providing certainty for mining investment and securing social license. This work will be a key component of BC's Northwest Strategy and has already proven effective elsewhere. In the Nechako watershed, Nadleh Whut'en and Stelat'en First Nations have developed clear water quality standards through the Yinka Dene Water Policy and worked with the province and mining companies to replace uncertainty and conflict with a shared framework, that improved relations and increased business certainty.

REDUCED FINANCIAL RISK & AVOIDED DISASTER COSTS

Healthy watersheds function as natural infrastructure that protect communities and local economies.

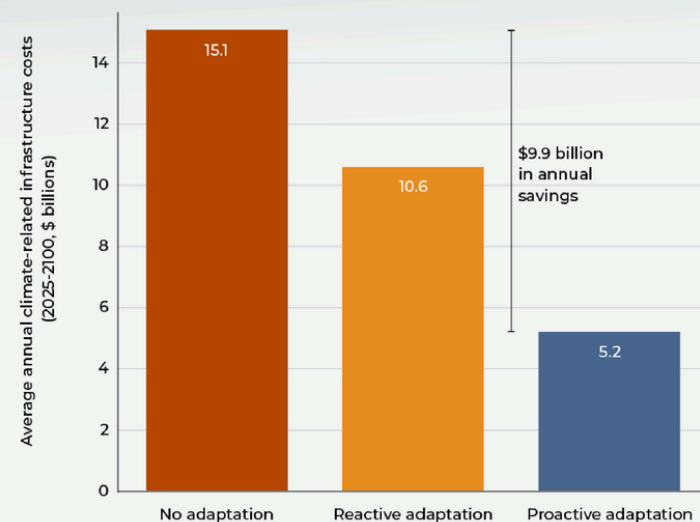
Wetlands and floodplains absorb and slow floodwaters. Intact forests and headwaters regulate runoff and reduce erosion. According to IISD, healthy watersheds provide services such as flood mitigation and water purification at around 50% less cost than equivalent built infrastructure.

Well-managed watersheds, supported by effective planning and governance, strengthen economic resilience and reduce business risk in the face of climate change. Climate impacts are already slowing Canada's economic growth by about \$25 billion per year, according to the Canadian Climate Institute.

Proactive investment in climate adaptation reduces long-term costs by nearly two-thirds and stabilizes economic outcomes. Investment in watershed governance, restoration, and monitoring is a cost-effective way to build BC's climate resilience.



Proactive adaptation reduces climate-related infrastructure costs by nearly two-thirds



>>> PREPARE OR REPAIR
How climate proofing public infrastructure pays off

Source: Canadian Climate Institute

ECONOMIC CASE STUDY: FIGHTING FIRES WITH WATER MAPPING

When wildfire threatened Argenta, B.C. in July 2024, a proactive watershed investment paid off immediately.



Living Lakes Canada and the Argenta Safety and Preparedness Society had just developed interactive water resource maps using long-term monitoring data and local knowledge.

These maps identified 29 water sources and 59 standpipe locations, which gave fire crews instant access to water supply to accelerate fire response.

IMPACT:

- Saved up to two days locating water sources
- Property and infrastructure losses avoided at scale
- Faster decision-making and emergency response
- Reduced emergency deployment costs
- Local job creation and more resilient communities
- \$5 million provincial investment leveraged an additional \$9 million (~ 2:1)

“The collaboration in developing these resources has been integral to the BC Wildfire Service’s ability to fight the Argenta Creek wildfire. It is an incredible story that will surely change how the Province addresses emergencies in remote communities.” Aimee Watson, Board Chair of the Regional District of Central Kootenay

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INVESTMENT SOLUTION

IMMEDIATE REVENUE & IMPACT

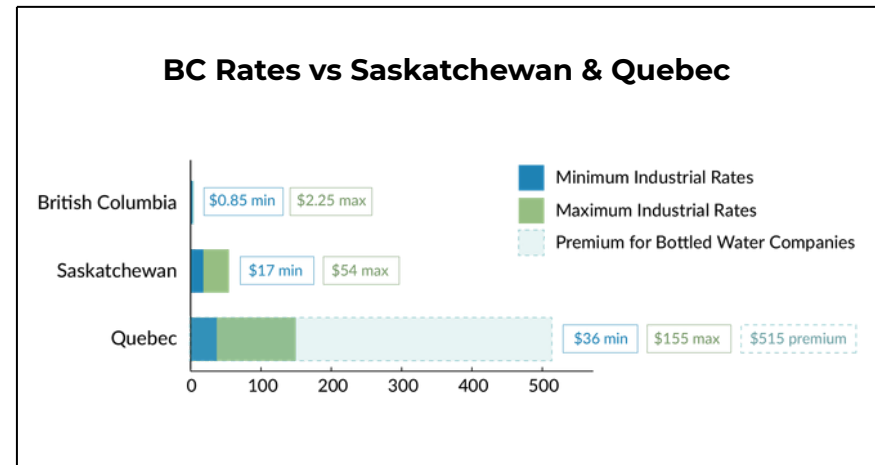


NEW REVENUE OPPORTUNITY

MODERNIZING INDUSTRIAL WATER RATES

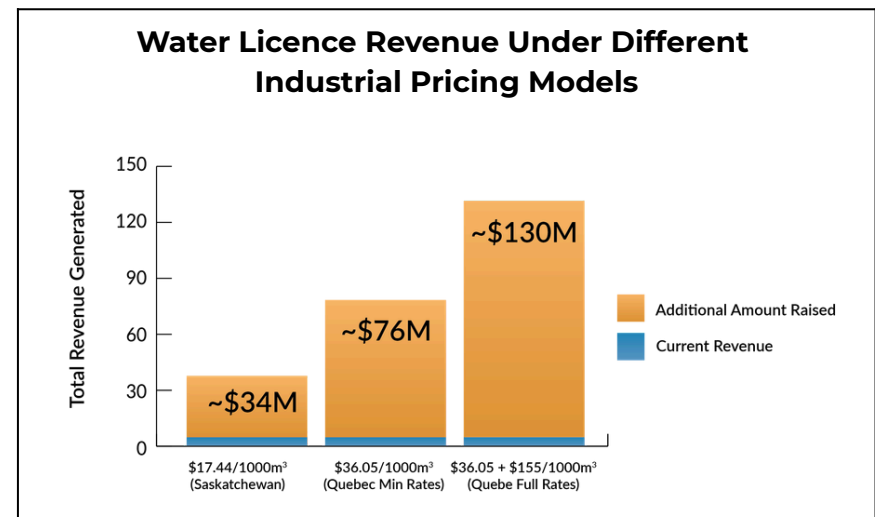


British Columbia's industrial water rates have not been reviewed for more than a decade and are among the lowest in Canada. Right now, industry is charged a maximum of \$2.25 per million litres. By bringing industrial water rates in line with other provinces, BC can take a practical, fiscally responsible step toward lasting watershed security across the province – without increasing costs for taxpayers or impacting business competitiveness.



Source: Modernizing Industrial Water Rates in BC (2025)

New revenue raised from modernized industrial water rates can generate over \$100 million annually to be reinvested in the watersheds that underpin economic activity in BC. These funds would provide stable, long-term funding for communities to ensure sustainable water supplies – protecting jobs, supporting food production, strengthening the economy, and reducing costs of droughts, floods and wildfires.



Source: Modernizing Industrial Water Rates in BC (2025)

BC WATERSHED SECURITY FUND

A HIGH IMPACT FUNDING MECHANISM



Watershed
Security Fund

BC has a province-wide mechanism capable of deploying watershed investment efficiently and responsibly. The BC Watershed Security Fund is already supporting 640 frontline workers to restore, monitor and govern BC's watersheds. This highly efficient and impactful funding program is fully scalable and ready to deliver immediate results with additional investment.

Over the past two years, this Fund has distributed **\$18 million** directly to communities, supporting First Nations, local governments, farmers, watershed groups, and conservation organizations to build watershed security for their regions. These projects are securing water supplies, improving water storage, building food security, reducing flood and wildfire damage, advancing reconciliation, and growing local economies.

In this period, the Fund received over **\$100 million** in applications, meaning it was only able to award grants to **18%** of projects. The current need far outweighs available funds and a shovel-ready pipeline of job-creating projects is primed for investment.






The Fund was established by the province in 2023 with a \$100 million endowment. The Fund is stewarded by the Real Estate Foundation of BC and the First Nations Water Caucus, with the BC government advising.

The endowment model is central to the success of this Fund, providing stable long-term funding for projects and enabling matching funds to be secured from private sources. To date, the endowment has generated \$10 million in funds, matched by \$8 million from philanthropic sources (*not including substantial funds leveraged by projects directly*).

A FUNDING MODEL FOR WATERSHED SECURITY



OUTCOMES

-  Job Creation and Regional Economic Development
-  Reduced Financial Risk and Disaster Costs
-  Increased Certainty for Economic Growth

INVESTMENT STRATEGY



1. Modernize industrial water rates to generate new revenue.
2. Dedicate annual revenue to the Watershed Security Fund to invest in community-driven watershed work that creates jobs, strengthens economic certainty, and reduces long-term costs.
3. Leverage these funds with federal and private sources to scale funding to meet the need.

REFERENCES



BC WATERSHED
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PHOTO CREDITS

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Pg 3 Naramata Bench Winery Vineyard, Penticton, Okanagan Valley photo credit Adobe Stock.com

Pg 4 Orchards and Okanagan Lake from Giants Head Mountain near Summerland photo credit Adobe Stock.com

Pg 5 Using hydraulic post pounder, photo by Jamie Long, BCWF Conservation Stewardship Communications Coordinator

Pg: 7 Drought in the North Arm of the Cowichan River, photo by Parker Jefferson, Cowichan Stewardship Roundtable

Pg.10 Taking data notes, photo by Birch Matkowski

Pg.12 Tranquil Brushing Crew, photo by Graeme Owsianski

Pg.13 Worker monitoring salmon through updated flood infrastructure photo by Collete Rooney

Pg.15 Sunset over UBC Farm CSFS CC BY-NC 2.0

Pg: 17 Argenta Safety and Preparedness Society crew using water resource map July 2024 photo by Louis Bockner

Pg: 18 Wetland restoration in progress at the Yaqaan Nukiy wetland restoration site. Photo by Jamie Long, BCWF Conservation Stewardship Communications Coordinator



BC WATERSHED
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WATERSHEDSECURITY.CA

The BC Watershed Security Coalition is a non-partisan, diverse coalition of 60 organizations made up of community water experts and leaders in the field, including farmers, Indigenous champions and local governments, and represents 285,000 British Columbians from all walks of life.