

Yukon Lakes Monitoring Overview Project

ABOUT THE PROJECT

The Yukon Lakes Monitoring Overview Project was initiated by the Government of Yukon, Water Resource Branch, and led by Living Lakes Canada in close collaboration with staff from the Water Resources Branch. Together, with the project contributors and participants, we explored the current and historic lake monitoring efforts, concerns, and priorities of Yukon rights holders and stakeholders. The participants' perspectives, our findings, and recommendations towards a coordinated lake monitoring effort in the Yukon are presented in the Yukon Lakes Monitoring Overview Project Report. This document is a summary of that report. See page 4 for the full report.

CONTRIBUTORS ACKNOWLEDGEMENT

We want to thank all the participants and contributors who offered their time, energy, knowledge, and interest for this project through conversations, interviews, and survey responses. Your voices made this collective project possible. We acknowledge we were not able to involve all rights holders and stakeholders in the information gathering process despite our aim to be as inclusive as possible.

"Our Elders tell us that water is life."

- Anonymous participant

Key Themes

CHANGES IN LAKE LANDSCAPES:

Participants mentioned noticing changes around lakes over the past several years including increased flooding, increased water temperatures, and changes in fish populations.

RELATIONSHIPS WITH PEOPLE, LAND, AND WATER:

Building relationships through respect and time spent in communities and out on the land are key elements to successful environmental monitoring programs.

TRANSBOUNDARY COLLABORATION:

Due to the geography of colonial borders and First Nations traditional territories, the Yukon is a region that requires collaboration across many governments including Alaska, British Columbia, Northwest Territories, Yukon First Nations and transboundary Indigenous governments and groups.

PROACTIVE ACTION:

Participants highlighted the importance of taking action and making decisions for land and water before negative environmental impacts are experienced.

LAND GUARDIAN PROGRAMS:

Indigenous-led Land Guardian programs were raised as an opportunity to expand lake monitoring alongside the recognition of Indigenous ways of knowing because of the vast territories these programs often cover.

EDUCATION:

The need for more education and awareness of the impacts of climate change and human activities was raised by participants, with a focus on empowering youth and generating opportunities for intergenerational knowledge sharing.

COMMUNICATION:

Effective communication was highlighted as the key to developing strong relationships especially in the context of lake stewardship where there are shared interests but a diversity of worldviews and approaches.

JURISDICTIONAL OVERLAPS:

Overlapping jurisdictions between First Nations, municipal, and territorial governments introduces barriers and challenges but also opportunities to working collaboratively on shared values of water stewardship.

INDIGENOUS KNOWLEDGE AND WESTERN SCIENCE:

Because Indigenous Knowledge and Western science should collaboratively inform lake monitoring efforts, there is an opportunity to explore what this could look like for lake stewardship in the Yukon region.

What We Heard

PRIORITIES

The main priorities related to lake monitoring brought forward by participants included:

- Fish and wildlife habitat
- Sources of drinking water
- Overall ecosystem health
- Recreational uses
- Archaeological and culturally-valued sites
- Climate change
- Agricultural impacts on water
- Water resources in general
- Carbon cycling
- Water quality

PRESSURES

The main pressures that participants are monitoring lakes for include:

- Forestry, Industrial (e.g. mining)
- Agricultural (e.g. nutrient, pesticide, stormwater runoff)
- Recreation (e.g. boating, lake access)
- Development (e.g. change to land use, septic systems, and grey water)
- Wildfires
- Atmospheric deposition
- Climate change (e.g. warming temperature, decreasing lake levels, changing water cycle pattern)
- Fish habitat degradation (either in isolation or the result of other main pressures)

CLIMATE CHANGE IMPACTS

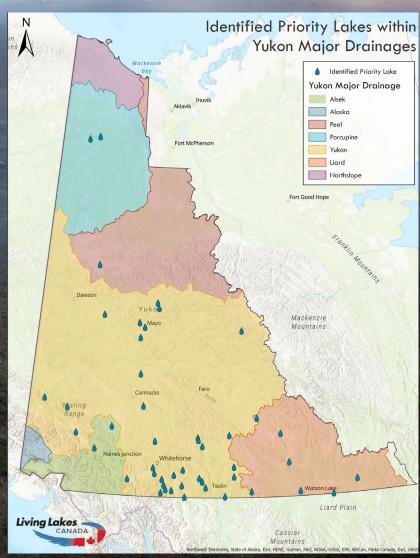
The main climate change impacts that participants are monitoring lakes for include:

- Changes in lake hydrologic balance
- · Decreasing ice cover
- Increasing lake surface water temperatures
- Declining salmon populations
- Trends in precipitation and flooding
- · Impacts of hydro-electricity generation
- Water quality
- Invasive species
- Increasing algal blooms

"The water would want a unified vision to support its health and usage. The water gives life to everything on this planet and so working together to support its health is of utmost importance. If some are not on board with this it can never work, everyone needs to work together and care for the water as it cares for everything and everyone always."

- Anonymous participant

PRIORITY LAKES



A map of identified lakes of interest for future water quality monitoring based on the interviews, focus group, and the survey, as well as on Yukon First Nations Final Agreements and Yukon community-based fish and wildlife monitoring plans.

Recommendations

- Coordinate, alongside rights holders and stakeholders, a working group to explore a Yukon-specific lake monitoring approach.
- Develop the capacity to interweave Indigenous Knowledge and Western science in all potential lake monitoring activities.
- Prioritize a watershed-level approach to lake monitoring.
- Secure long-term funding in support of long-term lake water quality monitoring programs.





- Allocate resources to education and outreach initiatives.
- Celebrate the beauty, the role, and the presence of Yukon lakes as well as the people who care deeply for these lakes.



ABOUT LIVING LAKES CANADA

A settler-founded organization, Living Lakes Canada has been leading water stewardship initiatives for almost two decades, with a long history of working with Indigenous Peoples, local communities, academia, and all levels of government to develop long-term protection of lakes, rivers, wetlands, and watersheds across Canada.

The team members involved in this project have life experiences from all across Canada, from the west coast of Vancouver Island, British Columbia to Halifax, Nova Scotia, bringing diverse experiences and insight into lake stewardship.

Visit livinglakescanada to learn more.

List of participants who consented to be publicly acknowledged for their contributions to this project:

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