

FIShNET (Fish and Indigenous NorthErn healTh): Healthy Water, Healthy Fish, Healthy People

January 23, 2019
Global Water Futures Operations Team
Second Annual Meeting

Presented by: Kelly Skinner (Co-PI)

Community Principal Investigator: Virginia Sutherland

Co-Principal Investigators: Brian Laird, Heidi Swanson

Community Co-Investigator: Vern Cheechoo

Co-Investigator: Mylène Ratelle, Jim Wallace



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MUSHKEGOWUK
COUNCIL ᐃᓕᓐᓂᐃ ᐃᓕᓐᓂᐃ

FIShNET will help answer a critical question from
Indigenous people in northern Ontario:

“How safe are fish to eat?”

The overarching goal of FIShNET is **to characterize the links between environmental change, water quantity and quality, fish health, food safety, and food security in partnership with Indigenous communities**



Mushkegowuk Territory



Fig. 1. Map of the Mushkegowuk Cree Territory First Nations and Ontario's Far North.

Source: McCarthy et al., 2012



Main Expected Outcomes

The main expected outcomes will include:

- Determination of **fish health concerns** from the community (Leads: Sutherland and Cheechoo)
- Strengthened relationships and opportunities for engagement, understanding of communication preferences, and **tailored tools for risk communication** (Leads: Skinner, Sutherland and Swanson)
- Improved ability to detect and predict changes in the **safety and sustainability of fish stocks** in the face of changing climate and resource development (Leads: Laird and Swanson)
- Fill site-specific data gaps related to **levels and sources mercury exposure** in the community (Leads: Laird and Ratelle)
- A better understanding of the **relationship between fish and food security** (Lead: Skinner)
- Design a platform to build future **data visualization tools** (Lead: Wallace)



Methods, Community Engagement, Capacity Building

Building on methods previously employed by the FIShNET team in other northern regions, including:

- local workshops, traditional knowledge interviews and surveys, community-based ecological monitoring, fish nutrient and mercury analysis, risk benefit assessment, dietary questionnaires, segmental hair mercury analysis, household food security surveys
- data sharing agreement
 - data will be owned, and access controlled by, the Mushkegowuk Council
- community members will be hired as local research coordinators
 - will assist with sample collection (Years 1 and 2) and knowledge mobilization (Year 3)
 - cross-cultural training



Timelines and Workplan

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|----------------------|--|
| <u>Year 1</u> | <ul style="list-style-type: none">• Participatory program launched through public meetings and sharing opportunities• Data will be collected through workshops, interviews, and surveys |
| <u>Year 2</u> | <ul style="list-style-type: none">• Collection of samples (fish and hair)• Start laboratory analyses |
| <u>Year 3</u> | <ul style="list-style-type: none">• Complete data analysis and refine models• Develop communication tools• Share findings with the community and other partners• Apply for further funding to expand the project (e.g., to expand to other Mushkegowuk communities) |



Foreseen Collaborations with other GWF Projects



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