

NWT-wide Community-based Water Quality Monitoring Program

NALMS - November 1, 2016 - Meghan Beveridge

Northwest Territories

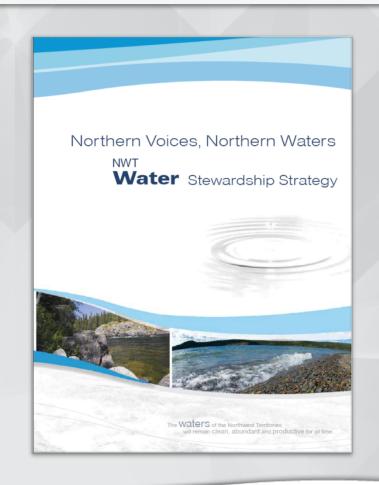
Northern Voices, Northern Waters

Vision:

The waters of the Northwest Territories will remain clean, abundant, and productive for all time.

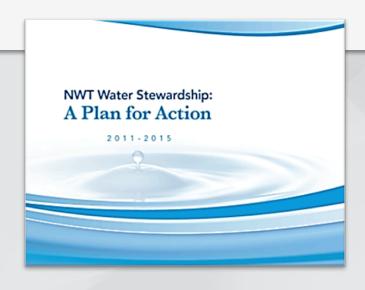
Goals:

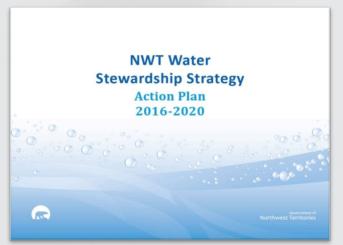
- Waters that flow into, within or through the NWT are substantially unaltered in quality, quantity and rates of flow
- Residents have access to safe, clean and plentiful drinking water at all times
- Aquatic ecosystems are healthy
- Residents can rely on their water to sustain their communities and economies
- Residents are involved in and knowledgeable about water stewardship
- All those making water stewardship decisions work together to communicate and share information





Keys to SuccessCommunity-Based Monitoring





- Develop community capacity to strengthen involvement in water stewardship, education, training, and research and monitoring programs.
- Work on ecosystem-based research and monitoring programs together.



What is community-based water quality monitoring?





What's the process?

Community Questions

- What are the questions relating to water?
- What information is needed to answer the questions?

Collect Information

- What information is already available (e.g.long-term data)?
- What additional information can be collected?

Communitybased Water Monitoring

- Capacity and training to collect information
- Monitors collect reliable information
- Decision makers have reliable information

Understand the Information

- What do all the numbers mean?
- How do these numbers compare to long-term data?
- How do these numbers compare to guidelines?



Identifying Community Questions

- Is the water healthy?
- Can we drink the water?
- What is in the water?
- Is what is in the water changing?
- Are stressors affecting water quality?
- Are contaminants potentially related to oil sands in the water?
- Are contaminants that can affect the health of fish and wildlife in the water?
- What are the cumulative effects of stressors on water quality?





How do we answer these questions?

Collect information

Scientific measuring and testing









Traditional and local knowledge



Photo credit: Sarah Elsasser



Where We Monitor

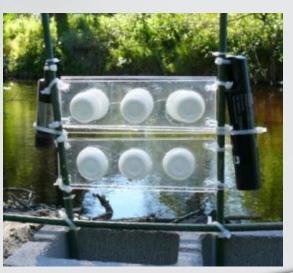
2012 – 13 communities

2013-16 - 21 communities

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What We Use to Monitor Water Quality











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Community Monitors are Important!

Capacity Building:

- Hands-on, in-the-field training
- Community Monitor
 Workshops
- YUMAs







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What do the numbers mean?

Answering
Questions
about Water
Health

What has the water been like in the past?

Long-termData

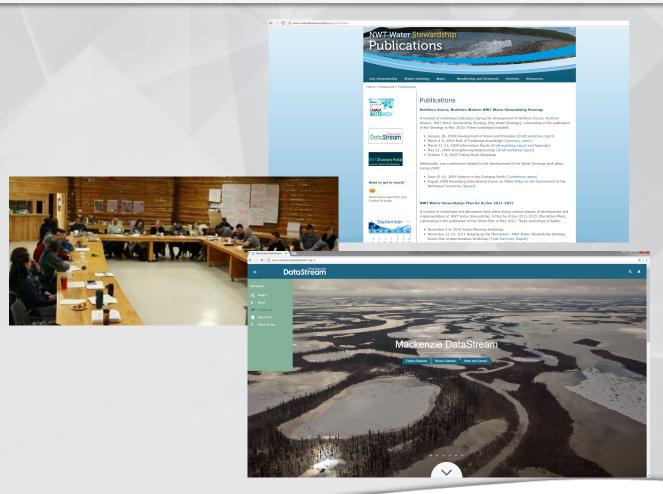
What is recommended?

Guideline



Getting Information Back to Our Community Partners

- Workshops and community meetings
- Publications
- Online





Opportunities & Challenges

Opportunities:

- Developing strong partnerships
- Community engagement
- Fostering trust
- Supporting local capacity
- Investing in Northern communities
- Filling data gaps
- Linking research with communities

Challenges:

- Each community is unique
- Capacity
- Resources
- Consistency
- Logistics / Weather
- Communications



Looking Forward...



- Planning for sixth field season
- Five-year review of the program
- Five-year results report
- Mackenzie DataStream online database



Thank you!

Questions or Comments?

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Department of Environment & Natural Resources
Government of the Northwest Territories

For more information about the NWT Water Stewardship Strategy and the Action Plan, visit:

www.nwtwaterstewardship.ca





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