Technicians in Training

Many of us never stop to think about a lake or our favourite park at a smaller scale - like the size of a molecule or an ion - yet it can be quite fascinating. It's amazing what can we learn about water, for example, when we look at the microorganisms that live in it, or the chemicals that are dissolved in it. What do these things tell us? Who are the people that can gather and communicate this type of information?

The answers can be found at INAC's Taiga Environmental Laboratory. This is a fully accredited northern-based laboratory, which means it is the place to go for top-quality analysis of water, sewage, effluent and soil in the NWT. All testing is done by experienced lab technicians at the Yellowknife-based facility.

Taiga is committed to training Northerners in the area of environmental chemistry, and is able to provide learning opportunities through its working relationship with Aboriginal Engineering Ltd. Each summer post-secondary northern students are hired to work as Junior Lab Technicians. These students learn about the day-to-day operation of an accredited laboratory, how to analyze samples, safety in the workplace, as well as how to operate instrumentation.

The lab has recently started a new initiative to help promote awareness and interest in environmental science. High school students are hired as part of an after school work experience program. This year, Nick Hurst, a Sir John Franklin High School student, has spent a few hours each week working at the lab. He plans to attend university in the fall to study in a science-related field.

Visit http://nwt-tno.inac-ainc.gc.ca/taiga for more information on training programs and/or laboratory services.



Grade two students from J. H. Sissons Elementary School in Yellowknife conduct exciting science experiments while touring the Taiga Environmental Laboratory. L-R: Emma Butler, Logan Clark, Alexandra Adolf and Hana Steinwand.



We can all play a role in protecting the environment. Many environmentally responsible acts, no matter how small, always add up to one healthier environment.

The Challenge

Challenge yourself and your family to perform all the following activities on a regular basis for a period of one week. Once you are in the habit of conserving (and protecting) the NWT's valuable water resources...there is no need to stop. Keep on making environmentally responsible choices.

- Turn off the faucet when you are brushing your teeth - continuous flow from a tap may use 4 to 5 litres of water per minute.
- Wear clothes more than once before washing next to the toilet the washing machine uses the most water in the average home.
- Be conscious of water use when rinsing dishes in the sink – running the faucet unnecessarily is literally washing a valuable resource down the drain.
- Try to consciously shave a few minutes off your regular shower routine - baths generally use more water than a shower.
- Use environmentally-friendly cleaning products this reduces the amount of hazardous chemicals getting into NWT water systems.
- Always turn off taps completely (make sure to get any broken ones fixed) - a dripping faucet can mean a loss of as much as 50-75 litres a day.
- Stoop and scoop after your pets it's melting time, if its not picked up poop can dissolve into the ground eventually making its way into water sources.

Save more: Placing a toilet dam (sealed plastic bottle filled with sand or water) in your toilet tank can save an average family over 45,000 litres of water per year.

Yes, you can make a difference! #

Got something to tell us?

Here's who to contact:

Tricia Melander-Forde INAC, Communications and Public Affairs PO Box 1500, Yellowknife, NT X1A 2R3 Phone: (867) 669-2462 Fax: (867) 669 2715 Email: Tricia.MelanderForde@inac.gc.ca

Plain Talk on Land and Self-government is produced by the Department of Indian Affairs and Northern Development in the NWT to help northerners understand these concepts, how they work, and what they mean in our day-to-day lives.

Our Vision

The NWT region of INAC is a respected partner in a strong and healthy Northwest Territories. We strive for: • respectful, effective relationships with Aboriginal

- creating and enhancing opportunities for all
- Northerners; • responsible resource development in healthy
- northern control over northern resources;
- responsive and accountable northern government as partners; and
- national initiatives that reflect the interests of all Northerners.

It is not a legal document.

On the Web

Government of Canada programs and services

INAC - NWT Region nwt.inac.gc.ca

Youthbuzz on the NWT

nwt-tno.inac-ainc.gc.ca/yb/yb-0-eng.asp

nwt-tno.inac-ainc.gc.ca/atr/ent-agr-eng.asp

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NWT Water Resources – A Healthy Future

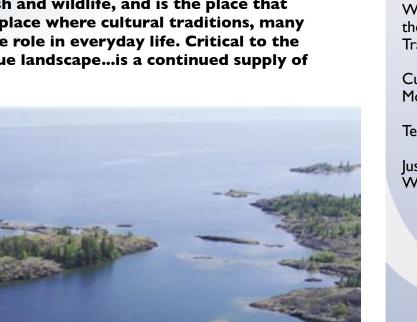
When people think of the Northwest Territories (NWT), the first thing that comes to many minds is its natural beauty - vast boreal forest, magnificent mountains descending into marsh, rolling tundra, pristine lakes and free-flowing rivers. This rich landscape hosts many species of birds, fish and wildlife, and is the place that generations of Northerners call home. It is a place where cultural traditions, many based on connections with nature, play a large role in everyday life. Critical to the health of the territory's people and this unique landscape...is a continued supply of clean and abundant water resources.

As pressures on water resources increase both within the territory and from neighbouring jurisdictions, the Government of Canada recognizes that effective water management is a top priority for Northerners and Canadians. Aboriginal leaders and many others have spoken clearly and emphatically about their concerns regarding the future of the NWT's water resources. It is clear that territorial residents need to collectively play a greater role in understanding the significance of current and emerging water management issues; and in shaping the future direction of water resources management.

Indian and Northern Affairs Canada, in partnership with the Government of the Northwest Territories, has been working on the development of the NWT Water Resources Management Strategy since early 2008. A discussion paper entitled Northern Voices, Northern Waters - Towards a Water Resources Management Strategy for the Northwest Territories was released last June. It includes a proposed approach to developing a strategy that will best reflect the interests and needs of NWT residents. Engagement with water partners is highlighted as a key component of this approach and discussions to help define the NWT's 'northern voice' have been underway for several months. A multi-party Steering Committee has been formed to oversee this initiative, which includes Aboriginal Leadership and government representatives.

Based on input from territorial water partners and residents, the NWT Water Resources Management Strategy will help guide all water use and management decisions. The development and implementation of this made-in-the-North strategy is an important step to ensure water resources in the NWT remain sustainable and continue to support the territory's people and overall environmental health.

Watch for the release of the strategy in upcoming months. Visit www.enr.gov.nt.ca or call 867-920-3296 for more information.



In This Issue:

NWT Water Resources -A Healthy Future

The Environmental Stewardship Framework

What about the NWT's Transboundary Water?

Cumulative Impact Monitoring

Technicians in Training

Just Plain Fun... Water Challenge

pring 2009



The purpose of our newsletter is to keep you informed on the progress of land and self government negotiations in the Northwest Territories, and to provide some answers to frequently asked questions. We also feature the people and communities involved in negotiations, celebrate milestones, and announce upcoming events. On behalf of Indian and Northern Affairs Canada (INAC), we hope you will find our newsletter informative and easy to read.



The Environmental Stewardship Framework

All Northerners have a responsibility to care for the land and water. In the NWT, a number of organizations play leadership roles in carrying out this shared responsibility, called "environmental stewardship". These include Aboriginal governments, the territorial and federal governments, co-management resource boards, regulatory boards, environmental non-governmental organizations, communities and industry.

What is it? The Environmental Stewardship Framework (ESF), previously known as the Cumulative Effects Assessment and Management Framework or CEAMF, was created in 2000 to support responsible economic development within the context of sound environmental stewardship. The Framework is like a "big toolbox" that includes all the different programs and initiatives that focus on taking care of the environment.

What is in the toolbox? The Framework recognizes that there are many components that must come together to make sure that the environment is protected, that communities thrive, and the economy is strong. These components are:

- 1. **Vision and Objectives:** It is important that residents of the NWT share a common vision for environmental stewardship. Where do we want to go? How do we want to get there? These are questions that Northerners need to ask themselves and each other and come up with a collective answer.
- 2. **Land Use and Conservation Planning:** Land use plans help to guide development and protect important ecological and cultural areas. They provide a context for both conservation and development. Protected areas are an important part of land use plans and community conservation plans.
- Monitoring: Understanding baseline (predevelopment) conditions and monitoring changes over time will help ensure that adverse effects are avoided or minimized. It will also help us determine which changes are caused by development and which changes are the result of natural variation.
- 4. **Research:** Environmental studies (e.g. determining why caribou numbers are falling) will increase our understanding of the environment, culture and economy, and improve our ability to make better decisions.
- 5. Environmental Screening, Assessment
 and Review: Thorough examination of the potential
 effects of development proposals are essential to ensure that if
 a project proceeds, it does so with minimal negative environmental
 effects and maximum social benefits.
- 6. **Regulation and Enforcement:** Regulation involves rights issuance, land use permitting, water licensing, and/or harvest quotas. If a project receives permits to proceed, the terms of these permits (including land and water licences) are intended to ensure that related environmental effects are minimized, monitored carefully and that appropriate changes are made to the project as it proceeds. The rules are enforced by the responsible authorities.
- 7. **Information Management:** Environmental and social information needs to be made available to all users in an understandable fashion. This will support good decision-making and help us to avoid studying the same thing over and over again, or missing areas that we need to study.
- 8. **Capacity-building:** Groups must have the people and finances to effectively participate in decision-making at all levels. Only in this way will decisions reflect the values and visions of the people affected.
- 9. **Coordination:** All participants must work together to implement the Framework. No one group is without responsibility; no one group has the sole responsibility. All of us



A field of fireweed located in one of the NWT's 42 ecoregions. Ecoregions are relatively large areas with similar climate, vegetation, geology and other ecological features.

have a role to play in ensuring the environment is protected and that we benefit from responsible economic development.

10. **Audit and Reporting:** Audits, including the NWT Environmental Audit, check on the health of the environment and the regulatory system. The results inform decision-makers on ways to improve operations.

How are the tools used?

To help different organizations understand where they fit in and how they can be the most effective in implementing the Framework, the ESF Steering Committee provides guidance and advice in the form of the ESF *Blueprint*. Organizations are

encouraged to use the recommendations found in the *Blueprint* to guide both everyday activities and long-term planning; and to help fill in any gaps by working with other environmental stewards. The *Blueprint* is reviewed and updated annually to help evaluate progress. Managing who-does-what to help protect the environment is complex, and the ESF *Blueprint* helps everyone keep track.

For more information, visit **www.ceamf.ca** or phone 867-669-2594.

This ESF Diagram shows how all the different framework components are interlinked.

How is INAC an Environmental Steward?

Taking care of the land and water in the NWT falls within Indian and Northern Affair Canada's (INAC) mandate. The Department fulfills its environmental stewardship role in many ways. Some activities include:

- environmental research
- baseline data collection and analyses
- cumulative effects monitoring
 providing technical expertise
- providing technical expertise
- land use planning participationcapacity-building support
- Capacity-building support
- enforcement activitiesregulatory regime involvement
- traditional knowledge incorporation
- operating an environmental laboratory
- guideline and policy development
- contaminated sites clean-up activities

What about the NWT's Transboundary Water?

Water in the NWT is impacted by activities in other jurisdictions – the flow of rivers and lakes simply does not recognize borders between provinces and territories. As the authority responsible for water resources management pursuant to the NWT Waters Act, INAC participated in the negotiation of a formal agreement on transboundary waters with its neighbours. The Master Agreement on managing transboundary waters in the Mackenzie River Basin

was signed by Alberta, Saskatchewan, British Colombia, the Yukon, the Northwest Territories and Canada in 1996. This agreement requires provinces and territories to negotiate the specific details of how transboundary waters will be monitored and managed in each jurisdiction through bi-lateral or potentially multi-lateral agreements. The NWT currently has a bi-lateral agreement in place with the Yukon. INAC's team of scientific experts monitor transboundary waters on an on-going basis to detect any environmental changes, and have engaged in

this work since the early 1990's. Supported by technical findings and data from monitoring activities, the NWT Water Resources Management Strategy will help guide upcoming negotiations with other jurisdictions.

What does the Mackenzie River Basin Board do?

The Master Agreement also set up a unique management body

– the Mackenzie River Basin Board. INAC's Regional Director

General sits on this Board along with other federal, territorial and

ABOVE: The Liard River drains into the Mackenzie River at the community of Fort Simpson. Water quality monitoring stations are set up on the NWT's four main transboundary waterways: the Slave River, Hay River, Liard River and Peel River.

LEFT: Water quality and quantity is monitored throughout the NWT on a regular basis.

provincial government representatives. The Mackenzie River Basin Board's mandate is to facilitate transboundary water agreements and monitor the overall state of the aquatic environment in the Mackenzie Basin. Monitoring results are compiled every five years to detect and/or evaluate trends or impacts on northern waterways – this *State of the Aquatic Ecosystem Report* is considered an "ecosystem check-up". A working group is currently compiling an inventory of Traditional Knowledge that relates to oil sands, hydro-electric projects and climate change to be used by the Board. The next report is anticipated later in 2009. Visit www.mrbb.ca for more information.

Cumulative

Impact Monitoring



The Northwest Territories is the only jurisdiction in

Canada where the implementation of a cumulative impact monitoring program is required under law. Cumulative impacts are changes to the biophysical, social, economic, and cultural environments caused by the combination of past, present and "reasonably foreseeable" future actions. The NWT Cumulative Impact Monitoring Program (CIMP), which is set out in land claim agreements as well as the Mackenzie Valley Resource Management Act, requires governments to collect information on how all uses of land and water including deposits of waste affect the NWT environment – a big job!

To help get this job done, the CIMP and Inuvialuit have partnered to develop and implement a community-based monitoring program in the Mackenzie Delta. This is a pilot project that will help Northerners document and understand how the land is changing or being impacted by development. The project will promote capacity building, test data collection and reporting protocols, foster community engagement and support the use of both traditional knowledge and science. It is intended to enhance the communities' overall role as environmental stewards.

As part of this project, the CIMP is working with a number of partners - the Sahtu Renewable Resource Board, the GNWT's Department of Education, Culture and Employment, Fisheries and Oceans Canada and Environment Canada – to establish community-based environmental monitoring sites where high school students will be introduced first-hand to environmental science. The initiative is linked with the concurrent development of a territory-wide grade 10 experiential science curriculum.

This Mackenzie Delta pilot project endeavours to engage community monitors and youth in scientific data collection, and to provide a voice to Inuvialuit Traditional Knowledge that expresses Inuvialuit views about the

local environment and its changes. Building on project results and lessons learned, it is hoped that similar community monitoring programs will be developed in other regions of the NWT. Visit www.nwtcimp.ca.

Communities play an important role as environmental stewards. Members from the community of Tuktoyaktuk are actively involved in CIMP's pilot project. L-R: Steve Kokelj, Philip Nasogaluak, Logan Gruben, Peter Voudrach and Chucky Gruben Top: Craig Gruben, Fred Wolki

