KEEYASK MONITORING ADVISORY COMMITTEE NEWSLETTER

Fall / Winter 2024



TANSI - HELLO from the Keeyask Monitoring Advisory Committee (MAC).

Keeyask has changed the land, water, and lives of people in many ways. Manitoba Hydro and the partner First Nations meet often to talk about these changes and how to handle them. The MAC is working to understand, watch and address these effects through field studies, traditional knowledge and more.

This newsletter gives a quick look into what is happening now and what will happen in the future.



MITIGATION
Mercury & Health



MONITORING
On the Land & Water



ENGAGEMENTCommunity-led Initiatives

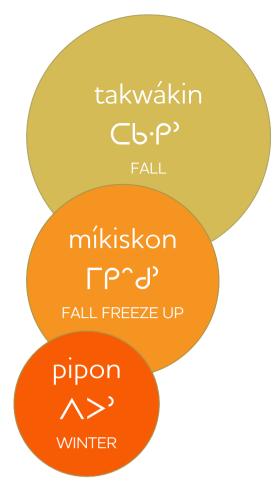
WHAT IS MAC?

The Keeyask Monitoring and Advisory Committee (MAC) discusses monitoring and mitigation activities and results.

MAC includes people from partner First Nation communities and Manitoba Hydro.

Reach out to your local MAC representative if you have questions about the project, or visit.

www.keeyask.com



WHAT DOES THE MAC <u>ACTUALLY</u> DO?

We talk about the Keeyask experience, including tough topics like the changing environment, effects of Hydro development, climate change, and other challenges that northern communities face.

We work towards creative solutions for the impacts of Keeyask. Things aren't perfect but we are working together.

Take a look at our signs to promote respectful harvesting practices and awareness of Ininiw Traditional Territories



COMMUNITY-LED INITIATIVES

Keeyask ATK Monitoring

The land, water and animals are monitored at Keeyask by the partner First Nations through their Aboriginal Traditional Knowledge (ATK) Programs. The ATK teams also provide land-based learning and youth mentorship.





There are many ways to look
at the world, like:
Traditional Knowledge,
Indigenous Sciences,
Community Observations, and
Western Sciences.
People may use different words to
talk about what they know and
experience.

Tataskweyak Cree Nation (TCN) ATK Chaiton Spence Annual Youth Camp

In October 2024, the TCN ATK team held a youth camp in honour of the late Chaiton Spence. Youth from TCN went to the land-based learning camp to enjoy the land and get away from the pressures of community life. Activities and positive rolemodels that connect youth to the land and their cultural traditions are important for wellbeing.

"Our cultural teachings and western science together give the youth a different perspective on our world we live in today. Seeing the positive changes in the minds and hearts of the youth is very rewarding."

- Robert Spence (TCN ATK)





Fox Lake Cree Nation (FLCN) ATK

Father's Day Fishing Derby

The FLCN ATK team monitored fish while promoting healthy communities by hosting a community fishing derby in June 2024. The ATK team measured and recorded the fish caught, and celebrated the 2024 graduating students with a fish fry.



Jimmy Lockhart and Drayden Jobb (FLCN ATK) measuring fish caught at the derby



Five Nations Gathering

The FLCN ATK team helped out at the Five Nations Gathering in August 2024 at the FLCN Cultural Camp. Elders shared stories from their communities and the ATK team made lunch with fried and smoked fish.



Jimmy Lockhart smoking fish

MAC FIELD TRIPS

Pre- & Post-Impoundment Boat Trips

IMPOUNDMENT

means flooding an area of land to store a large amount of water in a reservoir.



Pre-impoundment boat trip with MAC members in 2019



Post-impoundment boat trip with MAC members in 2023



In August 2023, members of the MAC took a boat trip from Tataskweyak Cree Nation (TCN) down the Nelson River to the Keeyask Generating Station. People from TCN talked about their community's history and their connection to the land, water, and animals. They showed several cultural sites that were flooded by the Keeyask impoundment in 2020.

Keeyask Site Tour -July 4th, 2024

On July 4th, 2024, the MAC members took a field trip to the Keeyask Generating Station and nearby areas. They toured the powerhouse, which has a new mural and plans for a heritage display. They also saw the future wetland site, areas where plants and trees have been replanted, and the Keeyaskosani Ancestral Memorial. They talked about ideas for signs at the upstream and downstream boat launches.



MAC members on bus viewing revegetation areas

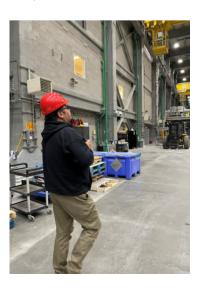






The Keeyaskosani Ancestral Memorial was consecrated in 2015 as a place to re-bury the remains of a 4,300 year old Cree ancestor found on the south shore of Gull Lake in 2010. The cemetery is meant for the reburial of any human remains discovered in the Keeyask Project area during the construction and operation.

MAC members tour of the powerhouse



New Mural at the Keeyask Powerhouse

A heritage display and mural were installed in the lobby of the Keeyask powerhouse to honour the ancestors and lived experiences of the Keeyask First Nations partners in the area.





Members of the MAC in front of the new mural in the Keeyask Powerhouse lobby.

The exhibit also shows the heritage work associated with Keeyask studies. The mural was painted by Tyler Tobacco and his daughter in 2024. A blessing will be held in Winter, 2025.

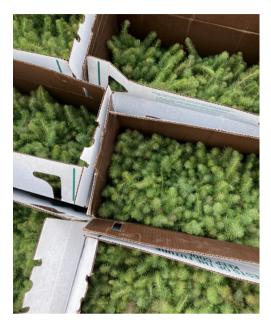
Reach out to



REVEGETATION

REVEGETATION

means planting or seeding a disturbed area to return it to nature

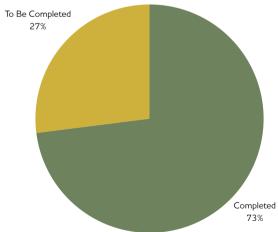


This summer, Iron North staff planted 240,000 black spruce and jack pine seedlings as part of the Keeyask revegetation efforts. Tree planting takes place in June because of the favourable growing conditions and to

allow the seedlings time to establish their roots before winter. The tree planting season typically runs for 3 weeks. This year saw many return planters contributing to the fastest planting speed Keeyask has seen to date!

1.3 million trees planted to date





Revegetation Area Completion Rate (%)

Attention to detail is very important in tree planting. There are many factors which can help or hinder a tree's growth. Some of these factors include ground moisture, soil

help or hinder a tree's growth. Some of these factors include ground moisture, soil type, sun exposure and root health. Experienced tree planters are able to identify "micro-habitats" or areas that will allow a seedling to thrive. In order for a seedling to survive, the roots must be planted straight and to a depth that covers the roots and not the stem



If you or someone you know is interested in joining the tree planting crew, please reach out to Iron North in the spring to inquire.

MERCURY & HUMAN HEALTH

- Mercury levels in the Keeyask reservoir are expected to be highest between 2023 - 2027.
- Eating fish is healthy and good for you, but avoid fish from Gull Lake. Generally, avoid eating the biggest fish.
- Check out the Safe Catch products for up to date fish consumption information about Gull Lake, Stephens Lake and Split Lake.
- Hair sampling is available so you can 'Know Your Number' (e.g. how much mercury is in your body).
- Your local Mercury Community Coordinator can help provide you with more information.





Hair Sampling Event in Gillam

Zebra Mussels at Keeyask



Zebra mussels are in the Nelson River, so they are also found at Keeyask. Because we can't see inside the pipes at Keeyask, we use bio-boxes to check for zebra mussel growth. These bio-boxes tell us when we need to use chlorine to kill the zebra mussels and stop the pipes from getting clogged. This treatment happens once the bio-boxes show the mussel growth in the pipes is too high.

MAC members checking a zebra mussel bio-box in the Keeyask Powerhouse

PEAT MANAGEMENT

Monitoring Effects and Mitigation

The Environmental Impact Statement noted that floating peat islands were expected in the Keeyask reservoir and it was anticipated they could float to the powerhouse. In 2023, the first peat islands near the powerhouse were a challenge to remove. Input from different groups helped create a better plan for managing peat in the future. The plan allowed for the efficient removal of a peat island from the powerhouse in 2024. Environmental protection, spill response, and heritage resource protection plans were considered during this work.



Floating peat islands in the Keeyask reservoir in 2024.

Boat patrol crews, Iron North and FLCN work together to remove the peat

WHAT WE KNOW ABOUT PEAT:

Mercury in Fish and Water

Peat islands are a normal part of the process of creating a reservoir. Removing peat does not change the predictions related to uptake of mercury in fish.

Sediment

Taking away peat islands can make the water around them muddy for a short amount of time. Some material will end up in Stephens Lake, but it won't be noticeable because there is not much material compared to the size of the lake.



Watch for these topics and more in the next issue:

Lake sturgeon
Caribou
Cultural Camps



If you have questions about Keeyask environmental monitoring or past studies, contact your ATK monitoring team:

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YFFN - Jimmy Beardy 204-341-2336

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TCN - **Robert Spence** 431-354-1407