KEEYASK MONITORING ADVISORY COMMITTEE NEWSLETTER

June 2022

NOW THAT KEEYASK IS OPERATING, WHAT'S NEXT?

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

Keeyask has affected land, water, and people in many ways. Hydro and the partner First Nations meet regularly to discuss these effects and ways to address effects. Efforts are underway to understand, monitor and address effects through field studies, traditional knowledge and more.

This newsletter shares a snap shot of current and ongoing activities.



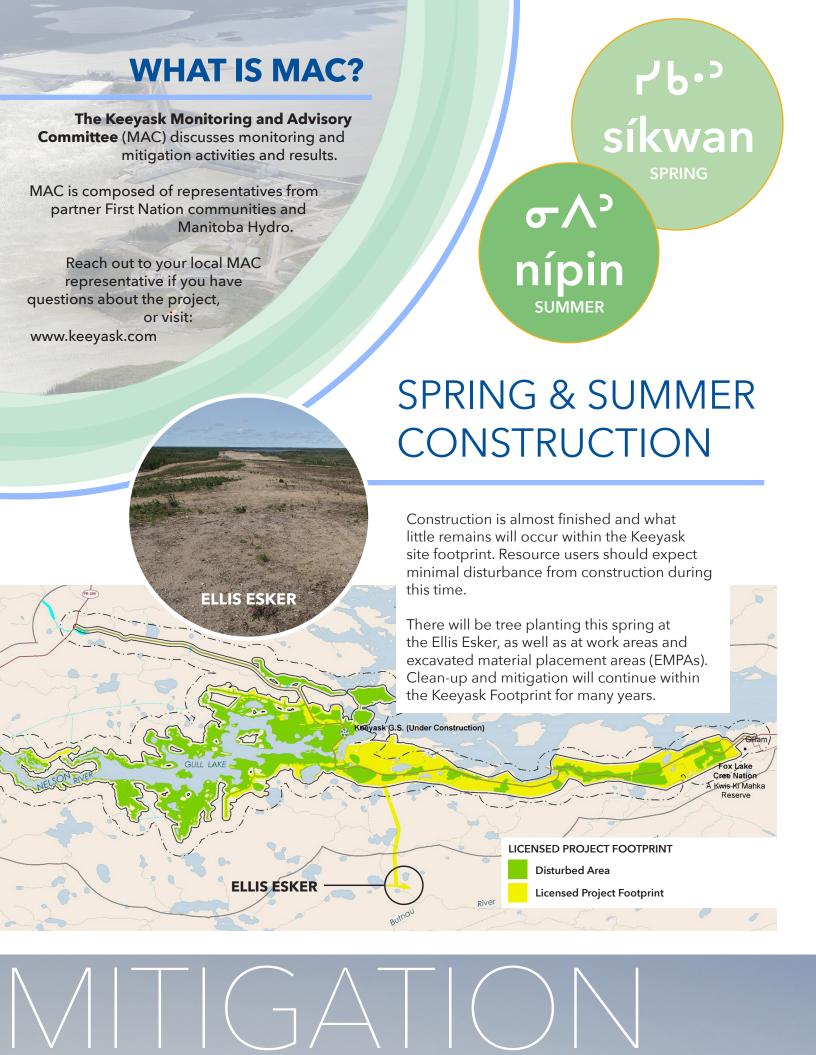
MITIGATIONClean up and replanting



MONITORINGNamao & wildlife



ENGAGEMENTCommunity-led initiatives



WORK AREA CLEAN UP

As project construction winds down and work areas are no longer needed, clean-up takes place.

- 1. Site clean-up includes removing all buildings, vehicles and equipment.
- 2. A ripper loosens the ground using a tractor with a blade. Soil is worked into the area to help prepare for tree planting.
- 3. Trees and grasses are planted. Workers from Iron North plant jack pine and black spruce tree seedlings in June.

Work Area A after site clean-up



Work Area C ready for tree planting

Trees planted by Iron North at Keeyask

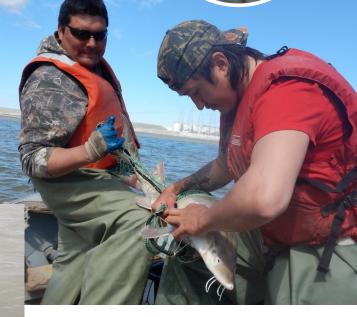


NAMAO MONITORING

Namao (Lake Sturgeon) monitoring occurred throughout the Project to understand how building the Project impacted namao on either side of the construction site. We wanted to know how many namao live in Gull

and Stephens lakes. We also wanted to better understand how juvenile and adult namao move in the Nelson River. So far, we have learned that the juvenile and adult populations in both lakes have increased since studies began in 2001.

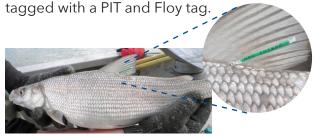
Namao monitoring and fish stocking will continue for many years to understand how the creation of the reservoir changes spawning habitats, populations and movements. It will take many years of monitoring, including scientific and Indigenous Knowledge studies to learn this.



Adult Namao - Monitoring at Stephens Lake Namao juvenile monitoring

FISH TAGS

Floy tags are external, and can be seen. PIT tags are embedded in the muscle of the fish. Stocked yearling namao have PIT tags. Namao that are captured through Keeyask monitoring and are longer than 350 mm are



CASH FOR FISH TAGS

If you catch a fish tagged with a Floy, PIT or acoustic tag you can receive \$5-25 per tag. Submit the tag or a clear photo of the tag number, and the location you caught the fish, to one of the following:

your community coordinator

 email: info@nscons.ca (Subject: Keeyask Tag Returns)

 Keeyask Tag Returns North/South Consultants 83 Scurfield Blvd. Winnipeg, MB R3Y 1G4 FLOY TAG



PIT TAG \$5





\$25 max. per fish (for fish with more than one tag)

MONITORING



Namao Spawn Camp

"ATK is something you live, breathe, touch- it's not just a document. ATK is never ending, and everyone has their own way."

-Val Massan

FISH HATCHERY

We want to increase the number of young fish to maintain or increase namao populations. Namao eggs are collected near spawning areas (upstream of Keeyask). They are hatched and raised at the Grand Rapids Fish Hatchery, which runs year round. They are then released in the Keeyask area as fingerlings or when they are one-year-old.

Yearling namao were released in Stephens Lake and the Keeyask Reservoir on May 30 and June 2, 2022. A new year class originating from broodstock collected at the Burntwood River will be raised at the hatchery over the summer, and fingerlings will be stocked out in the fall.

WILDLIFE MONITORING

CARIBOU TRAIL CAMERAS: Trail cameras are set up in the forest in and around the Project footprint to see if caribou are using the area. Caribou presence and numbers are monitored to see if construction activities and noise are causing changes in where they live and raise their calves.

CARIBOU AND MOOSE CALVING ON ISLANDS IN THE KEEYASK RESERVOIR

Prior to impoundment of the Keeyask reservoir in September 2020, 5 islands in the Gull Lake area were suitable habitat for caribou calving. Following reservoir flooding, 26 new islands suitable for caribou calving were formed from areas that were previously mainland habitat. In 2021, wildlife monitors, including community members, set up 26 trail cameras and 30 km of tracking transects on all 31 islands in the reservoir area.

It was predicted that wildlife would take a few years to discover this new island habitat, but results showed that the wildlife was using this new habitat sooner than expected. Monitoring shows caribou calves on 2 new islands. Adult moose were found on 23 of the 26 new islands and moose calves on 5 new islands. Black bear and red fox also used these newly formed islands. Stay tuned for more monitoring news into operations.

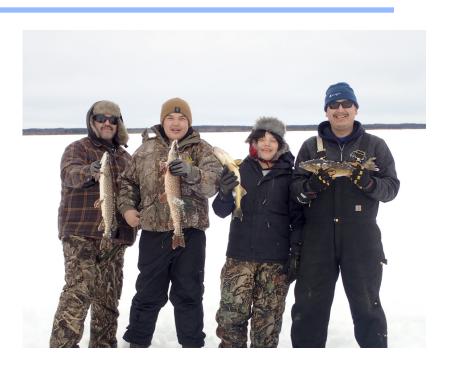


Setting up trail cameras for caribou monitoring, September 21, 2021

WAR LAKE UPDATE

War Lake First Nation resumed its ATK Monitoring Program in late March 2022, with a small group traveling to the community cabins at Atkinson Lake. For four days, local knowledge holder and resource user Gerald Brightnose, along with his three sons Graydon, Cody, and Gerald Jr., and advisor Matt Hunt, conducted local monitoring activities and participated in traditional activities including icefishing and net-setting.

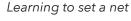
Gerald Brightnose and sons Cody, Gerald Jr., and Graydon showing their catch





Ice-fishing yielded dozens of jackfish and highly-sought after pickerel. Other species caught included burbot and whitefish. Pickerel were returned to the community and shared, whereas most other species were returned to the lake. Only one fish (a pickerel) showed signs of ill-health, including large lesions on the outside of the fish. When filleted. however, it was determined the lesions were superficial and did not penetrate the scales of the fish.

War Lake intends to continue monitoring the health of fish in Atkinson Lake and the surrounding area as part of its ATK Monitoring Program.



MERCURY AND HUMAN HEALTH

York Factory First Nation has created a truly impressive community calendar. The calendar, titled "Kinoséw minoskákéw, Fish is Good for the Soul", was led by YFFN member and Ininímowin language specialist Nellie Redhead, with contributions from Elders who shared their knowledge, and community members who shared beautiful photographs. The calendar

celebrates the role of wild fish harvest to maintain good health and livelihoods, to support cultural practices, and to share teachings between generations.



ASK YOUR MAC
REPRESENTATIVE OR MERCURY
COMMUNITY COORDINATOR
ABOUT MERCURY AND
FISH INFORMATION, AND
OPPORTUNITIES FOR HAIR
SAMPLING.

Birds

Flight

Keeyask

Habitat

WHAT'S IN A NAME?

The Gull/Tern Island was built to give gulls and terns in the area a place to nest, feed and rest. We invite community members to share their thoughts about a name for the Island.

YOUR NAME IDEAS TO your ATK Monitor, or krose@hydro.mb.ca

Namao spawn collection (May 15th - June 15th)

Little Gull Lake fish mortality (May 20th for 1 to 2 days)

Walleye, Northern Pike, and Lake Whitefish spawn monitoring (May 20th for 3 weeks)

Walleye and Northern Pike and Lake Whitefish Floy Tagging (spring)

Turbidity, Dissolved Oxygen and Sediment Monitoring (June - October)

Sediment coring in Keeyask Reservoir (June - September)

Water Velocity and Depth Measurement (summer months)

Water Quality Monitoring (June 20, July 14, August 15, September 12)

Fish Community Abundance and Mercury Monitoring (August 8 - 18)

Caribou Calving Island monitoring (April, July and September)

Greenhouse gas monitoring Recorders: Installation and Operation (June - October)

Habitat Monitoring (August 1 for 3 weeks)

Long-term Effects on Habitat Next to the Project Footprint (mid-July - August 31)

Long-term Effects on Habitat Next to the Reservoir shoreline (early July - August 31)

TERRESTRIAL

IF YOU HAVE QUESTIONS ABOUT KEEYASK
ENVIRONMENTAL MONITORING, OR PAST STUDIES,
CONTACT YOUR ATK MONITORING TEAM:

FLCN - MELANIE BEARDY 431-285-3031

YFFN - DARCY WASTESICOOT 204-341-2077

YFFN - **JIMMY BEARDY** 204-341-2336

WLFN - **DWAYNE FLETT** 204-288-4315

TCN - QUENTIN HARVEY 204-307-6528

www.keeyask.com

CAREERS

There are many ways to get involved in Keeyask environmental work:

BOAT OPERATOR- a great fit for someone with a pleasure craft operator card and strong knowledge of the waterways.

TREE PLANTER- short term positions for someone who loves being outside and enjoys physical work.

ATK MONITOR- a full time position for someone who knows the land well.

an opportunity for someone with a college or university degree in environment or natural resources management.