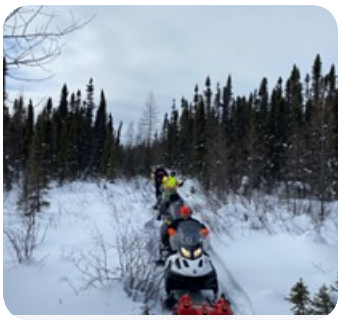
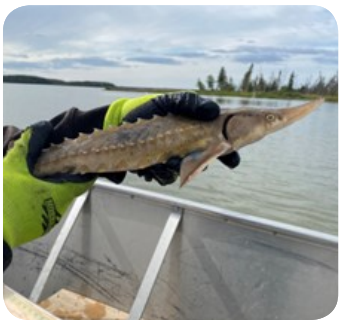
Keeyask Generation Project

Aboriginal Traditional Knowledge Monitoring Plan

Aboriginal Traditional Knowledge Monitoring Report

ATK-2024-TCN





KEEYASK

Manitoba Environment and Climate Client File 5550.00
Manitoba Environment Act Licence No. 3107

2023 -2024

KEEYASK GENERATION PROJECT

TATASKWEYAK CREE NATION

REPORT #ATK-2024-TCN

ABORIGINAL TRADITIONAL KNOWLEDGE MONITORING 2023/2024 ANNUAL REPORT

Prepared by

Tataskweyak Cree Nation

June 2024

This report should be cited as follows:

Tataskweyak Cree Nation. 2024. Aboriginal Traditional Knowledge Monitoring Report, 2023/2024 Annual Report #ATK-2024-TCN, June 2024.

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1.0 INTRODUCTION

Aboriginal Traditional Knowledge (ATK) is described in the Cree Nation Partners' Environmental Evaluation report for Keeyask as "knowledge that reflects our experience, understanding, wisdom, values and duties of everyday life and priorities governing our relation with Mother Earth and all her beings, derived and developed through lining in our Homeland ecosystem since time immemorial. ATK is inexplicably linked to our culture and our worldview."

The Tataskweyak Aboriginal Traditional monitoring program was put together to observe the effects of the Keeyask Project. Some of the key activities carried out from the program are described below.

1.1 TCN ATK 2023-24 HIGHLIGHTS

The 2023/2024 year was busy and impactful for the TCN ATK team with a new staff member joining the team in early 2023. Over the course of the year, the team focused on land/water-based activities and observations. Interwoven with the seasons, the TCN ATK annual activities align with weather changes and patterns. This year, the team expanded their tools to include new technologies like drones and weather-resistant cameras.

2.0 ON THE WATER

Throughout the open water season, the TCN ATK field team observed the water and shores around the Keeyask area. The drought conditions, mild winter, and fluctuating water levels from the operation of Keeyask led to safety concerns for those traveling by boat and skidoo. The team noticed changes to the shoreline and riparian habitats since Keeyask became operational. This has led to impacts on the animal and bird populations that rely on these shorelines. The unpredictable ice conditions meant a smaller window to access hunting and ice-fishing areas by skidoo and plane. Since Keeyask impoundment there is a lack of comfort navigating Gull and Clark Lake because of debris, peat islands, stumps, and changes to the landscape. This has led to less opportunities to access areas to harvest traditional food leading to community concerns about food security. The TCN ATK team plans to purchase canoes to help access areas during low water events. They also continue to work on building the trust with the youth on the water to ensure the next generation is aware of the many hazards that exist and continue to come up on Split Lake and the other impacted tributaries.

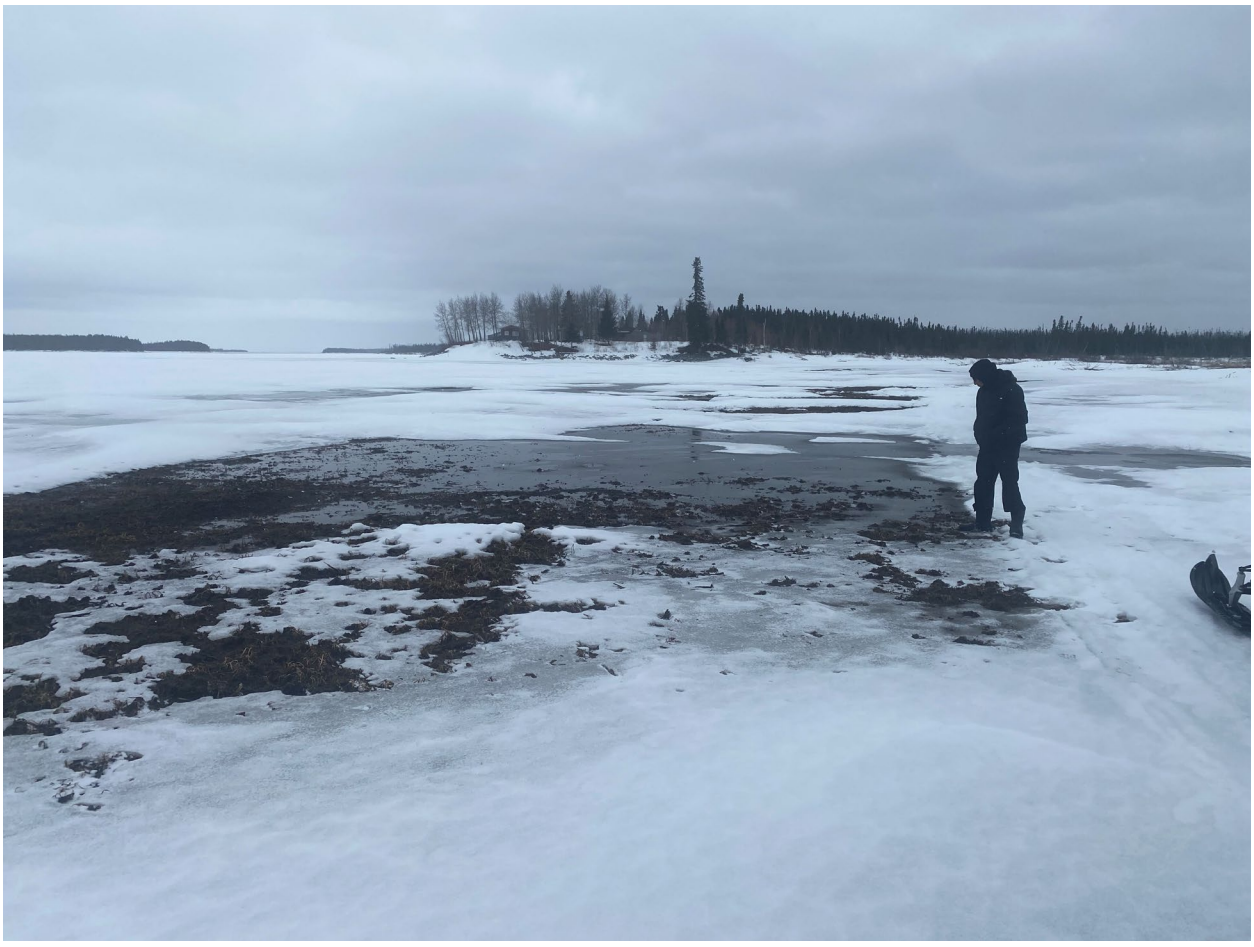

Photo 1: TCN field staff examining peat frozen into the ice on Clark Lake

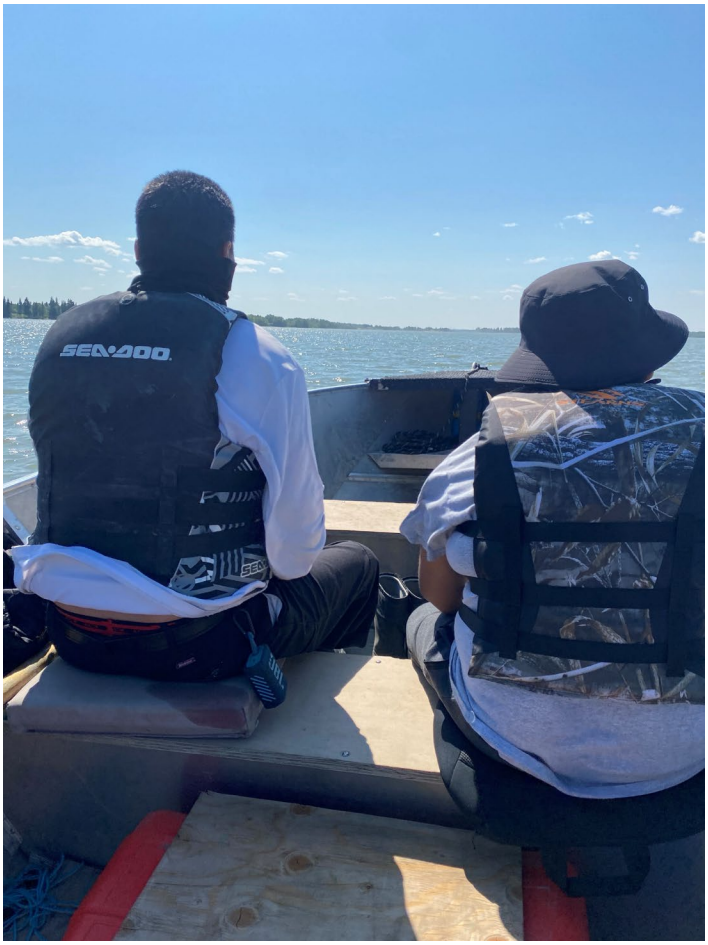

Photo 2: Youth from TCN learning to navigate the waterways by boat

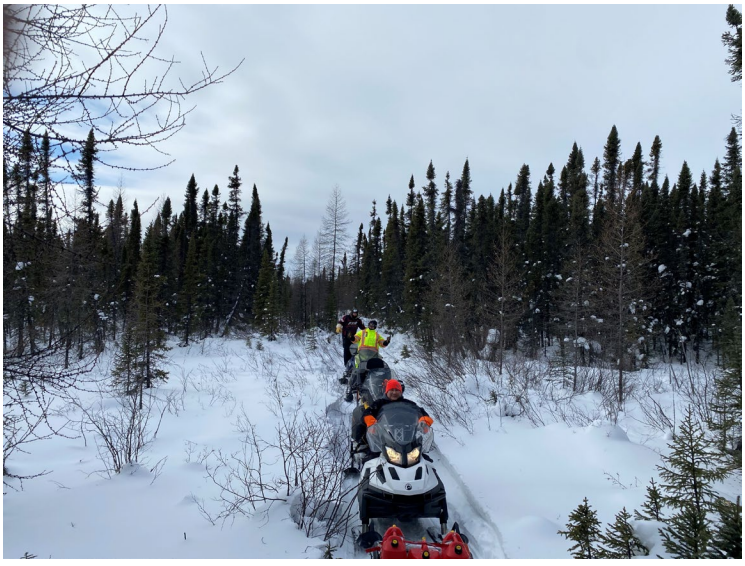

Photo 3: Travelling by skidoo to access areas impacted by Keeyask

2.1 FISH OBSERVATIONS

Fish populations, movements, and health in the Keeyask area is important to TCN and the ATK program. The impoundment of Keeyask in 2020 continues to change the fish patterns in Split, Clark, and Gull Lake. The pickerel and Whitefish populations have gone down significantly on Split Lake, and only the suckers and smaller pike are more dominant on Split Lake. Jumbo Whitefish are moving into the Assean River and being caught at the mouth of the Assean River at Assean Lake. The TCN ATK team thinks they are coming from Gull Lake because Jumbo Whitefish have not been caught at Assean Lake before as it is mostly Cutter Lake Whitefish. More Lake Sturgeon are being caught on Split Lake but are more dispersed than they were in Gull Lake.

Community members are reporting that the taste of locally caught fish has changed (tastes muddier) and is possibly linked to an increase in sedimentation since Keeyask impoundment. Resource Users also reported finding more sores on the fish caught. The ATK team wonders if the Keeyask Generating Station is decreasing fish range and leading to faster disease spread. They will continue to be on the water and report their observations.

The change in fish movements and populations has led to less successful fishing on Split and Clark Lake by community members. The quality of fish is changing, and people do not want to eat the small amount of fish they do catch. People can fish off system, but access to these areas is becoming more difficult due to climate change. It is as if the fish are looking for cleaner water away from Keeyask, but the unimpacted waters are getting smaller. This geographic tightening is putting strain on the fish and community members who rely on fishing.

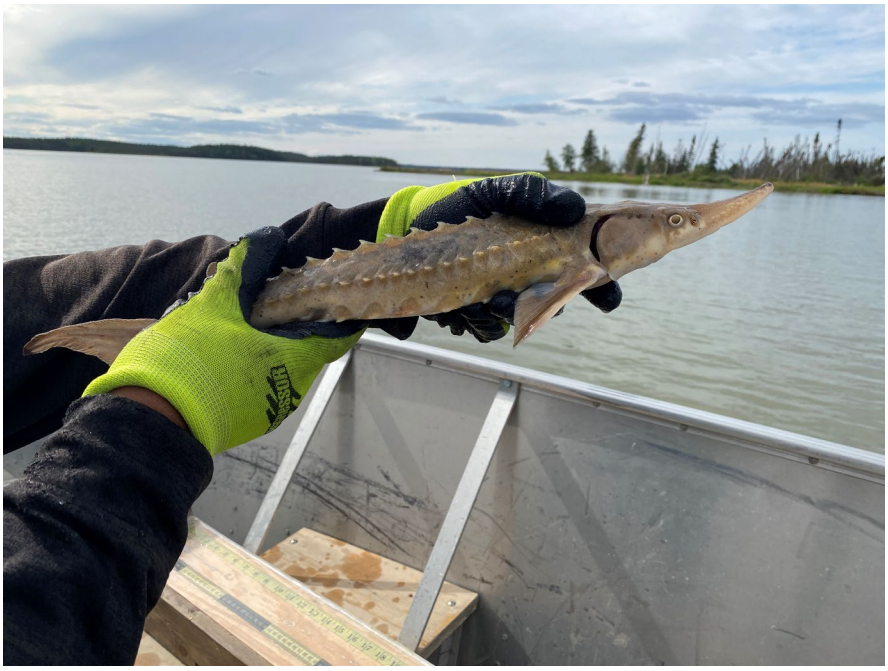

Photo 4: Lake Sturgeon caught and released for the TCN ATK fish study

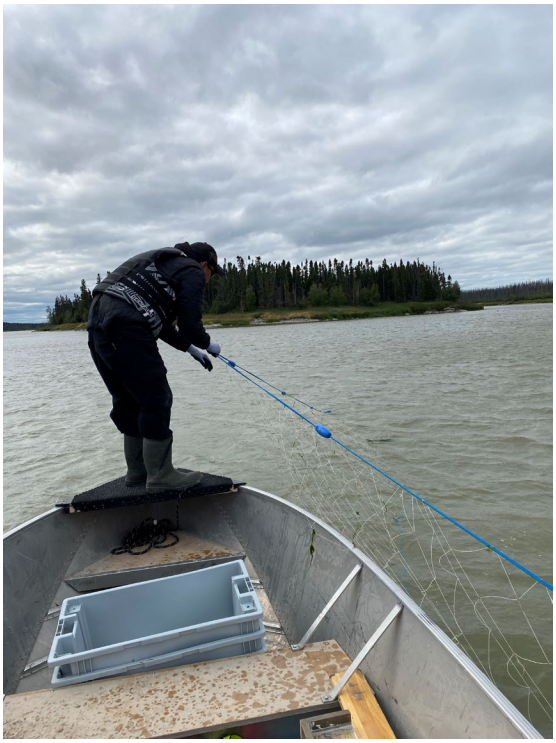

Photo 5: Setting fishing nets for the ATK fish studies

Photo 6: TCN resource users on the water

2.2 ZEBRA MUSSELS

Invasive zebra mussels are in the Keeyask area and impacting the waterways. The TCN ATK team are seeing zebra mussel shells along the shorelines, in fishing nets and in the stomach contents of harvested fish. The TCN ATK team is concerned with how zebra mussels will change the environment going forward.

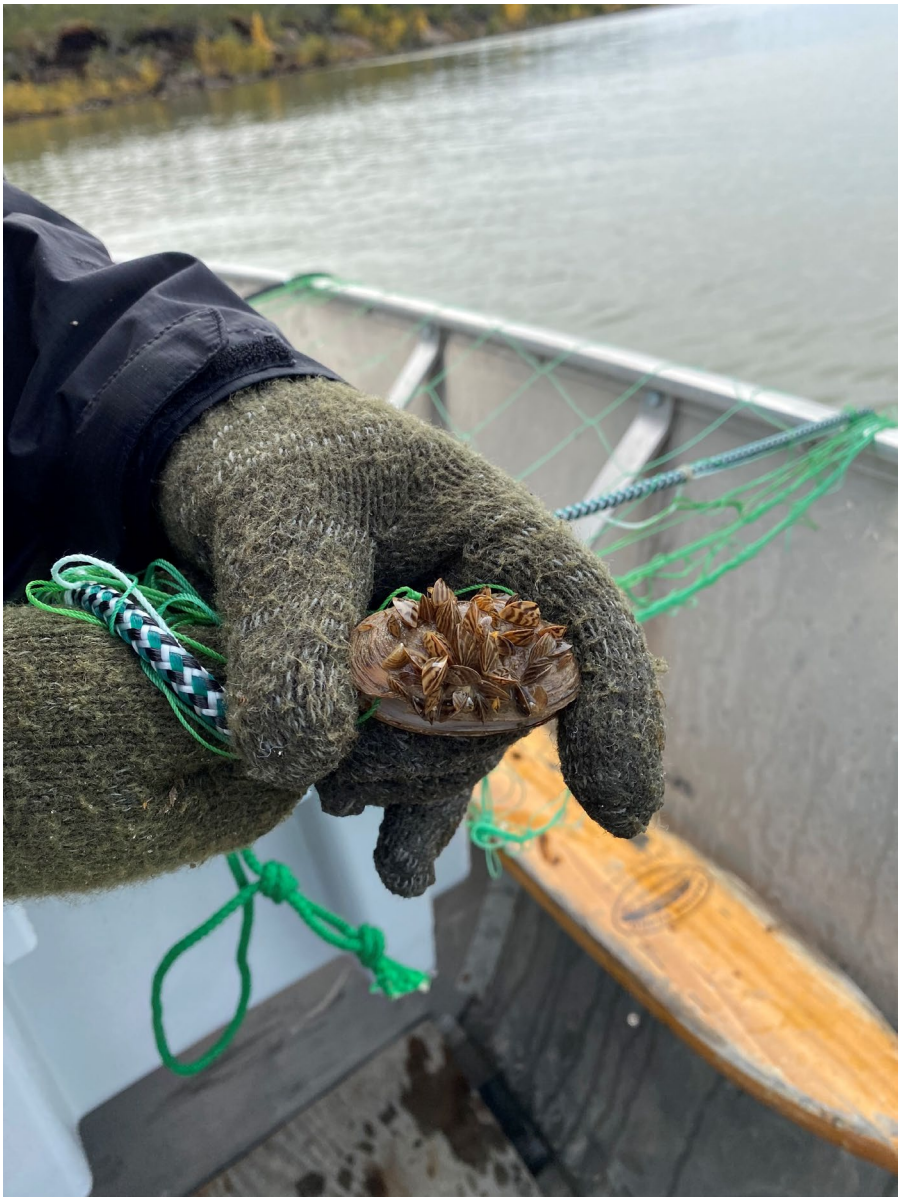

Photo 7: Zebra mussels attached to local non-invasive shell in a fishing net

Photo 8: Zebra mussel shells along the shorelines in TCN

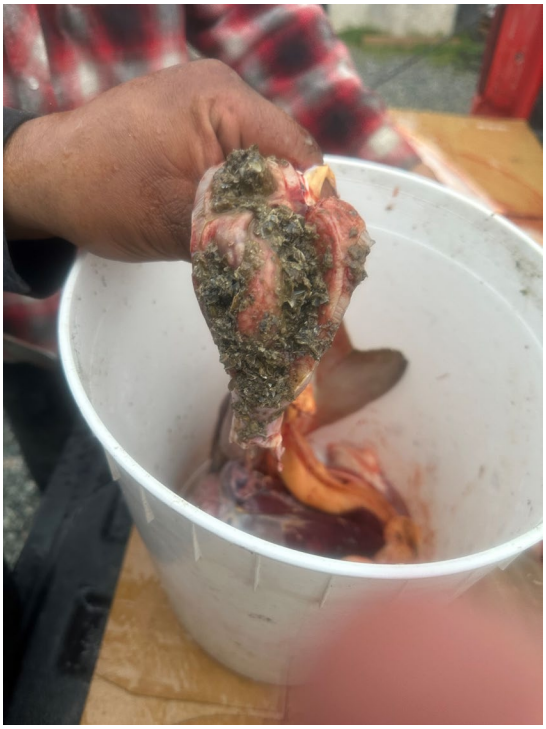

Photo 9: Zebra mussel shells found in the stomach contents of fish harvested near TCN

3.0 ON THE LAND

The TCN ATK team actively patrols the land in all seasons. In addition to tracking animal movements, the team also clears access trails for community use. The ATK team and local trappers reported seeing fewer fur bearing animals around the Split Lake area. They also reported fewer moose and caribou around Split and Clark Lake. The ATK team thinks the changing shoreline and associated decrease in plants/invertebrates from sedimentation from Keeyask water-up is leading animals to leave the area to search for better food sources. This pattern is concerning for TCN because harvesting traditional foods from the land is very important.

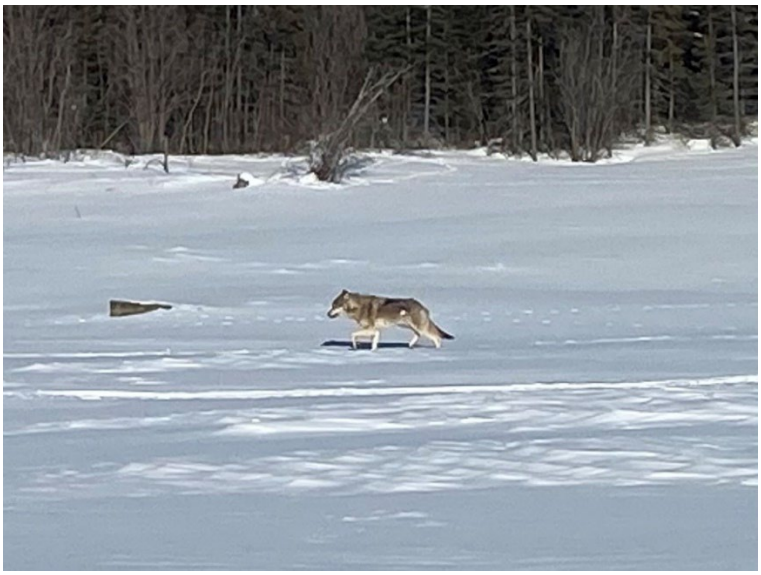

Photo 10: Wolf on the frozen lake

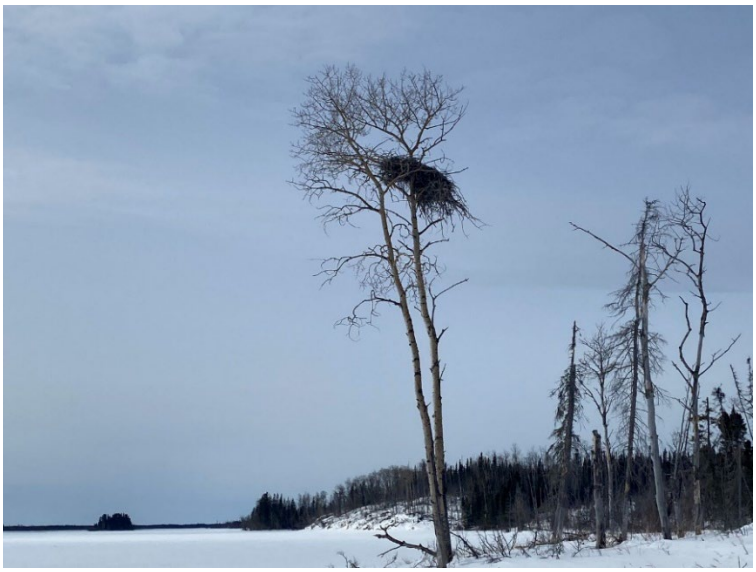

Photo 11: Bald eagle nest observed on the shore of the Nelson River

Photo 12: Caribou crossing the PR 280

4.0 NEXT STEPS

The TCN ATK team plans to continue patrolling the land and water around the community and Keeyask area. With fish and animal patterns changing since Keeyask water-up, there are concerns about traditional harvesting and food security. The TCN ATK team plans to offer land-based healing and learning opportunities in the community. There are also plans to host a medicinal plant harvesting workshop.