War Lake First Nation

Keeyask ATK Monitoring Program

Keeyask Generation Project

War Lake First Nation

Aboriginal Traditional Knowledge Monitoring Program Report (2020-2022)

June 2023

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1.0 Background

The Keeyask Generation Project is a 695 MW hydroelectric generating station and associated principal structures, situated 180 km northeast of Thompson and 40 km southwest of Gillam, currently nearing the end of construction. Located on the lower Nelson River at Gull Rapids, the area is of historical, cultural, and emotional importance to the Cree First Nations living there. A reservoir has been created upstream of the structures, which includes a powerhouse complex, a spillway, dams, and dykes.

Through a long process of negotiations, War Lake First Nation (War Lake) agreed to form a partnership along with Tataskweyak Cree Nation, York Factory First Nation, Fox Lake Cree Nation (collectively known as the Partner First Nations), and Manitoba Hydro and ratified the *Joint Keeyask Development Agreement* (JKDA) in 2009, which led to the formation of the Keeyask Hydropower Limited Partnership (KHLP).

Regulatory approval to start the construction of the Keeyask Generation Project was provided in July 2014 after the KHLP submitted an Environmental Impact Statement (EIS) for the project. War Lake First Nation and Tataskweyak Cree Nation, operating as Cree Nation Partners (CNP), assessed the project impacts on its own people using its own Overview of Water and Land (OWL) evaluation process, which was based on Aboriginal Traditional Knowledge (ATK) and used the Mother Earth Ecosystem Model. The findings of the OWL process were published in the Cree Nation Partner's *Keeyask Environmental Evaluation Report* (2012), which was developed as a stand-alone report in support of the partnership's EIS submission.

Part of the commitments made in the EIS included an Environmental Protection Plan (EPP), developed to help mitigate, monitor, and manage the environmental impacts predicted in the EIS.

War Lake First Nation signed the JKDA believing in the importance of a comprehensive environmental assessment process, including the resulting EIS and EPP, which are intended to give equal respect to ATK and western science for assessing and monitoring environmental impacts. Both ATK and western technical studies were conducted to provide a baseline from which to assess project impacts on the physical, aquatic, terrestrial and socio-economic environments, as well as on traditional resource use, heritage resources and community health.

The War Lake First Nation Keeyask ATK Monitoring Program was launched in the summer of 2017. War Lake First Nation's first *ATK Monitoring Program Report (November 2017-April 2019)* was published in May 2019. The second report was published in early 2020. This report covers activities undertaken from April 1, 2020, to March 31, 2023.

A Note on COVID-19

The COVID-19 pandemic drastically reduced War Lake's ability to undertake activities for the ATK Monitoring Program. The Program was designed to bring together Elders, knowledge holders, youth, and other community members for in-person activities, including Resource User Roundtables and ATK Monitoring Trips (see Section 2.0). As a remote community with a small and vulnerable population, War Lake was extremely cautious when holding in-person events over this extended period.

1.1 Aboriginal Traditional Knowledge

> *ATK is knowledge that reflects our experience, understanding, wisdom, values, beliefs, norms, and priorities governing our relationships with Mother Earth and all her beings, derived and developed through living in our homeland ecosystem since time immemorial. ATK is inextricably linked to our culture and our worldview.*
>
> *- Page 35, CNP Keeyask Environmental Evaluation Report (2012)*

Aboriginal Traditional Knowledge (ATK) was integrated in the Keeyask environmental assessment process and plays an important role in War Lake's monitoring of project impacts. The CNP approach to using ATK to evaluate past hydroelectric development impacts and the predicted impacts resulting from the construction and operation of Keeyask is modeled on the definition of Traditional Ecological Knowledge (TEK) which values the knowledge, beliefs, traditions, practices, and worldviews of Indigenous communities about the relationship of living beings with one another and their environment. TEK contributes to the survival of Indigenous communities over countless generations by securing livelihoods through the use and preservation of the environment. TEK is also now recognized by western science as being a valuable body of knowledge, experience, and understandings in managing environmental resources and in measuring environmental impacts from human disturbances, including climate change.

Oral traditions are based on knowledge passed on from one generation to the next. This oral history captures the knowledge and experience gained in one's lifetime – together they provide the foundation for ATK. Research and monitoring require spoken word opportunities for collecting and recording information, which can include discussion forums, interviews, and mapping, including Traditional Land Use and Occupancy Mapping (TLUOM). Relying on individual and group TLUOM to show the extent and type of land use, information collected on maps include hunting, trapping, fishing, plant and timber harvesting activity, camp and cabin sites, landscape markers, sacred sites, and travel routes. However, ATK is proprietary and sensitive, belonging exclusively to each Indigenous community. The content recorded is protected and only shared with the consent of the knowledge keepers and the community.

ATK collected can go beyond recording only land use and occupancy. Past and present experiences and observations on language, traditions, values, and the balance of spiritual, physical, mental, and emotional dimensions are often recorded with oral history interviews and through group discussions. Values include recognizing the spiritual and its interconnectedness with the physical, acknowledging reciprocity or the *"belief that as we receive from others, we must also offer to others"*, and understanding the concept of all things being equal as in "*we are part of the natural world with no separation between living and non-living"*.

> *Indigenous thought… is holistic, circular, and relational. "Indigenous peoples have traditionally seen all life on the planet as so multi-dimensionally entwined that they have not been quick to distinguish the living from the non-living" … all things on the earth: plants, animals, earth, water, air, and other humans.*
>
> *Page 10 – 2004 Aboriginal Research: Berry Picking and Hunting in the 21st Century by Kathy Absolon and Cam Willett*

ATK is continuously maintained by Indigenous communities and groups in response to their environment. A sense of identity and continuity is maintained through ongoing interaction with nature and sharing of knowledge and experiences from one generation to the next. This history includes a collective worldview, values, customs, and ways of doing and thinking that is integral to the preservation of ATK.

1.2 Cree Nation Partners Environmental Evaluation

The OWL evaluation process, based on TEK principles, guided compensations and partnership negotiations between War Lake and Manitoba Hydro. Both the War Lake 2002 *OWL Process Keeyask Project Draft Report* and the 2002 *Overview of Water and Land (OWL) Summary Report* acknowledged that the OWL process was guided by the Cree worldview. Further OWL studies followed using reference groups to examine the predicted environmental effects of Keeyask, focusing on the relationship of CNP Members to their environment. This comprehensive study process involved meetings, interviews, surveying, mapping, and community engagement, and resulted in War Lake's *Adverse Effects Agreement* and the JKDA.

The CNP 2012 *Keeyask Environmental Evaluation Report* was attached to the Keeyask EIS along with similar environmental evaluations conducted by York Factory First Nation and Fox Lake Cree Nation. The provisions for ATK environmental monitoring under the EEP allowed for each of the Partner First Nations to develop their own approach to monitoring the effects of the project on their communities and environment through independent ATK monitoring programs.

The EIS also included findings from community fieldwork studies conducted by War Lake Members and completed in 2009-2010. The local fieldwork team conducted Key Person Interviews (KPIs) with Members, collected and reviewed community and historical documents, and described an environmental baseline that provided a point of comparison for reporting on environmental monitoring activities

conducted in 2017-2019 under the War Lake ATK Monitoring Program. Where significant, the 2009-2010 findings are included in this report.

1.3 Keeyask Environmental Protection Plan

The EEP was developed during the Keeyask environmental assessment process to mitigate, manage, and monitor predicted adverse effects during Keeyask construction and operation. During the process, a baseline of conditions was established and described in the Keeyask EIS. The War Lake ATK Monitoring Program outlines the fieldwork research necessary to help compare past fieldwork results that helped define a baseline with current findings to determine the following:

- Test predicted effects outlined in the EIS.
- Identify unanticipated effects of the project.
- Monitor the effectiveness of mitigation measures.
- Determine if adaptive management is required.

Sunset at the Fox River Camp

2.0 War Lake ATK Monitoring Program

The War Lake ATK Monitoring Program was designed to provide opportunities for War Lake Members, including Elders, resource users, knowledge holders and youth to record, discuss, and communicate observations and perspectives regarding the effects of Keeyask construction and operation on all aspects of their world. This fieldwork research is conducted with the support and guidance of local fieldwork staff and advisors.

The program is guided by the following community objectives:

- Incorporate ATK in Keeyask monitoring and reporting processes.
- Ensure ATK is given equal weight to western science.
- Provide employment and training opportunities for War Lake Members.
- Provide opportunities for War Lake Members to participate in on-the-land programming.
- Facilitate the transfer of valuable knowledge held by Elders to our youth.
- Facilitate information sharing between Partner First Nations and Manitoba Hydro.
- Ensure War Lake Members are kept well-informed of all program activities and results.

Two key components drive the program. Monitoring through on-the-land programming and through roundtable discussions with experienced resource users. The first component is the ATK Monitoring Trips, which provides Members, Elders, knowledge holders and youth an opportunity to experience and learn on-the-land activities, and to observe and discuss changes to the land and waterways. Each season, a monitoring trip is planned to spend 3-5 days at a site traditionally used for hunting, trapping, and fishing. The second component is the Resource Users Roundtables. The resource users' discussion forum provides opportunities for Members to share their on-the-land experience and knowledge of hunting, trapping, and fishing. t Discussions are held each season to share knowledge and changes observed in areas that extend from the Landing River to Three Sisters Lake to Fox River within the War Lake Traditional Use Area (WLTUA).

This report will discuss the observations made during two ATK Monitoring Trips and one Resource Users Roundtable that took place between April 1, 2020, to March 31, 2023.

2.1 Objectives

War Lake developed its own traditional knowledge-based environmental monitoring program to:

- Identify areas and sites of importance.
- Document observations and traditional knowledge.
- Create a baseline of current conditions.
- Monitor changes to the environment.
- Explore the causes of environmental change.
- Establish a record for future generations.

2.2 Community Engagement, Consent, and Confidentiality

Community support and involvement are essential for successfully applying traditional knowledge to any research, assessment, or monitoring project. War Lake Members established a collaborative approach that respects Cree cultural values using community-based direction and participation to design the War Lake ATK Monitoring Program.

To ensure the effectiveness of the monitoring process, informed consent was obtained from all participants based on the provision of clear information about the objectives of each program event and the following assurances:

- All information collected was owned and controlled by War Lake First Nation.
- All sensitive information would be fully protected.
- Confidentiality of individual contributions would be fully respected.

The information provided through GPS and mapping activities is considered highly sensitive and will only be shared with parties under the strict direction and approval of War Lake First Nation. Similarly, the rich detail of events and activities identifying War Lake family members will be kept private and preserved for the community as part of their historical legacy. Signed consent and confidentiality forms are kept off-site for security and privacy.

2.3 Caribou Monitoring

The KHLP implemented additional caribou monitoring in response to Manitoba Hydro's proposed change in timing to Keeyask water-up and impoundment processes from the fall to the winter. Although the Partner First Nations and Manitoba Hydro did not agree on the proposed change in schedule, it was recognized by all partners that if the change in schedule were to proceed, additional steps were required to monitor and protect all caribou in the region.

From approximately December 2019 to March 2020, War Lake members conducted on-the-ground ATK caribou monitoring in the WLTUA and participated in helicopter reconnaissance flights led by Manitoba Hydro's environmental consultants to estimate the species, number, and location of caribou in the region. Water-up proceeded in winter and impoundment was delayed to the fall, following a decision taken by Manitoba Hydro after visiting with York Factory First Nation and Tataskweyak Cree Nation, and the onset of the COVID-19 pandemic.

Caribou monitoring was conducted less frequently from 2020-2022. War Lake Members have observed fewer caribou in the WLTUA in recent years. This is partially attributed to effects from construction, but War Lake Members are also quick to mention that the numbers of observable caribou differ greatly from year to year. War Lake continues to report observations to the Keeyask Caribou Coordination Committee to assist in the protection of this culturally important species.

2.4 ATK Monitoring Trips

Key locations of historical and cultural significance were identified during the Site Selection Roundtable, which took place in September 2017. During the program's initial years, participants experienced the on-the-land component with a first trip to War Lake and two trips to Atkinson Lake. In 2019, participants experienced the spring pickerel run at Landing River and returned to the resource rich area of Atkinson Lake in winter.

In September 2020, War Lake conducted an ATK Monitoring Trip to War Lake's recently purchased Fox River Camp. The focus of this trip was related to local moose hunting characteristics, including general field observations. The War Lake ATK Monitoring Trip Report #6 is included as Appendix D.

In March 2022, War Lake conducted an ATK monitoring Trip to Atkinson Lake. This location has been visited the most by the ATK Monitoring Groups because it offers an "off-system" environment with some modern amenities, including power by gas-generator, a kitchen, and enough sleeping space for larger groups. It also offers seasonal availability, although most War Lake trips have occurred at the end of winter in March. Repeated trips to Atkinson Lake have allowed for annual checks on the health of fish.

Multiple ATK Monitoring Trips were organized and cancelled for a variety of reasons since 2020. There have been travel difficulties (charter availability), weather-related issues (snowstorms and other weather-related issues for planned dates, including the early melt in 2023 preventing a planned trip to Atkinson Lake), and health-related issues (cases of COVID-19, unease with plane travel, and related issues). Despite these roadblocks, War Lake still highly values these trips, both for environmental monitoring and knowledge sharing, and will continue to aim for three trips a year to highly valued locations.

In each ATK Monitoring Trip, participants explored the environment, reported on observations made, and shared knowledge of historical importance. Observations and discussion from these two trips have been combined in summary form with those collected at the 2022 Resource Users Roundtable and are included in Section 3 Physical Environment Observations and Section 4 Resource Use Discussion.

2.5 Resource Users Roundtables

War Lake Members participated in one Resource Users Roundtable this during the 2020-2022 period. Multiple Resource User Roundtables were cancelled due to the COVID-19 pandemic. The Roundtable took place in War Lake on November 23-24, 2023.

Nine resource users including Elders and knowledge holders participated in a session that focused on a wide range of topics, including hunting, fishing, trapping, plants and animals, lands and waterways, access, and related topics. Given the difficulty in arranging these meetings, the opportunity was used to "catch-up" on previously discussed topics to maintain consistency and to ensure participants could discuss any issue of importance.

The observations and experiences shared during this session are summarized and presented in this report along with those collected during two ATK Monitoring Trips in Section 3 Physical Environment Observations and Section 4 Resource Use Discussion.

2.6 Communication and Reporting

The War Lake ATK Monitoring Program includes an inclusive approach to communication, which is fundamental in gaining and maintaining community support for ongoing monitoring activities. Communication activities in support of the program include community meetings, contributions to the community newsletter, and presentations and exchanges with the KHLP Board of Directors, Keeyask monitoring committees, and between other Partner First Nations.

Monitoring activities require note taking, map marking, photography, and GPS recordings that are included and reported in ATK Monitoring Trip Reports and detailed Roundtable Meeting Notes shared with War Lake Chief and Council. Presentations, reports, and articles are also prepared regularly for KHLP Board Meetings, Monitoring Advisory Committee Open Houses, Keeyask Cree Nation Community Workshops, and other committees upon request. Additionally, overall program reports are prepared annually with summary information provided to Manitoba Hydro for their Year in Review report.

Communication and reporting are part of the responsibilities of the ATK Coordinator. After five years in the position, War Lake's first ATK Coordinator left the position to pursue a separate employment opportunity. War Lake is seeking applicants to fill this position that is key to keeping lines of communication open with War Lake Members by having a visible presence at the War Lake Band Office. The ATK Coordinator's responsibilities include answering Members' questions about the program, distributing reports upon request, and working with other staff, including the Julie Lindal School, the Health Director, and Chief and Council, to maximize community participation in program events.

3.0 Physical Environment Observations

The following information on the physical environment was collected through two ATK Monitoring Trips and a Resource Users Roundtable from 2020-2022.

War Lake information gathered through the Keeyask environmental assessment work conducted in the community in 2009-2010 in support of the EIS is referenced where applicable. Past monitoring observations and discussion findings from November 2017 to March 2020 are presented in appendices.

Appendix A provides a summary of physical environment observations recorded in War Lake's *ATK Monitoring Report (November 2017 – April 2019)* as 2017-2019 Baseline Observations, while findings reported in War Lake's *ATK Monitoring Report (May 2019 – March 2020)* are included in summary form as 2019-2020 Monitoring Observations.

3.1 Land and Water

Fox River Camp Site

- The clear waters of the Bigstone and Fox Rivers are quite shallow in certain locations, with rapids, and many boulders just below the surface edges.
- Shoreline vegetation was scoured in many areas, suggesting that recent high-flow events had impacted the area.
- The high-velocity flows in various side streams made it difficult to listen for moose.

3.2 Animals and Plants

Trees, Berries and Plants of Interest

- Trees identified in photos included spruce, poplar, willow, birch, and jack pines – all typical to the area.
- Tamaracks can be found in swampier areas.
- Spruce sap continues to be used medicinally by boiling it to apply on bites and wounds.
- A series of photos of various berries were reviewed and identified; most abundant are blueberries followed by raspberries, strawberries, and moss berries and all are used for jams, pancakes, and baked goods (less used but found in the area are goose berries and cloud berries).
- All berries have an impact on the taste of traditional foods hunted and trapped.
- Northern tea leaves were identified in photos, and these leaves are gathered and used as a medicinal tea much like Labrador tea which is found further north.

- Another plant found in muskeg that looks like northern and Labrador teas but with larger, pointed leaves, are picked to use as band-aids since this plant has antiseptic properties, and the leaves are wiped on cuts and bites.
- Wegas (rat root) was identified and acknowledged as effective in helping ease cold and flu symptoms.
- One Resource Users Roundtable participant expressed an interest in learning more about medicinal plants and suggested that it would be good to have an expert give a workshop to teach War Lake Members how to identify and harvest plants of value in the area.

Fox River Camp Site

- Vegetation in the area was comprised mostly of lichen-moss, with scattered Labrador tea and other shrubs, such as willows and alder along the riparian-water's edge.

Flying to the Fox River Camp

4.0 Resource Use Discussion

The following information on the physical environment was collected through ATK Monitoring Trips and a Resource Users Roundtable from 2020-2022.

War Lake information gathered through the Keeyask environmental assessment work conducted in the community in 2009-2010 in support of the EIS is referenced where applicable. Past monitoring observations and discussion findings from November 2017 to March 2020 are presented in appendices.

Appendix B provides a summary of resource use discussion findings recorded in War Lake's *ATK Monitoring Report (November 2017 – April 2019)* as 2017-2019 Baseline Observations, while findings reported in War Lake's *ATK Monitoring Report (May 2019 – March 2020)* are included in summary form as 2019-2020 Monitoring Observations.

4.1 Travel Routes, Access, and Safety

General Observations

- Snow is melting earlier than in previous decades, making some traditional areas harder to access by snowmobile.

War Lake and Moosenose Lake Access

- It's becoming increasingly difficult to access blinds for hunting, especially when trying to head southwest towards Dafoe Lake.
- It's increasingly harder to access traditional blinds for geese hunting because the snow is melting too fast, making travel by snowmobile impossible.
- More outside hunters have been in the Split Lake and War Lake Resource Use Areas in recent years, possibly due to the Keeyask South Access Road connecting to PR 280.
- Trails have grown in with poplars and tamaracks and it's almost impossible to access certain areas even by 4-wheeler truck.
- Hunters can safely access War Lake by 4-wheel truck or snowmobile after freeze-up to hunt geese.

Cyril Lake and Atkinson Lake Access

- Conditions for accessing hunting blinds is variable in these sites due to frequent water fluctuations.

4.2 Hunting

Significant Changes to Geese Hunting in the Recent Past

- With temperatures warming, geese are taking a different route in the spring; Canada geese, snow geese and ducks went somewhere else, negatively impacting members participation in the spring hunt.
- In the past, one would see thousands of birds and would hunt every spring at traditional blinds found at Mink Farm, War Lake, Dafoe River, and other sites.
- In general, there are more geese in the fall as well as black ducks but less birds in the spring.

  Fall hunt of geese, duck, chickens (grouse), and ptarmigan is preferable to spring since the meat has a spruce taste.

Significant Changes to Caribou Sightings in the Recent Past

- Caribou are barely crossing through the area and are taking a different route although a few were spotted in recent years.
- One Resource Users Roundtable participant noted having successfully hunted 4 or 5 in the past few years along the rail tracks; he explained that he gets word from Shamattawa Members who post on Facebook.
- Another participant spotted 6 caribou (2 small ones) in the bush off Moosenose Lake in April 2022.
- Outside hunters, who often post their kill on Facebook, recently killed a cow and her 2 calves along the winter road that extends from Mile 2 to War Lake; War Lake hunters would not kill cows to let them and their offspring flourish.
- More outside hunters have been in the Split Lake and War Lake Resource Use Areas in recent years, possibly due to the Keeyask South Access Road connecting to PR 280.

War Lake and Moosenose Lake Sites:

- Length of hunting periods is also getting shorter; one Roundtable participant reported that he only had a 2-week period to use his preferred blinds on a creek off Moosenose Lake in the Butnau River area which he accessed by snowmobile.
- Participants continue to hunt moose in the same spots and there are plenty of moose.
- A decrease in caribou was noted but War Lake Members still hunt them while checking their traps.

Cyril Lake and Atkinson Lake Sites:

- Conditions for accessing hunting blinds is variable in these sites due to lots of water fluctuations.

- Hunting season started later than usual this year.
- Many moose spotted but mostly cows but still plenty enough to hunt.
- One Roundtable participant explained that current prices for furs do not compensate for the intensity of effort it takes to trap and that he was looking into bringing back moose hides to prepare them for sale to people making moccasins and gloves.
- Preparing the hide is also labour intense but the prices paid by outlets in Winnipeg make it worth investigating according to the participant; he is in the process of learning how to clean and prep moose hides for sale.

Fox River Camp Site:

- Two moose were taken while at the site for the 2020 ATK Monitoring Trip.
- Wolves were heard howling upstream of the camp, indicating that moose may have scattered in the area to avoid predation.
- Many game trails were observed in the area.
- The Black bear known to wander into the camp area was spotted on the shoreline, below the main cabin in the fall.

Collecting a Moose Kill at the Fox River Camp

4.3 Trapping

Significant Changes to Trapping in the Recent Past

- The beaver population has increased significantly due to a drop in the price of pelts.
- The price per pelt is so low that trappers are not bothering with beaver anymore resulting in more beaver dams being built in many parts of War Lake's Traditional Use Area.
- Beavers sell for only $3-$5 per pelt; weasels, muskrats and squirrels are also priced this low at the Fur Table.
- Beavers are still being trapped by some since Elders enjoy eating this traditional food; muskrat and the hind quarters of lynx are also trapped for food while rabbits are snared.
- Most difficult to trap are wolverines and wolves.
- Easiest to trap due to high population is marten (pushed out fisher but a few can still be found).
- Some trappers are turning to tanning and processing the pelts to make more money, some are even making their own goods and setting up shops.
- A small, tanned beaver hide can sell for $130 but tanning a hide is lots of work and time consuming.
- One Resource Users Roundtable participant described how he used a moose brain to tan the hide that was then used to make mitts and moccasins.
- Another participant described how it took him about a year to properly tan a large hide.

Landing River and War Lake Sites

- Lots of beaver dams on the Landing River towards York Factory.
- Some beaver controls have been set up on the rail tracks since it is dangerous; the situation is worse than ever because nobody is trapping beaver due to their pelts not being very valuable.
- One Roundtable participant spends the October to Christmas period on the land with his family, homeschooling the children, but the cabin structure they stay in is rotting out.
- Participants mentioned the state of their cabins making it difficult to spend time on their traplines; other participants mentioned the need for new cabins so that they could spend longer periods of time on their traplines rather than relying on day trips.
- Currently, trappers travel to their traplines by ATV and 4-wheeler truck before snow and then by snowmobile or snowshoes.
- It's becoming increasingly dangerous to travel with constant quick freeze up and melt.
- It was noted that eagles are staying longer at War Lake because it's not frozen over.
- More mice and owls than usual were observed in the Landing River area.

- There were also more frequent sightings of skunk.
- Another noted was a deer spotted in the Thompson area; there is worry that more deer moving north could bring chronic wasting disease and brain worm into the region, potentially affecting moose.
- Most frequently trapped fur bearers are martens, followed by foxes and wolves.
- Wolverines are looking mangey observed one participant.
- Although martens are still trapped, the population has been consistently dropping in the last few years and the timing for trapping them is hard to predict with changes to the climate; one participant believes that they are moving south.
- Nonetheless prices have dropped for marten while prices for foxes and wolves remain the same so far.
- Many squirrels and weasels are inadvertently trapped in traps set for martens.
- Only 2 to 4 lynxes trapped a year in this area.
- Fishers used to be plentiful and could trap 40 in one season in the 1980s but now you're lucky if you trap 1 every 5 years according to one trapper.
- The marten population grew substantially when the fisher population decreased; fishers are more likely to be found in the Grand Rapids area.

Atkinson Lake Site

- Martens and foxes are most frequently trapped in the area.
- One Roundtable participant noted that a pack of wolves has been moving from the lake all the way to the community; usually it's 10 wolves in the pack but sometimes there might be as many as 30.
- 1 or 2 lynxes trapped annually near Atkinson Lake; tend to find lynxes near rabbits.
- Price for lynxes has decreased dramatically; a full pelt with head and claws used to sell for $1,000 to $1,500 but the price has decreased dramatically to $100 a pelt.
- Wolves currently sell for $150 a pelt and wolverines for $200 but they used to be more highly valued.
- Similarly, otters used to be valued more and currently sell for $30 to $50 a pelt; otters are very fatty, so it takes a lot more work to skin and not worth the effort for what it's valued.

Fox River Camp Site

- At least three beavers were observed along the shoreline working to gather timber and readying their dens for winter.

- With a current decline in trapping, there is a higher beaver population.
- An increase in the Marten populations in the area was first observed in the 1980s, which consequently facilitated a decline in the Fisher population.

4.4 Fishing

Significant Changes to the Pickerel Run in the Recent Past

- In the spring 2022 Landing River pickerel run, only 8 or 9 were fished by rod each day.
- In a typical spring run in the past, you could fish 40 to 60 pickerel daily.
- Part of the change in number of pickerel could be due to an increase in beaver dams on the Landing River impeding pickerel movement.

Fox River Camp Site

- Overall, the Fox River at the camp site is shallow and rocky so difficult to navigate.
- There are three curves in the river near the camp site where pickerel is fished but in general, it is only ankle deep.
- Pickerel caught in the fall were a brownish-yellow colour, well proportioned, with no observed lesions or external parasites and averaged about 17” in length.
- Jackfish caught in the fall were notably skinny and averaged about 25” in length.

Cyril Lake and Atkinson Lake Sites

- Unlike the Landing River, there is lots of water with high and low fluctuations in the area which could be due to there being few beavers at Cyril and Atkinson Lakes.
- Both Cyril and Atkinson are fished when members fly in during the Fall Access Program for moose hunting and there are cabins and boats at both sites.
- Cyril Lake is mostly fished for jackfish and whitefish; Atkinson Lake is mostly fished for jackfish, pickerel, and whitefish.
- Atkinson Lake can also be accessed in early spring by snowmobile using the ice road that extends to the cabin site from the road to the MTS tower.
- Atkinson Lake is frequented more often than Cyril Lake and there are many spots for setting nets near the cabin site and at 5 blinds used for moose hunting.
- During the March 2022 ATK Monitoring Trip, sauger was caught for the first time in Atkinson Lake; the sauger was caught in a net through the ice, with the largest one being about 17” in length.

- All fish caught during that Trip, including pickerel and sauger, were shared with family and community.
- Whitefish caught in Atkinson Lake are dried and smoked using diamond willow as the preferred woody material; brine ingredients used to prepare the fish for smoking include water, kosher salt, and paprika.

Landing River Site

- Landing River is fished during the spring pickerel run.
- In recent years, the run has not been as abundant as in the past; one participant said that the run used to be so plentiful that he could easily spear the pickerel.
- The pickerel run lasts about 2 weeks with males traveling first and followed by females.

War Lake and Moosenose Lake Sites

- War Lake (and Surprise Lake) are fished all year long.
- One Resource Users Roundtable participant noted that there were plenty of pickerel fished in the creek connecting War Lake to Wakicomenaw Lake some 20 years ago.
- Hook and line fishing of jackfish, pickerel and whitefish occurs on Moosenose Lake during the winter and summer fishing derbies.
- Some members also set up nets (100 yards) in ice and open water.
- One participant also travels further north to Jean and Little Kettle Lakes for fishing.

War Lake Member with his Pickerel Catch

5.0 Connection to the Land

The following information on "connection to the land" was collected through ATK Monitoring Trips and a Resource Users Roundtable from 2020-2022.

War Lake information gathered through the Keeyask environmental assessment work conducted in the community in 2009-2010 in support of the EIS is referenced where applicable. Past monitoring observations and discussion findings from November 2017 to March 2020 are presented in appendices.

Appendix C provides a summary of observations and discussion related to connection to the land recorded in War Lake's *ATK Monitoring Report (November 2017 – April 2019)* as 2017-2019 Baseline Observations, while findings reported in War Lake's *ATK Monitoring Report (May 2019 – March 2020)* are included in summary form as 2019-2020 Monitoring Observations.

5.1 Family Ties, Identity, and Traditional Ways

Significant Changes to Traditional Food Consumption

- One Resource Users Roundtable participant shared that he had noticed rice-size growths on the livers of muskrats and on the breasts of ducks and geese; he wondered whether it was connected to lagoons and said that he was now very careful checking the meat on birds hunted.
- It was noted that rabbits were still good and plentiful for eating; moose was also plentiful and the meat good but moose hunting season was starting later and later as the cold weather is late to start.
- Caribou meat is also still very good; one participant noted that caribou chased down by snowmobiles suffer from frozen lungs and die.

6.0 Closing Remarks

The traditional knowledge that drives the War Lake ATK Monitoring Program is based on an on-going oral tradition and continuing traditional resource use activity that sustain the interaction between people and land. Locations or features in the landscape, connected by historical travel routes, act as memory tools for stories about people's relationship with their environment.

The values of War Lake Members that were first recorded through the OWL environmental evaluation process and confirmed through the 2009-2010 community fieldwork studies in support of the EIS, remain the same and of equal importance:

- Fishing, hunting, and trapping for food (ability to provide for family).
- Helping each other by sharing (community meals, family/community recreation, etc.).
- Eating traditional foods (promoting healthier lifestyle).
- Respecting and caring for Mother Earth and all her beings (human and non-human).
- Living on the land in traditional ways (ancestral identity).
- Learning in traditional ways (ATK knowledge transfer).
- Maintaining historical relationship with the land.

One notable difference between observations shared in the past and with those discussed through the ATK Monitoring Program is the influx of outsiders accessing resources in the WLTUA. There are several factors contributing to this change including increased pressure for resources from other First Nations and Métis, word of mouth sharing of harvesting locations through social media, and the greater number of people living in the region through employment in Gillam, the Keeyask Generation Project, and the Keewatinoow Converter Station Project.

Although concerns with the unpredictability of weather, including increasing shorter winter seasons and greater fluctuations in water levels based on the amount and frequency of snow, were first noted by respondents in the 2009-2010 studies, the changing weather patterns continue to be increasingly more pronounced and alarming. War Lake Members have noted that the unpredictability makes traditional activities including hunting, fishing, trapping, and berry collection more difficult. Certain traditional knowledge is less applicable than previous decades because seasonal weather changes, including warmer temperatures, have led to the introduction of new species, and changed movement patterns of existing species. Members have noted that freeze-up and melting of local waterways is no longer as predictable as previous decades, which has a significant impact on access to certain highly valued areas.

Appendix A: War Lake Physical Environment Observations and Discussion (2017-2020)

Land and Water

2017-2019 Baseline Observations: Areas described as important to War Lake Members include the corridor from the Munk rail stop to West Cyril River, the area between War Lake to Three Sisters Lake, and the nearby areas of Landing River and Moosenose Lake.

The terrain and waterways of the corridor from Cyril Lake to Atkinson Lake to Fox River were described in detail during many monitoring activities, including two ATK Monitoring Trips, to establish a baseline. These details are highlighted in the tables that follow.

Table 1 – Baseline Land Features in the War Lake Traditional Use Area

Ridges	Extending from Landing River area to War Lake to Bearbone Lake to Cyril Lake to Atkinson Lake
	Extending north from Cyril Lake and between Kettle Lake and Atkinson Lake
Beaches	A few long sandy beaches on the northeast side of Atkinson Lake
	A long beach leading to the mouth of the Little Fox River
	Some smaller beaches on southwest side of Atkinson Lake
	A few muddy, clay beaches on Cyril Lake
	Also, rocky beach and shorelines on Cyril Lake
Reefs	Located close to the centre on Atkinson Lake
Islands	Two islands on Atkinson Lake near the opening to the Cyril River
Portages	Five portages from Bearbone Lake to Cyril Lake and an additional portage from Cyril Lake to Atkinson Lake
	A 1.5-mile groomed portage from Kettle Lake to Atkinson Lake
	Traditional portage located near the waterfalls on Dafoe River

Table 2 – Baseline Water Features in the War Lake Traditional Use Area

Rapids	Ten sets of rapids from Bearbone Lake to Cyril Lake
	Two set of rapids from Cyril Lake to Atkinson Lake
	Many sets of rapids on the Fox River to Bigstone River route
	The Dafoe River has not been navigated past the confluence with the Fox River to determine number of rapids
Waterfalls	Waterfalls are located on the Dafoe River just past the confluence with the Fox River
Depth	Fingers and bays on Atkinson Lake are shallow
	Cyril Lake is extremely shallow
	Deepest area of Atkinson Lake features the reef and extends to the northeast area of the lake
Clarity	The water is mostly clear in these area lakes with increased turbidity related to seasonal flooding

2019-2020 Monitoring Observations: Only two areas were accessed through the ATK Monitoring Trips, Landing River (late spring) and Atkinson Lake (winter), and the Resource Users Roundtable was focused exclusively on fishing activity in War Lake's Traditional Use Area including Landing River, War Lake, Moosenose Lake, and Atkinson Lake.

Many of the rivers in War Lake's Traditional Use Area are too shallow for navigation although in recent years, resource users have noted higher than usual waters in the spring due to heavier than usual snowfalls. When the water is too high, it reduces the number of pickerel during the spring run and makes fishing more difficult. Ideally, the most efficient way to catch pickerel is in shallow pools near rapids.

Although many War Lake Members fish the spring pickerel run from a camp site located between the shoreline and the Landing River rail stop, one family travels further west towards York Landing to set up camp at a portage near a wider and shallower part of the river where pickerel are easy to snare. At the portage, it takes longer to catch 100 pickerel than it does at the rail stop camp – 2-3 days of dawn to dusk snaring as opposed to same day fishing at the more popular site. During the 2019 pickerel run, it was noted that the water was low and colder than usual, impacting the number of pickerel caught.

Atkinson Lake remains a popular destination year-round although it is further away and requires a longer stay than visiting Landing River or War Lake. Fishing is very good year-round and during the ATK Monitoring Trip, participants were successful in catching jackfish and pickerel. This large lake is relatively open and during the winter months the strong winds tend to blow over and cover the winter road and trails used to access the cabins situated on one of two large islands on the lake.

Participants of the Resource Users Roundtable confirmed observations made during past ATK Monitoring Trips and added further observations about other lakes in War Lake's Traditional Use Area. Additional details to those collected during the previous period include information about water depth for Hubley Lake (shallow), Kettle Lake (rocky) and Cyril Lake (shallow and rocky) where the deepest point is only 6 feet deep. Many of the waterways connecting these lakes are too shallow to travel by boat.

The longest set of rapids in the area is named Wolverine Rapids, located between Bearbone and Cyril lakes, and is rich with whitefish. One resource user described a fall trip through Wolverine Rapids around 2011-2012 where his group managed to use rocks to hit and catch whitefish where they had pooled together. On that same trip, they also fished pickerel in the rapids.

In general, water remains fast moving and clear throughout War Lake's waterways. It was also noted that the water in Moosenose Lake is much cleaner since the 1970s when float airplanes were frequently landing with commercial fishing catches that were packed at the Ilford fish plant.

Animals and Plants

2017-2019 Baseline Observations: Plants and animals were discussed in context with harvesting activities, changes to the environment and specific sightings made by participants of the Resource Users Roundtables and during ATK Monitoring Trips. To establish a robust baseline, some of the Resource Users Roundtables were dedicated to specifically describing all wildlife and vegetation throughout War Lake's Traditional Use Area. Baseline observations of mammals, birds, fish, and plant life are presented in tables that follow.

Table 3 – Baseline of Mammals Observed in the War Lake Traditional Use Area

Moose	Caribou	Black Bears	Lynx	Wolverines
Grey Wolves	White Wolves	Black Wolves	Fishers	Martins
Red Foxes	White Foxes	Cross Foxes	Beavers	Otters
Mink	Weasels	Muskrats	Rabbits	Squirrels
Field Mice	Deer Mice	Lemmings	Porcupines*	

** Porcupines are not spotted as frequently as in the past. Sightings of chipmunks, flying squirrels and bats are very rare. More recently, groundhogs, skunks, and rats have been observed.*

Table 4 – Baseline of Birds Observed in the War Lake Traditional Use Area

Canada Geese	Snow Geese	Lesser Geese	Lesser Snow Geese	Speckled Belly Geese
Ptarmigans	Sharp Tail Grouse	Rough Grouse	Spruce Hens	Sandhill Cranes
Mallard Ducks	Black Ducks	Pintail Ducks	Blue Green Wing Tail Ducks	Fish Ducks
Eagles	Osprey	Loons	Seagulls	Arctic Tern
Swans	Marlin Hawks	Red Tail Hawks	Night Hawks	Ravens
Crows	Black Birds	Rusty Black Birds	Grey Jays (Whiskey Jacks)	Killdeers
Great Grey Owls	Great Horned Owls	Snowy Owls	Hawk Owls	Black and Yellow Woodpeckers
Robins	Bunting Snowbirds	Barn Sparrows	Cliff Sparrows	
Sand Pipers	Cormorants	Pelicans*	Black Woodpeckers	

** Pelicans are new to the Traditional Use Area and are frequently observed in the Cyril Lake and Atkinson Lake corridor, as are cormorants. Rarely seen in the Traditional Use Area are turkey vultures, magpies, northern shrikes, and hummingbirds.*

Table 5 – Baseline of Fish Observed in the War Lake Traditional Use Area

Pickerel	Jackfish	Whitefish	Sturgeon
Tullibee (Cisco)	Suckers	Maria (Turbot)	Perch

Table 6 – Baseline of Plant Life Observed in the War Lake Traditional Use Area

Spruce Trees	Poplars	Willows	Birch Trees	Jack Pines
Tamaracks	Muskeg (Moss/Peat)	Wild Mint	Labrador Tea	Northern Tea
Weekes	Water Ferns	Lily Pads	"Cherry" Bushes	Blueberry* Bushes/Shrubs
Raspberries	Strawberries	Moss Berries	Gooseberries	Cloud Berries

** Blueberries a very abundant with two types noted – one type is low to the ground shrubs with dusty blue fruit and the other type are 2 ft high bushes with a darker blue fruit.*

2019-2020 Monitoring Observations: During the ATK Monitoring Trip to Landing River, participants set up camp not far from the rail tracks, having traveled there by train. The campsite showed evidence of other people having fished for pickerel during the run. The fish remains (heads and backbones) attracted a black bear sow and her two cubs. The bear sow returned on the last day of the group's stay, sitting beside the tent chewing up Styrofoam plates and cups, and had to be scared off by shots fired by the Bear Guards. Two male bears were also observed eating fish remains and the group delighted in watching the bear sow catching a sucker out of the rapids which she took to shore to feed her two cubs.

When the group first arrived, they only spotted suckers spawning in the rapids but soon after, pickerel started passing through. In general, the number of pickerel observed and caught was comparable to previous years and the fish appeared healthy (no signs of discoloration or illness).

An Elder who participated in the trip to Landing River set up six snares upon arriving to the camp to bring back rabbit to the community, but he suspected that bears made off with the two rabbits caught. The group also observed bald eagles watching them, but they did not witness them fishing.

Resource users who participated in the Resource Users Roundtable noted that there were more beavers in the Landing River area as well as the War, Bearbone and Hubley lakes because they are not being trapped due to the low value of their pelts. This has impacted the number of pickerel in these locations since the increased number of beaver dams is impeding fish movement. The situation with the beavers

has resulted in rail workers needing to shoot beavers along the line to protect the track as evidenced by participants of the ATK Monitoring Trip to Landing River who encountered a Member driving a high rail truck for this purpose.

During the winter ATK Monitoring Trip to Atkinson Lake, the group of participants who accessed the cabins by winter road for their stay on the land came across the unfortunate scene of a slaughter of caribou. It was difficult to confirm the number, ranging from 5 to 10, given the state of the remains found by the road. The hunt by outsiders is indicative of the high number of caribou observed in War Lake's Traditional Use Area this past winter. The participants noted both caribou and wolf tracks along the winter road to Atkinson Lake. Wolf tracks were also observed on the edge of the lake, about 50 meters from the cabins. The pack of wolves had been heard howling nearby on the first evening of the group's stay at the cabins. While fishing in the morning on the fourth day of their stay, participants also saw a group of 15 to 25 caribou crossing the lake, about 1 km away from the cabins.

Over the first two days of their stay on Atkinson Lake, participants mostly caught jackfish and some pickerel by the end of their trip. Of note were the leeches observed on many of the jackfish pulled from the lake. Advisors undertook some preliminary research into what type of leech was occurring and through visual assessment of photographs taken, believe them to be a type of leech. The photographs were also shared with a fish biologist and a parasitologist from North South Consultants who based on the body type and large size of the oral sucker, believed the leeches to be "*piscicola sp.*", which generally attach themselves to the outside of the fish. It was agreed that a fish sampling kit should be used on future ATK Monitoring trip to collect and analyze samples.

The fish focused Resource Users Roundtable session included discussion about healthy diets. Resource users reported that traditionally, fall proteins included fish, chicken (grouse), rabbit, beaver, muskrat, and moose. Winter proteins were predominantly caribou and fish while spring proteins consisted of geese, duck, and fish. Some participants recalled their parents and grandparents eating the back quarters of lynx, which were referred to as "big rabbit legs". In the past, when food was scarce and modern refrigeration non-existent, it was not uncommon to eat the same protein 3 times a day and for several days in a row. The introduction of household freezers allowed for more variety including freezing berries and fish to consume year-round.

Appendix B: War Lake Resource Use Observations and Discussion (2017-2020)

Travel Routes, Access, and Safety

2017-2019 Baseline Observations: Careful attention was paid to mapping out current travel routes to provide a baseline from which to compare subsequent years' monitoring observations. Access to resource use sites near the community is mostly by ATV and snowmobile. War Lake Members fly into Cyril Lake and Atkinson Lake under the Fall and Spring Access Programs but can access both lakes by snowmobile in early spring.

The first table that follows highlights the most frequently used overland and waterway routes. A second table provides baseline information about issues of concern related to access and safety.

Table 7 – Overland and Waterway Travel Routes Used by Resource Users

Overland Routes	
War Lake	Accessible by truck and ATV year-round using an all-weather road and is a 20-30 minute drive from the community.
	War Lake First Nation maintains the road and it is good most of the year (muddy during spring months) if it is plowed during the winter.
	War Lake First Nation often builds an ice road extension across the lake.
	Members travel by snowmobile in winter and spring using the road and ice road.
	The all-weather road used to connect to the winter road to Oxford House.
	Resource users that frequent the areas between War Lake and Three Sisters Lake will travel a full day by snowmobile to reach High Hill River.
Atkinson Lake	Access by ATV and snowmobile during winter and spring.
	There are two overland routes with the northern route taking 2-3 hours and the southern shortcut taking 1-2 hours depending on trail conditions.
	The northern route relies on the annual winter road to the Cyril Lake MTS tower and on some years, the road is extended to the campsite area on the island (allowing access with trucks).
	Referred to as the old freight road, the route connects to the winter road from Gillam to Shamattawa.

Overland Routes	
	The short cut relies on the same ice road to Cyril Lake, but Members can follow the south side of the Cyril River to the cabin site using a former dog sled trail.
	Accessing the cabin site by truck can only occur using the northern route when the road extends past the Cyril Lake MTS tower junction.
Waterway Routes	
	Landing River crosses Crooked (Wakicomenaw) Lake where there is a boat launch allowing for travel all the way to the cabin site at Atkinson Lake, taking 1-2 days depending on water velocity and requiring crossing 6 portages.
	The traditional route used by ancestors from York Factory followed the Hayes River to Bigstone River to Fox River to Atkinson Lake, and same route to Landing River.

Table 8 – Travel Access and Safety Issues for Resource Users

Costs	The 2009-2010 Community Fieldwork Studies identified costs of travel and supplies as a barrier to accessing resource use areas that require longer stays.
	Resource Users Roundtable participants also acknowledged that fuel prices impacted access to important sites by air, ATV and trucks and even boating during open water season.
	Resource users need to reduce the distance and frequency of travel because of high fuel costs.
	Supplies for longer or more frequents stays on the land are also costly as is equipment purchases and maintenance, limiting the number of Members participating in resource use activities.
Water Fluctuations	The 2009-2010 Community Fieldwork Studies noted changes in water levels had impacted access to the land, where water levels were too low to safely use boats in open water season and snowmobiles in the winter (hanging ice).
	Resource Users Roundtable participants also noted fluctuating water levels and increasing flooding that they observed was due to more frequent and heavier snowfalls.

	Heavy snowfalls also created safety issues with unprecedented high snowbanks making travel by snowmobile difficult if not impossible and making it hard to break trails.
	These observations in water fluctuations and flooding were noted at Landing River, War Lake, Atkinson Lake and Moosenose Lake, impacting boating safety.
Seasonal Changes	Shorter winter season were noted with concern in the 2009-2010 Community Fieldwork Studies since it was difficult for resource users to gauge when it was dangerous to travel across rivers and lakes.
	The length of winter seasons is very unpredictable as is the quantify and frequency of snowfalls all contributing to unsafe travel conditions, whether snowmobiles breaking through thin ice, getting stuck in deep snow, or rolling over due to lack of snow.
Outsiders	An increasing number of outsiders are accessing War Lake's traditional resource use areas and showing little respect by being wasteful and leaving carcasses behind.
	Power lines and a throughway road in the Munk to West Cyril Lake area have given outsiders, who come as far as from Saskatchewan and Minnesota on special licenses, greater ease to access the area for moose and caribou hunting.
	Outsiders from Gillam are accessing Atkinson Lake in the winter, by flying in or by snowmobile using a groomed snowmobile trail, to access the lake for ice fishing.

2019-2020 Monitoring Observations:

Access to the Landing River for the spring pickerel run is predominantly by train or ATV (approximately 4 miles east of the community on the rail line) and most War Lake Members will go out for the day, often traveling with a frying pan to enjoy a fish fry before returning home. Travel by rail is fairly reliable and inexpensive so most families can afford to participate in the pickerel run. Because of its proximity, many War Lake Members will set up nets during the spring pickerel run which can last 1-3 weeks and check on them daily without having to camp at the site. It is also possible to travel there on foot, an approximate 2-hour walk, or by boat if the water opens early enough. However, not everyone has a boat, and the high cost of fuel prevents many War Lake Members from boating during open water season, even on Moosenose Lake close to home. Fuel and maintenance costs are also a concern for travel by ATV or snowmobile. The further afield a family travels from the community, the more expensive it gets.

During the ATK Monitoring Trip to Landing River, most participants traveled by train, but some followed later by ATV. At one point, a War Lake Member was going to join the group with his boat (towing it with an Argo) so that participants could travel upstream to the next set of rapids but unfortunately, he did not return until their last day at camp and the Argo was used to transport participants and their gear back to

the community. Although access to the area is fairly easy, especially during the spring pickerel run, the increased number of beaver dams does present a danger to rail travel and can result in deadly derailments. The rail worker observed traveling the rails in a high rail truck during the ATK Monitoring Trip to Landing River was responsible for shooting beavers to protect the track.

Participants of the ATK Monitoring Trip to Landing River expressed concerns about the impacts of unpredictable weather and climate change. These concerns were also discussed by participants attending the Resource Users Roundtable, who also noted that the snowfalls have been heavier and more frequent, leading to more spring flooding including washing out segments of the rail line, the most serious being the 2017 wash out that closed the tracks to Churchill.

During the Resource Users Roundtable, participants noted that it was increasingly difficult to travel in War Lake's Traditional Use Area by boat, as many of the waterways were too shallow. They noted that waters were consistently higher in the lakes and rivers from War Lake to Atkinson Lake some 20-30 years ago. One participant reported that when they travelled the river by boat some 6-7 years ago, the water was not high but not too shallow to prevent navigation. During that same session, another resource user shared that he was resurrecting a traditional trail to West Cyril Lake by snowshoe starting at the Munk railway stop.

For the second ATK Monitoring Trip, participants travelled to Atkinson Lake by truck using the annual winter road built and maintained by War Lake Construction that had been extended south to access War Lake's cabins. Strong winds had blown-in much of the road, so the War Lake Construction maintenance group helped in clearing up the road. The Fieldwork Assistant then cut a trail across the lake to the island where the cabins are located.

Unfortunately, the combination of a well-maintained winter road, increased recreational hunters working at Keeyask and a high population of caribou has attracted outsiders to the area as was also witnessed in the previous year's ATK Monitoring Trip to Atkinson Lake. Participants of the Resource Users Roundtable reported that outsiders from Gillam were spotted ice fishing on the reef located in the centre of Atkinson Lake between February and April. Some of these fishers travel by snowmobile using a groomed trail while some have flown in by helicopter. However, the impact of outsiders fishing in the area is not as upsetting as witnessing the results of disrespectful hunting practices.

The group of ATK Monitoring Trip participants, which included six youth, witnessed the slaughter of possibly as many as 10 caribou with remains strewn at the side of the road. War Lake Members and leadership are reporting these instances of slaughter, indicating disrespectful and wasteful hunting practices, on a regular basis. Although the winter road provides the infrastructure required for War Lake Members to travel to highly valued areas, it also provides similar access to outside hunters. War Lake continues to explore potential ways to address the problem, including posting signs to remind outsiders to hunt respectfully.

Hunting

2017-2019 Baseline Observations: Members hunt chicken and moose in the fall, ducks and geese in the spring, and caribou, when around, in the winter. Moose hunting remains the most important hunt for War Lake Members. Moose hunting occurs in the Munk to West Cyril Lake area, the War Lake to Three Sisters Lake area, and the Cyril Lake to Atkinson Lake area. There are cabins located throughout these areas. Hunting in the Fox River area will become more frequent once Members start flying into the former outfitters camp in the fall season. Closer to home, Members hunt moose in the Landing River area and at Moosenose Lake.

Table 9 – Animal Population and Movement Observed by Resource Users

	Population	Movement
Moose	Modest drop in moose populations noted.	Noted that increased noise and pollution from Keeyask construction could be influencing moose travel patterns.
	Less kills in the fall hunt of 2017 due to decreased number of bulls.	Inconsistent/unpredictable weather patterns might also be impacting moose habits and movements.
	Increased number of wolves in the region including pack observed traveling around Atkinson Lake in the fall hunt of 2017.	
Caribou	Concerns expressed with woodland caribou being endangered.	Movement has become unpredictable, and the herd is more frequently moving further south since the 2013 fires.
	Also concerned that barren ground caribou may also become threatened.	There remains a tangle of burnt poles and wires throughout the area including the corridors between War Lake to Three Sisters Lake and Cyril Lake to Atkinson Lake that could possibly injure or deter movement.
	Peak population noted in 2013 with herd of possibly 40-50 crossing the power line corridor and Nelson River near PR 280 and golf course outside Thompson.	The two corridors also feature power lines and winter roads that might impact movement given noise and light sensitivity.
	Herd of coastal caribou observed in 2013.	Caribou like tamarack, lichen, and muskeg so the herd tends to move through areas not left barren by fires.

	Population	Movement
	In 2012, a large herd was observed passing through the Moosenose Lake area where from a distance the bay looked black from the tons of moose dropping littering the shore.	By 2012, caribou herds were spotted more frequently, sometimes crossing close to the community but other times as far south as Monument (Annesley) Lake (halfway to Oxford House).
	Concerns expressed on pressures on the population caused by the influx of outsiders accessing the Traditional Use Area, including sports hunters who are wasteful and disrespectful.	Blasting and heavy construction disrupt movements, but these activities are less intense than they were in 2012 to 2014.
		Regrowth in burn areas has resulted in more frequent sightings of caribou and summer resident caribou have been spotted calving on Stephens Lake.
Waterfowl and Grouse	No notable changes in geese or duck populations.	No notable changes in movements.
	No notable changes in chicken (grouse) population.	No notable changes in movements.

2019-2020 Monitoring Observations: Only observation made related to hunting were references made by participating resource users at the Resource Users Roundtable (focused on fish harvesting and consumption) about moose hunting trips to Hubley Lake, Atkinson Lake, and more recently, West Cyril Lake. Hubley Lake was a popular site for moose hunting and fishing about 20 years ago but as had been reported, the waterways in that area have become too shallow to be navigable. Approximately 6-10 War Lake Members continue to fly to Atkinson Lake every fall for moose hunting (part of the Fall Access Program) where they also set up nets to fish for pickerel, jackfish, whitefish and tullibee (cisco). In recent years, one resource user and his family have been flying to a traditional site on West Cyril Lake for moose hunting and fishing. There is an overgrown and burnt trail that had been used by the participant's grandparents and he is trying to recreate it by snowshoe to have more frequent access to the site since the lake is rich in jackfish, whitefish and tullibee (cisco).

Trapping

2017-2019 Baseline Observations: War Lake Members trap throughout their Traditional Use Area, often staying on the land for a week or more where they have cabins or checking their traplines daily in areas closer to the community. This has remained unchanged from the findings of the 2009-2010 community fieldwork studies where interview respondents noted that trapping occurs from October to April. Fall activities occur close to the community with trappers spending a few weeks in the bush and traveling by ATV or snowmobile. During the winter, resource users' access traplines on snowmobiles and stay for longer durations, using cabins. The intensity and frequency of trapping activity has decreased over time as discussed during roundtable sessions. Resource users interviewed in 2009-2010 also noted this trend.

Participating resource users explained that loss of activity is due to the following factors:

- Disappearance and/or population loss of certain fur bearing animals.
- Price of furs not being high enough to offset the high costs associated with trapping.
- Fluctuations in pricing of fur pelts from year to year.
- As Elders pass away, the total amount of trapping activity is decreasing.

Table 10 – Fur Bearing Animals Trapped by Species and Location

Species	Location	Population
Beaver	Landing River towards York Landing	Population down due to increased flooding
	Moosenose Lake	Increased beaver population in 2017
Fisher	All locations	Fisher have been displaced by Marten
Fox	Munk to West Cyril Lake	Increased number of red, white, and cross fox observed and trapped in 2017
Lynx	Cyril Lake to Atkinson Lake	Well populated with lynx
Marten	Cyril Lake to Atkinson Lake	Well populated with marten
	Munk to West Cyril Lake	Marten population down in 2017 – previously could harvest 60-70 pelts
	War Lake to Three Sisters Lake	Marten population down (i.e., 60 pelts in 2016 compared to only 10 in 2017)
Muskrat	Landing River towards York Landing	Population down due to increased flooding
	Moosenose Lake	None observed in the area for at least 20 years – prior to that could harvest 200 pelts annually
Wolverine	All locations	Very difficult to trap

Species	Location	Population
Wolf	Cyril Lake to Atkinson Lake	Note increased population of wolves in 2017
	All locations	Black, grey, and white wolves are very difficult to trap

Marten was the animal most frequently trapped according to resource users interviewed in 2009-2010 and the price for pelts had increased from $60/pelt to $80-$100/pelt by 2017. During that period, otter was considered a high valued fur while current observations indicate that its value had fallen significantly from $120/pelt to $30-$50/pelt by 2017. Beaver continues to be a less valued fur. The table that follows provides pricing information provided by resource users during the Resource Users Roundtables.

Table 11 – Pelt Values of Fur Bearing Animals

Species	Pelt Value Range
Beaver	$20
Black Wolf	$150 to $200
Cross Fox	$40 to $50
Fisher	$80 to $100
Grey Wolf	$150 to $200
Lynx	$80 to $100
Marten	$80 to $100
Mink	$10 to $20
Muskrat	$5 or less
Otter	$30 to $50
Red Fox	$30
Silver Fox	$50 to $100
Squirrel	$5 or less
Weasel	5$ or less
White Fox	$70
White Wolf	$150 to $200
Wolverine	$250 to $400

2019-2020 Monitoring Observations: Only observation made related to trapping was comments made by participating resource users at the Resource Users Roundtable focused on fish harvesting and consumption that the quantity of pickerel in the Landing River was down because of beaver dams blocking fish movement. Resource users added that beaver dams in War and Bearbone lakes were also blocking fish movement, resulting in lower pickerel and whitefish populations. Participants explained that the beaver population was up because they were not being trapped due to their loss of value at the fur table in Thompson. Suckers are still readily available and are used as trapping bait along with smaller whitefish when available.

Fishing

2017-2019 Baseline Observations: War Lake Members fish in the Munk to West Cyril Lake, the War Lake to Three Sisters Lake, and the Cyril Lake to Atkinson Lake resource use areas that are equipped with trails and cabins. Members only started fishing West Cyril Lake after 2015. It might become accessed more frequently once resource users get to know the water better. Some Members will travel a full day by snowmobile to High Hill River to net fish pickerel, whitefish, and jackfish. In future, Members hope to fly to Fox River for spring fishing with stays at the former outfitters camp. Fish quality of pickerel, whitefish and jackfish is excellent at West Cyril Lake, High Hill River, Cyril Lake, and Atkinson Lake.

It was noted that fishing at Landing River had decreased significantly since 2010. Polluted water (more debris noted by resource users) has had an impact on the quality of the fish and increasingly fewer War Lake Members are fishing pickerel during the spring run. The fish is described as having very jelly-like flesh that is also too white in colour.

Many people miss having easy access to pickerel at the Landing River site and on Moosenose Lake. It was reported that fishing for jackfish and whitefish continues at Moosenose Lake in the winter and summer months. Fish stocks are healthy, possibly more plentiful, and much improved in quality since the fish plant at Ilford closed in the late 1970s. At that time, there were many floatplanes flying in with commercial catches, polluting the water with fuel. These observations about the improved quantity and quality of fish in general throughout War Lake's Traditional Use Area due to a decrease of commercial fishing activity were also noted by War Lake resource users interviewed in during the 2009-2010 community fieldwork studies.

Table 12 – Fish Harvesting Seasons and Methods by Species

Species	Observation
Jackfish	Is fished in ice and open water
	Setting nets in ice is very labour intensive
	Easier to use fishing rods but results in smaller catches
	In general, resource users must move around from one spot on the lake to the next to harvest more fish than with open water fishing
	Setting nets in open water is most efficient and productive method of fishing
	Less sensitive to water quality or temperature changes than pickerel
Pickerel	Is fished in ice and open water
	Net fishing is easier and more productive in open water

Species	Observation
	Ice fishing is easier using fishing rods but still requires more movement on the lake
	Spring spawning runs are the best time for fishing pickerel
Sturgeon	Open water net fishing is preferred method
	Still fished but with less frequency since accessing rivers on the Hayes River system is further and more costly
	Must ensure the holes in net are small enough so only adult sturgeon are caught
Whitefish	Is fished in ice and open water
	Frequently fished in early spring after the thaw
	Also fished during fall spawning runs

Table 13 – Fish Harvesting Preferences and Consumption

Species	Observation
Jackfish	Some people prefer jackfish to pickerel and often the liver is also eaten
	Larger size (3 feet or more) is preferred because it is easier to clean than the smaller ones that have too many bones
	Unlike pickerel, skin needs to be scaled and it has wider bones to cut through
Maria (Turbot)	Maria if caught is used mostly for eating its liver
Perch	Rarely fished because it is very small and can swim through holes in nets used
Pickerel	Pickerel is the most favoured fish by community members
	Small and medium sized pickerel are preferred
	Often mix pickerel with other less desirable fish such as jackfish, whitefish or even suckers for fish patties
Sturgeon	Requires removing fins and cutting bones before preparing for consumption
	Served either boiled or smoked

Species	Observation
	Fish from Hayes River has darker flesh than Nelson River sturgeon
Suckers	Not a preferred fish but consumed by some resource users if caught
	Considered by-catch by many and traditionally used to feed dog teams
	Can be canned or ground to mix with other fish like whitefish, jackfish, or pickerel to make fish patties
	Some boil sucker heads as a delicacy
Tullibee (Cisco)	Also fished and is very similar to whitefish but smaller in size
Whitefish	Widely fished and third most favoured fish after pickerel and jackfish
	There is no size preference
	Like jackfish, it needs to be scaled and bones cut
	Either roasted, boiled, and smoked and fish guts and livers are also eaten
	Eggs (roe) often used in bannock

2019-2020 Monitoring Observations: Most observations collected during 2019-2020 monitoring activities were focused on fish. Pickerel continues to remain the most favoured fish for consumption followed by jackfish and whitefish. The first of two ATK Monitoring Trips focused on the spring pickerel fun on the Landing River in May 2019. The second trip focused on ice fishing in early March 2020. Both ATK Monitoring Trips also provided War Lake youth the opportunity to learn fish harvesting skills from experienced resource users and Elders.

During the Resource Users Roundtable, participants discussed fish harvesting practices and experienced throughout War Lake's Traditional Use Area. In addition to covering Landing River and Atkinson Lake, both very favoured locations for fishing pickerel, resources users shared information about Moosenose Lake, War Lake as well as Bearbone and Hubley lakes, Cyril River and Cyril Lake, and West Cyril Lake. Many of the observations shared supported those made and experienced by participants of both ATK Monitoring Trips.

Most of the participants of the ATK Monitoring Trip to Landing River arrived at their destination by train with the Fieldwork Team Leader and second Bear Guard following later by ATV. The Fieldwork Assistant and Bear Guard took charge of setting up camp while the three-youth set out to fish some 10 meters north of the rail track using fishing rods. There was already evidence that others had been fishing the pickerel run since there was a pallet and pile of pickerel heads and backbones at the campsite. At first only suckers were seen spawning in the rapids but as the day progressed, it warmed up and fishers were able to catch about 3 pickerel per hour each in the shallow pool of water between the rapids and where the tracks cross the river as well as in the wider river area upstream from the track. The pickerel run stalled as it got colder and the water temperatures dropped. It was noted that pickerel stay deep when the water is too cold. When the weather allowed for it, the number of pickerel observed and caught was comparable to previous years. The pickerel appeared healthy with no signs of discoloration or illness.

By the afternoon of day 3 of the trip, the youth had caught enough pickerel to begin filleting them. Each participant had their own zip lock bags to put in the coolers that had been prepared with packed ice by the Fieldwork Assistant. Most of the fish were males, perhaps indicating the main run was still to come, but there was the odd female with eggs. Most of the pickerel were 16 to 20 inches long and their stomachs were mostly empty.

Participants of the ATK Monitoring Trip to Atkinson Lake travelled by truck on the ice road and required assistance to clear the stretch of the road to the cabin site that had been blown-in by the previous day's strong winds. Once there, the Fieldwork Assistant cleared a trail across the lake to the island where the cabins are situated. The next day, fishing occurred at valued locations on Atkinson Lake, as had been discussed by the Fieldwork Team the previous night. Holes were drilled with ice-augers, with grader used to create fishing lanes. Fish typically caught at Atkinson Lake at this time of year include jackfish and pickerel.

During the first two days of their stay on Atkinson Lake, participants mostly caught jackfish with an average length of 23 inches (18 fish in total ranging from 18 to 27 inches) with the youngest participant

catching an 18 inches pickerel. On the last day of fishing, a total of 13 fish were caught including 9 jackfish (average length of 19 inches but one outlier was 31 inches) and 4 pickerel (average length of 20 inches). Of note were the leeches observed on many of the jackfish pulled from the lake. It was noted that jackfish were most available in the morning while pickerel were more plentiful in the late afternoon or evening. All Jackfish were returned to Atkinson Lake except for the largest fish caught by Councillor Flett. The pickerel were kept and returned to War Lake for distribution to War Lake Members.

Further observations about fish harvesting in the Landing River and Atkinson Lake locations were recorded during the fish focused Resource Users Roundtable held in the summer of 2019. Harvesting was described in terms of seasons and methods used, and quantity and quality of fish caught. Some of the observations support what the participants of the two ATK Monitoring Trips observed.

- Landing River
    - Mostly accessed for the spring pickerel run with many community members stopping at the railway stop some 4-5 km from Ilford.
    - Some families have fished the spring pickerel run further upstream, approximately 10 km from York Landing
    - A many as 1/2 of the community fish during the pickerel run using nets, snares, and fishing rods.
    - There used to be more jackfish than there is currently but still lots of suckers.
    - Quantity of pickerel is less in general because of beaver dams blocking fish movement.
    - The size of pickerel has also changed – during the spawning run, the smaller males move through first followed by the larger females.
    - In the past, pickerel size varied from 1-2 feet but now less than 1 foot long for both males and females.
    - The colour of the pickerel is more green than golden further upstream, like the colour of pickerel fished at York Landing
    - Most War Lake Members fillet and package the pickerel to bring back to the community for distribution but some will travel with frying pans to enjoy a fish fry at the site.
    - Approximately 8 fillets are packed per package and each household usually gets 2 or 3 packages each spring.
    - In spring 2019, the water was colder than usual and there was less fish to catch.

- Atkinson Lake
    - War Lake Members have been accessing this location through the Fall and Spring Access program to hunt and fish.
    - During the early spring, Members ice fish on the lake for jackfish, pickerel, whitefish and maria (burbot).
    - During the fall, Members open water fish for jackfish, pickerel, whitefish and tullibee (cisco)
    - Net fishing is preferred for both ice and open water fishing.

    - There is also plenty of perch, but they are small and swim through the net.
    - Although the lake was commercially fished in the 1960s-70s, the combination of fish quotas and size of the lake prevented a depletion in pickerel stocks.

Other fish harvesting sites in War Lake's Traditional Use Area were discussed in terms of seasonal activity and harvesting methods, and quantity and quality of fish.

- Moosenose Lake
    - The lake is used year-round for fishing by some War Lake Members.
    - In the early spring, 1/4 to 1/3 of the community ice fish using fishing rods, some daily.
    - Some Members travel by boat all over the lake to fish with fishing rods once the ice breaks in spring.
    - Used to be more popular to open water fish but now limited to whomever has a boat and can afford to gas up.
    - In the spring-summer season of 2019, only one boat went out with 3 members to set nets over 2 nights in bays close to the community.
    - Recently, the community hosted a shoreline derby in June 2019 off the community dock.
    - In early October 2018, 2 participants described spending 2-3 nights setting open water nets and checking them daily for a 1-week period during the whitefish spawning period.
    - During the winter, the community hosts an annual ice fishing derby where the largest jackfish caught using fishing rods around the middle of the lake wins the grand prize.
    - Few members continue to set nets in the winter, which was popular more than 20 years ago, and it was reported that nets were last set in the ice about 4-6 years ago.
    - Smaller jackfish and perch are often caught in nets set in late spring/summer.
    - Good sized jackfish can also be caught during the whitefish spawning period.
    - The lake used to have jumbo whitefish before the time of the commercial fishery.
    - Fuel from the float planes polluted the water and damaged the fish during the 1960s-70s.
    - Jackfish wasn't as susceptible and didn't change much in quality.
    - Today, fish stocks are returning to previous levels.
- Cyril River and Cyril Lake
    - In the fall, Wolverine Rapids (located halfway between Bearbone and Cyril lakes) is rich in whitefish.
    - Some 6-7 years ago in mid-September, whitefish was so plentiful that rocks were used to hit and catch fish pooled together in one spot.
    - There were also lots of pickerel at the rapids during that same boat.
    - During the spring pickerel spawning season, nets can be set at the entrance to Cyril Lake.
    - Later in the season (before Christmas), participants reported catching jackfish and small whitefish in nets set in the same area.

- West Cyril Lake
    - One family has been flying to West Cyril Lake for hunting and fishing through the Fall Access Program in recent years.
    - The lake has plenty of jackfish, whitefish and smaller tullibee (cisco).
- War, Bearbone and Hubley Lakes
    - An increase in the number of beaver dams in the area have blocked off fish movement.
    - Bearbone Lake still has jackfish and suckers but no pickerel or whitefish.
    - Hubley Lake was last fished about 20 years ago when one participant recalled setting open water nets while moose hunting there.
    - During that outing, they set the net overnight and pulled out 60 pickerel the next day.
    - This lake was also commercially fished and although there were fish quotas, the smaller War Lake experienced a change in pickerel population where over-fishing had a more intense impact than on the larger Atkinson Lake.

During the Resource Users Roundtable, participants also shared many observations regarding fish consumption. The session concluded with discussions about benefits and barriers to fish consumption, as well as ideas for increasing fish consumption in the community.

<u>Current fish consumption by species:</u>

- Jackfish
    - 1/8 of community never eats jackfish.
    - Average of 10 whole jackfish per household annually.
    - Tend to catch more when net fishing.
    - Those who fish or enjoy jackfish might eat 2-3 whole freshly caught jackfish in the spring and fall.
    - Very little net fishing is done in the winter months so those who fish or enjoy jackfish might eat freshly caught jackfish one or twice in the winter season.
    - In general, 1 large jackfish could feed a whole family throughout a week – 4 large jackfish could feed a family of 6 for a whole month.
    - Fresh jackfish is scaled, deboned, and fried with seasoning.
    - Some people prefer to keep the skin on and believe it helps keep the freshness and flavour of the flesh.
    - Some will freeze jackfish after scaling, deboning, and cutting into portions.
    - Portions can vary in size, some portions being as large as a rump roast.
    - Frozen jackfish will be thawed and fried, served with mashed potatoes, baked beans, raw onions and sometimes corn.
    - Depending on the person, an adult could eat from 1/2 to 1 whole jackfish in one sitting.
    - 10 to 15 large jackfish cleaned = 40 pounds of flesh.
    - But in general, very few jackfish get frozen.

- The community fish plant (across from the Mooseocoot Lodge) is used to freeze and store jackfish for the community.
- One participant noted that only the prepped then packaged portions of fish get taken while jackfish frozen whole are not touched.

- Pickerel
  - Everyone in the community eats and enjoys pickerel.
  - Due to net fishing in the spring and fall open water seasons, fishing families will catch 50 to 70 pickerel each season.
  - In the winter when pole fishing is more common, fishing families will catch 10 to 20 pickerel on average.
  - Large catches are shared with the wider family and the community.
  - In the spring and fall, whatever is caught is eaten right away.
  - Pickerel is rarely frozen since freezer burn sets in within weeks of freezing pickerel fillets (if frozen, needs to be eaten within a week)
  - With pickerel, fresh fillets are almost always given away before even considering freezing and storing in the community fish plant.
  - One participant provided the example of ice fishing over 3 days on Atkinson Lake over a 3-day period where they caught 30 pickerel with 5 pickerels = 10 fillets.
  - Pickerel was cleaned and prepped for taking home – 10 fillets were eaten by the family in weeks 1 and 2 while the remaining 20 fillets were given away.
  - Depending on the person, an adult could eat from 1/4 to 1/2 whole pickerel in one sitting.
  - Fish is fried whether fresh or from frozen and served with mashed potatoes, baked beans, and raw onions.

- Whitefish
  - 1/3 of community never eats whitefish.
  - Those members who like fresh whitefish might consume it twice a month and perhaps 2-3 times a month when thawing out frozen (whole, fillets or ground up).
  - Average of 4-5 whole whitefish consumed per fishing household in a week with the number of weeks dependent on how frequently they set nets.
  - Best catch is during fall whitefish spawning (late September-October) on Moosenose Lake.
  - Whitefish traditionally fished year-round on Moosenose Lake using mostly nets.
  - Currently, fewer members are setting nets in the winter.
  - One participant provided the example of setting net on the Moosenose Lake in June and catching 4 tubs of whitefish over a 2-day period (approximately 80 fish given that each tub holds about 20 whitefish).
  - The participant kept 5 whole whitefish, gave 50 whole whitefish to extended family and friend, and distributed the remaining 25 whitefish to Elders in the community.
  - Whitefish is more versatile and is often frozen whole or as fillets or ground up.

- But there is less demand for whitefish in the community, so catches are not being stored in the community fish plant.
- One participant reported that he bakes whole whitefish stuffed with carrots, potatoes and onions that can feed 1 to 3 people (depending on size of fish and portions eaten, which can be large).
- Many choose to grind whitefish with jackfish or suckers, or both, with crackers or breadcrumbs to make patties that can be fried and served in a sandwich.
- Whitefish can also be boiled with a mushroom sauce (made with canned mushroom soup and onions).
- Smoked whitefish is also popular while frying fillets is less popular.
- No matter how whitefish is prepared, adults eat similar portion sizes as when it's baked (1 to 3 people per fish).

Benefits and Barriers to Increasing Fish Consumption

- All participants agreed that eating fish is healthy and formed an essential part of a balanced traditional (country food) diet.
- Among families that fish regularly, most children eat and enjoy fish.
- Sometimes, children grow to love fish more as they get older.
- Participants observed that increased appreciation for eating fish could be tied to experiencing doing the fishing themselves.
- Participants agreed that they would be happy to see the community double its current fish consumption.
- One of the barriers to increasing fish consumption is the great effort it takes to fish with little in return.
- An example provided was that it takes a great deal of work to set a net for 3 hours to only yield one whitefish.
- On the other hand, during the whitefish spawning season in the fall, can set nets close to shore near the community on Moosenose Lake and catch plenty of whitefish and jackfish for less effort.
- When families travel further afield to other lakes, the effort combined with cost of travel makes it less attractive.
- Some places could be accessed more frequently by flying to them during open water season such as Atkinson Lake and Fox River.
- Although super expensive, it would be nice to be able to fly by helicopter (like the fishers from Gillam) to access the Dafoe River in the winter since it is rich with jackfish, pickerel, and whitefish.
- Dafoe River and West Cyril Lake could be accessed in the winter by snowmobile, but trails need to be broken and groomed.
- Maintenance of boats, ATVs and snowmobiles is costly as is the fuel to run them.
- Another barrier is available time, especially with job commitments.

- Also, families with children in school, have less time to travel and spend time on the land.
- Participants did not feel that pollution or increase in mercury were influencing fish consumption.
- They felt that the fish in their Traditional Use Area is safe and that they were confident in their ability to tell the difference between healthy and sick fish.
- They acknowledged that mercury is a concern for people living in the York Landing and Split Lake communities.
- Participants were not concerned with the relationship between natural occurring mercury in fish and portion sizes and amounts of fish consumed even if they were to double their rates of consumption.
- Preparing fish for eating with family is not considered a barrier to eating more fish.
- Most of the work, including preparing the fish (scaling, filleting, and packaging) is done while out on the land – cooking is not very labour intensive in comparison.

Opportunities for Increasing Fish Consumption

- The community fish plant presents opportunities, but it needs additional supplies such as a stainless-steel table, an ice machine, a scale, and a yard stick for measuring fish.
- It could also be expanded or have a small trailer adjacent to store equipment (nets, poles, snares, rods, ice augers, buckets, etc.) for a lending bank to provide opportunities for more members to go fishing.
- A stand alone or expanded facility to accommodate a walk-in cooler for moose and caribou meat would also help promote healthy diets.
- The fish plant facility could also be used to do workshops for youth during the annual winter fishing derby – participants believed that children as young as 10 years old would be keen to learn.
- Could invite 2 or 3 workshop leaders to do presentations and hands on practice on how to dress and package fish and how to use equipment.
- Currently the community just started a summer shoreline derby, and it is important to ensure that both it and the winter derby are held annually.
- School currently has a nutrition/country food program that includes cooking, so it is important that it remains a permanent part of the curriculum.
- In the past, summer swimming lessons were organized by AWASIS or Health Department – should be a permanent annual event.
- The occasional paddling and boat operation training for youth should be a permanent annual event.
- Health Department should also do more distribution of healthy eating information to every household and work with the school to encourage more adherence to a traditional/country food diet.
- One participant would like to see a week-long festival organized along the lines of the YFFN Goose Camp at York Landing.
- At the camp, Elders teach skills for preparing traditional/country food.

- It could take place in mid-October to coincide with Thanksgiving when more families are back in the community.

Other Activities

2017-2019 Baseline Observations: As first identified by War Lake Members who were interviewed as part of the 2009-2010 community fieldwork studies, War Lake Members continue to pick berries in and around the community according to roundtable participants. Blueberries are the most abundant in the region with two types noted – one low to the ground with dusty blue fruit and the other are 2 ft high bushes with a darker blue fruit. Next most abundant are raspberries, strawberries, and moss berries. However, it was observed that the strawberry and raspberry patches had become increasingly sparse in the past decades and the fruit tended to be smaller, almost as if growth was stunted. Gooseberries and cloud berries are also not as abundant even though they were plentiful about ten years prior. Other berries that have not been spotted in decades are only remembered by their Cree names.

In general, fires and earthworks influence growth and abundance. After the 2013 fires, blueberries were very abundant during the 2014-2015 seasons due to post disturbance re-growth. Blueberries, raspberries, strawberries, and moss berries are picked by families and used for jams and in pancakes. Eating berries influences the taste of certain meats like spruce hens that are typically hunted in the fall.

Resource users described other plants that are gathered and have medicinal value during a plant focused discussion session. Elders passed on much of the knowledge to present day resource users and some continue to practice plant gathering. Northern tea is in more abundance in the immediate area and is steeped as medicinal tea, much like Labrador tea. Labrador tea is more common further north but has been spotted growing on an island on Cyril Lake. Some plants are only known by their Cree name, such as the pointed leaf plant that grows in the muskeg and has bigger leaves than northern and Labrador tea plants but is known to have antiseptic value and was traditionally used on cuts and bites. Weekes is found on creeks and river shorelines between Bearbone and Cyril lakes and continues to be picked for helping ease cold and flu symptoms.

2019-2020 Monitoring Observations: The topic of plant harvesting activities did not come up in either ATK Monitoring Trip since these two trips occurred in early spring and winter. The Resource Users Roundtable session was exclusively focused on fish harvesting and consumption and berry picking activity was not commented upon.

Appendix C: War Lake Connections to the Land – Observations and Discussion (2017-2020)

Family Ties and Identity

2017-2019 Baseline Observations: War Lake Members who participated in both the ATK Monitoring Trips and the Resource Users Roundtables shared many recollections of their time on the land with family members and how important those experiences were in learning about their traditional ways and the history of their people. They remarked on how hunting parties could be as large as 6 members and would often include a combination of grandparents, parents, siblings, uncles, and cousins.

These observations were consistent with the findings of the 2009 Moose Hunter Survey. Hunters interviewed predominantly indicated that they were taught by their fathers to hunt. They also confirmed the large role family plays in participating in traditional pursuits together. These observations were also supported by interview responses from participants interviewed during the 2009-2010 community fieldwork studies that identified the benefits of hunting as follows: healthy food; traditional activity; ancestral identity; and family and community recreation.

Table 14 – Sites and Features of Cultural Importance

Ancestral Water Route	York Factory to Split Lake	Ancestors traveled by boat inland from community on Hudson Bay to the area known as York Landing following the Hayes River to Bigstone River to Fox River, spending time at Atkinson Lake and then travelling Cyril River through Cyril Lake to Crooked Lake to War Lake and on to Surprise Lake and following the Landing River to Split Lake.
Overland Trails	Cyril Lake to Atkinson Lake	A series of former dog sled trails continue to be used to get to the traplines in the Cyril Lake to Atkinson Lake area, and many War Lake families would stay in the area during the winter months.
		Dog sleds were used by War Lake families to hunt moose and caribou and to access traplines throughout the 1940s and 1950s.
	Landing River to Bearbone Lake	By the 1930s, War Lake and Tataskweyak Members settled on the south shore of Atkinson Lake while families from Fox Lake, York Factory and Shamattawa settled on the north shore. These settlements were active until the 1950s when many from the south relocated to Ilford to work on the railway and others from the north moved to the new settlement of York Landing.
Traditional Campsites	Atkinson Lake	Participants also noted a burial site located near the former north shore settlement.

		Many participants recalled working along with their fathers, brothers and cousins to help build cabins or assist with winter net fishing and fly in open water fishing on Atkinson Lake for commercial fishers.
		By the 1930s, gold prospecting had begun in the area using horse teams to access and bring back gold from God's Lake, passing through the War Lake area.
	War Lake	War Lake families have passed down the legend of a gold prospector working the God's Lake mine falling in love with a local Indigenous woman that he called "Princess" which led to calling it Princess Lake.
		The community settled across from the town of Ilford that had become an important transport marshalling and service center by the 1930s with the completion the Hudson Bay rail line and the construction of a tractor transport and winter freight road system.
Traditional Campsites	Moosenose Lake	The community was also a historic stop over location for ancestors travelling between Atkinson Lake and Split Lake.
		With that commercial activity, there were white families that settled in the area to run businesses that included Thompson, Lindal, Rondeau, Sanderson and Macleod and their names are often intertwined with recollections of past events with grandparents and great grandparents.
		There is a close connection to the railway, which eventually led to the development of winter road freighting and the commercial fishery as shared by resource users and other participants who had recollections of families involved on rail maintenance and road construction work crews, commercial fishers' assistants, and fish plant workers.
		Many War Lake Elders and Members also recall working on various Manitoba Hydro projects for decades starting with Kelsey; they remember using their knowledge of their traditional resource use areas for working on surveying the lands for transmission lines.

		The lake continues to be valued for recreational activities and traditional pursuits including family camping, fishing and spiritual retreats.

To the present day, many War Lake families have multiple generations working at Keeyask and on other Manitoba Hydro projects while balancing life in the community where they continue to practice traditional resource use activity. Resource users identified the challenges associated with spending time on the land with family and maintaining traditional ways in one roundtable session.

Challenges with spending time and learning on the land reported during 2017-2019 monitoring period:

- It is difficult to make time to get out on the land for long periods when working.
- It is rare for a family to go out in the bush for a month or longer.
- Trappers used to spend 1-2 months on the land 30-40 years ago while today, a trapper might spend up to 5 days on the land, mostly for the initial set-up and will check on traps on weekend trips.
- Trapping was the main source of income for many Elders in the past.
- Today the costs are higher than the return on furs so many only trap to maintain the culture and pass it on to their children.
- Use and proper maintenance of cabins have become important so that the most can be made of the limited time spent on the land.
- Even with the strong desire to maintain tradition and pass on knowledge, accessing the land is a challenge for many families who cannot afford the high costs.

2019-2020 Monitoring Observations: The ATK Monitoring Trips took participants to two locations of cultural importance to War Lake Members: Landing River for the pickerel run and Atkinson Lake for a stay at the community's cabins built on a traditional campsite. The Resource Users Roundtable also presented an opportunity to discuss how families spent time on the land, harvesting fish and other animals. Observations shared during these monitoring activities are presented by seasonal activity on the land.

- Winter Activity
    - Typically, some families could set a net in the ice in nearby War Lake and return the next day to check the net.
    - One participant's grandparents went further south to West Cyril Lake for short stays.
    - They would take the train to the Munk railway stop where there is a camp area nearby and would walk the trail to West Cyril Lake.
    - The trail is overgrown, but one participant is breaking the trail to try to access the area again.

- Other families went to Atkinson Lake to trap and stayed in cabins for 2-3 weeks where they would set a net in the ice in a nearby bay.
- Back when dog teams were used to access traplines, War Lake Members would set out in November and return in the spring, breaking up their long stay with short trips back to the community to get more supplies, sell furs or attend special events (Christmas, weddings, etc.).
- Participants marked the traditional dog sled trails on the map.
- One winter trail circuit covered the area that features War, Bearbone, Hubley, Lungstrum, and Three Sisters lakes (in the direction of Oxford House).
- A second winter trail circuit covered the area that features Cyril and Atkinson lakes to Fox River (in the direction of Shamattawa).

- Spring Activity
    - Most War Lake families participated in fishing during the pickerel run on the Landing River.
    - The campsite of the Landing River was also an important stop for the Cree traveling between communities of War Lake, Split Lake, and York Landing prior to the building of PR 280 and the winter road.
    - The campsite used to be the location of 4 homes and a small store owned by fur buyer Roddy McLeod.
    - Typically, during the pickerel run, fishing rods or long poles with snares at end were used.
    - Traditionally, members caught 100 or more pickerel each using these methods.
    - Given the close proximity, members would make day trips, back and forth, over the 2-3 week period of the pickerel run.
    - Traditionally, the catch would be shared with the community but before refrigeration, typically only enough fish to eat fresh was taken back to the community.
    - Fish was typically fried and eaten right away with some families traveling with their own frying pan.
    - Some people did smoke fish with diamond willows.
    - There was a mile and a half portage from Moosenose Lake to Landing River where jackfish and whitefish were caught and smoked, mostly for personal use.
        - Typically, it was mostly one family (4 or 5 people) that fished in that area (which is now part of one participant's trapline).
    - Some people also smoked the heads of suckers, which was considered a delicacy.
        - For the most part, suckers were used to feed dogs or ground with other fish to make fish patties.
    - In the 1980s, the Shoups family of Ilford would take suckers caught by community members and can them for their own and community use.

- Summer Activity
    - Traditionally, open water net fishing was done on Moosenose, War, Bearbone, Cyril and Atkinson lakes.
        - However, if the water was too warm, the fish flesh would be mushy and much less desirable.
    - Other lakes in the area are not fished because they are too shallow (Hubley) or too rocky (Kettle).
    - Butnau Lake is good, but the area is part of Tataskweyak's traplines.
    - Participants also identified two open water routes that continue to be navigable by canoe and motorboat.
        - One route starts at War Lake and ends at Atkinson Lake, passing 12 rapids with Wolverine Rapids between Bearbone and Cyril Lakes being the longest and rich in whitefish.
        - A second route starts at Moosenose Lake and follows the Landing River to Split Lake.

- Fall Activity
    - Many members set nets while hunting and trapping.
    - Can catch 100s of whitefish during spawning season (October) on Moosenose Lake at the community dock.
    - Some members will also fish whitefish on War Lake during the October spawning season.
    - Often used to take some of the whitefish caught to use as bait on the trapline.
    - The same was done with suckers and tullibee (cisco) caught in the nets.
    - During trapping season, whitefish and suckers would be cooked and fed to dog teams when they were used extensively and highly valued.

The ATK Monitoring Program is helping promote more interest in resuming more harvesting activity in War Lake's Traditional Use Area and opportunities to pass on skills from Elders and experienced resource users to youth. In the community itself, the winter fishing derby on Moosenose Lake remains well attended and in recent years, a summer shoreline derby was introduced to encourage youth participation in fishing activities.

Traditional Ways

War Lake Members interviewed during the 2009-2010 community fieldwork studies noted that although some efforts were being made to promote traditional ways, more could be done to support transferring ATK and interest in traditional resource use to the next generation. ATK transfer from one generation to the next was highly valued and respondents indicated strong support for ongoing programs and for new programs such as Elder and youth storytelling exchanges.

2017-2019 Baseline Observations: The passing of ATK from one generation to the next and the creation of opportunities to learn traditional ways both on the land and in the community continues to be very important to War Lake Members. Trapping was traditionally the most intensive of resource use activities which required Members to spend long periods of time on the land, pursuing other activities such as hunting, fishing and plant gathering while out on the traplines. As Elders pass away, the total amount of trapping activity is decreasing. There is fear that the knowledge of traditional ways will be threatened with the passing of Elders and the loss of active and frequent traditional resource use. The ATK Monitoring Program was designed to learn more about and monitor the environment in War Lake's Traditional Use Area by having Members, including Elders and youth, experience being on the land. That connection to the land also presented opportunities for ATK transfer between Elders and youth.

The Resource Users Roundtables also presented another opportunity to discuss traditional ways including the traditional harvest of certain animals and plants that contributed to War Lake Members' ability to survive living on the land under often-harsh conditions.

Important observations were shared about the traditional uses of caribou and other wild meats for food sustenance, clothing, and bedding.

Cultural importance of harvesting caribou and other wild meat:

- Caribou was very important to diet as was moose and geese.
- Moose continues to be the preferred meat harvested.
- One caribou could feed a family of six for up to two weeks.
- Caribou and moose can feed many people or be preserved to feed a family over an extended period.
- Before freezers were available in the community, families would smoke and dry the meat.
- The meat could also be mixed with berries and grease to make pemmican, but it was more common to use moose meat.
- Other First Nations would foretell of the movement of caribou when groups gathered.
- However, War Lake Members did not go out of their way or move long distances to hunt caribou – movement was too variable for it to be a primary or reliable source of sustenance.

- What was eaten was often variable from year to year, with little caribou, moose, or geese some years.
- People would also eat beaver, muskrat, rabbit, and other small game so they were not solely dependent on caribou and moose.
- Hides were cleaned for making mukluks, moccasins, and gauntlets (gloves).
- Men would use the hindquarter bone of caribou or moose to scrape off fur and for fleshing (removing the fat).
- Hides would be tanned using smoke.
- Women often stretched the hides in water by hand or using ropes to wring it dry.
- Women also used to do beading work on clothing made.
- Caribou hide could be laid on the ground and used as a mattress.

A session focused on wildlife and vegetation also provided opportunities to share information on how plants were traditionally used.

Traditional uses of plants:

- Spruce sap is boiled to apply on bites and wounds.
- Spruce sap is also used to patch holes on canoes and to treat fiddle strings.
- Birch bark is used for numerous items including moose calls, canoes, paddles, runners on dog sleds and axe handles.
- Spruce wood best for burning, both dry and green (for slow burns).
- Diamond willow best for smoking fish.

2019-2020 Monitoring Observations: As with past ATK Monitoring Trips, youth participants had the opportunity to learn many of the traditional skills of living off the land by doing the day-to-day tasks required to live on a campsite or cabin and using different techniques to harvest and dress fish based on seasonal conditions. Resource users and Elders were on hand to explain specific techniques and share experiences of how their relatives first learned their skills.

In addition to the traditional fishing activities and routes taken by War Lake families outlined in the previous section, the Resource Users Roundtable (focused on fish harvesting and consumption) explored the historical importance of fish in a traditional diet.

- Traditional Fish Harvesting
    - Fish was traditionally eaten year-round.
    - Access to moose and caribou was seasonally dependent, unlike fish.

    - People would also eat beaver, muskrat, rabbit, and other small game so they were not solely dependent on seasonal hunts.
    - Moosenose and War (Princess) Lakes were fished and continue to be fished year-round.
    - A point on Landing River just outside the community where it meets the railway was visited and fished and continues to be accessed for the spring pickerel run.
    - Bearbone and Atkinson Lakes were also visited and fished and continue to be accessed in spring.
    - Fall and winter fishing traditionally coincided with families going out on the land to hunt or spend time on their traplines, which included West Cyril, Three Sisters, Lungstrum, Hubley, Cyril, and Atkinson Lakes.
    - Three Sisters, Lungstrum, and Hubley Lakes are no longer accessed but one family has started to make more use of West Cyril Lake by breaking trails there from a camp site near the Munk railway stop.
    - Fishing occurred and was eaten whether out hunting or trapping or when back in the community.
    - Fish most consumed were jackfish, pickerel, and whitefish.
    - Maria (burbot) and tullibee (cisco) are also found in all the same lakes and rivers where members net fish for jackfish, pickerel, and whitefish.
    - Sturgeon is not found in the areas traditionally fished by members.
    - They were commercially fished in fast running rivers such as the Lower Nelson River (i.e., Jackfish Island area) as well as Bigstone and Fox Rivers.
    - Sturgeon was not fished domestically.
    - Suckers were commonly fed to dog teams.
    - Fish was traditionally refrigerated using holes in the ground by digging through 3 feet of moss to reach ice.
    - Enough fish was typically caught to feed numerous families in more than one dinner sitting.
- Traditional Fish Preparation
    - Pickerel cheeks are a delicacy – cheeks are dug out with a spoon or a filleting knife.
    - The gills beneath the neck, called the butterfly or rabbit ears, are also prepared separately (deep fried) as a delicacy.
    - Livers of jackfish and whitefish, prepared breaded with seasoned flour and fried, is another favourite.

- Livers of burbot (mariah) are also eaten but some find them too rich (livers are beige in colour when they are too fatty).
- In addition to smoking the heads of suckers, they can also be boiled.
- Some like to eat the eyes while others pick them out.
- Whitefish is also boiled, and eyes are often eaten.
- Whitefish internal organs are also boiled or fried.
- Whitefish eggs are used to make bannock.
- Of all the larger, fleshier fish, whitefish is the easiest to dress since no deboning is required.
- Jackfish can be prepared with or without skin depending on family's preference.
- Smaller jackfish and whitefish are tastier, but the larger ones can feed more people.
- In the past, every part of the fish was eaten.

- Traditional Fish Distribution
  - Jackfish is the most plentiful throughout the traditional territories in all seasons.
  - During the Landing River pickerel run, enough fish is caught to feed 2-3 families for a couple of weeks depending on how long the run lasts – it can vary from 1-3 weeks depending on the weather.
  - Whitefish caught during the October spawning season on Moosenose and War (Princess) Lakes can feed 2-3 families for a couple of weeks.
  - In general, most families would traditionally eat fresh fish 3 times a week.
  - In the summer, might eat frozen fish (caught in the spring) since the fish flesh of fish caught in the summer can sometimes be too mushy if the water is hot.
  - Traditionally, highly valued dogs were given cooked, higher quality fish except for pickerel, which have sharp fins and would need to be filleted.
  - Elders always said that it was important to respect it all – every animal valued including fish.

Appendix D: War Lake ATK Monitoring Report #6

Destination: Fox River Outfitters Camp at the Confluence of Bigstone River and Fox River

September 2020

Overview

War Lake conducted an Aboriginal Traditional Knowledge (ATK) Monitoring Trip from September 17th to the 23rd, 2020. The original start date was September 16, but was postponed to the 17th due to poor flying conditions. War Lake Members, including knowledge holders, resource users, and youth, traveled with an advisor from War Lake First Nation to Fox River Outfitters Camp (herein referred to as Fox River Camp) to conduct traditional activities, while monitoring an important part of the War Lake Traditional Use Area (WLTUA). The intention of the program is to review environmental effects on the WLTUA resulting from the construction of the Keeyask Generating Station.

For this trip, the primary focus of investigations was related to fishing and moose hunting characteristics, including general field observations of health and size. The Monitoring Trip also provided an opportunity for War Lake youth to participate in important land- and water-based social and cultural activities with experienced resource users and knowledge holders. With continued Monitoring Trips to highly valued locations, War Lake aims to document any observable environmental changes, with a focus on those which may affect resource use, including issues related to access, respectful hunting practices, and the health and availability of local wildlife. As well, the knowledge imparted by Members and documented in this report also includes stories and insight from other parts of the WLTUA, including related topics such as other foods, environmental observations, and important personal and family connections to the lands and waters.

This report will describe the activities undertaken leading up to the trip and while hunting and fishing and will provide observations and insights made by War Lake Members.

The following Members participated on the Monitoring Trip:

- Edward Ouskun – Knowledge Holder
- Debra Ouskun – Knowledge Holder
- Dano Fitzner – Knowledge Holder
- Joe Ouskun – youth
- Ethan Laliberty – youth
- Chris Fitzner – youth
- Mattius Spence – youth.

Consent and Confidentiality

War Lake's advisor reviewed and discussed the Consent and Confidentiality Form to ensure War Lake Members were aware of how the information they provide will be used and protected. All participants agreed to sign the Consent and Confidentiality Form. All youth consent forms were reviewed and signed by Brenda Ouskun, participating Knowledge Holder.

Day #1 – Travel to Camp. Fishing, and Tracking

On the morning of September 17, 2020, advisor Ariel Lupu, accompanied by his son, Nathan Lupu, flew out of Thompson around 7:15 am and into War Lake at about 8:00 am to pick up the participating Members, and then off to the Fox River Camp, arriving about 8:30 am. Final preparations and loading of gear and provisions were made in War Lake before departing for the Fox River Camp, including gathering and loading:

- General supplies including groceries, fishing equipment, sleeping bags, and other related supplies.
- Gasoline and propane.

The group arrived at the camp and was greeted by Randy Naismith and his brother in-law, Lyle McMaster, who provided additional support and guidance for the land and water activities. After unloading and settling in, three (3) separate boats explored different sections of the Bigstone River and Fox River. The focus was to call and scout for moose signs, while establishing fishing locations for both angling and setting nets.

Photo 1 - Unloading Otter Aircraft at Fox River Camp Landing

Day #1 Observations

- The current was quite strong, moving the boat downstream at considerable speed, but not strong enough to sweep a human away with basic swimming skills (also observed on Days 2 to 5).
- The clear waters of the Bigstone and Fox Rivers are quite shallow in certain locations, with rapids, and many boulders just below the surface edges (also observed on Days 2 to 5).
- Macrophyte vegetation was scattered, with many areas appearing scoured from current and high flows (also observed on Days 2 to 5).
- In some locations it was difficult to listen for moose, due to the high flows in various side streams, which are attributed to beaver *Castor canadensis*) activity.
- Fishing (observations in only one (1) of three (3) boats):
    - Three (3) walleye [otherwise known as pickerel] (*Sander vitreus*), and two (2) Northern pike [otherwise known as Jackfish] (*Esox lucius*) were caught angling in the Bigstone River, with Edward Ouskun guiding and positioning the boat within the current,
    - The pickerel were a brownish yellow colour, well proportioned, with no observed lesions or external parasites, and were generally about 43 cm (17 in) in length, and
    - The Jackfish were quite skinny in girth, and about 64 cm (about 25 in) in length.
        - Note: all reported lengths throughout this report are total from tip of the jaw to end of the tail (not fork length).
- Shorelines along the river:
    - Were mostly composed of silty clay, with various wetland grasses, sedges, and extensive moose browse vegetation such as willow (*Salix sp.*) in the shallow nearshore areas, and
    - Backshore areas contained mostly coniferous forest characteristic of the High Boreal/Hudson Bay Lowland areas of Manitoba and were comprised mostly of Black spruce (*Picea mariana*) and Tamarack (*Larix laracina*), with less than five (5) percent deciduous trees containing poplar (*Populus spp.*) and Paper birch (*Betula papyrifera*).
- The Black bear (*Ursus americanus*) known to wander into the camp area was spotted on the shoreline, below the main cabin.
- Marten (*Martes americana*) boxes were observed on trees along the river edges (also observed on Days 2 to 5).
- A pair of Canada jays [also known as Whiskey jacks] (*Perisoreus canadensis*) hung around camp, especially with moose remains as a major food source (also observed on Days 2 to 5).

Photo 2 - Sunset at Fox River Camp

Day #2 – Hunting and Fishing

The first moose kill occurred at about 7:00 am, approximately 250 m (273 yards), southwest of the Fox River Camp, in the nearshore area. The large bull moose was brought to the camp by boat, and then hauled onto the camp landing by the youth. The antlers of the moose had 8-points on each side of the rack. The bull was quartered, and all meat was taken out and hung. As well, prized organ meat such as the kidney and liver were removed. As mentioned by the hunters, the meat is to be shared amongst family and other War Lake Members.

The second moose kill occurred down river of the Fox River Camp, along a thick willow nearshore area. Three (3) boats filled with all hunting party members and advisor assisted in preparing and hauling the meat back to the Fox River Camp. The moose was killed by Chris in the late afternoon-early evening of Day #1.

This was Chris' first moose kill and was celebrated with tobacco offerings from both him and his father, Dano. As a show of respect, the moose hide, and other leftovers were gathered and neatly piled in one (1) location. Leaving parts of animals strewn around a kill site is considered disrespectful to the animal.

Photo 3 – Youth hauling bull moose ashore at Fox River Camp landing.

Photo 4 – Chris and Dano preparing the moose kill amongst the willows along the Fox River

Photo 5 – Brenda Ouskin, Chris' proud mom

The groups undertook two (2) separate fishing sessions, with focus again being on moose calls and tracking.

Day #2 Observations

- Wolves (Canus lupus) were heard howling upstream of the camp, which indicated that moose may have scattered in that area to avoid predation.
- There were lots of game trails in the area of the second moose kill.
- A few pickerel and Jackfish were caught, with most being in the 40 cm (16 in) length range.
- At least three (3) beavers were observed working the shoreline by gathering timber and readying the dens for winter (also observed on Days 3 to 5).
- There were many game trails along both shorelines.
- One (1) Lake sturgeon (Acipenser fulvescens) was caught in the Fox River with a net and brought back to camp to be processed (after departure of advisors). The sturgeon weighed about 34 kg (75 lbs.) and was about 1.2 m (4 ft) in length.

Day #3 – Tracking and Fishing

The weather turned from fall-like weather with cool overnights, to summer weather with gusty winds, reaching a high of about 20°C. With the higher temperatures came blackflies and mosquitoes, which were not as abundant the first two (2) days of the Monitoring Trip. As such, two (2) separate boat trips were undertaken during the day, with the first taking place in the morning, and the second during the evening.

Photo 6 – Moose tracking along Bigstone River shoreline

The first trip combined tracking and exploring shoreline areas for game trails and other moose signs.

<u>Day #3 Observations</u>

- The first site explored along the Bigstone River had lots of relatively fresh moose signs with game trails and tracks in the nearshore area.
- Vegetation in the area was comprised mostly of lichen-moss, with scattered Labrador tea (*Ledum groenlandicum*) and other shrubs, such as willows (*Salix sp.*) and alder (*Alnus sp.*) along the riparian-water's edge.

Photo 7 – Moose trail (approximate centre of photo)

- The second trip explored the Fox River, which also had lots of relatively fresh moose trails and tracks.
- Fishing downstream of Moose Island in the deeper areas of the Fox River produced 13 pickerel, with the largest two (2) being around 52 cm (20.5 in) in length. Most other pickerel were around 43 cm (17 in) in length.
- One (1) butterfly, and what appears to be an Eastern Comma butterfly (*Polygonia comma*) was observed sunning on the main cabin. This butterfly is considered uncommon in Manitoba (source: https://www.inaturalist.org/guides/5572?tags%5B%5D=Manitoba+Conservation+Status+Rank%3DS3+-+Uncommon)

Photo 8 – Moose track (centre of photo)

Photo 9 – Edward with 52 cm (20.5 in) pickerel

Photo 10 – Curing moose meat

Photo 11 – Preparing supper with fried moose meat and onions

Photo 12 – Butterfly sunning on main cabin

Day #4 – Tracking, and Fishing

The daytime high reached about 23°C, but in front of the main cabin in the direct sun, it seemed more like 30°C. It was too warm for hunting but tracking and fishing continued later in the day.

Day #4 Observations

- There was a thin haze in the sky from brush fires in the western US.
- Fishing was slow, with only a few pickerel and small Jackfish being caught.

Photo 13 – Hazy skies from western US brush fires

Day #5 – Tracking, Fishing, and Departure of Advisor

Rain started overnight, with intermittent showers throughout the day. Again, the temperature was cooler, but still warm at about 16°C. Most activities during the day occurred in the morning and focused on tracking with only five (5) pickerel caught on the Fox River. Ariel and Nathan were picked up by float plane and transported back to Thompson, around 5:00 pm.

Photo 14 – Hazy morning, with mist over the water

Stories and Insight

1. Locations

Atkinson (otherwise known as Fox) Lake is another important hunting and fishing area for War Lake Members. Caribou (*Rangifer tarandus*) herds are known to traverse the area, and many have been seen crossing the lake while ice fishing. Caribou sightings in War Lake First Nation have been common in recent years.

Edward explained that travel in this backcountry can be difficult without airplanes and winter roads. He mentioned that his uncle once carried a freighter canoe from Atkinson Lake up to Big Kettle Lake, that took a lot of strength and was challenging due to the numerous portages. Spring run-off and high water made the trip home to War Lake even more challenging.

2. Fishing

In March 2019, sauger (*Sander canadensis*) was caught for the first time in Atkinson Lake. The sauger was caught in a net through the ice, with the largest one being about 43 cm (17 in) in length. All fish caught during that trip, including walleye and sauger, were shared with family and community.

Whitefish (*Coregonus clupeaformis*) in Atkinson Lake are caught, dried, and smoked using diamond willow as the preferred woody material. The brine ingredients used to prepare the fish for smoking include water, kosher salt, and paprika.

3. Hunting

Cows without calves are called “Dry Cows,” and are fair game if observed to be solitary over a few days of tracking.

4. Meat Preparation

When consuming moose meat, the liver and kidneys are best when fried. Bear meat is also good when fried. Bear meat in this area is lean, because they hunt young moose calves, with evidence observed on the traplines. In addition, younger bulls have more tender meat.

5. Other Foods

Edward remembered picking blueberries and strawberries in the 1960s with the family. The rail line area was a good source before they started spraying chemicals. Both Edward and Brenda have indicated that the smaller leaves of Labrador tea are preferred for preparing teas.

6. Trapping

Edward and his brother helped build a cabin at Cyril Lake in 1986, which was used for trapping and recreation. Ed's brother shot beavers for their fur along the Dafoe River.

Edward accompanied his uncle on a few occasions as a trapper's helper. When Edward was 14 years old, he started accompanying his father on the trapline for the next eight (8) years. With a current decline in trapping, there is a higher beaver population. Also, an increase in the Marten population in the area was first observed in the 1980s, which consequently facilitated a decline in the Fisher (*Pekania pennanti*) population.