

2021-2022

# Lake Nipissing

Memorandum of Understanding Update







## Nipissing First Nation:

### Recognition of a Successful Partnership

Nipissing First Nation (NFN) plays a fundamental role in promoting the health and recovery of the Lake Nipissing fishery. NFN continues to have significant successes in protecting the lake's walleye population and maintaining safe harvest levels within its commercial fishery, consistent with Aboriginal treaty and harvesting rights. Our work on shared resource management and stewardship has attracted the interest of other governments and organizations and has led to increased capacity within NFN to support the Memorandum of Understanding (MOU).

### Nipissing First Nation Fisheries Law Regulations

In April 2015, following consultations that identified concerns of its community members about the stressed walleye fishery, NFN put new regulations in place under NFN's Fisheries Law that:

- Continued a spring moratorium on gillnetting (in effect since the Fisheries Law was enacted in 2005);
- Introduced a temporary moratorium on the cultural practice of spear fishing;
- Reduced the number of permitted gillnets from five panels to three; and
- Increased minimum gillnet mesh size from 3.5 inches to 3.75 inches.

## Memorandum of Understanding

The Government of Ontario recognizes NFN's Chi-Naaknigewin (Constitution) and Fisheries Law, a first for Ontario. This recognition supports a new approach to fisheries management and nation-to-nation relationship building. To build on the successes of the first two MOU agreements (2016-2019 & 2019-2022), NFN and the Ministry of Natural Resources and Forestry (MNRF) renewed the MOU in March 2022 for an additional three years (2022-2025) to continue sustainably managing the Lake Nipissing fishery. This cooperative work supports NFN's Fisheries Law and the recovery of the Lake Nipissing walleye population.

(FWIN) assessment. An online registration and reporting tool was implemented allowing commercial fishers to register and submit daily catch reports while NFN offices were closed during the pandemic. This option will continue to be available for the 2022 fishing season, along with in-person submissions. During the 2021 commercial fishery season, NFN staff were able to work with fishers to biologically sample the season's harvest. The health and safety of NFN and MNRF staff and NFN community members continues to be a top priority.



**NFN and MNRF renewed the MOU in March 2022 for an additional three years...**



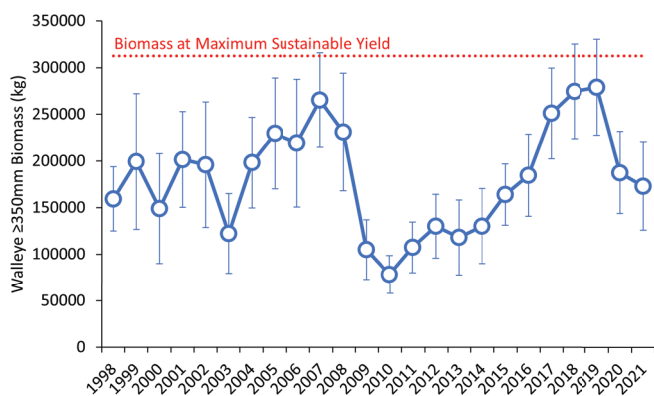
## Navigating COVID-19

During the second year of the pandemic, NFN and MNRF continued to be faced with making decisions on how monitoring, assessment and enforcement activities could take place while ensuring the safety of staff, community members and the public. By continuing to follow social distancing protocols, and use personal protective equipment (e.g., face masks, gloves, cleaning supplies), NFN and MNRF staff safely conducted joint patrols and completed the Fall Walleye Index Netting

## Importance of the MOU

NFN and MNRF successfully implemented the sixth year of the MOU in 2021-2022. The MOU along with NFN's Fisheries Law and leadership in the management of the commercial fishery, and MNRF's recreational fishery regulations, are equally vital to the long-term health and sustainability of the Lake Nipissing fishery. FWIN results show that management actions implemented by NFN and MNRF have put the walleye population on the path to reaching this goal.

Trends from FWIN show that the walleye population has improved compared to earlier assessment results (e.g., 2009). The 2021 FWIN assessment shows the biomass of walleye being slightly lower from 2020 but not significantly different from 2019. Population indicators such as biomass and mortality can fluctuate annually, so it is important to continue annual monitoring programs to ensure long-term trends are moving towards Lake Nipissing's management objectives. FWIN results also showed that annual mortality has increased from 2020. This increase may be attributed to the large three-year-old year class (e.g., annual fluctuation) that can skew the mortality calculation, so it is important to see if this trend continues.

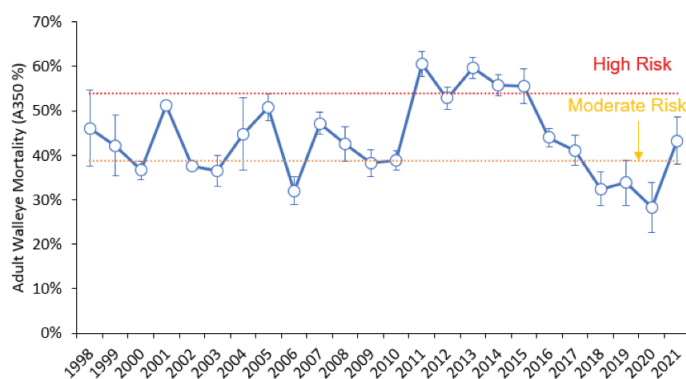


**Figure 1:** Walleye greater than 350 millimeters (mm) biomass in Lake Nipissing determined through FWIN. Maximum Sustainable Yield (MSY) is the red dashed line, and the management target for walleye in Lake Nipissing is 1.3 MSY (approx. 400,000 kg).

Recreational fishing regulation changes in 2014 and 2022 as well as the MOU are helping to rebuild the population, but it has not reached the Lake Nipissing Fisheries Management Plan's ten-year goal of a target biomass of approximately 400,000 kilograms (kg) (Figure 1). In January 2022, recreational fishing regulations for walleye were changed to a harvestable slot size of 40-45 centimetres (cm) to start protecting the older, larger walleye while also protecting juveniles.

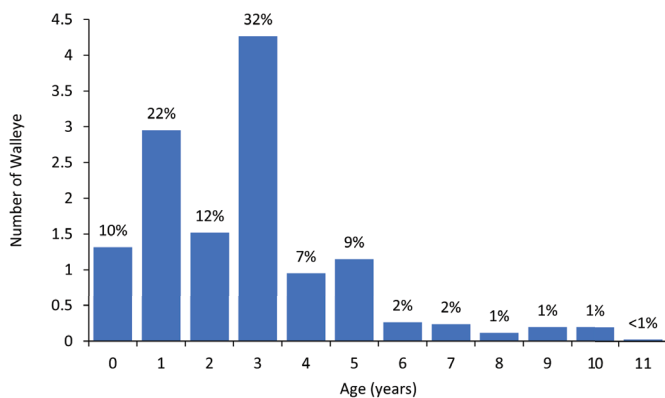
With the change in angling regulations beginning in the open water period of 2014, and the implementation of the MOU between NFN and MNRF in 2016, walleye biomass increased rapidly, and fishing mortality declined significantly (Figure 2). In 2021, mortality increased slightly which is a factor of the large three-year old year class.

Juvenile walleye continue to be protected so they can reach spawning grounds at least one year before becoming susceptible to the recreational and commercial fisheries. NFN's commercial fishery regulation that increased the minimum gillnet mesh size from 3.5 inches to 3.75 inches has allowed juvenile walleye in the population to rebuild.



**Figure 2:** Lake Nipissing annual mortality for walleye greater than 350mm, estimated from FWIN. The goal is to be below the dashed red line.





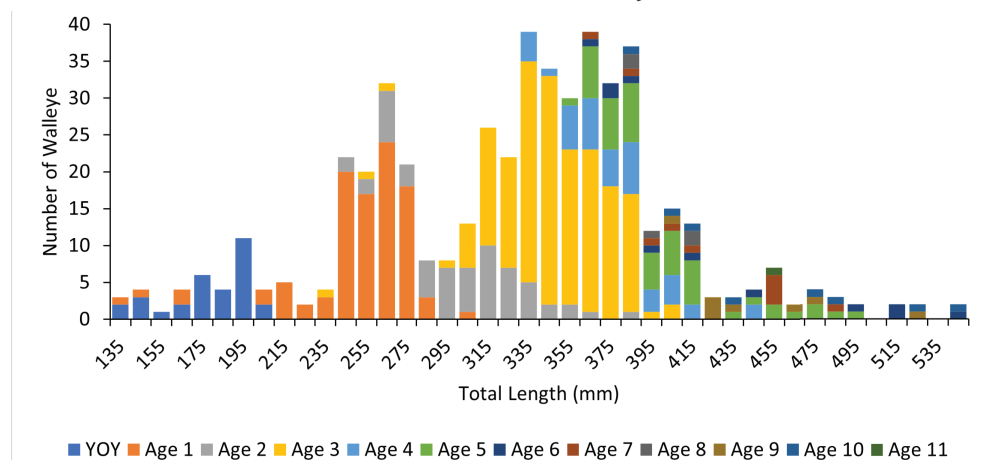
**Figure 3:** Walleye age distribution from Lake Nipissing FWIN in 2021.

In 2014, fisheries assessments indicated that there were few walleye older than five years, which was concerning because the majority of female walleye mature into spawning adults after five years of age. Since then, NFN and MNRF have been collaborating to determine safe harvest levels and support recovery efforts. Management actions have allowed the large year classes of 2011 (currently ten years old) and 2012 (currently nine years old) to be protected and grow into the fishery at an older age (Figure 3). The

harvestable slot size (40-45cm) will provide protection for older and younger walleye, while continuing to build biomass (kg of fish in the lake). The average age of the walleye population in Lake Nipissing is three years, while the oldest walleye was documented at 11 years old.

FWIN results show the majority of walleye are still young and small and that first-time spawning female walleye (ages five and greater) are building in numbers (Figure 4). Lake Nipissing's fishery remains fragile because of slow growth and fewer larger, older walleye in the population, meaning that additional time is required to rebuild the population to maintain a strong, healthy fishery.

NFN uses standardized processes to collect and analyze harvest data, which is used by Chief and Council to set regulations and limits every year to ensure sustainable harvest levels for the commercial fishery. This included an early closure of the commercial fishery in 2015–2017.



**Figure 4:** Walleye distribution in total length (mm) by age (years).



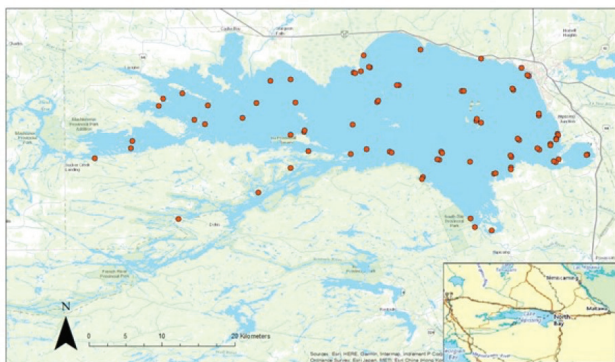
MOU activities, combined with harvest monitoring and enforcement efforts, continue to have a positive impact on the fishery and highlight the successful implementation of NFN's Fisheries Law. NFN and MNRF enforcement staff continue to see a strong acceptance of the NFN Fisheries Law.

### Working Together

NFN and MNRF continue to work together through a Steering Committee and the Compliance and Enforcement Working Group.

In 2021–2022, we:

- Continued to utilize adapted assessment, monitoring and enforcement activities with COVID-19 safety protocols;
- Held two Steering Committee meetings;
- Continued with regular cooperative efforts and communication outside of the Steering Committee and Enforcement and Compliance Working Group;
- Conducted joint fisheries assessments and monitoring surveys to assess the state of Lake Nipissing's walleye population and its overall fish community. This included 44 net sets for the FWIN survey (Figure 5);
- Developed joint communication materials;
- Built awareness of our ground-breaking sustainable fisheries partnership and natural resource management efforts; and
- Supported each other by conducting joint compliance patrols.



**Figure 5:** Map of net set locations for Lake Nipissing Fall Walleye Index Netting 2021.



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**NFN and MNRF staff continue to meet regularly through the Compliance and Enforcement Working Group...**



## Commercial Fishery Harvest Monitoring

In 2021–2022, NFN and MNRF supported commercial fishery harvest monitoring efforts by:

- Implementing online registration and daily catch reporting for fishers;
- Hiring four technicians to collect data from commercial fishery catches and fisheries assessment projects;
- Working cooperatively with NFN fishers to biologically sample approximately 5% of the total yearly commercial catch;
- Working jointly on the FWIN assessment; and
- Sharing fisheries data, conducting joint analyses to determine the health of the fishery and setting a safe harvest maximum for the upcoming year.

## Compliance and Enforcement

NFN and MNRF staff continue to meet regularly through the Compliance and Enforcement Working Group to discuss compliance concerns, identify safety issues, and share information.

Successful activities completed during the sixth year of the MOU included:

- Visiting four known markets to obtain fisheries information regarding Lake Nipissing walleye;

- Holding three Compliance and Enforcement Working Group meetings with an additional four meetings (joint with NFN and MNRF). Two meetings were held with Anishinabek Police Services (APS); and
- Conducting 47 combined marine and land patrols, four of which were joint patrols with NFN, MNRF and APS.

## Communications, Outreach and Education

NFN continues to deliver outreach and education activities to support its joint efforts with MNRF in implementing NFN's Fisheries Law and other related initiatives.

These included:

- Supporting NFN natural resources staff in public outreach and education activities;
- Discussing the MOU and NFN's Fisheries Law through 65 contacts with commercial and subsistence fishers (this includes multiple contacts with the same fishers) and conducting inspections as needed;
- Providing fisheries management information to NFN's community through their Natural Resources Committee, monthly newsletter and website, mailed notices, social media and electronic signs at key locations;







- Raising awareness of the MOU with other local First Nation communities;
- Providing NFN and MNRF progress updates on MOU activities through the 2020–2021 MOU Update;
- Joint Provincial Liaison Team visits (NFN, MNRF, APS) were not conducted in 2021–2022 due to COVID-19. These visits are normally used to discuss NFN's Fisheries Law and the MOU and will be continued when COVID-19 permits.

### Summary

The Lake Nipissing MOU and other management actions implemented by NFN and MNRF continue to keep Lake Nipissing's walleye population on a path to recovery. While the fishery continues to make progress, it remains fragile with few older fish in the population.

Some key MOU achievements over 2021–2022 included:

- Renewing the MOU for an additional three years;
- Continuing to utilize adapted assessment, monitoring and enforcement activities with COVID-19 safety protocols;
- Creating an online commercial registration and reporting tool that allowed fishers to register and submit daily catch reports while NFN offices were closed during the pandemic.
- Ongoing cooperation between NFN staff and fishers to meet commercial fishery sampling targets;
- Building awareness of our ground-breaking sustainable fisheries partnership and natural resource management efforts;
- Guidance from the MOU Steering Committee for NFN and MNRF implementing the MOU during 2021–2022.



## Fisheries Law

**Whereas** Nipissing First Nation has been fishing the waters of the lake now known as Lake Nipissing since time immemorial; and

**Whereas** Nipissing First Nation has been managing their fisheries of these waters since time immemorial; and

**Whereas** Nipissing First Nation has the Aboriginal and Treaty right to fish and such right has been confirmed and acknowledged by the Crown by entering into the Robinson Huron Treaty of 1850; and

**Whereas** managing the fisheries of Lake Nipissing is also reasonably incidental to the Aboriginal and Treaty right to fish; and

**Whereas** Nipissing First Nation managing the fisheries of Lake Nipissing is of great importance to the conservation of the fisheries and protection and preservation of the Aboriginal and Treaty right to fish for all Nipissing First Nation band members.

Nipissing First Nation pursuant to its inherent Aboriginal and Treaty right recognized and affirmed by section 35 of the Canadian Constitution hereby enact this fisheries law.



## Contact Information

For more information or a copy of the MOU Update please contact NFN or MNRF:

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