

# Status of the Walleye Population in Lake Nipissing

## 1. Status of Walleye

The walleye population in Lake Nipissing is in serious decline with the current population now half of what it was in the 1980s.

In response to concerns for the state of the walleye population and the potential changes in the aquatic ecosystem, the government initiated a review of all Lake Nipissing walleye data from 1967 to 2011.

We learned that the decline in the number of adult walleye (more than five years old) has varied between 30 per cent and 55 per cent over the last five decades (Figure 1).

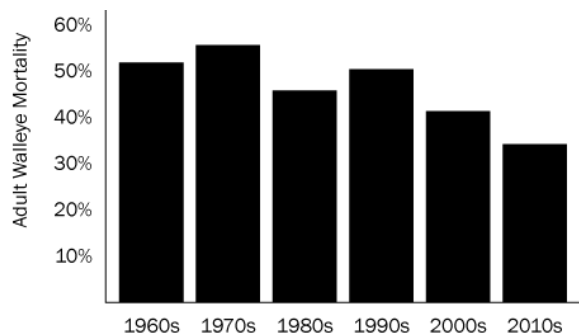
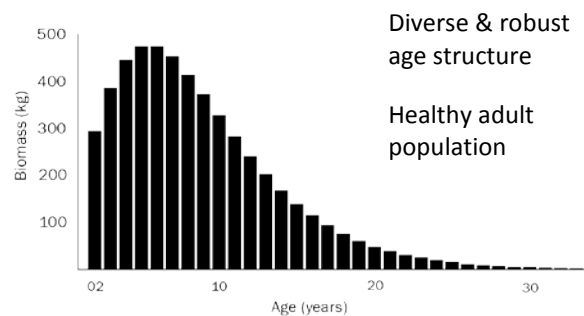


Figure 1: Rates of loss of adult walleye.

Even though it appears that adult walleye have been disappearing at lower rates over the past two decades, research reveals that the overall walleye population is still in decline. The science tells us that this disturbing decline is associated with a loss of fish younger than five years of age (Figure 2).

Today, with a decreasing population of young fish that have not yet had a chance to spawn, the walleye has declined to its lowest level.

### Natural Condition



### Current Condition

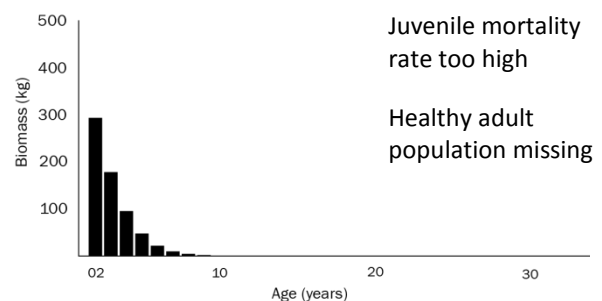


Figure 2 Natural (unfished) age structure compared to the current condition.

## 2. The Primary Cause of Walleye Decline

Overfishing has placed the walleye population in a vulnerable state.

Few fisheries of inland lakes have been studied as long or as intensively as the Lake Nipissing walleye fishery. In the 1970s and 1980s, combined harvest of walleye from the recreational and commercial fisheries on Lake Nipissing was very high, exceeding 100,000 kilograms per year. Through the 1990s, walleye harvests dropped slightly, averaging 100,000 kilograms per year. During that decade the noticeable decline in population was attributed in great part to the high harvest rates.

In face of the downward population trends, the walleye harvest fell further to 66,000 kilograms per year in the mid-2000s. However, even at these reduced harvests, the walleye population continued to decline (Figure 3).

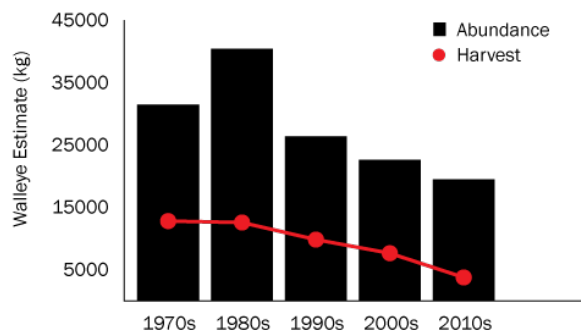


Figure 3: Walleye abundance and harvest of over four decades.

Unfortunately, in 2014 the combined harvest of walleye by the recreational and commercial fisheries exceeded sustainable levels.

To support recovery of the walleye population, the government identified and implemented changes to some fishing regulations on the lake.

### 3. Value of Walleye

Walleye plays an important role in the Lake Nipissing fishery and has been a significant contributor to the local economy.

Lake Nipissing continues to be a recreational hotspot in northeastern Ontario. On average each year recreational anglers spend nearly half a million hours fishing on the lake. Tourist establishments on Lake Nipissing rely heavily on healthy fisheries for their livelihood.

As well, there are treaty rights to fish commercially on Lake Nipissing, as legally confirmed in the 1990 R. v. Commanda case.

If we are going to regain the socio-economic benefits obtained from the recreational and commercial fisheries over the long term, we all need to work together to find ways to maintain a healthy fishery by reducing the fishing pressures on an already stressed walleye population.

### 4. Current Management Actions

It is possible for the walleye population to recover if young walleye are given a chance to grow and mature before being harvested.

The government has approved the Lake Nipissing Fisheries Management Plan. The plan outlines a number of management actions to support the long-term survival of the walleye population.

On January 1, 2014, the government increased the fishing opportunities for yellow perch, a potential competitor of young walleye. With new, higher perch daily catch limits – from 25 to 50 fish for a sport fishing licence – anglers can have a positive impact on walleye by directing some of their fishing efforts to perch.

To further support the recovery of walleye, on May 17, 2014, the government implemented the following changes:

- A new minimum size limit for walleye for the recreational angler with a zero possession of walleye less than 46 cm (18 inches) in length. The daily catch limits remain the same with two fish for a sport fishing licence.
- The bass (both smallmouth and largemouth) season now opens on the 3<sup>rd</sup> Saturday of June instead of the 4<sup>th</sup>.

Scientific studies have established that, if we protect the young fish, reduce the overall number of kilograms of walleye caught annually, and direct some of our fishing effort to other species, the walleye fishery could recover.

## 5. Results of Fisheries Monitoring

Fisheries assessments show current management actions have been successful in protecting young fish.

Scientific information gathered from annual Fisheries assessment and monitoring projects assists in providing direction for management actions on the lake. An adaptive approach is used to ensure that all management actions align with changes in fish populations or the broader Lake Nipissing ecosystem.

Angler “creel surveys” during open-water and ice fishing seasons provide information on recreational fishing activity and harvest on the lake. Results from the 2014 open water creel survey indicate that the recreational harvest under the new 46-cm minimum size limit has been successful in reducing the total walleye harvest.

Creel surveys during the 2015 ice fishing season will further indicate if the walleye regulation continues to meet its intended purpose of protecting young fish and allowing them to grow to spawning age.

The ministry appreciates the contribution of anglers who have followed the walleye regulation and helped protect young walleye.

The annual Fall Walleye Index Netting assessment, which has been conducted for the past 17 years, gathers important biological information such as fish length, weight, age and abundance. The results of the 2014 assessment confirm the walleye population remains stressed. Young walleye make up the bulk of the population and continue to require protection in order to reach maturity and have a chance to spawn.

## 6. Our Individual Actions

You can help.

Do your part by fishing for other species and reducing the fishing effort on walleye. Should you fish for walleye, make sure you only keep those 46 cm (18 in.) in length or over. If we all cooperate and make sacrifices, we can preserve the Lake Nipissing walleye fishery into the future.

[Fish Today... For Tomorrow](#)

**For more information about how you can contribute, please contact:**

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