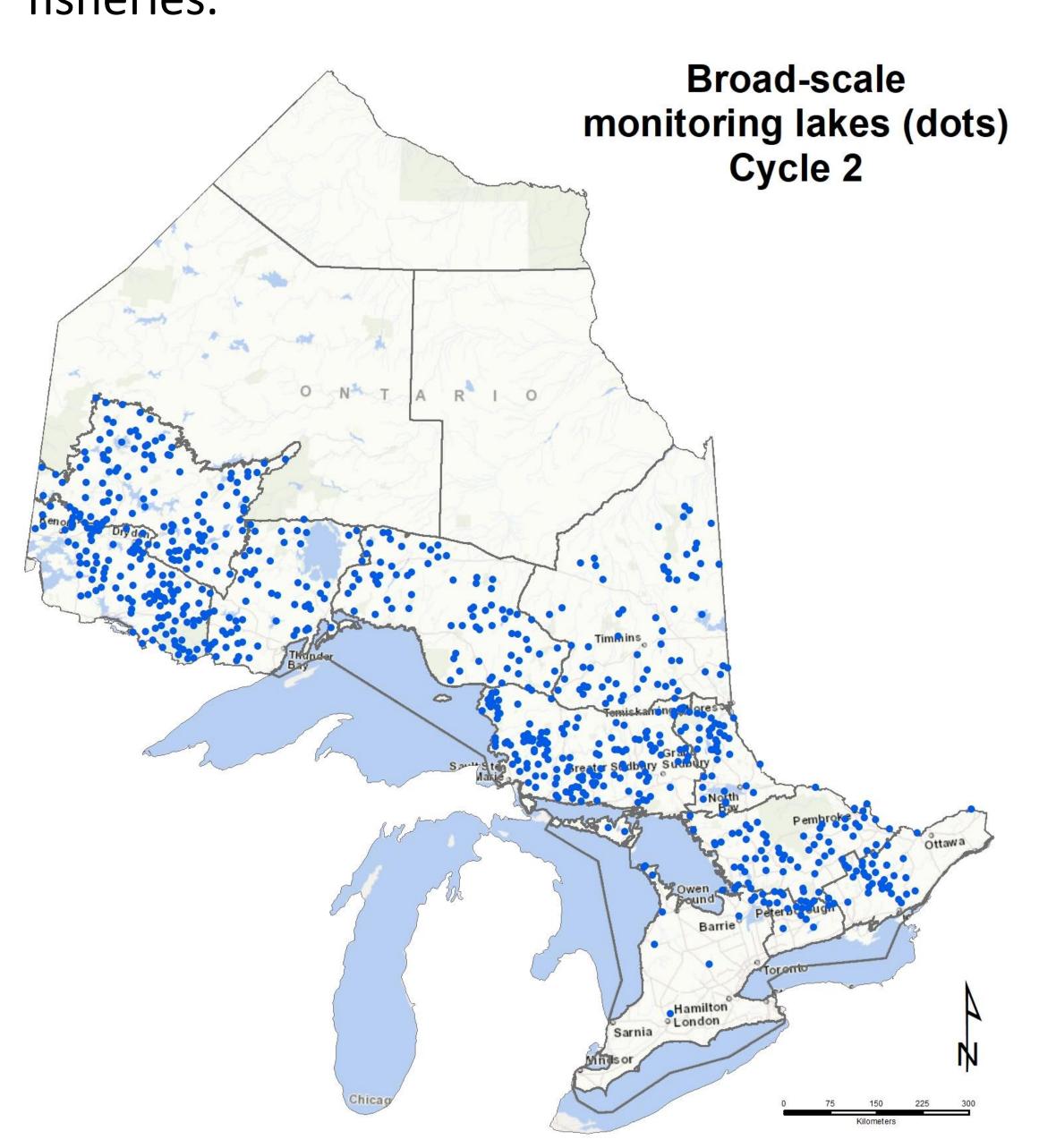
# Monitoring the health of Ontario's inland lakes

Every year, over 1.3 million anglers enjoy recreational fishing, contributing nearly \$2.5 billion to the Ontario economy. To ensure that present and future generations continue to enjoy high-quality fishing and the associated social and economic benefits, the Ministry of Natural Resources and Forestry (MNRF) works to maintain healthy fish stocks, which are an important environmental indicator. The Ecological Framework for Fisheries Management, introduced in 2004, supports fisheries management by simplifying regulations and increasing opportunities for public involvement. An important part of this approach is increasing our understanding of inland lakes and their fisheries.



### Broad-scale monitoring

To monitor the health of Ontario's inland lakes, MNRF has coordinated the broad-scale fisheries monitoring program since 2008. This long-term program is helping the ministry understand stresses on fisheries and other aquatic resources, including angling pressure, and report changes over time. Within a five year monitoring cycle approximately 700 lakes are sampled for water quality, aerial activity, large and small fish species, invasive species, contaminants in fish flesh and habitat. Some lakes are re-surveyed every five years for trend through time analysis.

## Fisheries management zones

Twenty fisheries management zones (FMZs) cover most of the lakes in Ontario. Fishing regulations such as catch limits and seasons, align within these zones.

For more detailed information or an alternate format, please contact info.mnrfscience@ontario.ca.

### Monitoring highlights

In 2019, we sampled 126 lakes and completed the second year of the third cycle. Over the first two cycles of monitoring, science staff visited over 1300 waterbodies and sampled a variety of fish species to collect biological information such as weight, length, age, sex, maturity, diet and contaminants and to estimate abundance.

Fish netting results for individual lakes are summarized as lake bulletins and are available at FISHONLINE (www.Ontario.ca/page/fishing).

Contaminant sampling results are included in the Guide to Eating Ontario Fish (www.ontario.ca/fishguide) published by the Ministry of the Environment and Climate Change.

By netting a lake that may have never been assessed, the broad-scale monitoring program has increased our knowledge about the distribution of rare native species in Ontario including pygmy whitefish, northern sunfish, and deepwater sculpin. This also allows us to track the distribution of non-native species such as rusty crayfish and spiny waterflea.



MNRF crew members record length, weight and other measures which are used to evaluate the health of Ontario's inland lakes.

#### Want to know more?

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