






So what will a changing climate mean for Ontario Lakes, and cottage country in particular?

by FOCA, with notes from the North American Lake Management Society (nalms.org)

Aquatic ecosystems are very vulnerable to climate change. Even small changes can cause big impacts. Some likely developments for Ontario include:

-  • The average annual amount of precipitation may not change dramatically; however, the distribution will change – likely more in the winter and less in the summer. The overall effect will be to reduce surface and groundwater levels.
-  • The frequency of intense rainfalls will increase, which will increase flooding events.
-  • There will be declines in the duration of winter ice. This may reduce the likelihood for winter fish kills in shallow lakes.
-  • The distribution of many fish and other species will change - cold-water species will likely decline in the south and warm-water species will expand northward.
-  • Fish growth rate should increase, but not at the same rate for each species. The food chain will likely be altered.



- Extreme heat will be more common.



- Warmer lakes will likely result in reduced fish habitat for existing species. These impacts will be especially severe in shallow lakes.



- The duration of summer water stratification will increase, adding to the risk of oxygen depletion. Lower water levels and warmer temperatures may accelerate the accumulation of mercury and other contaminants in the food chain and ultimately fish. These conditions could also lead to an increase in nuisance algae.



- Invasions of new non-native species will be more likely.

Specific ecological responses to climate change cannot be exactly predicted because changed conditions, with new combinations of native and non-native species, will interact in unpredictable ways.

How we adapt to changing climatic conditions will greatly influence the future state of Ontario's lakes and rivers.