

## Report: Excessive nutrients damaging Great Lakes region

### Algae, plants affect water people 'interact with most'

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The Associated Press

TRAVERSE CITY, Mich. – A resurgence of soupy blue-green algae blooms in the Great Lakes is an ominous sign of suffering water quality that poses health risks for people who depend on the lakes for drinking water, food and recreation, according to a U.S.-Canadian report released Wednesday.

Excessive levels of nutrients such as phosphorus are producing some of the worst cases of eutrophication – runaway growth of algae and other aquatic plants – since the 1970s, the report said. Among suspected causes are overflows from inadequate municipal sewage treatment and septic systems, plus runoff of livestock manure and fertilizers from large farms.

Other emerging threats include poorly regulated chemicals found in products such as medicines and flame retardants, groundwater contamination and damage from quagga mussels and other invasive species, the report said. Most of the dangers are showing up in the “near-shore zone,” which includes the Great Lakes’ shallow waters as well as wetlands, tributaries and groundwater that feed them.

“This is where people interact most with the lakes ... where they draw their drink-

ing water from, where they go to the beaches,” said Lana Pollack, co-chairwoman of the International Joint Commission, a U.S.-Canadian agency that advises both federal governments on issues involving their shared waterways.

The commission’s latest biennial analysis of the lakes’ health comes as the two nations are negotiating an update of the Great Lakes Water Quality Agreement, initially signed in 1972 and revised several times since.

The agreement led to a number of improvements over the next two decades, including reductions in discharges of chemicals and phosphate detergents responsible for algae blooms that killed large numbers of fish by sucking oxygen from the water. It also targeted more than 40 harbors and river mouths for cleanup of contaminated sediments.

But programs that monitored and controlled phosphorus have disappeared in the last 15 years, and “progress has leveled off and is actually sliding backward,” Pollack said. “We need to get our governments to recognize that all is not well.”

The algae explosion is most evident in Lake Erie, where warm, shallow waters get heavy loads of nutrient runoff from farms in western Ohio. But blue-green

cyanobacteria blooms have been spotted recently in all the Great Lakes except Lake Superior, and many shorelines have been littered with piles of rotting green mats of cladophora, a green algae.

Scientists have observed depleted levels of dissolved oxygen in Lake Erie’s central basin, and botulism believed linked to the algae has killed thousands of shore birds. Areas of “desertification,” or loss of productivity, have been spotted in some waters.

The report proposed a stepped-up scientific investigation of what’s causing the algae resurgence and what to do about it.

In the meantime, it urged government agencies to require measures preventing runoff from farms and cities, including bans on lawn fertilizers where appropriate and upgrading storm water management infrastructure.

Additionally, the commission called for research of better ways to detect health hazards in shallow waters and on beaches, where people can get sick from bacteria, viruses and parasites. Beach closures in recent years have cost local economies hundreds of millions of dollars.

But some have been based on false positive test results based on fecal bacteria from birds or algae, which are less dangerous than human waste, the report said.

