A U.S.-Canadian agency says there's little doubt that commercial fertilizer and manure are the top sources of phosphorus pollution in western Lake Erie.

The International Joint Commission says its science advisory board based the conclusion on an extensive analysis of existing data about the shallowest of the Great Lakes.

Excessive phosphorus feeds toxic algae blooms that have plagued Erie in recent years and created a "dead zone" where oxygen levels are too low for fish to survive.

The commission says its review focused on the lake's western basin and the St. Clair-Detroit River system, which flows into Lake Erie.

The analysis found that excess fertilizer phosphorus stored in farm soils and nearby ditches, buffer zones and wetlands could affect nutrient levels in the lake for years or even decades.