



Photo: Peter Essick

The Ghost of Phosphorus Past: How decades of phosphorus use is shaping today's water quality in North America

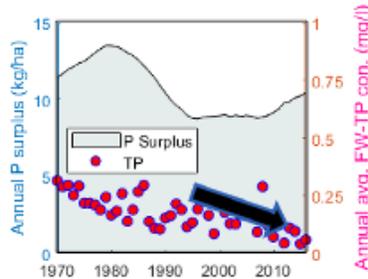
LEGACY PHOSPHORUS IN LAKE ERIE

- Since the 1960s, eutrophication has been a complex problem in Lake Erie.
- Over the past decade, the severity of algal blooms in Lake Erie have increased significantly despite conservation efforts and new policies.
- In the watersheds of Lake Erie, legacy phosphorus is stored in the soil and it may take several decades to travel before there is an increase in stream-phosphorus concentration.
- The US and Canadian watersheds of the Lake Erie basin show different phosphorus input and export trajectories. As a result, different strategies may be required to mitigate the problem.

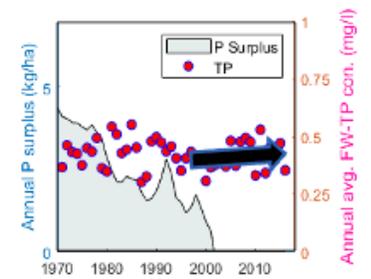


Photo: Great Lakes Now

Phosphorus Surplus in the Grand River Watershed, ON



Phosphorus Surplus in the Maumee River Watershed, OH



Figures by: Lamisa Malik

ADDITIONAL RESOURCES

- Learn more about algal blooms and how you can help by reading Rideau Valley Conservation Authority's [Algae and Aquatic Plant Educational Manual](#)
- Read information on the Government of Ontario's [website](#) about how to report algal blooms
- Watch the International Institute for Sustainable development's [video](#) about the impacts of eutrophication on freshwater
- Read the Water Institute's article about Nandita Basu's research on how "[Land-use legacies create time lags to water quality improvements](#)", as well as this journal article which includes "[Potential roadmaps to manage nutrient legacies](#)"

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