

POLLUTION: FROM AIR TO WATER

Organic nitrogen is a nutrient that comes from things that were once living. It is used in farming as a fertilizer and is found naturally in many places including the air. It becomes pollution when there is too much nitrogen.



Falls Lake and Jordan Lake were labeled as sensitive to nutrients in 1983 and their water quality has been getting worse ever since. The main pollutant is organic nitrogen. Both lakes are used for drinking water and are downstream from the City of Durham.

There were two goals for this study:

- To find out how much nitrogen pollution is getting into Durham streams from the air.
- To find out how the City's air pollution affects the water ways.

Research

The Environmental Protection Agency (EPA) has many stations set up to measure air quality. The stations do not, however, provide details about urban areas or monitor for organic nitrogen.

The City set up testing locations within the watersheds of the two lakes and monitored them for approximately a year. The collected samples were tested for many pollutants including organic nitrogen.

Results

The samples showed levels that were a lot higher than the EPA's state average.

Most of the organic nitrogen that pollutes our lakes comes from the air.