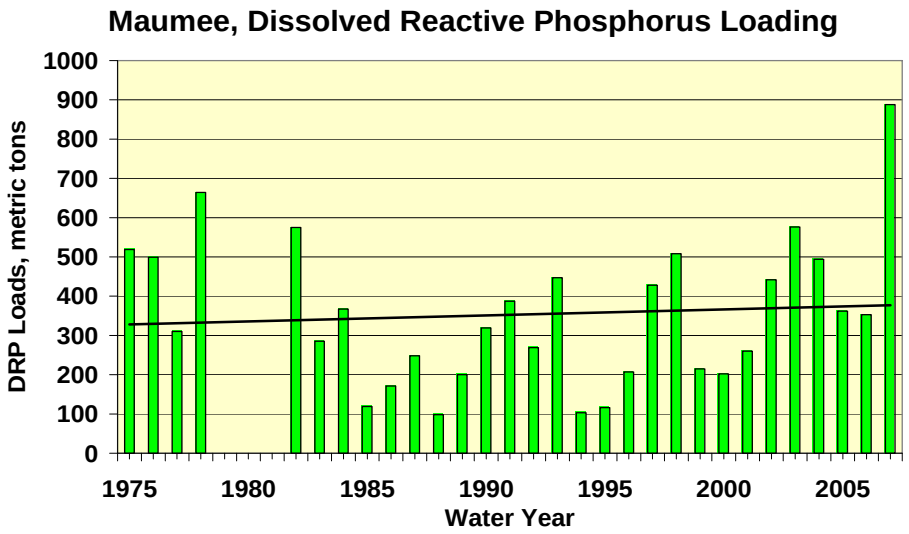
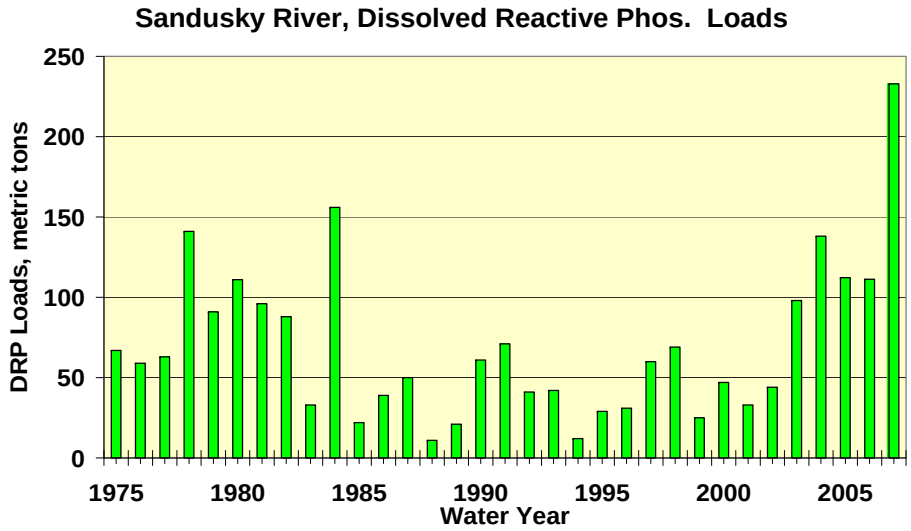
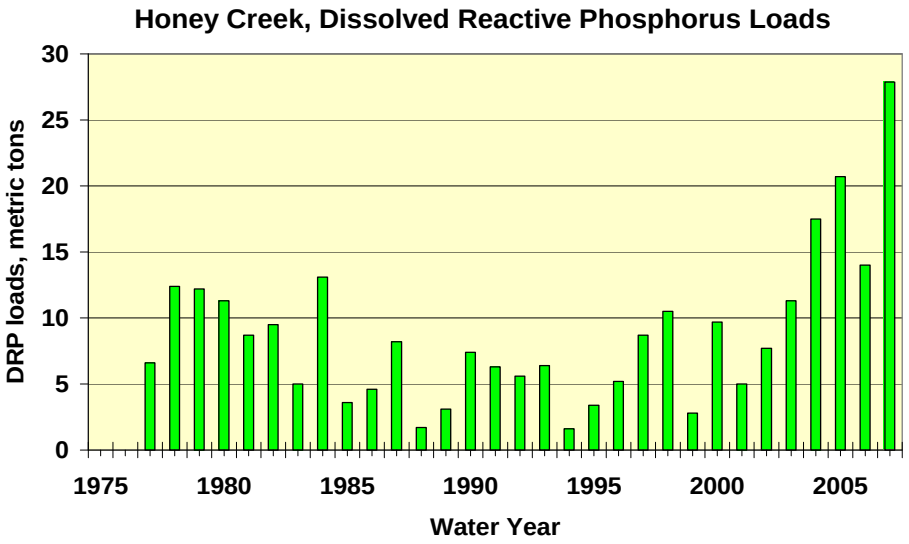
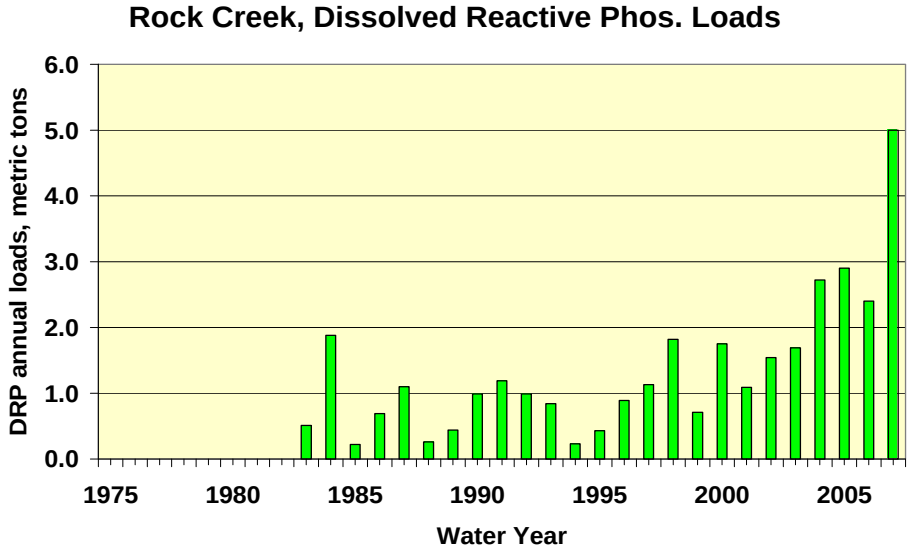
Trends in Annual Export of Dissolved Reactive Phosphorus From Northwestern Ohio Watersheds, 1975-2007





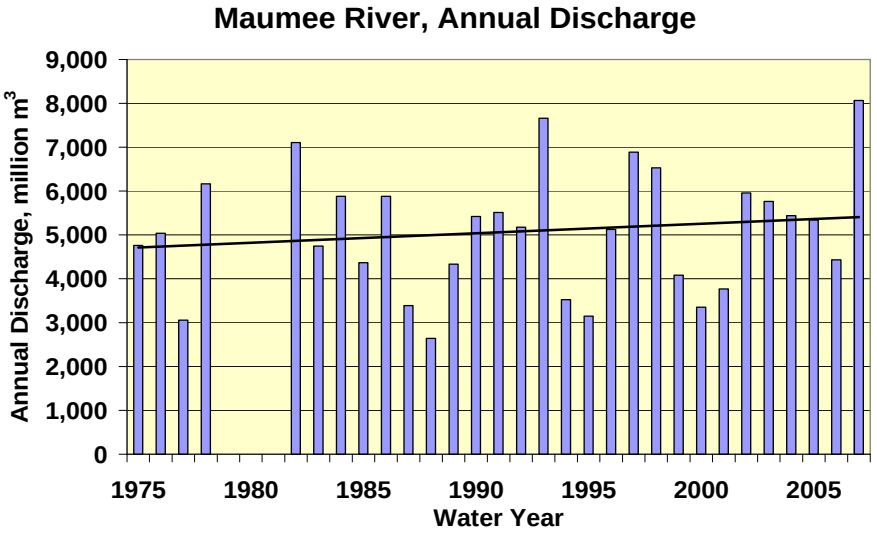


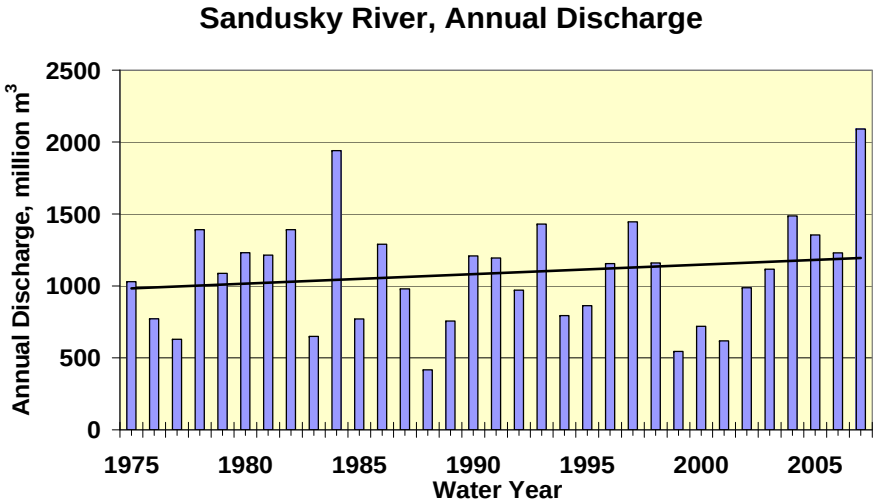


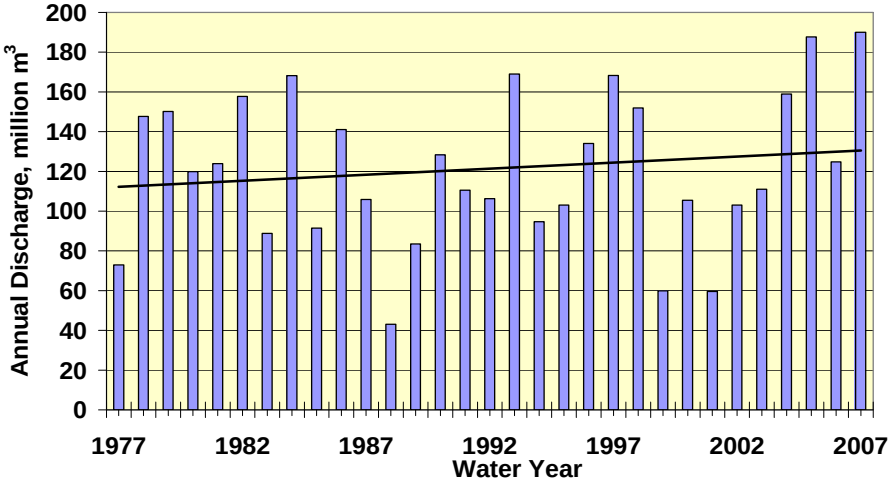
Data from the Heidelberg College National Center for Water Quality Research

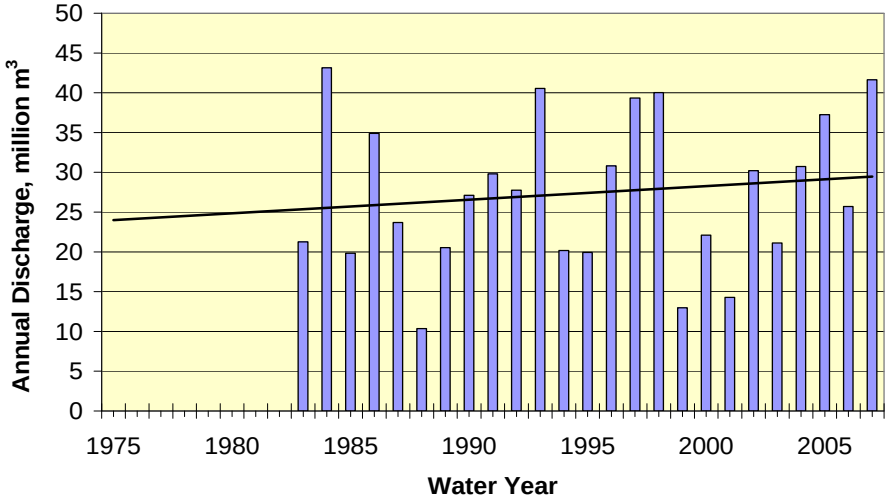
Trends in Annual Discharge (million cubic meters)

From Northwestern Ohio Agricultural Watersheds, 1975-2007





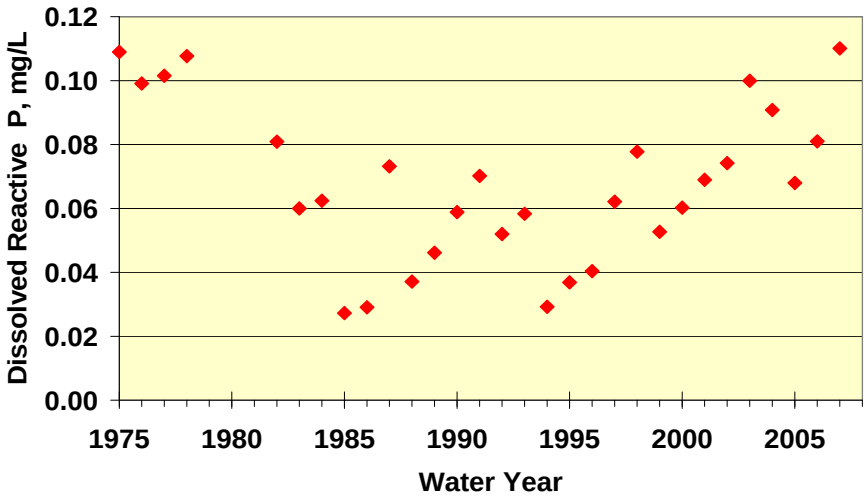




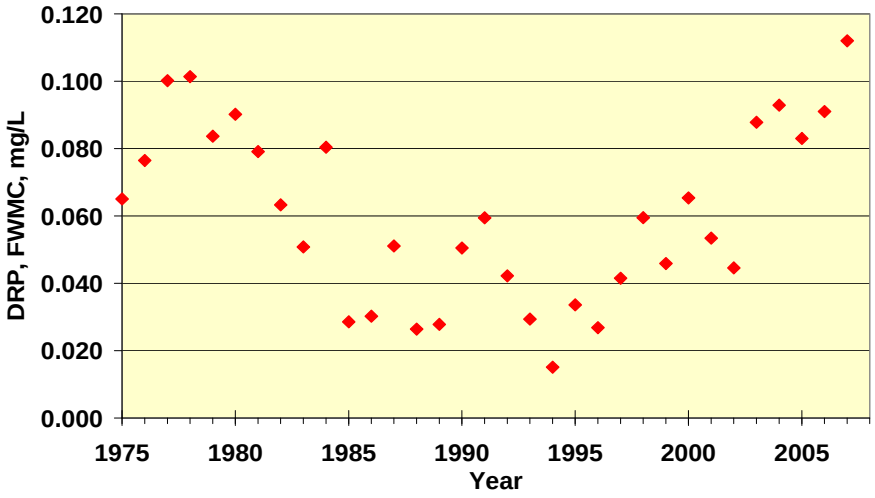
Data from the Heidelberg College National Center for Water Quality Research

Trends in Flow Weighted Mean Concentrations of Dissolved Reactive Phosphorus From Northwestern Ohio Watersheds, 1975-2007

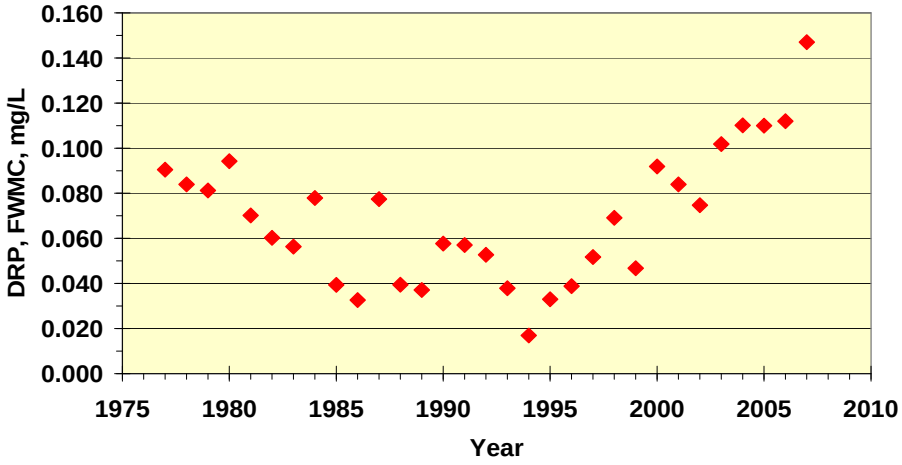
Maumee River, Flow Weighted DRP concentrations



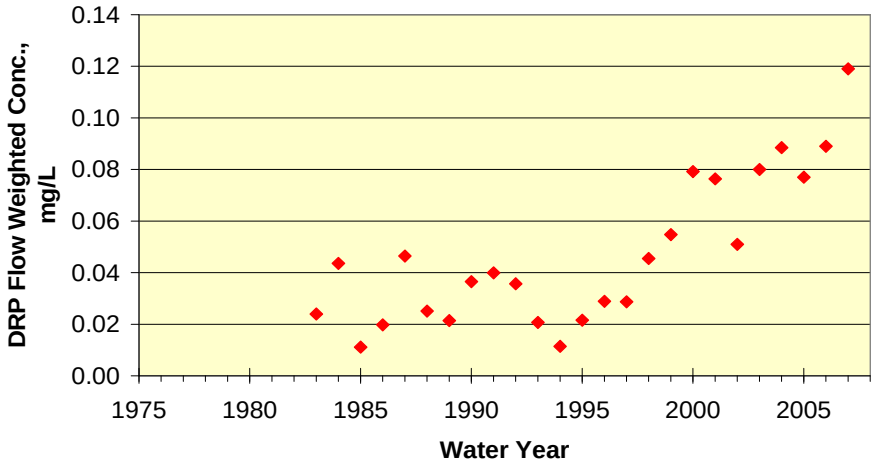
Sandusky River, Flow Weighted DRP concentrations



Honey Creek Dissolved Reactive Phosphorus Flow Weighted Mean Concentration, mg/L



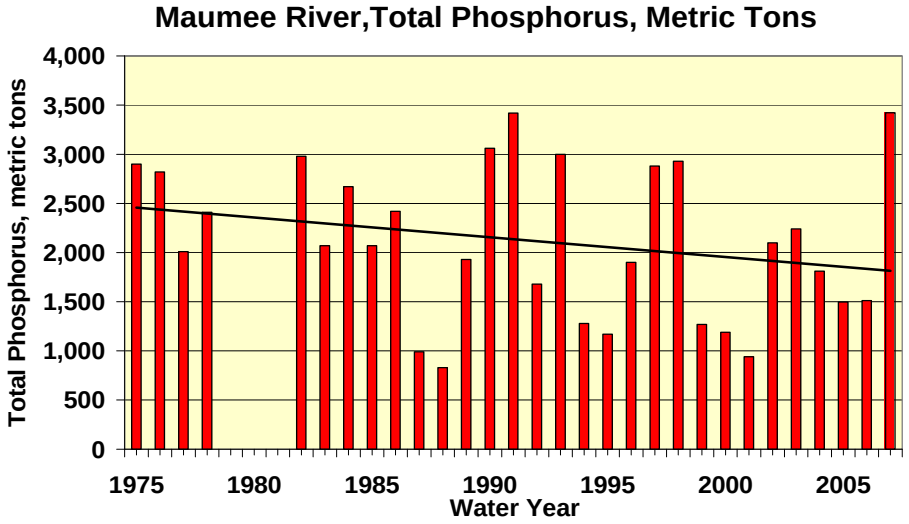
Rock Creek, Dissolved Reactive Phosphorus, Flow Weighted Mean Concentrations, mg/L

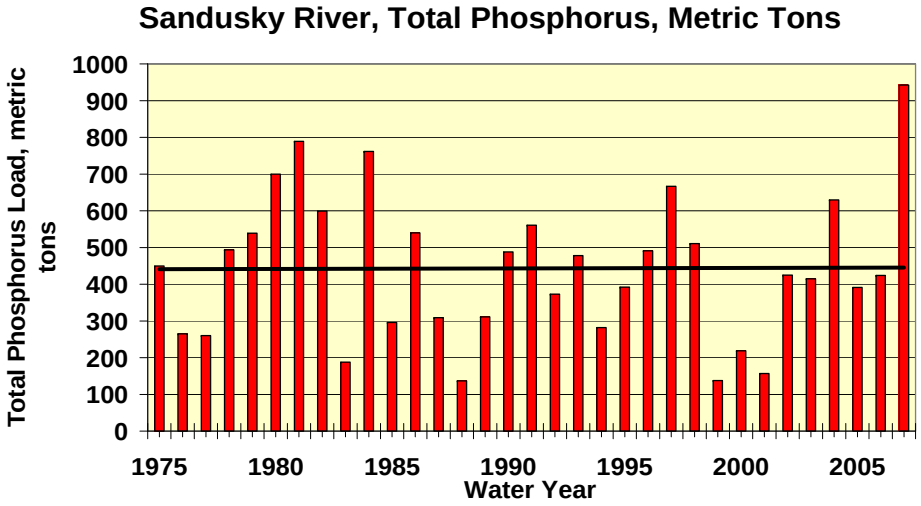


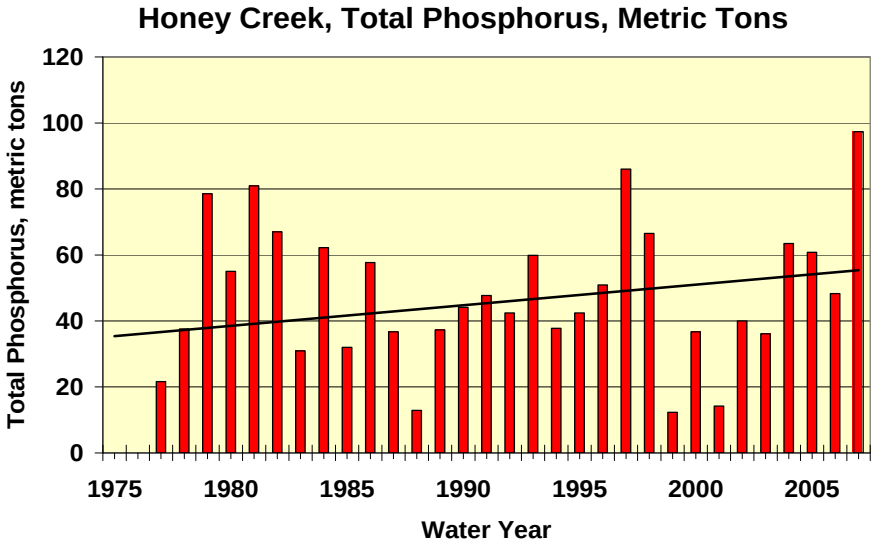
Data from the Heidelberg College National Center for Water Quality Research

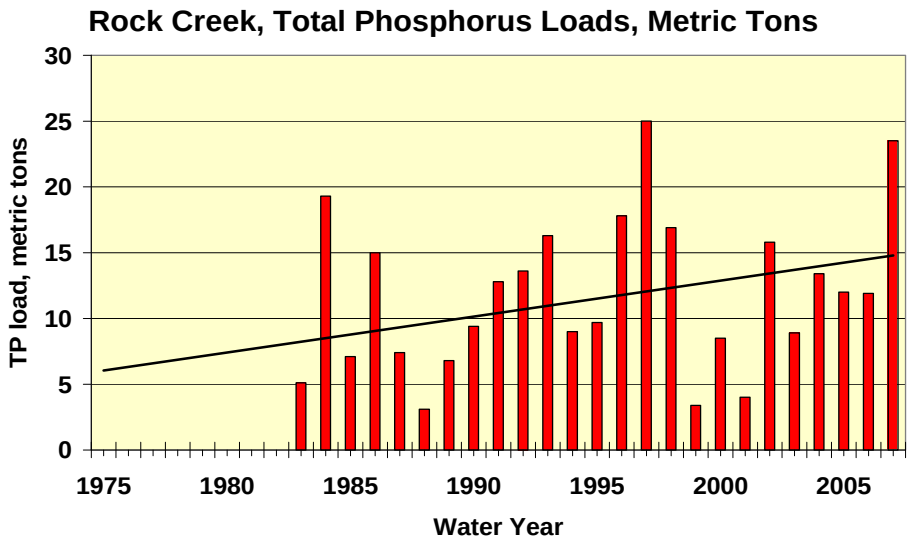
Trends in Annual Export of Total Phosphorus

From Northwestern Ohio Agricultural Watersheds, 1975-2007





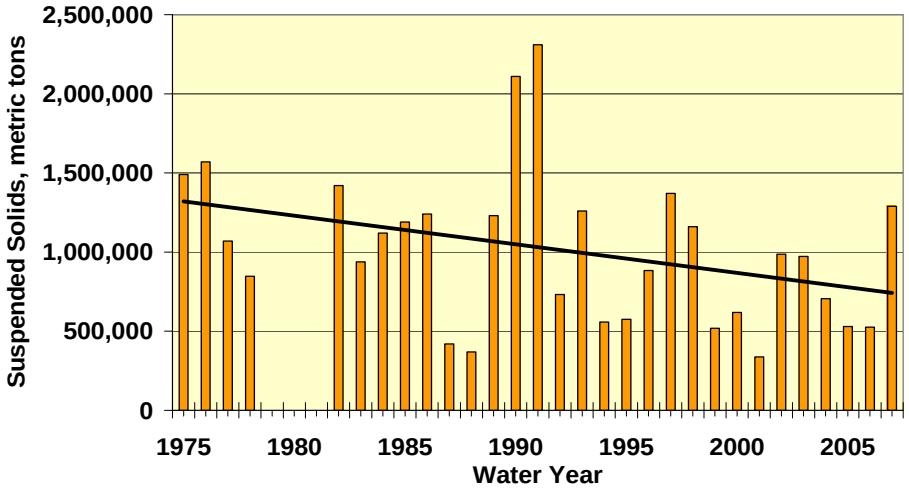




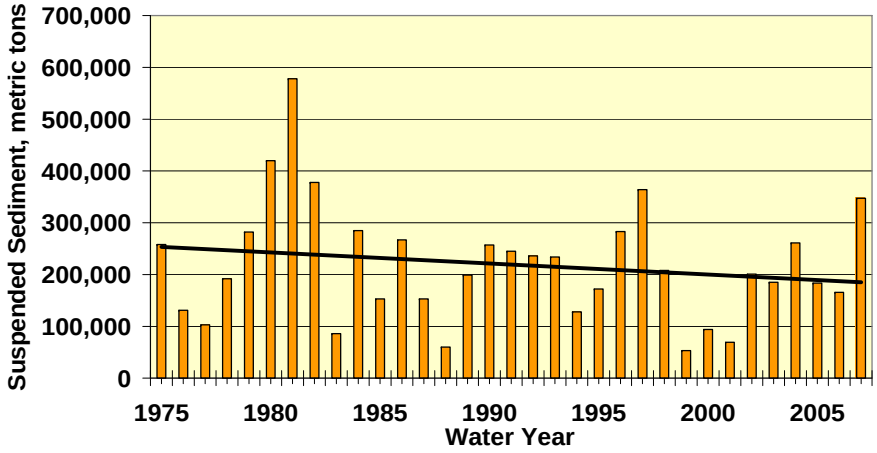
Data from the Heidelberg College National Center for Water Quality Research

Trends in Annual Export of Suspended Solids From Northwestern Ohio Agricultural Watersheds, 1975-2007

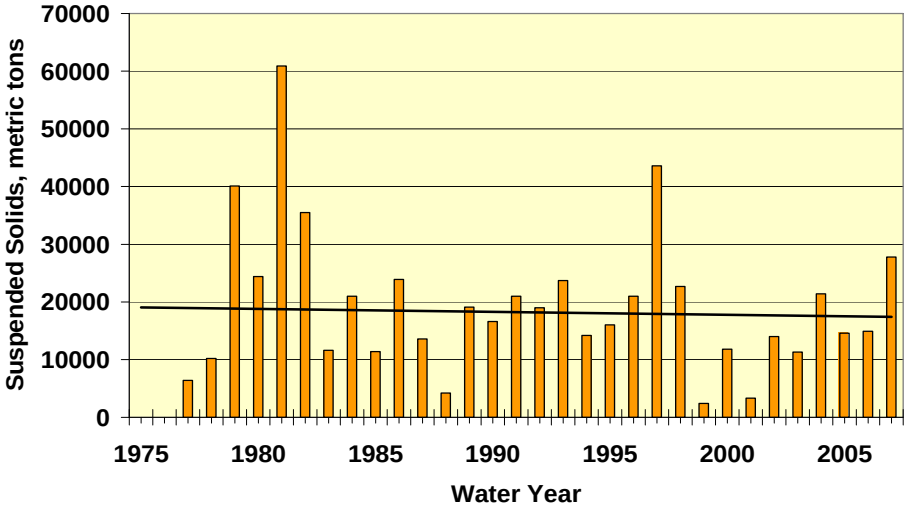
Maumee River, Suspended Solids Loads



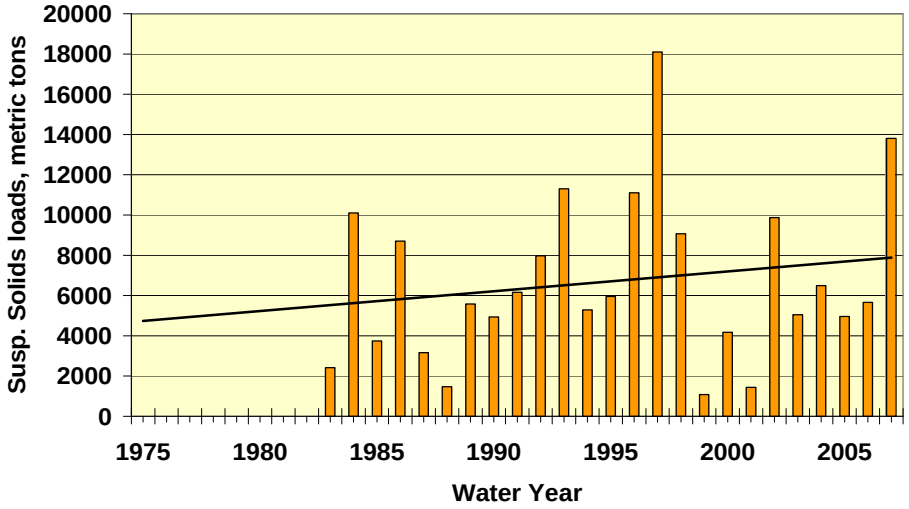
Sandusky R., Suspended Sediment, metric tons



Honey Creek, Suspended Solids Loading



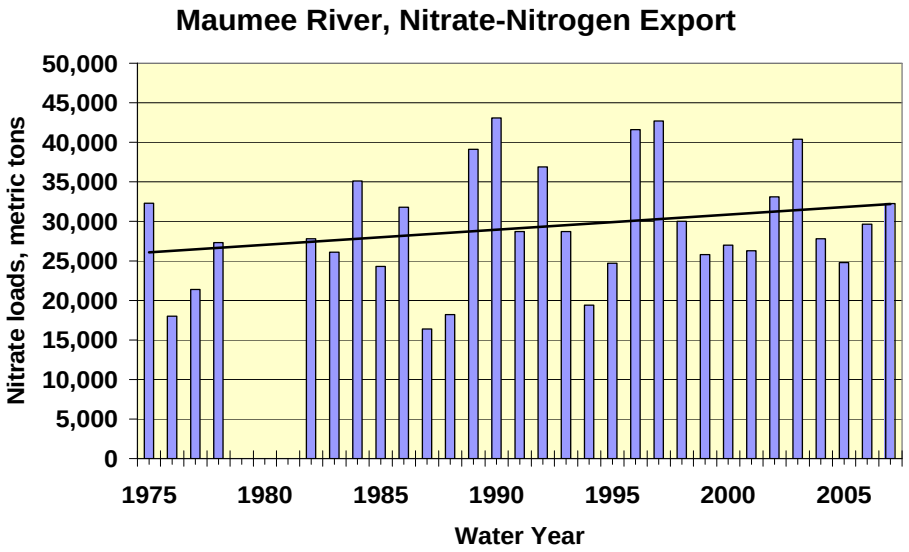
Rock Creek, Suspended Solids Loads

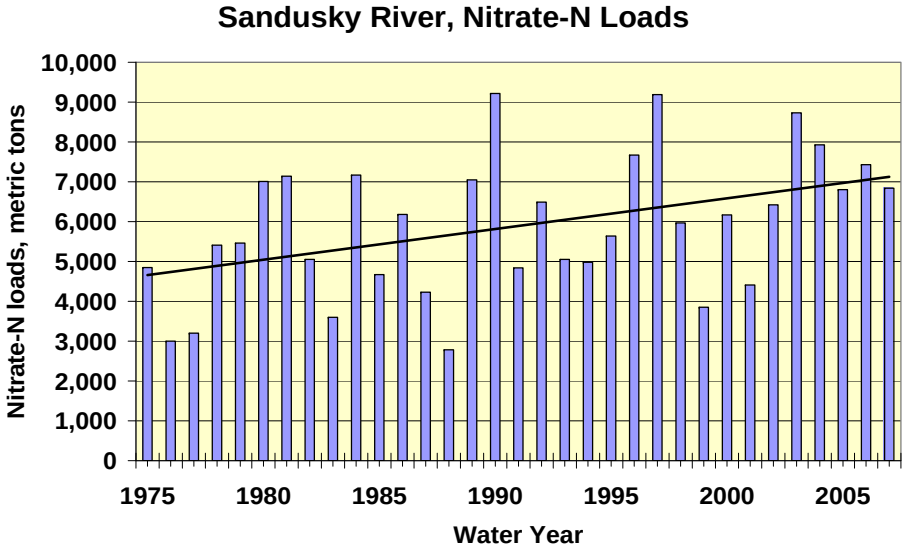


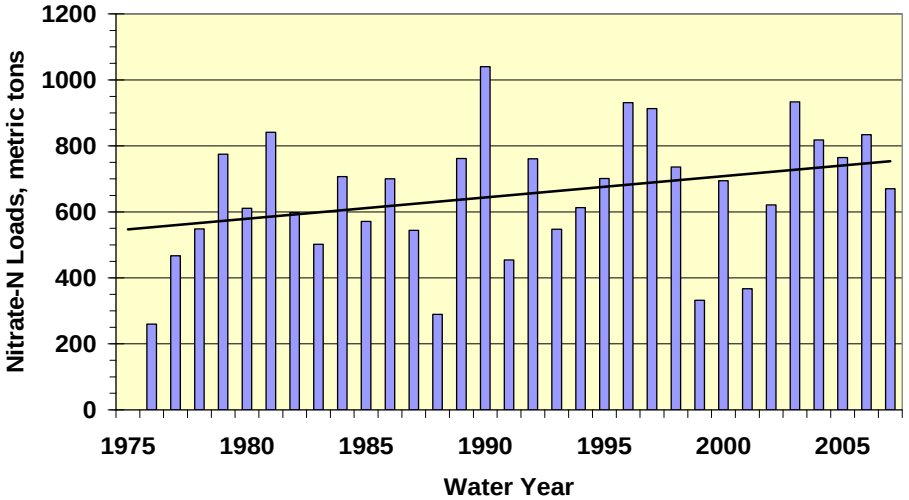
Data from the Heidelberg College National Center for Water Quality Research

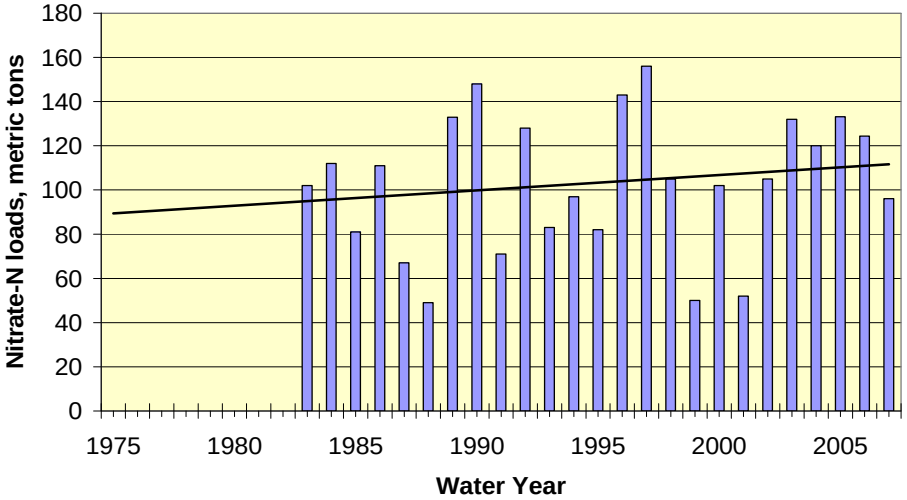
Trends in Annual Export of Nitrate-nitrogen

From Northwestern Ohio Agricultural Watersheds, 1975-2007









Data from the Heidelberg College National Center for Water Quality Research

Why has dissolved phosphorus loading to Lake Erie increased so dramatically since 1995? (see adjacent graphs)

Are these increased loads contributing to current declines in Lake Erie water quality? (see adjacent article)

The above questions have been the focus of the Ohio Environmental Protection Agency's newly formed Ohio Lake Erie Phosphorus Task Force. Considerable data support the view that the increasing dissolved phosphorus loading is related to current farming practices in the northwestern and north central Ohio. Also data indicate that these nutrient loads are impacting the nearshore zone of Lake Erie.

Heidelberg's National Center for Water Quality Research has received two major grants to support implementation of measures to reduce phosphorus export from the Sandusky River Watershed and its tributaries. These grants come from the U.S. Environmental Protection Agency and the Great Lakes Protection Fund. The laboratory is working with area farmers, extension agents, crop advisors, soil testing groups, and researchers from The Ohio State University, Michigan State University and the University of Wisconsin to undertake this research program. This research is starting in 2007 and will continue over the next five years.