

# Improved Nutrient Management through Subsurface Drainage Monitoring



Properly managed agricultural fields provide many opportunities to infiltrate and filter stormwater before it enters nearby streams, improving fish habitat and water quality.



No-till farming

The Institute of Water Research with support from the Fred A. and Barbara M. Erb Family Foundation is launching a program to explore ways to improve nutrient management in the field by monitoring and better understanding subsurface drainage discharge.

The goal of the program is to work with farmers to better understand the amounts, timing, and frequency of nutrients leaving through subsurface drainage and to explore novel approaches to minimize nutrient losses. These new approaches can lead to improved soil health, water quality benefits, and enhanced fish habitat in the Western Lake Erie Basin and nearby rivers and streams.

Farmers participating in the program can login to a website to monitor nitrates and phosphorus leaving their subsurface drains. Data collected from fields and tile drains will help inform web-based models used to predict effectiveness of conservation activities at reducing nutrients lost through subsurface drains.

**To learn more or get involved contact us!**



Institute of Water Research  
MICHIGAN STATE UNIVERSITY

Jeremiah Asher, Assistant Director  
Institute of Water Research, MSU  
asherjer@msu.edu  
517-432-5586



Fred A. and Barbara M.  
Erb Family Foundation

MICHIGAN STATE  
UNIVERSITY

Institute of Water Research



ADRIAN  
COLLEGE