Adaptive Management for Improved Water Quality in Multi-Use Watersheds

Water Conservation Advisory Commission

Ypsilanti Charter Township

11 August 2003
Project Objectives (big picture)
Develop proposed management plan(s) for eliminating nuisance blooms in Huron River impoundments
Establish two-way lines of communication with governmental authorities and NGOs in order to give scientific findings and reasoning a chance to inform democratic decision making

Project Objectives (conceptual)
Compartmentalize the middle Huron River into segments
Use mass-balance theory to calculate net sources and sinks in each segment
Make measurements to pinpoint internal versus external causes of the sources and sinks
Project Objectives (conceptual, continued)

Develop and apply modern theory about causation of nuisance algal blooms

Develop and test at small scale theory that could mitigate or eliminate the nuisance conditions

Select palatable proposals in consultation with community officials and authorities

Provide explanation and education about proposals as requested

Project Approach

Phased, multi-year progression

Intensive data acquisition for river and impoundments

Discovery and data rescue

Synthesis

Outreach, perceptions, needs, feedback

Comprehend decision-making landscape
Hoped-for Project Outcomes

Scientifically sound remediation plans

Politically and bureaucratically credible subsets of these plans

Scientifically credible public environmental education and outreach

Informed democratic decision making on environmental issues