

Ohio EPA Comprehensive Nearshore Monitoring Program

- Ohio EPA, Ohio DNR, Heidelberg University, John Carroll University, Ohio State University, University of Toledo
- \$1.195M GLRI awarded October 2010
- 3 Year monitoring program 2011-2013



Top 3 Accomplishments/Impacts

- State-led ensures consistent implementation and incorporation of data into state decision and long-term assessment programs
- Initial grant will be base for long-term monitoring program
- Partnership with agencies and universities that have a long history of working on Lake Erie ensures:
 - the best sampling and analytical methods will be used
 - appropriate sites are selected
 - data will be interpreted scientifically as well as from a management standpoint

Regional Value (transferrable/applicable)

- Data will be made readily available to the public and researchers
- 3 year cycle (not just a snapshot) to define conditions will capture the variability of dynamic areas
- Lake Erie findings applicable to other Great Lake nearshore areas



Ecosystem and Management Improvements

- OEPA will use new data to refine fish and habitat assessment metrics for the nearshore waters
- Data provide big-picture context for smaller-scale research
- Long-term monitoring program will track current trends and allow us to measure the impact of management actions

Public Benefits from Project

- Quantifies the link between watershed land use and impacts in nearshore waters
 - Engage the watershed stakeholders and land owners
- Provides a more comprehensive assessment of water quality conditions, including nutrient, HAB, fish community
 - State managers local decision makers will have more complete picture of the science to develop effective policies

Economic Impact

- Funding agency and university research staff to conduct monitoring, analyze samples, and evaluate findings
 - Over \$200K to universities, over 2,000 hrs budgeted
 - OEPA 5 FTE total (~1.6FTE/yr)
- Monitoring data could lead to more informed and improved management decisions that could contribute to a reduction in harmful algal blooms

New Research Needs and Mgt Questions

- Impact of climate change on current near shore dynamics
- HABs – what caused eastward extension this year, vertical distribution of toxins during blooms, toxin accumulation in fish tissue and affect on fish populations
- Hypoxia- no dead zone seen in 2011 yet
- Still processing data...



Benefits of Synthesis Effort

- Sharing data and ideas
- Concerns about duplication of efforts with multiple sources of GL funding... Coordination is critical

