Maumee Watershed
Nutrient TMDL Project

Addressing Lake Erie Impairments

Webinar
June 1, 2022
Project Team

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How Today’s Webinar Questions Will Work

**Note:** Audience members’ microphones are muted. The “raise hand” function is also disabled. Please use the Submit Questions function to receive technical assistance, ask questions, or submit comments.
How Today’s Webinar Questions Will Work

• Staff will answer questions after the presentation

  • Some questions may be incorporated into the Maumee Watershed Nutrient TMDL Frequently Asked Questions (FAQ) document

  • Some questions may address management decisions that have not been made; those questions will not be addressed today
Outline

• Overview of implementation and adaptive management

• Additional notes on NPDES Permitting
Implementation & Adaptive Management

Assess the Situation  
Develop a Strategy  
Establish Milestones  
Implement the Strategy  
Monitor Environmental Response  
Evaluate Progress  
Adjust the Strategy

Some changes require revisiting the TMDL
## Maumee Watershed Nutrient TMDL Project

### 2008 Baseline

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~1500 Metric Tons ~3.3 Million Pounds

~600 Metric Tons ~1.3 Million Pounds of Phosphorus Reduction
Planning & Development Milestones Under Consideration

- Revise priority practices for H2Ohio based on emerging research
- Develop NPDES permits consistent with TMDL allocations
- Review programs for consistency with revised NRCS 590 Nutrient Management Standard
- Intergovernmental collaboration
- Research & Development of water management practices

Implementation Milestones Under Consideration

- Increase cropland acres with approved Voluntary Nutrient Management Plans
- Address additional unsewered communities
- Implement additional natural infrastructure practices
- Expand controlled drainage on suitable acres
- Increase participation in voluntary programs through H2Ohio

Establish Milestones

Additional Milestones?

Delist Lake Erie
Implement the strategy

• Point Sources
  • Ongoing implementation of long-term control plans
  • Human-health led priorities for managing failing household sewage treatment systems
  • Evaluate DRP specific practices for MS4 permits
  • Implement waste load allocations in NPDES permits
Implement the strategy

• Enhance Nonpoint Source Sinks - Natural Infrastructure Approach
  • H2Ohio focus on natural infrastructure through ODNR
  • U.S. EPA GLRI funding for Maumee Area of Concern – loss of habitat and wildlife
  • U.S. EPA GLRI funding for state priorities
  • Conservation Reserve Enhancement Program – incentivize riparian and wetland restoration
  • Land conservancies and nonprofit partnerships
Implement the strategy

• Improve Nonpoint Source Management
  • Planning Efforts
    • Domestic Action Plan
    • Targeted planning through Nine Element NPS-IS development
  • Funding Priorities
    • H2Ohio implementation through Ohio Department of Agriculture
    • NRCS Regional Conservation Partnership Program (RCPP) - Tri-State Western Lake Erie Basin Phosphorus Reduction Initiative
    • NRCS GLRI funding prioritization to Maumee River watershed
    • Ohio EPA 319 Funding
  • Policy Implementation
    • Implement the fertilizer applicator certification programs
    • Continue implementing the ban on manure and fertilizer applications on frozen and snow-covered ground
Lake Erie
Bloom severity monitoring, via satellite assessment and toxin monitoring

Water Quality Gages
Sentinel Watersheds ➔ Regional (HUC-8) ➔ Basin (Waterville)

Research
ODNR H2Ohio wetland monitoring program; edge-of-field monitoring; stormwater monitoring

Intermediate Indicators
Soil test phosphorus trends; agricultural phosphorus inputs, crop production, point source monitoring data, precipitation/stream discharge

Track Implementation
Agricultural BMPs, plan development, wetlands restored, riparian preservations, etc.
Lake Erie
Bloom severity index, Lake Erie Recreation Use (algae), Drinking Water Intake Data (algae)

Water Quality Gages
Nutrient Mass Balance Study, trend analysis, flow weighted mean concentrations

Research
H2Ohio wetland study, Army Corps P-optimal wetland, paired watershed project, ongoing SWAT model evaluations of implementation scenarios, legacy P project etc.

Intermediate Indicators
Soil test phosphorus regional trends, agricultural phosphorus mass balance, etc.

Track Implementation
Ohio Agriculture Conservation Initiative (OACI) metrics, nine element NPS-IS development, NRCS – CEAP assessments, etc.
When: Ongoing through implementation programs with specific TMDL evaluations at specified intervals.

Why:
- If metrics show conservation programs aren’t having desired impact on practice adoption
- Monitoring metrics show positive environmental outcomes for a specific practice
- Policy changes occur and state agencies need to implement them

How:
- Conservation Programs Evolve
- Some changes require additional stakeholder engagement
- Some changes require additional federal review and approval
Additional Notes on NPDES Permitting

• Existing loads are consistent with the WLA collectively – individual WLAs would not always be met
• Propose Watershed General Permit for total phosphorus to increase flexibility
• ~35 facilities discharge greater than 85% of the load from permitted facilities
• These facilities would be included in a general permit - this is where phosphorus management is more cost effective
Additional Notes on NPDES Permitting

• Managing Growth
  • Utilize better technology for new/expanding/upgrading facilities
  • Ongoing optimization
  • Consider emerging technologies where they improve existing treatment abilities
Next Steps

• PMR coming soon!
  • June 29th webinar will discuss the overall report structure and content

• 30-day comment period

• July 14th in-person meeting/detailed overview of each section of the report
Maumee Watershed Nutrient TMDL Project

Questions?

Maumee TMDL information, updates, FAQs, and webinar recordings, and presentation slides are available on the Ohio EPA Maumee Watershed Nutrient TMDL webpage here: https://epa.ohio.gov/divisions-and-offices/surface-water/reports-data/maumee-river-watershed

Please submit questions, comments, or feedback concerning the TMDL process to: epatmdl@epa.ohio.gov