Wisconsin's Phosphorus Rule

The Watershed Adaptive Management Option: a new tool for cost-effectively restoring our watersheds

Melissa Malott, J.D.
Water Program Director*

*Also serves as chair of Dane Co. Lakes & Watershed Commission

cleanwisconsin

Overview

- Regulatory Framework
  - Administrative rules
  - Traditional compliance strategies
  - Complications with nutrients
- Wisconsin's Watershed Adaptive Management Option
  - Overview
  - How it works
  - WAMO v. Water Quality Trading
  - Why it works
  - Where it works
- Dane County pilot

Regulatory Framework

- Wisconsin Administrative rules
  - NR 102 numeric water quality criteria (phosphorus)
  - NR 151 agricultural performance standards
  - Nr 217 phosphorus implementing language
  - Total Maximum Daily Loads Waste Load Allocations
- Traditional compliance
  - Technology controls
  - Compliance schedules, Variances, UAAs, Site-Specific Criteria
  - Water Quality Trading (?)
- Complications with nutrients

Watershed Adaptive Management Option (WAMO)

- Wis. Admin. Code NR 217.18:
  - A strategy option for WPDES permittees to comply with phosphorus standards in a timely and cost-effective manner, taking into consideration the contributions of phosphorus from point and nonpoint sources in a watershed
  - Permittees submit a WAMO plan with WPDES permit reissuance application
  - Compliance contingent on water quality

Watershed Adaptive Management Option (WAMO)

- WAMO plan elements:
  - Demonstration that addressing nonpoint source pollution is critical to achieving water quality standards
  - Demonstration that permittee compliance would require expensive control technology
  - Analysis of phosphorus loading in watershed
  - Planned specific and verifiable runoff control actions to achieve water quality standards
  - Measurable goals for plan implementation
  - Demonstration of funding ability and partners

WAMO: How it works

- Drivers: Permitted point sources
  - WPDES Permit compliance via actions that result in water quality standards being met in waterbody
- End game: water quality standards met
- Routes: nonpoint reductions, partnerships
- WAMO 3 step:
  - Pollution source assessment
  - Pollution reduction assessment
  - Implementation plan

WAMO planning: Step 1 of 3

- Outreach: A note on inclusiveness.
- Data-gathering:
  - You have access to almost all the information you'll need.
  - Significant point and nonpoint phosphorus contributors
  - Nutrient management plans
  - Data resources: pt srcs, USGS, EPA, Google, DNR (PRESTO), TMDLs, Universities, contractors, community resources
  - Determine if sufficient baseline information for modeling; if not, plan to collect baseline data. Begin collecting data.
- Organizational structure of partnership

WAMO planning: Step 2 of 3

- Data-gathering, analysis
  - Collect data, enter it into selected model.
  - Analyze data for strategic phosphorus runoff reduction locations and practices. Using the model and analysis, determine necessary reductions to achieve water quality standards.
  - Incorporate stakeholder goals where possible to leverage other resources.
  - Model plan for those reductions necessary to meet water quality standards and beyond. Test nonpoint pollution reductions methods and strategies.

WAMO planning: Step 3 of 3

- WAMO plan creation
  - Identify options for pollution controls.
  - Compare pollution control options to other watershed priorities, and pick pollution controls that will achieve water quality goals, best address watershed priorities, and be cost-effective.
  - Create implementation plan and timeline, monitoring plan with measurable goals and planned options for adaptations.
  - Establish agreement with stakeholders that binds parties to commit the funding, resources, and policy work to implement the WAMO plan.
  - Submit compliant plan to DNR.

WAMO v. Trading

WAMO

- Focus: watershed
- Goal: meeting water quality criteria
- Compliance: water quality, via monitoring
- Liability: High
- Flexibility: High

Trading

- Focus: discharge limit
- Goal: meeting permit effluent limits
- Compliance: calculation
- Liability: medium
- Flexibility: low (must conform with framework)

WAMO: Why it works

- Appropriate elements
  - Drivers, priorities, framework concept
- Ancillary benefits
  - Phosphorus reduction strategies with habitat or energy benefits can leverage other stakeholder resources
- Catalyzes collaboration and coordination
  - Federal, state, local agencies, universities
  - Community groups, foundations
- Cost-effective
  - Cost effective solution to phosphorus problems
  - Cost effective alternative to traditional compliance

WAMO: Where it works

Where you have all of the following:

- Watershed capacity and resources to clean up phosphorus nonpoint pollution > cost to clean up phosphorus nonpoint pollution
- Point sources willingness to lead
- Nonpoint source dominated watershed
  - Size of watershed, sources of pollution
  - Possible reductions, targeting considerations
- Sufficient partnerships
  - County, state, and federal agencies/programs, research resources
  - Community resources
  - Parties with TMDL obligations

WAM0: Dane Co Pilot

- Background
- Major stakeholders
- Madison Metropolitan Sewerage District's outline for a WAM0 plan
- Pilot project

WAMO in the Red Cedar Basin

- Background
- Major stakeholders
- Potential partners
  - Who's engaged in water quality?
  - Who might be interested in ancillary benefits?
- Pilot project

WAM0: Questions, discussion

cleanwisconsin

Connect with Clean Wisconsin

Follow us on   

Visit our website at www.cleanwisconsin.org

Join our Action Network

cleanwisconsin