The Alliance for the Great Lakes

Presentation to the 5th National Conference on Ecosystem Restoration

Governance Challenges to Algal Blooms in the Great Lakes

Lyman Welch

August 2, 2013

ALLIANCE FOR THE GREAT LAKES

ENSURING A LIVING RESOURCE FOR ALL GENERATIONS

A Community that Cares for the Great Lakes

Formed in 1970, the Alliance for the Great Lakes is the oldest independent Great Lakes citizens' organization in North America. Our community today includes…

- Individuals
- Businesses
- Elected officials
- Teachers and students
- Environmental advocates
- Policy leaders
- Recreational enthusiasts
- Civic organizations

The Alliance is the only independent policy organization working solely to improve the Great Lakes every day.

ALLIANCE FOR THE GREAT LAKES
ENSURING A LIVING RESOURCE FOR ALL GENERATIONS

Great Lakes Beaches are a Recreational Resource

- Citizens from the Great Lakes region and beyond use Great Lakes beaches for recreation
- There are approximately 8 million swimmers and 80 million swimming days in the Great Lakes every year

Alliance for the Great Lakes
Ensuring a Living Resource for all Generations

Recreation Means Fun, but also Money

- Closing all Lake Michigan beaches for one season could cost $2.7 billion
- Benefit of reducing advisories at Ohio's Lake Erie beaches would be $3.2.-3.4 million
- Restoration of areas of concern could raise coastal property values $12-$19 billion

Alliance for the Great Lakes
Ensuring a Living Resource for all Generations

Innovative and Promising Approaches to Addressing Phosphorus and Algae

Alliance for the Great Lakes
Ensuring a Living Resource for all Generations

Numeric Standards

- Clear requirements, not narrative standards
  - Wisconsin's phosphorus standards and the Great Lakes Water Quality Agreement
  - Lake Erie Binational Nutrient Management Strategy

Alliance for the Great Lakes
Ensuring a Living Resource for all Generations

“4R” Nutrient Stewardship Certification Program

- “Right Source, Right Rate, Right Time, Right Place”
- Establishes general principles and best practices
- Provides educational training and monitoring

Alliance for the Great Lakes
Ensuring a Living Resource for all Generations

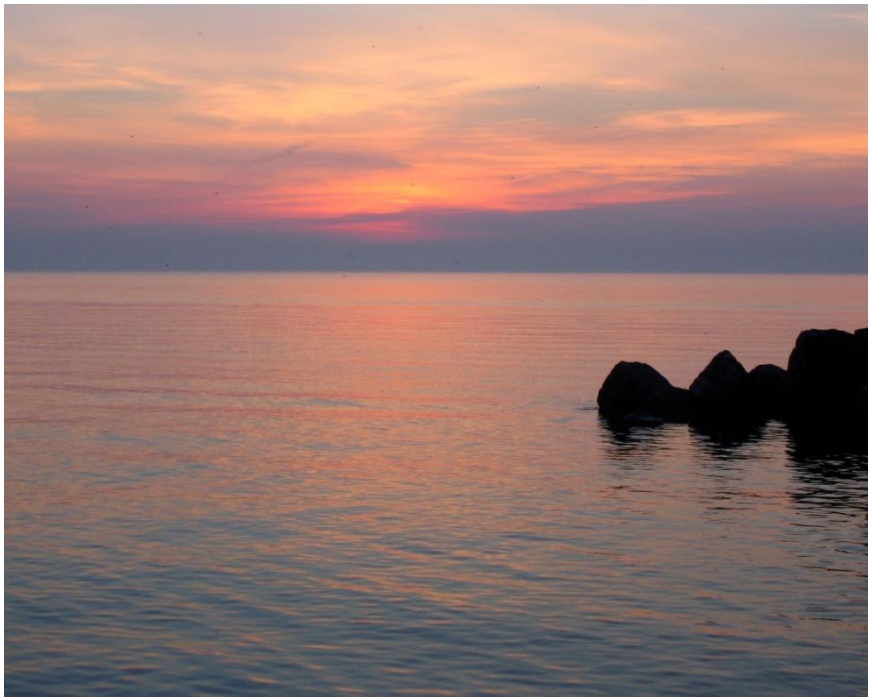
Use of Total Maximum Daily Loads ("TMDLs")

- Can require regulating Point and Non-Point Sources
  - Non-Point Sources tougher to regulate
- Point Sources in Michigan have teamed up to fund Non-Point Source changes

Alliance for the Great Lakes
Ensuring a Living Resource for all Generations

Water Quality Trading Programs

- Ohio's trading program:
  - Sources earn tradable credits for reductions
  - State-approved management plan
  - Reporting, oversight, and public participation



Alliance for the Great Lakes
Ensuring a Living Resource for all Generations

Wisconsin-Adaptive Management

- Point and Non-Point Sources enter into enforceable agreements
- Can use if:
  - Phosphorus levels exceed water quality criteria
  - Non-Point Sources are a problem
  - Point Source compliance is expensive

ALLIANCE FOR THE GREAT LAKES
ENSURING A LIVING RESOURCE FOR ALL GENERATIONS

What's Special About Adaptive Management?

- Less stringent interim discharge limits
- Reporting, auditing, and inspection requirements
  - Ongoing dialogue between Point Sources, Non-Point Sources, and state

What's Special About Adaptive Management? (cont.)

- Watershed-wide agreements spread costs
- Less stringent limitations become permanent <u>if water criteria met</u>
  - Focus on the quality of the water, not regulating individual discharges

Alliance for the Great Lakes
Ensuring a Living Resource for all Generations

What's Special About Adaptive Management? (cont.)

- Adjusting to new information
  - Changes incorporated into permits
  - Allows greater flexibility

Alliance for the Great Lakes
Ensuring a Living Resource for all Generations

Three Key Points

- Healthy beaches demand continuing attention
- Phosphorus pollution leads to excessive algae which may harm humans, kill aquatic life, and degrade the overall quality of beaches
- Promising and innovative solutions to the problems of algae and phosphorus include:
  - Numeric Standards
  - “4R” Nutrient Stewardship Certification Program
  - Total Maximum Daily Loads
  - Trading Programs
  - Adaptive Management

Alliance Connections

Contact: Lyman Welch, (312) 445-9739, lwelch@greatlakes.org

Learn more about the Alliance: www.greatlakes.org

Visit our Algae Page: www.greatlakes.org/algae

LIKE us on Facebook: www.facebook.com/allianceforthegreatlakes

FOLLOW us on Twitter: www.twitter.com/a4gl

Alliance for the Great Lakes
Ensuring a Living Resource for all Generations