

PA 12-155 Process

Connecticut Department of Energy and Environmental Protection



September 30, 2013

- * PA 12-155 Summary
- * Collaboration Commitment
- * Workgroups
- * Next Steps



PA -12-155 Requirements

- The topics are as follows:
 - A state-wide response to address phosphorus **nonpoint source pollution**;
 - Approaches for municipalities to use in order to comply with standards established by the United States Environmental Protection Agency for phosphorus, including **guidance for treatment** and potential plant upgrades; and
 - The proper **scientific methods** by which to measure current phosphorus levels in inland nontidal waters and to make future projections of phosphorus loading in such water.
- PA 13-129 requires report by 10/1/14

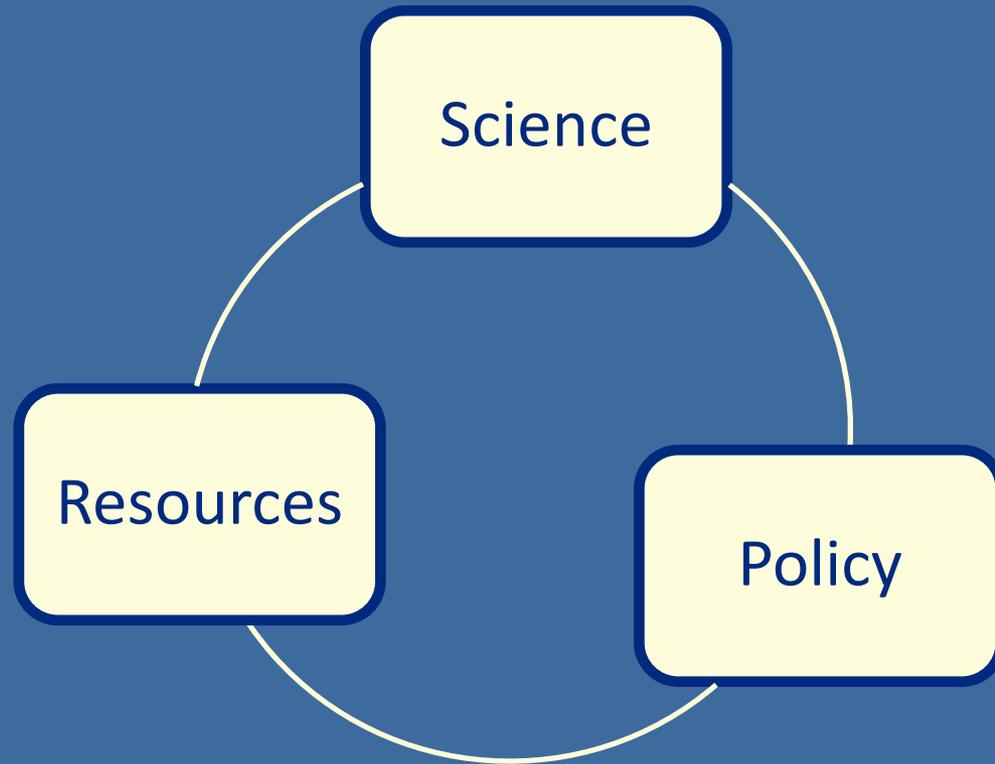


Guiding Principles

- Evaluate on watershed basis
- Evaluate process to address all concerns
- Use progressive steps to assess results
- Use permit terms to bound evaluation periods
- Continuous collaboration



Progressive Time-bounded Evaluation



Collaboration Process

- Developing cost-effective phosphorus reduction strategies in collaboration with municipalities and other implementers
- Openness to new ideas
- Continuing dialogues, raising awareness
- Understanding implications for municipalities, waste water treatment facilities, agriculture; industry, recreational users and others
- Transparency and information sharing
- Seeking Innovation
- Establishing best practices and benchmarking
- Utilizing sound science
- Listening even when it is hard
- Outcomes and science will not be presupposed



The Realm of the Possible

- Maximize implementation of ongoing water quality activities that will ultimately benefit water quality regardless of source or actor
- Maximize utilization of proven BMPs
- Work to incorporate creative approaches to achieve WQS
- Seek holistic watershed based approaches
- Champion approaches that allow flexibility for implementation
- Incorporate adaptive management into implementation plans



Capture the Innovation Potential

- Take steps in closing the phosphorus cycle, i.e. use less, recycle more and improve processes to meet reduce the phosphorus loading at the source or in products;
 - Working with Water Companies/DPH regarding corrosion additives, product reformulation, etc.
- Evaluate existing and emerging technologies for reducing phosphorus loading;
- Seek out lessons learned and technology transfer opportunities and share, share, share



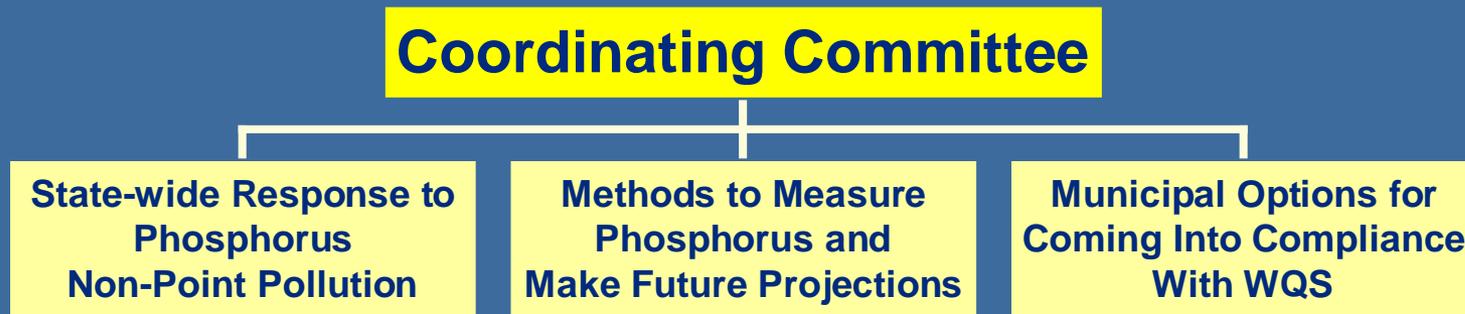
Coordinating Committee

- Co-chaired by:
 - Macky McCleary, Deputy Commissioner DEEP
 - Garry Brumback, Town Manager Southington
- Membership should be broadly inclusive given public interest and in order to assure support and defensibility of the outcome.
- Recommend quarterly meetings for the coming year.



Coordinating Committee Responsibilities

- Overall direction and timing
- Establish three technical work groups, and charge them with formulating recommendations to the Coordinating Committee by March 1, 2014.
- Address cross-cutting issues



EPA's Role



- US EPA Region 1 under its Clean Water Act (CWA) authorities is requiring/driving DEEP to:
 - 1) update non-point source strategy plans,
 - 2) develop numeric nutrient criteria, and
 - 3) address phosphorus loading through permitting.
- EPA involvement is essential
- Recommendations/outcomes will need to meet CWA requirements and EPA approval.



Workgroup 1



State-wide response to phosphorus nonpoint pollution

- As required by the CWA, DEEP is the process of updating our statewide Nonpoint Source Pollution Plan.
- Recommended that interested stakeholders participate in process and help craft the next plan iteration.
 - Tasks
 - Updated plan will include identification of strategies to reduce phosphorus (Nonpoint Source Management Program plan umbrella is broader than phosphorus)
 - Draft Nonpoint Source Management Program plan scheduled to be delivered to EPA soon
 - Final plan scheduled for 1st quarter of 2014

Co-Leadership:

- Virgil Lloyd, Fuss & O'Neill
- Chris Malik, DEEP

Meeting schedule:

bimonthly

Deliverable:

The specific component of the non-point source plan relevant to phosphorus



Workgroup 2

Methods to measure phosphorus and make future projections

- Tasks:

- Evaluate and quantify the role of phosphorus in stream impairment and
- Determine reductions needed to meet identified water quality goals

- Steps:

- Define the management goals including endpoints,
- Identify causal relationships between phosphorus and the endpoints,
- Develop an analysis plan that details data needs and
- Establishes appropriate methods for performing assessment.

Co-Leadership:

- Roger Dann, Wallingford
- Mary Becker, DEEP

Meeting schedule:
bimonthly

Deliverable:

Recommend changes, if appropriate, to Connecticut's phosphorus strategy for non-tidal waste receiving streams.



Utilization of CASE Workgroup 2

- Connecticut Academy of Science and Engineering (CASE) is a private, nonprofit, public-service institution patterned after National Academy of Sciences
- Roger Dann and Mary Becker will work with CASE on scope and during process
- CASE will put together a panel of unbiased experts to evaluate topics under Workgroup 2
- CASE will maintain editorial control of their report – responsibility of Steering Committee to make final recommendations under PA 12-155



Workgroup 3

Municipal options for coming into compliance with water quality standards



- Tasks:
- A technology assessment along with integration of the results of Work Groups 1 and 2.
 1. Assessment of available technology to address both point and nonpoint phosphorus controls, identification of predicted performance, capital and operational cost and relative reliability.
 2. Identify opportunities to look at a watershed and balance both point and nonpoint source reductions in order to achieve the level of phosphorus identified in the work done by Work Group 2.

Co-Leadership:

- Dennis Waz, Meriden
- Rowland Denny, DEEP

Meeting Schedule:

Monthly

Deliverable: A guidance document for municipalities that outlines options for meeting both effluent limits and water quality standards



General Workgroup Charge

- Collaboration within group
- Co-chairs responsible for:
 - Schedule
 - Organization
 - Meeting agendas
 - Work product and deliverables
- Unresolvable issues to the Coordinating Committee leadership promptly
- Working to deadlines



Goals

- **Bring together knowledge and experience** necessary to strengthen innovation and knowledge among all parties for better management of phosphorus, to foster sustainability and to seek cost effective solutions
- Contribute to formulating a knowledge agenda which can be connected to research and innovation
- Transparency in information and data sharing



Next Steps

- Establishing workgroup meeting schedules
- Establishing workgroup membership/participation

