

PA 12-155 Nonpoint Source Workgroup #1

Connecticut Department of
Energy and Environmental Protection



May 12, 2014

Workgroup 1



Statewide response to phosphorus nonpoint source pollution

- DEEP is updating our statewide Nonpoint Source Pollution Program Plan.
- Stakeholder participation and collaboration especially implementation
- WWW.CT.GOV/DEEP/PHOSPHORUS and file sharing on skydrive.live.com
 - Tasks
 - Updated plan will include identification of strategies to reduce phosphorus (Nonpoint Source Management Program Plan: scope covers all pollutants and impairments, not just phosphorus)
 - Draft Nonpoint Source Management Program plan scheduled to be delivered to EPA 3rd quarter of 2014
 - Draft Report for PA 12-155 Nonpoint Source Workgroup

Co-Leadership:

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

Meeting schedule: monthly

Deliverable:

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



Nonpoint Source Workgroup Meetings

- **NPS Workgroup Meeting Schedule:**

- July 22, 2014, from 1 to 2:30 p.m. in Holcombe Room, 5th floor, DEEP HQ
- May 6, 2014, from 1 to 2:30 p.m. in Room 2B at DEEP Headquarters
- March 24, 2014, from 1 to 2:30 p.m. in Room 2B at DEEP Headquarters
- February 10, 2014, from 10 to 11:30 a.m. in Room 2B at DEEP Headquarters.
- January 6, 2014 from 1 to 2:30 p.m. in Room 2A, at DEEP Headquarters.
- November 25, 2013, from 1 to 2:30 p.m. in Room 2B, at DEEP Headquarters.
- October 25, 2013 from 1 to 2:30 p.m. in DEEP Holcombe Room.

- **NPS Onsite Wastewater Systems Subcommittee**

- June 24, 2014, at 10 a.m. in Room 2B at DEEP Headquarters
- March 10, 2014, at 1 p.m. in Room 2A at DEEP Headquarters
- January 17, 2014, at 1 p.m. in Room 2B at DEEP Headquarters



NPS Workgroup Participants

- Amanda Clark , CT DPH
- Stephen Anderson, CT DoAg
- Cynthia Baumann, CDM Smith
- Bill Hoerle, CT Air N.G.
- David Potts, Geomatrix LLC, COWRA
- Peter Francis, CT DEEP
- Frank Schaub , COWRA
- Greg Bugbee, CT Ag Expt Station
- Michael Hart , CT DEEP
- Robert Hust , CT DEEP
- James Hyde , USDA-NRCS
- Mike Jastremski, Housatonic V.A.
- Chris Malik , CT DEEP Co-Chair
- Justin Milardo, CT DPH
- Chuck Lee, CT DEEP
- Lynn McHale, City of Waterbury
- Erik Mas, Fuss and O'Neill
- Richard Meinert, UConn C.E.S.
- Nelson Malwitz, Brookfield WPCA
- Wayne Nelson, CT DoAg
- Robert Scully, CT DPH
- Sean Merrigan, CT DPH
- Virgil Lloyd, Municipal Co-Chair
- Margo Ward, CT DEEP
- Joe Wetteman, CT DEEP



Nonpoint Sources: Six groups

Workgroup members compile info and submit to DEEP:

- Fertilizers
- Animal Waste: Livestock, Domestic & Wildlife
- Soil Erosion, including bedload and channel erosion
- Urban Stormwater
- Onsite Wastewater Treatment Systems, Sub-Committee
- Internal Loading: Lake Sediments



Planning Process

- **Analysis of Problem**
- **Goals and Objectives**
- **Identify Alternative Solutions**
- **Evaluation of Outcome**
- **Discussion of Next Steps**



Challenges

- Identify and quantify relative inputs with Precision and Accuracy, land-use land-cover analysis.
- The nature of nonpoint source pollution is variable, spatial, temporal, storms. Modeling by watershed.
- Many of the highest loading events can be large storms when BMPs are over capacity.
- Analysis of costs and effectiveness of NPS implementation strategies, other States' experiences.
- Science and Policy: Reasonable assurance that goals can be met is absolutely essential.



Process

- Developing cost-effective sustainable phosphorus reduction strategies in collaboration with municipalities and stakeholders
- Collaborate with DEEP Nonpoint Source Program, utilize diverse groups of stakeholders
- Watershed based Plan Implementation, Improving awareness and participation, Citizen Monitoring
- Municipal Role: planning, education, implementation,
- Stormwater General Permits: effectiveness, costs and compliance



Next Steps

- Pollution Prevention: Source reduction, Reduce impacts from discretionary activities, lawncare, yard waste, animal waste, impervious cover.
- Fertilizer regulation, education and outreach: Messaging. Authorities and Funding, practicability.
- Animal waste management
- Onsite Wastewater Treatment Systems Management Statewide, planning / tracking / upgrades: Municipal strategies, DPH and DEEP role.



Implementation Considerations

- Funding for Implementation
- Pollution Prevention
 - Source Controls
 - Education and Outreach
- Reasonable assurance of success
- Implement and Assess results:
Establish and re-evaluate goals.



Onsite Wastewater System Goals

- Target priority areas first:
 - Lake watersheds and P-impacted watersheds
 - Dense developments
 - Unfavorable Soil: Depth to groundwater , channeling
- Effective management protocols
 - Permitting, Education, and Outreach
 - Tracking, upgrade data collection and management
 - Legal Authorities to mandate inspection and upgrades
 - Regulation: Time of Sale inspection
 - Maintenance and System Evaluation and Upgrades
 - Reduce / modify loadings and/or dispersal methods
 - Age of leaching fields, loading, siting, and surficial geology.



NPS Phosphorus Contacts

- Information: www.ct.gov/deep/phosphorus
- Contact co-chairs:
- Chris Malik (860) 424-3959
- christopher.malik@ct.gov
- or
- Virgil Lloyd (860) 646-2469 #5275
- vlloyd@fando.com

