PA 12-155 Nonpoint Source Phosphorus Workgroup

Meeting notes from July 22, 2014, 1 p.m. meeting, DEEP 5 Holcombe

Co-Chairpersons:

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Introductions: Chris Malik, Nelson Malwitz, Virgil Lloyd, Steve Anderson, Andrew Lord, Greg Bugbee, Margo Ward, Chuck Lee, Michael Hart

Previous meeting minutes are up to date at www.ct.gov/deep/phosphorus

The onsite wastewater subcommittee met on 6/24.

Updates on submissions:

Draft submissions are on the Skydrive site set up by Mike J. along with background documents at https://onedrive.live.com/ username NPS_WorkGroup@outlook.com password is available on request to NPS workgroup members.

Canada Geese: The has not been a big increase in harvest in response to increased hunting seasons

Scope was reviewed.

Modeling accounts for point sources and loadings from 3 land cover types: agriculture, urban, and forested. Export coefficients were assigned based on literature review and EPA discussions: Predicted loads were apportioned: multiply areas x export coefficients.

Most NPS P correlates with suspended sediments, BMPs will target TSS.

DEEP NPS Program Plan Update due in September, plan is a technical document describing DEEP's program and goals with milestones.

Draft 2014 CT Integrated Water Quality Report will be published within a week.

DEEP is involved with a TMDL Visioning program which integrates the components of TMDL analyses, Stormwater General Permits and Nonpoint Source programs.

Components of urban stormwater are regulated as stormwater; DEEP's MS4 permit draft proposes increased controls on nutrients.

The feasibility of analyzing a smaller watershed to quantify and define implementation costs and reasonable assurance of success was discussed.

Pollution Prevention activities with stakeholder participation will be better defined. Feasibility/cost and reasonable assurance of load reductions are needed to justify expenditures.

Malwitz described Candlewood Lake 30 year study on history of pollution of the lake. Human interaction has biggest impact. Seasonal house conversions to year round use is significant. Suggested that sewers could be a solution, but there are negatives associated. Candlewood Shores community has asked WPCA for sewers.

Factors contributing to P-related failure of onsite disposal systems include: improper siting, especially proximity to groundwater, channeling from distribution system rather than effective dispersion.

4 season conversion and intensification of use of homes around lakes. High loading after long periods of sporadic use can stress systems. When sewering occurs, conversion to bigger houses, construction impacts/ soil erosion, and more impervious surfaces and intensive use leads to increased NPS loadings.

It was suggested that that inspection and upgrade of onsite systems at time of property transfer should be recommended including thorough inspection, assessment of need for distribution box levelling, if evidence of failure at leaching field. Record keeping is an important part of the process. Typical finance company inspections are not adequate for water quality concerns, as they just pump out and look for mechanical failures.

Internal loading from sediments question: How long and how much benefits result from alum treatments? And how much P can be expected to be released from lakes and ponds with internal loading? Lake Pocotopaug and Hatch Pond data might be useful.

12-155 requires Do Ag regulatory/outreach role: How do we move forward? Is homeowner compliance adequate? Are homeowners aware that routine use of P fertilizers on lawns is banned? Fertilizers applied to driveways sidewalks, or before heavy rain, quantities and timing questions. Details are uncertain on how to accomplish comprehensive educational program. Inspection and enforcement on homeowner scale might not be feasible.

Can more instructions be added to labelling? Question for Wayne Nelson. Education at retail points of sale in 12-155 statute, Section 3g. What funding would be required for that to be better implemented. Steve A will determine. Who should conduct “policing”? Comr of Ag.?

Organic lawn fertilizers can’t practicably remove P, compost is often used as alternative to fertilizers. Scope of problem?

Golf courses are not regulated under 12-155. Questions as to their role in P loadings?

Manures. At this time: beneficial uses consist of: bedding, cow pots. There is a demand for digestors.

Container nurseries use soluble fertilizers. Magnitude of nutrients in storm flows isn't well known. BMPs? Industrial Stormwater permits?

Anaerobic digestors for energy: Proposals exist for Bridgeport and 2 in Southington. Innovative energy solutions and waste reuse might benefit from regulatory changes and or subsidies. Infrastructure is energy related so additional parties become involved. There are roadblocks to putting energy back into grid; this killed project in NW CT. Bozrah poultry waste incinerator faced similar issues, long term contract for power resale lacking. Power consumption onsite makes more feasible vs. sending to grid?

Need framework for discussion with PURA and others. Be as specific as possible but avoid picking winners and losers.

Pet waste: James River Center for Watershed Protection study indicates cost effectiveness. IDDE also cited as cost effective for nutrient control.

Greenways sited along rivers, walking dogs results in nutrient and pathogen loadings.

Mechanisms for funding for urban stormwater programs?

Experiences with extensive NPS outreach activities and citizen monitoring and trackdown programs in Norwalk, Saugatuck, Sasco, Five Mile basins have keyed municipal staff on specific targets protective of water quality and have correlated with delistings for pathogens. The same kind of focus could be put on nutrients and soil erosion.

What should be NPS priorities for funding? Structural, non-structural, education and outreach, pollution prevention.

Soil erosion, AG, construction, flash flooding, streambank erosion, changing hydrographs due to increased impervious cover. Holly Pond study is underway by DEEP to reduce sediment inputs.