

PA 12-155 Nonpoint Source Phosphorus Workgroup

Meeting notes from October 7, 2014, 1 p.m. meeting, DEEP 2B

Co-Chairpersons:

Chris Malik, DEEP, christopher.malik@ct.gov (860) 424-3959

Virgil Lloyd, vlloyd@fando.com (860) 646-2469 ext. 5275

Introductions: Chris Malik, Virgil Lloyd, Chuck Lee, Margo Ward, Chuck Lee, Joe Wetteman, Rich Meinert, Cindy Bauman, Andrew Lord.

Workgroup members were encouraged to share their Draft submissions on the OneDrive site set up by Mike Jastremski <https://onedrive.live.com/> username NPS_WorkGroup@outlook.com password is available on request to NPS workgroup members.

Virgil Lloyd presented a partial summary of bulletized recommendations to date, cost aspects need to be enhanced.

Deliverable expected to be from Coordinating Committee to Legislature. Lead agencies and funding sources will be needed to implement recommended actions. Estimations of those funding needs are desired.

Suggested 3 categories of recommendations: 1)Actions that require legislative/statutory changes, 2)Structural BMPs with funding estimates and partners, 3)Non-structural BMPs: Education and outreach etc

Lawns and gardens: some policies are already in place, but outreach may be needed to increase compliance /participation, fertilizers, yard waste disposal, dust and leaf disposal in street. Funding to enforce or provide education is needed.

There may be some reorganization of the original outline's topics due to overlap, particularly agricultural, animal waste, and fertilizers

Surplus P on farms needs to be removed and sent to areas where croplands need P.

Digestors currently in operation at one farm (Freund's) and ceased operations at another (Cushman's). Cushmans had technical issues: insulation peeling and filling up with solids, and electrical switching components. Cushman produced electricity, Freund produces hot water. Operators find they need to take in fats oils and grease to supplement, which adds to end disposal costs. High volume of effluent is difficult to dispose by a farm. Ability to discharge effluent to a POTW would facilitate.

Cooperative larger scale digestors would have advantages: Combine manure, food waste, fats oils and grease. Send nitrogen back to farms? MA has some cost

studies, Casella Organics has invested in MA. 2 have been built and 5 planned in MA.

Energy companies have difficulty getting involved due to complexity of sending power to grid. (North Canaan) Laws with net metering might make it more attractive, but third party ownership could be a problem with energy-related grants. Clarification on pitfalls would be useful.

Digesters allow creation of a value added product from P containing wastes, and reduce volume and weight substantially, but don't consume phosphorus.

Concept: promote innovative energy related to manage oversupply as biosolids, avoid being overly specific?

Other regional Ag cooperatives? Regional POTW and FOG initiatives. Long term contracts for tipping fees, not guaranteed?

Incentive, through Energy, before net metering wasn't cost effective, other obstacles, utilities (solar) can't cross road right of ways, only CL&P.

P content 2-3% of biosolids being brought into State. Potentially cheaper to buy biosolids than to truck wet dairy manure.

Most CT biosolids incinerated, except Stamford, which goes to NY State.

Manure injection technology makes more fields available for spreading due to reduced odor and runoff.

A funding sources is desired for a planning effort to identify hurdles, and estimate needs to develop alternative technologies.

Municipalities that operate digesters: City of Groton, Norwich ?

Cover crops, NRCS Soil health workshop in November

Ag BMPs: much of land farmed is year to year agreements, landowners don't always consent/commit to maintaining a BMP that could have a long lifespan.

Incentivize growing grain crops for poultry industry? Barley, Oats etc, to reduce need to import feed. Mycotoxins aflatoxins and molds can be problematic, Regional dryers could reduce risk. Planning funds needed.

Container nurseries, P applied in pots, minimize runoff. Recommendations such as P-sorbing materials? Balled and Burplap nurseries are different.

Golf courses? Do they use P fertilizers? Exempted, More research needed.

Onsite system inspection recommendations. Point of sale.

Urban Stormwater update by Cindy Bauman, added recommendations. Last page highlighted recommendations for other sections.

- 1) IC plan similar to TMDL, DEEP has IC response plan in the works.
- 2) Green Infrastructure Implement regs and guidance with municipalities. Farmington watershed towns is a pilot, Salmon watershed- TNC, Newington, Greenwich, Tolland. Tie to new construction in stormwater permitting? Statewide Municipal Land Use Evaluation grant program? CFE website: <http://www.reducerunoff.org/> CLEAR involvement
- 3) BMP effectiveness. Compilation of pollutant removal effectiveness, maintenance issues and costs, SW BMPS in LID Manual, TSS surrogate applicability. What specific research would be more valuable than implementation of BMPS that reduce TSS?
- 4) Regional approaches for sw treatment. Efficiency.
- 5) Program financing mechanisms Stormwater Utility Pilot Program. If one entity owns water sewer and stormwater infrastructure, there is better likelihood for success. Identify successes and pitfalls in nearby locations. CSO communities might be more likely. Authority exists to establish, Statute#

Create options for NPS trading, or stormwater banking.

Vetting for all recommendations necessary,

Poultry manure from broilers, different from layers. Not as easy to pelletize.

Internal loading, sequester in sediment or aeration to keep redox up so sediments don't release soluble P. Are there watershed specific recommendations in vulnerable lake watersheds? ALUS D.O.

303d lakes listed due to internal loading affecting recreational uses / Harmful Algal Blooms (HABs) Pocotopaug, Beseck

Recommendations for Champlain TMDL. Other recs for legacy P Agricultural Innovations Group Report / Hust distributed.

Hydropower lakes were built with large watersheds so also have high nutrient loadings associated.