**PA 12-155 Nonpoint Source Phosphorus Workgroup**

**Meeting notes from May 6, 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, Nelson Malwitz, Mike Jastremski, Virgil Lloyd, Jim Hyde, Joe Wetteman, Chuck Lee, Greg Bugbee, Margo Ward, Cindy Bauman, Amanda Clark

Data used in analyses, which was supplied by DEEP to Virgil Lloyd, was discussed and will be posted to website here: http://www.ct.gov/deep/lib/deep/water/water_quality_standards/p/interimmgntphosstrat_042614.pdf Data lists 44 watersheds where point source waste water discharges occur. www.ct.gov/deep/phosphorus is DEEP's phosphorus page with links.

Enrichment factor is comparison to forested natural condition

NPDES loadings are from point sources including but not limited to wastewater plants.

3 land cover types, export coefficients were assigned based on literature review and EPA discussions: Forested, Urban, Agriculture. Land cover areas determined from UConn-Clear remote sensing, Predicted loads were apportioned: multiply areas x export coefficients.

Virgil Lloyd's analyses are in process. It would be helpful to have a better understanding of source contributions to assess bmp cost / benefits.

It was suggested to Virgil Lloyd, by Roger Dann, that Urban and Ag numbers used in DEEP's modeling reflect a 60% reduction, based on assumptions that bmps will be in place. There were some early back and forth discussions that modeled that scenario, but that is definitely not applied to the numbers that are currently being used.

Question about export coefficients from Greg B., older numbers from Ag Expt station: earlier Frink and Novell numbers do not concur. Urban coefficient was higher than Ag in older numbers. The newer numbers have been determined to be more accurate and precise.

Water quality databases and models in development: Puget Sound bmps, Chesapeake Bay, NYC water supply watersheds; Jim Hyde and Mike Jastremski have additional contacts.

Champlain: largely agricultural, and Charles River: more urbanized therefore more similar to CT, also have developed modeling.

Urban stormwater: Cindy Bauman progress report, draft submission distributed, posted on Skydrive. Solutions portion of writeup has not been completed. Table of contents last month, list of case studies, 2 are documented: Chesapeake Bay and Madison, WI.

Summary of problems and issues, Water Quality standards, Chesapeake work, urban ag wastewater, Madison, WI: lawns, urban areas,

Urban stormwater goals, Two types of bmps: source reduction (P2) and pollutant load reduction (structural), GI

UNH study bmp effectiveness for removing pollutants

National Pollutant Removal Database

Dissolved P removed by sorbtion.

Bmp efficiency related to storm magnitude duration, urban bmps are most effective at treating first flush, Ag bmp scenarios may differ.

Canada Geese: in 1930s non-migratory birds were imported as decoys for migratory birds,

CT Canada geese population in 1990s est. 40k

0.55 g/day/bird Phosphorus , Batterson Park Pond estimates 150 kg/year or 19% of annual load

Non-lethal population control methods involve 3 strategies: egg oiling, do not feed, and hazing; Can stabilize, but not typically reduce populations. Rounding geese up can be successful, local demand is the most likely way that support can be found. Groton airport? US FWS General Permit
http://www.fws.gov/migratorybirds/mbpermits.html

IW reg changes were suggested: Require non-mowed buffers? Toth Park Easton fencing example, Greenwich has extensive experience, other municipalities: Norwalk, New Canaan, Groton

Hunting to reduce populations? second season in winter, low participation, decline in overall goose hunting.

Effect on D.O. and E Coli

Chuck will update submission.  Additional work required on animal waste.

Amanda will update next draft submission for 6/24 Onsite subcommittee meeting, review, clarification of improper siting etc

Submissions from committee members should be completed in the next few weeks.