STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

Jewel Mullen, M.D., M.P.H., M.P.A.
Commissioner

Dannel P. Malloy
Governor
Nancy Wyman
Lt. Governor

December 4, 2014

Robert Hust
Assistant Director
Planning & Standards Division
Bureau of Water Protection & Land Reuse
CT Department of Energy & Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Re: Nonpoint Source Management Program Plan

Dear Mr. Hust:

The U.S. Environmental Protection Agency approved CT DEEP's 2014 Nonpoint Source Management Plan effective September 29, 2014. The acknowledgements page lists the CT Department of Public Health (DPH) as one of the cooperating state agencies in the development of the plan. The plan includes a section (4.1.4) on subsurface sewage disposal systems (SSDSs), and a table (Table 4-5) of 5-year (2015 – 2019) objectives, actions, and milestones for these systems.

The DPH and Local Directors of Health regulate an estimated 99% of all SSDSs in CT, and this Department has an advisory committee of decentralized sewage system stakeholder organizations that has been in existence since the late 1970s. Unfortunately, this Department and our committee stakeholder organizations were not afforded the opportunity to participate in the Nonpoint Source Management Plan update. As such, I recommend a clarification be issued to the acknowledgements page relative to this Department's non-participation in the plan update. Please provide this program a copy of the clarification in the event one is issued. Thank you for your assistance in this matter.

Sincerely,

Robert W. Scully
Supervising Sanitary Engineer
Environmental Engineering Program

cc: Suzanne Blancaflor, M.S., M.P.H., Chief, Environmental Health Section, DPH

P/RWS/NPS Plan Letter

Keeping Connecticut Healthy
DPH
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Environmental Health Section

Environmental Engineering Program (EEP) comments on the February 18, 2016 Draft of the Nonpoint Source Workgroup #1 Report to P.A. 12-155 Coordinating Committee:

1. The draft report's introduction should provide additional reference to nonpoint source pollution considerations that were included in the DEEP's initial meeting concerning P.A. 12-155 that was held on November 28, 2012, and in the DEEP's "kick-off" meeting held on September 30, 2013. The initial meeting's power point presentation noted in the potential opportunity discussion that 3 categories (Storm water, Agriculture, & Source controls) were of high significances, and 1category (Onsite sewage) was of low significance. The September 13, 2013 announcement for the open kick-off meeting discusses the Coordinating Committee and the three workgroups they established, and the meeting outlined the roles of the three workgroups. The introduction cites the workgroups primary goals, but it needs to be noted that the workgroup was advised by the Coordinating Committee that the DEEP's consultant CT Academy of Science and Engineering (CASE) would not be evaluating non-point source phosphorus pollution measurements, breakdowns, or percent contributions. It should be understood that the workgroup did not have such a charge or the expertise and resources to handle such a task.
2. Section 2 of the draft report concerns nonpoint source pollution management, and it references EPA's approval of CT's Nonpoint Source Management Program Plan. The EEP is in agreement that management of decentralized sewage systems is an element of nonpoint source management, and the EEP recommends the report include language promoting better integration of decentralized sewage system management actions into CT's nonpoint source management program. The nonpoint source section implies that there is a coordinated approach but that hasn't been entirely accurate relative to onsite sewage system matters. Unfortunately, the EEP wasn't involved with the NPS plan update (see attached letter). Section 2.3 includes a list of six major pollutant source groups of NPS phosphorus, and one of which is onsite wastewater disposal systems. It is recommended that additional clarification be provided as the broader public act meetings down-played the concern about phosphorus loading from on-site sewage systems. It should be clarified that phosphorus loading from on-site sewage systems can be a concern in small lot/densely developed areas, especially when the sewage systems are not properly sited.

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3. Section 3.3 concerns onsite wastewater treatment and it specifically mentions town-wide wastewater management plans, point-of-sale wastewater system inspections, and a comprehensive statewide onsite wastewater system management program. The EEP submitted comments (attached) to the DEEP dated December 28, 2012 that recommended among other things that the state-wide strategy to reduce phosphorus loading in inland non-tidal waters include recommendations about comprehensive management of decentralized sewage in accordance with EPA guidance documents. It is recommended that the report include the EEP's recommendations in this regard.
4. Section 4 includes a discussion about storm water considerations and it cites low impact development techniques and the MS4 General Permit. The DPH published a January 1, 2015 revisions to the Department's *Technical Standards for Subsurface Sewage Disposal systems* that addresses storm water infiltration systems that may impact onsite sewage disposal systems. The DEEP's new MS4 General Permit also includes language concerning coordination between storm water programs with onsite sewage system regulators, which will help minimize conflicts. The EEP's December 2012 phosphorus comments mention the need to coordinate local and state storm water and on-site sewage disposal programs.
5. Section 4.5 includes a discussion about internal loading from lake sediments, and the recommendations note that before proceeding to management efforts to control internal phosphorus loading in lakes, and assessment of all phosphorus loading sources is recommended. The EEP is in agreement with this recommendation, and our December 2012 comments recommended that the state-wide strategy to reduce phosphorus loading to inland non-tidal waters include recommendations that the extent of impairment from onsite sewage systems be further evaluated along with a review of pro-active pollution prevention techniques. This would be especially important in lakeside communities with small lots that support homes with antiquated onsite sewage systems.
6. Section 4.6 concerns onsite wastewater disposal/septic systems, and it notes current regulations require a reserve area. It should be clarified that reserve areas are only required for new construction sites. Section 4.6.2 includes recommendations for better management of onsite wastewater systems. As noted in the above comment #3, it is recommended that the report's language be revised to specifically reference comprehensive decentralized sewage system management in accordance with EPA's guidance documents that are sited in the attached comments. It should be noted that the recently adopted LISS CCMP makes such a reference, as it is recognized that all management components need to be addressed for the most successful programs. It is also recommended that the report promote an integrated approach that more effectively coordinates nonpoint source pollution control, source water protection, and decentralized sewage system management into the state's TMDL program to assist in meeting the state's water pollution control and health protection goals. The EEP has previously cited EPA's recommendation that states re-evaluate their clean water state revolving fund programs to ensure that decentralized needs are accurately determined and sufficiently funded.

Comments prepared by Robert Scully, March 4, 2016

Department of Public Health (DPH) Environmental Engineering Program (EEP) comments on the November 28, 2012 Department of Energy and Environmental Protection (DEEP) meeting on Public Act No. 12-155 and the proposed statewide response to phosphorus nonpoint source (NPS) pollution in state waters.

Septic systems are a source of phosphorus, however based on the meeting it's my understanding that septic systems only produce a small percentage of the phosphorus load to inland nontidal waters, and the bigger pollution sources of phosphorus are sewage treatment plants, agricultural areas and stormwater runoff. It would be helpful to include estimates of phosphorus loads from various point and NPS pollution sources. The power point slides note that phosphorus from septic systems is not an issue as long as the systems are properly designed, installed, operated and maintained. Comprehensive management of decentralized sewage systems (septic systems, alternative treatment systems, cluster systems) would ensure the systems are properly designed, installed, operated and maintained. It is recommended that the state-wide strategy to reduce phosphorus loading in inland nontidal waters that is to be developed in accordance with P.A. No. 12-155 include recommendations about comprehensive management of decentralized sewage systems in accordance with EPA guidance documents (*Voluntary National Guidelines for Management of Onsite and Clustered (Decentralized) Wastewater Treatment Systems, Handbook for Managing Onsite and Clustered (Decentralized) Wastewater Treatment Systems*).

Based on presentation, phosphorus loading from public sewer systems seems to dwarf phosphorus loading from on-site sewage systems even though on-site systems serve 40% of the state's population. As such, it would appear use of decentralized sewage systems should be encouraged and public sewer expansions discouraged unless they are needed to address health and environmental problems that can't be addressed with on-site technology. The draft 2013-2018 Conservation & Development Plan includes recommendations that an objective public sewer need assessment protocol be developed, and this would help to reduce phosphorus loading by utilizing on-site sewage systems whenever possible.

The statewide NPS Management Program Plan is to be updated in 2013. Decentralized sewage system stakeholder organizations should be invited to participate in the update. DPH has a Code Advisory Committee (CAC) of decentralized sewage system stakeholder organizations, and DPH can distribute information on the plan update to the CAC members.

The statewide response to NPS phosphorus pollution reduction has a strong emphasis on stormwater best management practices (BMPs) and low impact development strategies (LIDS). It is critical that such practices and strategies be implemented with due consideration of on-site sewage disposal facilities and needs. Typical LIDS include on-site stormwater disposal, which in certain cases can hydraulically overload the receiving soil that the proper operation of the on-site sewage disposal system is dependent upon. Low impact development storm system retrofits on existing sites would be an activity that requires review and approval by the local director of health to ensure proper separation from the on-site sewage disposal system, and to confirm compliance with Public Health Code Section 19-13-B100a (B100a), which requires preservation of sewage disposal areas. In order to be approved by the local director of health, it would need to be demonstrated that the stormwater system does not eliminate a code complying septic area or potential septic repair area. It is recommended that the state-wide

strategy to reduce phosphorus loading in inland nontidal waters include a discussion about proper coordination with decentralized sewage system regulators on stormwater BMPS and LIDS.

A green infrastructure/LID conference is planned for 2013. DPH would like to be consulted in advance of the conference to ensure decentralized matters are properly addressed.

Phosphorus loading from antiquated on-site sewage systems in lakeside communities with small lots can be a concern, and it is recommended that the state-wide strategy to reduce phosphorus loading in inland nontidal waters include recommendations that the extent of the impairment from on-site sewage systems be further evaluated along with a review of pro-active pollution prevention techniques.

Comments prepared by Robert Scully, December 28, 2012