

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

DPH Environmental Engineering Program Comments on the LISS CCMP September 2014 Public Draft

Draft CCMP Update September 2014: The Environmental Engineering (EE) Program has not been able to sufficiently review this public draft, however the program submitted comments on a September 2014 Internal Draft that were sent to the CT Department of Energy and Environmental Protection (DEEP) under a July 16, 2014 cover letter (see attached document).

CCMP Update, Supplemental Document, Implementation Actions September 2014 Draft: There are four implementation actions (IAs), two of which are designated as priority actions (3 & 4 in below list) that are specifically related to on-site/decentralized wastewater treatment systems, and the following are comments on those IAs:

1. IA # WW-14 (Improved Policies for Decentralized Wastewater Systems): This action item references improved management of decentralized wastewater systems in accordance with EPA's voluntary guidelines, which is a policy that the CT Department of Public Health (DPH) has historically supported. Funding sources for this policy reference each state's SRF loan program, and this is in line with EPA recommendations that promotes use of CWSRF as a means for states to implement comprehensive wastewater system management programs, and EPA has been encouraging states to re-evaluate their CWSRF programs to ensure decentralized needs are adequately determined and sufficiently funded. This action item also encourages CT & NY health agencies to "discuss nutrient removal systems" and the performance metric mention incorporating local sewer districts, tracking installations, and replacement of conventional systems with decentralized systems. The wording in relative to these points needs to be clarified. It is assumed that the last metric is meant to concern replacement of conventional septic systems with nutrient reducing alternative treatment (AT) systems, and it must be understood that currently in CT, AT systems are not regulated by health agencies, but rather by DEEP. DPH has been advocating improved and comprehensive management of all decentralized wastewater systems that include conventional septic systems and AT systems.
2. IA# WW-15 (Improve Management of Denitrifying On-site Wastewater Systems): It's not clear why denitrifying systems are noted to improve nitrogen and pathogens, and it's recommended the wording be revised to note the promotion of greater use of AT systems and more appropriate use of conventional systems for improved wastewater renovation including nutrient and pathogen reduction. The noted cooperators & partners mention implementation of this action item at the local level, and research by an academic or consulting agency partner. State level agencies need to also be included in this list, and this action item cannot be successfully achieved with comprehensive decentralized sewage system management as discussed in IA# WW-14, and reference to such management should be included also in IA# WW-15.
3. IA# WW-16 (Modify Septic System Use & Siting Policies to Accommodate Climate Change/Sea Level Rise): The title of this action item needs to be expanded to cover all decentralized wastewater systems including AT systems, community systems, in addition to septic systems, especially since the action item text specifically mentions decentralized treatment plants, which are assumed to be AT systems serving individual properties and cluster developments. The project description cites the CT & NY state health agencies for being charged with working with municipalities to oversee and



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implement regulations for such systems and septic systems. See comments under IA#s WW-14 & 15 for comments about comprehensive management of decentralized systems and jurisdiction of AT systems in CT.

4. IA# WW-17 (Resiliency of Existing & New Wastewater Treatment Systems (Septic & WWTF) & Stormwater Infrastructure to Accommodate Sea Level Rise): The EE Program is in support of this action item, however LID/Stormwater Infiltration Programs need to be coordinated with on-site sewage disposal programs at the state and local level as discussed in the July 16, 2014 Internal Draft Comments.

Comments prepared by Robert Scully, Supervising Sanitary Engineer, EE Program, 11/13/14

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July 16, 2014

Mark Parker
LISS Coordinator
Bureau of Water Protection & Land Reuse
Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106

Re: LISS CCMP Internal Draft

Dear Mr. Parker:

Attached please find comments on the September 2014 Internal Draft of the Long Island Sound Study (LISS) Comprehensive Conservation and Management Plan (CCMP) prepared by Robert Scully of the Environmental Engineering Program. Thank you for the opportunity to review the internal draft. If you have any questions or concerns, please contact Mr. Scully directly at (860) 509-7296.

Sincerely,

A handwritten signature in black ink, appearing to read "Suzanne Blancaflor".

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

C: Ellen Blaschinski, R.S., M.B.A., Chief, Regulatory Services Branch



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DPH Environmental Engineering Program Comments on the LISS CCMP September 2014 Internal Draft

Section 1: The introduction mentions the billions of dollars in financial commitments made over the last 20 years to upgrade wastewater treatment plants in the discussion of accomplishments since the 1994 CCMP was approved. The following paragraphs provide a discussion of the challenges that remain and that have emerged. It is recommended that the introduction note that decentralized wastewater treatment systems (DWTSS) serve approximately 40% of CT's population and comprehensive management of these systems remain a challenge, which is a concern since almost the entire state of CT is in the LIS watershed. If this section is revised to mention DWTSS, it should be noted such systems include conventional septic systems, older antiquated systems such as cesspools, and alternative/package treatment systems, and it would seem appropriate to mention these systems are typically utilized in rural and low density suburban areas that lack public sewer infrastructure. It is noted that the DWTS is a defined term in the glossary, however no acronym is provided. Conversely, OSWTS (On-Site Wastewater Treatment System) has an acronym, but is not a defined term. DWTSS & OSWTSs are for the most part the same sewage treatment systems in CT.

Section 2: None

Section 3: Page 18 includes a discussion of the densely populated/developed Western Sound area, and it notes that the higher population contributes higher volumes of sewage to septic systems and cesspools. This is the first mention of septic systems and cesspools in the document. If DWTSS are not mentioned in Section 1 of the revised draft, it is recommended that the term be introduced in this section, along with the above noted comments.

Section 4: Page 24 includes a paragraph that starts out mentioning the damage caused by the storm surge of Superstorm Sandy, and the next sentence notes that wastewater treatment plants (WWTP) discharge over one billion gallons of effluent into the Long Island Sound (LIS) every day. It may be helpful to connect the two thoughts by noting the bypass of the millions (confirm) of gallons of untreated sewage from wastewater treatment plants into the LIS as a result of the storm. The paragraph also cites flooding impacts on wastewater (treatment) plants, septic systems, and stormwater systems that has the potential to release untreated waste into the LIS. It should be noted that the vast majority of untreated sewage discharges to the LIS caused by floods originates from WWTP, and as such, reference to septic systems in that sentence should be removed. Typically, floods render septic systems inoperable, and cause malfunction conditions. DWTS considerations should be mentioned in the climate change discussion. Sea level rise and storm surge impacts are matters that affect DWTSS.

Section 5: The strategic aspirations for the next twenty years should include improved working partnerships with local, regional and state organizations, both regulatory and non-regulatory, to achieve the desired outcomes. It should be noted that CTDOH is an acronym, listed to stand for CT Department of Public Health (CTDPH), but neither CTDOH nor CTDPH is utilized in the draft document. CTDPH along with its local health department counterparts play a vital role with public health and environmental protection.



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Section 6: Strategy 1-1b4 cites improved management of contaminants and nutrients from decentralized, package, and OSWTSs, and their impact on groundwater. As previously noted DWTSS is a broad category of sewage systems that include OSWTSs, and they may be conventional septic systems, primitive cesspools, or alternative/package treatment systems. It is recommended that the wording in this strategy be revised to cite improved and comprehensive management of DWTSSs, which will provide improved renovation of wastewater contaminants and nutrients to protect both groundwater and surface water. Objective 1-3c cites improvements to access and usage of information, databases, and resources and incorporation of data into management actions. It may be helpful to mention CTDPH in the collaborative efforts between LISS and partner organizations.

Table 1 includes various implementation action numbers (IA#s) that concern DWTSSs, and again various terms (septic systems, OSWTSs, packaged/decentralized, on-site septic systems) are used in different IA#s. The cited actions for improved policies, understanding and management, and climate change siting apply to all DWTSSs, and it is recommended that the other terms be replaced with DWTSSs. It is recommended that “comprehensive management” of DWTSSs be cited rather than just “management” of such systems to support broader management that is in-line with EPA guidance. IA# WW-11 cites the development of a nonpoint source and stormwater tracking system tool for the LIS watershed. DWTSSs are considered nonpoint sources of pollution; however it is not clear if the development of such a tracking system would include a system for DWTSSs. It is recommended that IA# WW-9 cite a collaborative LID program that works with DWTSS regulators.

Section 7: None

Section 8: It is recommended that CTDPH and local health officials be mentioned in Outcome 3-3. Outcome 3-4 cites sustainable and resilient wastewater treatment systems, and hopefully that means both centralized (sewers) and decentralized (DWTSSs) wastewater treatment systems. Outcome 3-4 references municipal comprehensive management plans. It would be helpful to encourage the development of a municipal template plan at the state level to ensure essential plan components are addressed. Outcome 3-5 cites infrastructure planning, which historically has been tied to public water and sewer facility planning. Local communities without public water or sewer infrastructure should be encouraged to undertake similar planning actions but with decentralized options considered. Decentralized sewage system planning should be supported at the state level as a proactive pollution prevention measure that municipalities should embrace. Table 3 lists implementation actions that include supporting communities as they develop and adopt municipal sustainability and coastal resiliency plans. These actions and the training and technical assistance on sustainability, adaptation, and resiliency concepts should include coordination with and support for state regulatory agencies involved with on-site sewage disposal. LID and green infrastructure initiatives should also be coordinated with on-site sewage disposal regulatory agencies to ensure preservation of code complying areas for wastewater generating buildings and to ensure stormwater infiltration systems don't negatively impact on-site sewage disposal systems.

Section 9: IA# SM-22 should include supporting involvement of and communication with state agencies (i.e., CTDPH) in addition to local governments. IA# SM-28 concerns capitalization of CWSRF to adequately finance clean water needs, and it should be recognized that EPA has been encouraging states to re-evaluate their CWSRF programs to ensure decentralized sewage needs are adequately determined and sufficiently funded.

Section 10: None

Section 11: This section has yet to be completed.

Glossary & Acronyms: See comments under Section 1 and Section 5.

Comments prepared by Robert Scully, Supervising Sanitary Engineer, EE Program, 7/16/14