

Environmental Engineering Program (EEP) Comments Included on the LISS CCMP Review Feedback Form

The DPH in conjunction with Local Health Departments regulate the vast majority of on-site sewage disposal systems in CT, and it is estimated that these decentralized sewage systems (DSSs) serve approximately 40% of the state's population. The EEP is the primary program that administers the Department's sewage disposal codes. The EEP supports revisions to the CCMP to reflect the changes in attitude that have occurred over the last 20 years about the role DSSs play in domestic sewage treatment and disposal, and to stress the need for proper management of DSSs to ensure these systems are protective of public health and the environment. The EEP also supports revisions to the CCMP that promote and advocate decentralized sewage system (DSS) management in accordance with EPA's 2003 Management Guidelines entitled *Voluntary National Guidelines for Management of Onsite and Clustered (Decentralized) Wastewater Treatment Systems*. The EEP recommends that the CCMP recognize the important role DSS management plays with other public health and environmental protection programs (drinking/source water protection, nonpoint source management, TMDLs, UIC, stormwater/LID, CWSRF/319 grants, CAM/LIS, etc...), and recommends the CCMP make the linkage between DSS management and these other programs to better integrate the state's efforts in meeting its public health and environmental protection goals.

Attached are comments I prepared in 2008 on a proposed consultant study of DSS issues in CT. Although the study was never undertaken, the comments further discuss the Department's support for comprehensive DSS management, and they reference the DPH's public health and water pollution control statutory authority over on-site sewage disposal, and the comments also cite DSS permitting regulations and land use regulations that are intended to ensure development in non-sewered areas does not exceed the capacity of the land to handle wastewater generated. The attached comments also cite various DSS stakeholder organizations, and the EEP encourages the CCMP revision work group to reach out to those organizations to solicit their input on the plan revision.

The EEP has also generated comments on CT's CWSRF program to encourage support for improved and comprehensive DSS management that would provide for a proactive pollution prevention approach for DSSs that is in-line with relatively new EPA positions and strategic plans. Those communications and comments on other related programs (i.e., TMDL) further discuss attributes of, and barriers to, DSS management, and the linkage to other public health and environmental protection programs. The CCMP should acknowledge that EPA 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 should be a goal of the CCMP, and is mentioned in the attached EPA MOU document. For the last 15 years in CT, DSS management with use of CWSRF has been limited to a handful of shoreline communities through the establishment of Decentralized Wastewater Management Districts, which has not advanced DSS management at the state level or for remaining areas in the state.

The CCMP should recognize the points and principles in EPA's 1997 *Response to Congress on Use of Decentralized Wastewater Treatment Systems*, and make note that the report stated "Adequately managed decentralized wastewater systems are a cost-effective and long-term option for meeting public health and water quality goals." The EPA report to Congress also acknowledges that inequitable funding and institutional biases have historically hampered DSS management. The CCMP should cite implementation of the management components of EPA's 2003 management guidelines as goal to ensure DSSs are adequately managed. Other state guidance documents have avoided the discussion of comprehensive DSS management and down played its importance. The CCMP should recognize that the state needs to take a lead role in order to achieve improved DSS management. Unfortunately, many state guidance documents equate DSS management to periodic maintenance/pumping, and infer that it is mainly a local issue by simply encouraging local communities to consider adopting a DSS pump-out program.

The CCMP draft outline dated 9/18/13 includes a subsection with bulleted points as to why the CCMP is being revised and it makes note of emerging issues (climate change, stormwater runoff, impacts of development and land use) and how they will be addressed, and new management initiatives (green infrastructure & LID, etc...) and planning. The fact that DSS management is not cited in the draft outline leads me to believe that its importance will be down

played in the revised CCMP. Hopefully there will be additional opportunity to elevate DSS management so that it receives the attention it deserves. The CCMP should include a discussion of each of the EPA recommended DSS management components as ultimately all of them can affect system performance and pollutant renovation. Planning is a component of DSS management, and the CCMP should include a discussion on regulatory barriers that discourage sensible development that makes the best use of the land and that avoids sprawl.

Although DSSs are considered green technology by EPA as noted in the attached EPA MOU documents, CT has been equating green infrastructure to stormwater systems. It appears stormwater and LID initiatives are rapidly becoming a priority for CT, and the CCMP should include a thorough discussion as to why such programs and initiatives need to be coordinated with DSS regulators at the state and local levels. DSS regulations require sewage disposal area preservation so adequate area is maintained to ensure wastewater producing buildings can install the most code compliant sewage disposal system as possible. In addition to ensuring preservation of sewage disposal areas, stormwater systems must also be sited to avoid negative impacts to the existing DSS. A goal of the CCMP should be to further coordinate stormwater/LID and decentralized programs.

The CCMP should make a connection to the recently adopted 2013-2018 Plan of Conservation and Development (C & D Plan), and include goals related to specific outcomes cited in the C & D Plan. The C & D Plan encourages the development of an objective sewer need assessment protocol so that a determination can be made as to whether wastewater and community pollution problems can be solved by on-site solutions or if sewers are the most appropriate and cost effective solution. The protocol should be scientifically defensible. The C & D Plan also discusses induced growth controls to ensure water and sewer infrastructure installed to correct pollution problems in non-designated growth areas is done at a scale that does not subsequently induce growth that is not desired in environmentally sensitive or preservation areas. A goal of the CCMP should encourage state agencies with input from municipalities and stakeholder organizations to develop induced growth controls that can be enforced uniformly and meet the desired outcomes of the C & D Plan. The C & D Plan also no longer references the previously recommended 2-acre minimum buildable area lot size for residential buildings constructed on public water supply watersheds. The CCMP should encourage additional discussion on appropriate building densities for areas relying on DSSs so that code requirements can be established to ensure proper renovation of domestic sewage.

Objective 1-1b concerns the reduction of nutrient and contaminant loads from non-point sources, and Strategy 1-1b4 cites an improved management of contaminants and nutrients from DSSs. As previously noted, the EEP and the DPH support comprehensive DSS management that is modeled after EPA guidance. This would ensure systems are not only properly designed, sited, and maintained, but would address other management components (training, planning, enforcement, funding matters, etc...). The CCMP should encourage state agencies to address the lack of administrative controls and standards for alternative sewage treatment systems.

Objective 1-3b concerns research, monitoring, and water quality assessments for pollutants. The CCMP should recommend DSS regulators be kept in the loop on items related to DSSs.

Comprehensive DSS management needs to become a higher priority, especially considering the extent DSSs are used in CT, and the role they play in ensuring protection of the LISS, water resources, and the environment.

Climate change (Sea level rise, storm surges) discussions and initiatives should also include DSS considerations.

Projects (Education, sanitary surveys, BMPs, etc...) concerning DSSs should be coordinated with DSS regulators.

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P/RWS/CCMP Comments