

Decentralized Sewage System Resiliency Planning

Many areas of Connecticut do not have access to public sewers, and they rely on decentralized sewage systems (DSSs) to dispose of their wastewater. The vast majority of DSSs in CT are septic systems; however they also include community sewerage systems and alternative treatment systems. DSSs serve approximately 40% of CT's population, and more than 75% of the state's land area relies on DSSs for wastewater disposal. Public sewer systems serve urban areas and higher density suburban areas; while rural and low density suburban areas predominately use DSSs.

Climate change has the potential to impact areas in CT that rely on DSSs by changing the landscape and reducing the carrying capacity of the land to dispose of wastewater in a matter that is protective of both public health and the environment. This is especially a concern in coastal areas and other areas where sea level rise and storm surges can dramatically alter the land that DSSs rely on to disperse wastewater in a sanitary manner. Six shoreline municipalities dispose of almost all their wastewater through DSSs, and many other coastal areas have homes and businesses that do have access public sewers. These at risk communities need to better understand the climate change challenges moving forward and need for resiliency planning. The University of Rhode Island's New England Onsite Wastewater Training Center recently prepared a presentation entitled *Soil-based Onsite Wastewater Treatment and the Challenges of Climate Change* that makes this point (See URI Attachment).

Currently in CT, decentralized sewage system planning is typically only accomplished through the municipal facility planning process when a local community is trying to address a community pollution problem. Although President Obama in the 2013 Climate Action Plan identified the Clean Water State Revolving Fund (CWSRF) programs as a key tool for climate change preparedness, in CT these funds are not available for decentralized sewage system projects unless it is in conjunction with a Decentralized Wastewater Management District (DWMD) established pursuant to CT General Statutes Section 7-245 through 7-247. Such districts are established to address community pollution problems rather than to deal with resiliency planning, and currently only the Town of Old Saybrook has established a DWMD that has implemented a multi-year project that ultimately will upgrade approximately 1900 DSSs. The Town of Old Saybrook Environmental Planner, Sandy Prisloe prepared a presentation entitled *Climate Change Issues and Challenges for Municipalities* (See Old Saybrook Attachment) that depicts climate change impacts to Old Saybrook's coastal area including those areas in their DWMD.

CT Municipalities that rely on DSSs should be encouraged to undertake resiliency planning, and such efforts should be supported with financial incentives. A handful of CT coastal municipalities have begun resiliency planning, and one, the Town of Guilford, has a Coastal Resiliency Plan. David Murphy, PE with Milone & MacBroom recently prepared a presentation entitled *Coastal Resilience for Wastewater Systems* (See M & M Attachment) that highlights the need for resiliency planning as it relates to DSSs. CT policies support actions that address climate change; however lack of access to funding opportunities has hampered resiliency planning initiatives in areas relying on DSSs.

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