

New York's Current Environment Regarding Decentralized Wastewater Management

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This is my second piece focusing on the topic of decentralized wastewater (septic system) management. In this article I want to express to you the past and future trends regarding decentralized (septic) system management in New York. I will discuss what many professionals in the field feel

are necessary components required to have an effective local septic system management program. Finally, I will discuss how an effective septic system management program can tie into ones source water protection program.

Unlike many states, New York does not have a standardized system to manage septic systems. Currently in New York, there is a minimum level of septic system management that falls under the purview of local county health departments or NYSDOH district offices. Health departments regulate the installation of new systems and sometimes effectively regulate the replacement of failed septic systems. This came into effect statewide when the design standard of Appendix 75-A was put into public health law in 1990. The problem is that the majority of septic systems currently being utilized in New York were installed prior to 1990. Without health department oversight, many systems were installed in poor soils, systems may not have been sized correctly, or systems may have been installed within what is considered now "minimum separation distances" from sensitive areas (waterways, wells, ditches, etc). The NYSDEC 2004 305B report to Congress, (required statewide assessment of all surface waters) indicates that roughly eight percent of all rivers and streams that are not meeting their respective designated use are being negatively impacted by failing septic systems. The same report indicates that seven percent of all lakes and reservoirs are being impacted by failing septic systems. Excluding anomalies with some localities, this information indicates there is a statewide gap in regards to holistic septic system management.

All is not lost though. There is a strong movement in New York by USEPA, NYSDOH and NYSDEC to put information into local governments' hands to improve the management of septic systems. The New York State Nonpoint Source Coordinating Committee, comprised of representatives from the federal, state, and local level, have created an onsite wastewater group to address local septic system management. This group has identified and is trying to promote a number of concepts that will improve management. The main concepts being promoted are; 1) Promote existing local programs that seem to be working, 2)

Educate local decision makers and homeowners, 3) Promote new cost effective technology that will work for unsuitable soil conditions, 4), Create accepted training for installers and regulatory officials, and 5) Improve current regulations so there is a framework that is accepting to new technologies. The onsite wastewater group is using a variety of outlets to push these concepts to local decision makers, installers, and regulators.

Let's take a closer look at the concepts that are being promoted and give examples of each.

1. Promote existing local programs that seem to be working: One example of a local management program that is currently functioning is the Town of Huron's (Wayne County) septic system management program. The Town of Huron passed its final version of its "Septic Law" in 2002 after realizing that failing systems were impacting water resources. In New York, towns have authority to pass local laws under the state's Consolidated Laws "Municipal Home Rule Law". Section 10(1)(ii)(a)(11) state that a municipality may adopt local laws for the "protection and enhancement of its physical and visual environment." The Town of Huron's Septic Law sets the circumstances and criteria for required septic system inspections, and sets the circumstances and criteria for upgrading and the replacement of septic systems. Newly constructed systems must follow NYSDOH's Appendix 75-A as is required by all other areas of the state. It must be said that this local law met much opposition which led to some local leaders losing their positions on the Town Board. This is often the case when any new local law or change in zoning is proposed in rural New York which may impact people financially, even if in the long run the change is for the best. A copy of the Town of Huron's Septic Law is available as a PDF file at www.nyenvlaw.com/huron/septic.htm

2. Educate local decision makers and homeowners: Education of homeowners on the topic of septic systems has and continues to be done by a number of groups. First and foremost, Cornell Cooperative Extension has been providing materials at a low cost for anyone wanting the information. There are a number of other outlets that provide information to homeowners, technical assistance providers, and regulators such as EPA's Office of Wastewater, National Small Flows Clearinghouse, as well as, a number of other state's land grant universities. The majority of these outlets are funded federally for the purpose of providing their respective information free of charge.

Recent changes to outreach material, that's available to general public, have been information focusing on community leaders. These resources are focusing on processes such as local laws, zoning overlays, and the subdivision review process that local municipalities have as power in New York. Local governments being charged with the task of protecting the public health of their constituents can use these tools to manage septic systems. The New England Interstate Water Pollution Control Commission has put together a packet (called "Protecting Drinking Water Sources in Your Community: Tools for Municipal Officials") for community leaders that includes information on septic system management. This product is also available as a PDF file at www.neiwpcc.org.

3. & 4. Promote new cost effective technology; Create accepted training for installers and regulatory officials:

These two categories can be grouped due to the fact that there is an organization that has been formed, the New York Onsite Wastewater Treatment Training Network (commonly referred to as OTN), to deal with those very issues statewide. Comprised of vendors, installers, regulatory officials, and technical assistance providers this organization provides training sessions on various topics such as an inspections course, a designer's course, as well as, courses focusing on alternative septic system solutions (new technology). OTN has been adopted by the NYSDEC, NYSDOH, and NYSDOS as a statewide leader in training regarding septic systems. Information on their organizations and training can be found at: www.delhi.edu/corporateservices/otn_wastewater_programs.asp.

5. Improve current regulations so there is a framework that is accepting to new technologies:

As mentioned before, the last rendition of public health law that applies to septic systems was put in place in 1990. Technology related to septic systems has grown by leaps and bounds in the last 15 years, and unfortunately, regulations were put in place that do not easily allow for the use of new technology to solve problems associated with poor existing soils or small building lots. The use of improved alternative system technology will give the consumer more choices, may have a cost savings, and may offer better nutrient and pathogen removal from wastewater leachate. The NYSDOH is currently making changes to Appendix 75-A, and to the best of my knowledge, are putting provisions in place that encourages the use of alternative septic system technologies.

So how does this tie into source water protection? Its known throughout the state that the majority of septic systems currently in use are older than when Appendix 75-A was established. It's then safe to assume that a good portion of systems in the state are not either sized correctly, they are installed in improper soils, they are installed without safe separation distances from drinking water sources or water

sources period. As mentioned before, this should be a concern, especially for those water system managers who have a number of septic systems within their respective source water protection area. The majority of surface water supply source water protection areas in New York rely entirely on decentralized wastewater treatment for both residential and commercial land use. It must be noted during the contaminant inventory process of source water protection planning, septic systems are almost always considered potential sources of contamination.

So what can you as, water suppliers, do regarding septic systems within your source water protection areas? I would encourage water supply managers (most cases water operators) to inquire to local code enforcement officers and their respective health departments on how septic systems are managed in their source water protection areas. If any water system is interested in this topic please contact me for resource information or a sight visit. 💧