

WASTEWATER MANAGEMENT PROGRAM

WWW.OSWPCA.ORG

*Maps of Wastewater
Management District
& Focus Areas*

*Wastewater Management Pro-
gram and Public Education
Materials*

Frequently Asked Questions

Legal Documents

Meeting Minutes

DEP Correspondence

Links & Contact Information

The information in the first paragraph was taken from the March 2003 EPA booklet titled: "Voluntary National Guidelines for Management of Onsite and Clustered (Decentralized) Wastewater Treatment Systems"

For additional information visit the EPA Office of Wastewater Management website page at www.epa.gov/owm/

Upcoming Events:

*Community Meetings
Civic & Professional
Organizations, & Town
Agency Roundtables
Summer Public Hearings*

***AUGUST 2009*
*REFERENDUM***

WHY DOES THE DEP SAY THAT MY SEPTIC SYSTEM IS POLLUTING?

According to the EPA, septic systems are the second biggest contributor to groundwater pollution. Statistics across the country show that approximately 10% of systems fail annually and 20% are malfunctioning in some way. With 4 billion gallons of wastewater dispersed below the ground daily, poorly maintained systems pose not only environmental threats, (nitrogen and phosphorus) but also significant public health concerns with the introduction of viruses and bacteria to surface water or drinking water wells.

The engineering studies and the DEP identified the 15 focus areas in the proposed wastewater management district over 20 years ago as "areas of concern." There are several reasons for this.

- Some of the areas are low lying, or with close proximity to surface waters, and have a shallow depth to groundwater. Indeed some of the systems' components are in the groundwater or become saturated during high tides or storm events.
- Many of the locales are densely populated, with lots that are too small to effectively renovate the wastewater; have enough room for adequate leaching area.
- Some of the soils are inadequate for proper percolation to allow the removal of bacteria, viruses, and nutrients.
- Many of the systems are old (some 30-40 years) with non-compliant components like: drywells instead of properly sized leaching systems, undersized tanks (300-750 as opposed to 1000 gallon),

single compartment instead of 2-compartment tanks, lack of effluent filters, missing baffles, cess-pools, steel tanks, and a few homemade specials!

If these reasons why some septic systems are polluting the groundwater in Old Saybrook, aren't compelling enough, the WPCA has done sampling over the years....



Groundwater Sampling cont'd on pg. 2

From 1996–2006 Old Saybrook hired CEI (Cummins Envirotech Inc.) to monitor 84 micro wells that were installed throughout the 15 focus areas. While the results were not evidence of gross pollution there were hits in each sampling event. The data from the

program varied considerably from location to location and sometimes at the same location at different times.

The samples were taken during the different seasons and showed evidence of: shallow groundwater, (particularly in Chaiker Beach, Indiantown,

and Saybrook Manor), nitrogen, varying from zero to 30mg/1 as N, ammonia, and fecal coliform. Although it is arguable that some hits may be due to lawn fertilizer use (a "No No" especially near the shore and River I), and animals, the engineers maintain that the

GROUNDWATER SAMPLING CONT'D

The information on the Groundwater Sampling program was obtained from the OS Wastewater Facilities Plan, Section 4: Pgs. 17-19. The Report can be reviewed at the Acton Public Library or in Town Hall.

"Improperly constructed and poorly maintained septic systems are believed to cause substantial and widespread nutrient and microbial contamination"

This information on managing a wastewater program is excerpted from the March 2003 EPA booklet titled: "Voluntary National Guidelines for Management of Onsite and Clustered (Decentralized) Wastewater Treatment Systems"

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ammonia results point to human impact. This means raw wastewater discharged from septic systems into the groundwater.

The Connecticut Water Quality Standard for fecal coliform (bacteria found in the gut of warm blooded animals) is zero. That means there should not be bacteria in good quality groundwaters. The sampling did find fecal coliform in the majority of the microwells at one time or another. Although most of the hits have shown less than 100 colonies, some have been in the 1000s which

could be attributed to the highly permeable soils. These soils do not allow for sufficient removal mechanisms to prevent pathogens from entering the groundwater.

The conclusion drawn from the groundwater sampling is that: **treatment of the effluent is inadequate in many cases, is degrading the groundwater, and does not protect the environment.**

This groundwater monitoring was discontinued in 2006, after the DEP and WPCA mediation process. The DEP and WPCA con-

cluded that enough data was compiled and the funds were best directed towards the planning phase of the Decentralized Wastewater Management Program.



Great Blue Heron

WHAT ARE THE BENEFITS OF AN ONSITE WASTEWATER MANAGEMENT PROGRAM?

Although it is difficult to measure and document specific cause and effect relationships between onsite wastewater treatment systems and the quality of our water resources it is widely accepted that improperly managed systems (resulting from inadequate siting, design, construction, installation, operation, and/or maintenance) contribute to major water quality problems.

Benefits of a management program are realized by both the communities and the individual property owners. They include the following:

Protection of public health and local water resources Septic system failures in the form of yard backups have been recognized as a

public health hazard and insult to natural resources. Improved management practices minimize the occurrence of failures and ensure that pollutants are adequately treated and properly dispersed.

Protection of property values Management programs offer an opportunity to obtain the same level of service and aesthetics as sewered communities at a fraction of a cost, thus providing property appreciation and cost savings.

Groundwater conservation A well managed onsite system will contribute to groundwater recharge, as opposed to the declining water tables and water shortages experienced by over developed and sewered areas.

Preservation of tax base

A well-managed onsite program will prevent small communities from having to finance the high cost of centralized sewers. Many small communities have exhausted their tax base at the expense of public safety and education, to pay for the sewers. They then entice growth to increase the tax base, sacrificing the small town character that attracted residents originally.

Life-cycle cost savings

There is a clear indication that in many cases management may pay for itself in terms of lower failure rates and alleviate the need for premature system replacement.