

Wastewater Forum Flush With Ideas For Improvements

By Bill Lawyer

Amazing as it may seem, 85 people from around Westchester County showed up by 8:30 a.m. at Pace University in Pleasantville last Friday to attend a Conservation Café forum on “wastewater” (i.e. sewage).

The program, entitled “After The Flush – Westchester’s Wastewater and the Environment” attracted a broad cross section of people, including environmentalists, educators, naturalists, engineers, municipal conservation advisory council members, teachers, high school students and the general public.

What brought them there? Well, maybe it’s the fact that taxpayers in communities along the Long Island Sound Shore are going to be paying significantly higher taxes to cover the cost of upgrading wastewater treatment plants.

Or maybe that even with upgraded plants, when heavy rain falls, untreated or only partially treated sewage gets flushed right into the sound.

Or maybe it’s because improvements to the wastewater treatment system infrastructure are “shovel ready” projects that can qualify for stimulus package funds and get the local economy growing again.

Speakers at the event included County Commissioner of Environmental Facilities Thomas Lauro, the County’s Watermaster Gina D’Agrosa, and environmental activists Nancy Seligson of Save The Sound and Josh Verleun of Riverkeeper.

Participants learned about the evolution of the county’s wastewater treatment from basically nothing at the turn of the 20th century to its current system whereby over 90% of all county wastewater is piped to and treated by seven plants located on the Hudson River and Long Island Sound.

Modern sewage treatment is in effect a form of biomimicry, using organic processes to remove hypoxia causing nutrients and dangerous bacteria.

Stormwater systems get heavily polluted by litter, animal wastes and vehicle exhaust residue, but stormwater goes directly to the Sound and Hudson untreated in most of the county.

One potentially dangerous problem is that people and even medical facilities dump unused medicines into the wastewater treatment systems, even though current systems are unable to deal with them.

While only about 4% of the wastewater goes to septic systems, located mainly in northern Westchester, those systems are notorious for not being maintained properly and contaminating drinking water supplies.

On a positive note, Mr. Lauro stressed that the County is working hard to get the effluent that is released into the Hudson or Sound as nitrogen free as possible. And, they are attempting to “green” the wastewater treatment process, by collecting methane gas from the wastewater and use it to provide the energy needed to treat the wastewater. They are installing solar panels to further support the treatment operations, as well.

Ms D’Agrosa also highlighted the County’s efforts to collect information on all septic systems in the county and monitor them to make sure they are functioning properly.

During the second-half “conversation” period of the forum, the questions and suggestions “flowed” from the audience. Some of the points raised included:

- While the cost of wastewater treatment seems high, when considered in terms of usage it comes out to “less than a penny a flush.”
- A Japanese engineer who designs wastewater treatment facilities in Tokyo and Osaka commented that they have generated hydroelectric power from the flow of the wastewater to the treatment plants.
- The primary threat to the Sound and the Hudson comes from the fact that during heavy rains stormwater gets into the wastewater pipes and results in overloading them so that untreated or only partially treated sewage gets flushed into the sound. One solution is to build large underground holding tanks that would delay the release of stormwater during heavy rains.
- There are many things that everyone can do to help. These include limiting water use during rainstorms, reducing runoff from homes with drywells and semi-pervious driveways and walkways, reducing the use of nitrogen rich lawn fertilizers, and planting more trees and shrubs to takeup rainwater. Green roofs were also suggested.

Noting the number of students in the audience, Commissioner Lauro urged them to consider studying engineering, as he said that “the future of the world’s water quality depends on designing and managing sustainable treatment systems.”