

DRAFT
TOWN OF OLD SAYBROOK
WATER POLLUTION CONTROL AUTHORITY
302 MAIN STREET
OLD SAYBROOK, CT 06475-2369
Saybrook Manor, Plum Bank, and Great Hammock Beach

Wednesday, July 8, 2009

The Town of Old Saybrook Water Pollution Control Authority met on Wednesday, July 8, 2009, in the Old Saybrook Middle School at 60 Sheffield Street, Old Saybrook, CT to conduct a Public Education Session on the Decentralized Wastewater Management District program for the neighborhoods of Great Hammock Beach, Plum Bank, and Saybrook Manor.

I. Call to Order

The meeting was called to order by Chairman Pavel Wilson at 7:00PM.

II. Introduction of WPCA and Staff

Chairman Pavel Wilson, Elsa Payne, George Gwizd, Mike Evangelisti, Chuck Wehrly, Doris Zumbroski, Don Lucas, WPCA Coordinator, Robbie Marshall, WPCA Info. Specialist and members of the public were in attendance.

III. Public Information Session for Great Hammock Beach, Plum Bank, and Saybrook Manor

Chairman Wilson discussed some comments that were made at previous public education sessions. He addressed the comment that the Town had 30 days to appeal to the court and did not do it. The administration felt having been defeated at every court appearance, that it was too expensive to continue to appeal and lose.

There are also comments being made that there is no pollution and there never was. We have 29 pages in our Facilities Plan that document that. We'll be the first to admit that there is not gross pollution, but never the less there is pollution. At the June 17th Public Hearing a resident asked the DEP representative what is the definition of pollution. His answer was any elevation above the baseline is considered pollution. The DEP Commissioner has the authority granted by the CT State Statutes to order the pollution be cleaned up.

Coordinator Don Lucas presented the Great Hammock Beach, Plum Bank, and Saybrook Manor maps and PowerPoint slides.

IV. Questions and Answers

Q: How is the nitrogen measured?

A: The DEP said water proximity lots need to reduce nitrogen coming out of the systems by 50%. Engineering studies and guidebooks have shown that the average wastewater stream contains about 40 milligrams per liter. So we're looking at getting it down to 20 milligrams per liter or less. Some AT systems have a sample port at the end of the treatment unit. Others can have a lysimeter installed which samples the leachate.

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Q: Is it a measurable parameter?

A: Yes.

Q: Are we achieving that now?

A: The DEP has made the assumption that standard septic systems on the water are not achieving that level and need to be upgraded.

Q: You made reference to the fact that the central plant was taken off the table. When, how, and by whom?

A: One of the Town's policies is "Sewer Avoidance." This is supported by the Town's Plan of Conservation and Development. So when we went to mediation with the DEP we told them we did not want to put a sewer system in and they agreed but required a cost comparison (onsite vs. central) for the purpose of the study.

Q: Has any other town ever come to this point with the DEP?

A: No.

Q: Has the DEP ever forced a Town to install a sewer plant?

A: I don't know for a fact, but I would say yes. They sewer a lake in East Hampton by order of the DEP.

There was continued discussion on whether or not the DEP would carry out their threat of enforcement. We not only have 2 letters from DEP but we are under 2 court orders.

Q: If we vote this down would we have to put the sewer issue back on for discussion?

A: It would not be up for discussion. It goes to the DEP and the DEP could go to the court and order us to put in the central plant and take our future options away from us.

Q: This handles 1900 properties and it costs \$45 million. Divide \$45 million by 1900 and tell me how much that it per home. 50 million divided by 2000 is \$25,000 per home. How are you getting these numbers? There is nobody going to pay \$25,000. Everything you put up here. This is the big dig in Old Saybrook. Like what they did in Boston. None of the numbers make sense. Every single one of those dollars comes from us taxpayers. That 50%. What do you think; it falls out of the sky? Continued discussion on the numbers.

A: What is \$70 million divided by 1900?

Q: The sewer system will take care of every single home in town.

A: No it will not. It would include the commercial properties on Route 1; about 2500 properties.

Q: How much more would it be? It's not going to be another \$70 million to do the whole town.

A: We came up with \$45 million based on the maps that were developed in 2003. We did not do a lot-by-lot analysis at that time. We looked at aerials of the beach areas, the size of the lots and estimated what type of upgrades would be needed. We estimated 458 AT systems, costing \$20 - \$28,000. Since that time we have gone through all the files in the district, reviewed whatever information was available on each lot. With the advances in the subsurface disposable units, now you can treat a 2-3 bedroom house in the area in which you can park a car. If you have a 6 X 20 area you can put in a septic system that will treat a 3 bedroom house. That technology did not exist in 2003. The 458 AT lots should be less than 300. So because of the advances the repairs on the individual lots should cost less.

Q: So why are you telling us \$45 million?

A: I can tell you in about a week. The reason I say that is because we just finished the Saybrook Manor map this week. The intention is that we can now tally up the number and types of upgrades and provide a better estimate. When we came up with the numbers last Fall, we used what we had and came up with a worst case scenario. It's going to be a lot easier to come in lower than ask for more money. It could be significantly less. Whether the money comes from the Town or the Clean Water Fund it's still all of our money. But the option we have is ½ a mill for an onsite solution or over 2 mills for a central plant.

Q: The town is taking all the burden and saying let all the beach owners pay for it. And for some reason Fenwick was left out. If you look at the advanced technology your advocating, it is definitely new to CT. The costs are going to be higher than that because people aren't trained in it. Then you're going to have a mini treatment plant in your backyard. It's interfering with our property. It seems to me if the community had an opportunity to choose between this alternative which has so many unknowns vs. a treatment plant to treat the entire town you might find there's a different vote than what you're assuming.

A: Some of these systems are nothing more than a compressor that puts air into the leachate to change the nitrogen cycle so that we achieve our 20 milligrams per liter of nitrogen into the groundwater. Those are the worst cases we anticipate.

There was a discussion about the marketability of the properties.

A: As far as sewerage the whole town, we can't sewer the whole town for a couple of reasons. In order to qualify for federal or DEP funding for a sewer project any area that is proposed for a sewer requires a study that is approved by the DEP. And you have to demonstrate that there is a need for the sewers to be installed. We've done the study for the 15 focus areas. We haven't done studies for anything north of Route 1 and 95. Those areas do not qualify for assistance from the State or federal government and cannot be sewerage under either program right now. You could do a study and then run into the issue of a sewer plant discharging into the CT River.

Q: What they fail to tell you if you agree with this referendum is that the Town is going to tell you exactly what you have to do with your property. They are going to tell you what's going to be done, who's going to do it, and what it's going to cost.

Q: Is this a Question and Answer session or an opportunity for people to get up on their soap box?

A: In regard to what happens on your lot; either myself or another representative from the WPCA will meet with each individual owner and present the information we have on file on your system. If you have better information from a pumper or repair, give it to us; the more information there is, the better off we all are. We will review the information; for example a 750 gallon single compartment tank and a dry well. The groundwater in the area is about 6 feet down. Dry wells are between 6 and 8 feet tall. So you're into the groundwater. The criterion for the program is the bottom of the system has to be 24" above groundwater. So our recommendation would be to replace the tank with a 1000 gallon 2-compartment tank and use a shallower leaching component. We'll meet with you and ask where you want the tank and leaching. We're not going to do this arbitrarily; it's your property.

There was a discussion about where the system would go and the appeal process.

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Q: You would use your contractor.

A: The way the Clean Water Funds are disbursed is that they cannot go directly to a homeowner. So we would put this out to bid, bundle lots together, and achieve economies of scale by getting discounted rates on components. We would prepare the sketches for 6 or 8 houses and get proposals from contractors to upgrade the systems.

Q: What about the maintenance fee?

A: If you have an advanced treatment system there would be an annual maintenance fee depending on the complexity of the system. We anticipate about \$600-800 per year. The sewer user fee is about \$500 per year.

Q: Is it possible for a homeowner to receive training and certification to do their own maintenance?

A: Yes. It is possible. You would need a subsurface disposal installation license from the state, then you'd have to meet the criteria and training for that unit, and you can become a service contractor.

Q: Is it the same training a service contractor would have to go through to be licensed?

A: Yes.

Q: The website shows my property is supposed to have an AT system. So which is it?

A: The maps will be put on the website tonight. We just finished the map today.

Q: The Town and the Clean Water Fund are going to pay 25% each.

A: The contribution of the Town is going to be in services; the engineering, design, handling the funding. A contractor might say it's \$7500 to put the system in the ground. On top of that is another \$2500 for the engineering and design, so it's a \$10,000 system. The CWF will pay \$2500, which leaves a balance of \$5000.

Q: Plum Bank has 2 town beaches and both of them are going to require AT systems. Can the Town put in AT systems early, like next year, so the Town and the residents get a chance to see the AT system operational in the State of CT for the first time and see if they really work? Are they going to drop the nitrogen load by 50% and if there are any problems before homeowners start putting in 15 – 20 grand so we don't feel like complete guinea pigs?

A: Yes. It's possible the Town can install those early after the ordinance is passed and the delegation of authority for AT system permitting is granted to the WPCA.

Q: In past meetings they had systems with vents going above the surface and use plastic rocks to disguise them. Upon looking online I discovered information on Orenco (and forwarded it to you). This is a good system for seasonal residences because you can shut them down without having to start them up by feeding them. It uses no electricity in the winter and starts right up in about 24 hours. Are any of those systems going to be given to the homeowner as options or just the recirculating sand filters?

A: We have met with Barnstable County representatives on Cape Cod; they have 1400 systems installed now. We have met with Pinelands New Jersey, Putnam County New York, and Anne Arundel County Maryland who will be replacing about 40,000 systems in the next few years. We've been receiving information from them, especially in respect to seasonal applications; which function well seasonally and which don't. Our intention is to create a short list of 3 or 4 systems that are suitable for our uses and area.

Q: What is the rough depth to groundwater at the Cornfield Point area of Plum Bank?

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A: Probably 24-30" adjacent to the road.

Q: Is there a procedure for how the depth to groundwater is determined?

A: The Public Health Code defines seasonal high groundwater as the level to which the groundwater rises for at least a period of 30 days. We have had sample wells in many of the areas in town and septic repairs so we have the data. But the best way is to excavate until you reach mottling which is soil discoloration indicating the highest level the groundwater reaches. Early on in the program we installed 23 wells in Chalker Beach and measured the groundwater in respect to the tides. The tides rise about 3 feet; which only impacts the groundwater 3 inches.

There was discussion about groundwater levels in different locations.

Q: What is the amount needed for leaching?

A: For a 3-bedroom house you need 495 square feet. The program calls for 2/3 of that so you need at least 330 square feet.

Q: How did DEP come up with the pollution figures?

A: The town did some studies back in the 70's and the 80's. There were a number of engineering reports that were based on pumpouts and repair frequencies and evaluations by the Town Sanitarian and the DEP. Those were the initial determination of the focus or study areas. Those studies resulted in Court orders to correct the pollution problems according to the DEP. We went to court and lost twice, as Pavel says the DEP's position is that any level above background level is considered pollution.

There was a discussion on nitrogen level and testing.

Q: Is the \$28,000 the cost for purchasing the components, installing them, anything else?

A: And engineering and design.

Q: It looks like it's costing the homeowner 75%.

A: No. The Town will pay for engineering and design.

Q: So the 28K will include more than just installation and components.

A: Yes.

Q: Are there electrical costs?

A: Most of the AT systems cost about \$1 a day.

Q: You mentioned that you have secured a 2-year commitment from the Clean Water Fund. Have you submitted an application to the DEP for years 2010-2011?

A: No we haven't submitted the application yet.

Q: Then how can you say will have money from the CWF?

A: The DEP has said that they have set aside the money for the first 2-years.

Q: How can they do that without going through the priority process?

A: We are on the priority list. We have spoken with our attorney and our commitment to the program is going to be based on DEP's commitment to providing funding. If the CWF monies dry up then the Town's commitment to the program ceases also.

There was continued discussion on the Clean Water Fund. Discussion on "Doing nothing is not an Option."

Q: In the possibility that the DEP forces Old Saybrook to put a sewer in, isn't there the probability of State funding to offset the \$71 million?

A: The DEP says they are not sure how much funding would be available. It could be reduced by 25%.

Q: I understand that people who have houses in trusts or estates won't be able to vote.

A: We have asked the Town Attorney to provide clarification on that in the form of a white paper.

A: Town Clerk Sarah Becker said we do have answer. Trusts cannot vote. I had a letter before but I just got a reiteration of who cannot vote in a referendum. Trusts, corporations, and LLCs cannot vote.

Q: Can a husband and wife vote?

A: Yes. If the property is in both names; if you're a real live person, you can vote. If a property is in a "Life Use" only the "Life Use" person gets to vote. If the house is only in one name, only that person gets to vote.

Q: Does it matter how big your tank is?

A: Yes, if it's under 1000 gallons it needs to be replaced with a 1000 gallon 2-compartment tank.

Q: How is my brother who is out of state going to vote?

A: We will have absentee ballots available after the Selectmen set the referendum date and the questions.

Q: Will people who are unaffected by this be able to vote?

A: If you're a property owner in the Town you will be able to vote. There are 1900 properties in the district and about 6600 in the Town. About 1/3 of the properties are directly affected, but every property is affected by the mill rate. So everyone has a property to vote.

Discussion about LLCs not being able to vote.

Q: You told us the detrimental part of having a sewer, can you tell us the detrimental part of having an onsite system?

A: You're responsible for an onsite system. If you go with a sewer system, you're responsible for the bill. But you flush it and forget it; you don't really care what happens downstream of your property. If you own a septic system you're responsible for the upkeep of that system.

Discussion about reliability of AT systems and results from other states.

Q: If it doesn't work we'll have to put in something else.

A: From an environmental standpoint if an individual system fails, what's the environmental impact of that as opposed to a 750,000 gallon sewage treatment plant burping for 12 hours into the CT River? A question was raised about success rates, have you ever known a sewage treatment plant not to malfunction? A: How about the MDC in Hartford. Wethersfield Cove; it flooded Wethersfield Cove with feces for days. The same thing happened with Mattabassett in Cromwell; an operator turned the wrong valve and thousands of gallons spilled into the River.

Q: I'm only there a few months out of the year and why am I fixing something that ain't broke? I'll pay \$200 or \$300 every year, but leave me alone, I'm not polluting anything.

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A: The State says you are, unfortunately. They went to the Supreme Court and won twice, so we have to do something. We looked at 50 or 60 different scenarios and suggested proposals to the DEP. One of them was; we will upgrade the systems as they fail. The DEP said this would take too long. This is the approach they take in Putnam County New York, but we only have about 1% failures a year. So this is not acceptable to them. A: You say your septic system is working just fine. But how do you know that? You could have a dry well that is sitting in the groundwater and you'll never know that you're getting no scrubbing action at all. Your waste is going directly into the groundwater.

There was continued discussion on testing and the court order.

Q: What is Westbrook doing? Are they in the same situation?

A: Yes. They are waiting for our solution. If our solution works, then the DEP will instruct the other towns to follow our lead.

Q: If you have a raised bed what happens to the runoff in a storm?

A: The beds are made of coarse sand which will allow the water to drain through it.

Discussion about mounded systems, drainage, and proper placement on a lot.

Q: Is there any place to put a sewage treatment plant?

A: A sewage treatment plant would take about 4 or 5 acres of land and the DEP has reviewed aerial photographs of the town and identified (not specifically to us) sites that would be adequate for a treatment plant. The plant doesn't have to be located on the River; it can be located in a shopping center and continue on to the River. It has to discharge between the railroad bridge and the Baldwin Bridge. South of the bridge would change the classification of the River. North of the bridge it is a Class B waterbody which can receive treatment plant discharge.

Q: A few years ago there was talk about small community systems. What happened to that?

A: We don't have the land available. We looked at areas between the railroad tracks, between 95 and Spencer Plain Road, the Gardella site, the area off Lookout Hill, off Schoolhouse Road, and what we found was that the area off Lookout Hill is a wetland. So we would destroy a wetland to create a large leaching area. It couldn't take the volume of wastewater from the beaches. We looked at a pressure sewer along the Amtrak right of way. We could not find areas large enough to receive those amounts of wastewater.

Q: What about a pumping station to send it over to Harvey's Beach to handle 70 homes along the waterfront?

A: If you're going to do that you need to collect the wastewater from Great Hammock.

Q: Plum Bank is a very environmentally sensitive area, and most of the homes require AT systems. The O & M could be more consistently done.

A: That only addresses Plum Bank. It doesn't address Chalker Beach, Saybrook Manor, and Indiantown.

Q: Plum Bank is the only area that is 100% ATS. It would even out the nitrogen loading.

A: Yes but it only addresses that one area. Most of the houses on Plum Bank (about 45) can probably be treated just with air injection.

Continued discussion on putting a system in Harvey's Beach and community systems vs. individual systems.

Q: Question about raising the grade of the property; are there any restrictions on that?

A: No. You can use that area along the road to put your leaching area.

Q: Can you use the wetlands?

A: Yes, you wouldn't have to use raised beds. Most of systems can be worked into the embankment and you would have enough room to get treatment for a 3 bedroom house.

Description of system setup; 1000 gallon tank, distribution box with compressed air at a fixed rate into the leaching system. There are a few systems such as: Greenleach, Geomatrix, and Mantis which have components that you can get a very high hydrolic loading in a very small area and you would be 24" above groundwater. The air injection would get the nitrogen reduction.

Q: What happens when you leave, do you have to shut the system down?

A: No. It will be set up so it operates on a float in the septic tank and as you get discharge from the tank into the distribution box it'll trip the air compressor. The air compressor will run for a set amount of time and shuts down when it times out. Those systems are very suitable for seasonal use.

Q: So the seasonal properties will have different systems?

A: We intend to make each lot an individual solution. The air compressor systems work on year-round as well as seasonal.

The meeting ended at 9:15 PM.

Respectfully Submitted,
Old Saybrook Water Pollution Control Authority

Rebbie A. Marshall

WPCA Recording Clerk