

## PEP CAC Meeting Notes

6/20/19, 2-4 pm

### Guest Speaker: Suffolk County Septic Improvement Program (SIP)

Justin Jobin, Environmental Projects Coordinator

[www.reclaimourwater.info](http://www.reclaimourwater.info)

631-852-5811

### Lauren (PEP): Introduction to the topic & PEP

#### Justin:

- If there are any questions about this topic there are staff dedicated to answering them and info cards at the front of the room.
- Suffolk County has the densest cesspool system in this area of the U.S.
- A cesspool is just a hole in the ground; doesn't treat for anything
- A loophole has existed for 40 years allowing homeowners to replace a cesspool with another cesspool. As of July 1<sup>st</sup>, however, homeowners will have to upgrade to the minimum standard septic tank instead.

**Question:** Is this a county law or a state law?

**Answer (Justin):** It is a county law

#### Justin:

- A conventional septic system is no better than a cesspool because it does nothing to remove nitrogen or treat anything.
- Six technologies are currently approved in Suffolk County (see slide).
- The three at the top of the slide are the smallest and most popular.

- The three on the bottom are larger systems, which might be better for larger families or homes with more people.
- Hyrdo-action systems are the most popular overall
- Septitech is also popular because you don't have to buy an additional pump to remove the liquid; it is built in.
- The Septic Improvement Program is a simple program that includes a county grant, state grant, and town rebate/ low-interest loan to upgrade to a better septic system.
- The homeowner will still be responsible for some design and engineering fees, maintenance costs, etc.
- There is a \$5k incentive to homeowners to use the pressurized shallow drain field because they remove up to 50% of nitrogen in "loamy" soil.
- Wastewater is always warm and nutrient rich so it keeps the grass moist and green "naturally" without fertilizers, watering, or lawn maintenance.

**Question:** The slide says 50% nitrogen in loamy soil, but LI is mostly sandy soil.

**Answer (Justin):** You can put it in less deep in sandy soil and that seems to help. Stony Brook is also working on adding woodchips to the system to improve nitrogen, other nutrient, and pharmaceutical removal and breakdown. Our soil is similar to soils in Cape Cod and Massachusetts where these systems have been successful so far.

**Question:** Any issue of bringing coliform bacteria into the upper layers of soil?

**Answer (Justin):** No findings of that so far. A bio-mat is formed that helps to reduce coliform.

**Question:** What is happening with the IRS issue with double taxation?

**Answer (Justin):** The grant is not taxable to the homeowner because a 1099 tax form is issued to the contractor, so the homeowner should not also be taxed. Unfortunately, the comptroller felt strongly that 1099 needs to be sent to both contractors and homeowners.

**Answer (Kevin of TNC):** The comptroller asked for a definitive ruling from IRS. We are hoping for a ruling in our favor from IRS come January 2020. The comptroller issued a 1099 to two people, not just the contractor. Until we hear of affirmation from the IRS that the homeowner should receive a 1099 they will not receive one.

**Question:** But what if we receive this grant thinking we won't get a 1099, then IRS and the comptroller decide that we should?

**Answer (Kevin):** The IRS audited Maryland already and no tax was given, so you can draw your own conclusion. It is more likely that it will be in our favor.

**Question:** Should we add topsoil/ loamy soil?

**Answer (Justin):** Adding soil that isn't naturally there isn't as effective as it would be had it been there to start with. The pore spaces and other factors that are necessary for treatment aren't there. You might, however, bring in additional sand to help.

**Question:** How deep can these drain fields be?

**Answer (Justin):** They can be anywhere from 30" to 18" deep, though I'd rather they be no deeper than 18".

**Question:** What happens in a hurricane if the power goes out so pumping to the surface doesn't work?

**Answer (Justin):** Some can pump by gravity, but most cannot. You can use a generator and pump as needed. They're also working on a battery or solar powered option. But in a power failure you're using less water generally anyway. But you need a means of pumping for it to be effective, so it may not be the best option for everyone if you're in an area where power outages are frequent.... Or, you could just hook up a generator if that was the case; you don't need to pump continuously anyway.

**Justin:**

- The industry is well adapted to this program. Need is the driving force behind innovation and change, so the market is growing in Suffolk County. The technology developers are focusing on Suffolk County and Maryland because they have the highest need and use adoption.

**Question:** Does a septic system also remove Phosphorus?

**Answer (Justin):** Loamy/ silty soil binds phosphorus, which is great for freshwater areas like ponds where it is a concern.

**Justin:**

- There is plenty of grant money (see slide), but it is beginning to get maxed out
- There are priority areas that are the first choice for grants, though failed systems that need to be replaced are also high priority.
- They are close to capacity, but there is still money.
- With pre-existing or older homes, the cost estimate could be off due to more challenge with making assumptions about pipes, elevation, etc.
- The average cost with engineering to these situations tends to be \$22k-\$24, the later number due to a few extreme cases in Montauk most recently which raised the average.
- We would prefer the cost to be closer to \$20k
- The maintenance costs are about \$250-300 a year.
- Maintenance includes checking pumps, air flow, cleaning the system, etc.
- This fee is waived if you can convince a neighbor to also upgrade their septic system.
- Here's some things to do before you apply... (see slide for list)

**Question:** Are grants available to multi-family homes, affordable housing communities, or apartments?

**Answer (Justin):** The grants are currently only available for single family residences. In the future we'd like to make them available for things like Habitat for Humanity and other low-income housing projects.

**Question:** Are grants available only for year-round, primary homes, or are seasonal and second homes considered? What about low to moderate income eligible people who have a second home due to inheritance of a small bungalow etc.?

**Answer (Justin):** This is where it gets tricky and it's important to consider each case individually in the future, but right now a second home is rarely eligible due to the income requirements etc. Unfortunately, there are people who inherited a little beach cottage and want to do the right thing, but it isn't supported by the program.

**Question:** Are small businesses considered?

**Answer (Justin):** we are working on expanding, so sometimes, yes, and hopefully more in the future.

**Question:** What about new construction?

**Answer (Justin):** New construction is not valid because it's state-mandated anyway to replace a cesspool with a septic system. The grant money would be too small to even make a dent in the cost at that point. The program is for replacing existing systems not installing new.

**Justin:**

- Now we will do a walk-through of the website and application process. Go to [reclaimourwater.org](http://reclaimourwater.org). (see slides and handout)

- We are adding new questions to this form. “Do you want to let us share the information with the town?,” to automatically share statistics and information with the town. Also, “How did you hear about the program?” so that we can see which organizations or outreach events are most effective.
- The application process is totally online but paper copies are available for those without computer access or computer literacy.
- All the paperwork you need can be easily uploaded to the website.
- 1<sup>st</sup> goal would be working with the town of Shelter Island, then East Hampton and Southampton.

**Kevin:**

- I’d like to add that if you are wondering, “How does this work for me? How can I get friends and family involved? How can I convince my friends?” messaging and material is available.
- You can let us know if you would like to host an event or have information or materials sent to you or your organization.

**Question:** Is anyone working with Southold town supervisor to convince him to join the Hamptons and Shelter Island?

**Answer (Kevin):** Basically, he said that they are committed to the way they have been doing things. However, as citizens in Southold start doing this upgrade and asking the town to do this program, it will help the effort from the ground up.

**Question:** Do you have a breakdown by town of applicants for SIP?

**Answer (Justin):** We’re working on it.

**Answer (Kevin):** Stony Brook had students call people who started but did not finish the process and ask them about their motives for applying. They found that people do it mainly for environmental reasons. The highest numbers of applications came from those who care about

groundwater and surface water, and mainly from the 45+ age group. This shows that they aren't just opportunists taking advantage of the grant. Most people choose societally acceptable answers, though, so it doesn't necessarily mean they're really interested in helping to solve the problem.

**Justin:**

- We're now seeing younger people and people working in this industry trying to lead by example.
- There are 13,000 approved applicants currently (see slide)
- 300-500 are actually in the ground already
- Most are new construction on the south fork where they're required, though. This also includes tear-downs and McMansions going up.

**Question:** Does it stink?

**Answer (Justin):** Smells much better than a cesspool does.

**Question:** Is it noisy?

**Answer (Justin):** There are quieter ones available; noisy ones are not popular. Most people find they are quieter than they expected.

**Question:** What cannot be flushed into the septic system (bleach, paint, etc.)?

**Answer (Justin):** Unless you flush a lot of bleach each week, a little bit should be fine. The only thing that isn't is actually essential oils if you use them and don't dilute them. Essential oils that are antimicrobial for example are much worse for the bacteria in the septic system than bleach or paint.

**Justin:**

- Here are some photos of green grass over the pressurized drain field, which is typically 10ft by 30ft.

- There are no setback requirements because it isn't really considered a structure, so yard space is less of an issue.
- We also do tours of the systems if anyone you know has questions.

**Question:** What about pharmaceuticals and nanoparticles etc.? Are these also reduced or measured?

**Answer (Justin):** Only recently have they started to research these particles. Shallow leaching fields significantly break down pharmaceuticals, but the question becomes "into what?" It could be really terrible. Stony Brook is working on a wood chip bed that would help break down personal care products.