

Tisbury Water Resources Committee Meeting
Hybrid Meeting
Thursday May 18, 2023
Public Meeting Minutes

Committee Members: Ben Robinson, Chris Scott, Nancy Gilfoy, Dr. Michael Loberg, Sheri Caseau, John Best, Gerry Hokanson

Environmental Partners Engineers: Kate Roosa, Robert Rafferty

Consultant: Scott Horsley

Town Administrator: John Grande

Select Board Members: Roy Cutrer, John Cahill, Christina Colarusso

Board of Health: Maura Valley, Dr. Michael Loberg

Staff: Jared Meader, Melinda Byers

In person participants: 25

Online participants: 11

Ben Robinson: Calls the meeting to order at 6:36pm

Kate Roosa: CWMP-townwide 20-year water quality solutions

- ***Lake Tashmoo Watershed***
 - a. Needs to remove 6,500 lbs. per year or 42.5% of existing septic systems.
- ***Lagoon Pond Watershed***
 - a. Needs to remove 13,000 lbs. of nitrogen per year or more than 50% of existing septic systems.

Reduction – Treating the nitrogen source

Remediation – Treating nitrogen in the groundwater

Restoration – Treating nitrogen in the water body

Design Risk, Nitrogen Removal and Operation Management

Reduction

- Composting toilets, Urine diversion, Incinerating toilets
- Innovative alternatives
- Decentralized systems (Cluster Treatment Systems)

All those items need a **Responsible Management Entity (RME)**-regulatory agent for oversight monitoring for each system.

RME could be a branch of the Sewer Dept using the enterprise fund or the Board of Health to test and monitor. An EPA grant study is happening in Barnstable with a pseudo RME. It is collecting data from systems. The former RME system lacked accountability. It also needs funding. The default accountability method was the homeowner. That isn't working.

- Traditional Collection System pumped to Wastewater Treatment Plant
- Compact Open Space Development (Kuehn's Way-case study example)
- Transfer of Development Rights

Restorative Technology

- Aquaculture
- Permeable Reactive Barriers (PRBs) trench and injection method (Lagoon Pond 2020-case study)
- Stormwater Best Management Practices (BMPs) -Bioretention areas & rain gardens.

Explore Cape Cod Commission Technology Matrix website if you want to suggest other technologies.

Scott Horsley: Lake Tashmoo Targeted Watershed Plan

Summary of Nitrogen Loads and Required Reduction -see attached breakdown.

Inventory of Septic Systems in the Tashmoo Watershed -860

I/A systems (FAST, Bioclere, Waterloo, Advantix) 25

Enhanced I/A (Nitroe locally made) 19

Cesspools 28

Title 5 systems pending upgrade (General Approval) 2

Title 5 systems pending upgrade (Provisional Approval) 5

Preliminary Recommendations

- Enhanced I/A upgrades in West Tisbury & Tisbury
- B2 Sewer District – already funded, beginning construction fall 2023
- Stormwater Retrofits -Bioretention /rain gardens, constructed wetland, underground infiltration systems
- Cluster Treatment Systems-possibly Lake St
- Fertilizer Management -Phytoremediation, fertigation wells

Potential Cluster Wastewater Treatment System example would be on Lake Street continuing to the Lake Street Park. It is a cost-effective alternative to upgrading each system individually.

Enhanced I&A Septic Systems Actual Cost

Retrofit of existing Title 5 system-leave septic system and leach field, only adding the middle treatment-approximately \$37,047.00

Partial Upgrade-replace septic tank or leach field- approximately \$44,332.00.

Full upgrade- (includes both septic tank and leach field) -approximately \$48,487.00.

The objective is to submit a grant application to the State Revolving Fund (SRF). The deadline to file is August 11, 2023. This plan will be completed in June. We will take it to the Select Board for approval and then we will fill out the application for State funding.

Scott Horsley:

I feel the need to reiterate all those upgrades or retrofitting's must have a **Responsible Management Entity (RME)**-regulatory agent for oversight monitoring for each system.

Kate Roosa:

Scott and I are both involved in the New England Water Environment Association, NEWEA. We are part of the Innovative and Alternative Onsite Wastewater Task Force. We are exploring through the Task Force, what private funding is available. A lot of the best publicly available funds go through the Clean Water Trust which we are plugged into on behalf of the community.

The Mass DEP requires a well-balanced plan and a backup plan. At the 5-year mark, we determine if progress is being made. If not, we need to pivot to other technologies.

Meeting adjourns 8:23pm

Next meeting is a virtual meeting scheduled for Tuesday May 30, 2023 @ 3:30pm