



## Optimizing Performance of Large Nitrogen-Reducing Septic Systems & Small Package Treatment Plants

Buzzards Bay Coalition  
114 Front Street  
New Bedford, MA 02740

### 2019 Decision Maker Workshop from the Buzzards Bay Coalition

Join us for this exciting opportunity to learn how to optimize the performance of wastewater treatment systems!

Wastewater represents the largest source of nitrogen pollution to our coastal waters in Southeast New England and reducing these nitrogen inputs are critical to ensuring the health of these waterways. This two-part workshop will highlight what every wastewater treatment plant operator, Title 5 system inspector, and soil evaluator needs to know in order to optimize performance of large denitrifying septic systems and small package treatment plants.

#### Part 1: Operating and Maintaining Large Denitrifying Septic Systems: What Operators Need to Know to Optimize Service and Performance

For some rural areas, centralized sewerage can be too costly and nitrogen-reducing septic systems will be a part of the solution in restoring water quality and protecting our waterways from harmful algal blooms. The Coalition has worked with communities throughout the Buzzards Bay watershed to install both single family nitrogen-reducing septic systems and those serving developments with wastewater flows between 2,000 & 10,000 gallons per day.

This workshop will focus on the operation and maintenance of large nitrogen-reducing septic system technologies. Participants will hear perspectives from the Massachusetts Alternative Septic System Test Center (MASSTC) and vendors of various technologies installed in the region. Lessons learned from implementing these technologies will be shared with a special focus on what operators need to know to optimize performance. A panel discussion on the future of large nitrogen-reducing septic system technologies and a final Q & A session will wrap up Part I of the workshop.

#### Speakers

**Maureen Thomas**, Water Resource Specialist - Buzzards Bay Coalition

**George Heufelder**, M.S., R.S. - Massachusetts Alternative Septic System Test Center

## MASSTC-Recommended Vendors & Speakers\*

**Mollie Caliri**, Project Engineer - F.R. Mahoney & Associates

**Mark Lubbers**, NE Regional Sales Manager – Aquapoint 3

**Michael Moreau**, Service Manager - Wastewater Treatment Services

**Michael McGrath**, PLS, P.E. - Holmes & McGrath

**John Smith**, Ph.D., P.E. - KleanTu

**Lauren Usilton**, President – Wastewater Treatment Services

*\*The vendors and technologies participating in this program were identified by the Massachusetts Septic System Test Center as either current strong performers or technologies with promise. For data, see the Barnstable County I/A Septic System Tracking database*

*(<https://www.barnstablecountyhealth.org/programs-and-services/ia-septic-system-tracking>). The*

*Buzzards Bay Coalition does not endorse or independently certify the performance of these technologies.*

## Part 2: Package Treatment Plants: How to Make Them Work

For more densely-developed suburban areas, sewerage is a feasible option for controlling nitrogen pollution to our waterways and small package treatment plants can provide an economical solution. In the Buzzards Bay watershed, there are some noteworthy neighborhood-scale treatment plants that will be highlighted due to their performance in successfully removing nitrogen prior to discharge. The municipally-owned West Island Treatment Plant in Fairhaven and two privately-owned treatment plants - the Red Brook Community Treatment Plant in Plymouth and the Red Brook Club & Marina Treatment Plant in Cataumet – will be presented. The operators of these treatment plants will provide an overview of each plant and share their experiences with ensuring optimal performance through established operation, maintenance, and monitoring programs. A final Q & A will end the indoor portion of the workshop and then we will offer an optional tour of the West Island Treatment Plant in Fairhaven.

## Speakers

**Maureen Thomas**, Water Resource Specialist - Buzzards Bay Coalition

**George Heufelder**, M.S., R.S. - Massachusetts Alternative Septic System Test Center

**Vincent Furtado**, BPW Superintendent - Town of Fairhaven

**George “Skip” Malonson**, Project Manager, Weston & Sampson, Red Brook, Plymouth

**Daniel Gorczyca**, Project Manager - A.D. Makepeace, Red Brook, Plymouth

**James Kane**, Senior Vice President - A.D. Makepeace, Red Brook, Plymouth

**Mark Lubbers**, NE Regional Sales Manager – Aquapoint 3

## Details

Date: Thursday, May 2, 2019

Time: Noon – 4:30 p.m. with Optional Field Tour at 5:00 p.m.

Location: Buzzards Bay Coalition Learning Center

114 Front Street

New Bedford, MA 02740

Parking: Elm Street Parking Garage, 51 Elm Street, New Bedford or on-street parking

Optional Tour: West Island Treatment Plant, 141 Fir Street, Fairhaven, MA 02719

## Agenda

12:00 p.m.	Welcome & Lunch	Maureen Thomas, Buzzards Bay Coalition
12:30 - 2:40 p.m. (20 min. each)	<i>Part I. Operating &amp; Maintaining Large Denitrifying Septic Systems: What Operators Need to Know to Optimize Service &amp; Performance</i>	
	Intro: Importance of O & M for system performance (10 min.)	Maureen Thomas, BBC George Heufelder, MASSTC
	Amphidrome Technology	Mollie Caliri, F.R. Mahony & Associates
	Biobarrier Technology	Lauren Usilton, Wastewater Treatment Services
	Bioclere Technology	Mark Lubbers, Aquapoint 3
	RUCK CFT	Michael McGrath, Holmes & McGrath
	SanTOE Technology	John Smith, KleanTu
	SeptiTech Technology	Michael Moreau, Wastewater Treatment Services
2:40 p.m.	Panel with Q & A	All
3:00 – 4:35 p.m. (30 min. each)	<i>Part II. Small Package Treatment Plants: How to Make Them Work</i>	
	Intro: Neighborhood-Scale Systems (5 min.)	Maureen Thomas, BBC George Heufelder, MASSTC
	West Island Treatment Plant, Fairhaven (Municipally-owned RBC)	Vincent Furtado, Town of Fairhaven
	Red Brook Community Treatment Plant, Plymouth (Privately-owned MBR)	Skip Malonson, Weston & Sampson, Daniel Gorczyca & Jim Kane, A.D. Makepeace
	Red Brook Harbor Club & Marina, Cataumet (Privately-owned AquaFAS)	Mark Lubbers, Aquapoint 3
4:35 p.m.	Q & A	All
5:00 p.m.	Optional Field Tour – West Island	All

## Instructional Materials

Instructional materials are currently being prepared but shall include:

- Technology information & DEP approvals
- Wastewater Treatment Plant Technology information
- Models of Neighborhood-Scale Wastewater Treatment on Buzzards Bay: Successes from West Island, Fairhaven and New Silver Beach, Falmouth
- Speaker presentations

## Earn Professional Credits:

TCH credits are available for this workshop.

## Lead Instructor/Workshop Coordinator:

Maureen Thomas, Water Resource Specialist

Buzzards Bay Coalition

114 Front Street

New Bedford, MA 02740

(508)999-6363, Ext. 230

[thomas@savebuzzardsbay.org](mailto:thomas@savebuzzardsbay.org)