

PROJECT APPLICANT: NYS Center for Clean Water Technology (CCWT)
at Stony Brook University
PROJECT TITLE: NRB for Residences at Mashashimuet Park
PROJECT TYPE: Wastewater Treatment/Pollution Prevention
SCALE: Neighborhood/Watershed
APPROACH: **Reduction**

DESCRIPTION

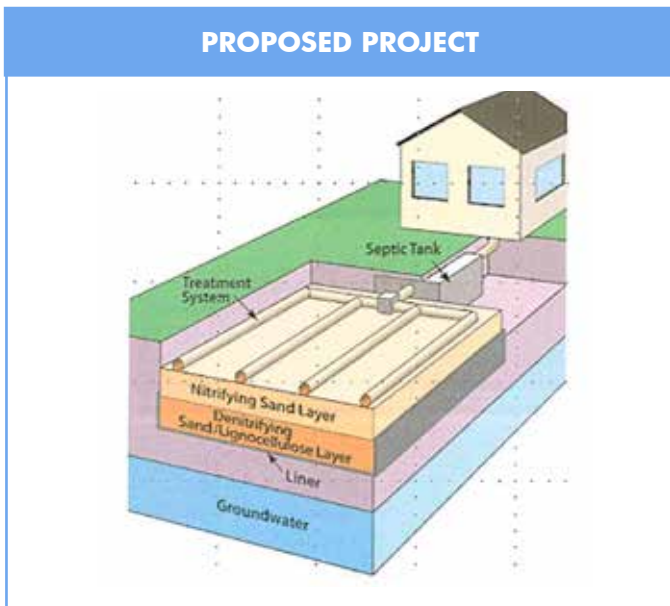
The proposed project is the replacement of two existing conventional cesspool systems with two nitrogen reducing biofilter (NRB) systems for the two existing residences located on the site of Mashashimuet Park. This project and NRB systems are a Suffolk County Department of Health Services pilot program to provide an evaluation of this new type of denitrification system.

The project site and both residences are located in the High Priority Area. One residence is located just south of Jermain Avenue and the other residence is located just east of Main Street/ Bridgehampton-Sag Harbor Turnpike and both are in very close proximity to Otter Pond. Otter Pond is a tributary of Upper Sag Harbor Cove, which has experienced harmful algal blooms and low dissolved oxygen levels over the last several years. Sag Harbor Cove is listed as an impaired water body and Upper Sag Harbor Cove has experienced Hypoxia and Anoxia as well as low water clarity. Levels of algae have exceeded the EPA values and there has been high levels of ichthyotoxic (toxic to fish) rust tide algae. Cochlodinium, a species of red tide that causes fish kills, was detected in Upper Sag Harbor Cove.

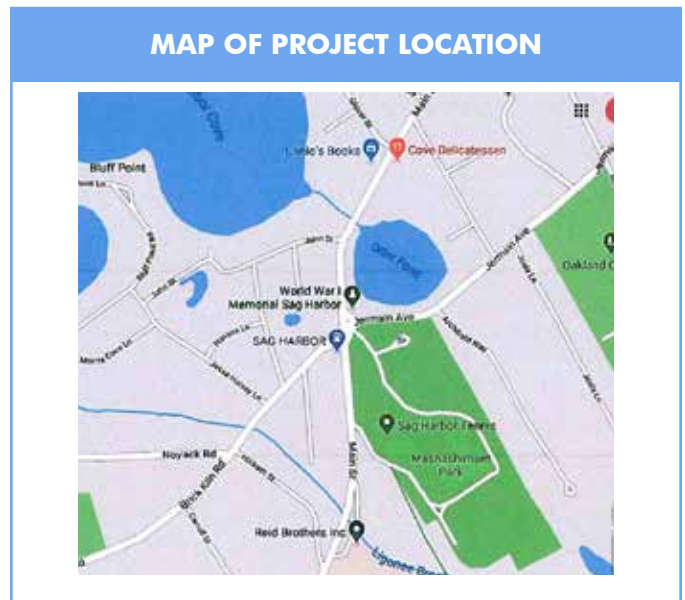
High nitrogen levels have been found to be the cause of algae growth in these areas. Nitrogen loading analysis found that existing sanitary and cesspool systems contribute approximately 70-90% of the total load. This pilot program is working towards finding the most effective approach for reducing nitrogen contributors by evaluating the NRBs as alternatives.

NRBs have been shown to reduce nitrogen by approximately 80% from most residential wastewater effluent. The proposal of placing two separate NRBs for each single-family dwelling with an average daily generation of 100 gallons of wastewater per person are anticipated to reduce nitrogen by approximately 73 lbs. annually. This treatment is anticipated to reduce the nitrogen impact on Otter Pond as well as the larger watershed of Upper Sag Harbor Cove and Sag Harbor Cove.

PROPOSED PROJECT



MAP OF PROJECT LOCATION



REQUESTED AMOUNT:

\$ 62,900