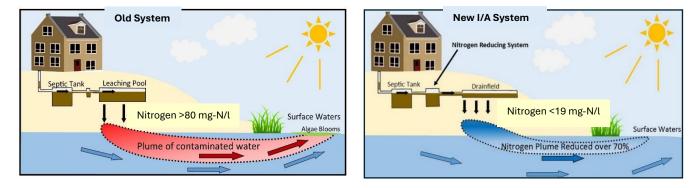


NYS Center for Clean Water Technology

LOW NITROGEN SEPTIC SYSTEM UPGRADES

We Have a Nitrogen Problem

Nitrogen pollution is the greatest threat to the health of our lakes, ponds, and harbors contributing to harmful algal blooms (HABs), low dissolved oxygen, and bacterial contamination leading to shellfish and bathing beach closures. Nitrogen from cesspools and conventional septic systems has been identified as the largest single cause of degraded water quality. Conventional septic tanks and cesspools do not remove nitrogen.



Installing a low nitrogen septic system is the most important thing you can do to improve water quality.

What is a Low Nitrogen Septic System?

Low Nitrogen Systems, called I/A (innovative/alternative) Systems are different than conventional septic systems. They are specifically designed to remove significant amounts of nitrogen from your wastewater. Suffolk County has approved seven different systems homeowners can install, each capable of meeting the new standard of 19 mg/L total nitrogen.



SCDHS I/A OWTS Approved Technologies

How do I know which system to install?

While each system is slightly different, they all work on the same principle by using a multi-chambered tank and providing aeration to one chamber to stimulate the natural occurring bacteria to convert ammonium to nitrates (called nitrification) and another chamber with no oxygen added to convert the nitrates to nitrogen gas (called denitrification). Your design engineer will provide guidance on which system is suitable for your property.

Incentive programs available

There are generous grants and rebates available to homeowners as incentives to upgrade your septic system through Suffolk County, New York State and additional funding available in the Towns of East Hampton, Southampton and Shelter Island. Visit Suffolk County's website <u>www.ReclaimOurWater.info</u> for details on these programs.

Basic steps to upgrade your septic system

- 1. Submit grant applications to Suffolk County and Town (East Hampton & Southampton if applicable)
- 2. Contract with a design professional to prepare plans for your property. System size is based on the number of bedrooms. Engineer submits plans to SCDHS for approval.
- 3. Select installer from Suffolk County approved list.
- 4. SCDHS inspectors will visit the site, inspect the installation, and witness system startup.
- 5. County pays grant directly to installer.
- 6. If applicable, submit copies of other expenses to the Town for reimbursement under rebate program.

What to expect during Installation

They need to excavate your property. It is important to work with your engineer on location and equipment access to minimize impact to plantings and trees. Control panels can be remotely located. Access covers need to be accessible for servicing, which is required twice per year. The disruption to your property is temporary but the environmental benefits are lasting.



CCWT & PLT team up to assist homeowners to accelerate septic system upgrades

Waiting passively for individual homeowners to act will mean our local waters will continue to receive harmful loading of nitrogen on a continuing basis for decades. **WE NEED TO ACCELERATE THE SEPTIC SYSTEM UPGRADES**. CCWT and Peconic Land Trust is targeting Sagaponack watershed to assist homeowners with navigating the septic upgrades process including:

- Educating homeowners on the septic system upgrade process and what to expect
- Assist with grant applications.
- Guidance to select engineer for system design.
- Guidance to select system installer.
- Promote installation of most environmentally protective system

To take advantage of this free service, please reach out to Tom Varley, Watershed Manager for CCWT for more detailed information to start on your upgrade project. <u>Thomas.varley@Stonybrook.edu</u>