

Septic System Rules to Protect Water Quality and Human Health

General Purpose and Intent

- 1) Protect the quality of the major public water supplies (both public and private) for the Town of New London
- 2) Protect the quality of ground water and surface waters in our streams and in the lakes and ponds in the Town of New London
- 3) Protect public health through prevention of human contact with sewage and related pathogens
- 4) Prevent increased nitrogen and phosphorus accumulations and related pathogens from entering the lakes, ponds, rivers, streams and aquifer recharge areas
- 5) Provide a proactive approach towards septic systems posing higher risk and significance of failure within the Town of New London

Problems that can result from septic systems:

- Septic systems that are poorly designed and/or and improperly maintained are known to contaminate drinking water, wells and surface waters such as lakes and rivers.
- Contaminants released from septic systems include bacterial and viral pathogens, pharmaceuticals, “forever” chemicals (PFAs) and nutrients including phosphorus and nitrogen. These contaminants have negative consequences for human health.
- Nutrients added to lakes, rivers and streams can also lead to algal and cyanobacteria blooms, further reducing water quality, impacting human health, and disrupting important ecosystem processes.
- Excessive levels of phosphorus have already resulted in the impaired status of 65 lakes in New Hampshire.
- While failing septic systems result in conditions that are obvious (soggy lawns and sewage backed up in basements), poorly maintained systems can leak effluent in ways that are not always apparent to property owners.

Frequently Asked Questions Regarding Septic System Regulations

What causes systems to fail? Systems using old design standards from +30 years ago, time related mechanical or electrical component failure, increased usage beyond the original septic plan, sub-standard soils used during construction, or ingrowth of roots systems into the piping.

What are normal practices regarding the frequency of septic maintenance in other geographies? Required septic pump outs, usually every three years, are standard law in many critical watersheds. For example, that is the law if you are in the New York City watershed, or in the watershed of the Delaware Water Basin, or, in New York state, if your lake has been designated as an impaired lake.

Is three years the norm? While some authorities require or recommend annual or bi-annual maintenance, the most common is a recommendation that septic systems be inspected and pumped at least once every three years.

What about seasonal properties, single occupancies, or other sparse usage instances? Many authorities allow an exception process for such situations with an allowance for frequency of maintenance to be dropped to as little as once every 7 years.

Do new septic systems require inspection in NH? Yes. Currently NHDES inspects septic system installations when they are approximately 90% complete.

Do Towns in NH have the authority to regulate the maintenance of septic systems? Yes. NH RSA 147:10 grants municipal health officers, with the approval of the Board of Selectmen (NH RSA 147:1), authority to adopt regulations that will ensure that wastewater disposal systems shall not be a nuisance or injurious to public health. NHDES has required approved plans, inspection and operational approval for all subsurface systems since 1971 and since 1967 within 1000' of a lake.

Can proper septic maintenance really make a difference? Yes. While it may be difficult to precisely calculate the phosphorus load into NH lakes from septic systems (as opposed to other non-point sources), there have been measurable reductions in phosphorus levels – and improvement in overall water quality - in several lakes where there have been systematic efforts to identify and upgrade problematic septic systems.

What is the probability that some septic systems in our town are not operating properly? New York and Massachusetts studies of septic populations initiating required inspections recorded failure rates of 25% to 50% for the first inspection cycle. In the second inspection cycle (three years later), the failure rate dropped to less than 5%.

Are there ways to help families for whom proper septic maintenance presents a real financial challenge? Some NH watershed associations with existing watershed management plans have been able to assist homeowners with 319 grant funds. Some states, including New York and Rhode Island, have revolving loan funds and/or grant programs available to defray some of the cost of system replacement and advanced treatment.

Is there a certification for septic evaluators in NH? Yes. Certification is available through the NH Office of Professional License and Certification in Concord.

Do you have any exemplary success stories? Yes. The Town of Putnam Valley, NY, adopted a Septic Tank Pump-Out Regulation in 2016 (<https://ecode360.com/31537445>). Roaring Brook Lake resides entirely within Putnam Valley and was having a decline in water quality that they believed was due, in large part, to poorly maintained septic systems. In 2017, the first year that the septic pump-out law went into effect, 80% of the homes around Roaring Brook Lake pumped. The quality of the water in the lake improved dramatically.

Have any NH towns adopted regulations that might help us move forward in this process?

Yes, the following summary comes from a recent DES factsheet:

- Town of Chesterfield Health Regulation: overlay district requiring most systems to be pumped once every three years. Also specifies the conditions under which replacing the system is required.
 - Town of Deering Watershed Protection District Septic Tank Regulation: overlay district requiring systems to be pumped and inspected at least once every three years.
 - Town of Meredith Regulations of Certain Subsurface Wastewater Disposal Systems in the Lake Waukegan Watershed: overlay district establishing conditions under which replacement of a septic system is required. Also requires that systems without a design on file with NHDES be certified once every five years to ensure they are not in failure.
 - Town of Rye Health Regulation: systems in the Parson's Creek watershed must be pumped at least every three years.
 - Town of Sunapee Septic Rules: overlay district requiring systems on properties in the protected shoreland be pumped at least once every three years, with certain exceptions.
 - Town of Windham Ordinance Governing Onsite Wastewater Treatment System Pump-Out and Inspection within Cobbetts Pond Village District: overlay district requiring septic systems to be pumped and inspected at least once every three years.
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