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Summary: Regulatory Impact Statement

6 NYCRR Subpart 646-3: Wastewater Management

Statutory Authority

This regulatory impact statement (RIS) summary has been prepared for the proposed regulation, 6 NYCRR Subpart 646-3, promulgated by the Lake George Park Commission (Commission). The Legislature established the Commission as an independent agency and delegated to it broad powers to protect, enhance and regulate the resources of the Lake George Park, and particularly the waters of Lake George. Environmental Conservation Law (ECL) § 43-0110(1) directs the Commission, in consultation with the department (DEC), the department of health (DOH) and each municipality located in whole or in part within the park, to adopt, after public hearing according to the provisions of the State Administrative Procedure Act, rules and regulations for the discharge of sewage or treated sewage effluent onto the land or into the groundwater of the park to ensure optimum protection of ground and surface waters of the park.

The proposed regulations are intended to protect the waters of Lake George from wastewater pollution by helping ensure that all onsite wastewater treatment systems in proximity to the lakeshore and streams within the Lake George basin are functional, through a recurrent septic inspection program for all properties within 500 feet of the Lake George shoreline and 100 feet of all DEC regulated streams. Additionally, the Commission's enhanced standards for all new and replacement onsite wastewater treatment systems in the Lake George basin will further protect Lake George from impacts related to wastewater systems and associated nutrient pollution.

Needs and Benefits

Lake George provides a number of benefits to the surrounding communities and the people of the State of New York. The Lake is the primary supply of drinking water for the Village of Lake George and the Hamlet of Ticonderoga, and is the reserve supply for the Town of Bolton. Lake George is also a drinking water supply to hundreds of commercial resorts and lakefront properties.

Septic systems, when not properly designed, constructed and maintained, can have negative impacts upon nearby waterbodies and groundwater. Nutrients in wastewater include phosphorus and nitrogen, both of which are key components of algae and plant growth in waterbodies.

With guidance from regional subject matter experts and the Commission, the review of existing literature was focused on eleven (11) studies of particular relevance to Lake George and as identified through review of readily available resources. The literature reviewed covers nearly a 40-year span from 1981 to 2020, and includes research from academia, the public sector, and private sector.

In addition to the detailed literature review, the Commission conducted a comprehensive Geographic Information Systems review of the population of septic systems within proximity to Lake George and its tributaries. Key Points:

- There are 5,957 parcels with septic systems in the Park.
- 84% of properties in the LG Park with septic systems intersect with limiting environmental characteristics or Resources of Concern.
- 45% (2,682) of septic systems are within a distance of 500' around Lake and 100' around Streams.
- 94% of the septic systems in the LG Park are residential, 6% are commercial, community, etc.
- The average age of residential houses with septic systems in the Lake George Basin is approximately 50 years old, with the majority of houses constructed between 1950 and 1994. If their system has not been upgraded or replaced (an unknown at this time), the age of most septics would range from 25-70 years in age.

Program Background and Description

In June of 2021 the Commission created an Ad-Hoc Committee to discuss septic systems around Lake George and the idea of an inspection program and enhanced design standards within the Lake George watershed. This committee consists of five Commission Board Members plus 14 individuals from varying backgrounds representing engineering, building codes, business and planning professions. The Commission also tasked its retained engineer Chazen Companies LLC to provide considerable expertise and knowledge to the project, to help ensure a thorough understanding of all issues involved. Meetings are held monthly and are fully accessible to the public via Zoom teleconference due to the Covid 19 pandemic. All meetings, materials, agendas, minutes, videos and reports are posted on the Commission website at www.lgpc.ny.gov.

Properties Included in This Program

This proposed wastewater inspection program pertains to all wastewater systems located within 500' of Lake George or within 100' of DEC regulated streams. The structure location as viewed from aerial imagery was used to determine which properties would most likely be included in an inspection program. This analysis resulted in approximately 2,700 properties being identified as being included in the new septic system inspection program in the Lake George Park.

Septic System Inspection Process

To get an effective understanding of the functioning of an onsite wastewater treatment system, an inspector needs to visually confirm as many components of that system as possible. To achieve these goals, proper septic system inspections typically follow this general process:

1. In advance of the inspection, the landowner or agent (septic hauler or similar) unearths the septic tank ports, distribution box, and any pump chambers.
2. For the inspection, the septic hauler needs to be present to ultimately pump out the septic tank as part of the inspection and program.
3. The inspector looks at the property to see if there is any evident surface discharge of untreated wastewater on the ground or surrounding area.
4. The inspector works with the homeowner or hauler to confirm that all water generating devices are discharging into the septic tank, by turning on and off each fixture and witnessing the water entering the tank.
5. The inspector looks to see the water level in the uncovered distribution box, to ensure that the infiltration bed is not backing up, to ensure proper leveling of outlet pipes and that the system has an even discharge into the leach lines.
6. If there is a pump tank, the inspector will check the alarms to ensure proper operation.
7. Following these items, the hauler will pump the septic tank, and the inspector will review the tank for integrity of baffles and water tightness.
8. The inspector will confirm that the septic system is sized properly for the number of bedrooms in the house, based on NYS Health Code 10 NYCRR Part 75-A or NYS DEC, as applicable.
9. Once complete, the hauler will replace the system caps and restore the grounds to their original state.
10. The inspector will provide the homeowner with a report of the inspection, and notify the owner of any follow-up actions, such as system repairs, that may be required to facilitate compliance with long-standing design standards.

Inspection Interval

The vast majority of lake-based recurrent septic system inspection programs in New York state have an inspection interval of once every five years. Discussions regarding this timeframe with program managers revealed their reasoning, being that septic tanks should generally be pumped

out once every five years to keep the system functional, and their inspection programs always involve a pumpout from a NYS licensed hauler. The LGPC concurs that an inspection interval of all involved properties once every five years would be an appropriate timeframe for Lake George.

To accommodate a generally consistent number of inspections every year for the five year period, the 2,700+ properties in the inspection program area would be divided into five distinct populations, each representing approximately 540 properties (one fifth of the total number of properties in the program). Each year, the Commission would mail letters to each of the property owners in one of the five sections, notifying them that they need to get their system inspected within a year's time. By the end of the five year interval, all 2,700 property owners in the program would have had their systems inspected. After the fifth year, the program would begin again in the same order of inspections.

Substandard and Failing Systems

If, upon inspection, a system was found to be failing, have broken components or be substantially below current standards, the owner of the system would be responsible to undertake those repairs or upgrades. Simple repairs would be overseen by the Commission, but any system upgrades requiring engineering would be overseen by the appropriate municipal or county entity. Costs of repairs and upgrades would be the responsibility of the property owner. If a system was found to be failing (no septic tank, metal septic tank, failed infiltration bed, surface septage evident), the property owner would be afforded up to six months to make the requisite repairs. Extensions to this timeframe could be granted with identified hardship.

If, upon inspection, a system was found to be substandard (a septic tank less than 100% of required capacity, an infiltration bed less than 75% in size, infiltration bed less than 50 feet to Lake George or a DEC stream), the system would have to be upgraded by the property owner within five years (prior to the next inspection). Based on the outcome of other programs in NYS, it is anticipated that a modest percentage of septic systems inspected will require upgrade. These upgrades and approvals would be processed through the existing framework of regulatory entities, generally local municipalities or the county.

Inspection Staffing

This program would rely on the Lake George Park Commission to hire seasonal technicians and train them on septic inspection protocols. The Commission would be responsible for administration of the entire program, including contacting property owners to schedule the inspection, coordinating with the homeowner on their schedule with a septic hauler, conducting the inspection and all follow-up activities resulting from the inspection. This program model would benefit from being able to utilize existing Commission field staff to absorb inspections

during busy times, thus lowering the need for the number of dedicated inspection technicians hired specifically for this program, and lowering the cost to property owners.

Enhanced Septic System Design Standards

To help improve phosphorus (and nitrogen) removal in newly constructed onsite treatment systems in the Lake George basin, the Commission proposes new standards as follows:

1. The soil absorption area for septic systems constructed in the Lake George basin shall be located a minimum of 36" above seasonal high groundwater and bedrock
2. The reduction in absorption area and trench length allowed by NYS DOH at 10 NYCRR 75-A or NYS DEC Design Standards for Enhanced Treatment Units (ETUs) and Gravelless Absorption Systems shall not apply to Wastewater Treatment Systems in the Lake George basin
3. Upon redevelopment (tear down/rebuild), the septic system servicing that structure shall be brought into compliance with all current applicable design standards

Costs

Ninety-four percent of the properties in the wastewater inspection program area are residential, with the remaining six percent being commercial. The cost to a residential property owner annually for the program is \$50, and the cost to a commercial property owner is \$100. The increased cost for commercial properties is the inherent complexity of commercial systems that will likely require two inspectors present during the inspection instead of one.

In addition to the inspection program cost is the once-per every five years septic tank pumpout required for the inspection. Routine septic system pumpouts are a regular maintenance activity for property owners that own septic systems, and this cost should already be occurring among properties with septic systems to treat their wastewater (NYS DOH recommends pumping septic tanks every 2-3 years). As such, this is not seen as a new cost to the property owner.

The cost of this program is not seen as unduly burdensome on property owners in the program inspection area. LGPC analysis of property tax rates and property values in the inspection area reveals that the proposed residential annual fee of \$50 represents less than one half of one percent (0.005) of a typical annual tax bill for these properties.

*** END ***

