

TOWN OF TICONDEROGA

Lake George Baldwin Filter Plant Facts

Background

- Diatomaceous earth (DE) filtration plant.
- Constructed (Pump House & Water Tank): 1965.
- Filtration installed (1995) to meet Surface Water Treatment Rule requirements¹.
- Improvements & commissioning: 2000.
- DE dust hazards mitigated thru use of PPE and fans.
- 1-million-gallon water storage tank located at Mt. Defiance (needs replacement).

BALDWIN STATUS

- THE 1995 IMPROVEMENTS (DE) ARE TECHNOLOGICALLY OBSOLETE, WHICH INCLUDES FAILING PIPES, TANKS, ETC.
- BUILDING DOES NOT MEET CURRENT SAFETY STANDARDS (VENTILATION, ETC.).
- BUILDING DOES NOT MEET MANY CURRENT BUILDING CODES.
- LACK OF LAND & ADEQUATE SEWER SYSTEM MAKES UPGRADING DIFFICULT.
- PLANT EXPENSIVE TO OPERATE.
- AVG ANNUAL COST TO MAINTAIN: APPROX \$168,000.

Capacity

- Permit to take 1 million gallons per day from Lake George.
- Filter plant and pumps are at capacity if run 24/7 (i.e., about one million gallons a day).
- Cannot serve northern half of town due to elevation differences.
- Cannot serve entire town due to lack of capacity.

What Has/Can/Cannot be Done?

- Town continues to support plant w/no plans to abandon.
- Replaced, and continues to update/replace, the most problematic parts (the septum's in the DE filters), filter housing, etc.
- Distribution system upgrades necessary because piping is in poor condition.
- Plant failure w/no distribution system from wells would leave southern part of town without water.
- Plant is land locked – near zero land expansion options.
- Permission to use fill in lake for expansion unlikely.
- Sewer system improvements along Baldwin Road would be required with plant improvements as the current sewer system is inadequate for any filter option that requires backwash.
- Cartridge filter options are expensive regarding operations & maintenance.

Benefits

- Lake George remains a good drinking water source.
- Close vicinity to the water districts.
- Closer proximity to districts provides additional redundancy.
- No dam maintenance, no miles of pipe to replace (currently).

¹ It is noted that these are the same surface treatment rules that apply to the Gooseneck Pond water system. It appears in electing to improve Lake George but not Gooseneck Pond to comply with these surface water treatment rules, that the Village/Town in the early 90s, had already set in motion the decommissioning of Gooseneck Pond as a drinking water source.