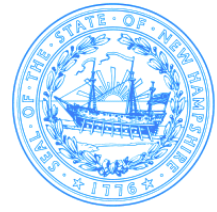




The State of New Hampshire
Department of Environmental Services



Robert R. Scott, Commissioner

August 8, 2024

Kenneth Jacques
New London Springfield Water Precinct
72 Old Dump Rd
New London, NH 0257

transmitted via email to: nlswp@tds.net

**Subject: RE: Colby Point Wellfield— Source Development Options
CWS New London Springfield Water; PWS ID: 1721010**

Dear Commissioners:

The purpose of this letter is to follow up a recent meeting between New London Springfield Water Precinct (the Precinct) and New Hampshire Department of Environmental Services (NHDES) Drinking Water Groundwater Bureau, regarding the source capacity of the Colby Point Wellfield in New London. The Colby Point Wellfield consists of six relatively shallow overburden wells located on a peninsula (Colby Point) on Little Sunapee Lake. The wells were installed and tested in 1994 and 1995 by DL Maher and have been in operation by the Precinct since that time. The total wellfield withdrawal rate during the 1995 well test was 780,480 gallons per day (gpd), but the Precinct now reports that the sustainable yield of the wellfield has declined to around 500,000 gpd. The Precinct is assessing additional water supply options to increase their capacity to meet the future demands of the system.

The Precinct reports implementing regular well maintenance through Barrie Miller Well & Pump to clean out the wells three at a time every three years (so a 6-year interval per well). NHDES has also reviewed the Emery and Garrett Groundwater Investigations, A Division of GZA report entitled "Groundwater Resource Assessment Phase 1 Groundwater Investigation Report" dated May 30, 2023. This report summarizes different options that Precinct could take to develop additional water supplies and ultimately recommends that the Precinct considers development of new sources in other locations. While NHDES agrees with continued evaluation of new water sources, we also recommend that the Precinct investigate regaining lost capacity from the existing Colby Point Wellfield as this could be completed in a timely manner at relatively lower costs.

NHDES has also reviewed water use records from New London, but it has not been able to find any water level records from the wellfield. Water levels in the production wells and in the surrounding aquifer are vital important information to determine the cause for the decline in yield and track well performance over time. Without water level information it is difficult to determine if the decline is related to the formation or the well itself. Yield decline may be due to clogging of well's screen and gravel pack over time and the well is no longer as efficient at transmitting water from the surrounding aquifer. NHDES strongly recommends that the Precinct install transducers in each of the production wells to monitor pumping and non-pumping water levels, if it is not already doing so. Additionally, NHDES recommends that water level measurements are collected from surrounding monitoring wells if still available.

NHDES offers the following information regarding NHDES permitting requirements related to increasing the water supply capacity of the Colby Point Wellfield:

www.des.nh.gov

29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095
(603) 271-3503 • Fax: 271-2867 TDD Access: Relay NH 1-800-735-2964

- Redevelopment of the existing wells by surging or other means does not require NHDES approval and can be completed by the Precinct at any time.
- Since the wellfield was installed before July 1998, the wellfield is exempt from the large groundwater withdrawal permit requirements, in accordance with RSA 485-C:21.
- In accordance with RSA 485-C:22, back-up and/or replacement wells can be installed in the wellfield without obtaining a large groundwater withdrawal permit as long as the total withdrawal remains below the documented yield of the wellfield (780,480 gpd). It would be acceptable to NHDES for the Precinct to develop a seventh well to add to the existing production wells. This would be considered a “backup well” for permitting purposes. Alternatively, the Precinct could install a “replacement well” to replace one (or more) of the existing wells that has lost capacity. This would require that the Precinct deactivate one of the existing sources.
- Any new well, either a back-up well or replacement well in the existing Colby Point wellfield, would require equivalent testing efforts under the large community well siting rules Env-Dw 302 only (no large groundwater withdrawal permitting). This process would require the Precinct to submit a plan for a 5-day pumping test (Preliminary Application). Once approved by NHDES, the Precinct would complete the pumping test and submit a final report summarizing the pumping test for review and approval. This permitting effort could be completed in as little as 6 months once the production well is installed, depending on the availability of contractors and consultants doing the work. There are no public hearings or other requirements associated with this approval. Due to the unique location of the wellfield, surrounded by the lake, the monitoring program during the test would be relatively limited to the wellfield and surface water; there are no nearby private wells that could be impacted by this withdrawal.
- There is no set maximum distance that a back-up or replacement well can be installed from one of the existing wells. In accordance with RSA 485-C:22, the Precinct would have to demonstrate that the effects of the well on water resources will be substantially the same as the existing wells. NHDES has discretion on the location of back-up/replacement wells based on this statute and on-site factors such as potential or known source of contamination. NHDES is willing to review any proposed new well locations with the Precinct as needed.
- The new well would be required to meet sanitary protective area (SPA) requirements (Env-Dw 302.10) or obtain a waiver as needed. NHDES acknowledges the unique nature of this site and that a significant portion of the current SPA overlaps the lake.
- NHDES does not recommend that the Precinct develop a horizontal or angled well at this location. Due to the proximity of the surface water bodies, there is increased risk of bacteria from these types of sources.

If you have any questions about this letter, please feel free to contact me at (603) 271-3918 or Andrew.T.Koff@des.nh.gov.

Regards,



Andrew Koff, P.G.

Drinking Water and Groundwater Bureau

cc: Stephen Roy, Brandon Kernan, R.Suozzo, C.Klevens; NHDES
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