NEW LONDON-SPRINGFIELD WATER SYSTEM PRECINCT
Commissioners Meeting
September 24, 2024
Whipple Hall

Attendees: Chairman Kenneth Jacques, Commissioner Richard Cross, Commissioner John MacKenna, Superintendent Rob Thorp. Many in attendance. Sign in sheet attached to these minutes.

Chairman Ken Jacques called the meeting to order at 1:00 PM.

The meeting was convened to discuss water supply options for the area, specifically focusing on Colby Point. The goal was to gather input from various stakeholders and experts to determine the best course of action.

Various participants were introduced, Peter Pitsas from Underwood Engineers, Randall Suozzo from DES, Dan Tinkham from Emery & Garrett, Mike Metcalf from Underwood Engineers, Barrie Miller from Barrie Miller's Well and Pump service , and stakeholders like Cotton Cleveland.

Mike Metcalfe provided a historical overview of Colby Point, including the installation of six wells in the early 90s and the challenges faced in maintaining them.

The wells at Colby Point have been losing efficiency, and there are concerns about the site's ability to continue meeting water demands.

The discussion included the possibility of using Little Lake Sunapee as a water source and the challenges associated with it, such as the need for pump stations.

Dan from Emory & Garrett provided a detailed analysis of the hydrogeology of Colby Point, highlighting the limitations due to fine-grained material and limited saturated thickness.

The possibility of using horizontal well technology to improve water extraction at Colby Point was discussed. This method is more expensive and somewhat experimental.

DES has concerns about the use of horizontal wells due to a higher probability of bacterial presence.

Discussion on the current state of the well field, including the decline in well yields, maintenance practices, and potential for adding new wells. Barrie Miller's maintenance practices were highlighted, including the cleaning and rebuilding of pumps every three years.

The need for detailed water level monitoring was discussed, including the use of camera analysis and transducers. The limitations of the current SCADA system in pulling historical data were also mentioned.

Discussion on the regulatory constraints related to water withdrawal limits and the permitting process for exceeding 750,000 gallons per day.

Challenges related to the physical space and infrastructure for adding new wells were discussed, including the need for additional conduits, electrical upgrades, and backup power modifications.

The possibility of exploring alternative water sources, such as bedrock wells, was discussed. The challenges of finding suitable land and the potential costs were mentioned.

Conclusion

1. Barry Miller's maintenance helps recover 3-4% of lost capacity, but the fine sands remain a significant issue. Adding new wells could be an option, but space and infrastructure limitations exist.

2. More detailed water level monitoring is needed, but the current SCADA system makes it cumbersome to retrieve data. Upgrading the system or finding alternative methods could be beneficial.

3. The current permit allows for up to 750,000 gallons per day. Exceeding this limit would require significant additional permitting.

4. Adding new wells would require significant infrastructure changes, which could be costly and complex.

5. Exploring alternative water sources could be an option, but it comes with its own set of challenges and costs.

Discussion on the regular maintenance of wells, including mechanical surging every three years to restore lost capacity due to sand and silt migration.

Consideration of testing wells individually by setting up at the pumping station and using transducers to monitor water levels.

Suggestion to have A&D look at the SCADA system to download data for regular monitoring of wells.

Discussion on the feasibility and challenges of horizontal and angled wells, including potential bacteria problems and engineering difficulties.

Consideration of adding new wells to the field and the potential impact on existing wells' production.

Discussion on the possibility of upsizing existing wells to increase the linear foot of open screen area exposed to the aquifer.

Recommendation to conduct geophysical surveys on the peninsula to find over-deepened areas and improve well placement.

Discussion on the benefits of acid cleaning and camera surveys to check for buildup on well screens.

Discussion on the potential contamination risks from nearby sites and the importance of maintaining surface water quality.

Discussion on the next steps, including reviewing old construction logs and possibly drilling a test well for better analysis.

Discussion on the variability of soil analysis and its impact on well design, including sieve analysis and comparison to slow sand filters.

Cotton Cleveland discussed the history and future considerations for wells at Colby Point, emphasizing minimal disturbance and the need for family and conservation society consultation.

Cotton Cleveland stressed the importance of rigorous water conservation practices and the need for transparent standards for new housing and water usage.

Cotton Cleveland urged proactive leadership to address water needs, workforce housing, and conservation, referencing her father's efforts in these areas.

Discussion on creating a proposal for further evaluation of existing wells, including geophysics and SCADA systems, and the need for a timeline.

Mention of state funds available for strategic planning and the upcoming deadline for applications.

Review old construction logs.

Consider drilling a test well for better analysis.

Conduct geophysical surveys on the peninsula.

Create a proposal for further evaluation of existing wells, including geophysics and SCADA systems.

The Commissioners concluded the meeting by reviewing a change order for the Main Street Project. Commissioner Cross made a motion to approve the change order, Commissioner MacKenna seconded the motion. All in favor, no objections.

The meeting ended at 2:45.

Respectfully submitted

Rhonda L Gauthier

Office Manager