

Water Systems Improvements

November 10, 2020

Town of Orwell

Project Background

The Town of Orwell water system is comprised of three (3) water sources; the spring house constructed in the 1880s, the infiltration gallery installed in 1985, and the shallow dug well installed in 1988. While the facilities are generally in good overall condition, the District's water supply has at times struggled to meet daily water demands during periods of low groundwater level (often during the months of August through October).

In 2012, the system was experiencing minor leaks and the wells did not have sufficient water to supply the Town's public water system, forcing the Town to truck in potable water for several weeks. The Town's surficial groundwater sources have repeatedly demonstrated drastically reduced yield during low groundwater level periods, resulting in insufficient source capacity.

Most recently in July 2020, the Town sources again did not have sufficient water to supply the Town's public water system, forcing the Town to truck in potable water. The Oswego County Health department has cited the Town with supply violation of Subpart 5-1—Appendix A—3.2.1.1. Appropriate action by the Town is required to improve source supply to eliminate this violation.



Potential Alternatives

Three (3) potential improvement scenarios that have been identified at this time, all of which depend on the results of groundwater investigation to be performed in 2021. The alternatives are listed below, in order of Town preference.

1. Develop new Local Well at existing Town Well Site

- ⇒ Should a favorable groundwater sources be found, a new well will be developed near or at the existing well site and will be incorporated into the existing treatment building.
- ⇒ *Approximate Cost: \$1,855,000*

2. Develop new Adjacent Well and Treatment Building

- ⇒ If favorable water *is not* found at the existing well site and *is* found elsewhere in the Town, a new well site and treatment building will be developed, location and source dependent.
- ⇒ *Approximate Cost: \$2,278,000*

3. Connection to Town of Richland Schoeller Well Site

- ⇒ If a reliable source *is not* found through the investigation efforts, the Town will connect to the Town of Richland Schoeller Well site, to be used as a supplemental water source for the Town to be purchase in case of emergency.
- ⇒ *Approximate Cost: \$2,939,000*

The alternative selected, and full scope of potential Alternative 1 and Alternative 2, will not be fully realized until the groundwater investigations are complete. The project cost, and funding scenarios are based on Alternative 3, as a conservative measure.

Project Funding Scenarios

The Town will be submitting funding applications to several potential sources through NYSEFC, CDBG, and USDA RD. The Town is eligible to apply for grants through the WIIA, CDBG, and ECWAG programs.

The project funding scenario assumes that Alternative 3 will be implemented as a conservative measure but will ultimately depend on the results of the groundwater investigation. Potential funding sources are shown below with an anticipated user charge range.

- Max CDBG Grant: \$1,250,000
- Max ECWAG Grant: \$1,000,000
- Max WIIA Grant: \$1,763,400
- USDA RD Subsidized Loan: 38-year term, 1.75-3.0%
- **Annual Debt Service Range (per EDU): \$278-\$484***

***Debt service depends on both the outcome of the groundwater investigation and the success of funding applications.**

Next Steps

- District Formation – December 2020
- Bond Resolution/ BAN – January 2021
- Apply for Funding – February 2021
- Groundwater Investigation – Spring 2021
- Submit Project Design for Approval – Fall 2021
- Construction Start – Spring 2022
- Construction Completion – Fall 2022

