



Vermont Department of Environmental Conservation

Agency of Natural Resources

EC7 WATER INVESTMENT DIVISION

National Life Building, DAVIS 3

1 National Life Drive

Montpelier, VT 05620-3510

FAX: (802)828-1552

FNSI Public Comment Responsiveness Summary

Westford Community Wastewater System Project

Vermont/USEPA Clean Water Revolving Loan Number RF1-267

1/13/2023

The Town of Westford Community Wastewater System Project (RF1-267) is receiving federal funding through the Cleaning Water State Revolving Fund (CWSRF) and the American Rescue Plan Act (ARPA). Various state and federal laws and executive orders address specific environmental concerns and review procedures. All elements of federally funded projects must comply with National Environmental Policy Act (NEPA). Planning, design, and construction of CWSRF/ARPA projects are overseen by the Water Investment Division (WID), Design and Construction Engineers (DCE).

Under the CWSRF program, the environmental review for CW projects is required between Step 1 – Preliminary Engineering and Planning and Step 2 – Final Design. Completing the environmental review prior to final design allows for an interdisciplinary approach to assessing and identifying potential environmental impacts. This early identification allows the engineering consultant to design a project with limited to no adverse effects on the identified environmental items. When those impacts cannot be avoided, program permitting requirements and mitigations measures are built into the design and bid documents prior to construction.

On October 14, 2022, the WID determined that this project qualifies for a Finding of No Significant Impact (FNSI). A public hearing regarding the FNSI was held during a planning commission meeting on October 17, 2022. The 30-day public comment period for the FNSI for this project ended on November 13, 2022, and public comments regarding the environmental effects of the project were received and considered by this Division. This comment responsiveness summary is the result of all public comments received during the 30-day public comment period related to environmental issues ending November 13, 2022, and comments during the public hearing on October 17, 2022.

Some comments have been combined or edited for brevity and clarity.

Public Lands

Monday, October 17, 2022, at Public Hearing

Bill Clearly – Town of Westford Selectboard Member

Asked about relocation of the pump station to reserve space for an expanded town office.

Monday, October 17, 2022, at Public Hearing

Vicky Ross – Town of Westford Resident

Asked about how locating the pump station on the town office and library site would impact the property.

To preserve, enhance, restore, and conserve Vermont's natural resources, and protect human health, for the benefit of this and future generations.

Stone Environmental will coordinate with the Town and WID during final design on the exact location of the pump station on the town property. Impacts to the public buildings and property will be identified during final design and addressed in the Special Conditions of the contract construction documents.

Prime Agriculture

Monday, October 17, 2022, at Public Hearing
Ira Allen – Town of Westford Resident

Concerned about the moving of the Jackson Farm in order to maintain agricultural use to avoid payment of mitigation fee.

Monday, October 17, 2022, at Public Hearing
Carol Winfield – Town of Westford Resident

Asked how many agricultural acres would be lost and where in the field would the soil-based disposal field would be paced.

The Jackson Farm and Forest project conserved 43 agricultural acres through the Vermont Land Trust and 133 acres as a Town Forest. Seven of the 133 acres for the Town forest were reserved for the wastewater community soil-based disposal field. The disposal field is not located with primary agricultural soil.

Prime agricultural soils have been identified in the project area of the Maple Shade Town Forest parcel near the entrance by Brookside Road. Concurrence with USDA Natural Resources Conservation Service (NRCS) will be needed during final design. Where disturbance within the known area is unavoidable during construction, mitigation measures will be identified by NRCS and must be provided in the Special Conditions of the contract documents.

Water Quality

Monday, October 17, 2022, at Public Hearing
Katie Harris – Town of Westford Resident

Concerned about how the stream on her property will function as a buffer. Monday, October 17, 2022, at Public Hearing
Robert Pittala – Town of Westford Resident

Asked if there was a required travel time for system water to reach the river.

The effluent from the soil-based disposal field will flow by gravity through the subsurface into the groundwater. Based on the topography of the area, the groundwater from the disposal field area flows toward and discharges to the swale which flows towards a smaller tributary which eventually discharges to the Browns River. The swale acts as a natural buffer between the disposal area and properties on the other side of the swale.

This project requires an Indirect Discharge permit be obtained through the Drinking Water and Groundwater Protection Division (DWGWD), Indirect Discharge Program (IDP). Potential indirect impacts from the soil-based disposal field to nearby water supplies, source protection areas, and receiving surface waters are reviewed and addressed as part of the permitting process. There is a requirement of 2-year travel time related specially to drinking water supplies to prevent a public health risk but no criteria for time of travel to surface waters.

Rare, Threatened, and Endangered Species

Monday, October 17, 2022, at Public Hearing
Katie Harris – Town of Westford Resident

Asked what inventories the planning commission has obtained on rare, threatened, and endangered plant inventories and had any review for significant natural communities been done. Does the project require an Act 250 permit?

Tuesday, November 8, 2022, at 6:41 p.m. via email
Pat Haller – Town of Westford Resident

Commented on the Maple Shade Town Forest study by biologists for sensitive species prior to the creation of the town forest. Also commented about flora and fauna on the town forest property given more protection through creation of the 130 acres.

The preservation of Vermont's natural wildlife is an objective of all CWSRF funded projects. The State environmental review process requires projects to comply with the Endangered Species Act [16. U.S.C. § 1531 et. Seq. (1973)]. In addition, CWSRF also reviewed the Vermont Endangered Species Law (10 V.S.A. Chap. 123).

On page 21 in the environmental report, titled "Westford Community Wastewater Disposal System Environmental Information Document, CWSRF Loan Number RF1-267-1.0," it provides the information related to the tools used by Stone Environmental. Stone corresponded with US Fish and Wildlife Service and Vermont Fish and Wildlife Department (FWD) during the environmental review. Information related to US Fish and Wildlife Service and FWD can be found in Appendix D.

There was one indication of rare, threatened, and endangered species by US Fish and Wildlife Service within the project area. CWSRF reviewed all the relevant information and concluded removal of trees in the area of concern is not anticipated, nor is cave work being completed on this project. It was determined there would be no necessary wildlife habitat nor significant natural communities affected by the project.

This project does not require an Act 250 permit as the total disturbance is less than 9 acres. Therefore, the project as proposed does not constitute development under 10 V.S.A. 6001 (3)(A)(v). The District Coordinator from the Natural Resource Board (NRB) made a determination on August 8, 2021.

Deer Wintering

Monday, October 31, 2022, at 6:40 p.m. via cc email to Everett Marshall (FWD)
Katie Harris – Town of Westford Resident

Commented on the potential of a deer wintering area on the adjoining property and concerned about the lack of in-person review of the impact to wildlife or plants.

The white-tailed deer within Vermont are not considered rare, threatened, or endangered species under the Endangered Species Act [16. U.S.C. § 1531 et. Seq. (1973)]. CWSRF obligation is to review the list of rare, threatened, or endangered species. No mitigation measures are needed for this project.

There were no identified deer wintering areas within the project area and there are no adverse impacts to deer

related to the project. The disturbance by the construction of a drip disposal field is minimal compared to a traditional soil-based leach field. The normal construction season in Vermont occurs from April 15th to October 15th outside of the winter months. Once the construction of the drip disposal field is complete, the field will remain visually as it did before construction. There is no removal of trees within the disposal field project area that would impact deer wintering areas on adjoining properties. Nor would there be impediment of deer movement.

Urban Soil

Monday, October 17, 2022, at Public Hearing
Lori Johnson – Town of Westford Resident

Concerned about the movement of contaminated urban soil during construction.

There is urban background soils as identified in the FNSI. Vermont Department of Environmental Conservation (DEC), Waste Management and Prevention Division (WMPD), Sites Management Section (SMS) guidance document dated January 3, 2022, titled “Linear Construction Projects Guidance Document” provides guidance for identification and best practices management of contaminated soils and groundwater potentially encountered during a linear construction project. Collaboration between the consulting engineer and SMS will take place during final design related to contaminated soil and groundwater. Movement of contaminated soil and groundwater discovered during construction requires prior approval by SMS.

Invasive Species Soil Management

Monday, October 17, 2022, at Public Hearing
Lori Johnson – Town of Westford Resident

Concerned about the movement of soil during construction containing invasive species, like snake worms, to locations within the community not previously found.

Soil material moved during linear construction projects typically remains within the general location of its excavation. Excavation of material during construction of individual homeowner STEP tanks and required piping will remain within the individual’s property. If excessive material containing snake worms is to be removed offsite, it will be included in the soil management plan for the project during final design. The development of soil management plan is noted in the urban soil response above.

Wetland

Monday, October 31, 2022, at 6:40 p.m. via cc email to Everett Marshall
Katie Harris – Town of Westford Resident

Supported the wetland permit being sought for the project as an adjoining landowner to the Maple Shade Town Forest property and the brook running through property.

Wetland delineation was completed by a qualified wetlands consultant for the project in October 2022. An updated site plan with the wetland delineation and buffer will be sent to DEC, Watershed Management (WM), Wetland Program for assessment of proposed impacts. The assessment will be taken into consideration during final design.

If avoidance of the wetland or wetland buffers cannot be prevented, a permit through DEC, Watershed Management (WM), Wetland Program will be required before a final design approval letter can be given by WID.

Ledge Removal, Environmental Impacts, and Drinking Water Wells

Monday, October 17, 2022, at Public Hearing
Lori Johnson – Town of Westford Resident

Concerned about ledge impacts on the project area. Would this not be considered an environmental impact? How might this impact wells?

Tuesday, October 18, 2022, at 4:03 p.m. via email
Maureen Wilcox – Town of Westford Resident

Questioned why a more in-depth study has not been completed related to ledge and how this will be handled? This seems to be extremely important to the viability of the project and re the potential impact to multiple properties.”

Wednesday, October 19, 2022, at 10:19 a.m. via email
Barbara Peck – Town of Westford Resident

Commented on the lack of information related to ledge removal, proximity of the neighboring properties, and the possible environmental ramifications (foundations and drinking water wells) being unknown.

Sunday, October 23, 2022, at 2:49 p.m. via email
Carol Winfield – Town of Westford Resident

Commented about the uncertainty related to impacts by ledge removal to the environment, or to the neighboring properties.

Tuesday, November 8, 2022, at 6:41 p.m. via email
Pat Haller – Town of Westford Resident

Commented about past experience with blasting in the community not being an issue for drinking water wells and foundations. Comment was more concerned about potential contamination of aged septic systems on the drinking water wells than impact of blasting would have on drinking water wells.

The CWSRF reviews project features to identify potential impacts and necessary mitigation measures related to environmental concerns. Ledge removal measures required during construction are reviewed as a standard engineering and construction practice outside of the environmental review process. Nonetheless, CWSRF consulted with sister agencies related to the public’s concerns related to ledge removal and provides the following additional information about standard engineering and construction practices.

As part of addressing the concern of community members about potential negative impacts to private drinking water wells and foundations related to blasting, WID consulted with Benjamin Dejong, State Geologist and Director of Vermont Geological Survey Program; Jesse Ives, Finals Engineer of VTRANS Construction & Materials Bureau; and Roger Bergeron, CWSRF Chief Construction Engineer.

Ledge removal occurs on many different types of projects throughout the state, including linear construction

projects, like the proposed project for Westford. One advantage of a low-pressure force main over a traditional gravity sewer is the depth of the force main. A force main is constructed 6-feet below existing grade with the excavation being a minimum of 4-feet wide. This reduces the depth of ledge removal compared to the traditional gravity sewer (5-feet to 20-feet deep).

The removal of ledge required can be completed by different methods including, but not limited to, an excavator with a hydraulic grinder/hammer or blasting. The method of removal is selected by the contractor; however, special conditions and/or technical specifications within the bid documents provide very specific requirements related to ledge removal for projects. The standard Technical Specifications related to blasting requires pre- and post-blasting surveys, site visits with homeowners, and water sampling along with extensive insurance carried by the blasting contractor.

Geology performed a desktop review of the geology for the Westford project area, private drinking water well records, and proximity of neighboring parcels. The depth of the private drinking water well records in the Brookside Road area show deep wells due to the pinnacle formation with some as deep as approximately 550-feet. The pinnacle formation is an impeding layer in the subsurface causing drinking water wells to be constructed deeper to get below the impeding layer. Due to the shallow nature of the ledge removal required during construction of a low-pressure force main, the department considers the impact to drinking water wells low.

Although this is not a VTRANS project, we consulted with them since their projects often involve blasting. VTRANS does not have a specific policy related to drinking water wells and impact by ledge/rock blasting during VTRANS construction projects. However, there are protocols in place, like, pre-blast surveys and site visits, including taking water samples from the private drinking water wells within 750-feet of the blasting zone(s). Despite these protocols VTRANS considers the contractor on the project responsible for the protection of the drinking water wells.

Soil borings and ledge probes are required during design of linear construction projects to accurately understand subsurface conditions during design. Also, the cost of ledge removal potentially required for a project is determined through this data collection. As part of the proposed Step 2 Engineering Services Agreement by Stone Environmental, soil boring/ledge probes will be completed prior to final design. Once the data has been captured by Stone Environmental, the assigned CWSRF design engineer will coordinate with the Town and Stone Environmental on requirements by the CWSRF program for removal of ledge on the Westford project. This will include incorporation of requirements in the contract documents. Ledge removal is standard engineering and construction practice and is not considered an additional mitigation.

General Comments

Wednesday, October 26, 2022, at 8:43 p.m. via email
Barb Cady – Town of Westford Resident

Requested to hold off on the FNSI until verbally questions and concerns of the residents are addressed.

The State Environmental Review Process (SERP) used by CWSRF projects is an approved environmental review process by the Environmental Protection Agency (EPA). CWSRF addresses all specific environmental comments and questions presented through the FNSI process either during the 30-day public comment period or during FNSI public hearing.