VERMONT

Vermont Department of Environmental Conservation
Drinking Water and Groundwater Protection Division
Old Pantry Building
103 South Main Street
Waterbury, VT 05671-0403
www.vermontdrinkingwater.org

[phone] 802-241-3400
[in-state] 800-823-6500
[fax] 802-241-3284

Agency of Natural Resources

To: Christine Thompson, Director, Drinking Water and Groundwater Protection Division

Through: Eric Blatt, P.E., Chief, Engineering and Financial Services Section

From: Bryan Redmond, DWSRF Program Specialist

Subject: Town of Proctor – DWSRF Environmental Review of Comprehensive Water System Upgrades.

Date: November 16, 2012

Project Identification

Name: Town of Proctor, Water System Improvements
Drinking Water State Revolving Fund Loan RF3-289

Address: Stan Wilbur, Town Administrator
Town of Proctor
45 Main Street
Proctor, VT 05765

Location: Town of Proctor, Vermont

Summary of Environmental Review

The Department of Environmental Conservation (Department), Drinking Water and Groundwater Protection Division has reviewed this project in accordance with the Program's "Environmental Review Procedures for Projects Funded Through the Vermont/EPA Drinking Water State Revolving Fund Loan Program."

The Department has reviewed the following documents:

- Environmental Information Document titled "Town of Proctor, Water System Improvements," dated September 2010, by Marble Valley Engineering, PC.

- Environmental Assessment Report titled "Town of Proctor, Water System Improvements, Addendum B", dated August 2010, by Marble Valley Engineering PC.

- Comprehensive Preliminary Engineering Study titled "Town of Proctor, Water System Improvements, Addendum A", dated July 2010, by Marble Valley Engineering, PC.

- Letter, Characteristics of Construction Contracts, Marble Valley Engineering, PC, dated January 6, 2011.

- Long Range Plan Update titled "Town of Proctor Public Drinking Water System, Long Range Plan Update – March 2012 (revised April 27, 2012)".

- Settlement Agreement, between Town of Proctor and Beverley Taranovich, dated August 6, 2012.

- Settlement Agreement, between the Town of Proctor and the Settling Defendants, dated February 22, 2012.

- Consent Judgment and Order, Rutland Superior Court, dated September 26, 2012.

Project Description

The Town of Proctor is located in Rutland County, Vermont. The project consists of comprehensive system upgrades to include source, storage, treatment, transmission and distribution improvements. The upgrades are proposed in order to facilitate regulatory compliance with the Federal Stage 1 and Stage 2 Disinfectants and Disinfection Byproduct Rules and the Vermont Water Supply Rule, specifically requirements relating to minimum water pressure. The proposed project will convert the surface water based system to a groundwater only system based upon a rehabilitated, replacement Field Street Well, located within the Town of Proctor. Distribution and storage facility upgrades are needed to meet the hydraulic requirements imposed by the new well and to address the sufficient residual pressure goal.

A brief description of each of the construction contracts follows:

- *Contract 1: This contract replaces approximately 3,700 feet of 4-inch cast iron main on Olympus Avenue, Grove Street, Park Street, and Holden Avenue with 8-inch ductile iron main.
- Contract 2: Water Meters and Backflow Prevention - This contract provides for the installation of individual water meters and backflow prevention on all service lines.
- *Contract 3: The existing well pump station will be demolished and a new well pump station will be constructed to accommodate the replacement well and new piping, chemical feed systems and controls. The existing 8 inch well

casing and pump will be renovated for standby usage in the case of replacement well/pump mechanical failure. Controls will be coordinated with the concurrent water storage/distribution system improvements.

- Contract 3A: East Street Water Main - This contract provides pressure reduction and possible pipe replacement for a block of homes near the well pump station that will be exposed to extremely high pressure when the new system is placed into operation.
- Contract 4: East Side Tank and Tower Road - This contract includes the construction of a new 680,000-gallon water storage tank, access road, cutting and capping existing tank supply line, connection of new tank supply line to existing distribution system and the replacement of approximately 500 feet of 6-inch cast iron main on Tower Road.
- Contract 5A: This project is required to control the water level between the east and west storage tanks. The installation includes a below grade concrete vault constructed over the existing 8-inch/10-inch water main, a solenoid-controlled valve, valve control system and provisions for booster disinfection. The distribution isolation valve, controlled by west side storage, will batch feed water from the east side of the system to the west side of the system. This sequence allows the volume of the existing West Tank to partially turn over, minimizing the impact of any distribution system-generated DBPs. Modifications also allow a greater utilization of the originally-constructed storage volume.
- 5B: This contract consists of the construction of a new 33,000-gallon water storage tank to provide minimum domestic pressure to the Bluff/Taylor/Gibbs neighborhood. Twenty (20) psi is available from the existing West Water Storage Tank for fire suppression purposes. To maintain existing fire suppression capability, but increase domestic pressures, this new pressure zone will be isolated at three points of hydraulic access by check valves installed in underground vaults. One check valve will have a solenoid-controlled override; the other two will not.
- Contract 6: This contract will replace approximately 2,000 feet of 4-inch cast iron main on upper Park Street and Chatterton Park with 8-inch ductile iron main.
- Contract 6A: Replacement of a section of 4 inch cast iron pipe located under a house and which also serves a fire hydrant.
- Contract 7: The existing east side water storage tank is undersized, is coated inside and out with lead paint and has reached the end of its useful life. It will be removed and the site restored. Cutting and capping of the existing tank supply line and connecting new tank supply line will be accomplished under Contract No. 4.
- Contract 8: The Town of Proctor Selectboard has adopted a two phase program for the discontinuance and abandonment of the surface water supply infrastructure located in the Towns of Chittenden and Pittsford. Phase 1 discontinuance relating to the surface water treatment plant will include physical disconnection and capping of the raw water piping entering the facility and the finish water line exiting the facility. The plant will be closed

and protected against vandalism. Phase 1 discontinuance relating to the transmission and distribution pipe will include cutting and capping the pipe at the downstream end near the last customer on the system. All water service lines will be cut and capped at or near the distribution main or where the service line enters the building. Phase 2 infrastructure abandonment is not currently defined. It may include project adaptive re-use of the two surface water intakes and raw water main and the filter plant by the U.S. Fish & Wildlife Eisenhower National Fish Hatchery; abandonment, adaptive re-use or demolition of the existing surface water treatment plant and adaptive re-use of the site alone; abandonment or partial adaptive re-use and full or partial plugging and/or demolition of the existing transmission main and physical removal of pipe sections exposed on the top of the ground or laid on the bottom of rock-based streambeds.

* Indicates project was issued a categorical exclusion under a separate DWSRF loan.

Finding of No Significant Impact (FNSI) Required

The Vermont Department of Environmental Conservation, Drinking Water and Groundwater Protection Division has established "Environmental Review Procedures for Projects Funded Through the Vermont/EPA Drinking Water State Revolving Fund," in accordance with the National Environmental Policy Act (NEPA), for projects receiving drinking water revolving loan funds. Under these environmental review procedures, projects that are known to have significant unusual characteristics or are known to cause significant public controversy are not eligible to receive categorical exclusion and are subject to more detailed environmental review requirements.

A Finding of No Significant Impact (FNSI) is the appropriate environmental review response for this project. This project is not eligible for categorical exclusion from detailed environmental review. Also, the project's direct and indirect environmental effects do not meet the criteria for issuance of an Environmental Impact Statement (EIS), as described in section XII of the Department's environmental review procedures. The basis for this determination is the intended disconnection of approximately 63 residential service connections currently supplied drinking water from the Proctor municipal water system. These connections are located in the towns of Pittsford and Chittenden. The Department has determined that this action has resulted in significant public controversy and is highly unusual in nature when compared to other projects funded through the loan program.

Alternatives to the Project

Four primary alternatives (with numerous variations) were considered to solve the regulatory compliance issues of substandard water pressure and compliance with disinfection by-product (DBP) standards. The four primary alternatives considered are outlined below. Please refer to Comprehensive Preliminary Engineering Study (CPES), Addendum B: Environmental Assessment Report for a full description of each alternative (and variations) considered.

I. The no action alternative. This alternative is not regulatorily acceptable.

II. Surface water system upgrade to address DBPs and other storage and distribution system improvements identified in the CPES. This alternative while technically feasible was determined not to be cost effective.

III. Hybrid surface water/groundwater system. This alternative while technically feasible was determined not to be cost effective.

IV. Groundwater only system. This alternative is technically feasible, cost effective, and will not have significant adverse environmental impacts from its construction or operation. It is anticipated that the construction of these improvements will result in regulatory compliance. This alternative does present additional legal constraints as this alternative will result in the discontinuance of service to those residences currently served in the Towns of Pittsford and Chittenden.

Direct and Indirect Environmental Effects of the Project

The direct environmental effects of construction and operation of this project are adequately addressed by the September 28, 2010 Environmental Information Document and the August 2010 Addendum B: Environmental Assessment Report prepared by Marble Valley Engineering. These documents provide a thorough assessment of the direct environmental impacts and conclude there are no significant environmental consequences resulting from the project. There are no significant environmental impacts on general land use, important farmland, or formally classified lands. There are no significant environmental impacts on floodplains, streams, or wetland resources. There are no significant environmental impacts on biological resources, including endangered species, or sensitive natural community types. Construction erosion and runoff control measures will be incorporated into the project. Due to the proposed project construction there will be minor, temporary environmental impacts relating to air quality, transportation, noise, and vibration.

In regards to historic resources, several archeological studies have been conducted of the project areas and have concluded that no further study is required at this time. Historic preservation concerns include visual screening of the distribution isolation valve vault; photo documentation, drawings, and historical research on the existing East Side water storage tank; proper mothballing of the water filtration plant under phase I abandonment; and possible further study when an alternative is selected for phase II abandonment. The concerns relating to the distribution valve vault and the existing East Side water tank will be adequately addressed in the contract documents. Concerns relating to the abandonment of the existing water filtration plant will be addressed during the construction permitting process and a requirement that further study may be required prior to proceeding to phase II abandonment.

The indirect environmental effects of construction and operation of this project are expected to be minimal. The primary purpose of the project is to increase water pressure and improve water quality for the service area within the Town of Proctor's municipal boundary. The proposed project will reduce the size of the service area through the disconnection of users currently served within the Towns of Pittsford and Chittenden.

Socio-Economic Effects of the Proposed Project

The proposed project will not require relocation of people. Customers adversely impacted by the abandonment portion of this project will receive partial compensation from the Town of Proctor to offset the costs associated with obtaining an alternate drinking water supply (described below). A general obligation bond in the amount of $6,164,177 was approved by the Town of Proctor voters on August 24, 2010. It is anticipated that the total project cost will be funded through low interest loans provided through the Drinking Water State Revolving Fund. The current increase in the user rate to cover the new debt associated with the project is estimated to be $165 per equivalent residential unit. As stated above, the selected alternative represents the most cost effective, technically feasible solution that is anticipated to result in regulatory compliance.

Mitigation of Adverse Impacts

The Town of Proctor has established a fund in the amount of $250,000 to provide financial assistance to those being disconnected to seek an alternative source of drinking water. The specifics of this fund including the method for disbursement of funds will be in accordance with the Consent Judgment and Order issued by the Vermont Superior Court on September 26, 2012.

Additionally legislation was passed during the 2012 legislative session to establish a low interest loan program to provide financial assistance to individuals to seek an alternate source of drinking water if they have been involuntarily disconnected from a public water system. The program will be administered by the Agency of Natural Resources and loans will be made to the applicant municipality to assist their residents impacted by this project to seek an alternate drinking water source. The Town of Pittsford has applied for these funds to provide financial assistance to properties within the Town of Pittsford whose service is being discontinued.

List of Agencies and Groups Consulted

Federal Agencies:

- US Environmental Protection Agency Region 1, Boston, Massachusetts
  Environmental Engineer, Municipal Assistance Unit
- USDA Rural Development
  State Engineer, Montpelier Office
- US Army Corp of Engineers
  Senior Project Manager, Vermont Office

State of Vermont:

- Department of Fish and Wildlife
  Ecologist, Natural Communities Program
- Department of Environmental Conservation

Rivers Engineer, Rivers Program
NFIP Community Assistance Coordinator, Rivers Program
Wetlands Scientist, Wetlands Office
DWGWPD, Engineering Section
DWGWPD, Operations Section
DWGWPD, Staff Attorney

- State Historic Preservation Office
  Survey Archeologist
  Architectural Historian

Summary of Public Involvement

One public hearing is scheduled for December 10, 2012 at 5:30 p.m. at the Town of Proctor's municipal offices. The notice for the meeting was included in the Notice of Intent to Issue a Finding of no Significant Impact to the Proctor water system improvements project which is being published in the Rutland Herald. The meeting notice will be posted on the Drinking Water and Groundwater Protection Division's website, the Agency of Natural Resources electronic public meeting calendar, and the Vermont Department of Libraries' electronic state public meeting calendar.