



**CWSRF Projects C5-5520-05-70 & 05-00**  
**Town of Ticonderoga**  
**Essex County**  
**Sewer Rehabilitation and WWTP Improvements (Stage 1)**  
**Sewer District No. 5**

**Type of Financing:** Short-Term Interest-Free and American Recovery and Reinvestment Act (ARRA) Funds

**Estimated Amount to be Financed:** \$5,615,923      **EPA Approved Green Project Reserve:** \$917,091

**Estimated ARRA Principal Forgiveness:** \$3,621,100

**Estimated Principal of Long-Term Financing:** \$1,994,923

	(Amount)	(Source & Type)
<b>Other Funding Sources:</b>	\$ 1,000,000	NYS Adirondack Water Quality Grant
	\$ 323,780	Bonds Issued
	\$ 190,000	Municipal Contribution
	\$ 138,500	Principal Payment

**Prior CWSRF Recipient:** Yes (X) No ( )

**Hardship Determination:** Yes (X) No ( )

**Project Description:**

This action consists of financing costs associated with planning, design and construction of the first stage (phases 1, 2 and 3) of wastewater treatment and collection facility modifications project in the Town of Ticonderoga. The project is defined by: an engineering report entitled, "Aeration System Replacement Evaluation, dated November 18, 2005" and process Reconstruction Plans, dated October 31, 2005, revised November 11, 2005 which were approved by the New York State Department of Environmental Conservation (NYSDEC) on November 28, 2005; by an engineering report entitled, "Combined Sewer Water Pollution Control Plant, Unit Process Evaluation and Capital Improvement Plan", dated March 16, 2007 which was approved by NYSDEC on June 29, 2007; by an engineering report entitled, "Town of Ticonderoga Sewer District No. 5, Water Street Sewer Collection System Evaluation", dated March 7, 2008 which was approved by NYSDEC on May 16, 2008. The project is further defined by numerous force account projects that were determined to be eligible for CWSRF financing by Memorandum dated May 20, 2008; by plans and specifications entitled "Alexandria Avenue Storm Sewer Rehabilitation and Realignment", dated January 2007 which was approved by NYSDEC on November 19, 2007; by plans and specifications entitled "Wastewater Treatment Plant Reconstructing (Phases 1-3), Preliminary Treatment Process", dated January 16, 2009, which was approved by NYSDEC on March 27, 2009. This report was supplemented to add Green Project Reserve features by a NYSERDA Report entitled "Ticonderoga WWP Reconstruction Phases 1-3 Energy Efficiency Funding Memorandum", dated August 25, 2009 that was determined eligible by the NYS Environmental Facilities Corporation on December 8, 2009.

The NYSDEC approved Capital Improvement Plan recommends implementing this project in two stages. It is anticipated the Town of Ticonderoga will apply for CWSRF financing in the future to construct the second stage (phases 4, 5 and 6) of this project which is identified as CWSRF Project Number C5-5520-07-00.

## **Project Summary:**

The Town of Ticonderoga Sewer District No. 5 owns and operates a combined sanitary/storm water collection and treatment facility located along the LaChute River within the Hamlet area once known as the Village of Ticonderoga. The wastewater treatment facility has been in service since 1979 but due to its age, restrictions in the collection system, and new regulatory requirements for more advanced treatment, this facility is not able to consistently meet SPDES effluent limits and is in danger of catastrophic failure if improvements are not made soon to both the collection and treatment facilities.

Reports recommend a two staged project approach utilizing the CWSRF program to help affordably solve these problems. Each stage of the project is comprised of three phases of work to be constructed over the next several years. This action, namely Stage 1 (phases 1, 2 and 3) includes refinancing costs associated with emergency WWTP equipment, collection system replacement projects, tertiary and preliminary treatment upgrades and other miscellaneous work. Stage 2 (phases 4, 5 and 6) includes storm water holding tank, secondary treatment and solids handling upgrades.

Green Project Reserve (GPR) funding will enable the Town to improve the energy efficiency of the wastewater treatment facility. The Town will install variable frequency drives on the grit pumps, classifier degritting screw, grit conveyor drive motor; install grit blower chambers with automatic valves, storm water recycle pumps/flow control structure modifications; and install premium efficiency motors on all new equipment and existing equipment greater than 7.5 horsepower. These proposed improvements have been approved by the U.S. Environmental Protection Agency as eligible GPR infrastructure under the American Recovery and Reinvestment Act of 2009.

## **Financing Summary:**

Total project costs of \$7,268,203 will be funded with a combination of short-term interest-free financing, principal forgiveness, a Green Project Reserve grant, a NYS Adirondack Water Quality Grant for \$1,000,000, bonds issued in the amount of \$323,780, a municipal contribution for \$190,000 and principal payments totaling \$138,500. The Town plans to convert to long-term direct financing in 2010.

## **SEQR Findings:**

The Corporation has determined that the proposed action will finance a project which will not have a significant adverse impact on the environment: (1) the DEC has issued a SERP Certification; (2) there are no potentially large impacts identified; (3) the Town of Ticonderoga, acting as Lead Agency, has issued a negative declaration.

## **Construction Schedule:**

<u>Description</u>	<u>Construction Start</u>	<u>Construction Completion</u>
Contract "H"	January 11, 2006	May 6, 2006*
Contract "GC"	January 11, 2006	May 6, 2006*
Water Street Sewer Reconstruction	October 7, 2008	August 30, 2009 ***
Septic Receiving Building	May 7, 2004	September 15, 2008
Alexandria Ave. Storm Sewer	December 2007	May 15, 2008 ***
Champlain Ave. Sewer	April 16, 2005	October 15, 2005*
CB Vacuum Truck	May 23, 2005	May 23, 2005**
WWTP-Electrical Construction	October 9, 2009	August 5, 2010 (T)
WWTP-General Construction	October 9, 2009	August 5, 2010 (T)
Force Account	October 9, 2009	August 5, 2010 (T)

\*As per Engineer's Certification of Completion

\*\* Date of Delivery and Acceptance

\*\*\* As per Construction Contract Schedule