



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

AUG 28 2008

To All Interested Government Agencies and Public Groups:

In accordance with the U.S. Environmental Protection Agency's (EPA) procedures for the preparation of environmental impact statements (EIS), an environmental review has been performed on the proposed agency action below:

Project Name: Limeledge Water Districts

Purpose of Project: The purpose of the project is two-fold:
a) to eliminate a potential public health threat to residents of the Village of Marcellus, as the Village's public water supply has been determined to be Ground Water Under the Direct Influence of Surface Water, and
b) to provide sufficient quantities of potable water to the residents of the Limeledge area of the Towns of Marcellus and Skaneateles, who are currently using individual groundwater wells which are generally unsatisfactory in terms of water quality and quantity.

Project Originator: Town of Marcellus (lead agency)

Project Location: Town and Village of Marcellus, and Town of Skaneateles Onondaga County, New York

Project Description: The proposed project involves installation of approximately 61,500 linear feet of 8" diameter water mains, together with fire hydrants and other appurtenances. A water pumping station and a 150,000-gallon capacity water storage tank will also be constructed. In addition, in the Village, the existing North Street pumping station and Highland Water Tank will be upgraded and rehabilitated, and inadequate water mains will be replaced in two critical areas. This water supply infrastructure will be connected to the Onondaga County Water Authority's existing system of water distribution mains.

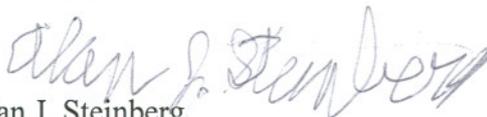
Estimated Eligible Project Cost: \$ 4,848,000

Estimated EPA Grant: \$ 477,000

Our environmental review of this project indicates that no significant adverse environmental impacts will result from the proposed action. Consequently, we have made a decision not to prepare an EIS on the project. This decision is based on a careful review of the project's environmental information document and other supporting information. All of these documents, along with the Environmental Assessment (copy enclosed), are on file at the offices of the EPA Region 2 and the Town of Marcellus where they are available for public scrutiny upon request. The EA is also available on EPA Region 2's website at <http://www.epa.gov/region02/spmm/r2nepa.htm>.

Comments supporting or disagreeing with this decision may be submitted to EPA for consideration. All comments must be received within 30 calendar days of the date of this finding of no significant impact (FNSI). Please address your comments to: Grace Musumeci, Chief, Environmental Review Section, at the above address. No administrative action will be taken on the project for at least 30 calendar days after the date of this FNSI.

Sincerely,


Alan J. Steinberg
Regional Administrator

Enclosure

ENVIRONMENTAL ASSESSMENT
SPECIAL APPROPRIATION ACT GRANT PROJECT

LIMELEDGE WATER DISTRICTS PROJECT
TOWN OF MARCELLUS (lead agency)
ONONDAGA COUNTY, NEW YORK

U.S. Environmental Protection Agency – Region 2
New York, NY

I. Project Identification

Name of Project: Limeledge Water Districts

Grant Applicant: Town of Marcellus, New York (lead agency)

Project Location: Town and Village of Marcellus, and Town of Skaneateles
Onondaga County, New York

II. Background

The project area is located in western Onondaga County, New York, approximately 10 miles west-southwest of the Syracuse metropolitan area (Figure 1). It includes the Village of Marcellus and portions of the Towns of Marcellus and Skaneateles.

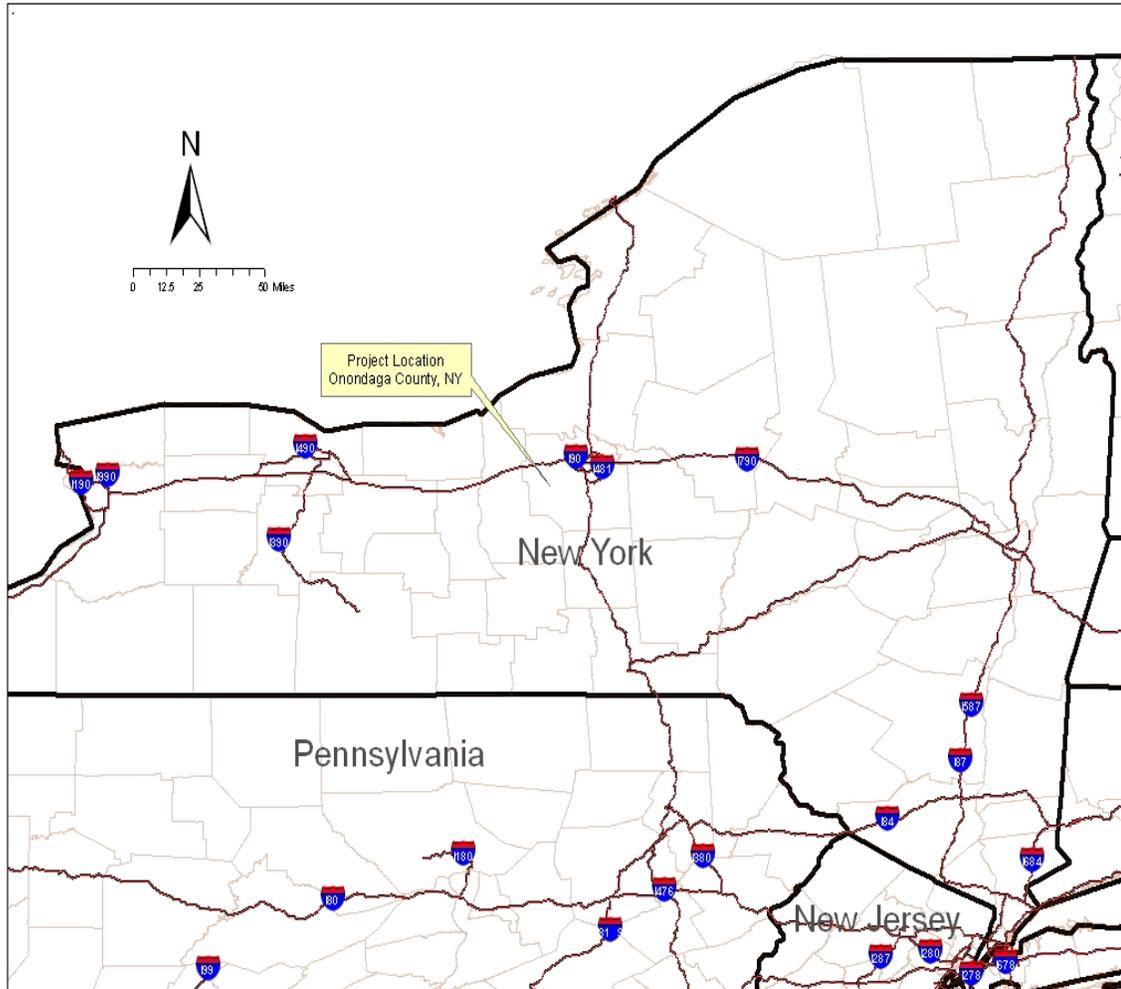


Figure 1 – General Location Map

Nine Mile Creek, which is fed by Otisco Lake immediately to the south, flows through the project area to Onondaga Lake (Figure 2). Otisco Lake, the smallest and easternmost of the Finger Lakes, is approximately 6 miles long and 0.75 miles wide. It is one of three primary sources of water (the other two are Lake Ontario and Skaneateles Lake) utilized by the Onondaga County Water Authority (OCWA) to provide drinking water to 340,000 customers in Onondaga, Oswego, Madison and Oneida Counties.

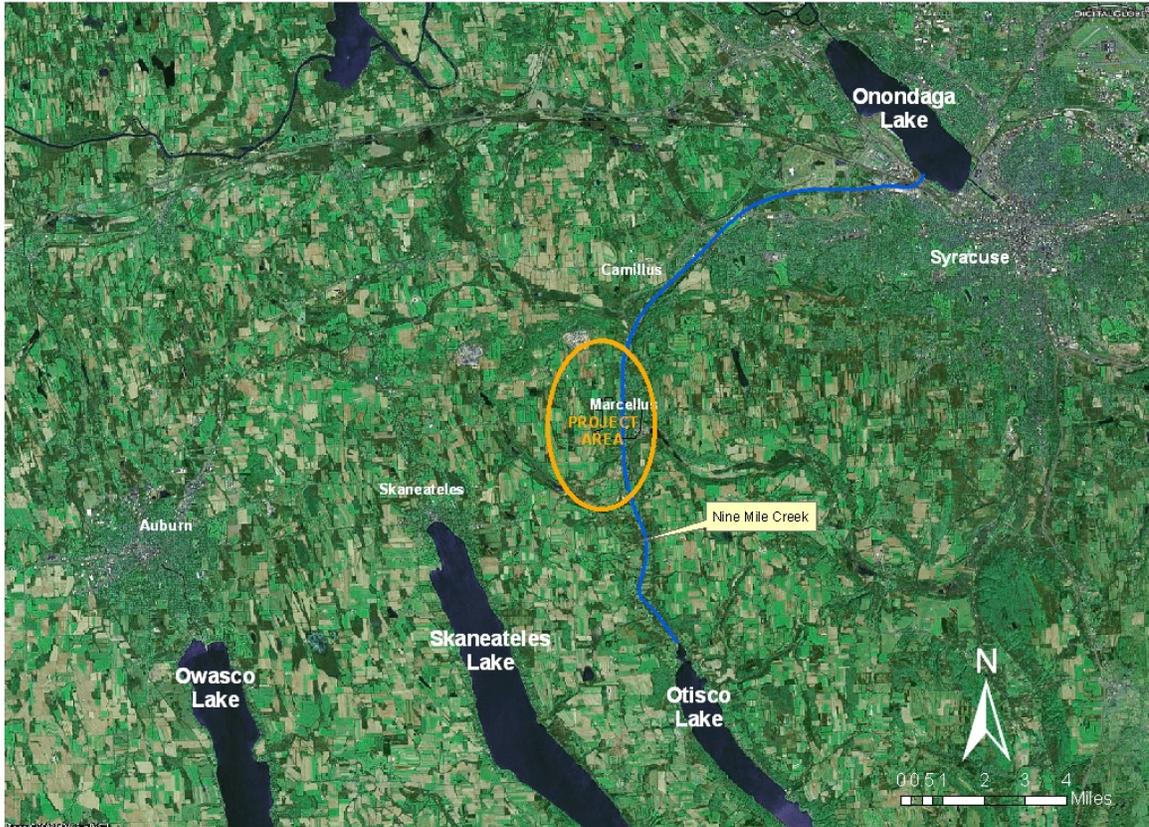


Figure 2 – Aerial Overview of General Project Location

The Towns of Marcellus and Skaneateles are approximately 33 and 49 square miles in size, respectively, and have populations of 6,319 and 7,323 (Figure 3). The project area in these Towns is predominantly agricultural, with designated Agricultural Districts. Products include livestock, dairy, hay, corn, wheat and lumber. There are also several small residential developments. Residents in the Town of Marcellus and Town of Skaneateles portions of the project area currently rely on private wells for their water supply needs.

The Village of Marcellus is approximately 0.6 square mile in size, with a population of 1,826. The Village, which is served by an existing public water supply system, contains residences, shops and small businesses, and the Marcellus Central School District.

Many residents of the project area are employed in Skaneateles or the greater Syracuse metropolitan area; farms are the largest employers in the immediate project area.



Figure 3 – Highway Map of Project Area

III. *Purpose and Need for the Project*

The project area is primarily the Town and Village of Marcellus with a small extension into the Town of Skaneateles to serve a small residential development and for the site of a proposed water storage tank. The purpose and need for this project is to make potable water from the OCWA available to service the needs of the residents of these areas.

Except for residents of the Village, most of the residents of the project area currently obtain water from private wells. Many of these individual wells are reportedly unable to consistently provide sufficient amounts of satisfactory quality drinking water. In addition, the area is located over subsurface deposits that are not suitable for supplying the quantities of water required to install and operate a large municipal water supply system. With support from residents and property owners in these areas, the Towns have formed the Limeledge Water Districts to supply sufficient quantities of quality potable water to the area.

Until recently, the Village of Marcellus' existing public water supply system received water from a spring-fed reservoir, with an emergency connection to the OCWA's water supply system available for severe drought conditions or when the system requires major maintenance. Of particular note, however, is that the Village's main water source has been determined to be "Ground Water Under the Direct Influence of Surface Water" (GWUDI). As a result, to comply with federal and state requirements for ensuring that public drinking water supply systems provide water that is safe to drink, the Village needs to either install a water filtration system or develop an alternate source of water that complies with the New York State Surface Water Treatment Rule and the New York State Sanitary Code. In the interim, the OCWA is supplying the Village with water through its emergency connection.

To resolve these problems, the OCWA has expressed an interest in providing properly treated drinking water to the Village water system and the residents of the Limeledge Water Districts on a long-term basis. To that end, the Town and Village of Marcellus and the Town of Skaneateles have entered into an intermunicipal agreement with respect to implementation of the proposed project.

The OCWA has sufficient water supply capacity to meet the water supply needs of these additional areas from its permitted withdrawals from Otisco Lake. It has a permit from the State of New York to withdraw up to 20 million gallons of water per day from Otisco Lake. After chlorination for disinfection and to mitigate the growth of zebra mussels, the water is conveyed five miles by gravity to the OCWA's Water Treatment Plant in Marcellus for treatment prior to distribution to customers via the OCWA's system of water mains.

IV. Description of the Proposed Project

To service the Limeledge Water Districts portion of the project area, the proposed project includes installation of approximately 61,500 linear feet of 8-inch diameter water lines (58,100 linear feet in the Town of Marcellus, and 3,400 linear feet in the Town of Skaneateles), together with all necessary valves and appurtenances. In addition, a new pump station and connection to the existing water system would be installed near the Village's Highland Water Tank. To provide adequate storage capacity to meet water demand variations and provide adequate fire flows, a new 150,000-gallon water storage tank would be constructed in the Town of Skaneateles (Figures 4 and 5).

Fire hydrants would be installed at 600-foot intervals, near road intersections, and at the ends of all water mains. Service will be provided to each existing developed parcel in the proposed service areas via a curb box and stop at the property line. It will be the responsibility of each property owner to disconnect the property's plumbing from private wells, and to connect it to the public water supply, pursuant to the requirements of the Onondaga County health code and related ordinances.

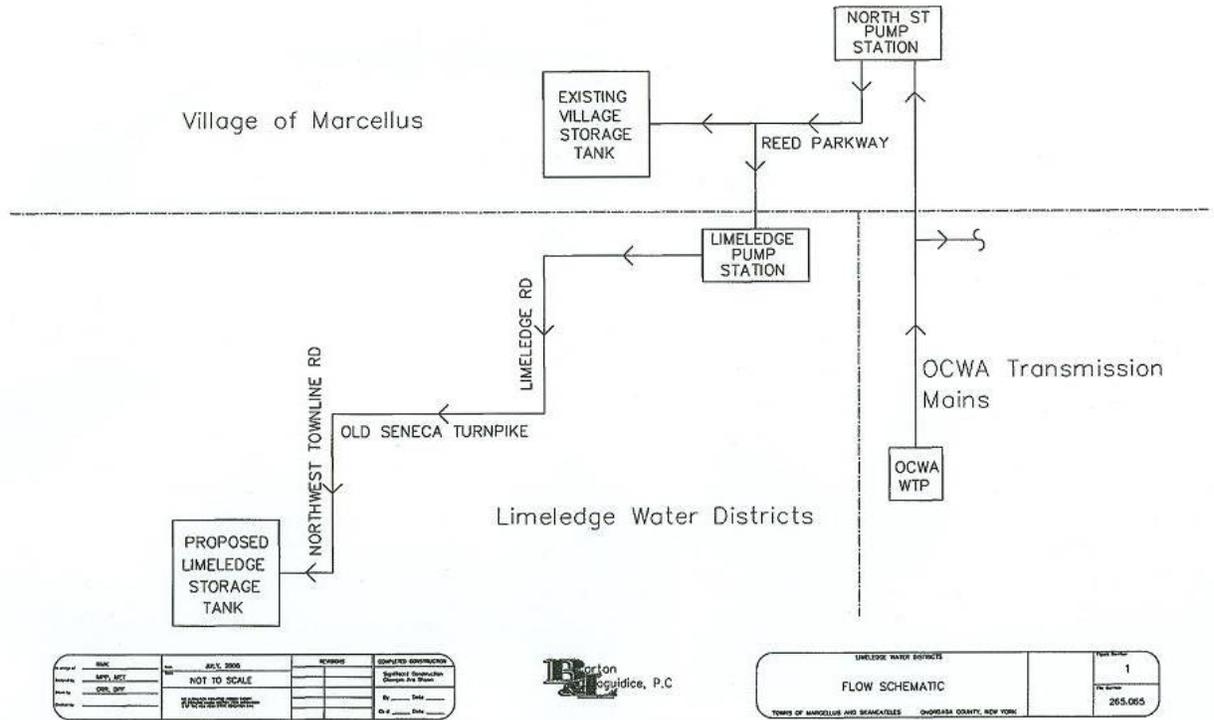


Figure 5 – Water Supply Schematic Diagram

The existing water supply system in the Village of Marcellus portion of the project area would also be improved. The existing North Street pumping station in the Village would be upgraded, and the existing Highland water tank would be rehabilitated. To provide adequate water flow through the Village system, two sections of existing 6-inch diameter water main will be replaced with new 8-inch pipe, along Reed Parkway and Main Street.

Water will be supplied to the area via existing Village connections to OCWA water mains. These connections were originally installed to provide the Village with an emergency backup source of water supply. The Village is currently utilizing these connections because the Village's own water supply has been determined to be GWUDI by the State of New York.

V. Costs

Total Estimated Project Cost	\$6,287,000
Estimated Grant-eligible Project Cost:	\$4,848,000
Estimated EPA Grant:	\$ 477,000

Each connected unit would pay a quarterly water bill to the OCWA. Based on the OCWA's current residential water rates, the cost for a typical unit using 73,000 gallons of water per year would be approximately \$208.

VI. Alternatives

Alternative 1 - Proposed Project - Construction of new water mains, a booster pump station, and water tank, and rehabilitation of the Village's existing water supply system, as described in Section IV above. This alternative involves pumping water from the existing OCWA water system to the existing Village tank, and to the new water storage tank in the Skaneateles areas of the Limeledge Water District.

Alternative 2 - Serve select areas in the Towns of Marcellus and Skaneateles via a Joint Pumping Station with the Southern Onondaga Area Water Districts Project - This alternative would not address or resolve the issues associated with the Village of Marcellus' water supply problems or in other areas that rely on inadequate wells. Consequently, it was rejected.

Alternative 3 - Location/Routing Alternatives - Alternative routings of the water lines is somewhat restricted, because all parcels in the water districts must have access to water supply lines along their property boundaries. Thus, wherever feasible to do so without affecting sensitive areas, the water mains will be installed within the shoulders of existing roadways. With respect to the Village, the location of the rehabilitation work and other improvements are necessitated by the configuration of the existing system.

Alternative 4 - No Action - Under the no action alternative, no new water lines would be installed. The properties presently served by the Village system would be left without a supply of potable water if the OCWA terminates the current emergency service arrangement and the Village does not install a water filtration plant or develop an alternate source of water that complies with the New York State Surface Water Treatment Rule and the New York State Sanitary Code. In addition, without the project, individual property owners in the Limeledge Water Districts will be forced to choose between replacing failing wells, pursuing uncoordinated individual efforts to obtain alternative water supplies, constructing water lines from another municipality, continuing to live with substandard drinking water quality, and even potential property abandonment. Consequently, the no action alternative was rejected.

VII. Environmental Consequences

A. Land Use - The construction of the project will be conducted in accordance with New York State's "Guidelines/Special Permit Conditions for Water/Sewer Transmission Mains Located Partially or Wholly in an Agricultural District." Furthermore, the Commissioner of Agriculture and Markets of the State of New York has reviewed the project and, in September 1, 2001 letters to the Towns of Marcellus and Skaneateles, determined that the project would not have an unreasonable adverse effect on the continued viability of farm enterprises within an agricultural district or on State environmental plans, policies, and objectives. Thus, land use in areas zoned agricultural should not significantly change, although some properties may become developed with additional residences in the future. Changes in land use that could result from the availability of public water can be controlled by zoning regulations.

- B. Wetlands/Surface Water Quality - Construction of the waterlines will occur in highway rights-of-way and will not disturb any wetlands. In addition, siltation controls will be provided along the construction areas to prevent any potential silt migration to wetlands/surface waters. The water mains will be buried below-ground and the surface will be subsequently restored. Consequently, the project will have no significant wetland or water quality impacts.
- C. Floodplains - There is a narrow flood zone associated with Nine Mile Creek as it flows through the Village. However, the project does not involve installation of facilities or other disturbances in this area. Consequently, the project will not exert any significant physical impacts on the floodplains, so flood elevations will not change.
- D. Air Quality - The proposed project is located in the Onondaga County carbon monoxide (CO) air quality maintenance area. Because the project is funded with a federal grant, it is subject to the general conformity air regulations (40 CFR 93 Subpart B). Accordingly, EPA conducted an analysis of CO pollutant emissions from construction of the project. Emissions estimates were based on emission factors taken from a number of sources and on vehicle/equipment types and activity levels supplied by the project sponsor.

Table 1 shows the results of the general conformity applicability analysis for 2009, when the construction period is expected to occur. As indicated, emissions of CO from construction of the project are significantly less than the applicable general conformity “de minimis” threshold value. Therefore, the project is presumed to conform to the State Implementation Plan.

TABLE 1 - ESTIMATED CONSTRUCTION EMISSIONS FOR GENERAL CONFORMITY ANALYSIS	
<i>POLLUTANT</i>	<i>CO (carbon monoxide)</i>
OFF-ROAD CONSTRUCTION EMISSIONS (tons)	1.081
ON-ROAD CONSTRUCTION EMISSIONS (tons)	0.437
TOTAL CONSTRUCTION EMISSIONS (tons)	1.518
GENERAL CONFORMITY THRESHOLD (tons)	100
PERCENTAGE OF THRESHOLD	1.52%

EPA also estimated the potential greenhouse gas emissions from the construction phase of the Limeledge Water Districts project. Table 2 shows the results of the greenhouse gas analysis.

TABLE 2 - CARBON DIOXIDE EMISSIONS SUMMARY	
<i>POLLUTANT</i>	<i>CO₂</i> <i>(carbon dioxide)</i>
OFF-ROAD CONSTRUCTION EMISSIONS (tons)	198.030
ON-ROAD CONSTRUCTION EMISSIONS (tons)	14.788
TOTAL CONSTRUCTION EMISSIONS (tons)	212.818

Short-term construction-related impacts to air quality in the project area include fugitive dust emissions and emissions from construction equipment. Mitigation techniques include but are not limited to:

- Wetting or chemically treating exposed earth during construction.
- Limiting construction activities during extremely windy and/or dry conditions.
- Covering dust-producing materials being transported to and from the area.
- Keeping trucks and other construction equipment clean and properly maintained
- Implementing traffic management plans to minimize delays, and routing traffic away from residential areas and other sensitive receptors.

- E. Transportation - Standard maintenance and protection traffic measures will be implemented to reduce traffic disturbances during construction, but some minor short-term delays are likely in areas where the water main needs to be installed within the roadway pavement. There will be, however, no permanent or long-term transportation impacts.
- F. Aesthetics - Except for the locations of the new pump station in the Village and the new Limeledge water tank in Skaneateles, the aesthetics of the project area will not be affected. The pump station will be hidden by forest on three sides and will utilize the same access road as the existing Highland Water Tank. The new water tank, which will be located near the top of a hill to facilitate water pressure and flow via gravity, will be painted a color chosen by the Towns to blend in with and complement the landscape of its rural location.

- G. Noise - Noise generated by construction equipment may temporarily impact residents as construction proceeds through their areas. This noise will be temporary and localized. Construction equipment will be equipped with mufflers in accordance with state regulations, and local noise ordinances will be followed. The booster pump station will produce low-level operation noise, but the pump housing will be designed so that ambient noise levels outside the pump station are not affected.
- H. Endangered/Threatened Species - The U.S. Fish and Wildlife Service and New York State Department of Environmental Conservation were consulted about the project. In a letter dated, September 7, 2001, the FWS stated that no known federally listed endangered/threatened species or their habitat is present in the area.
- I. Cultural Resources - The New York State Office of Parks, Recreation and Historic Preservation has reviewed the Stage 1A and Stage 1B cultural resources investigations for the project. The State Historic Preservation Officer's March 25, 2008 letter indicated that the project will have No Adverse Effect on historic properties in or eligible for listing in the State and National Registers of Historic Places. EPA concurs with this conclusion.
- J. Cumulative Impacts - Construction of this water system will have a positive impact on the project area by providing an environmentally sound solution to the water supply problems facing the users of the existing Village water system and of residents who currently must utilize inadequate private wells.

Another water supply project, the Southern Onondaga Water Districts Project, is presently ongoing in the vicinity of Otisco Lake, south of the project area. Additional traffic delays could result from concurrent construction in both areas. However, these can be avoided through coordination of lane closures and other traffic management measures by the Town of Marcellus, which is involved with both projects.

We also considered the two projects' cumulative effects on air quality. Even with both projects underway at the same time, CO emissions are still significantly less than the applicable "de minimis" threshold value for conformity with the State Implementation Plan.

- K. Socio-Economic/Environmental Justice Issues -The EPA Region 2 Environmental Justice (EJ) analysis methodology supports *EPA Region 2's Interim Policy for Environmental Justice*. A specific community that is under evaluation for inclusion in the Region's EJ program is referred to as the Community of Concern (COC). The evaluation process hinges on the comparison of the respective levels of the environmental burden, minority representation, and low-income representation between the COC and its statistical reference area.
- Demographic Analysis - EPA's demographic analysis utilizes a Geographic Information System (GIS) to estimate the percent minority and percent poverty for the community of concern and compares them to appropriate statistical references. Analysis of the project area indicates that minorities compose less than

2.75 percent of the population of the local community (compared to 34.73 percent, the percentage that EPA uses to determine minority areas in rural sections of New York State), and that less than 4.11 percent of the population has income that is below the poverty level (compared to 23.59 percent, the percentage that EPA uses to identify low income rural sections of New York State). Accordingly, the area does not meet the EPA criteria for being classified an Environmental Justice area.

Demographic Indicators:	<u>N.Y. State Threshold</u>	<u>Marcellus</u>	<u>Skaneateles</u>
Percent Minority	34.73	1.77	2.75
Percent Poverty	23.59	3.08	4.11

- ***Environmental Burden*** - The community's existing environmental burden was similarly estimated by EPA through the use of GIS analysis. EPA uses GIS analysis and the concept of an Environmental Load Profile to compare communities' present environmental load to statewide-derived thresholds. To accomplish this, EPA uses the following three indicators: Toxic Release Inventory, Facility Density, and Air Toxics. Except for existing facility density in Skaneateles, which is slightly greater than the state average, none of the indicators exceed their corresponding New York State Threshold values.

Environmental Load Indicators:	<u>N.Y. State Threshold</u>	<u>Marcellus</u>	<u>Skaneateles</u>
Toxic Release Inventory	5.67	4.56	3.23
Facility Density	56.00	41.55	68.57
Air Toxics Cancer	63.55	30.06	26.86
Air Toxics Non-Cancer	11.30	3.74	3.24

VII. Coordination of Environmental Review

- Public Participation** - The formation of water districts is subject to New York State Town Law, which requires public participation. Accordingly, the public was presented with a "Map, Plan and Report" for each of the proposed districts in Marcellus and Skaneateles. Each was subsequently accepted by their respective Town Boards and presented to the residents of the Limeledge Area Water Districts. Then, the requisite petitions were circulated, signatures obtained, and public hearings conducted. The Towns published their environmental review findings (negative declarations) in the New York State Environmental Review Bulletin as required by the New York State Environmental Quality Review Act, and conducted public hearings on the matter.

B. Indian Nations and Federal, State and Local Agencies Notified/Consulted

- Onondaga Nation
- Haudenosaunee Environmental Task Force
- U.S. Department of the Interior – Fish and Wildlife Service
- New York State Department of Environmental Conservation, Division of Fish, Wildlife and Marine Resources, Natural Heritage Program
- New York State Office of Parks, Recreation and Historic Preservation
- New York State Department of Agriculture and Markets
- New York State Department of Health
- New York State Department of Transportation
- Onondaga County Department of Transportation
- Onondaga County Planning Department
- Onondaga County Health Department
- Onondaga County Water Authority

VIII. Reference Documents

- A. *Environmental Information Document (Parts 1 and 2), Limeledge Water Districts, Towns of Marcellus and Skaneateles, Onondaga County, New York*, Barton & Loguidice, P.C., May 2008
- B. *Final Notice to Undertake an Action Within an Agricultural District (Towns of Marcellus, Otisco, and Spafford)*, Barton & Loguidice, P.C., February 2006
- C. *Report of Field Reconnaissance, Phase 1A Cultural Resources Assessment, Limeledge Water District Project, Towns of Marcellus and Skaneateles, Onondaga County, New York*, Christopher D. Hohman, Public Archeological Facility Report, Binghamton University, July 2, 2007
- D. *Cultural Resources Management Report, Phase 1B Cultural Resources Reconnaissance Survey for the Proposed Limeledge Water District*, Andrew K. Graupman, Rochester Museum and Science Center, Regional Heritage Preservation Program, March 10, 2008
- E. *Letter response to EPA comments*, Matthew E. Thomas, Barton & Loguidice, P.C., July 16, 2008