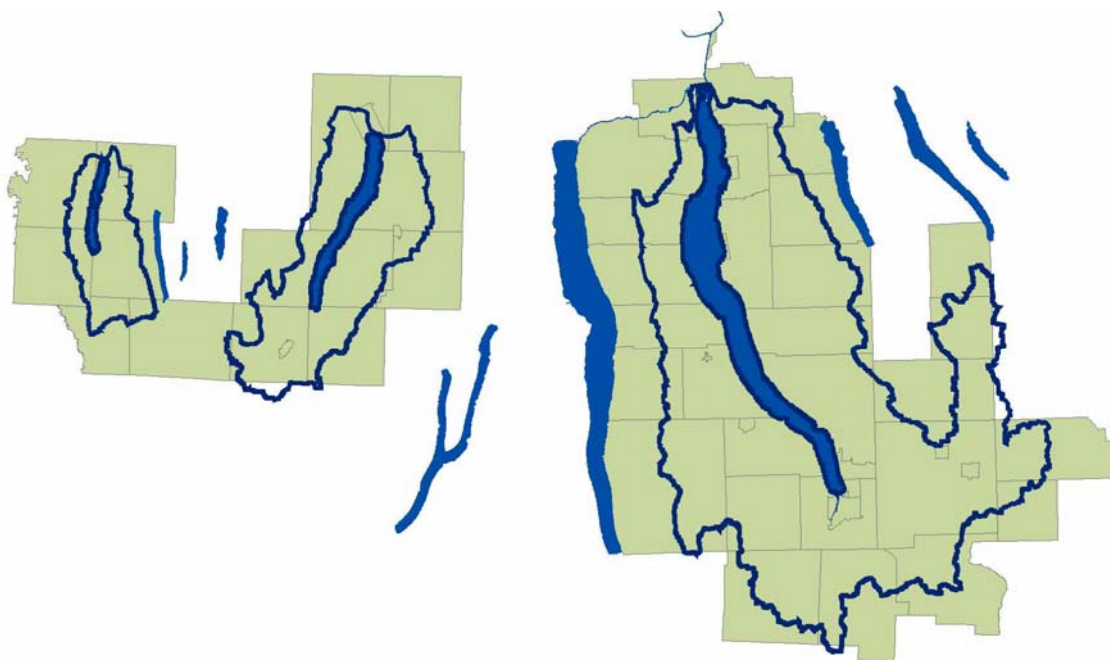


Genesee/Finger Lakes Regional Planning Council

Local Laws to Protect Finger Lakes Water Quality Project

Canandaigua ~ Cayuga ~ Conesus



Phase I: Assessment of Ordinances and Practices

July 2005

Acknowledgements

Jason Haremza, Senior Planner
Brian C. Slack, Senior Planner
Dave Zorn, Executive Director

Interns

Eric Ameigh
Albert Fulton
Ben Furtaw
Yenal Kucuker
Gay-Lynne Levy
Nick Onody

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Local Laws to Protect Finger Lakes Water Quality Project

Canandaigua ~ Cayuga ~ Conesus

Phase I: Assessment of Ordinances and Practices

July 2005

A report prepared for the New York State Department of State by the Genesee/Finger Lakes Regional Planning Council to assess the adequacy of the study area's local laws, ordinances, and controls with regard to the prevention or reduction of non-point source water pollution.



Genesee/Finger Lakes Regional Planning Council

50 West Main Street • Suite 8107

Rochester, NY 14614

(585) 454-0190

<http://www.gflrpc.org>

gflrpc@gflrpc.org

GENESEE/FINGER LAKES
Regional Planning Council

Mission Statement

The Genesee/Finger Lakes Regional Planning Council (G/FLRPC) will identify, define, and inform its member counties of issues and opportunities critical to the physical, economic, and social health of the region. G/FLRPC provides forums for discussion, debate, and consensus building, and develops and implements a focused action plan with clearly defined outcomes, which include programs, personnel, and funding.



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I. Introduction

Within the Finger Lakes region, watershed management or protection plans have been completed for the Canandaigua, Cayuga, and Conesus Lake Watersheds:

- *Canandaigua Lake Watershed Management Plan* – 1999
- *Cayuga Lake Restoration and Protection Plan* – 2001
- *Conesus Lake Watershed Management Plan* – 2003

Preparation of each plan was undertaken through various partnerships with the New York State Department of State, financed through grants from the Environmental Protection Fund *Local Waterfront Revitalization Program*. The planning process was overseen by inter-municipal organizations comprised of the local governments and organizations involved in watershed protection.

The watershed protection plans identify priority actions needed to protect and improve water quality, including capital projects, education, and local development controls. Building on these watershed protection plans, Genesee/Finger Lakes Regional Planning Council (G/FLRPC) has assessed and will develop specific water quality control laws and/or ordinances for local governments within the Canandaigua, Cayuga, and Conesus Lake Watersheds through the *Local Laws to Protect Finger Lakes Water Quality* project (often referred to as the “Local Laws” project¹). This project consists of three primary phases:

Phase I – Assessment: Existing local laws, ordinances, and practices that relate to water resources will be evaluated in all 56 case study municipalities (42 towns, 12 villages, 2 cities) that lie within the three watersheds.

Phase II – Local Law Development: Working closely and collaboratively with local boards, specific water quality control laws and/or revisions to existing regulations will be developed for 13 targeted municipalities within the case study area of the three watersheds.

Phase III – Manual and Workshop Development: A manual will be prepared that will consist of model local laws as well as case study examples that illustrate the means by which local laws can be utilized to effectively reduce water pollution from non-point sources. This manual will be developed as a resource intended for local governments (utilizing the experiences of Phase I and Phase II of the project) to be presented at 8 workshops throughout the NYS portions of the Lake Erie and Lake Ontario drainage basins in the fall of 2005.

This project defines watershed municipalities as those having at least 6% or more than three square miles of their land in the watershed. By this definition, there are 56 municipalities in the three watersheds:¹

¹ During the assessment process, it was learned that the Seneca-Cayuga Canal sub-watershed was officially recognized as part of the Cayuga Lake Watershed. In an effort to manage the case study area and adhere to the traditional watershed boundaries, the Town and Village of Waterloo and the Village of Seneca Falls were therefore omitted from the study area of this project.



- **Canandaigua Lake - 11 municipalities**

Town of Canandaigua
City of Canandaigua
Town of Gorham
Town of Hopewell

Town of Italy⊙
Town of Middlesex⊙
Town of Naples
Village of Naples

Town of Potter
Village of Rushville
Town of S. Bristol

- **Cayuga Lake - 38 municipalities**

Town of Aurelius
Village of Aurora
Town of Caroline⊙
Village of Cayuga
Village of Cayuga Heights
Town of Covert
Town of Danby
Town of Dryden⊙
Village of Dryden
Town of Enfield
Town of Fayette⊙
Town of Fleming
Village of Freeville

Town of Genoa
Town of Groton
Town of Harford
Town of Hector
Village of Interlaken⊙
City of Ithaca
Town of Ithaca
Town of Lansing⊙
Village of Lansing
Town of Ledyard⊙
Town of Lodi
Town of Newfield
Town of Ovid

Town of Romulus
Town of Scipio
Town of Sempronius
Town of Seneca Falls
Town of Springport
Town of Summerhill
Village of Trumansburg
Town of Ulysses⊙
Village of Union Springs
Town of Varick⊙
Town of Venice
Town of Virgil

- **Conesus Lake - 7 municipalities**

Town of Conesus⊙
Town of Geneseo⊙
Town of Groveland⊙

Town of Livonia
Village of Livonia
Town of Sparta

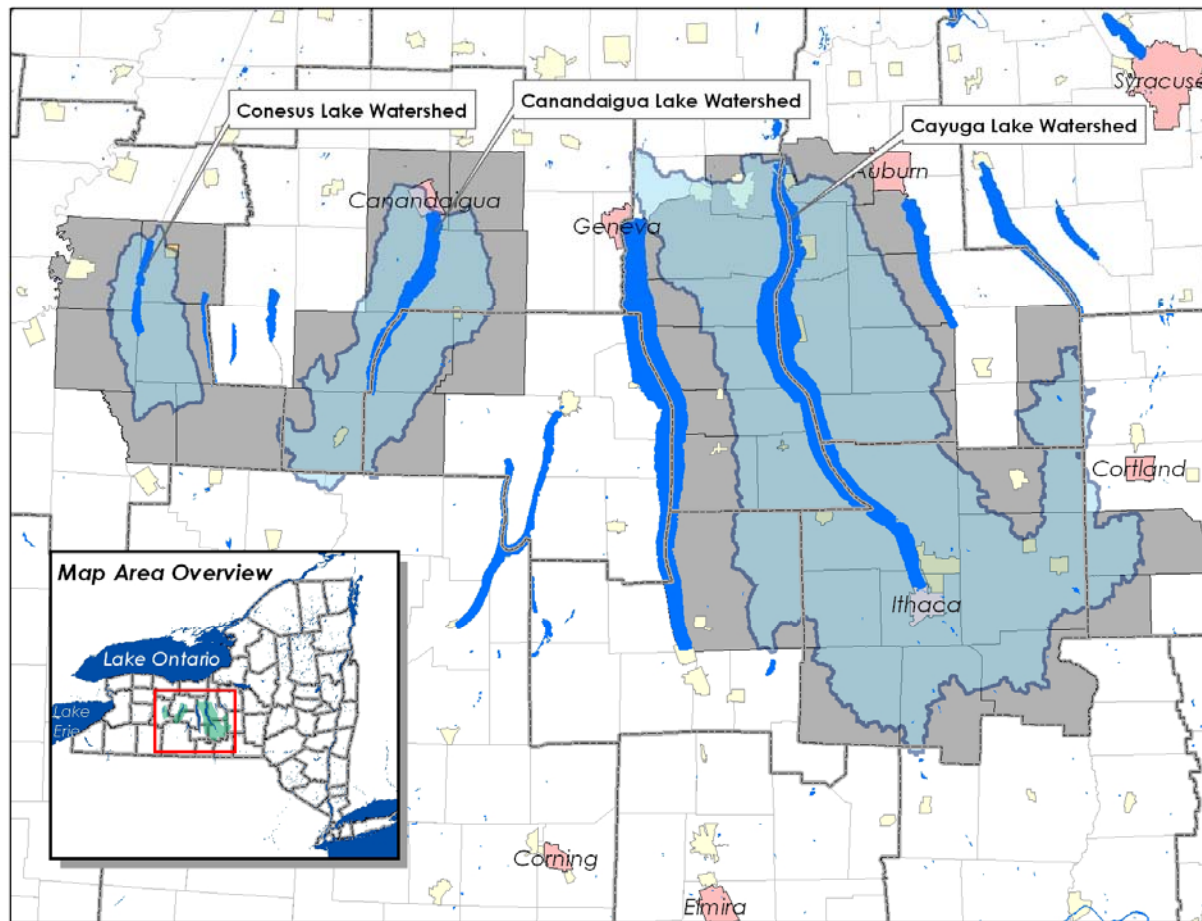
Town of Springwater

** "⊙" indicates a Phase II targeted municipality



II. Assessment Overview¹

Project Case Study Area



The assessment of local laws in the Canandaigua, Cayuga, and Conesus Lake watersheds was initiated in the early 2004 by G/FLRPC as Phase I of the project. A general land use regulation inventory was completed focusing on three primary building blocks of land use control in New York State: the comprehensive plan, zoning, and subdivision regulation. The 56 municipalities vary widely in many factors and the presence of these basic components of land use control could not be assumed. Results of this inventory can be found in Appendix A.

Subsequently, a much more detailed assessment was conducted using a 'best management practices' (BMP) assessment tool. This form was developed by the New York State Department of State for use with the Long Island South Shore Assessment and Lake George Watershed Assessment. The form was modified by G/FLRPC for use in the Finger Lakes, since the geography and socio-economic factors of most Finger Lakes municipalities are very different from both Long Island and the Lake George area.

¹ Due to their length, assessment forms have been summarized for review and analysis and have not been included unabridged in this report. Assessments for each municipality have been submitted in hard-copy format to the NYS Dept. of State and can be viewed online at the project website (www.gflrpc.org).



The entire assessment process was conducted in order to gain a thorough understanding of existing local laws, ordinances, and practices, many of which impact land use and ultimately water resources in the Finger Lakes. The BMP assessment form, a copy of which is in Appendix D, lists 151 individual best management practices which are divided into six primary categories:

1. Development

- Existing Development
- New Development and Substantial Redevelopment

2. Forestry and Agriculture

- Forestry
- Agriculture

3. Waterways and Wetlands

- Modified Waterways
- Wetlands and Riparian Area Management and Restoration

4. Marinas

- Existing Marinas
- New Marinas
- All Marinas

5. Roads and Bridges

- Existing Roads and Bridges
- New Roads and Bridges
- All Roads and Bridges (existing and new)

6. Onsite Wastewater Treatment Systems (OWTS)

- (There are no sub-categories for OWTS)

The existing local laws of the 56 municipalities were reviewed against these 151 best management practices. Utilizing G/FLRPC's library of local land use ordinances and the existing land use control assessments in the three watershed management plans, G/FL staff began the process of local law assessment in the spring of 2004. Tables and charts summarizing the results of this assessment can be found throughout the body of this report.

Assessment Approach

There are numerous challenges associated with an assessment of this nature. A large number of municipalities, the diversity of the socio-economic and land use characteristics across these municipalities, coupled with the detail of the assessment form (151 individual best management practices) made the review an arduous but important undertaking.

As stated above, the process began with the creation of an inventory of local laws and other pertinent land use documents for each case study municipality. The inventory was conducted by focusing on three primary building blocks of land use control in New York State: the comprehensive plan, zoning, and subdivision regulation. When available, other relevant local codes and regulations were also reviewed, garnering variable results. Examples include local sediment and erosion control laws, junk laws and animal control ordinances (which might include stipulations relevant to the proper use and disposal of waste materials). All available laws and other official documents on record as of the summer of 2004 were included in the



analysis.

The majority of municipalities in the three case study watersheds are rural, with small populations and tax bases. Thus, they do not have the means, or often the need, to support a full-time staff that could be consulted for projects of this type, nor have they experienced the growth and development that would instigate the need for comprehensive land use controls.

Furthermore, existing staff such as clerks and highway superintendents often do not have the additional time to devote to a lengthy assessment, while others –such as code enforcement officers and planning board chairs –have limited hours or are unpaid volunteers. These factors further compelled G/FLRPC to perform most of the work of the preliminary assessment in-house. Tapping into the local knowledge base regarding on-the-ground practices, however, is recognized as a crucial step in performing an accurate and reliable assessment.

Compilation and Ranking of Best Management Practices

Laws vs. Practices

Local laws and regulations are methodically reviewed in an effort to detect legal mandates for the use of BMPs while undertaking various construction or operational activities within the jurisdiction. As BMPs are found, they are gleaned from the document and entered into the assessment form with the proper citation.

Using the legislative process is viewed as a reliable means of instituting the use of a BMP within a jurisdiction. By subjecting the variables of a BMP's use and application to public scrutiny and seeing that the implications of its use are fully deliberated by the relevant officials, a municipality can help to ensure that it will serve its intended purpose in a uniform manner throughout the jurisdiction. However, the legislative process by no means guarantees that a BMP will be properly implemented in the field. Local officials may not necessarily enforce regulations that are on the books for a variety of reasons, such as outward pressure, failure to recognize the need for the law, failure to understand the law, or simply unawareness altogether.

In many cases, environmental BMPs are practiced voluntarily in the field by conscientious public officials, private contractors and citizens. "Good housekeeping" practices were therefore searched for and assessed by contacting local highway and public works departments directly. In some instances, field research was conducted in order to investigate whether BMPs were in place at specific locations, such as marinas and waterfront recreation areas.

Independent Organizations and Special Jurisdictions

In many instances, local jurisdictions rely on independent or public agencies to perform certain tasks across a large area, such as a watershed, county or region.

All of the counties within the case study area have Soil and Water Conservation District (SWCD) offices which perform a wide array of duties relative to land and water conservation. These activities typically include source water protection, drainage assessment and improvement,



water quality monitoring, erosion prevention and environmental restoration, as well as the development of various education and outreach programs. Cornell Cooperative Extension county offices perform similar functions, often in conjunction with SWCDs, private land owners and local governments. Local and regional watershed groups – recognizing the need for specific actions to take place in their respective areas of concern – have also been increasing their organizational capacity, complexity and resource base in recent years. In a number of instances, these groups have become very effective and efficient at addressing local water quality needs and concerns. Furthermore, county, state and regional agencies – such as county health departments and the NYS Office of Parks, Recreation and Historic Preservation – are responsible for administering a variety of functions across a wide area or within their respective jurisdictions.

When available, BMPs that are undertaken and implemented by agencies other than local jurisdictions have been captured in the assessment and listed as appropriate.

Ranking

The method for ranking a BMP's degree of implementation is as follows:

2 – Full Implementation: If a law, it must fully address the associated BMP without question or variance. As the law is written, it should bear a clear and reasonable resemblance to the BMP as it is written in the assessment form. The defined jurisdiction of the law should be considered thoroughly. For example, BMPs mandated within mobile home parks can not, by definition, be applied throughout a municipality and should not be given a ranking of '2' if the BMP is intended to be applied across an entire jurisdiction. For practices, the identified practice must clearly relate to the BMP. Personal conversation with relevant local officials or actual observance in the field must be made to determine whether the BMP is being fully implemented.

1 – Partial Implementation: If a law, the BMP may be considered to be “partially implemented” if it is not entirely clear in the language of the law if the action or mandate will thoroughly address the area of concern as described in the BMP assessment form. Or, the law may be written to address only a specific area or zone, such as a mobile home park or environmental protection overlay district. If a practice, the BMP may be considered to be partially implemented if it is a general practice applied across a regional or local jurisdiction without strict scrutiny or oversight. In some cases, this applies to activities undertaken by independent organizations, such as a watershed group or academic institution.

0 – Not at all: No evidence has been found that the BMP listed in the assessment form is being implemented to any degree within the municipality or jurisdiction.

N/A Not applicable: It would not be possible for the municipality to implement the BMP and/or the BMP as it is described in the assessment form is not covered under the routine operational authority of the municipality or department in question. For example, agricultural operations are not typically found in urban settings; therefore a “n/a” can be found throughout the Forestry and Agriculture section for all cities and most villages in the case study area.



III. Assessment Results: General Overview

Introduction

The following charts and descriptive data are the result of a year-long compilation and assessment of laws and practices that affect water quality within the Canandaigua, Cayuga and Conesus Lake watersheds. As explained in Chapter 2, data was gathered and entered into an assessment matrix in spreadsheet format in a uniform manner throughout this process. By doing so, data can be combined and grouped for ease of analysis and interpretation.

Unabridged assessment forms that contain detailed information for each municipality are intended to accompany this report.¹ Each assessment form explicitly documents the type of law or practice that was observed to meet the criteria of the BMP, as well as the interpreted degree of implementation.

Chapter 3 of this report presents a summary of information gathered across the Canandaigua, Cayuga and Conesus Lake watersheds. More detailed analyses at the watershed level are provided in Chapter 4.

Information relative to land use control laws, land and watershed area, and other pertinent details have also been included in the Appendices.

¹ Visit <http://www.gflrpc.org> for information on how you can obtain a copy of these assessment forms.

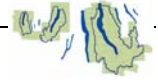


Basic Land Use Control Inventory

<i>Canandaigua</i>	Comprehensive Plan	Zoning	Subdivision Regulation
<i>Number of Watershed Municipalities that Possess:</i>	9 of 11*	10 of 11	9 of 11
<i>Percentage</i>	82%	91%	82%
<i>Average age (in years) of existing documents</i>	10.4	24	20.3
* one additional municipality is in the process of completing a comprehensive plan			

<i>Cayuga</i>	Comprehensive Plan	Zoning	Subdivision Regulation
<i>Number of Watershed Municipalities that Possess:</i>	13 of 38*	25 of 38	23 of 38
<i>Percentage</i>	34%	66%	61%
<i>Average age (in years) of existing documents</i>	11.1	18.5	17.7
* four additional municipalities are in the process of completing a comprehensive plan			

<i>Conesus</i>	Comprehensive Plan	Zoning	Subdivision Regulation
<i>Number of Watershed Municipalities that Possess:</i>	4 of 7*	6 of 7	6 of 7
<i>Percentage</i>	57%	86%	86%
<i>Average age (in years) of existing documents</i>	8.5	20.8	18.8
* one additional municipality is in the process of completing a comprehensive plan			

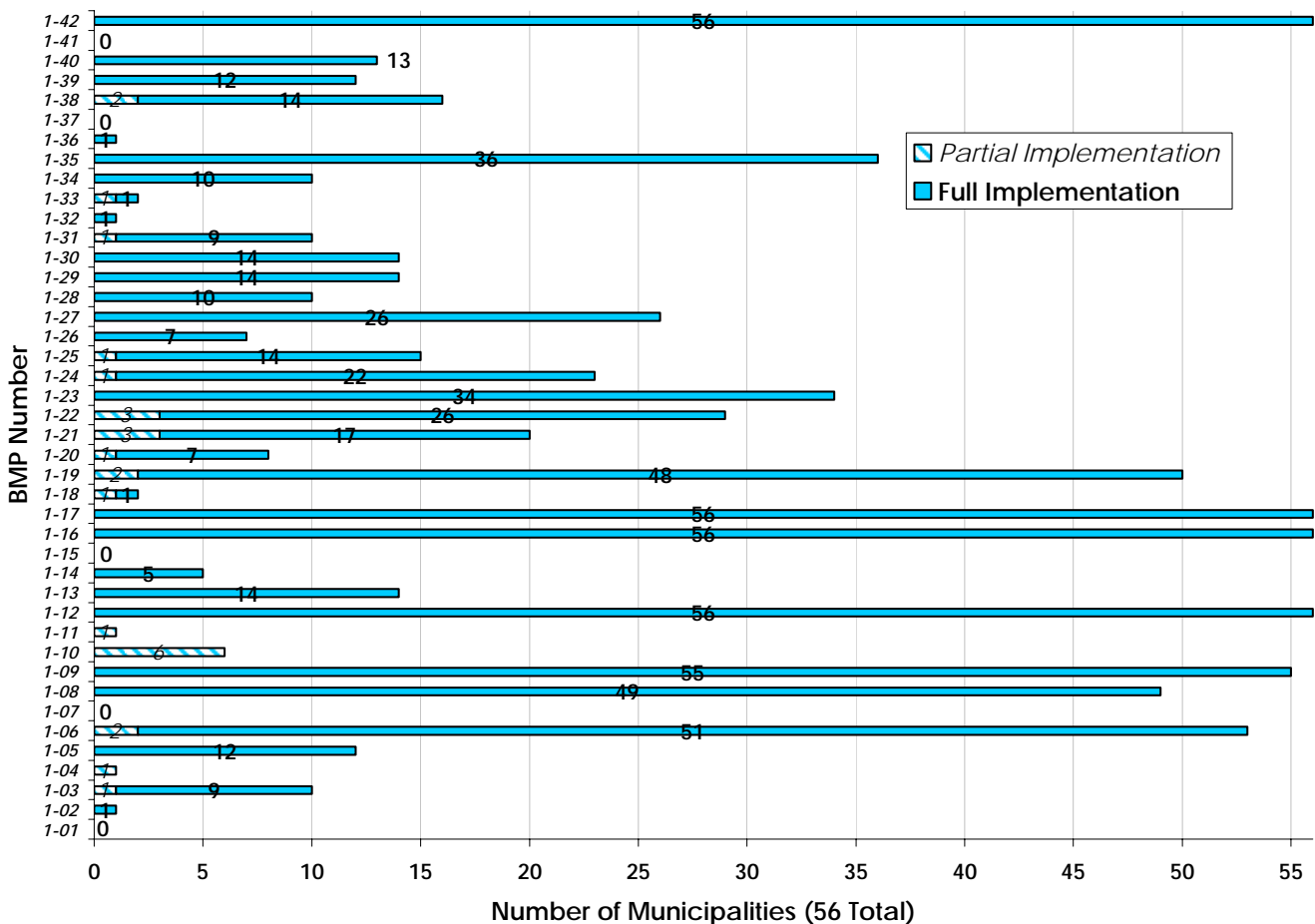


Overview: Development

Across the three watersheds, 36 of the 42 *Development* BMPs were found to be addressed to some degree. Those BMPs that were not found to be addressed include:

- **1-01:** Identify retrofit opportunities
- **1-07:** Institute turf management practices on golf courses, parks and recreation areas
- **1-15:** Discourage feeding of waterfowl
- **1-37:** Develop priority list for BMPs – use of vegetative low areas for retention/infiltration
- **1-41:** For redevelopment, employ regulations that provide for technologically advanced (on and off) site wastewater treatment systems to optimize efficiencies and address “challenging” sites.

Development: Canandaigua, Cayuga, and Conesus Watersheds Combined





Overview: Forestry and Agriculture

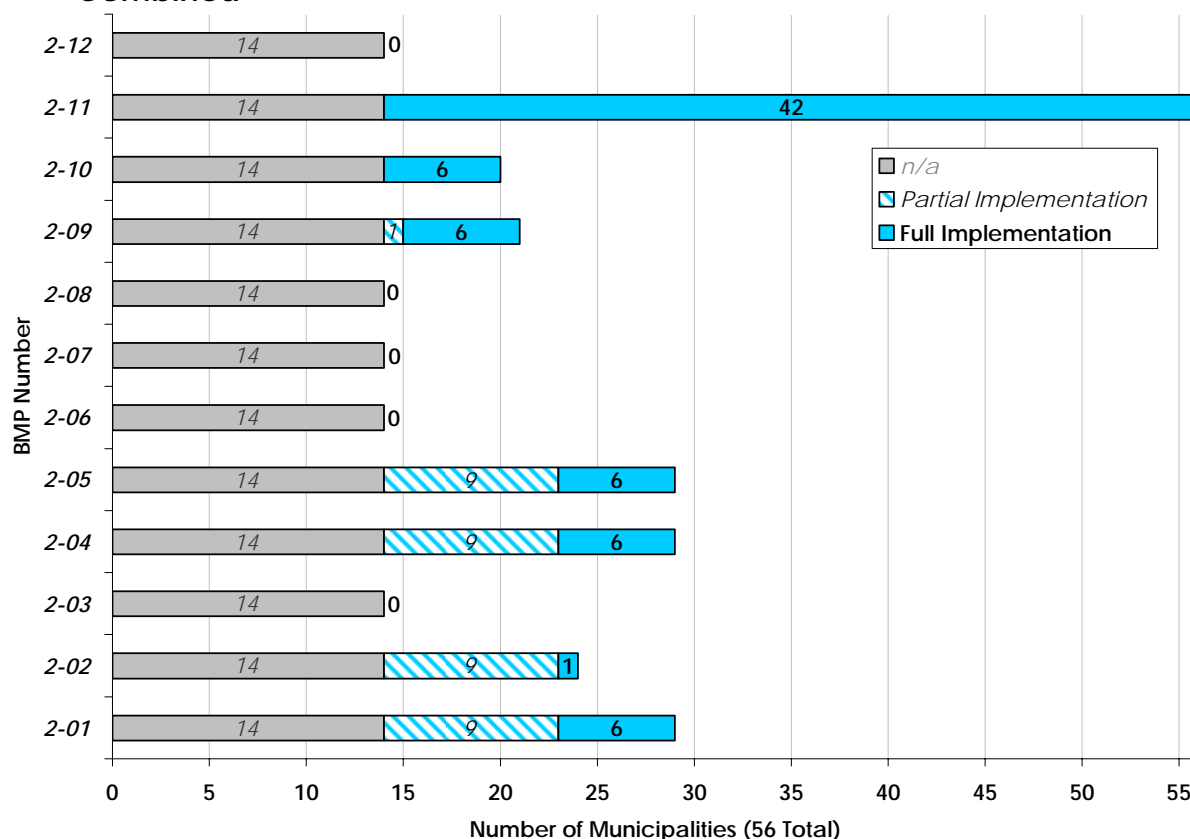
Across the three watersheds, 7 of 12 BMPs in *Forestry and Agriculture* were found to be addressed to some degree. Those BMPs that were not found to be addressed include:

- **2-03:** Seasonal preferences for logging operations
- **2-06:** Limit grades of access roads
- **2-07:** Require stabilization of roads/drives to forestry site
- **2-08:** Employ natural topography and contour for design of road network
- **2-12:** Require farms seeking agricultural value assessment to participate in AEM

Furthermore, 14 municipalities across the three watersheds were determined not to be capable of supporting significant forestry or agricultural activities. These include:

- Village of Aurora
- City of Canandaigua
- Village of Cayuga
- Village of Cayuga Heights
- Village of Freeville
- Village of Interlaken
- City of Ithaca
- Village of Lansing
- Village of Livonia
- Village of Naples
- Village of Rushville
- Village of Trumansburg
- Town of Ulysses
- Village of Union Springs

Forestry/Agriculture: Canandaigua, Cayuga, and Conesus Watersheds Combined



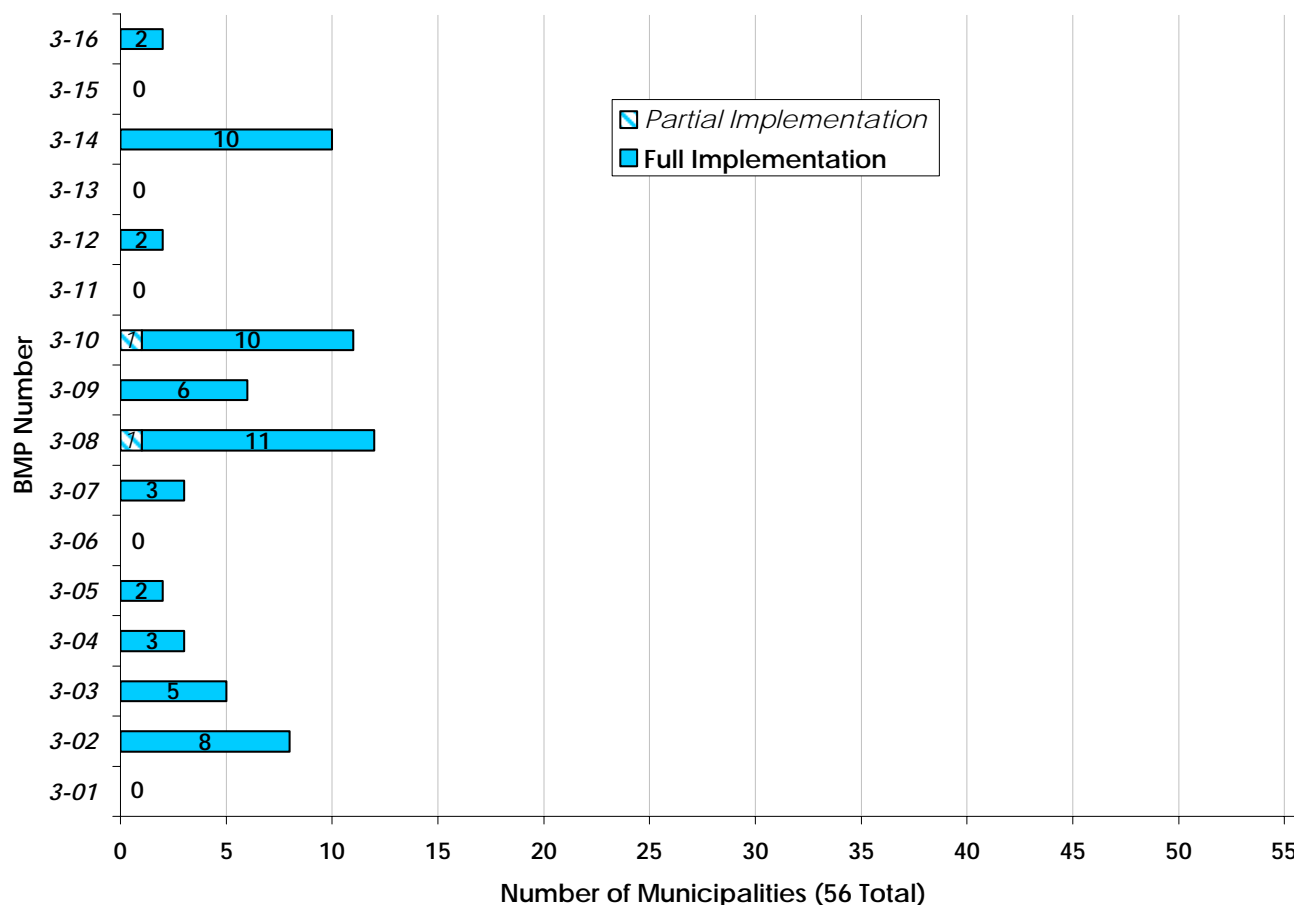


Overview: Waterways and Wetlands

Across the three watersheds, 11 of 16 BMPs in *Waterways and Wetlands* were found to be addressed to some degree. Those BMPs that were not found to be addressed include:

- **3-01:** Develop an operation and maintenance program for existing modified streams that includes identification of opportunities and actions to restore habitat and the physical and chemical characteristics of these streams
- **3-06:** Design and construct shore erosion control facilities, in accordance and erosion and sediment control plan, in areas where marsh creation and soil bioengineering are ineffective or where existing protection methods are being flanked or are failing
- **3-11:** Consider wetlands and riparian areas and their non-point source (nps) control potential on a watershed scale
- **3-13:** Conduct permitting, licensing, certification and non-regulatory nps pollution activities in a manner that protects wetland functions
- **3-15:** Use appropriate pretreatment practices such as vegetated systems or detention or retention basins to prevent adverse impacts to wetland functions that affect nps pollution abatement from hydrologic changes, sedimentation, or contaminants

Waterways and Wetlands: Canandaigua, Cayuga, and Conesus Watersheds Combined





Overview: Marinas

There were no significant findings regarding BMP use in marinas across the case study area. The low number of BMP implementation can be attributed to a number of reasons:

- There are 24 municipalities across the case study area without significant waterfront space or are not likely to have the opportunity to locate a new marina.
- There were only 4 marinas found that are administered by local municipalities. (See *Appendix E* for a comprehensive list of marinas across the three watersheds).
- Among those municipalities that have docking and mooring laws – which were few – it was found that those laws typically focus on spatial relationships (placement and configuration of berthing and mooring facilities) as opposed to environmental BMP implementation.
- The majority of public marinas across the case-study area were found to be administered by state agencies (NYSDEC, Office of Parks, Recreation and Historic Preservation), which are exempt from most local laws. The research and investigation of on-the-ground BMPs practiced among private marinas and state-managed marinas fell outside of the scope of this analysis.

The following BMPs were discovered through either site visitation or personal interviews to locally-administered marinas:

- **4-03:** Provide proper disposal/recycling facilities to marina patrons, preferably covered receptacles (2 municipalities were found to be implementing to a limited extent)
- **4-09:** Target outreach programs about proper disposal at marina patrons through the use of signs, mailings, and other means (2 municipalities were found to be implementing this BMP to a limited extent)
- **4-20:** Establish and enforce no-wake zones to decrease turbidity and reduce erosion potential from boat wakes (2 municipalities were found to be implementing this BMP to its fullest extent)
- **4-23:** Monitor water quality during construction to protect ambient water quality to the maximum practicable extent (1 municipality was found to be implementing this BMP to its fullest extent)
- **4-24:** Develop a marina siting policy to discourage development in areas containing important habitat designated by local, State, or federal agencies (1 municipality was found to be implementing this BMP to its fullest extent)
- **4-30:** Use properly designed and constructed engineering practices that minimize shoreline disturbance in areas where soil bioengineering and plants are ineffective (1 municipality was found to be implementing this BMP to its fullest extent)
- **4-31:** Use appropriate shore erosion control methods, such as returns or return walls, in areas where existing protection methods are being flanked or are failing (1 municipality was found to be implementing this BMP to its fullest extent)

[The chart for *Marinas* has been omitted due to a lack of significant data to illustrate.]



Overview: Roads and Bridges

Across the three watersheds, 25 of 26 BMPs in *Roads and Bridges* were found to be addressed to some degree. The BMP that was not found to be addressed was:

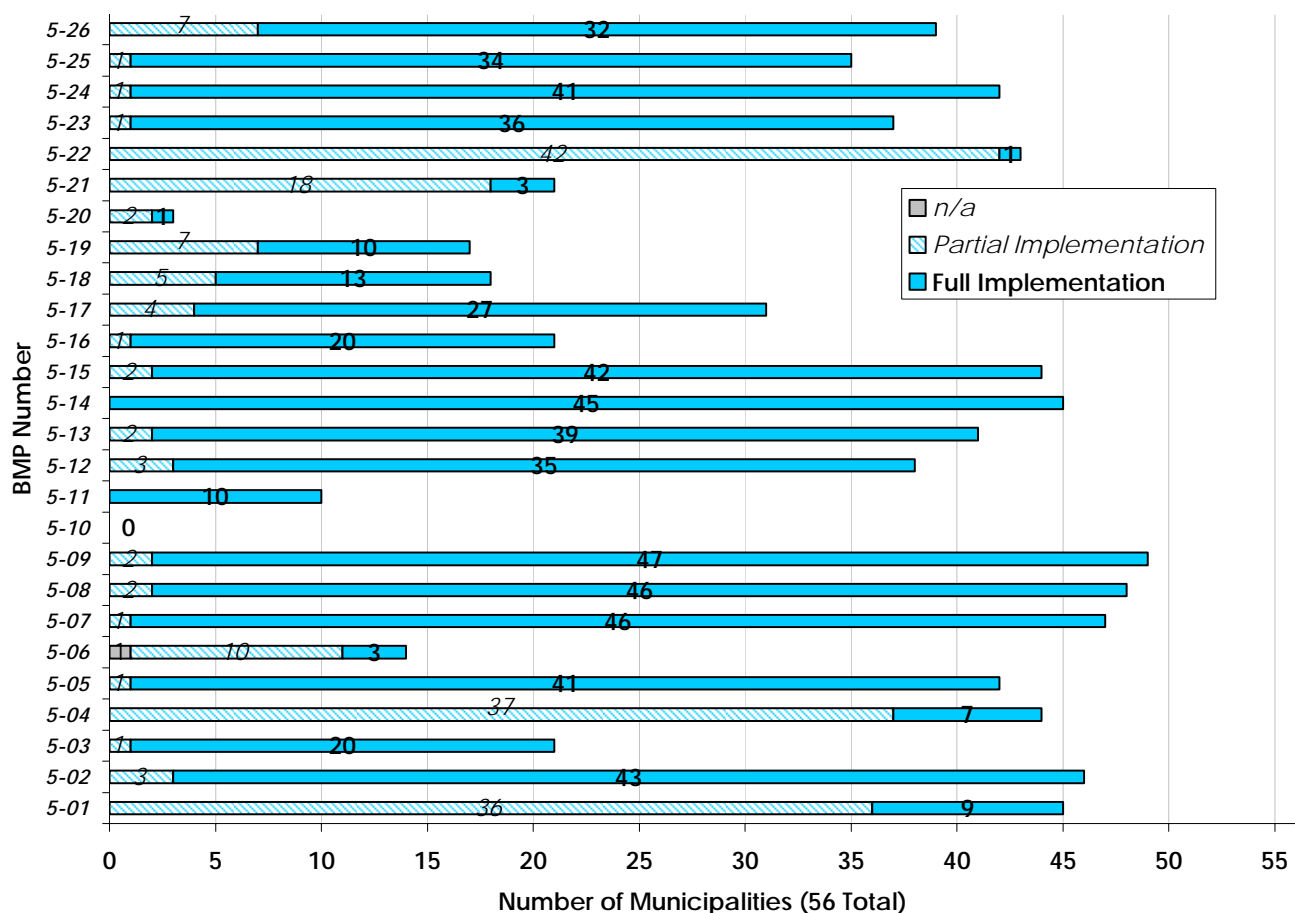
- **5-10:** Retain additional runoff sites

The description for BMP 5-10 was somewhat vague, making it difficult to find specific applications of this BMP.

A high level of detail was provided by local highway superintendents regarding BMP implementation. Most of the individuals that were contacted were very forthcoming and displayed a great depth of knowledge regarding erosion and sediment control, environmental mitigation and BMP implementation in general. Furthermore, individuals within the field of highway management are typically afforded many opportunities to receive training regarding new technologies and practices and are able to consult with others in their field regarding innovative approaches to environmental protection.

Twelve of fifty-six highway or department of public works superintendents could not be reached for comment.

Roads and Bridges: Canandaigua, Cayuga, and Conesus Watersheds Combined





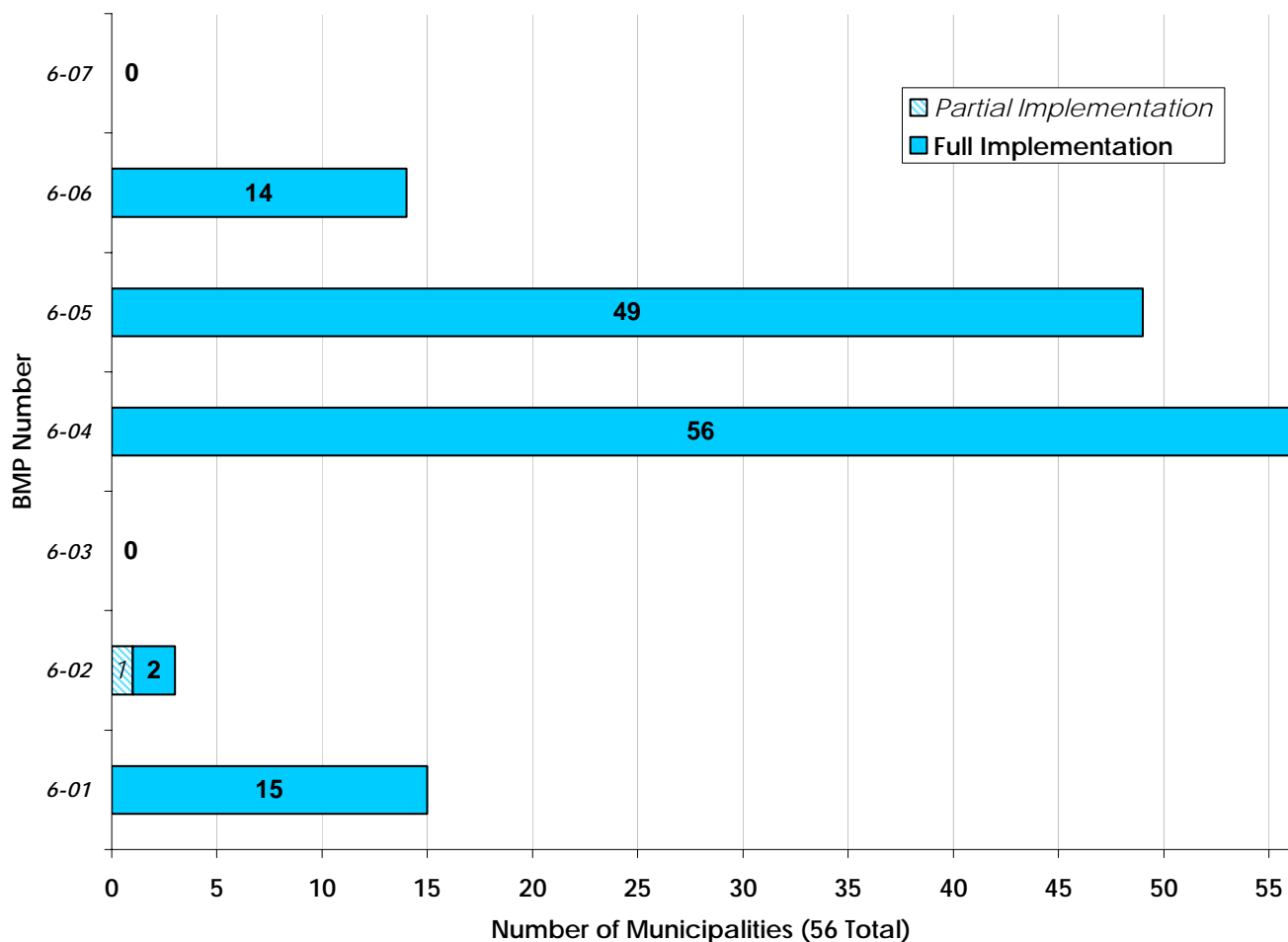
Overview: Onsite Wastewater Treatment Systems (OWTS)

Across the three watersheds, 5 of 7 BMPs in *Onsite Wastewater Treatment Systems* were found to be addressed to some degree. Those BMPs that were not found to be addressed were:

- **6-03:** Promulgate plumbing codes that require practices that are compatible with OWTS
- **6-07:** Set goals for effluent limits (nitrogen, phosphorous, BOD, etc)

As seen below, all municipalities were registered as fully-implementing BMP 6-04: Target outreach programs at homeowners, contractors and developers. In recent years, a wide variety of organizations have taken up the cause of informing the public of the importance of maintaining septic systems as well as the negative impacts that failing septic systems can have on local water quality.

Onsite Wastewater Treatment Systems: Canandaigua, Cayuga, and Conesus Watersheds Combined





IV: Assessment Results: Watershed Overview

Introduction

Chapter 4 has been organized into three primary sections according to watershed. Each watershed begins with an overview of findings for each of the 6 primary BMP categories. After the watershed overview section, municipal summaries have been included for each city, town and village that was included in the watershed area used in this study. There the reader can find information regarding the location of the municipality, socio-economic data relevant to the municipality, the specific laws reviewed from that municipality, and the tabular results of the completed assessment.

Information relative to land use control laws, land and watershed area, and other pertinent details have also been included in the Appendices.

Targeted Municipality Overview

Targeted municipalities – those that were focused on during Phase II of this project – have added narrative description and are identified with a “🎯” symbol.

In general, most of the targeted municipalities show full or partial implementation levels of development-related BMPs at around 30%. By contrast, forestry, agriculture, waterway/wetland, and marina implementation ranged from 0 to 10% of listed BMPs.

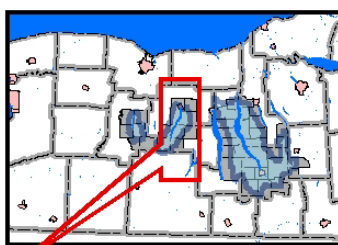
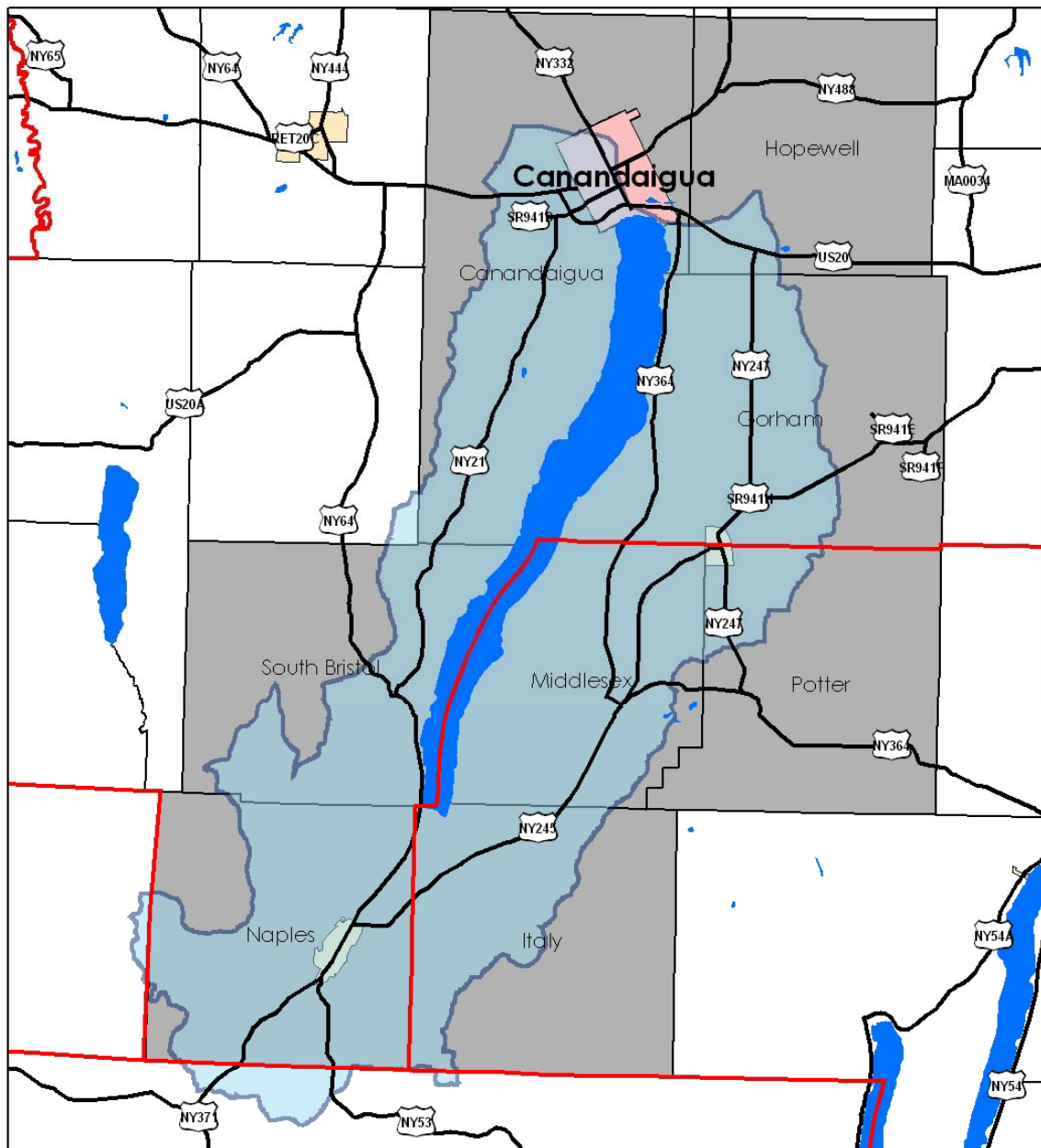
However, most municipalities chose to work on development-related local laws, such as zoning ordinances, subdivision ordinances, or erosion and sediment control ordinances. This reflects the real or perceived thinking on the part of municipalities that endeavors such as forestry, agriculture, wetlands, and marinas are either outside of municipal purview and/or overseen by other entities (i.e. NYS Department of Environmental Conservation, NYS Department of Agriculture and Markets, etc.). Conversely, development regulation is one area that local municipalities feel they have full control over. Finally, many municipalities in the Finger Lakes perceive that increased development represents one of the larger environmental threats.



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Overview of the Canandaigua Lake Watershed



- Canandaigua Lake Watershed
- Towns within the Watershed Boundaries
- County Boundary
- Cities
- Villages
- County and State Roads



0 3.75 7.5 Miles

Overview Area

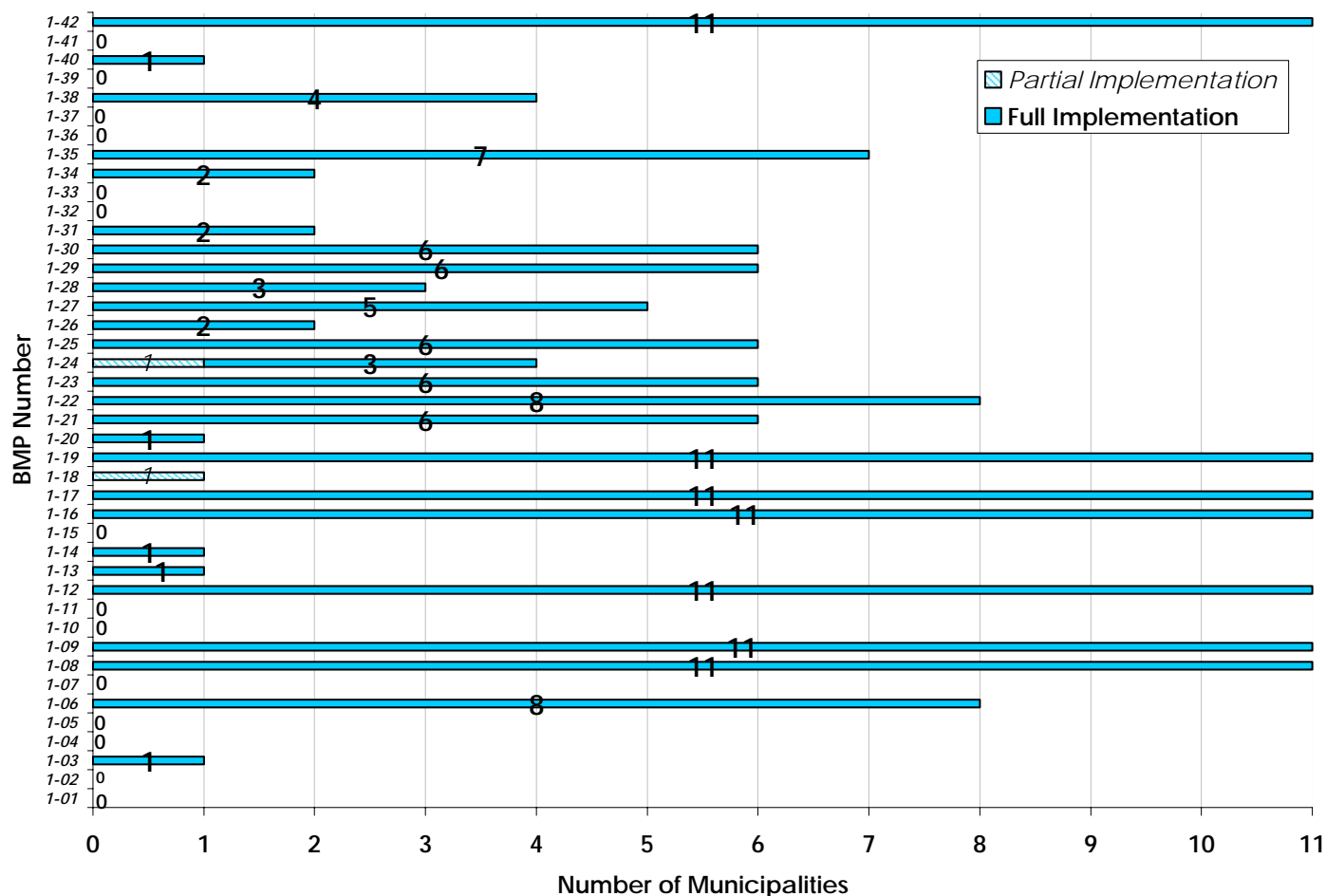


Development – Canandaigua Lake Watershed

Within the Canandaigua Lake Watershed, 28 of the 42 *Development* BMPs –nearly 67% – were found to be addressed to some degree. Those BMPs that were not found to be addressed include:

- 1-01: Identify retrofit opportunities
- 1-02: Identify habitat and natural conveyance system restoration opportunities
- 1-04: Acquire additional land for locating treatment facilities
- 1-05: Encourage homeowners to place compost piles away from waterbodies and roadways
- 1-07: Institute turf management practices on golf courses and parks and recreation areas
- 1-15: Discourage feeding of waterfowl
- 1-32: Use appropriate solid and hazardous waste generation and disposal practices including source controls and recycling
- 1-33: Encourage construction site management techniques which include the proper handling and disposal of pesticides and petroleum products and containers
- 1-36: Require tree surveys and/or cutting plans
- 1-37: Develop priority list for BMP's - use of vegetative low areas for retention/infiltration
- 1-39: Require connection to and/or extension of existing water & sewer if project is within 500 feet of existing infrastructure
- 1-41: For redevelopment, employ regulations that provide for technologically advanced (on and off) site wastewater treatment systems to optimize efficiencies and address "challenging" sites

Development: Canandaigua Lake Watershed





Forestry and Agriculture – *Canandaigua Lake Watershed*

Within the Canandaigua Lake Watershed, only one BMP in *Forestry and Agriculture* was found to be addressed to some degree. The following BMP – 2-11: Use Agricultural Environmental Management (AEM) –is addressed throughout all of the watersheds in the case study area.

AEM is generally not a process that is initiated at the local level; rather, county Soil and Water Conservation Districts, working in conjunction with other state and federal agencies, encourage interested farm owners to enroll in the AEM program as appropriate.

Furthermore, 3 municipalities in the Canandaigua Lake watershed were determined not to be capable of supporting significant forestry or agricultural activities. These include:

- City of Canandaigua
- Village of Naples
- Village of Rushville

It is important to note that a model timber harvesting law has been drafted and is currently being hosted on the Canandaigua Lake Watershed Council’s website, www.canandaigualake.org/. The law was drafted incorporating specific recommendations put forth in the *NYS Forestry BMP Field Guide*. If this law is adopted in its current form by local municipalities, it will effectively address the following *Forestry and Agriculture* BMPs:

- **2-01:** Consider potential water quality impacts when selecting silviculture system (yarding system, site preparation, pesticides employment, etc)
- **2-02:** Consider harvesting practices
- **2-05:** Preplan harvest areas, skid trails, and access so as to be on stable soils, avoiding steep gradients, multiple stream crossings, poor drainage areas, etc.
- **2-06:** Limit grades of access roads.
- **2-07:** Require stabilization of roads/drives to forestry site
- **2-08:** Employ natural topography and contour for design of road network
- **2-09:** Require stormwater controls for increased runoff from ground cover modification
- **2-10:** Consider site restoration

[The chart for *Agriculture and Forestry* has been omitted due to a lack of significant data to illustrate.]



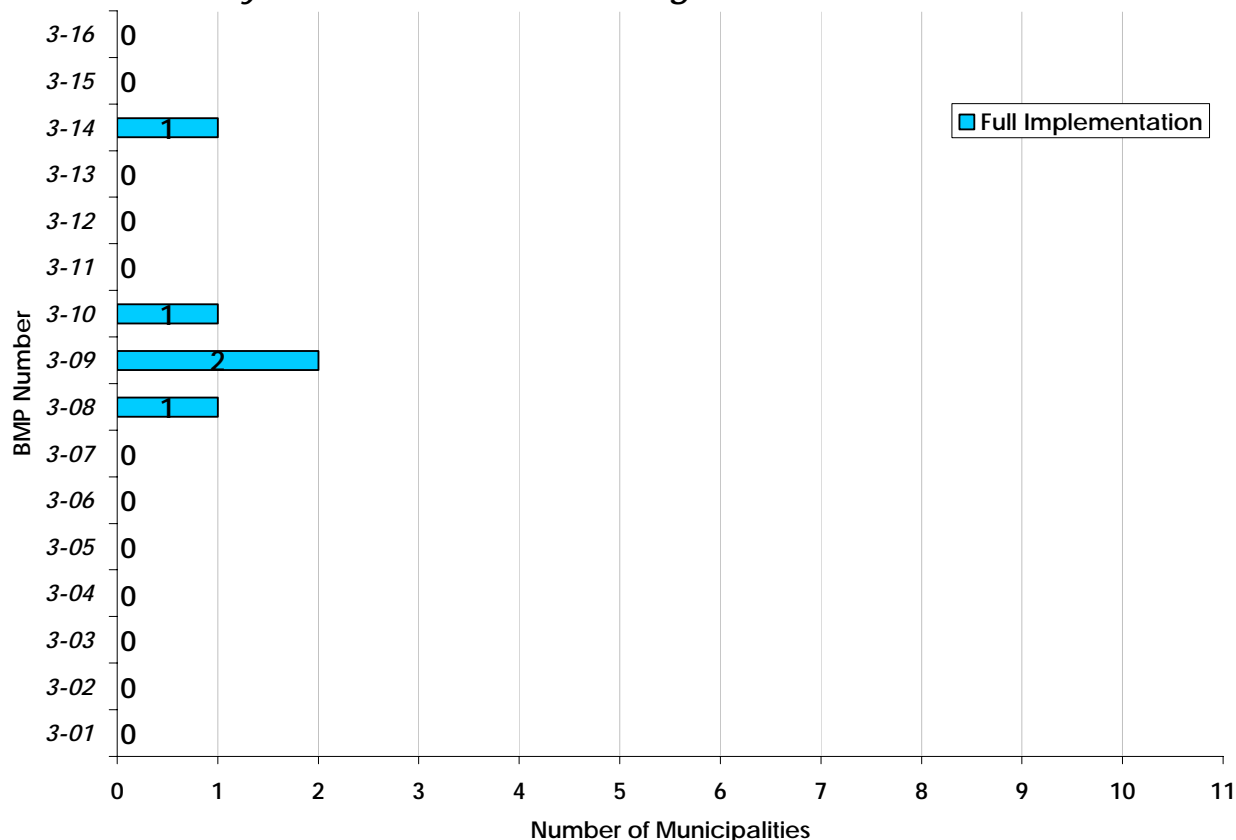
Waterways and Wetlands – *Canandaigua Lake Watershed*

Within the Canandaigua Lake Watershed, 4 of 16 BMPs under *Waterways and Wetlands* –or 25% – were found to be addressed to some degree. Those BMPs that were addressed included:

- **3-08:** Protect streambanks through direct nonstructural means, such as new vegetation or protection of existing vegetation; direct structural means, such as revetments and bulkheads; indirect nonstructural means, such as regulating irrigation near streambanks or rerouting overbank drainage; or indirect structural means, such as deflecting channel flow away from streambanks with dikes, board fences and gabions
- **3-09:** Use setbacks to minimize disturbance of land adjacent to streambanks and shorelines
- **3-10:** Prevent discharges to waterbodies in amounts that would adversely affect the taste, color or odor of the waters, or would impair the waters for their best usages
- **3-14:** Special zoning considerations to protect wetland areas

It is very likely that more municipalities are in fact using BMPs in and around riparian areas when necessary. Municipal planning boards may request developers to submit specific plans regarding riparian and wetland protection when reviewing individual site plans near sensitive areas, at which point BMPs may be addressed on a case-by-case basis. Few specific laws regarding protection of these areas were found, however. Furthermore, when contacted, most highway departments indicated that their work generally does not deal with riparian or wetland areas *per se*.

Waterways and Wetlands: Canandaigua Lake Watershed





Marinas – *Canandaigua Lake Watershed*

Within the Canandaigua Lake Watershed, 7 of 38 BMPs under *Marinas* –or 18% – were found to be addressed to some degree. This low showing of BMP implementation among marinas can be attributed to a variety of reasons, including:

- Six out of the eleven municipalities in the watershed are without significant waterfront space or are not likely to have the opportunity to locate a new marina.
- There were 3 sites in the Canandaigua Lake watershed that could be classified as a municipally-run marina. These include the City Pier (City of Canandaigua), Kershaw Park (City of Canandaigua) and the Onanda Site (Town of Canandaigua). None of these sites were very large, nor did they offer the wide array of amenities that one would expect to find at a large marina.
- While four municipalities were found to have passed the *Canandaigua Lake Uniform Docking and Mooring Law*, it was found that this law focuses primarily on spatial relationships (placement and configuration of berthing and mooring facilities) as opposed to environmental BMP implementation.
- On-the-ground BMPs practiced among private marinas and state-managed marinas fell outside of the scope of this analysis. To this end, the remainder of marinas found within the Canandaigua Lake watershed were found to be either: a) privately operated and not subject to local ordinances regarding activities on or near marinas or b) administered by state agencies (NYSDEC, Office of Parks, Recreation and Historic Preservation), which are exempt from most local laws.

The following *Marina* BMPs were found to be addressed to some degree by municipalities in the Canandaigua Lake watershed:

- **4-03:** Provide proper disposal/recycling facilities to marina patrons, preferably covered receptacles
- **4-09:** Target outreach programs about proper disposal at marina patrons through the use of signs, mailings, and other means
- **4-20:** Establish and enforce no-wake zones to decrease turbidity and reduce erosion potential from boat wakes
- **4-24:** Develop a marina siting policy to discourage development in areas containing important habitat designated by local, State, or federal agencies
- **4-30:** Use properly designed and constructed engineering practices that minimize shoreline disturbance in areas where soil bioengineering and plants are ineffective
- **4-31:** Use appropriate shore erosion control methods, such as returns or return walls, in areas where existing protection methods are being flanked or are falling

[The chart for *Marinas* has been omitted due to a lack of significant data to illustrate.]



Roads and Bridges – *Canandaigua Lake Watershed*

Within the Canandaigua Lake Watershed, 25 of 26 BMPs under *Roads and Bridges* –or 96% – were found to be addressed to some degree. The BMP that was not found to be addressed was:

- **5-10:** Retain additional runoff sites

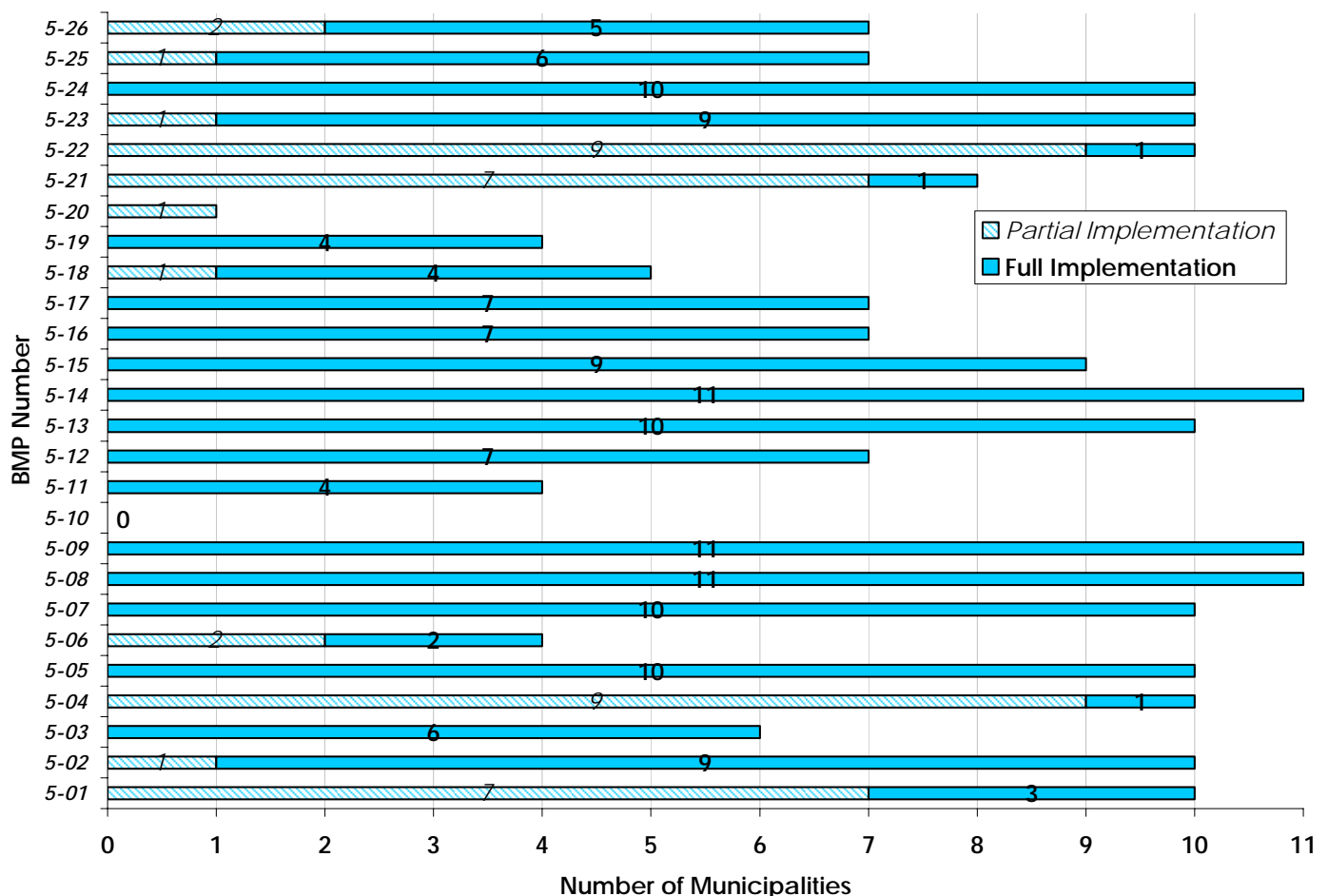
The description for BMP 5-10 was somewhat vague, making it difficult to find specific applications of this BMP in any of the three watersheds.

Besides BMP 5-10, the following BMP was very rarely found in any of the watersheds:

- **5-20:** Target existing public holdings, such as parks, for removing unnecessary impervious surfaces

The City of Canandaigua was able to point to a specific instance where impervious road material was replaced with a vegetative substitute during a road reconstruction project. While this was more than likely done for aesthetic purposes and not specifically intended to mitigate stormwater runoff, the measure nonetheless has some measurable degree of benefit to the watershed.

Roads and Bridges: Canandaigua Lake Watershed





OWTS – Canandaigua Lake Watershed

Within the Canandaigua Lake Watershed, 4 of 7 BMPs under *Onsite Wastewater Treatment Systems* –or 57% – were found to be addressed to some degree. The BMPs that were not found to be addressed were:

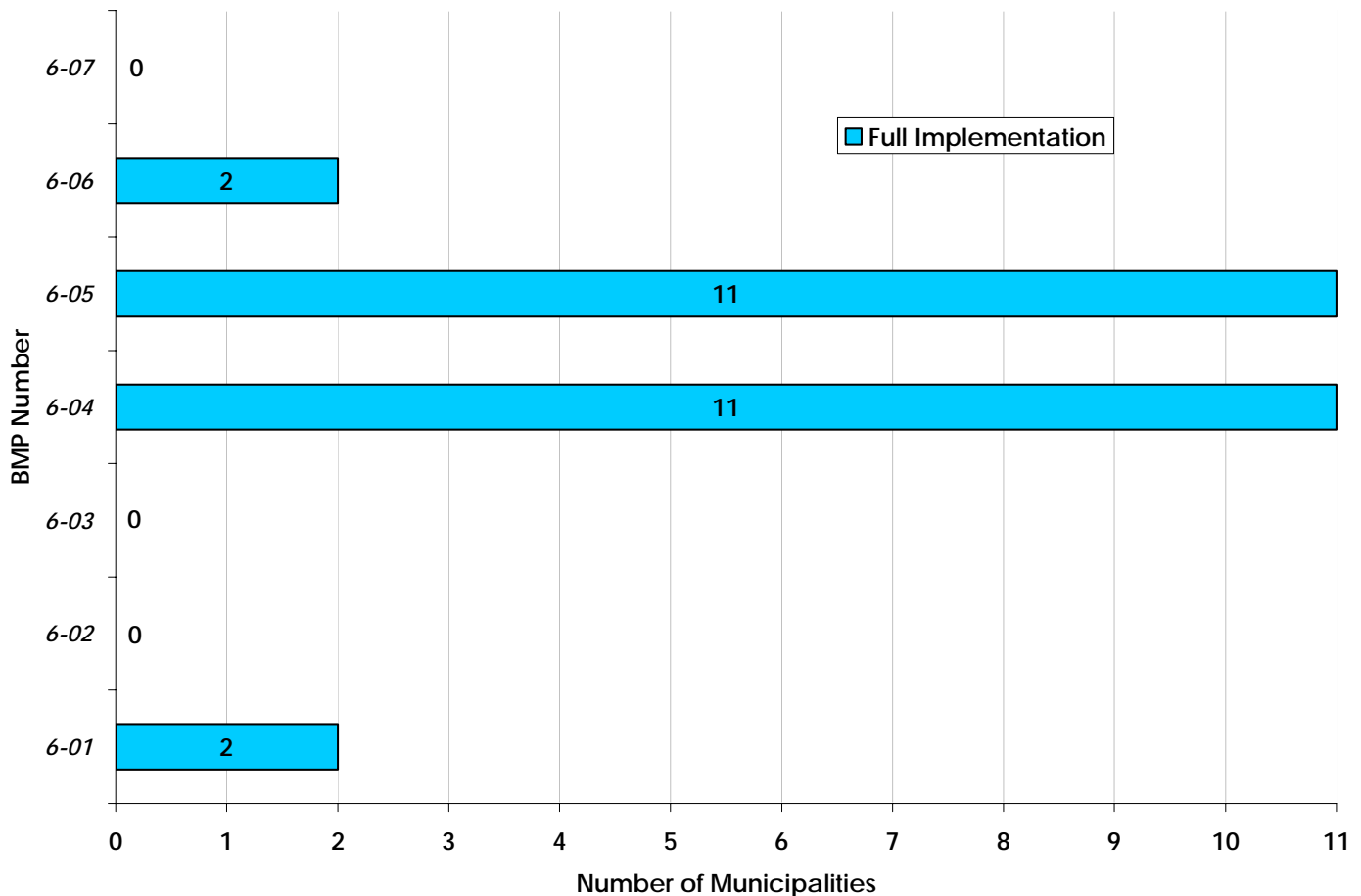
- **6-02:** Institute setback guidelines
- **6-03:** Promulgate plumbing codes that require practices that are compatible with OWTS
- **6-07:** Set goals for effluent limits (nitrogen, phosphorous, BOD, etc)

Two BMPs were found to be fully addressed throughout the watershed:

- **6-04:** Target outreach programs at homeowners, contractors and developers
- **6-05:** Inspection of all OWTS at property transfer or within 1 year prior to transfer

While mandatory, routine inspections of OWTSs provide the best mechanism for decreasing the risk of failing systems across a wide area, education and outreach and inspections at property transfers are two very important steps that are covered throughout this watershed.

Onsite Wastewater Treatment Systems: Canandaigua Lake Watershed



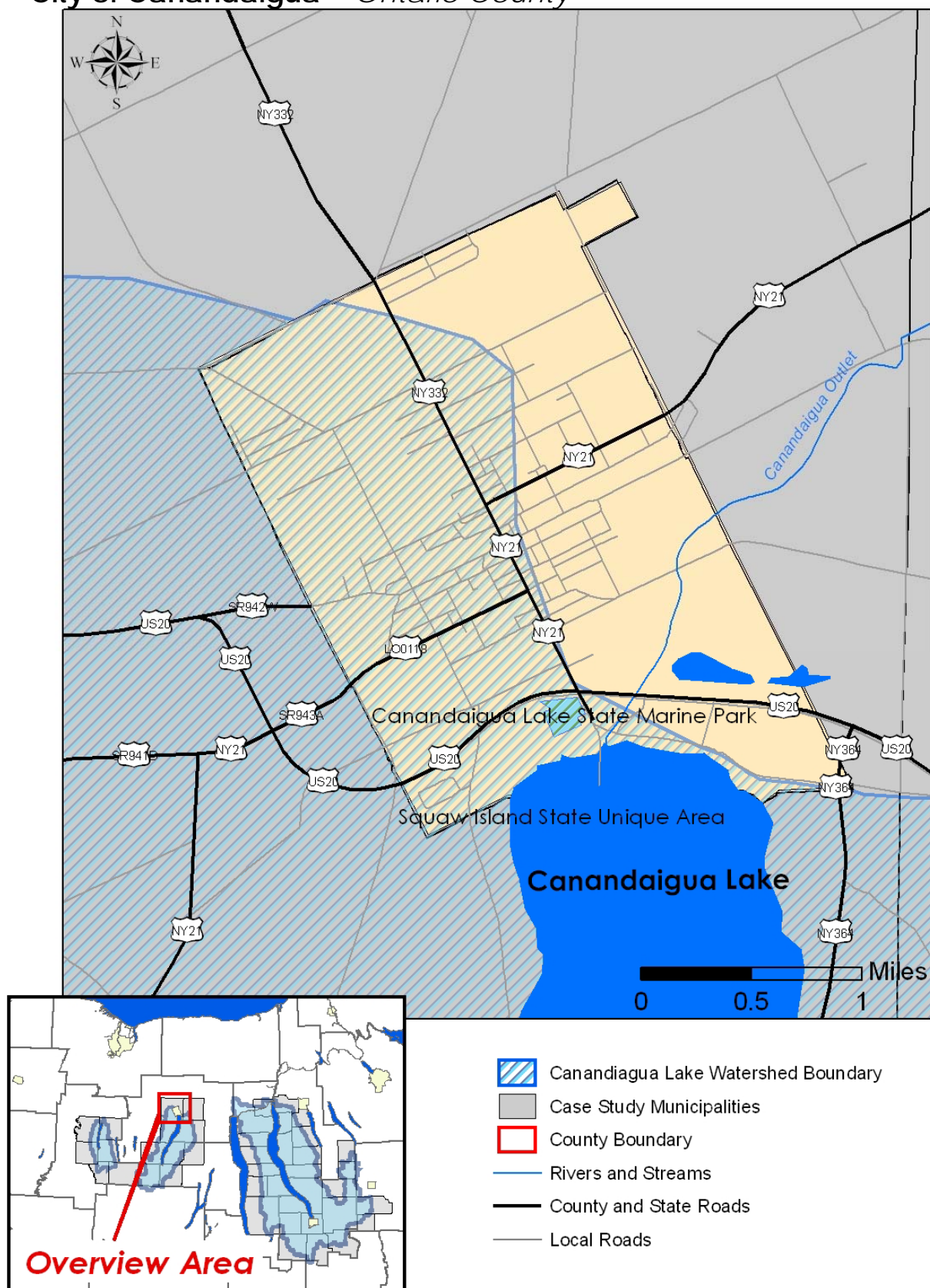




Municipal Summaries for the Canandaigua Lake Watershed



City of Canandaigua • Ontario County





City of Canandaigua

Ontario County

The City of Canandaigua lies within the northwestern portion of the Canandaigua Lake watershed. The city covers an area of 4.6 square miles, 52.7 percent of which lies within the Canandaigua Lake watershed. The City of Canandaigua has approximately 1.5 miles of shoreline on Canandaigua Lake.

According to the 2000 Census, the City of Canandaigua contains 11,264 people. The city experienced a population increase of 11.2 percent between 1960 and 1980 and an increase of 8.1 percent between 1980 and 2000. The median age in the City of Canandaigua is 39.3 years and the average household size is 2.25 persons. Median household income is \$37,197, with a poverty rate of 5.9 percent. There are 5,066 housing units in the City, 7.4 percent of which have been built since 1990. The median value of owner-occupied homes is \$100,600.

Local Laws Reviewed:

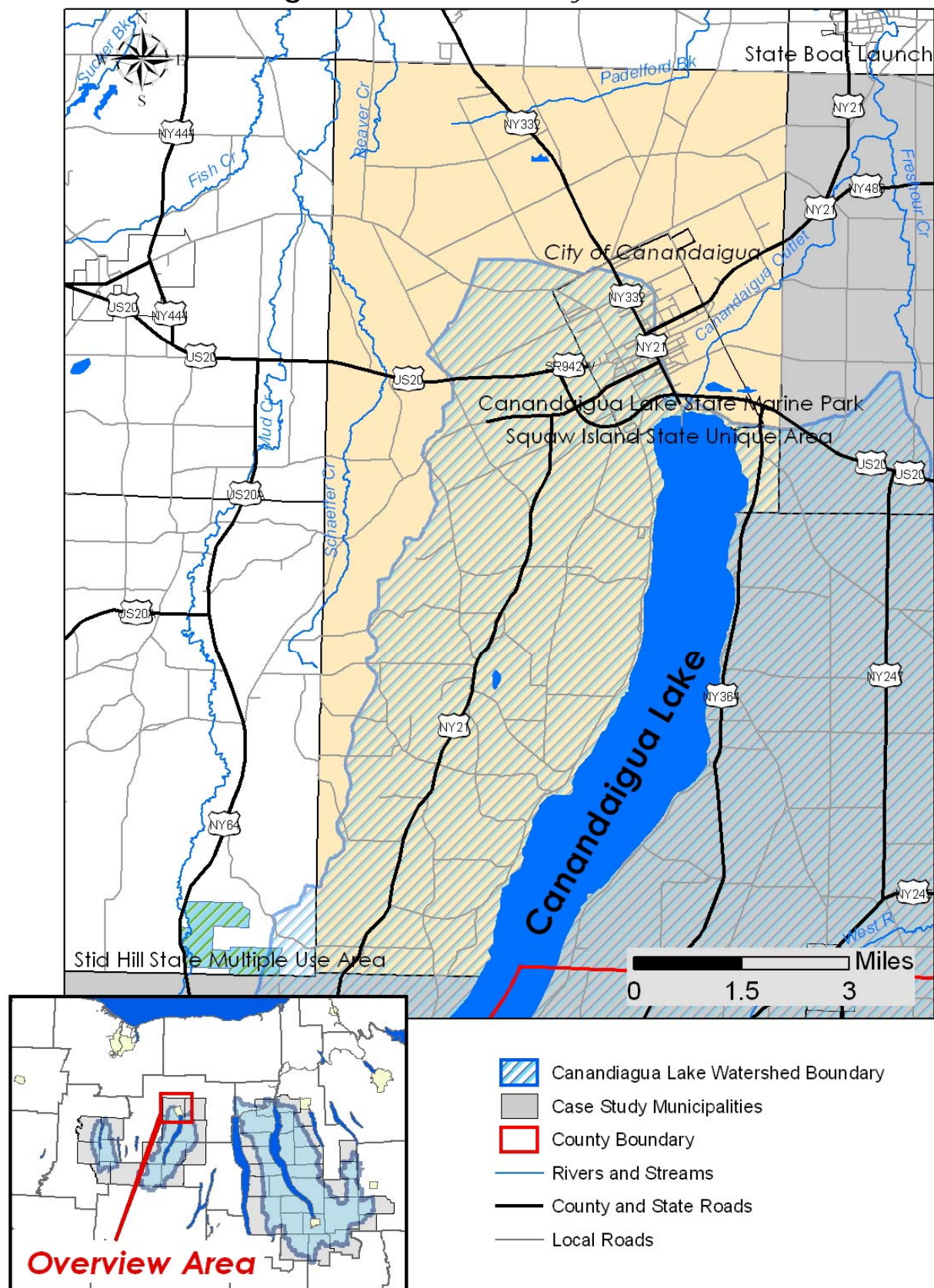
- *Storm water Management and Erosion Control Chapter 3.24, 1991*
- *General Purpose and Administration Chapter 10.04, 2000*
- *Land Subdivision Regulations: Title 11, 2000*
- *City of Canandaigua: Municipal Code and Comprehensive Plan, 2003*
- *City/Town of Canandaigua Uniform Docking and Mooring Law, 2004*

Assessment Results:

<i>City of Canandaigua</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	4.6	18 of 42 (42%)	0
		<i>Existing Development</i>	0
		<i>New Development/ Substantial Redevelopment</i>	0
<i>Percent of Municipality in Watershed:</i>	52.7%	12 of 26 (46%)	0
		<i>Forestry</i>	10
		<i>Agriculture</i>	2
<i>Percent of Watershed within Municipality:</i>	1.46%	0 of 16	0
		<i>Modified Waterways</i>	0
		<i>Wetlands - Riparian Management/Restoration</i>	0
		3 of 48 (6%)	0
		<i>Existing</i>	0
		<i>New</i>	0
		0 of 10	0
		<i>All</i>	0
		24 of 26 (92%)	0
		<i>Existing</i>	0
		<i>New</i>	0
		11 of 13 (84%)	0
		<i>All</i>	0
		7 of 7 (100%)	0
OWTS		2 of 7 (28%)	0



Town of Canandaigua • Ontario County





Town of Canandaigua

Ontario County

The Town of Canandaigua lies within the northwestern portion of the Canandaigua Lake watershed. The town covers an area of 55.8 square miles, 50.7 percent of which lies within the Canandaigua Lake watershed. Canandaigua has approximately 11.5 miles of shoreline on Canandaigua Lake.

According to the 2000 Census, the Town of Canandaigua contains 7,649 people. The town experienced a 23.8 percent increase between 1960 and 1980 and an increase of 26.2 percent between 1980 and 2000. The median age in Canandaigua is 39.6 years and the average household size is 2.62 persons. Median household income is \$57,978, with a poverty rate of 2.3 percent. There are 3,281 housing units in the Town, 23.3 percent of which have been built since 1990. The median value of owner-occupied homes is \$123,600.

Local Laws Reviewed:

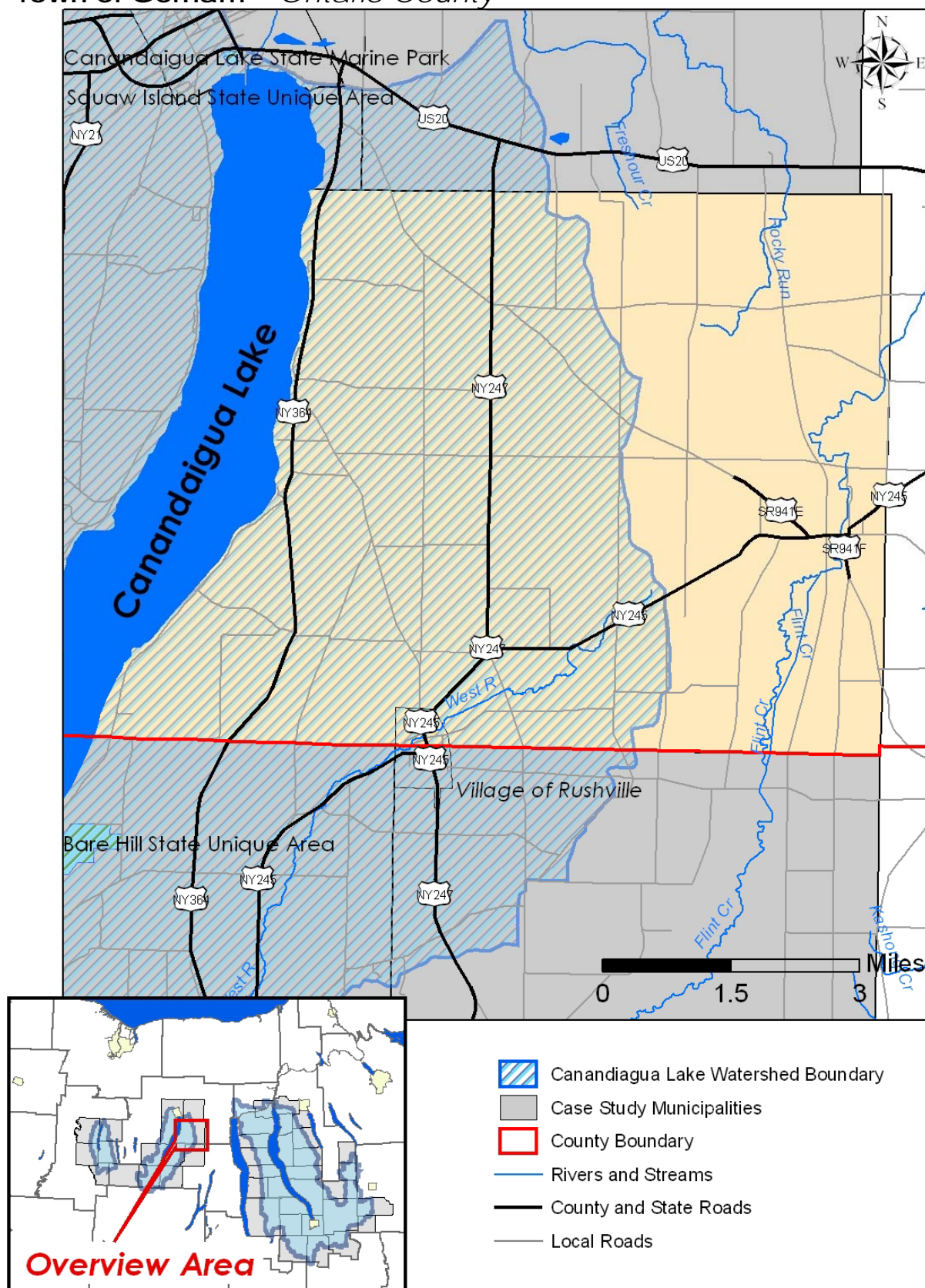
- *Town of Canandaigua Master Plan, 1987-2010*
- *Town of Canandaigua Master Plan: A Visual Summary, 1987-2010*
- *Town of Canandaigua Town Code Excerpts: Chapters 44-45, 85, 90, 105, A106, 1992*
- *Town of Canandaigua Municipal Code, 1994*
- *Town of Canandaigua Comprehensive Plan: 2002*
- *Town of Canandaigua Land Development requirements: Work Product*
- *City/Town of Canandaigua Uniform Docking and Mooring Law, 2004*

Assessment Results

<i>Town of Canandaigua</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	55.9	22 of 42 (52%)	0
		<i>Existing Development</i>	0
		<i>New Development/ Substantial Redevelopment</i>	0
<i>Percent of Municipality in Watershed:</i>	50.7%	1 of 12 (8%)	0
		<i>Forestry</i>	0
		<i>Agriculture</i>	0
<i>Percent of Watershed within Municipality:</i>	17.07%	0 of 16	0
		<i>Modified Waterways</i>	0
		<i>Wetlands - Riparian Management/Restoration</i>	0
		3 of 48 (6%)	0
		<i>Existing</i>	0
		<i>New</i>	0
		2 of 18 (11%)	0
		<i>All</i>	0
		0 of 10	0
		24 of 26 (92%)	0
		<i>Existing</i>	0
		<i>New</i>	0
		12 of 13 (92%)	0
		<i>All</i>	0
		6 of 7 (85%)	0
OWTS		2 of 7 (28%)	0



Town of Gorham • Ontario County





Town of Gorham

Ontario County

The Town of Gorham lies within the northeastern portion of the Canandaigua Lake watershed. The town covers an area of 48 square miles, 59.82 percent of which lies within the Canandaigua Lake watershed. Gorham has approximately 8.25 miles of shoreline on Canandaigua Lake.

According to the 2000 Census, the Town of Gorham contains 3,776 people. The town experienced a population increase of 37.7 percent between 1960 and 1980 and an increase of 4.3 percent between 1980 and 2000. The median age in Gorham is 39.1 years and the average household size is 2.66 persons. Median household income is \$43,138, with a poverty rate of 4.2 percent. There are 1,900 housing units in the town, 12.3 percent of which have been built since 1990. The median value of owner-occupied homes is \$93,600.

Local Laws Reviewed:

- Town of Gorham Municipal Code Table of Contents:
 - Town of Gorham: Chapter 34- Unsafe Building Laws, 1982
 - Town of Gorham: Chapter 36-Uniform Code Administration and Enforcement, 1987
 - Town of Gorham: Chapter 37-Providing Fair Housing Opportunities, 1988
 - Town of Gorham: Chapter 32- Subdivision Regulations, 1990
 - Town of Gorham: Chapter 33- Mobile Home Park Laws, 1990
 - Town of Gorham: Chapter 35- Soil Erosion and Sedimentation Control, 1991
 - Town of Gorham: Chapter 38 Canandaigua Lake Uniform Docking and Mooring Law, 1993
 - Town of Gorham: Chapter 44- Public Water Supply Rules and Regulations, 1996
 - Town of Gorham: Chapter 45- Flood Damage Prevention, 1996
 - Town of Gorham: Chapter 39- Right to Farm Law, 1999
 - Town of Gorham: Chapter 31- Zoning Ordinance, 2003
- Town of Gorham: 1997 Comprehensive Plan, 1997
- Town of Gorham- Property Nuisance Abatement Law, 2000
- Town of Gorham: Addendum #1 to the Comprehensive Plan, 2002
- Town of Gorham: Addendum #2 to the Comprehensive Plan, 2002

Assessment Results:

Total Municipal Land Area (sq miles): 48

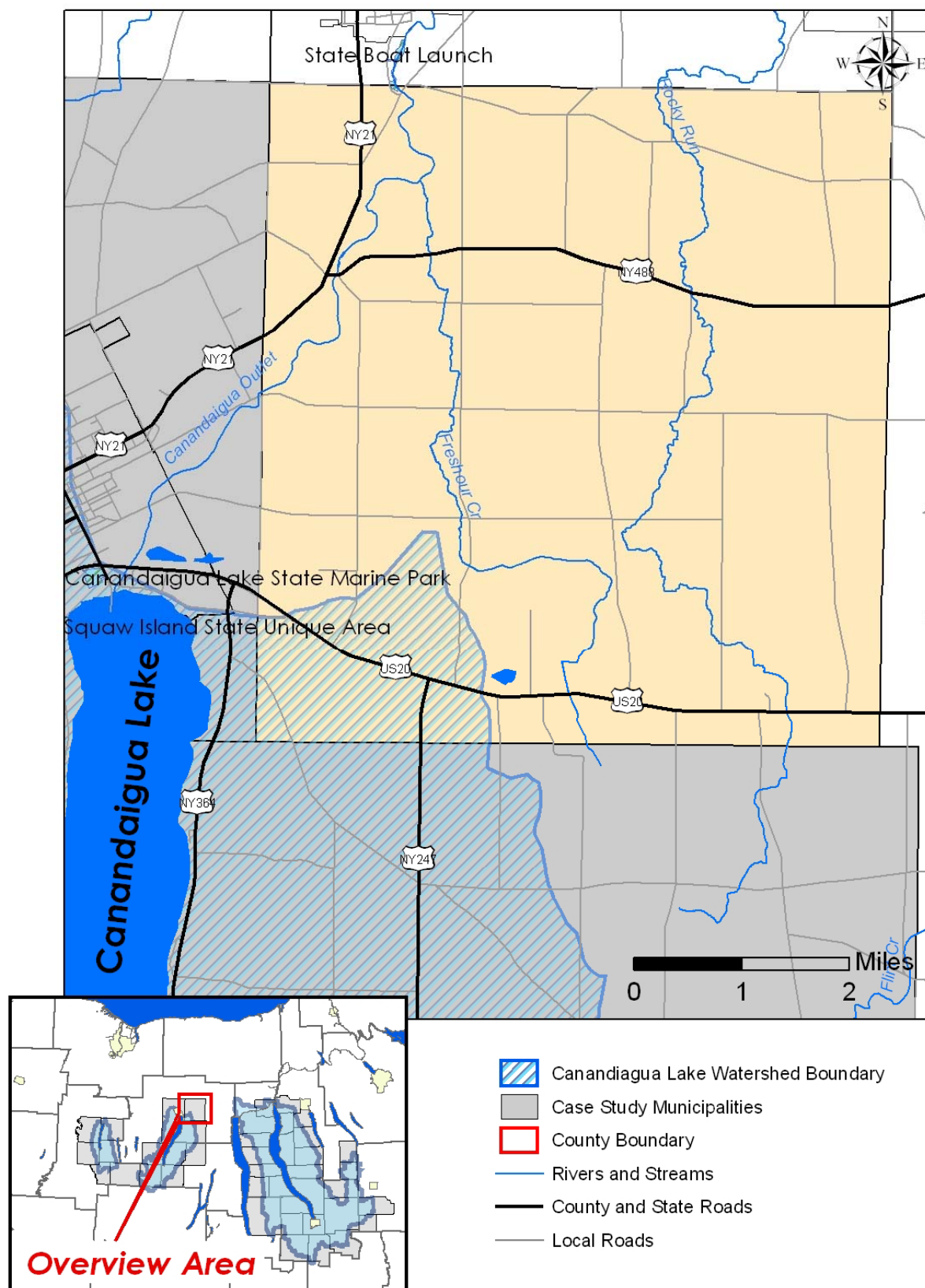
Percent of Municipality in Watershed: 59.8%

Percent of Watershed within Municipality: 17.31%

<i>Town of Gorham</i>	Full or Partial Implementation	Not applicable
Development	20 of 42 (47%)	0
Existing Development	6 of 16 (37%)	0
New Development/ Substantial Redevelopment	14 of 26 (53%)	0
Forestry/Agriculture	1 of 12 (8%)	0
Forestry	0 of 10	0
Agriculture	1 of 2 (50%)	0
Waterways/Wetlands	1 of 16 (6%)	0
Modified Waterways	1 of 10 (10%)	0
Wetlands - Riparian Management/Restoration	0 of 6	0
Marinas	2 of 48 (4%)	0
Existing	0 of 20	0
New	2 of 18 (11%)	0
All	0 of 10	0
Roads and Bridges	23 of 26 (88%)	0
Existing	6 of 6 (100%)	0
New	11 of 13 (84%)	0
All	6 of 7 (85%)	0
OWTS	2 of 7 (28%)	0



Town of Hopewell • Ontario County





Town of Hopewell

Ontario County

The Town of Hopewell is located in Ontario County and lies within the northeastern portion of the Canandaigua Lake watershed. The town covers an area of 35 square miles, 8.5 percent of which lies within the Canandaigua Lake watershed. While Hopewell has no shoreline on Canandaigua Lake, the town does have several minor tributaries that contribute to the lake.

According to the 2000 Census, the Town of Hopewell contains 3,346 people. The town experienced a population increase of 37.7 percent between 1960 and 1980 an increase of 33.4 percent from 1980 to 2000. The median age in Hopewell is 39 years and the average household size is 2.6 persons. Median household income is \$41,604, with a poverty rate of 4 percent. There are 1,342 housing units in the town, 17.4 percent of which have been built since 1990. The median value of owner-occupied homes is \$84,000.

Local Laws Reviewed:

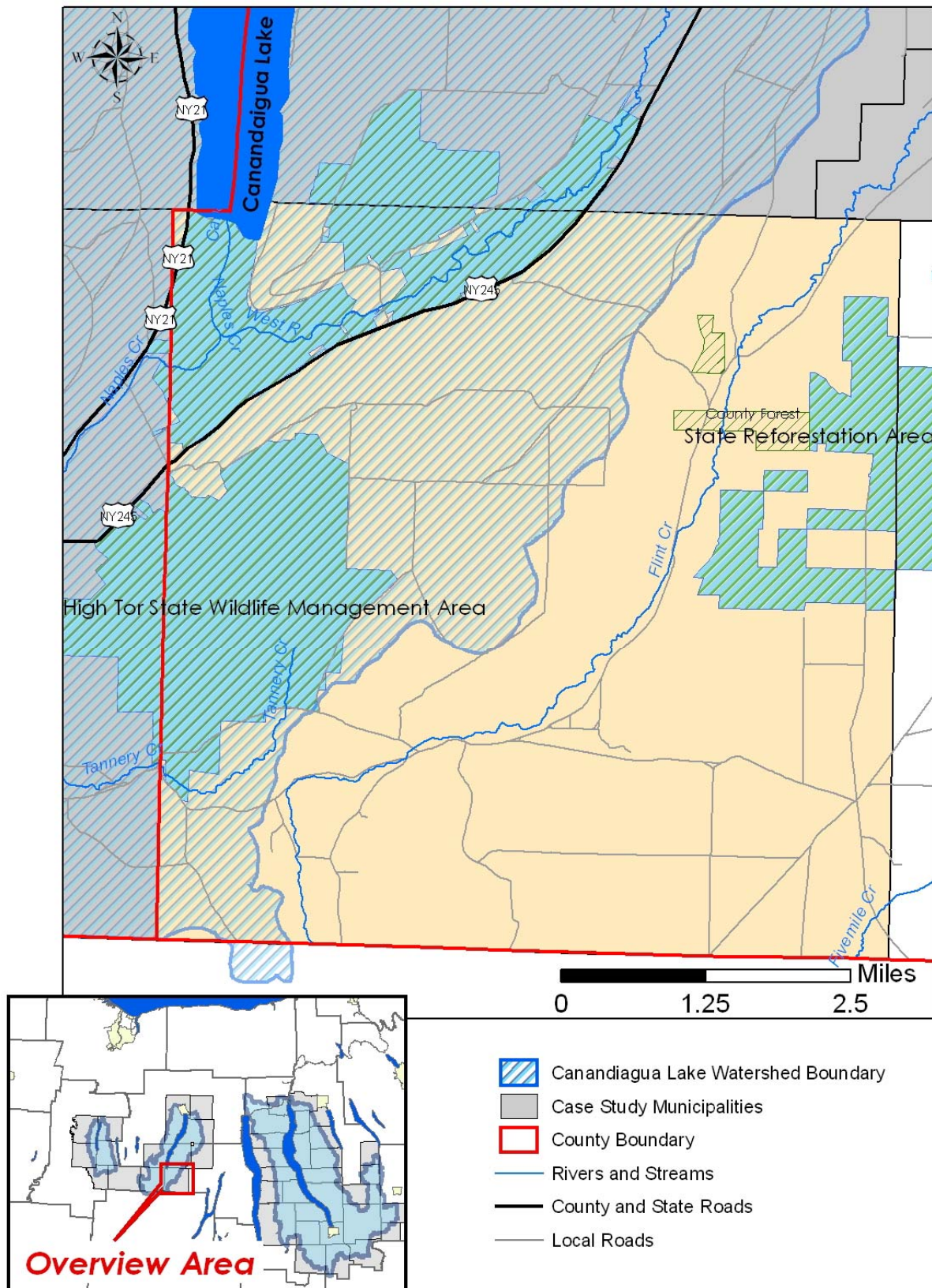
- *Town of Hopewell Rules and Regulations for Subdivisions*, 1983
- *Town of Hopewell Zoning Ordinance*, 1986
- *Town of Hopewell Master Plan*, 1991

Assessment Results:

<i>Town of Hopewell</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	35	16 of 42 (38%)	0
		<i>Existing Development</i> 5 of 16 (31%)	0
		<i>New Development/ Substantial Redevelopment</i> 11 of 26 (42%)	0
<i>Percent of Municipality in Watershed:</i>	8.5%	1 of 12 (8%)	0
		<i>Forestry</i> 0 of 10	0
		<i>Agriculture</i> 1 of 2 (50%)	0
<i>Percent of Watershed within Municipality:</i>	1.80%	2 of 16 (12%)	0
		<i>Modified Waterways</i> 2 of 10 (20%)	0
		<i>Wetlands - Riparian Management/Restoration</i> 0 of 6	0
		0 of 48	48
		<i>Existing</i> 0 of 20	20
		<i>New</i> 0 of 18	18
		<i>All</i> 0 of 10	10
		17 of 26 (65%)	0
		<i>Existing</i> 4 of 6 (66%)	0
		<i>New</i> 8 of 13 (61%)	0
		<i>All</i> 5 of 7 (71%)	0
OWTS		4 of 7 (57%)	0



Town of Italy • Yates County





The Town of Italy lies within the southeastern portion of the Canandaigua Lake watershed. The town covers an area of 39.4 square miles, 42.1 percent of which lies within the Canandaigua Lake watershed. Italy has approximately one mile of shoreline on Canandaigua Lake and contains a significant segment of the West River, a major tributary of the lake.

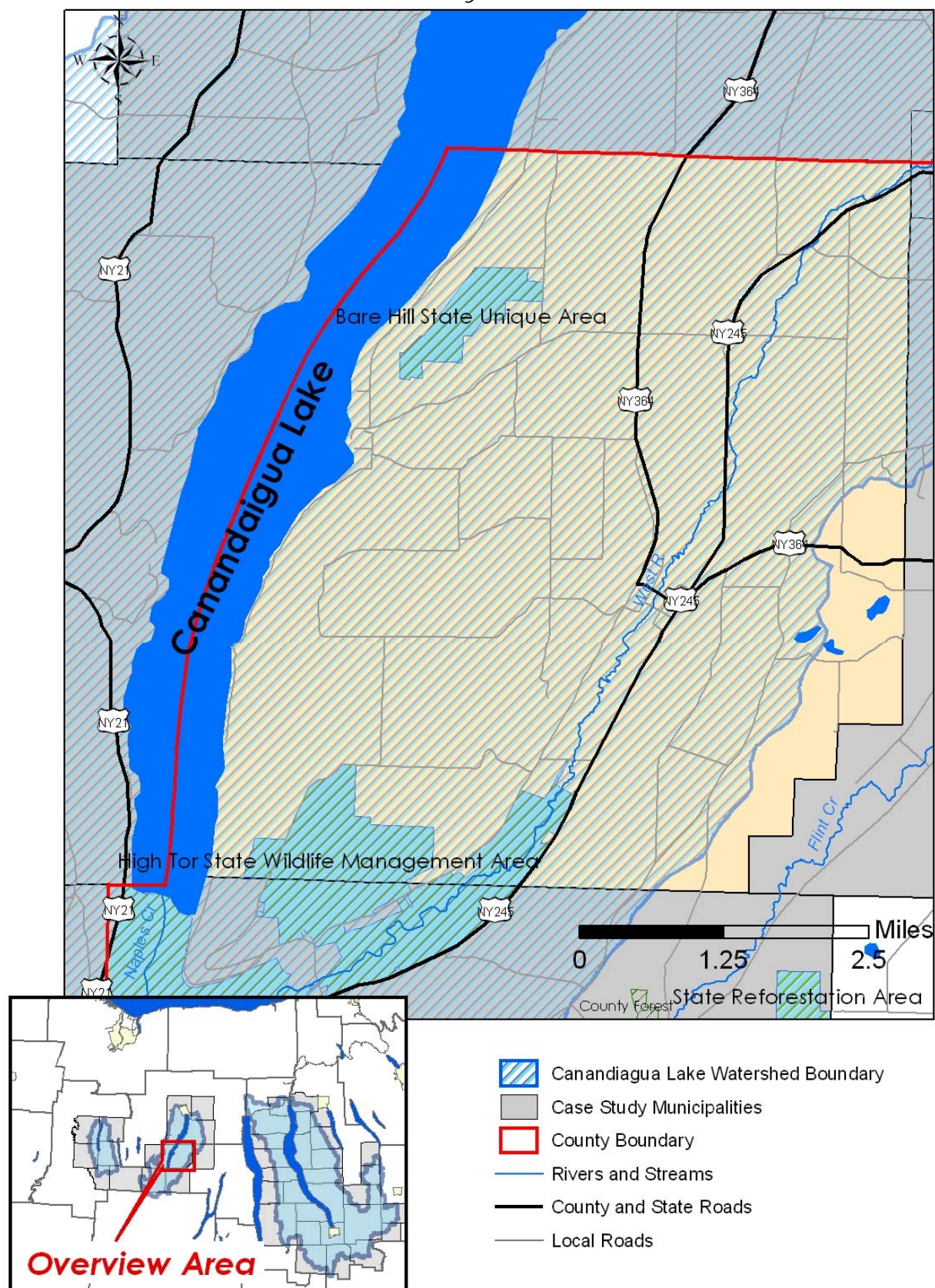
According to the 2000 Census, the Town of Italy contains 1,087 people. The town experienced a population increase of 122.6 percent from 1960 to 1980 an increase of 14 percent from 1980 to 2000. The median age in Italy is 38.5 years and the average household size is 2.58 persons. Median household income is \$33,750, with a poverty rate of 7.6 percent. There are 578 housing units in the town, 19.7 percent of which have been built since 1990. The median value of owner-occupied homes is \$70,400.

As the law review shows, the Town of Italy did not have any significant land use control laws when the Local Laws to Protect Finger Lakes Water Quality project started. In one of the most comprehensive efforts of any of the targeted municipalities, the Town of Italy seized the initiative and opportunity available through the project to develop the most basic tools of land use control: a comprehensive plan and zoning. G/FLRPC was able to provide very thorough input and assistance with the preparation of a Comprehensive Plan (adopted 2004) and Zoning Law (pending), by working with the Town of Italy Zoning Commission. Most significantly, this occurred in a town with a history of planning challenges, which include never having had zoning, and defeats of previous attempts to implement zoning.

<i>Town of Italy</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	39.4	7 of 42 (16%)	0
	<i>Existing Development</i>	4 of 16 (25%)	0
	<i>New Development/ Substantial Redevelopment</i>	3 of 26 (11%)	0
<i>Percent of Municipality in Watershed:</i>	42.1%	1 of 12 (8%)	0
		<i>Forestry</i>	0 of 10
		<i>Agriculture</i>	1 of 2 (50%)
<i>Percent of Watershed within Municipality:</i>	10%	0 of 16	0
		<i>Modified Waterways</i>	0 of 10
		<i>Wetlands - Riparian Management/Restoration</i>	0 of 6
		0 of 48	48
	<i>Existing</i>	0 of 20	20
	<i>New</i>	0 of 18	18
	<i>All</i>	0 of 10	10
		14 of 26 (53%)	0
	<i>Existing</i>	4 of 6 (66%)	0
	<i>New</i>	7 of 13 (53%)	0
	<i>All</i>	3 of 7 (42%)	0
OWTS		4 of 7 (57%)	0



Town of Middlesex • Yates County





The Town of Middlesex lies within the central eastern portion of the Canandaigua Lake watershed. The town covers an area of 30.3 square miles, 92.3 percent of which lies within the Canandaigua Lake watershed. Middlesex has 7.5 miles of shoreline on Canandaigua Lake.

According to the 2000 Census, the Town of Middlesex contains 1,345 people. The town experienced a population increase of 37.9 percent between 1960 and 1980 an increase of 19.3 percent between 1980 and 2000. The median age in Middlesex is 41.1 years and the average household size is 2.52 persons. Median household income is \$43,618, with a poverty rate of 3.4 percent. There are 732 housing units in the town, 12.7 percent of which have been built since 1990. The median value of owner-occupied homes is \$72,500.

The Town of Middlesex currently has several laws on the books that regulate land use and development and help the Town protect the water quality of Canandaigua Lake. One of the most significant gaps, however, was a subdivision ordinance. The Town Planning Board felt that developing this law was particularly important in light of past problems with multi-lot development (especially drainage problems). In addition, regional growth patterns indicate that more residential development will spread south from the Ontario County Town of Gorham along Canandaigua Lake into Middlesex. G/FLRPC was able to provide significant assistance with the development of a Subdivision Ordinance by working with the Town of Middlesex Planning Board.

Local Laws Reviewed:

- *Town of Middlesex Local Law #3: Canandaigua Lake Uniform Docking and Mooring Law, 1992*
- *Town of Middlesex Local Law #1: Providing and Removal of Fire and Health Hazards and Weeds, 1994*
- *Town of Middlesex Local Law #2: Repair and Removal of Unsafe Buildings and Collapsed Structures, 1994*
- *Town of Middlesex Zoning Law, 1999*
- *Town of Middlesex Storm water Management and Erosion Control Law*

Assessment Results:

Development		Forestry/Ag.		Water/Wetlands		Marinas		Roads/Bridges		OWTS
17 of 42 (40%)		1 of 12 (8%)		1 of 16 (6%)		0 of 48		22 of 26 (84%)		2 of 7 (28%)
Existing Development	5 of 16 (31%)	Forestry	0 of 10	Modified Waterways	0 of 10	Existing	0 of 20	Existing	5 of 6 (83%)	(no sub-categories)
New Development/ Substantial Redevelopment	12 of 26 (46%)	Ag..	1 of 2 (50%)	Wetlands/ Riparian Management & Restoration	1 of 6 (16%)	New	0 of 18	New	11 of 13 (84%)	
						All	0 of 10	All	6 of 7 (85%)	

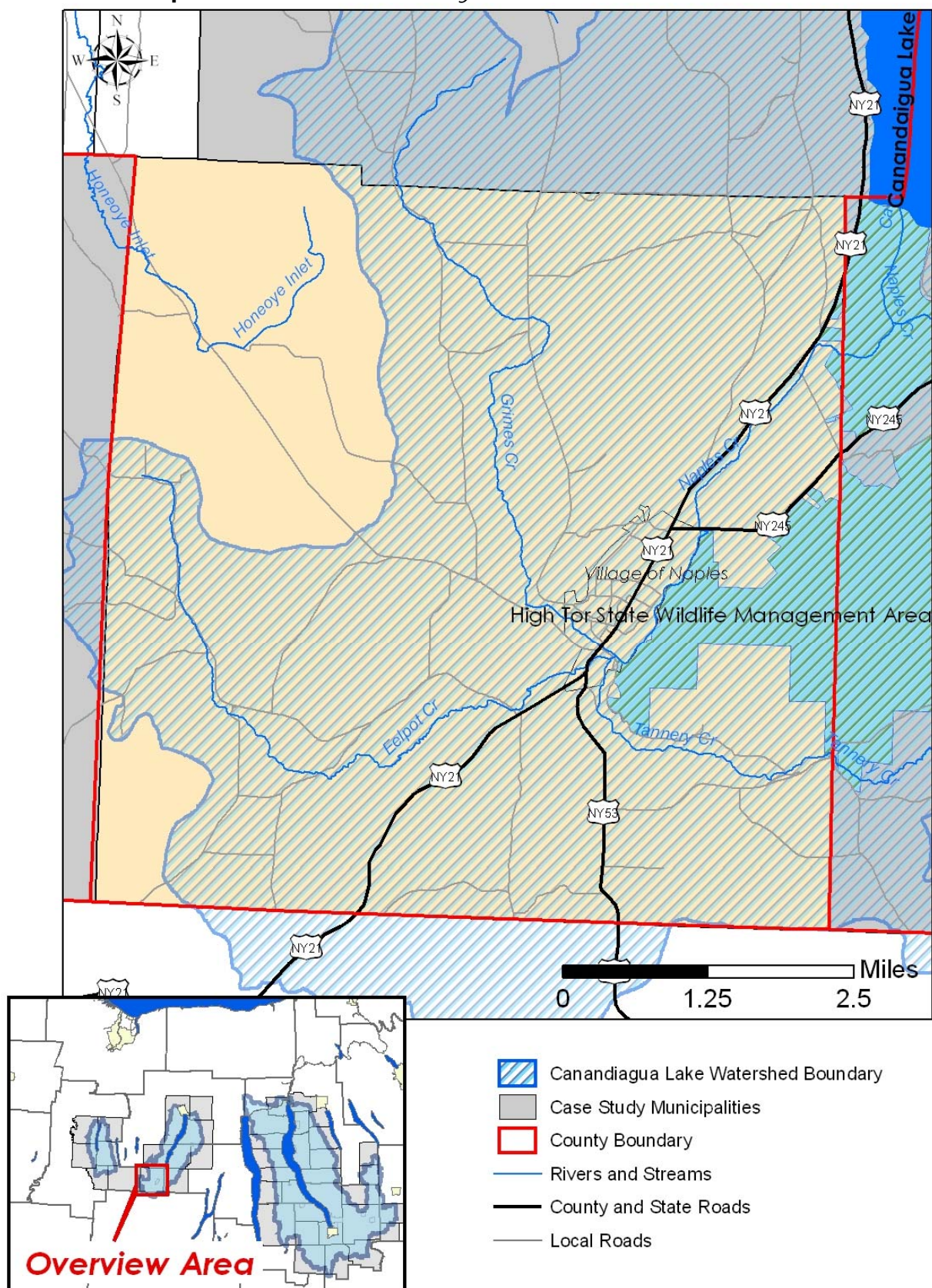
Total Municipal
Land Area (sq miles):
30.3

Percent of
Municipality in
Watershed:
92.3%

Percent of
Watershed within
Municipality:
16.9%



Town of Naples • Ontario County





Town of Naples

Ontario County

The Town of Naples lies within the southwestern portion of the Canandaigua Lake watershed. The town covers an area of 38.9 square miles, 80.4 percent of which lies within the Canandaigua Lake watershed. While Naples has no shoreline on Canandaigua Lake, the Grimes Creek is a significant tributary of the lake.

According to the 2000 Census, the Town of Naples contains 2,441 people. The town experienced a population increase of 19.6 percent between 1960 and 1980 and an increase of 4.4 percent between 1980 and 2000. The median age in Middlesex is 39.7 years and the average household size is 2.46 persons. Median household income is \$36,812, with a poverty rate of 8.9 percent. There are 1,112 housing units in the town, 12.7 percent of which have been built since 1990. The median value of owner-occupied homes is \$79,700.

Local Laws Reviewed:

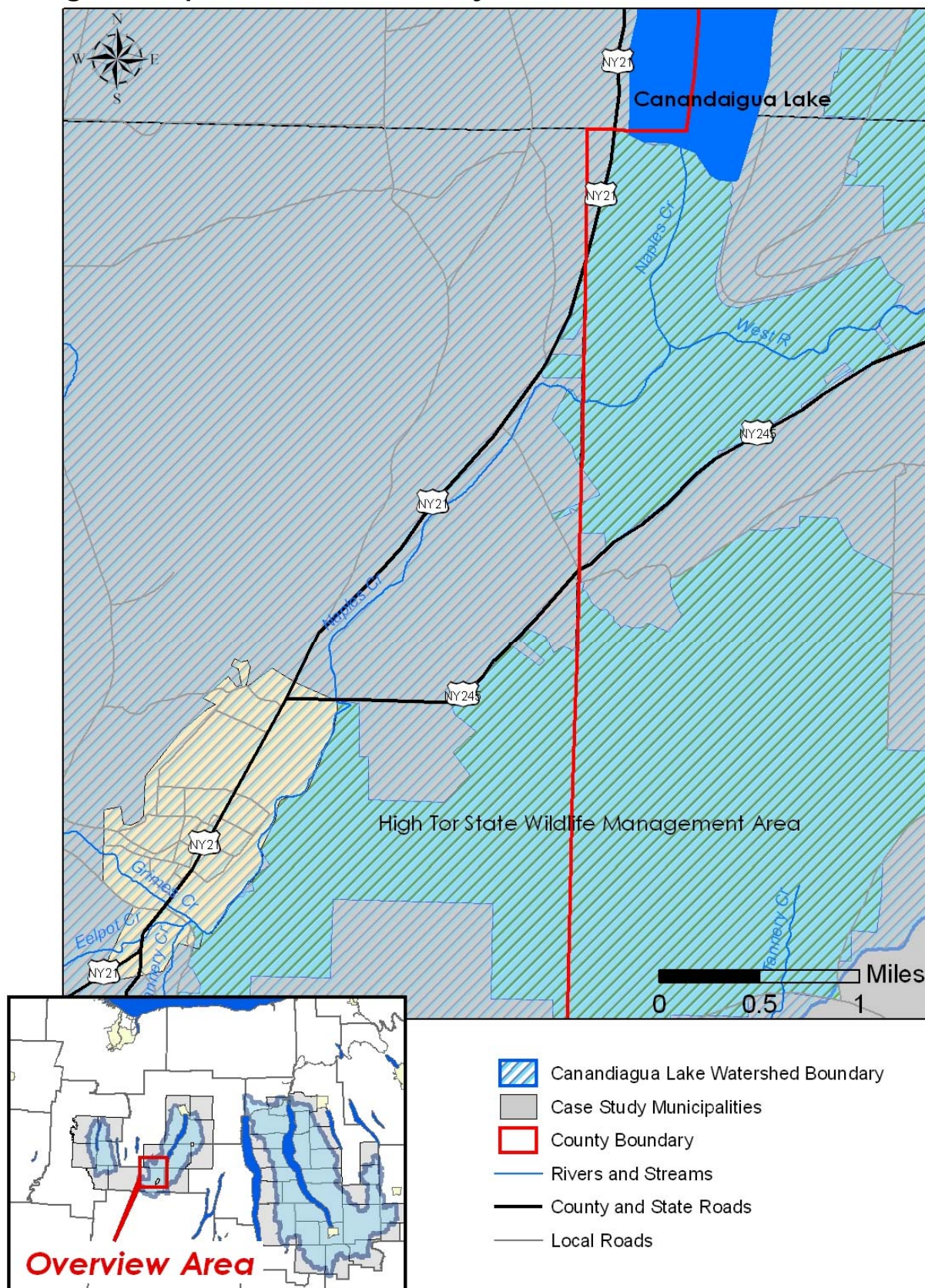
- *Town of Naples Subdivision of Land Regulations*, 1992
- *Town of Naples Zoning Code: Chapter 132*, 1997
- *Town of Naples Master Plan 2002-2007: Strategic Plan report*, 2002

Assessment Results:

		<i>Town of Naples</i>	Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	38.9	Development	11 of 42 (26%)	0
		<i>Existing Development</i>	5 of 16 (31%)	0
		<i>New Development/ Substantial Redevelopment</i>	6 of 26 (23%)	0
		Forestry/Agriculture	1 of 12 (8%)	0
<i>Percent of Municipality in Watershed:</i>	80.3%	<i>Forestry</i>	0 of 10	0
		<i>Agriculture</i>	1 of 2 (50%)	0
		Waterways/Wetlands	1 of 16 (6%)	0
		<i>Modified Waterways</i>	1 of 10 (10%)	0
<i>Percent of Watershed within Municipality:</i>	18.87%	<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
		Marinas	0 of 48	48
		<i>Existing</i>	0 of 20	20
		<i>New</i>	0 of 18	18
		<i>All</i>	0 of 10	10
		Roads and Bridges	17 of 26 (63%)	0
		<i>Existing</i>	5 of 6 (83%)	0
		<i>New</i>	8 of 13 (61%)	0
		<i>All</i>	4 of 7 (57%)	0
		OWTS	2 of 7 (28%)	0



Village of Naples • Ontario County





Village of Naples

Ontario County

The Village of Naples is located in Ontario County and lies within the southwestern portion of the Canandaigua Lake watershed. The village covers an area of .95 square miles, 100 percent of which lies within the Canandaigua Lake watershed. While Naples has no shoreline on Canandaigua Lake, the Naples Creek is a significant tributary of the lake.

According to the 2000 Census, the Village of Naples contains 1,072 people. The village experienced a population decline of 1 percent between 1960 and 1980 and another 12.5 percent decline between 1980 and 2000. The median age in the village is 39.1 years and the average household size is 2.37 persons. Median household income is \$34,219, with a poverty rate of 12 percent. There are 510 housing units in the village, 4.5 percent of which have been built since 1990. The median value of owner-occupied homes is \$78,300.

Local Laws Reviewed:

- Village of Naples Local Law #3, 1994
- Village of Naples Local Law #2, 1996
- Village of Naples Local Law #1, 1999
- Village of Naples Local Law #1, 2000
- Village of Naples Local Law #2, 2000
- Village of Naples Local Law #1, 2001
- Village of Naples Local Law #2, 2002
- Village of Naples Local Law #3, 2002
- Village of Naples Local Law #1, 2003
- Village of Naples Local Law #2, 2003

Assessment Results:

Total Municipal
Land Area (sq miles):

.9

Percent of Municipality
in Watershed:

100%

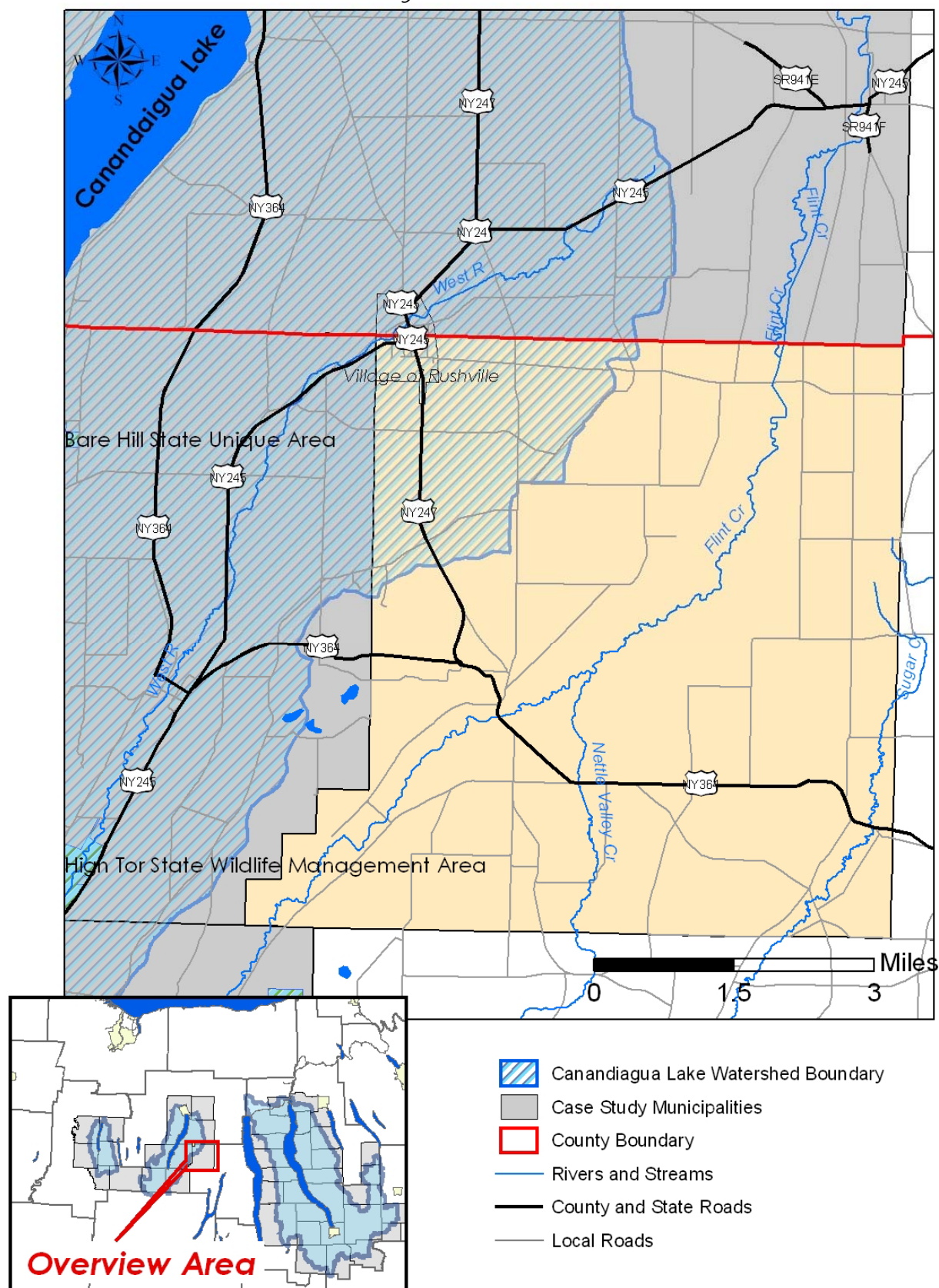
Percent of Watershed
within Municipality:

.57%

<i>Village of Naples</i>	Full or Partial Implementation	Not applicable
Development	12 of 42 (28%)	0
<i>Existing Development</i>	5 of 16 (31%)	0
<i>New Development/ Substantial Redevelopment</i>	7 of 26 (26%)	0
Forestry/Agriculture	0 of 12	12
<i>Forestry</i>	0 of 10	10
<i>Agriculture</i>	0 of 2	2
Waterways/Wetlands	0 of 16	0
<i>Modified Waterways</i>	0 of 10	0
<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
Marinas	0 of 48	48
<i>Existing</i>	0 of 20	20
<i>New</i>	0 of 18	18
<i>All</i>	0 of 10	10
Roads and Bridges	19 of 26 (73%)	0
<i>Existing</i>	5 of 6 (83%)	0
<i>New</i>	9 of 13 (69%)	0
<i>All</i>	5 of 7 (71%)	0
OWTS	2 of 7 (28%)	0



Town of Potter • Yates County





Town of Potter

Yates County

The Town of Potter lies within the central western portion of the Canandaigua Lake watershed. The town covers an area of 36.5 square miles, 13.4 percent of which lies within the Canandaigua Lake watershed. While Potter has no shoreline on Canandaigua Lake, the headwaters of the West Creek—a significant tributary of the lake—originate there.

According to the 2000 Census, the Town of Potter contains 1,830 people. The town experienced a population increase of 29.5 percent between 1960 and 1980 and an increase of 33.9 percent between 1980 and 2000. The median age in Potter is 32.6 years and the average household size is 3.1 persons. Median household income is \$42,784 with a poverty rate of 8.6 percent. There are 626 housing units in the town, 18.1 percent of which have been built since 1990. The median value of owner-occupied homes is \$69,600.

Local Laws Reviewed:

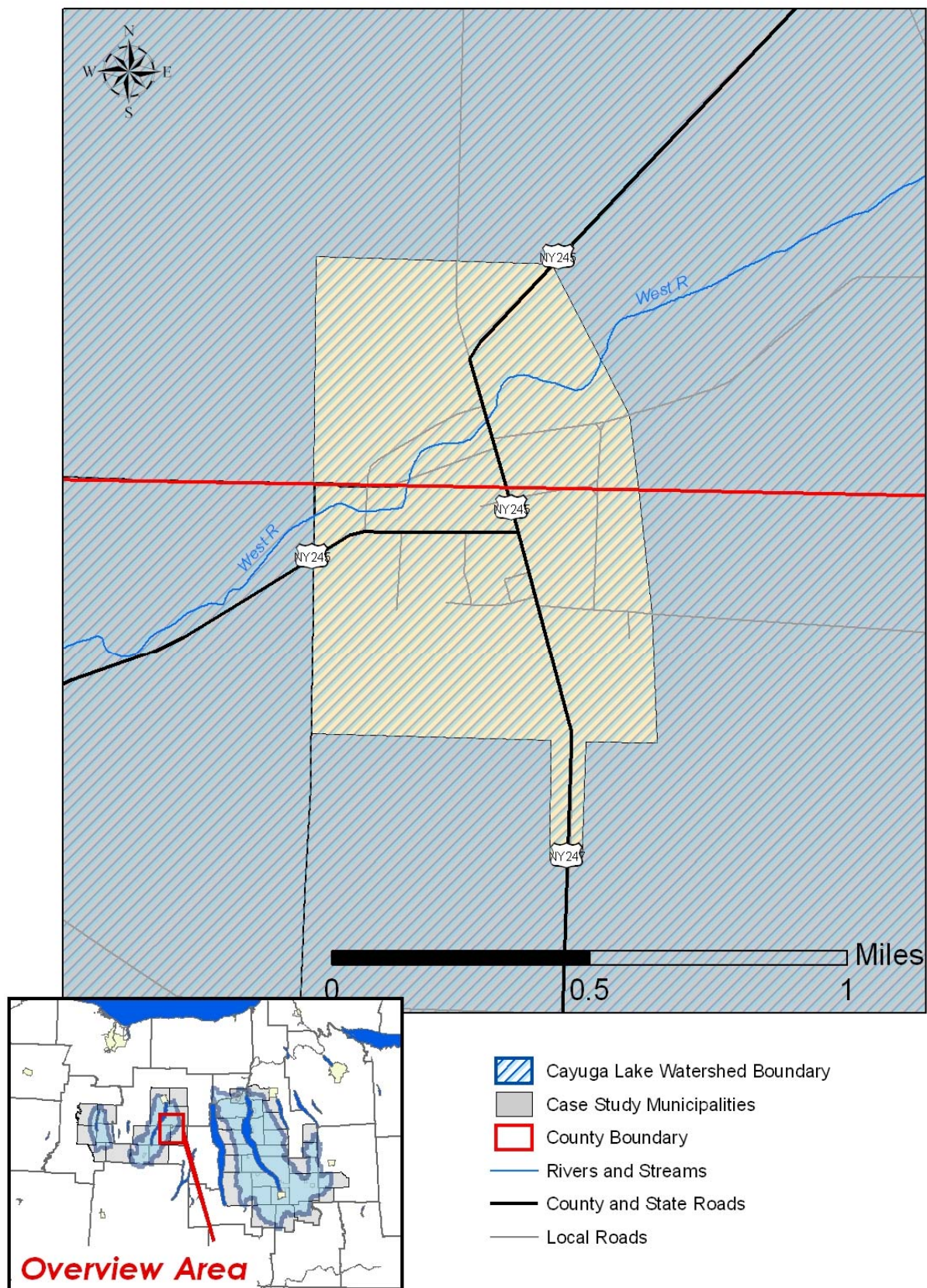
- *Town of Potter Comprehensive Plan, 1979*
- *Town of Potter Zoning Ordinance, 1979*
- *Town of Potter Subdivision Regulations, 1979*
- *Town of Potter Local Law A: Town of Potter Junk Storage Law, 1995*

Assessment Results:

<i>Town of Potter</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	36.5	15 of 42 (35%)	0
	<i>Existing Development</i>	4 of 16 (25%)	0
	<i>New Development/ Substantial Redevelopment</i>	11 of 26 (42%)	0
<i>Percent of Municipality in Watershed:</i>	13.4%	1 of 12 (8%)	0
	<i>Forestry</i>	0 of 10	0
	<i>Agriculture</i>	1 of 2 (50%)	0
<i>Percent of Watershed within Municipality:</i>	2.94%	0 of 16	0
	<i>Modified Waterways</i>	0 of 10	0
	<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
	Marinas	0 of 48	48
	<i>Existing</i>	0 of 20	20
	<i>New</i>	0 of 18	18
	<i>All</i>	0 of 10	10
	Roads and Bridges	18 of 26 (69%)	0
	<i>Existing</i>	4 of 6 (66%)	0
	<i>New</i>	8 of 13 (61%)	0
	<i>All</i>	6 of 7 (85%)	0
	OWTS	2 of 7 (28%)	0



Village of Rushville • Ontario/Yates Counties





Village of Rushville

Ontario/Yates Counties

The Village of Rushville lies within the central western portion of the Canandaigua Lake watershed. The village covers an area of .57 square miles, 100 percent of which lies within the Canandaigua Lake watershed. While Rushville has no shoreline on Canandaigua Lake, the West Creek traverses its borders.

According to the 2000 Census, the Village of Rushville contains 621 people. The village experienced a population increase of 30.7 percent between 1960 and 1980 and an increase of 10.8 percent between 1980 and 2000. The median age in Rushville is 37.1 years and the average household size is 2.62 persons. Median household income is \$35,625 with a poverty rate of 8.9 percent. There are 239 housing units in the village, 11.4 percent of which have been built since 1990. The median value of owner-occupied homes is \$74,200.

Local Laws Reviewed:

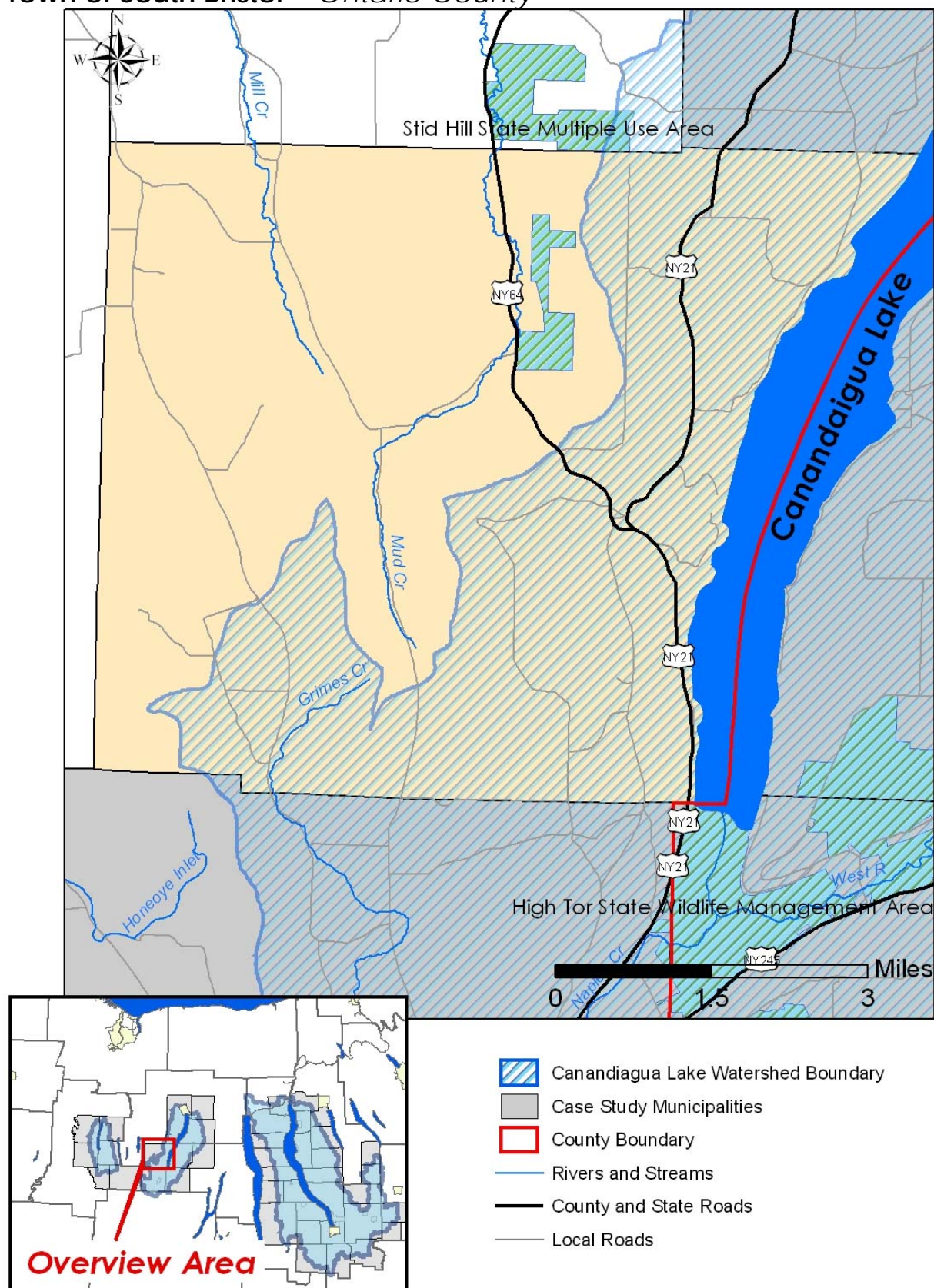
- *No ordinances on file*

Assessment Results:

<i>Village of Rushville</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	.6	9 of 42 (21%)	0
		<i>Existing Development</i>	<i>5 of 16 (31%)</i>
		<i>New Development/ Substantial Redevelopment</i>	<i>4 of 26 (15%)</i>
		0 of 12	12
<i>Percent of Municipality in Watershed:</i>	100%	0 of 10	10
		0 of 2	2
		0 of 16	0
		0 of 10	0
<i>Percent of Watershed within Municipality:</i>	.34%	0 of 6	0
		0 of 6	0
		0 of 48	48
		0 of 20	20
		0 of 18	18
		0 of 10	10
		19 of 26 (73%)	0
		5 of 6 (85%)	0
		8 of 13 (61%)	0
		6 of 7 (85%)	0
		2 of 7 (28%)	0
		0	0



Town of South Bristol • Ontario County





Town of South Bristol

Yates County

The Town of South Bristol lies within the southwestern portion of the Canandaigua Lake watershed. The town covers an area of 38.3 square miles, 46.4 percent of which lies within the Canandaigua Lake watershed. South Bristol has over 7 miles of shoreline on Canandaigua Lake.

According to the 2000 Census, the Town of South Bristol contains 1,645 people. The town experienced a population increase of 95.3 percent between 1960 and 1980 and an increase of 36.5 percent between 1980 and 2000. The median age in South Bristol is 42.1 years and the average household size is 2.44 persons. Median household income is \$52,312 with a poverty rate of 4.7 percent. There are 1,145 housing units in the town, 12.4 percent of which have been built since 1990. The median value of owner-occupied homes is \$110,700.

Local Laws Reviewed:

- *Town of South Bristol Comprehensive Plan, 2000*
- *Town of South Bristol Subdivision of Land Regulations, 2003*

Assessment Results:

Total Municipal
Land Area (sq miles): **38.3**

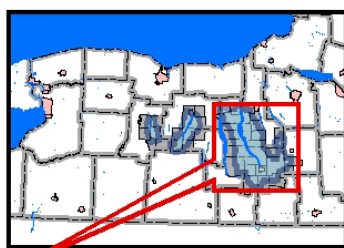
Percent of Municipality
in Watershed: **46.3%**

Percent of Watershed
within Municipality: **10.71%**

<i>Town of South Bristol</i>	Full or Partial Implementation	Not applicable
Development	11 of 42 (26%)	0
<i>Existing Development</i>	5 of 16 (31%)	0
<i>New Development/ Substantial Redevelopment</i>	6 of 26 (23%)	0
Forestry/Agriculture	1 of 12 (8%)	0
<i>Forestry</i>	0 of 10	0
<i>Agriculture</i>	1 of 2 (50%)	0
Waterways/Wetlands	0 of 16	0
<i>Modified Waterways</i>	0 of 10	0
<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
Marinas	0 of 48	0
<i>Existing</i>	0 of 20	0
<i>New</i>	0 of 18	0
<i>All</i>	0 of 10	0
Roads and Bridges	3 of 26 (11%)	0
<i>Existing</i>	0 of 6	0
<i>New</i>	3 of 13 (23%)	0
<i>All</i>	0 of 7	0
OWTS	2 of 7 (28%)	0



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Overview Area



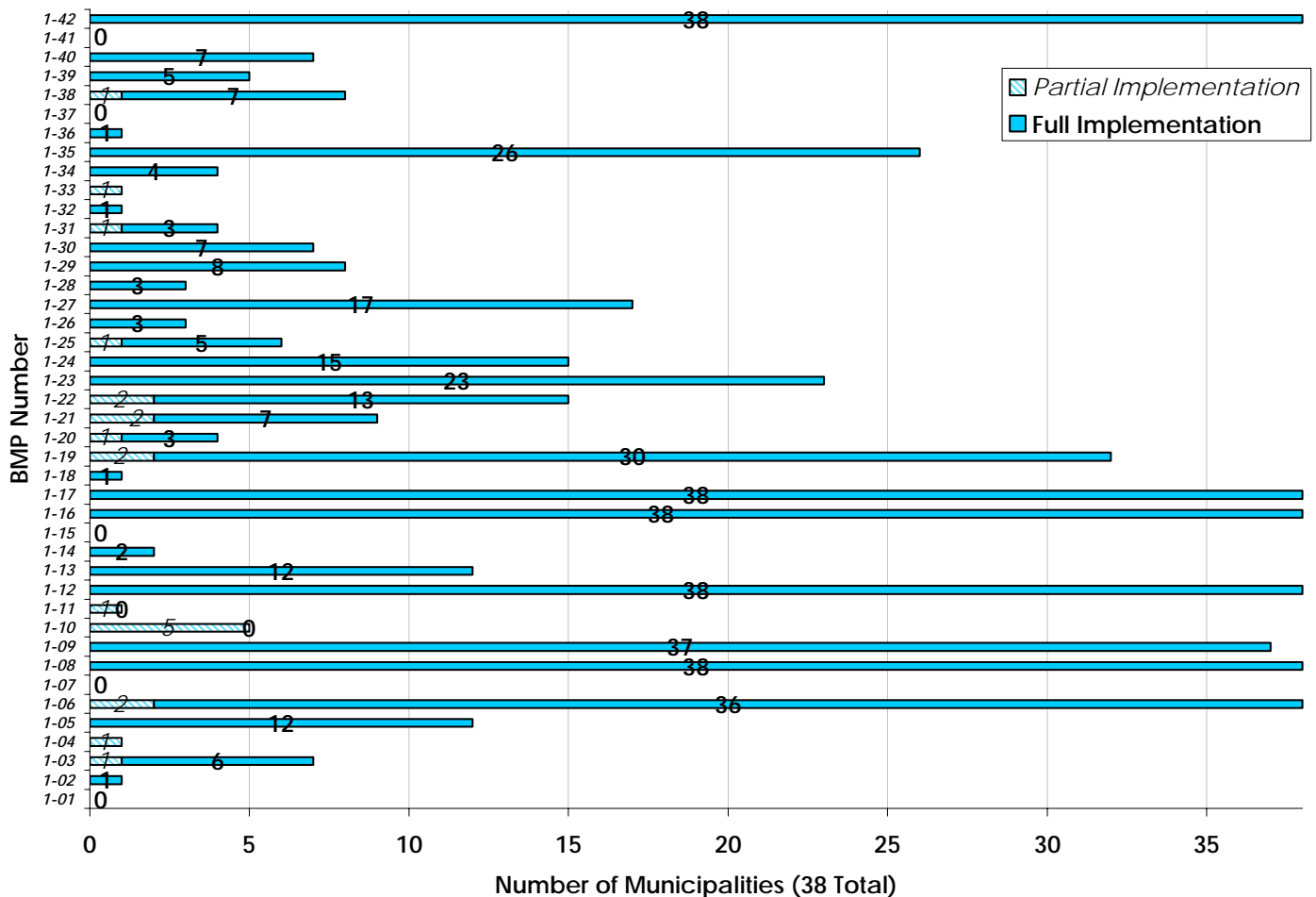
Development – Cayuga Lake Watershed

Within the Cayuga Lake Watershed, 37 of the 42 *Development* BMPs –or 88% – were found to be addressed to some degree. Those BMPs that were not found to be addressed include:

- **1-01:** Identify retrofit opportunities
- **1-07:** Institute turf management practices on golf courses and parks and recreation areas
- **1-15:** Discourage feeding of waterfowl
- **1-37:** Develop priority list for BMP's - use of vegetative low areas for retention/infiltration
- **1-41:** For redevelopment, employ regulations that provide for technologically advanced (on and off) site wastewater treatment systems to optimize efficiencies and address "challenging" sites

As seen below, there were seven BMPs found that are being used in 36 or more municipalities, indicating a high degree of basic BMP use in the Cayuga Lake watershed. These are primarily the result of comprehensive education and outreach programs by organizations such as the Soil and Water Conservation District and the Cornell Cooperative Extension, as well as volunteer programs, such as local watershed groups.

Development: Cayuga Lake Watershed





Forestry and Agriculture – Cayuga Lake Watershed

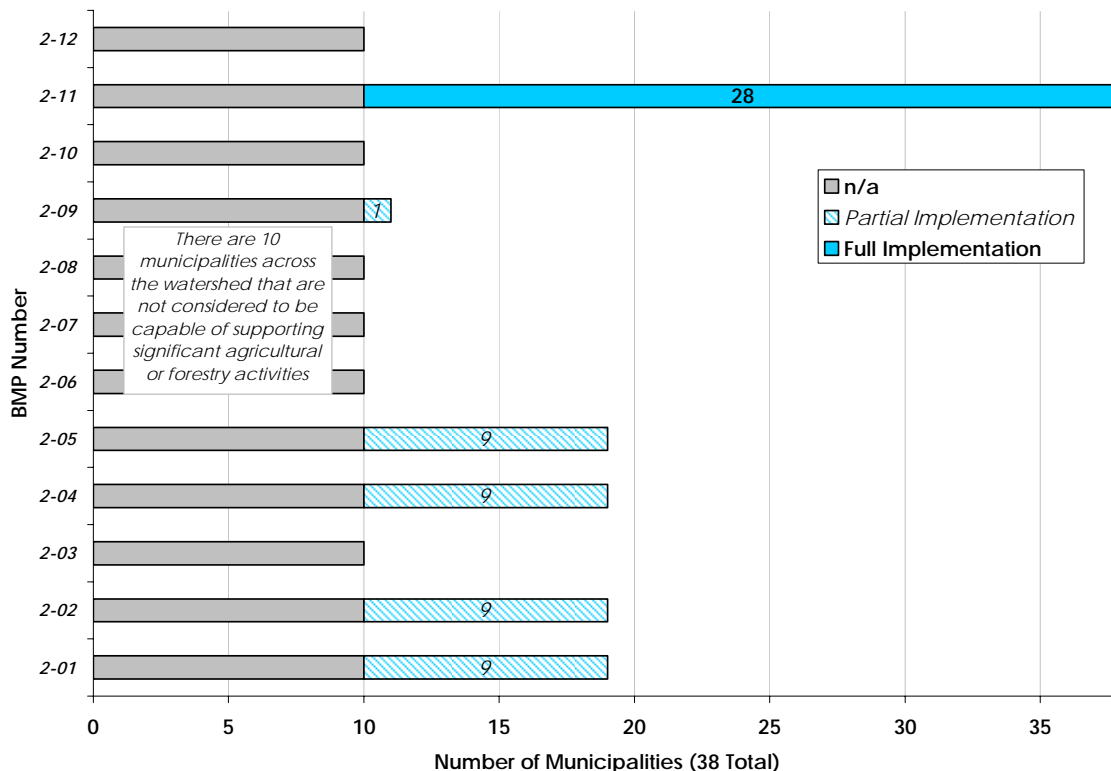
Within the Cayuga Lake watershed, 6 of 12 – or 50% – of the BMPs under *Forestry and Agriculture* are being addressed to some degree. The five BMPs that were most widely addressed are as follows:

- **2-01:** Consider potential water quality impacts when selecting silviculture system (yarding system, site preparation, pesticides employment, etc)
- **2-02:** Consider harvesting practices
- **2-04:** Have specialists (geologist, soil scientist, geotechnical engineer, wildland hydrologist) review plans in high erosion hazard areas
- **2-05:** Preplan harvest areas, skid trails, and access so as to be on stable soils, avoiding steep gradients, multiple stream crossings, poor drainage areas, etc.
- **2-11:** Use Agricultural Environmental Management (AEM)

Nine municipalities in Cayuga County were given partial credit for addressing four BMPs in *Forestry*. The Cayuga County CCE developed a program for local citizens called “Forest Fundamentals: Tools for Landowners.” The workshop series, conducted in cooperation with Onondaga County CCE, the NYS DEC and Cornell’s Forestry Extension Program, provided landowners with resources to help them participate in cost-share assistance programs, complete a management plan, work with foresters, and more. While not as effective as addressing the BMPs through local laws, such a practice nonetheless brings important land management issues to light and allows landowners who are interested in land and water conservation to learn how to properly manage their forest resources in a way that will protect local water quality.

As stated earlier, BMP 2-11 (AEM) is addressed throughout all of the watersheds in the case study area.

Forestry and Agriculture: Cayuga Lake Watershed



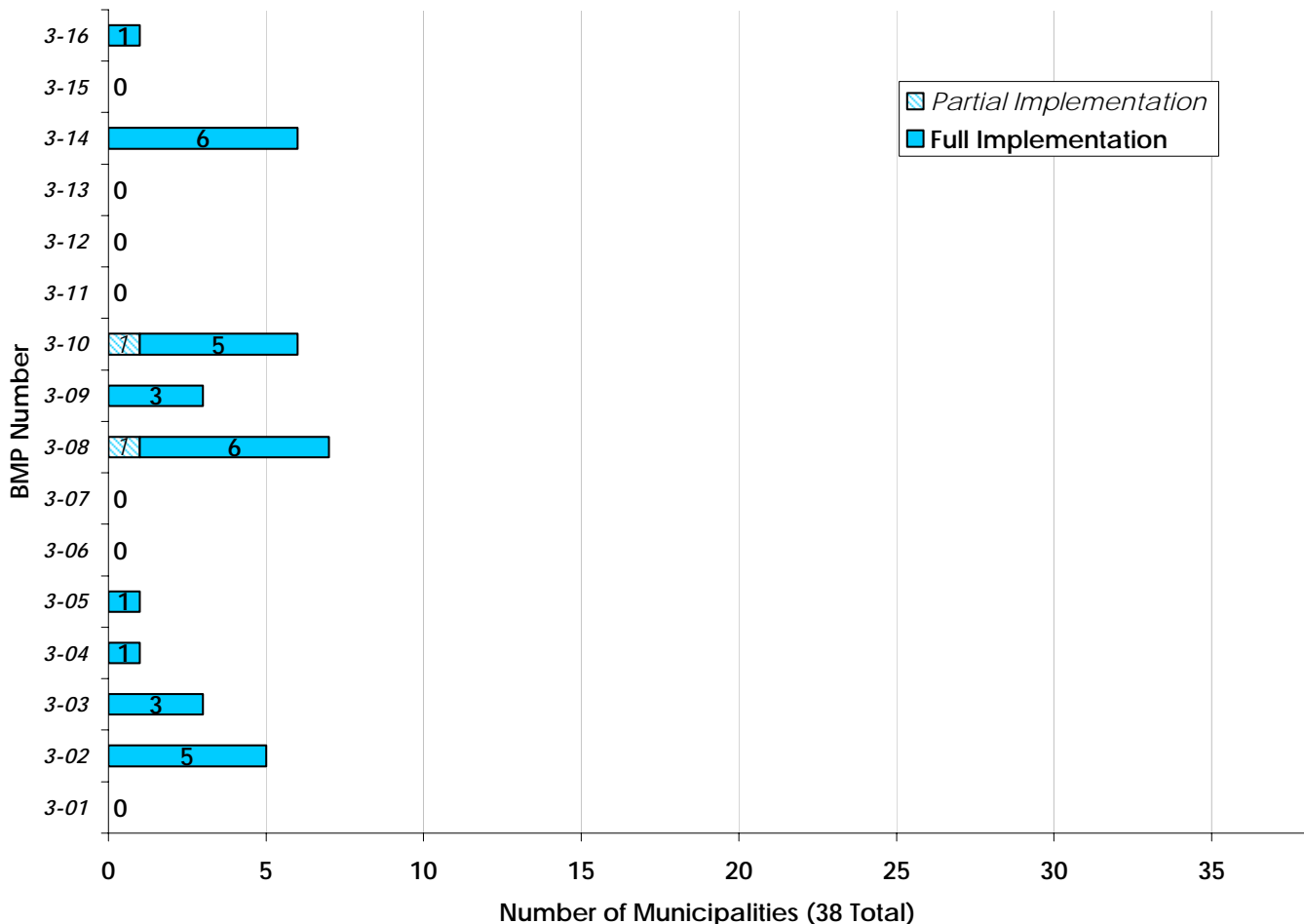


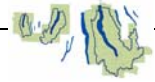
Waterways and Wetlands – Cayuga Lake Watershed

Within the Cayuga Lake watershed, 9 of 16 – or 56% – of the BMPs under *Waterways and Wetlands* are being addressed to some degree. Those municipalities that showed implementation of 3 or more BMPs included the City of Ithaca and the Towns of Lansing, Seneca Falls and Summerhill. Those BMPs that were not found to be addressed are as follows:

It is important to note that the Cayuga Lake Intermunicipal Organization has been developing a comprehensive “Science-Based Assessment” of water quality issues throughout the Cayuga Lake watershed, including extensive monitoring programs and capital initiatives such as streambank stabilization and phosphorus abatement. Unfortunately, most of these initiatives were unknown when the assessment took place and therefore have not been reflected in the assessment matrices. If these actions were captured during the assessment process, one could expect BMPs that emphasize monitoring (3-01), restoration (3-02), facility maintenance (3-07) and the identification of retrofit opportunities (3-06/11/12/15) to be implemented across a wide geographic area. Due to limited resources, these BMPs are typically initiated through individual demonstration projects that are implemented in a specific location. As the benefits of these projects become clear, they can be readily adopted across a wider area.

Waterways and Wetlands: Cayuga Lake Watershed





Marinas – Cayuga Lake Watershed

Within the Cayuga Lake Watershed, there were no BMPs of significance under the category of *Marinas* found to be addressed in any manner. This low showing of BMP implementation among marinas can be attributed to a variety of reasons, including:

- Fifteen out of the thirty-eight municipalities in the watershed (40%) are without significant waterfront space or are not likely to have the opportunity to locate a new marina.
- There was only 1 site found in the Cayuga Lake watershed that could be classified as a municipally-run marina – the Lansing Town Park and Marina. A telephone interview was conducted with a staff person from the marina, and no BMPs were found to be active at the site.
- There were no docking and moorings laws found that focused on environmental BMP implementation.
- On-the-ground BMPs practiced among private marinas and state-managed marinas fell outside of the scope of this analysis. To this end, the remainder of marinas found within the Cayugaa Lake watershed were found to be either: a) privately operated and not subject to local ordinances regarding activities on or near marinas or b) administered by state agencies (NYSDEC, Office of Parks, Recreation and Historic Preservation), which are exempt from most local laws.

[The chart for *Marinas* has been omitted due to a lack of significant data to illustrate.]



Roads and Bridges – Cayuga Lake Watershed

Within the Cayuga Lake Watershed, 25 of 26 BMPs under *Roads and Bridges* –or 96% – were found to be addressed to some degree. The BMP that was not found to be addressed was:

- **5-10:** Retain additional runoff sites

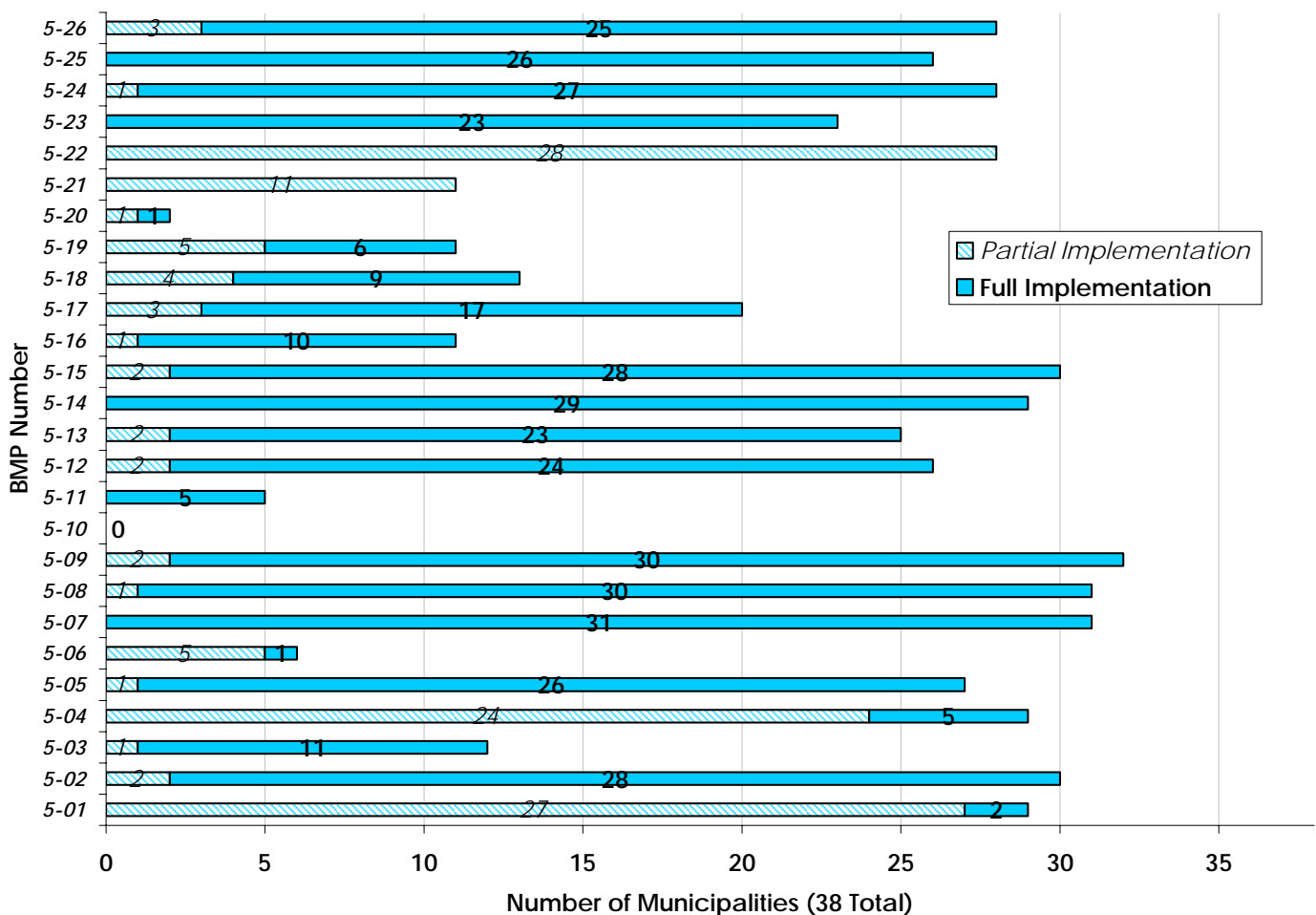
The description for BMP 5-10 was somewhat vague, making it difficult to find specific applications of this BMP in any of the three watersheds.

Besides BMP 5-10, the following BMP was very rarely found in any of the watersheds:

- **5-20:** Target existing public holdings, such as parks, for removing unnecessary impervious surfaces

It is also important to note that highway department officials from 9 of the 38 municipalities in the Cayuga Lake watershed were unavailable for comment. Even so, this category still shows a high rate of BMP implementation.

Roads and Bridges: Cayuga Lake Watershed





OWTS – Cayuga Lake Watershed

Within the Cayuga Lake Watershed, 5 of 7 BMPs under *Onsite Wastewater Treatment Systems* – or 71% – were found to be addressed to some degree. The BMPs that were not found to be addressed were:

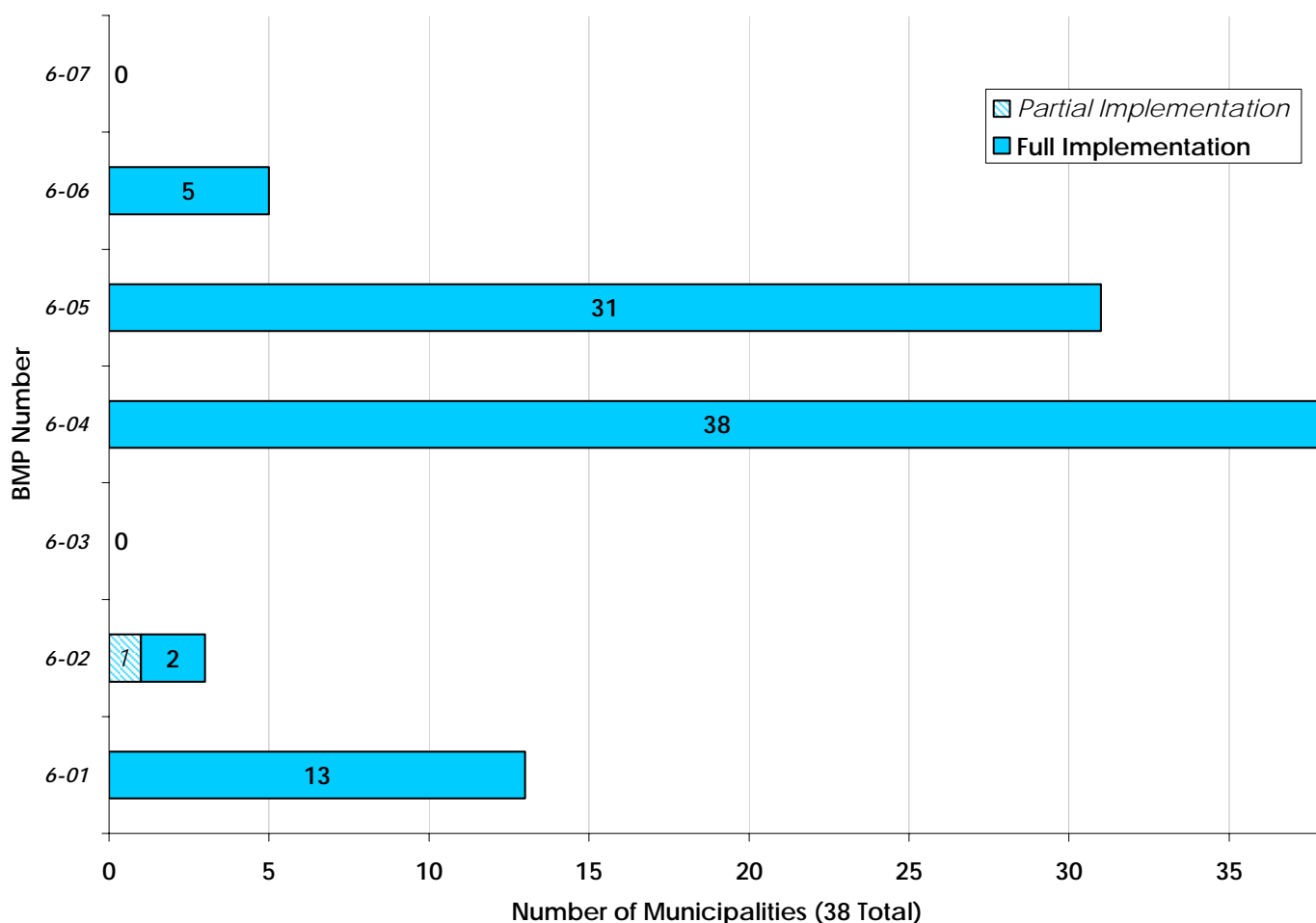
- **6-03:** Promulgate plumbing codes that require practices that are compatible with OWTS
- **6-07:** Set goals for effluent limits (nitrogen, phosphorous, BOD, etc)

Two BMPs were found to be addressed to a high degree throughout the watershed:

- **6-04:** Target outreach programs at homeowners, contractors and developers
- **6-05:** Inspection of all OWTS at property transfer or within 1 year prior to transfer

The seven municipalities in Seneca County did not meet BMP 6-05, as inspections are only necessary if a complaint is made or if specifically requested by a lending institution.

Roads and Bridges: Cayuga Lake Watershed





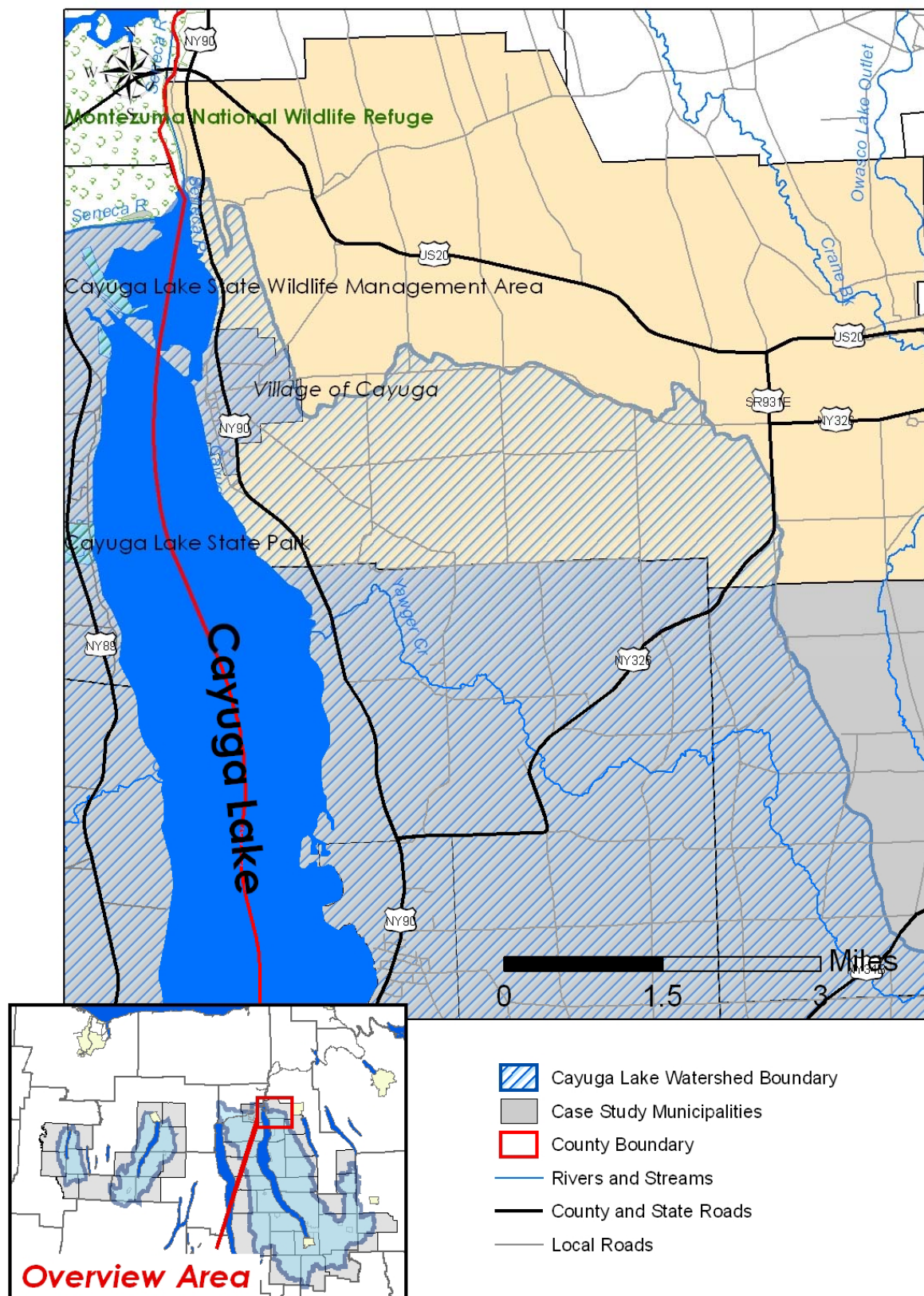
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Municipal Summaries for the Cayuga Lake Watershed



Town of Aurelius • Cayuga County





Town of Aurelius

Cayuga County

The Town of Aurelius lies within the northeastern portion of the Cayuga Lake watershed. The town covers an area of 29.9 square miles, 57.5 percent of which lies within the Cayuga Lake watershed. Aurelius has over 4 miles of shoreline on Cayuga Lake.

According to the 2000 Census, the Town of Aurelius contains 2,936 people. The town experienced a population increase of 10.7 percent between 1960 and 1980 and an increase of 2 percent between 1980 and 2000. The median age in Aurelius is 40 years and the average household size is 2.59 persons. Median household income is \$41,202, with a poverty rate of 7.4 percent. There are 1,273 housing units in the Town, 12.8 percent of which have been built since 1990. The median value of owner-occupied homes is \$73,500.

Local Laws Reviewed:

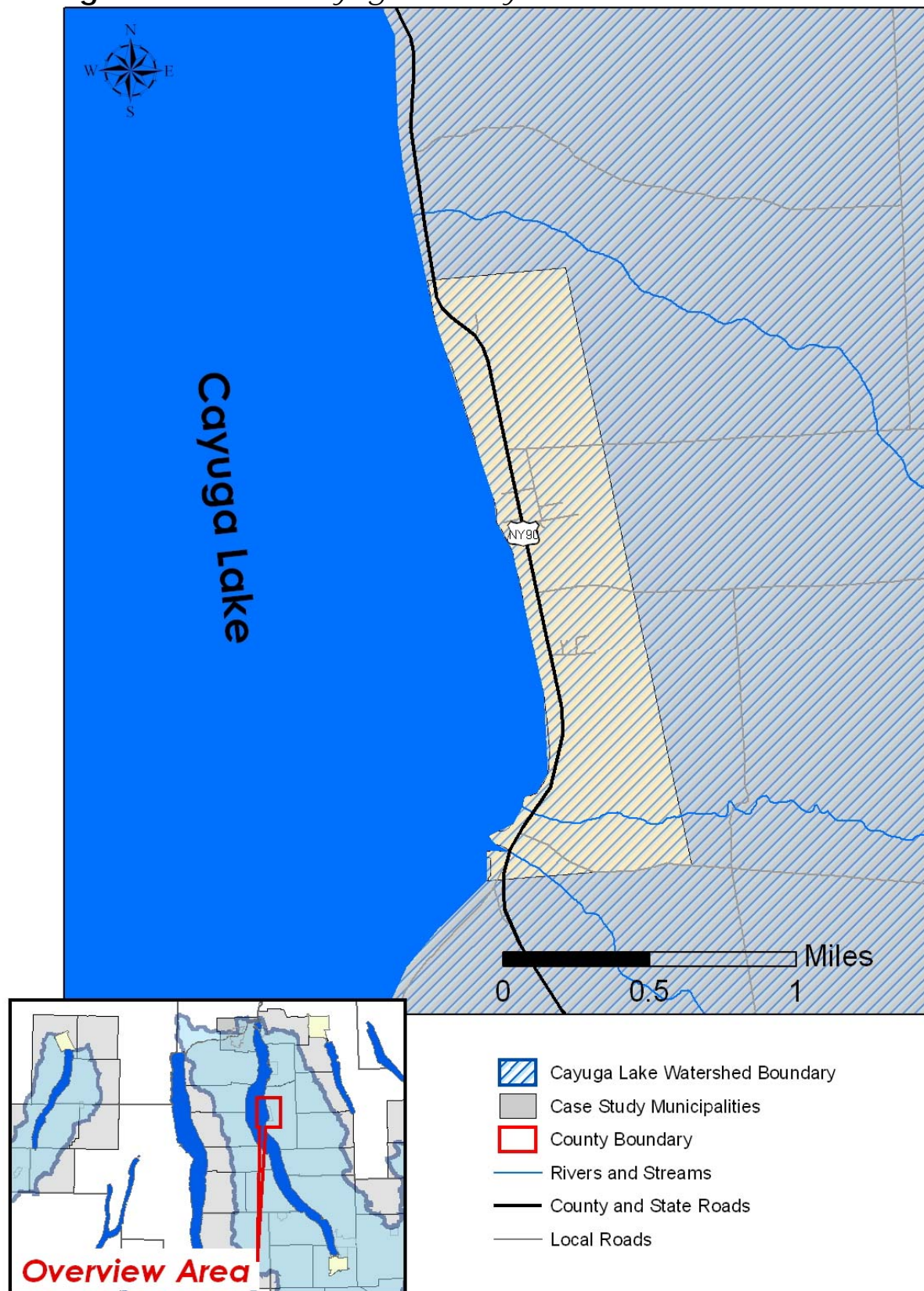
- *Town of Aurelius New York Zoning Law 1993: Draft II*

Assessment Results:

<i>Town of Aurelius</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	Development	13 of 42 (30%)	0
	<i>Existing Development</i>	7 of 16 (43%)	0
	<i>New Development/ Substantial Redevelopment</i>	6 of 26 (23%)	0
<i>Percent of Municipality within Watershed:</i>	Forestry/Agriculture	5 of 12 (41%)	0
	<i>Forestry</i>	4 of 10 (40%)	0
	<i>Agriculture</i>	1 of 2 (50%)	0
<i>Percent of Watershed within Municipality:</i>	Waterways/Wetlands	0 of 16	0
	<i>Modified Waterways</i>	0 of 10	0
	<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
	Marinas	0 of 48	0
	<i>Existing</i>	0 of 20	0
	<i>New</i>	0 of 18	0
	<i>All</i>	0 of 10	0
	Roads and Bridges	19 of 26 (73%)	0
	<i>Existing</i>	4 of 6 (66%)	0
	<i>New</i>	8 of 13 (61%)	0
	<i>All</i>	7 of 7 (100%)	0
	OWTS	3 of 7 (42%)	0



Village of Aurora • Cayuga County





Village of Aurora

Cayuga County

The Village of Aurora lies within the northeastern portion of the Cayuga Lake watershed. The village covers an area of 0.9 square miles, 100 percent of which lies within the Cayuga Lake watershed. Aurora has just over 2 miles of shoreline on Cayuga Lake.

According to the 2000 Census, the Village of Aurora contains 720 people. The town experienced a population increase of 11 percent between 1960 and 1980, followed by a 22 percent decline between 1980 and 2000. The median age in Aurora is 21.6 years and the average household size is 2.33 persons. Median household income is \$57,222, with a poverty rate of 1.8 percent. There are 234 housing units in the village, 4.7 percent of which have been built since 1990. The median value of owner-occupied homes is \$99,700.

Local Laws Reviewed:

- *Village of Aurora Local Law #3, 1993*

Assessment Results:

*Total Municipal
Land Area (sq miles):*

.9

*Percent of Municipality
within Watershed:*

100%

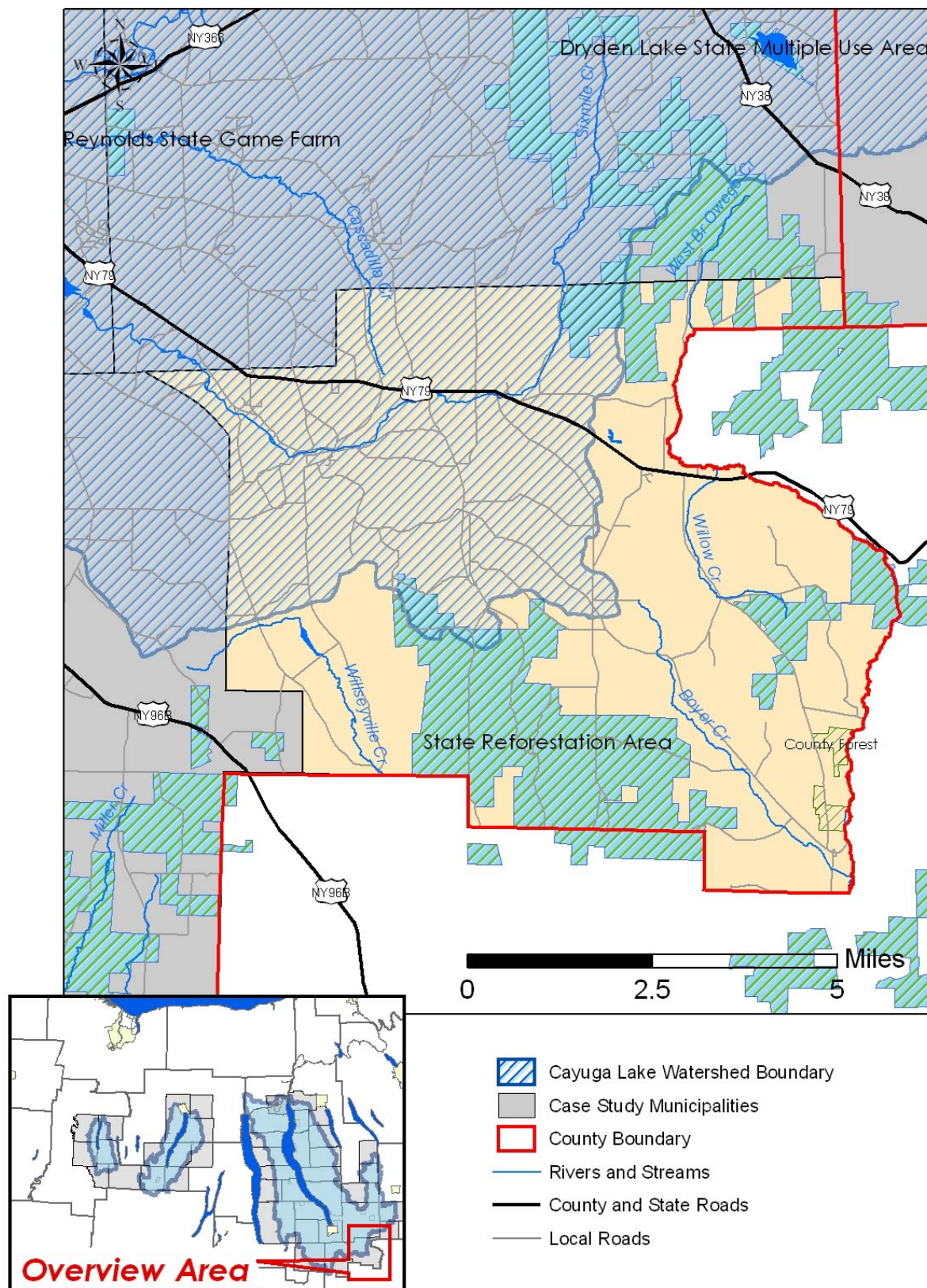
*Percent of Watershed
within Municipality:*

.12%

<i>Village of Aurora</i>	Full or Partial Implementation	Not applicable
Development	19 of 42 (45%)	0
<i>Existing Development</i>	9 of 16 (56%)	0
<i>New Development/ Substantial Redevelopment</i>	10 of 26 (38%)	0
Forestry/Agriculture	0 of 12	12
<i>Forestry</i>	0 of 10	10
<i>Agriculture</i>	0 of 2	2
Waterways/Wetlands	1 of 16 (6%)	0
<i>Modified Waterways</i>	0 of 10	0
<i>Wetlands - Riparian Management/Restoration</i>	1 of 6 (16%)	0
Marinas	0 of 48	0
<i>Existing</i>	0 of 20	0
<i>New</i>	0 of 18	0
<i>All</i>	0 of 10	0
Roads and Bridges	18 of 26 (69%)	0
<i>Existing</i>	5 of 6 (83%)	0
<i>New</i>	9 of 13 (69%)	0
<i>All</i>	4 of 7 (57%)	0
OWTS	3 of 7 (42%)	0



Town of Caroline • Tompkins County





The Town of Caroline lies within the southeastern portion of the Cayuga Lake watershed. The town covers an area of 54 square miles, 91 percent of which lies within the Cayuga Lake watershed. While Caroline has no shoreline on Cayuga Lake, the Sixmile Creek—a significant tributary of the lake—traverses its boundaries.

According to the 2000 Census, the Town of Caroline contains 2,910 people. The town experienced a population increase of 30 percent between 1960 and 1980, and an increase of 5.7 percent between 1980 and 2000. The median age in Caroline is 37.5 years and the average household size is 2.46 persons. Median household income is \$43,315, with a poverty rate of 13.7 percent. There are 1,276 housing units in the town, 4.7 percent of which have been built since 1990. The median value of owner-occupied homes is \$97,100.

The Town of Caroline demonstrated a need for enhanced development regulation. While the Town currently does not have zoning, a committee is working on a Comprehensive Plan. Because that committee's work was well underway when this project began, the Planning Board and the Town Board felt that G/FLRPC's expertise could be best utilized by reviewing the draft Erosion and Sediment Control Law. This law was developed from models provided by NYSDEC/NYS DOS, Tompkins County, and the neighboring Town of Lansing. Because the Town of Caroline was designated a regulated Municipal Separate Storm Sewer System (as part of the Ithaca urbanized area) in 2003, developing and adopting this law was a priority so that the Town would comply with Minimum Measures 4 and 5 of the Stormwater Phase II requirements. Some technical assistance and input on Comprehensive Planning process was provided to the Town of Caroline Planning Board, but the bulk of the work done by G/FLRPC was in assisting the Town's Conservation Board and consultant with reviewing the Erosion, Sediment Control and Stormwater Management Law.

Local Laws Reviewed:

- *Town of Caroline Subdivision Law, 2000*

Assessment Results:

Development		Forestry/Ag.		Water/Wetlands		Marinas		Roads/Bridges		OWTS
14 of 42 (33%)		1 of 12 (8%)		1 of 16 (6%)		0 of 48		19 of 26 (73%)		2 of 7 (28%)
Existing Development	6 of 16 (37%)	Forestry	0 of 10	Modified Waterways	1 of 10 (10%)	Existing	0 of 20	Existing	5 of 6 (83%)	(no sub-categories)
New Development/ Substantial Redevelopment	8 of 26 (30%)	Ag.	1 of 2 (50%)	Wetlands/ Riparian Management & Restoration	0 of 6	New	0 of 18	New	9 of 13 (69%)	
						All	0 of 10	All	5 of 7 (71%)	

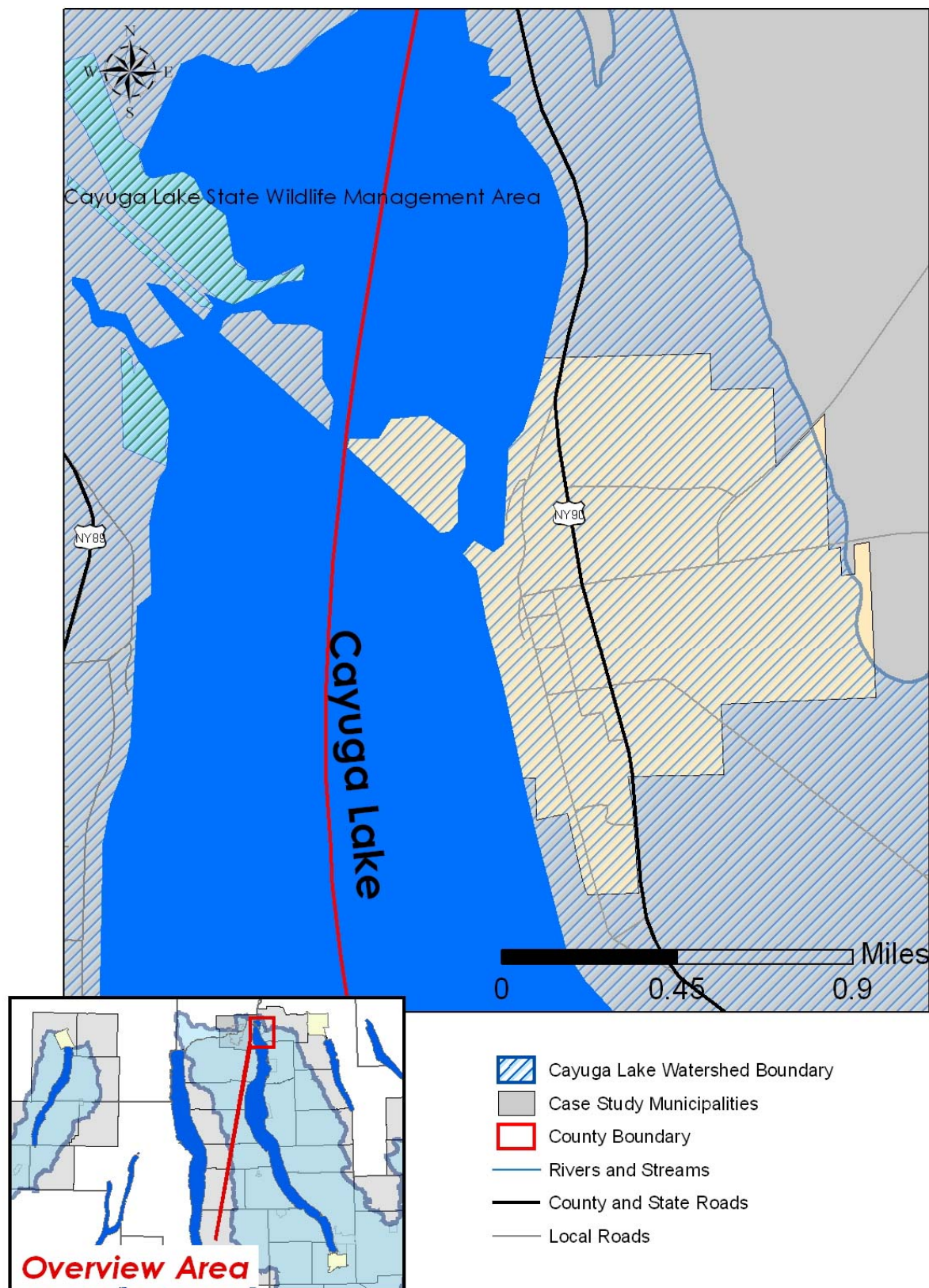
*Total Municipal
Land Area (sq miles):*
54

*Percent of
Municipality in
Watershed:*
37.1%

*Percent of
Watershed within
Municipality:*
2.79%



Village of Cayuga • Cayuga County





Village of Cayuga

Cayuga County

The Village of Cayuga lies within the northeastern portion of the Cayuga Lake watershed. The village covers an area of 0.9 square miles, 100 percent of which lies within the Cayuga Lake watershed. Cayuga has approximately 1 mile of shoreline on Cayuga Lake.

According to the 2000 Census, the Village of Cayuga contains 509 people. The town experienced a population decline of 2.73 percent between 1960 and 1980, and continued to decline by 15.7 percent between 1980 and 2000. The median age in Cayuga is 38.6 years and the average household size is 2.51 persons. Median household income is \$37,679, with a poverty rate of 1.5 percent. There are 243 housing units in the village, 7.8 percent of which have been built since 1990. The median value of owner-occupied homes is \$72,000.

Local Laws Reviewed:

- *Village of Cayuga Zoning Law*, 1988
- *Village of Cayuga Local Law #3: Land Subdivision regulations*, 1988
- *Village of Cayuga Local Law #4, 1988: Property and Yard Maintenance*, 1988
- *Village of Cayuga Local Law #2, 1992: Introductory Site Plan Review and Approval*, 1992

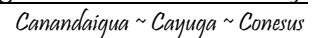
Assessment Results:

Total Municipal
Land Area (sq miles): .9

Percent of Municipality
within Watershed: 91%







Percent of Watershed
within Municipality: .12%

<i>Village of Cayuga</i>	Full or Partial Implementation	Not applicable
Development	14 of 42 (33%)	0
<i>Existing Development</i>	7 of 16 (43%)	0
<i>New Development/ Substantial Redevelopment</i>	7 of 26 (26%)	0
Forestry/Agriculture	0 of 12	12
<i>Forestry</i>	0 of 10	10
<i>Agriculture</i>	0 of 2	2
Waterways/Wetlands	0 of 16	0
<i>Modified Waterways</i>	0 of 10	0
<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
Marinas	0 of 48	0
<i>Existing</i>	0 of 20	0
<i>New</i>	0 of 18	0
<i>All</i>	0 of 10	0
Roads and Bridges	2 of 26 (7%)	0
<i>Existing</i>	0 of 6	0
<i>New</i>	2 of 13 (15%)	0
<i>All</i>	0 of 7 (85%)	0
OWTS	4 of 7 (57%)	0



A map of Cayuga Lake and the surrounding region. The lake is shown in blue, with the label "Cayuga Lake" written across it. To the south of the lake is "Allan H Treman State Marine Park", indicated by a green hatched area. The "Cayuga Inlet" is labeled near the southern shore. A network of roads is shown as black lines, with several routes marked with shields: NY 34, NY 13, NY 88, NY 96, NY 78, NY 98, SR 930F, and CO 0015. A compass rose in the top left corner shows North (N), South (S), East (E), and West (W). A scale bar at the bottom right indicates distances in miles, with markings for 0, 0.5, and 1 mile. The map also shows a grid of townships and counties, with some areas shaded in light blue and yellow.



-  Cayuga Lake Watershed Boundary
-  Case Study Municipalities
-  County Boundary
-  Rivers and Streams
-  County and State Roads
-  Local Roads



Village of Cayuga Heights

Tompkins County

The Village of Cayuga Heights is located in Tompkins County and lies within the southern portion of the Cayuga Lake watershed. The village covers an area of 1.7 square miles, 100 percent of which lies within the Cayuga Lake watershed. Cayuga Heights has approximately 1 mile of shoreline on Cayuga Lake.

According to the 2000 Census, the Village of Cayuga Heights contains 3,273 people. The village experienced a population increase of 13.7 percent between 1960 and 1980, and an increase of 3.25 percent between 1980 and 2000. The median age in Cayuga Heights is 42.5 years and the average household size is 2.10 persons. Median household income is \$74,258, with a poverty rate of 1.5 percent. There are 1,561 housing units in the village, 15.1 percent of which have been built since 1990. The median value of owner-occupied homes is \$196,900.

Local Laws Reviewed:

- *Village of Cayuga Heights Zoning Regulations, 2001*

Assessment Results:

<i>Village of Cayuga Heights</i>		Full or Partial Implementation	Not applicable
Development		13 of 42 (30%)	0
Existing Development		5 of 16 (31%)	0
New Development/ Substantial Redevelopment		8 of 26 (30%)	0
Forestry/Agriculture		0 of 12	12
Forestry		0 of 10	10
Agriculture		0 of 2	2
Waterways/Wetlands		0 of 16	0
Modified Waterways		0 of 10	0
Wetlands - Riparian Management/Restoration		0 of 6	0
Marinas		0 of 48	0
Existing		0 of 20	0
New		0 of 18	0
All		0 of 10	0
Roads and Bridges		19 of 26 (73%)	0
Existing		5 of 6 (83%)	0
New		9 of 13 (69%)	0
All		5 of 7 (71%)	0
OWTS		3 of 7 (42%)	0

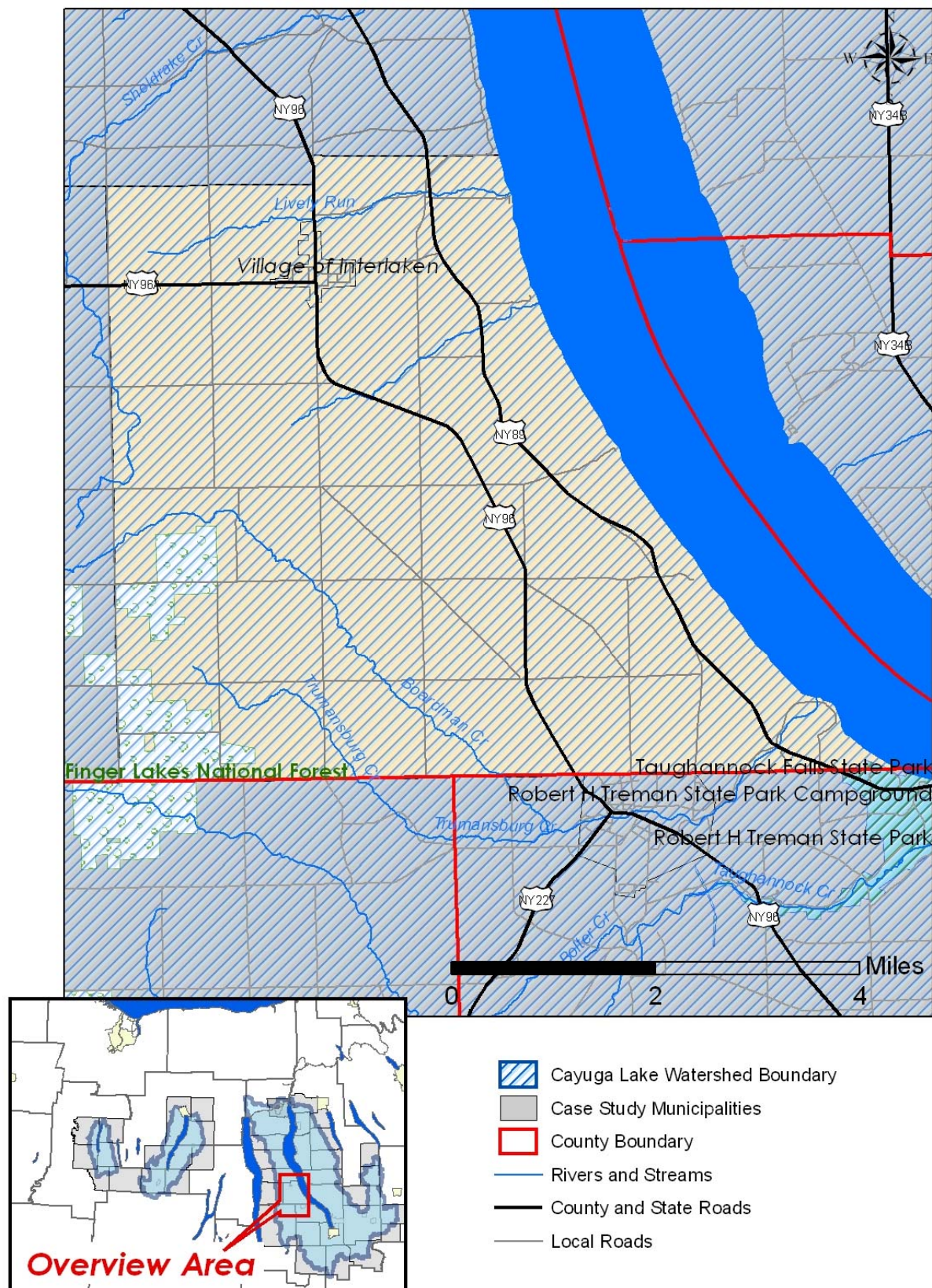
Total Municipal
Land Area (sq miles): 1.7

Percent of Municipality
within Watershed: 100%

Percent of Watershed
within Municipality: .24%



Town of Covert • Seneca County





Town of Covert

Seneca County

The Town of Covert lies within the central western portion of the Cayuga Lake watershed. The town covers an area of 30.8 square miles, 53 percent of which lies within the Cayuga Lake watershed. Covert has over 6 miles of shoreline on Cayuga Lake.

According to the 2000 Census, the Town of Covert contains 2,227 people. The town experienced a population increase of 26.8 percent between 1960 and 1980, and an increase of 3.32 percent between 1980 and 2000. The median age in Covert is 44.5 years and the average household size is 2.45 persons. Median household income is \$38,068, with a poverty rate of 7.2 percent. There are 1,183 housing units in the town, 7.5 percent of which have been built since 1990. The median value of owner-occupied homes is \$75,400.

Local Laws Reviewed:

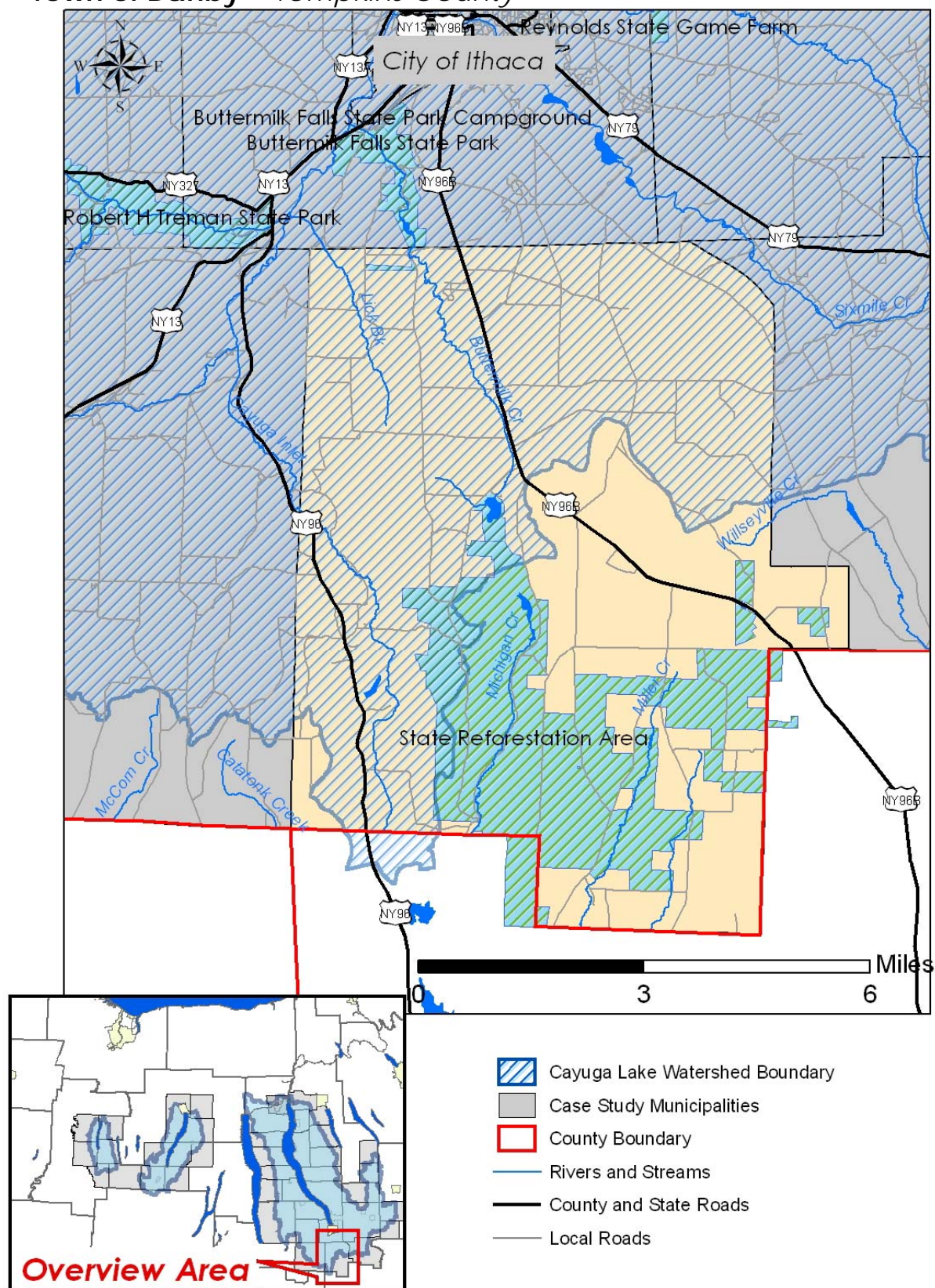
- *Town of Covert Land Subdivision Regulations*, 1981
- *Town of Covert Land Management Ordinance*

Assessment Results:

		<i>Town of Covert</i>	Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	30.8	Development	13 of 42 (30%)	0
		<i>Existing Development</i>	5 of 16 (31%)	0
		<i>New Development/ Substantial Redevelopment</i>	8 of 26 (30%)	0
<i>Percent of Municipality within Watershed:</i>	100%	Forestry/Agriculture	1 of 12 (8%)	0
		<i>Forestry</i>	0 of 10	0
		<i>Agriculture</i>	1 of 2 (50%)	0
<i>Percent of Watershed within Municipality:</i>	4.29%	Waterways/Wetlands	1 of 16 (6%)	0
		<i>Modified Waterways</i>	1 of 10 (10%)	0
		<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
		Marinas	0 of 48	0
		<i>Existing</i>	0 of 20	0
		<i>New</i>	0 of 18	0
		<i>All</i>	0 of 10	0
		Roads and Bridges	17 of 26 (65%)	0
		<i>Existing</i>	4 of 6 (66%)	0
		<i>New</i>	8 of 13 (61%)	0
		<i>All</i>	5 of 7 (71%)	0
		OWTS	1 of 7 (14%)	0



Town of Danby • Tompkins County





Town of Danby

Tompkins County

The Town of Danby lies within the southern portion of the Cayuga Lake watershed. The town covers an area of 52.8 square miles, 52.5 percent of which lies within the Cayuga Lake watershed. While Danby has no shoreline on Cayuga Lake, the Buttermilk Creek traverses its borders, which is a significant tributary of the lake.

According to the 2000 Census, the Town of Danby contains 3,007 people. The town experienced a population increase of 18.9 percent between 1960 and 1980, and an increase of 22.8 percent 1980 and 2000. The median age in Danby is 39.7 years and the average household size is 2.53 persons. Median household income is \$50,348, with a poverty rate of 3.9 percent. There are 1,249 housing units in the town, 20.5 percent of which have been built since 1990. The median value of owner-occupied homes is \$97,300.

Local Laws Reviewed:

- *Town of Danby Subdivision Regulations, 1996*
- *Town of Danby Comprehensive Plan: Unfinished, 2000*
- *Town of Danby Zoning Ordinance Regulations, 2000*
- *Town of Danby Summary of the Comprehensive Plan, 2003*

Assessment Results:

*Total Municipal
Land Area (sq miles):* **52.8**

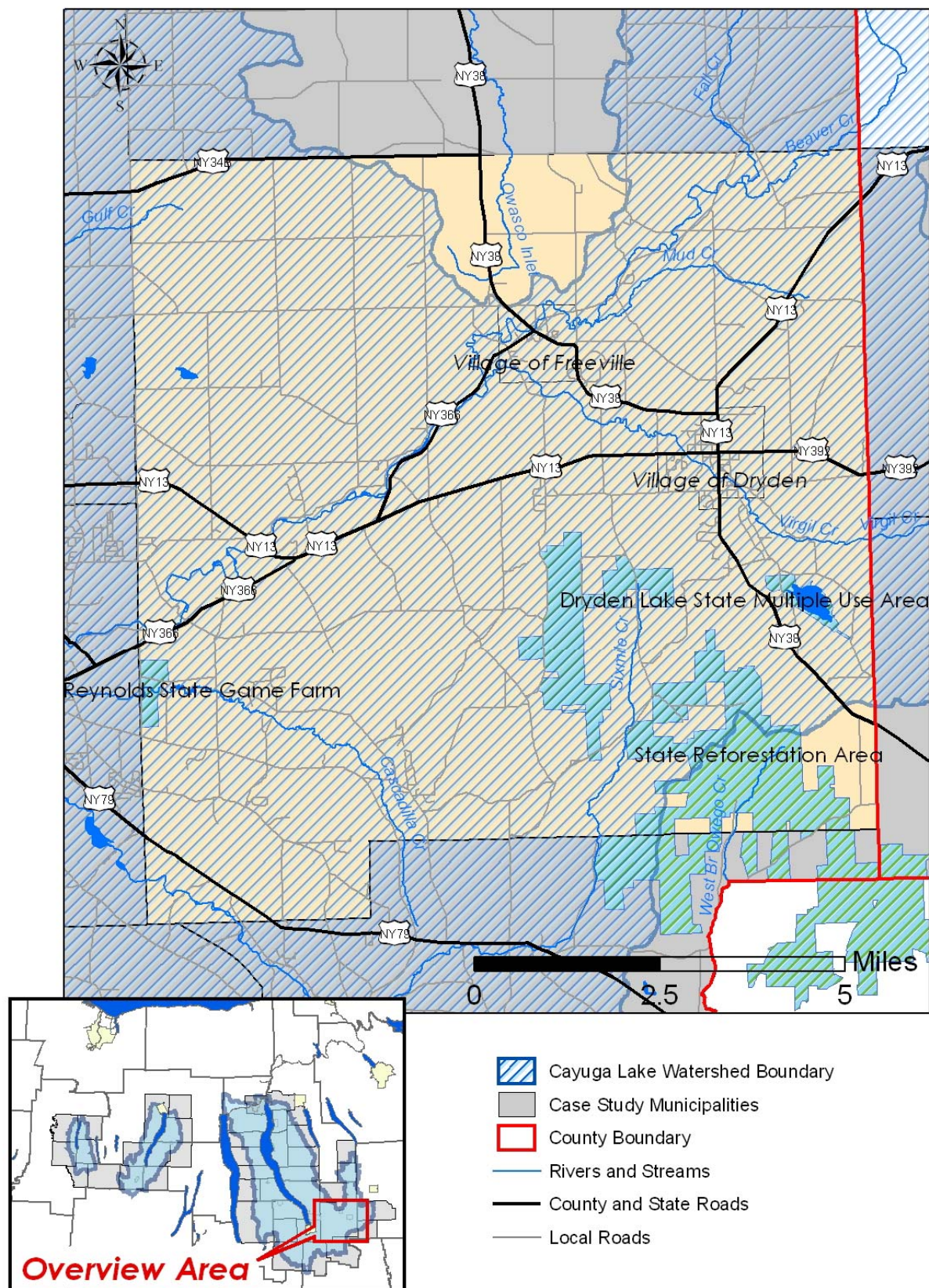
*Percent of Municipality
within Watershed:* **52.5%**

*Percent of Watershed
within Municipality:* **3.86%**

<i>Town of Danby</i>	Full or Partial Implementation	Not applicable
Development	18 of 42 (42%)	0
<i>Existing Development</i>	6 of 16 (37%)	0
<i>New Development/ Substantial Redevelopment</i>	12 of 26 (46%)	0
Forestry/Agriculture	2 of 12 (16%)	0
<i>Forestry</i>	1 of 10 (10%)	0
<i>Agriculture</i>	1 of 2 (50%)	0
Waterways/Wetlands	2 of 16 (12%)	0
<i>Modified Waterways</i>	2 of 10 (20%)	0
<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
Marinas	0 of 48	48
<i>Existing</i>	0 of 20	20
<i>New</i>	0 of 18	18
<i>All</i>	0 of 10	10
Roads and Bridges	20 of 26 (76%)	0
<i>Existing</i>	5 of 6 (83%)	0
<i>New</i>	9 of 13 (69%)	0
<i>All</i>	6 of 7 (85%)	0
OWTS	2 of 7 (28%)	0



Town of Dryden • *Tompkins County*





The Town of Dryden lies within the eastern portion of the Cayuga Lake watershed. The town covers an area of 92.3 square miles, 91.2 percent of which lies within the Cayuga Lake watershed. While Dryden has no shoreline on Cayuga Lake, the Cascadilla and Fall Creeks traverse its boundaries, each of which are significant tributaries of the lake.

According to the 2000 Census, the Town of Dryden contains 13,532 people. The town experienced a 65.3 percent population increase between 1960 and 1980, and an 11.3 percent increase between 1980 and 2000. The median age in Dryden is 35.1 years and the average household size is 2.43 persons. Median household income is \$42,559, with a poverty rate of 7.3 percent. There are 5,807 housing units in the town, 14 percent of which have been built since 1990. The median value of owner-occupied homes is \$102,400.

Much like the Town of Caroline, the Town of Dryden demonstrated a need for enhanced development regulation. However, unlike Caroline, Dryden has many existing regulatory tools, many adopted within the past several years. Dryden is also fortunate in that it has an Environmental Planner, Debbie Gross as a full-time member of the municipal staff. G/FLRPC assisted Ms. Gross in reviewing a draft Erosion and Sediment Control Law. This law was developed from models provided by NYSDEC/NYSDOS, Tompkins County, and the neighboring Town of Lansing. Because the Town of Dryden was designated a regulated Municipal Separate Storm Sewer System (as part of the Ithaca urbanized area) in 2003, developing and adopting this law was a priority so that the Town would comply with Minimum Measures 4 and 5 of the Stormwater Phase II requirements. G/FLRPC assisted the Town staff with reviewing the Erosion, Sediment Control and Stormwater Management Law.

Local Laws Reviewed:

- *Town of Dryden Selected Ordinances and Local Laws*, 1988
- *Town of Dryden Zoning Amendments*, 1989
- *Town of Dryden Land Use Questionnaire*, 1999
- *Town of Dryden Future Land Use: Alternatives and Recommendations Draft*, 1999
- *Town of Dryden Land Use Questionnaire Results*, 2000
- *Town of Dryden Comprehensive Plan Draft*, 2003

Assessment Results:

Development		Forestry/Ag.		Water/Wetlands		Marinas		Roads/Bridges		OWTS
13 of 42 (30%)		1 of 12 (8%)		0 of 16		0 of 48		20 of 26 (76%)		2 of 7 (28%)
Existing Development	5 of 16 (31%)	Forestry	0 of 10	Modified Waterways	0 of 10	Existing	0 of 20	Existing	6 of 6 (100%)	(no sub-categories)
New Development/ Substantial Redevelopment	8 of 26 (30%)	Ag.	1 of 2 (50%)	Wetlands/ Riparian Management & Restoration	0 of 6	New	0 of 18	New	9 of 13 (69%)	
						All	0 of 10	All	5 of 7 (71%)	

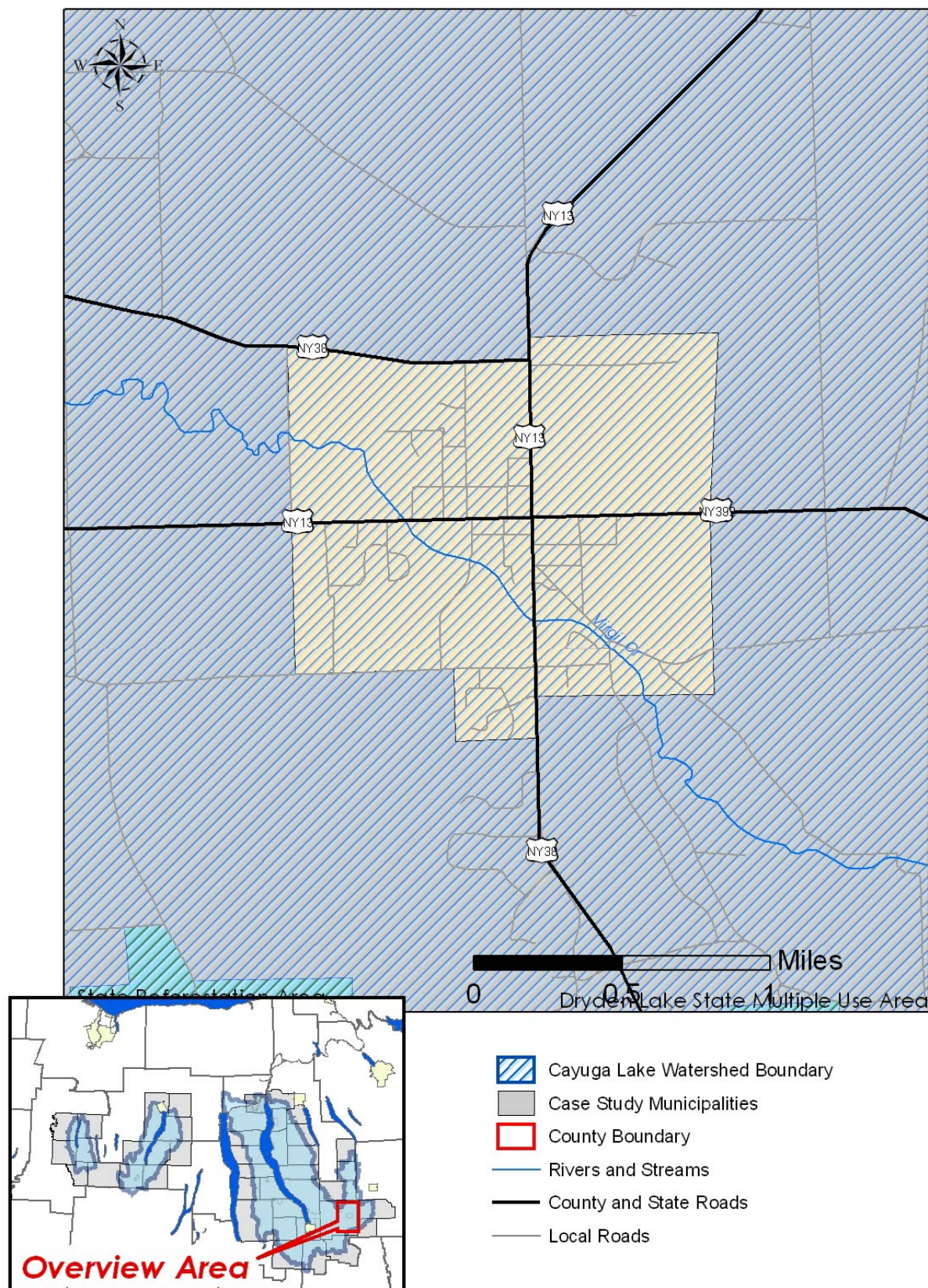
*Total Municipal
Land Area (sq miles):*
92.3

*Percent of
Municipality in
Watershed:*
91.2%

*Percent of
Watershed within
Municipality:*
11.73%



Village of Dryden • *Tompkins County*





Village of Dryden

Tompkins County

The Village of Dryden lies within the eastern portion of the Cayuga Lake watershed. The village covers an area of 1.6 square miles, 100 percent of which lies within the Cayuga Lake watershed. While the village has no shoreline on Cayuga Lake, the Virgil Creek passes through its boundaries.

According to the 2000 Census, the Village of Dryden contains 1,832 people. The village experienced a 39.4 percent population growth between 1960 and 1980, and a 4 percent increase between 1980 and 2000. The median age in The Village of Dryden is 36.7 years and the average household size is 2.37 persons. Median household income is \$43,997, with a poverty rate of 5.1 percent. There are 803 housing units in the village, 8.5 percent of which have been built since 1990. The median value of owner-occupied homes is \$88,400.

Local Laws Reviewed:

- *Village of Dryden Laws, 1996*

Assessment Results:

Total Municipal
Land Area (sq miles): 1.6

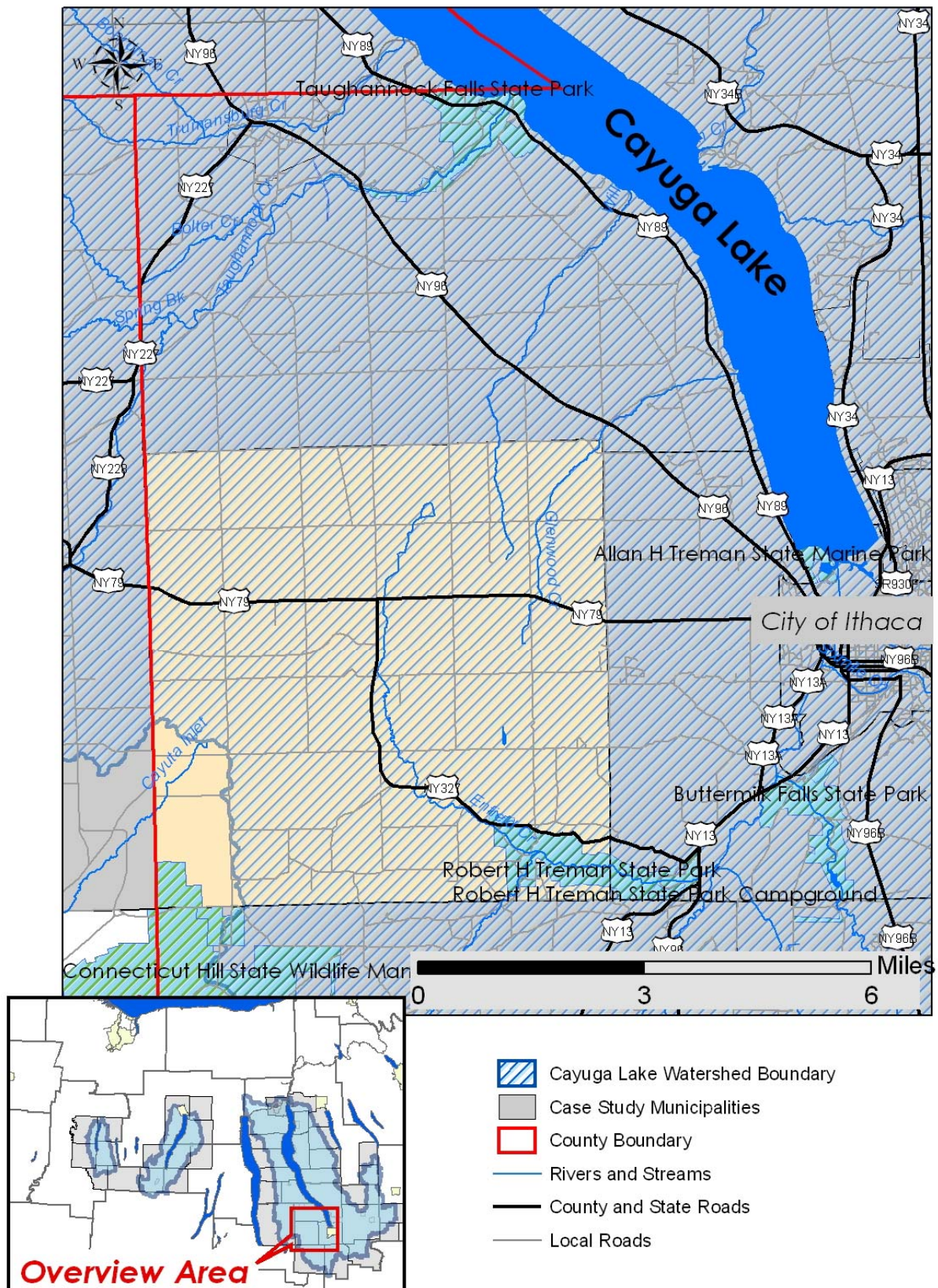
Percent of Municipality
within Watershed: 100%

Percent of Watershed
within Municipality: .23%

<i>Village of Dryden</i>	Full or Partial Implementation	Not applicable
Development	20 of 42 (47%)	0
Existing Development	7 of 16 (43%)	0
New Development/ Substantial Redevelopment	13 of 26 (50%)	0
Forestry/Agriculture	1 of 12 (8%)	0
Forestry	0 of 10	0
Agriculture	1 of 2 (50%)	0
Waterways/Wetlands	0 of 16	0
Modified Waterways	0 of 10	0
Wetlands - Riparian Management/Restoration	0 of 6	0
Marinas	0 of 48	48
Existing	0 of 20	20
New	0 of 18	18
All	0 of 10	10
Roads and Bridges	17 of 26 (65%)	0
Existing	5 of 6 (83%)	0
New	7 of 13 (53%)	0
All	5 of 7 (71%)	0
OWTS	4 of 7 (57%)	0



Town of Enfield • Tompkins County





Town of Enfield

Tompkins County

The Town of Enfield is located in Tompkins County and lies within the southwestern portion of the Cayuga Lake watershed. The town covers an area of 36.1 square miles, 93.5 percent of which lies within the Cayuga Lake watershed. While Enfield has no shoreline on Cayuga Lake, the Enfield Creek passes through its boundaries, eventually converging with Cayuga Inlet.

According to the 2000 Census, the Town of Enfield contains 3,369 people. The town experienced a 51 percent increase in population between 1960 and 1980, and an increase of 41.9 percent between 1980 and 2000. The median age in Enfield is 36.4 years and the average household size is 2.55 persons. Median household income is \$36,538, with a poverty rate of 11.9 percent. There are 1,450 housing units in the town, 24 percent of which have been built since 1990. The median value of owner-occupied homes is \$79,900.

Local Laws Reviewed:

- *Town of Enfield Comprehensive Plan, 2003*

Assessment Results:

Total Municipal
Land Area (sq miles): **36.1**

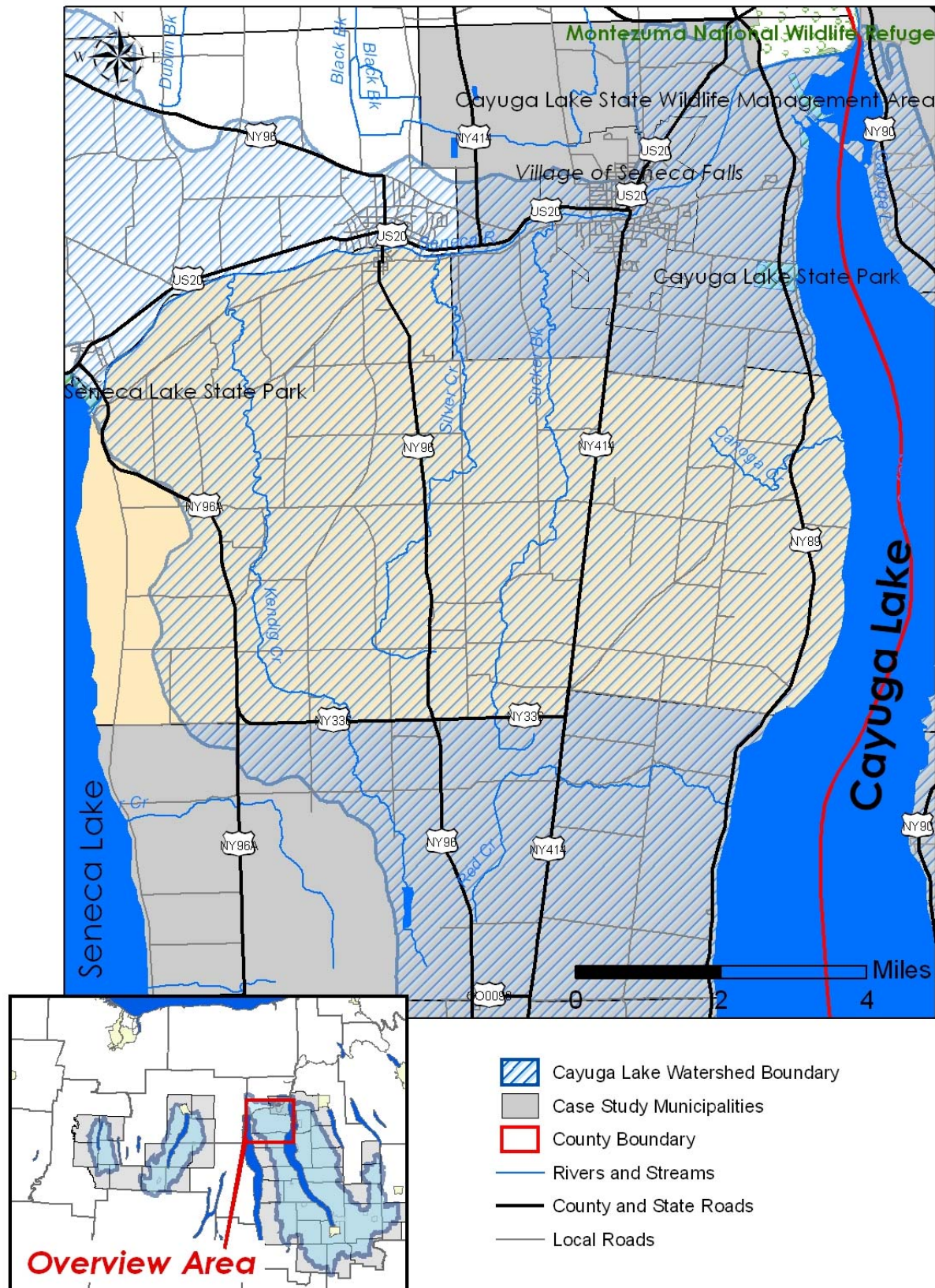
Percent of Municipality
within Watershed: **93.5%**

Percent of Watershed
within Municipality: **4.7%**

<i>Town of Enfield</i>	Full or Partial Implementation	Not applicable
Development	9 of 42 (21%)	0
<i>Existing Development</i>	5 of 16 (31%)	0
<i>New Development/ Substantial Redevelopment</i>	4 of 26 (15%)	0
Forestry/Agriculture	1 of 12 (8%)	0
<i>Forestry</i>	0 of 10	0
<i>Agriculture</i>	1 of 2 (50%)	0
Waterways/Wetlands	0 of 16	0
<i>Modified Waterways</i>	0 of 10	0
<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
Marinas	0 of 48	48
<i>Existing</i>	0 of 20	20
<i>New</i>	0 of 18	18
<i>All</i>	0 of 10	10
Roads and Bridges	19 of 26 (73%)	0
<i>Existing</i>	5 of 6 (83%)	0
<i>New</i>	8 of 13 (61%)	0
<i>All</i>	6 of 7 (85%)	0
OWTS	2 of 7 (28%)	0



Town of Fayette • Seneca County





The Town of Fayette lies within the northwestern portion of the Cayuga Lake watershed. The town covers an area of 54 square miles, 20.79 percent of which lies within the Cayuga Lake watershed. Fayette has over 5 miles of shoreline on Cayuga Lake.

According to the 2000 Census, the Town of Fayette contains 3,643 people. The town experienced a population increase of 33.3 percent between 1960 and 1980, and a population decline of .45 percent between 1980 and 2000. The median age in Fayette is 39.3 years and the average household size is 2.65 persons. Median household income is \$43,259, with a poverty rate of 4.2 percent. There are 1,680 housing units in the town, 10.7 percent of which have been built since 1990. The median value of owner-occupied homes is \$83,700.

The Town of Fayette demonstrated a need for assistance with development-related issues. The when the Local Laws to Protect Finger Lakes Water Quality project got underway and G/FLRPC approached the Town, Fayette was in a unique situation. They were in the process of developing a new comprehensive plan jointly with the neighboring Town of Varick, just to the south. This example of intermunicipal cooperation deserves commendation.

So, although the Comprehensive Plan process was underway, guided by a planning consulting firm, the Town felt that G/FLRPC could contribute to the process. The established process for the Comprehensive Plan was to review a different issue facing the community at each month's meeting of the Comprehensive Plan Committee. The April 2005 meeting was designated as the water resources meeting and both the Town and the consultant stressed the desire for *specific tools* that a municipality could incorporate into their comprehensive plan. That is, they already knew that water is a valuable resource and needed to be protected. What they wanted to know was *how specifically* a Town could do this.

G/FLRPC coordinated a "Water Quality Tools and Techniques Workshop" that took place at this April meeting of the Comprehensive Plan committee. Representatives from NYSDEC, Seneca Lake Pure Waters Association, Cayuga Watershed Intermunicipal Organization, and G/FLRPC spoke about agricultural issues related to water quality, onsite wastewater issues related to water quality, lakeshore development issues related to water quality, and stormwater issues. This four issues having previously been identified by the Comprehensive Plan committee as priority concerns for Fayette.

Thus the real assistance provided to Fayette was less of a hardcopy paper or report, but more in the coordination and organization of this workshop, which the Town found very beneficial to its Comprehensive Planning Process.



Town of Fayette, cont.

📍 Targeted Municipality

Seneca County

Local Laws Reviewed:

- Town of Fayette Subdivision Regulations
- Town of Fayette Zoning Ordinance

Assessment Results:

Total Municipal
Land Area (sq miles):

54

Percent of Municipality
within Watershed:

20.8%

Percent of Watershed
within Municipality:

1.56%

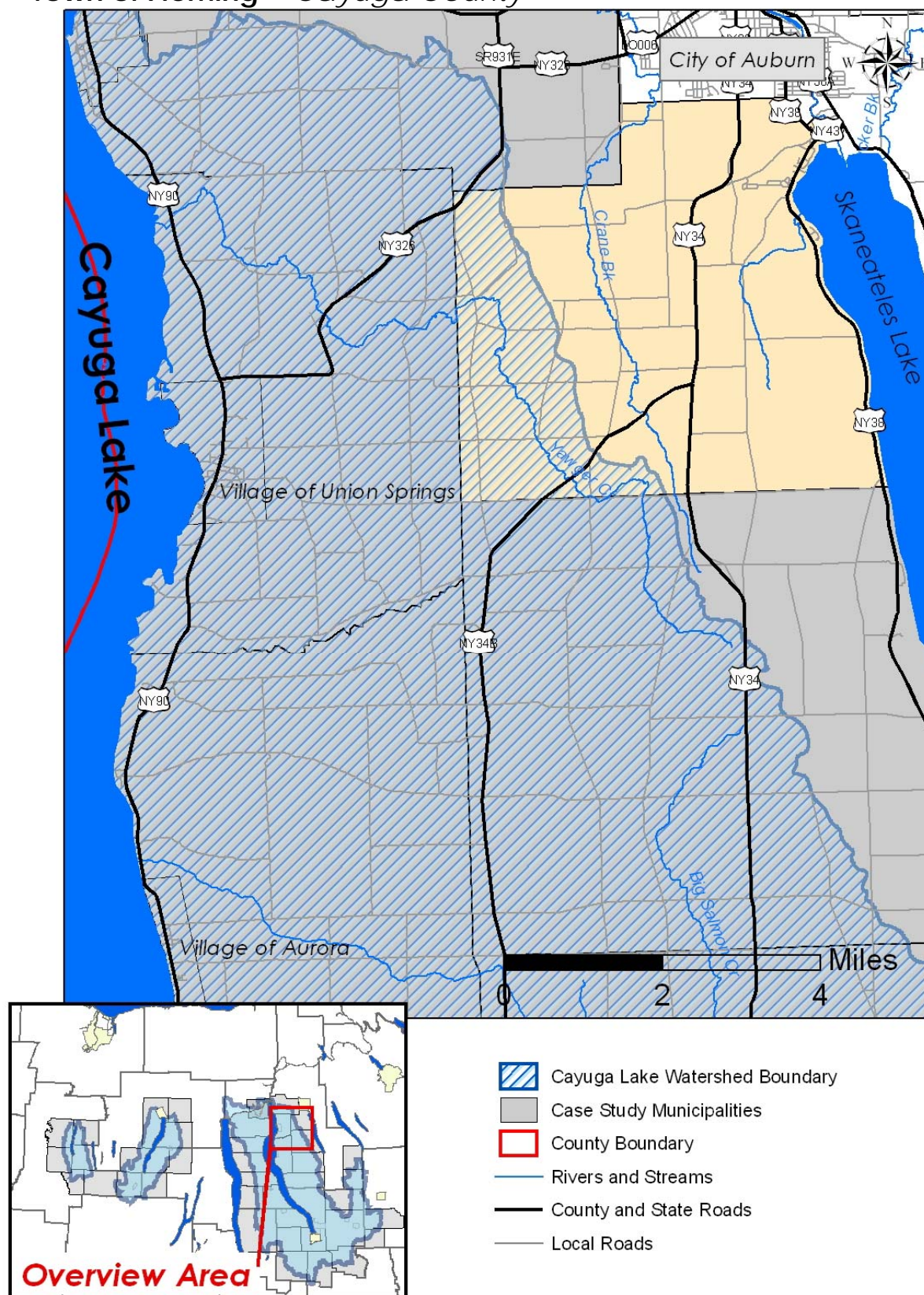
<i>Town of Fayette</i>	Full or Partial Implementation	Not applicable
Development	13 of 42 (30%)	0
<i>Existing Development</i>	5 of 16 (31%)	0
<i>New Development/ Substantial Redevelopment</i>	8 of 26 (30%)	0
Forestry/Agriculture	1 of 12 (8%)	0
<i>Forestry</i>	0 of 10	0
<i>Agriculture</i>	1 of 2 (50%)	0
Waterways/Wetlands	1 of 16 (6%)	0
<i>Modified Waterways</i>	1 of 10 (10%)	0
<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
Marinas	0 of 48	0
<i>Existing</i>	0 of 20	0
<i>New</i>	0 of 18	0
<i>All</i>	0 of 10	0
Roads and Bridges	15 of 26 (57%)	0
<i>Existing</i>	4 of 6 (66%)	0
<i>New</i>	7 of 13 (53%)	0
<i>All</i>	4 of 7 (57%)	0
OWTS	3 of 7 (42%)	0



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Town of Fleming • Cayuga County





Town of Fleming

Cayuga County

The Town of Fleming lies within the northeastern portion of the Cayuga Lake watershed. The town covers an area of 21.4 square miles, 23.43 percent of which lies within the Cayuga Lake watershed. Fleming has no shoreline on Cayuga Lake but has several unnamed tributaries of the Cayuga watershed.

According to the 2000 Census, the Town of Fleming contains 2,647 people. The town experienced a population increase of 15.6 percent between 1960 and 1980, and an increase of 10.6 percent between 1980 and 2000. The median age in Fleming is 41.3 years and the average household size is 2.54 persons. Median household income is \$49,368, with a poverty rate of 3.9 percent. There are 1,153 housing units in the town, 19.4 percent of which have been built since 1990. The median value of owner-occupied homes is \$97,100.

Local Laws Reviewed:

- *Town of Fleming Subdivision Regulations*, 1989
- *Town of Fleming Zoning Code 1988: Local Law #1 & 3*, 1996
- *Town of Fleming Design Criteria and Construction Specifications for Land Development*, 2004

Assessment Results:

Total Municipal
Land Area (sq miles): 21.4

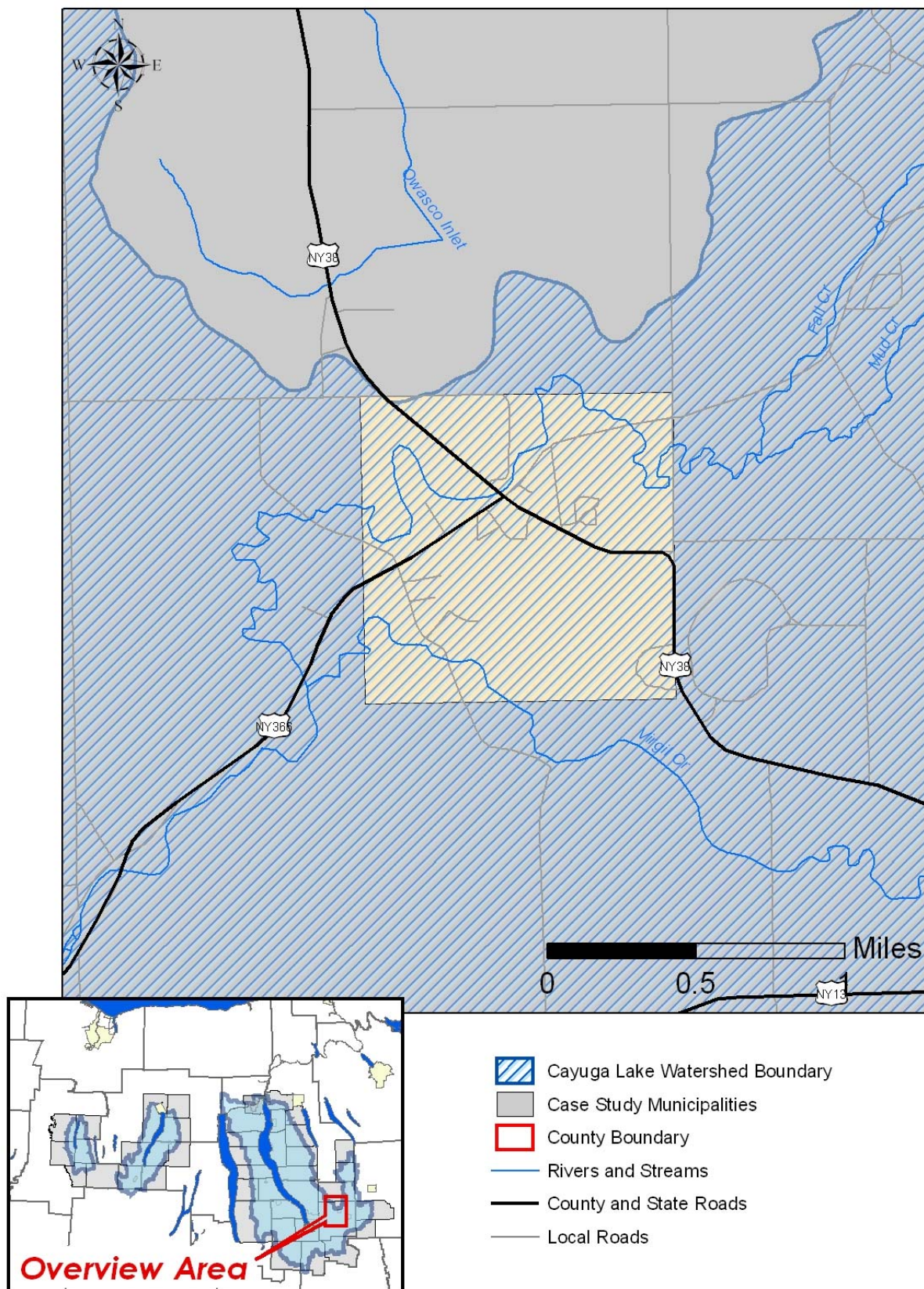
Percent of Municipality
within Watershed: 23.4%

Percent of Watershed
within Municipality: .70%

<i>Town of Fleming</i>	Full or Partial Implementation	Not applicable
Development	22 of 42 (52%)	0
<i>Existing Development</i>	9 of 16 (56%)	0
<i>New Development/ Substantial Redevelopment</i>	13 of 26 (50%)	0
Forestry/Agriculture	5 of 12 (41%)	0
<i>Forestry</i>	4 of 10 (40%)	0
<i>Agriculture</i>	1 of 2 (50%)	0
Waterways/Wetlands	1 of 16 (6%)	0
<i>Modified Waterways</i>	1 of 10 (10%)	0
<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
Marinas	0 of 48	0
<i>Existing</i>	0 of 20	0
<i>New</i>	0 of 18	0
<i>All</i>	0 of 10	0
Roads and Bridges	20 of 26 (76%)	0
<i>Existing</i>	5 of 6 (83%)	0
<i>New</i>	10 of 13 (76%)	0
<i>All</i>	5 of 7 (71%)	0
OWTS	3 of 7 (42%)	0



Village of Freeville • *Tompkins County*





Village of Freeville

Tompkins County

The Village of Freeville lies within the eastern portion of the Cayuga Lake watershed. The village covers an area of 1 square mile, 99.97 percent of which lies within the Cayuga Lake watershed. While Freeville has no shoreline on Cayuga Lake, Fall Creek traverses its boundaries.

According to the 2000 Census, the Village of Freeville contains 505 people. The village experienced a population decline of 4.7 percent between 1960 and 1980, and a population increase of 12.5 percent between 1980 and 2000. The median age in The Village of Freeville is 36.6 years and the average household size is 2.33 persons. Median household income is \$44,688, with a poverty rate of 7.3 percent. There are 224 housing units in the village, 17.8 percent of which have been built since 1990. The median value of owner-occupied homes is \$79,100.

Local Laws Reviewed:

- *Village of Freeville Land Use and Development Code*, 1986
- *Village of Freeville Sewer Laws, Rules, and Regulations*, 1998

Assessment Results:

Total Municipal
Land Area (sq miles): 1.1

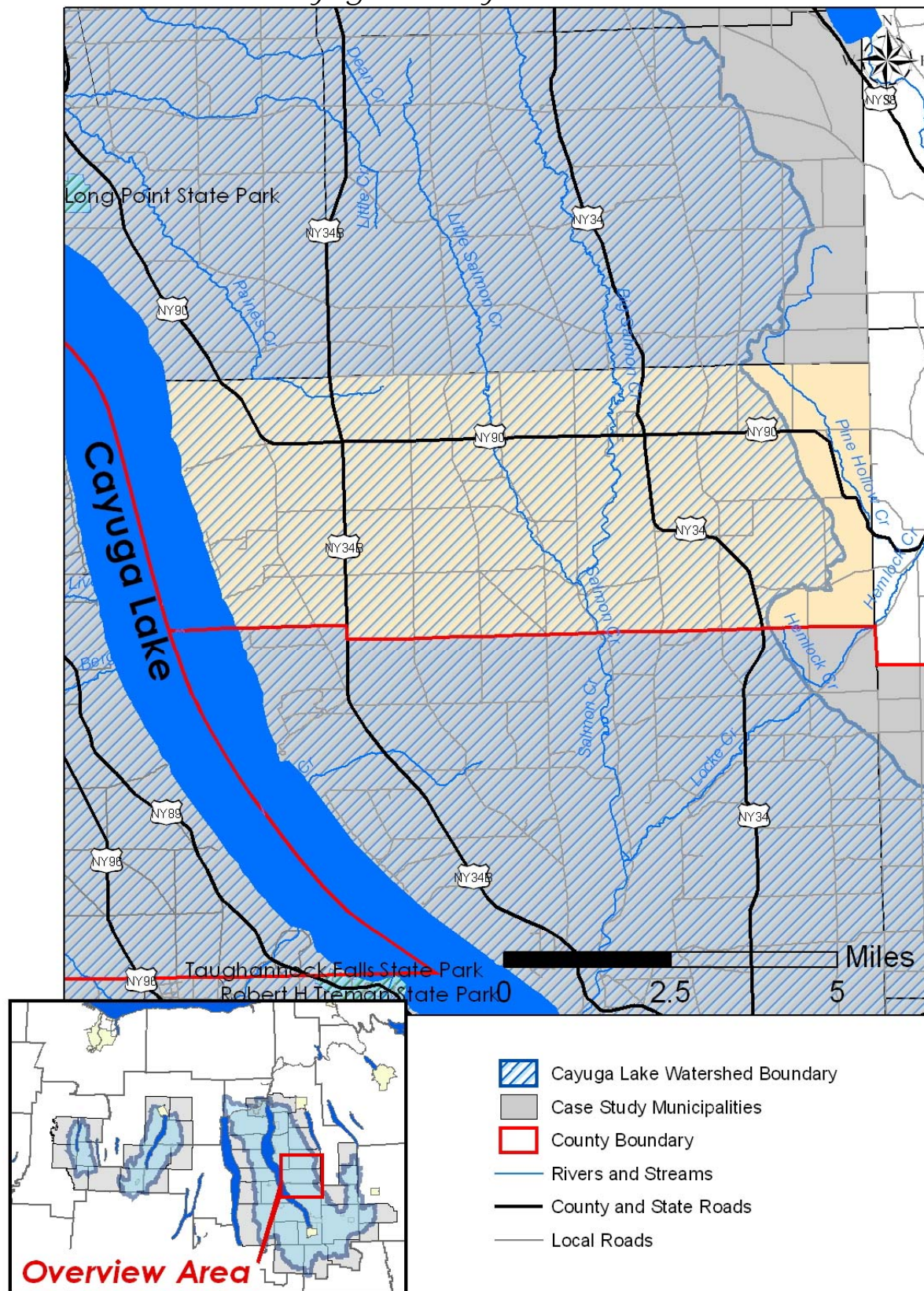
Percent of Municipality
within Watershed: 100%

Percent of Watershed
within Municipality: .15%

<i>Village of Freeville</i>	Full or Partial Implementation	Not applicable
Development	10 of 42 (23%)	0
<i>Existing Development</i>	5 of 16 (31%)	0
<i>New Development/ Substantial Redevelopment</i>	5 of 26 (19%)	0
Forestry/Agriculture	0 of 12	12
<i>Forestry</i>	0 of 10	10
<i>Agriculture</i>	0 of 2	2
Waterways/Wetlands	1 of 16 (6%)	0
<i>Modified Waterways</i>	0 of 10	0
<i>Wetlands - Riparian Management/Restoration</i>	1 of 6 (16%)	0
Marinas	0 of 48	48
<i>Existing</i>	0 of 20	20
<i>New</i>	0 of 18	18
<i>All</i>	0 of 10	10
Roads and Bridges	2 of 26 (7%)	0
<i>Existing</i>	0 of 6	0
<i>New</i>	2 of 13 (15%)	0
<i>All</i>	0 of 7	0
OWTS	3 of 7 (42%)	0



Town of Genoa • Cayuga County





Town of Genoa

Cayuga County

The Town of Genoa lies within the central eastern portion of the Cayuga Lake watershed. The town covers an area of 38.9 square miles, 89 percent of which lies within the Cayuga Lake watershed. Genoa has approximately 4 miles of shoreline on Cayuga Lake.

According to the 2000 Census, the Town of Genoa contains 1,914 people. The town experienced a population increase of 7 percent between 1960 and 1980, and then a decline of .36 percent between 1980 and 2000. The median age in Genoa is 38.3 years and the average household size is 2.67 persons. Median household income is \$43,618, with a poverty rate of 6.1 percent. There are 927 housing units in the town, 13.3 percent of which have been built since 1990. The median value of owner-occupied homes is \$97,100.

Local Laws Reviewed:

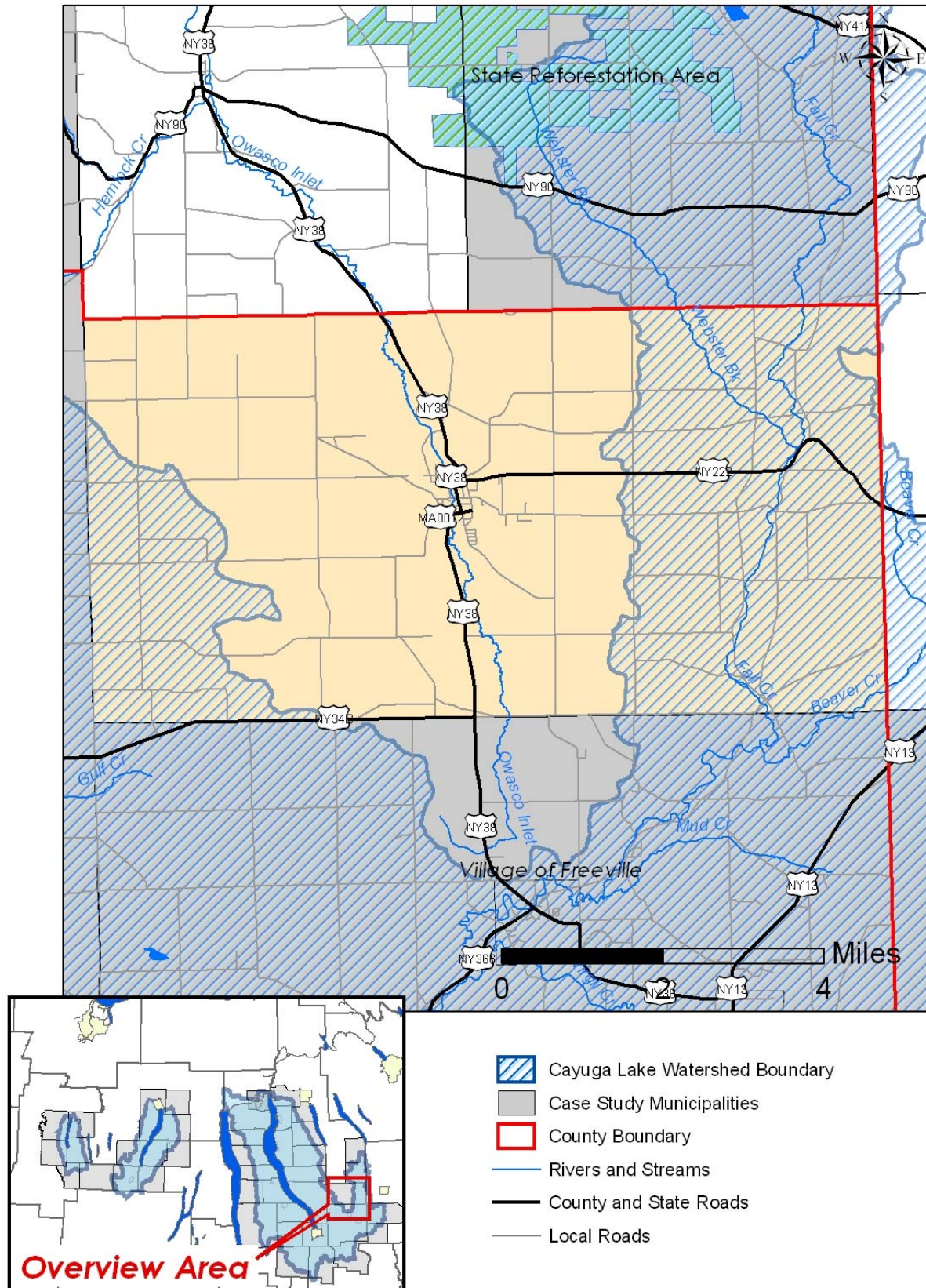
- *Town of Genoa Local Law#1 of year 1972: Use and Supply of Water Regulations, 1972*
- *Town of Genoa Local Law#1 of year 1982, 1982*
- *Town of Genoa: Mobile Home Law, 1988*
- *Town of Genoa: Set Back and Lot Area Law, 1988*
- *Town of Genoa Local Law#1 of year 1992: Flood Damage Prevention, 1992*
- *Town of Genoa Local Law#1 of year 1993, 1993*

Assessment Results:

<i>Town of Genoa</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	38.9	12 of 42 (28%)	0
	<i>Existing Development</i>	7 of 16 (43%)	0
	<i>New Development/ Substantial Redevelopment</i>	5 of 26 (19%)	0
<i>Percent of Municipality within Watershed:</i>	89%	5 of 12 (41%)	0
	<i>Forestry</i>	4 of 10 (40%)	0
	<i>Agriculture</i>	1 of 2 (50%)	0
<i>Percent of Watershed within Municipality:</i>	4.83%	0 of 16	0
	<i>Modified Waterways</i>	0 of 10	0
	<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
<i>Marinas</i>	0 of 48	0	0
	<i>Existing</i>	0 of 20	0
	<i>New</i>	0 of 18	0
	<i>All</i>	0 of 10	0
<i>Roads and Bridges</i>	19 of 26 (73%)	0	0
	<i>Existing</i>	4 of 6 (66%)	0
	<i>New</i>	9 of 13 (69%)	0
	<i>All</i>	6 of 7 (85%)	0
<i>OWTS</i>		3 of 7 (42%)	0



Town of Groton • *Tompkins County*





Town of Groton

Tompkins County

The Town of Groton lies within the central eastern portion of the Cayuga Lake watershed. The town covers an area of 48.5 square miles, 42.6 percent of which lies within the Cayuga Lake watershed. While Groton has no shoreline on Cayuga Lake, Fall Creek traverses its borders.

According to the 2000 Census, the Town of Groton contains 5,794 people. Groton experienced a 16.6 increase in population between 1960 and 1980, and an 11.1 percent increase between 1980 and 2000. The median age in Groton is 37.4 years and the average household size is 2.62 persons. Median household income is \$42,407, with a poverty rate of 4.8 percent. There are 2,271 housing units in the town, 13.3 percent of which have been built since 1990. The median value of owner-occupied homes is \$72,200.

Local Laws Reviewed:

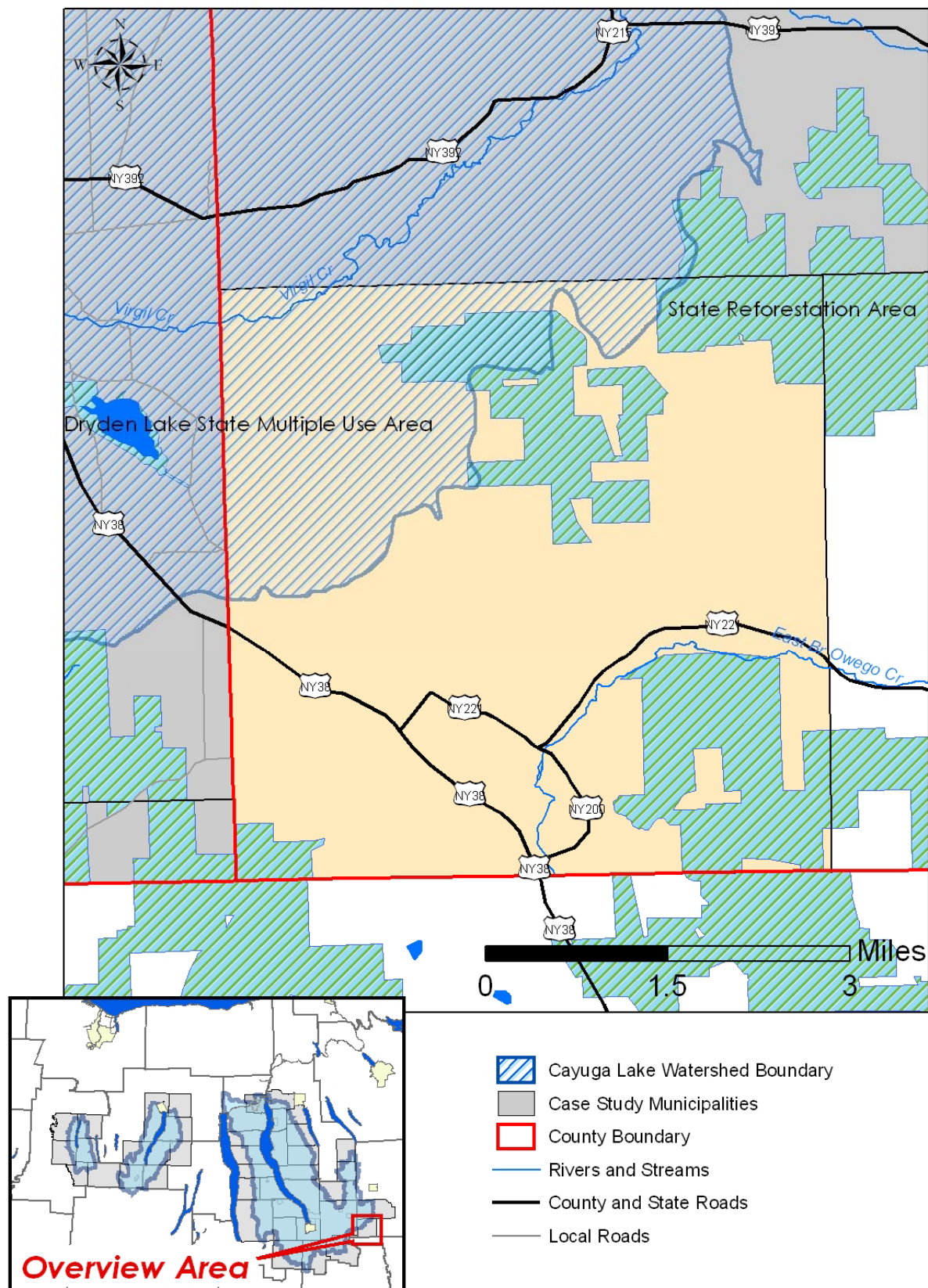
- *Town of Groton: Local Law #2- Regulating Solid Waste Management Facilities, 1987*
- *Town of Groton: Local Law #1- Regulating Solid Waste Management Facilities, 1988*
- *Town of Groton: Ordinance relating to Licensing and regulating Junk Yards, 1989*
- *Town of Groton: Mobile Home Ordinance, 1992*
- *Town of Groton: Local Law #2- Agricultural Practice Regulations, 1997*
- *Town of Groton land Use and Development Code*

Assessment Results:

<i>Town of Groton</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	48.5	12 of 42 (28%)	0
		<i>Existing Development</i>	<i>5 of 16 (31%)</i>
		<i>New Development/ Substantial Redevelopment</i>	<i>7 of 26 (26%)</i>
<i>Percent of Municipality within Watershed:</i>	42.6%	1 of 12 (8%)	0
		<i>Forestry</i>	<i>0 of 10</i>
		<i>Agriculture</i>	<i>1 of 2 (50%)</i>
<i>Percent of Watershed within Municipality:</i>	2.88%	0 of 16	0
		<i>Modified Waterways</i>	<i>0 of 10</i>
		<i>Wetlands - Riparian Management/Restoration</i>	<i>0 of 6</i>
		0 of 48	48
	<i>Existing</i>	<i>0 of 20</i>	<i>20</i>
	<i>New</i>	<i>0 of 18</i>	<i>18</i>
	<i>All</i>	<i>0 of 10</i>	<i>10</i>
		18 of 26 (69%)	0
	<i>Existing</i>	<i>5 of 6 (83%)</i>	<i>0</i>
	<i>New</i>	<i>7 of 13 (53%)</i>	<i>0</i>
	<i>All</i>	<i>6 of 7 (85%)</i>	<i>0</i>
OWTS		2 of 7 (28%)	0



Town of Harford • Cortland County





Town of Harford

Cortland County

The Town of Harford lies within the southeastern portion of the Cayuga Lake watershed. The town covers an area of 23.7 square miles, 21 percent of which lies within the Cayuga Lake watershed. Harford has no shoreline on Cayuga Lake but does have several unnamed tributaries in the Cayuga watershed.

According to the 2000 Census, the Town of Harford contains 920 people.¹ The median age in Harford is 35.8 years and the average household size is 2.7 persons. Median household income is \$33,750, with a poverty rate of 6 percent. There are 363 housing units in the town, 22.3 percent of which have been built since 1990. The median value of owner-occupied homes is \$65,400.

Local Laws Reviewed:

- No regulations on file

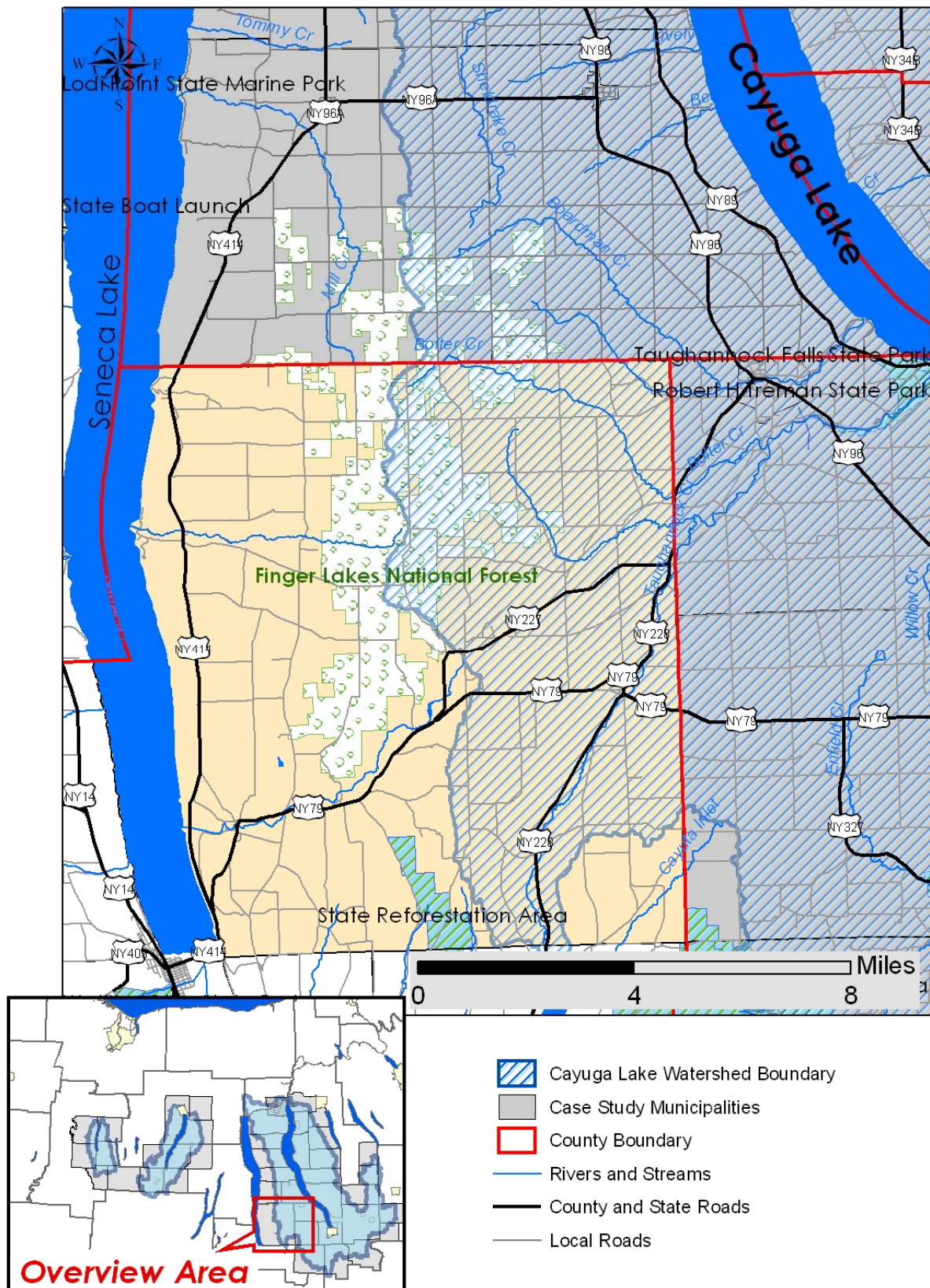
Assessment Results:

<i>Town of Harford</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	23.7	8 of 42 (19%)	0
	<i>Existing Development</i>	5 of 16 (31%)	0
	<i>New Development/ Substantial Redevelopment</i>	3 of 26 (11%)	0
<i>Percent of Municipality within Watershed:</i>	21%	1 of 12 (8%)	0
	<i>Forestry</i>	0 of 10	0
	<i>Agriculture</i>	1 of 2 (50%)	0
<i>Percent of Watershed within Municipality:</i>	.69%	2 of 16 (12%)	0
	<i>Modified Waterways</i>	2 of 10 (20%)	0
	<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
<i>Marinas</i>	0 of 48	48	
	<i>Existing</i>	0 of 20	20
	<i>New</i>	0 of 18	18
	<i>All</i>	0 of 10	10
<i>Roads and Bridges</i>	0 of 26	0	
	<i>Existing</i>	0 of 6	0
	<i>New</i>	0 of 13	0
	<i>All</i>	0 of 7	0
OWTS		2 of 7 (28%)	0

¹ Harford is missing population data for 1960; no population growth/decline statement could be provided.



Town of Hector • Schuyler County





Town of Hector

Schuyler County

The Town of Hector lies within the southwestern portion of the Cayuga Lake watershed. The town covers an area of 100.6 square miles, 43.5 percent of which lies within the Cayuga Lake watershed. While Hector has no shoreline on Cayuga Lake, the town holds the headwaters of Taughannock Creek as well as several other significant tributaries.

According to the 2000 Census, the Town of Hector contains 4,854 people.² The median age in Hector is 38.4 years and the average household size is 2.59 persons. Median household income is \$39,380, with a poverty rate of 8.7 percent. There are 2,378 housing units in the town, 14.4 percent of which have been built since 1990. The median value of owner-occupied homes is \$77,200.

Local Laws Reviewed:

- No regulations on file

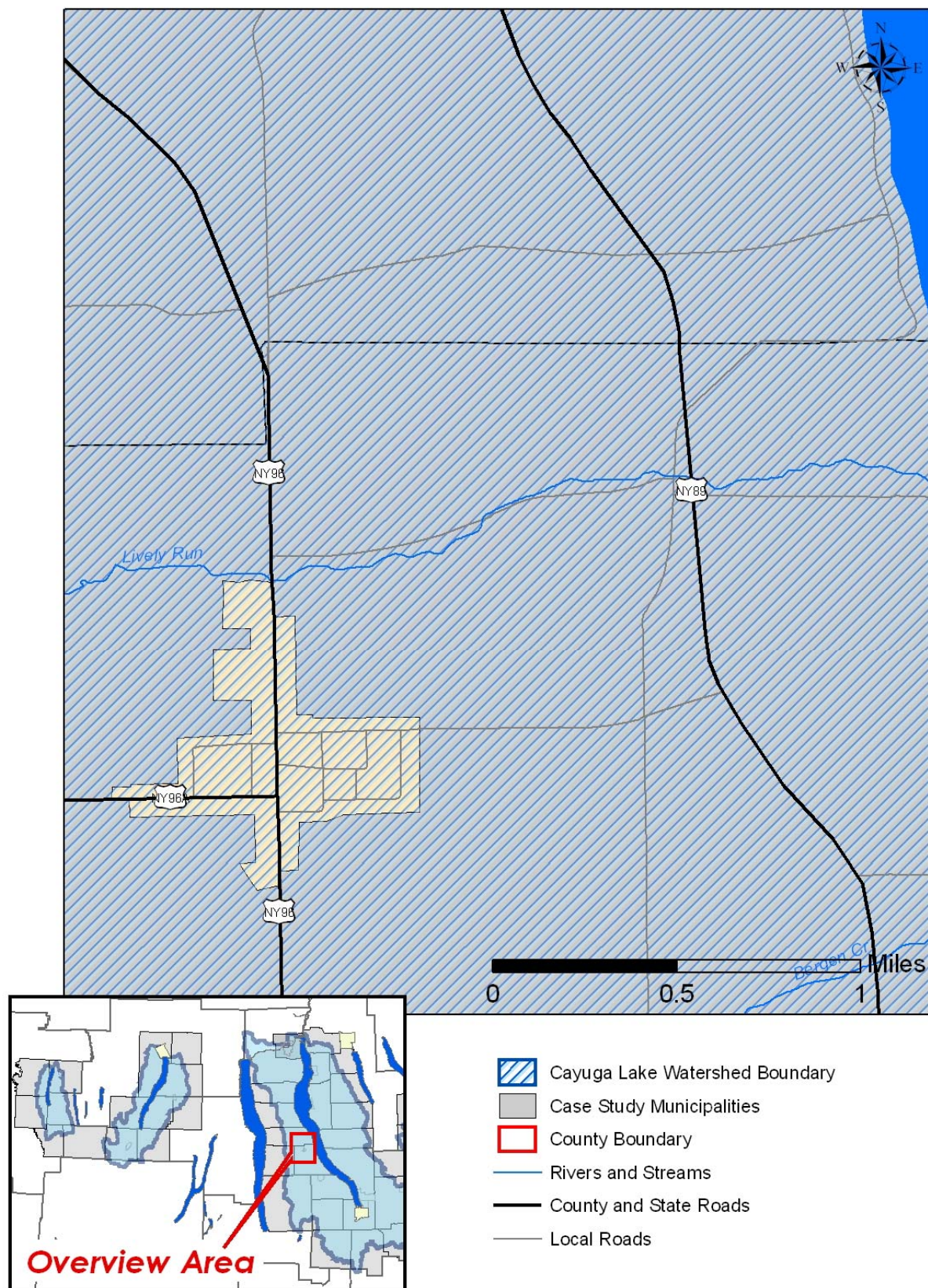
Assessment Results:

<i>Town of Hector</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	100.6	8 of 42 (19%)	0
		5 of 16 (31%)	0
		3 of 26 (11%)	0
<i>Percent of Municipality within Watershed:</i>	43.6%	1 of 12 (8%)	0
		0 of 10	0
		1 of 2 (50%)	0
<i>Percent of Watershed within Municipality:</i>	6.10%	0 of 16	0
		0 of 10	0
		0 of 6	0
<i>Marinas</i>		0 of 48	0
	<i>Existing</i>	0 of 20	0
	<i>New</i>	0 of 18	0
<i>Roads and Bridges</i>	<i>All</i>	0 of 10	0
		0 of 26	0
	<i>Existing</i>	0 of 6	0
<i>OWTS</i>	<i>New</i>	0 of 13	0
	<i>All</i>	0 of 7	0
		3 of 7 (42%)	0

² Hector is missing population data for 1960 and 1980; no population growth/decline statement could be provided.



Village of Interlaken • Seneca County





The Village of Interlaken is located in Seneca County and lies within the western portion of the Cayuga Lake watershed. The village covers an area of 0.3 square miles, 100 percent of which lies within the Cayuga Lake watershed. Interlaken has no shoreline on Cayuga Lake but does have one minor tributary which passes through its borders.

According to the 2000 Census, the Village of Interlaken contains 674 people. The village experienced a population decline of 12.2 percent between 1960 and 1980, and continued to decline by 1.6 percent between 1980 and 2000. The median age in The Village of Interlaken is 38.6 years and the average household size is 2.51 persons. Median household income is \$31,518, with a poverty rate of 9.5 percent. There are 278 housing units in the village, 5.1 percent of which have been built since 1990. The median value of owner-occupied homes is \$60,500.

As the analysis shows, the Village of Interlaken has no adopted local land use regulations. As with several of the smaller villages or very rural towns in the region, Interlaken needed the most fundamental building block of land use control – the Comprehensive Plan.

G/FLRPC, drawing on its experience in Comprehensive Planning with the Town of Italy and the Village of Dresden, is coordinating the development of a Comprehensive Plan for the Village. Public outreach was conducted through a survey, and the Village Clerk and a Village Trustee, Barb Stewart, have been guiding the process locally.

The plan is currently under development and is anticipated to be adopted by early 2006.

Local Laws Reviewed:

- *No regulations on file*

Assessment Results:

Development		Forestry/Ag.		Water/Wetlands		Marinas		Roads/Bridges		OWTS
8 of 42 (19%)		0 of 12		0 of 16		0 of 48		17 of 26 (65%)		1 of 7 (14%)
<i>Existing Development</i>	<i>5 of 16 (31%)</i>	<i>Forestry</i>	<i>0 of 10</i>	<i>Modified Waterways</i>	<i>0 of 10</i>	<i>Existing</i>	<i>n/a</i>	<i>Existing</i>	<i>4 of 6 (66%)</i>	<i>(no sub-categories)</i>
<i>New Development/ Substantial Redevelopment</i>	<i>3 of 26 (11%)</i>	<i>Ag..</i>	<i>0 of 2</i>	<i>Wetlands/ Riparian Management & Restoration</i>	<i>0 of 6</i>	<i>New</i>	<i>n/a</i>	<i>New</i>	<i>8 of 13 (61%)</i>	
						<i>All</i>	<i>n/a</i>	<i>All</i>	<i>5 of 7 (71%)</i>	

Total Municipal Land Area (sq miles):
.3

Percent of Municipality in Watershed:
100%

Percent of Watershed in Municipality:
.04%



City of Ithaca

Tompkins County

The City of Ithaca lies within the southern portion of the Cayuga Lake watershed. The city covers an area of 5.4 square miles, 100 percent of which lies within the Cayuga Lake watershed. The City of Ithaca has over one mile of shoreline on Cayuga Lake as well as the Cayuga Lake inlet.

According to the 2000 Census, the City of Ithaca contains 29,287 people. The city experienced a population decline of .2 percent between 1960 and 1980, and an increase of 1.9 percent between 1980 and 2000. The median age in the city is 22 and the average household size is 2.13. Median household income is \$21,441, with a poverty rate of 13.5 percent. There are 10,716 housing units in the city, 7.1 percent of which have been built since 1990. The median value of owner-occupied homes is \$96,200.

Local Laws Reviewed:

- *City of Ithaca: A General Plan*, 1971
- *City of Ithaca Waterways Study*, 1976
- *City of Ithaca Stewart Park 1987 Preservation Goals and Guidelines*, 1987
- *City of Ithaca Information Booklet*, 1998
- *City of Ithaca Inlet Island Urban Design Plan DRAFT*, 1998
- *City of Ithaca List of Plans and Studies*, 2001
- *City of Ithaca Environmental Quality Review*, 2003
- *City of Ithaca: Chapter 276-Site Plan Review*, 2003
- *City of Ithaca: Chapter 290-Subdivision of Land Regulations*, 2003
- *City of Ithaca: Chapter 325-Zoning Regulations & Map*, 2003
- *City of Ithaca Flood Damage Prevention*, 2003
- *City of Ithaca Site Plan Review Application and Procedures*, 2003
- *City of Ithaca Subdivision Application Requirements and Procedures*, 2003

Assessment Results:

Total Municipal
Land Area (sq miles):

5.4

Percent of Municipality
within Watershed:

100%

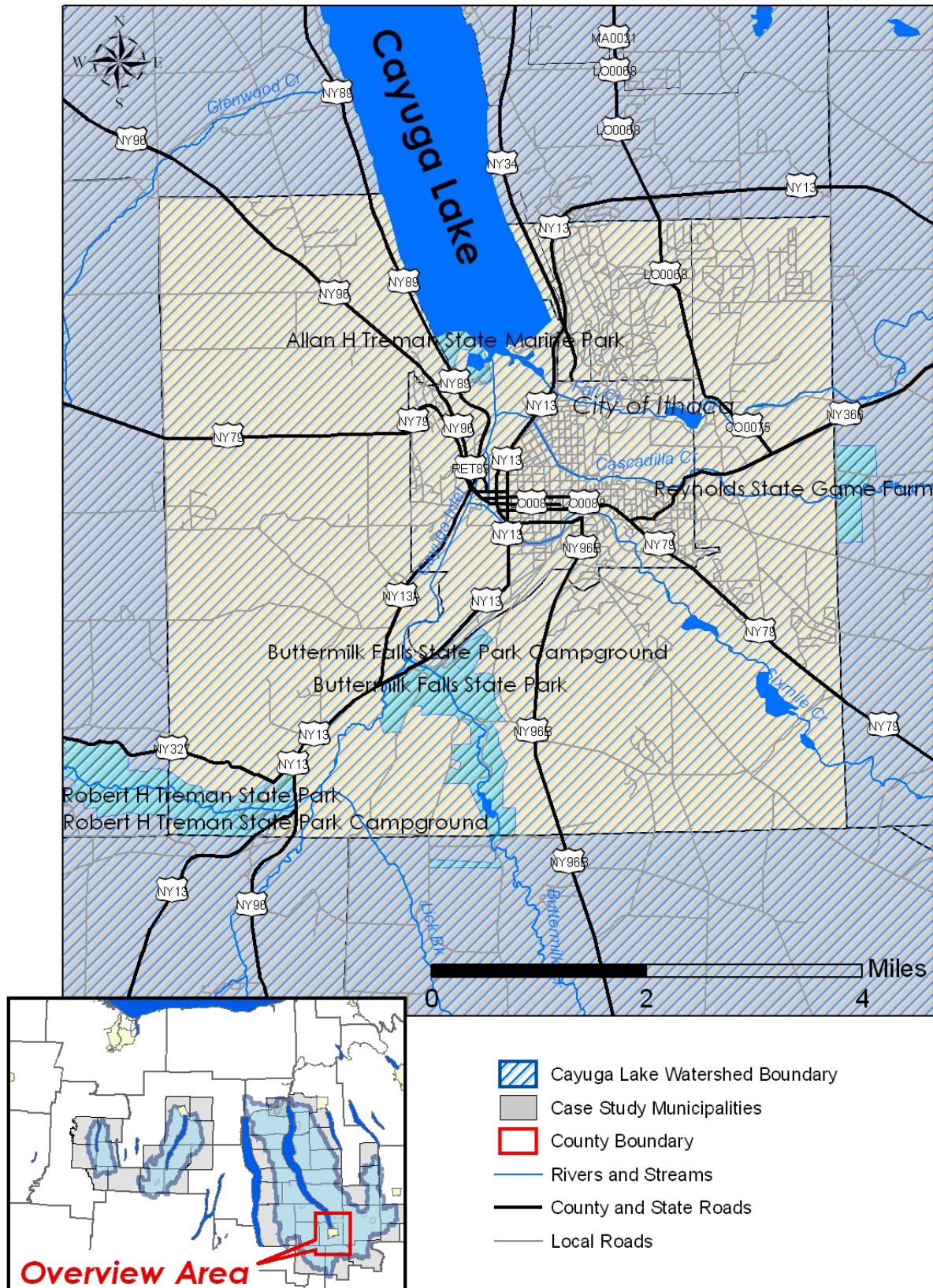
Percent of Watershed
within Municipality:

.75%

<i>City of Ithaca</i>	Full or Partial Implementation	Not applicable
Development	15 of 42 (35%)	0
Existing Development	7 of 16 (43%)	0
New Development/ Substantial Redevelopment	8 of 26 (30%)	0
Forestry/Agriculture	0 of 12	12
Forestry	0 of 10	10
Agriculture	0 of 2	2
Waterways/Wetlands	1 of 16 (6%)	0
Modified Waterways	0 of 10	0
Wetlands - Riparian Management/Restoration	1 of 6 (16%)	0
Marinas	0 of 48	0
Existing	0 of 20	0
New	0 of 18	0
All	0 of 10	0
Roads and Bridges	3 of 26 (11%)	0
Existing	1 of 6 (16%)	0
New	2 of 13 (15%)	0
All	0 of 7 (85%)	0
OWTS	2 of 7 (28%)	0



Town of Ithaca • Tompkins County





Town of Ithaca

Tompkins County

The Town of Ithaca lies within the southern portion of the Cayuga Lake watershed. The town covers an area of 28.7 square miles, 100 percent of which lies within the Cayuga Lake watershed. The town has over one mile of shoreline on Cayuga Lake.

According to the 2000 Census, the Town of Ithaca contains 18,198 people. The town experienced a 76.6 percent population increase between 1960 and 1980, and another 13.5 percent increase between 1980 and 2000. The median age in the town is 28.1 years and the average household size is 2.25 persons. Median household income is \$45,281, with a poverty rate of 4.2 percent. There are 6,818 housing units in the town, 17 percent of which have been built since 1990. The median value of owner-occupied homes is \$140,300.

Local Laws Reviewed:

- *Town of Ithaca Comprehensive Plan*, 1993
- *Town of Ithaca Subdivision Regulations*, 1993
- *Town of Ithaca Park, Recreation, and Open Space Executive Summary*, 1997
- *Town of Ithaca Zoning Ordinance and Certain Related Local Laws*, 1997
- *Town of Ithaca: Local Law #3 & Application*, 1998
- *Town of Ithaca: Local Law #4 & Application*, 1998
- *Town of Ithaca: Local Law #6 & Application*, 1998
- *Town of Ithaca: Local Law #7 & Application*, 1998

Assessment Results:

Total Municipal
Land Area (sq miles): **28.7**

Percent of Municipality
within Watershed: **100%**

Percent of Watershed
within Municipality: **3.99%**

<i>Town of Ithaca</i>	Full or Partial Implementation	Not applicable
Development	17 of 42 (40%)	0
<i>Existing Development</i>	8 of 16 (50%)	0
<i>New Development/ Substantial Redevelopment</i>	9 of 26 (34%)	0
Forestry/Agriculture	1 of 12 (8%)	0
<i>Forestry</i>	0 of 10	0
<i>Agriculture</i>	1 of 2 (50%)	0
Waterways/Wetlands	5 of 16 (31%)	0
<i>Modified Waterways</i>	4 of 10 (40%)	0
<i>Wetlands - Riparian Management/Restoration</i>	1 of 6 (16%)	0
Marinas	0 of 48	0
<i>Existing</i>	0 of 20	0
<i>New</i>	0 of 18	0
<i>All</i>	0 of 10	0
Roads and Bridges	25 of 26 (96%)	0
<i>Existing</i>	6 of 6 (100%)	0
<i>New</i>	12 of 13 (92%)	0
<i>All</i>	7 of 7 (100%)	0
OWTS	2 of 7 (28%)	0



The Town of Lansing lies within the southeastern portion of the Cayuga Lake watershed. The town covers an area of 59.6 square miles, 97.2 percent of which lies within the Cayuga Lake watershed. Lansing has approximately 12 miles of shoreline on Cayuga Lake.

According to the 2000 Census, the Town of Lansing contains 10,521 people. The town experienced a 96 percent increase in population between 1960 and 1980, and an increase of 26.5 percent between 1980 and 2000. The median age in Lansing is 34.8 years and the average household size is 2.33 persons. Median household income is \$48,250, with a poverty rate of 4.2 percent. There are 4,647 housing units in the town, 15.4 percent of which have been built since 1990. The median value of owner-occupied homes is \$127,800.

With a 45% rate of development-related BMP implementation, Town of Lansing demonstrates a high level of sophistication and awareness of the issues. Lansing has many existing regulatory tools, many adopted within the past several years. Lansing is also fortunate in that it has a full-time Planning and Zoning Administrator, Richard Platt, as a full-time member of the municipal staff. G/FLRPC assisted Mr. Platt in reviewing a draft Erosion and Sediment Control Law. This law was developed largely by the Town's consulting engineer. Because the Town of Lansing was designated a regulated Municipal Separate Storm Sewer System (MS4) (as part of the Ithaca urbanized area) in 2003, developing and adopting this law was a priority so that the Town would comply with Minimum Measures 4 and 5 of the Stormwater Phase II requirements. Lansing saw this as an especially high priority, and has been one of the first MS4s locally to comply with this portion of the regulations, three years ahead of the 2008 deadline. G/FLRPC assisted the Town staff with reviewing the Erosion, Sediment Control and Stormwater Management Law.

Local Laws Reviewed:

- *Subdivision Rules and Regulations*, 1991
- *Town of Lansing Specifications for Town Highways*, 2002
- *Land Use Ordinance*, 2004
- *The Phase II Storm water Regulations*

Assessment Results:

Development		Forestry/Ag.		Water/Wetlands		Marinas		Roads/Bridges		OWTS
19 of 42 (45%)		1 of 12 (8%)		3 of 16 (18%)		0 of 48		21 of 26 (80%)		2 of 7 (28%)
Existing Development	5 of 16 (31%)	Forestry	0 of 10	Modified Waterways	2 of 10 (20%)	Existing	0 of 20	Existing	5 of 6 (83%)	(no sub-categories)
New Development/ Substantial Redevelopment	14 of 26 (53%)	Ag..	1 of 2 (50%)	Wetlands/ Riparian Management & Restoration	1 of 6 (16%)	New	0 of 18	New	10 of 13 (76%)	
						All	0 of 10	All	6 of 7 (85%)	

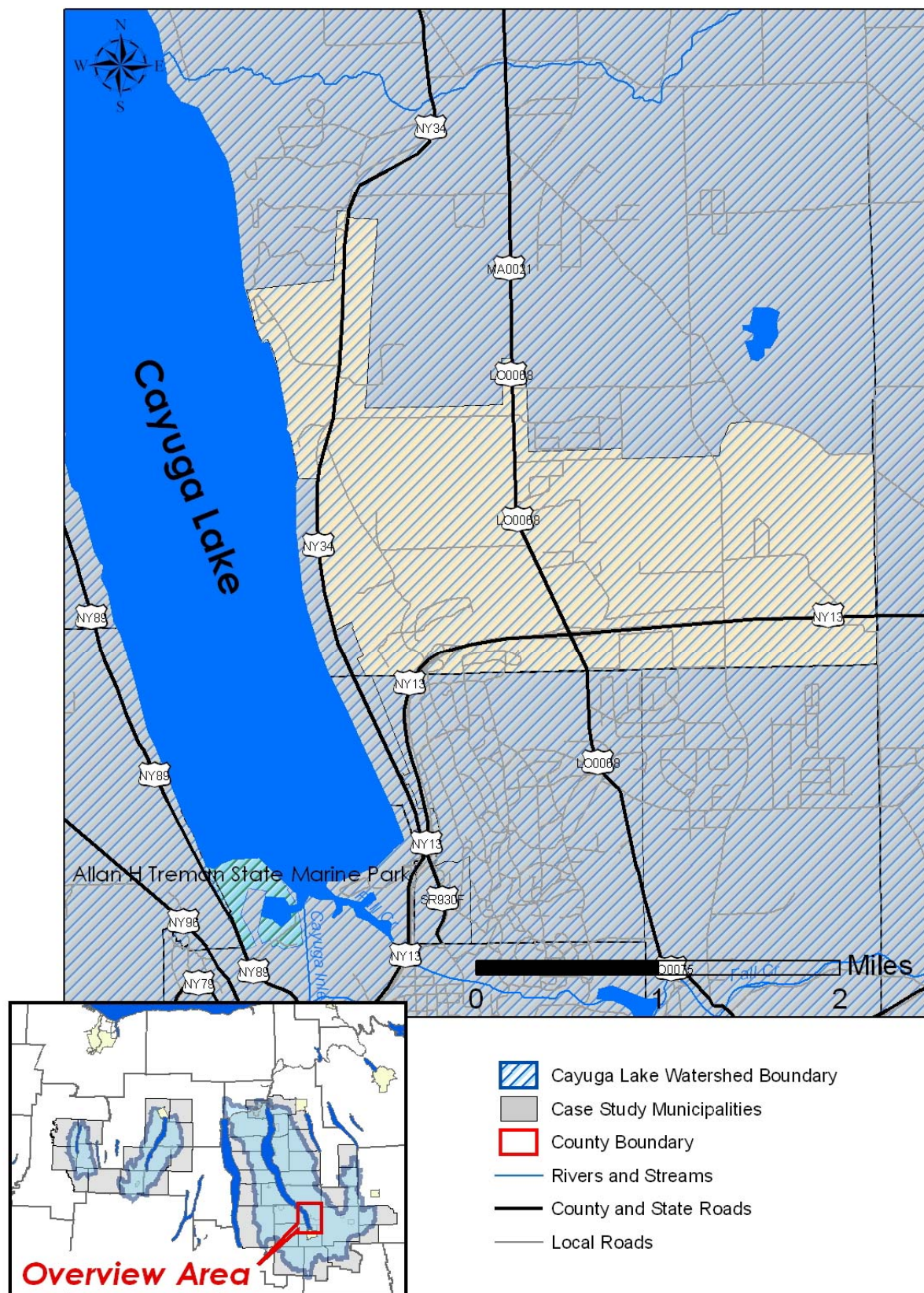
*Total Municipal
Land Area (sq miles):*
59.6

*Percent of
Municipality within
Watershed:*
97.1%

*Percent of
Watershed within
Municipality:*
8.06%



Village of Lansing • *Tompkins County*





Village of Lansing

Tompkins County

The Village of Lansing is located in Tompkins County and lies within the southeastern portion of the Cayuga Lake watershed. The village covers an area of 4.4 square miles, 99.9 percent of which lies within the Cayuga Lake watershed. The village has approximately 2 miles of shoreline on Cayuga Lake.

According to the 2000 Census, the Village of Lansing contains 3,417 people.³ The village experienced a population increase of 12.4 percent between 1980 and 2000. The median age in the village is 32 years and the average household size is 2.06 persons. Median household income is \$38,185, with a poverty rate of 9.5 percent. There are 1,666 housing units in the town, 8.3 percent of which have been built since 1990. The median value of owner-occupied homes is \$188,400.

Local Laws Reviewed:

- *Village of Lansing Land Subdivision Regulations*, 1984
- *Village of Lansing Zoning Laws*, 1984
- *Village of Lansing Greenway Plan*, 1994
- *Village of Lansing Comprehensive Plan*, 1999
- *Village of Lansing: Local Laws #1,2,3,4,5,6*, 1998-2000

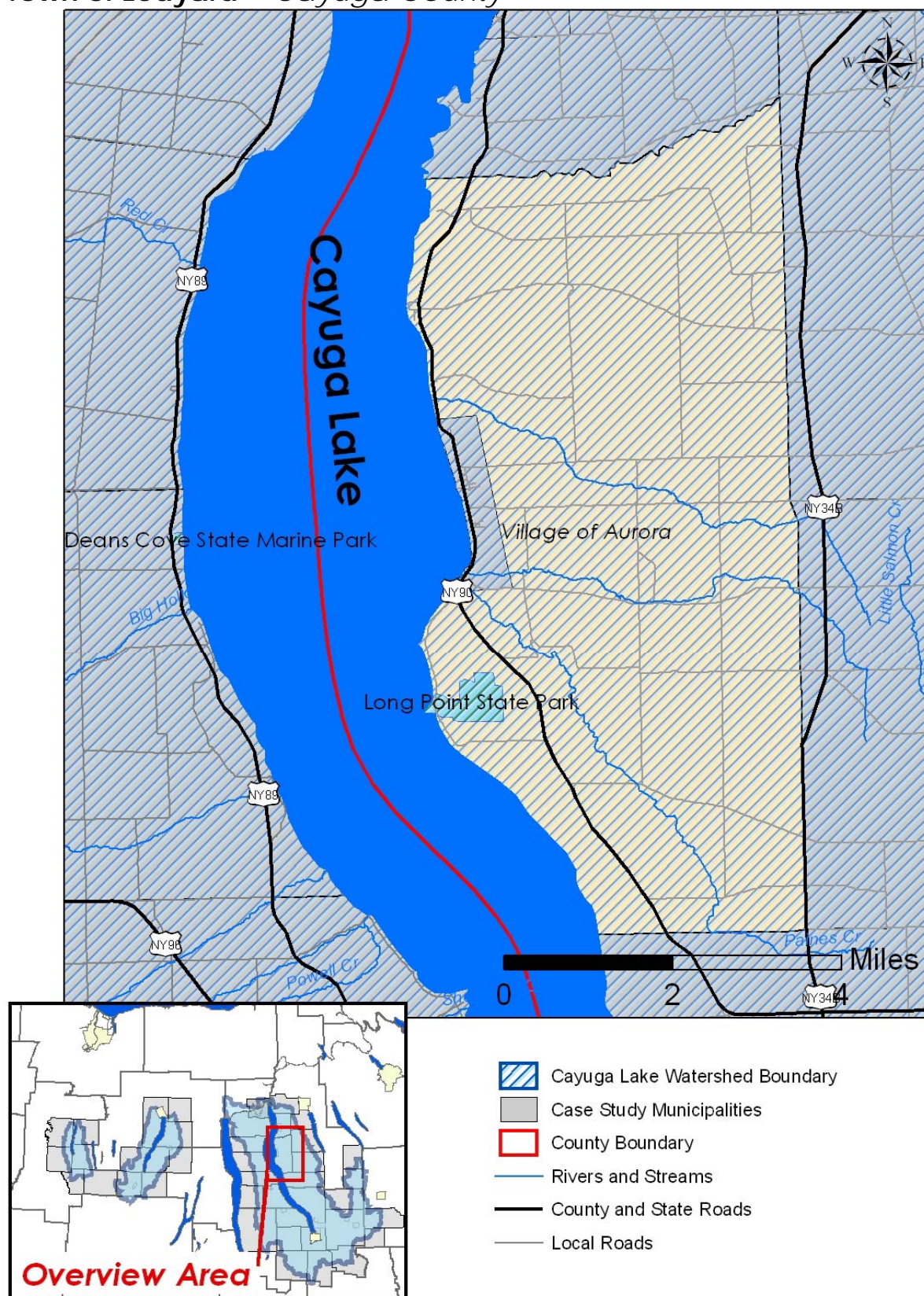
Assessment Results:

<i>Village of Lansing</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	4.4	21 of 42 (50%)	0
	<i>Existing Development</i>	7 of 16 (43%)	0
	<i>New Development/Substantial Redevelopment</i>	14 of 26 (53%)	0
<i>Percent of Municipality within Watershed:</i>	100%	0 of 12	12
	<i>Forestry</i>	0 of 10	10
	<i>Agriculture</i>	0 of 2	2
<i>Percent of Watershed within Municipality:</i>	.62%	2 of 16 (12%)	0
	<i>Modified Waterways</i>	2 of 10 (20%)	0
	<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
<i>Marinas</i>	0 of 48	0	0
	<i>Existing</i>	0 of 20	0
	<i>New</i>	0 of 18	0
	<i>All</i>	0 of 10	0
<i>Roads and Bridges</i>	23 of 26 (88%)	0	0
	<i>Existing</i>	5 of 6 (83%)	0
	<i>New</i>	12 of 13 (92%)	0
	<i>All</i>	6 of 7 (85%)	0
OWTS		2 of 7 (28%)	0

³ Population data for the village of Lansing does not exist for 1960; village established in 1974



Town of Ledyard • Cayuga County





According to the 2000 Census, the Town of Ledyard is located in Cayuga County and lies within the northeastern portion of the Cayuga Lake watershed. The town covers an area of 35.6 square miles, 100 percent of which lies within the Cayuga Lake watershed. Ledyard has approximately 5 miles of shoreline on Cayuga Lake.

According to the 2000 Census, the Town of Ledyard contains 1,832 people. The town experienced a population increase of 13.5 percent between 1960 and 1980, and a decline of 2 percent between 1980 and 2000. The median age in Ledyard is 35.2 and the average household size is 2.52. Median household income is \$42,857, with a poverty rate of 1.9 percent. There are 888 housing units in the town, 18.9 percent of which have been built since 1990. The median value of owner-occupied homes is \$90,200.

As with many municipalities in the Finger Lakes, the Town of Ledyard felt that gaps existed in its ability to regulate development. Specifically, the Town Planning Board felt that a subdivision ordinance was necessary, as up until now, the Town did not have this land use control tool. Even though population is growing slowly, new development just to the north in the Auburn area, and the increasing development of the Finger Lakes in general as a recreational and vacation home area, Ledyard felt a subdivision ordinance was important to implement. It should be noted that the most pressing water quality issue identified by the Town was the growth of industrial farming operations. These, however, cannot be regulated by local municipalities and instead fall under the purview of the Concentrated Animal Feeding Operation (CAFO) program at NYSDEC. Therefore, G/FLRPC provided assistance to the Town of Ledyard Planning Board with the development of a Subdivision Ordinance.

Local Laws Reviewed:

- *Town of Ledyard Local Law #2, 1968*
- *Town of Ledyard Local Law #1, 1994*

Assessment Results:

Development		Forestry/Ag.		Water/Wetlands		Marinas		Roads/Bridges		OWTS
13 of 42 (30%)		5 of 12 (41%)		0 of 16		0 of 48		16 of 26 (61%)		3 of 7 (42%)
Existing Development	7 of 16 (43%)	Forestry	4 of 10 (40%)	Modified Waterways	0 of 10	Existing	0 of 20	Existing	5 of 6 (83%)	(no sub-categories)
New Development/ Substantial Redevelopment	6 of 26 (23%)	Ag.	1 of 2 (50%)	Wetlands/ Riparian Management & Restoration	0 of 6	New	0 of 18	New	7 of 13 (53%)	
						All	0 of 10	All	4 of 7 (57%)	

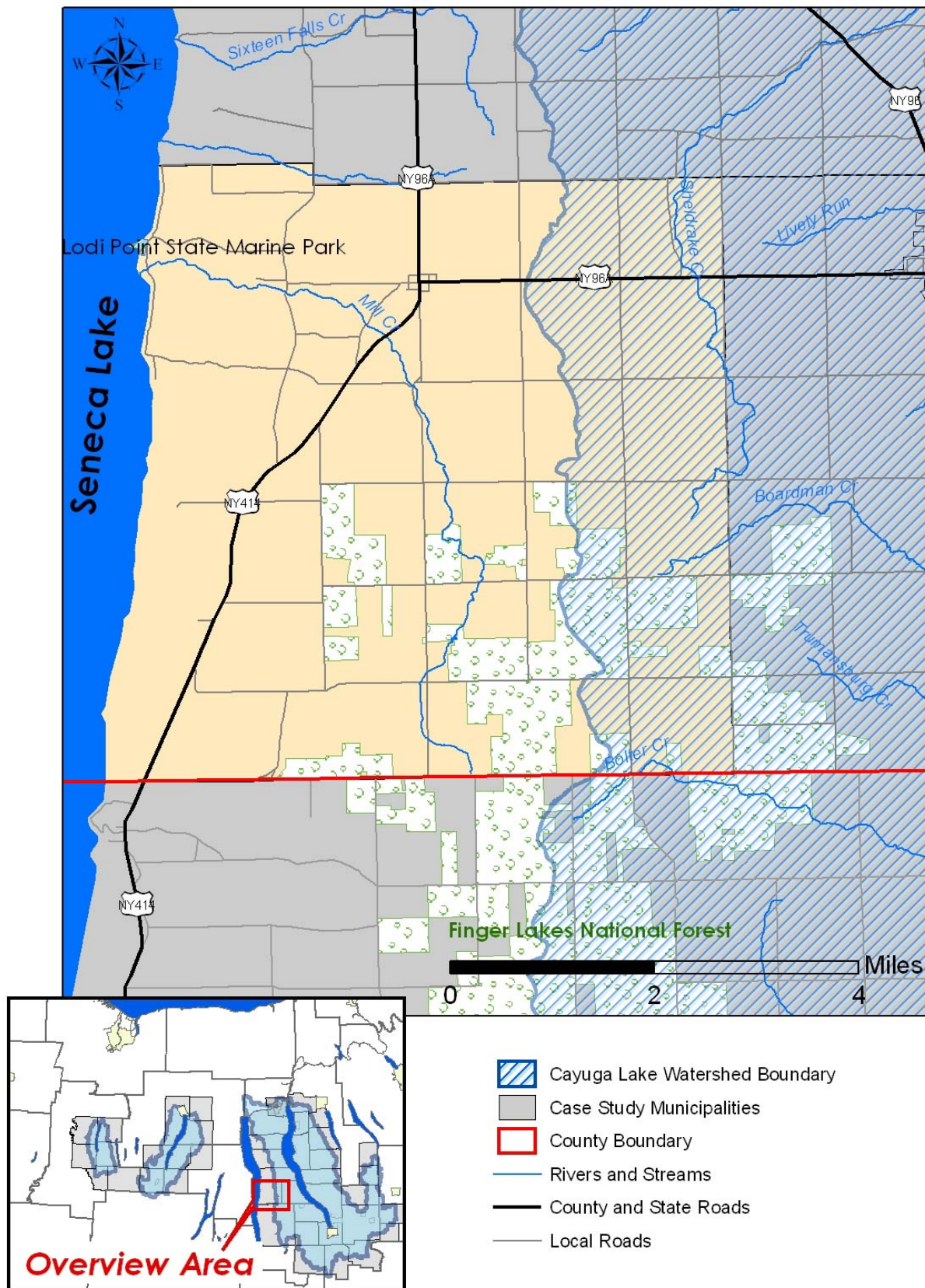
*Total Municipal
Land Area (sq miles):*
35.6

*Percent of
Municipality within
Watershed:*
100%

*Percent of
Watershed within
Municipality:*
4.96%



Town of Lodi • Seneca County





Town of Lodi

Seneca County

The Town of Lodi lies within the central western portion of the Cayuga Lake watershed. The town covers an area of 33.6 square miles, 25.8 percent of which lies within the Cayuga Lake watershed. While Lodi has no shoreline on Cayuga Lake, the Sheldrake Creek passes through its boundaries, which is a contributing tributary of the lake.

According to the 2000 Census, the Town of Lodi contains 1,476 people. The town experienced a population decline of 2.4 percent between 1960 and 1980, and an increase of 33.9 percent between 1980 and 2000. The median age in Lodi is 35.2 years and the average household size is 2.64 persons. Median household income is \$37,414, with a poverty rate of 10.4 percent. There are 812 housing units in the town, 9.8 percent of which have been built since 1990. The median value of owner-occupied homes is \$68,900.

Local Laws Reviewed:

- No regulations on file

Assessment Results:

Total Municipal
Land Area (sq miles): **33.6**

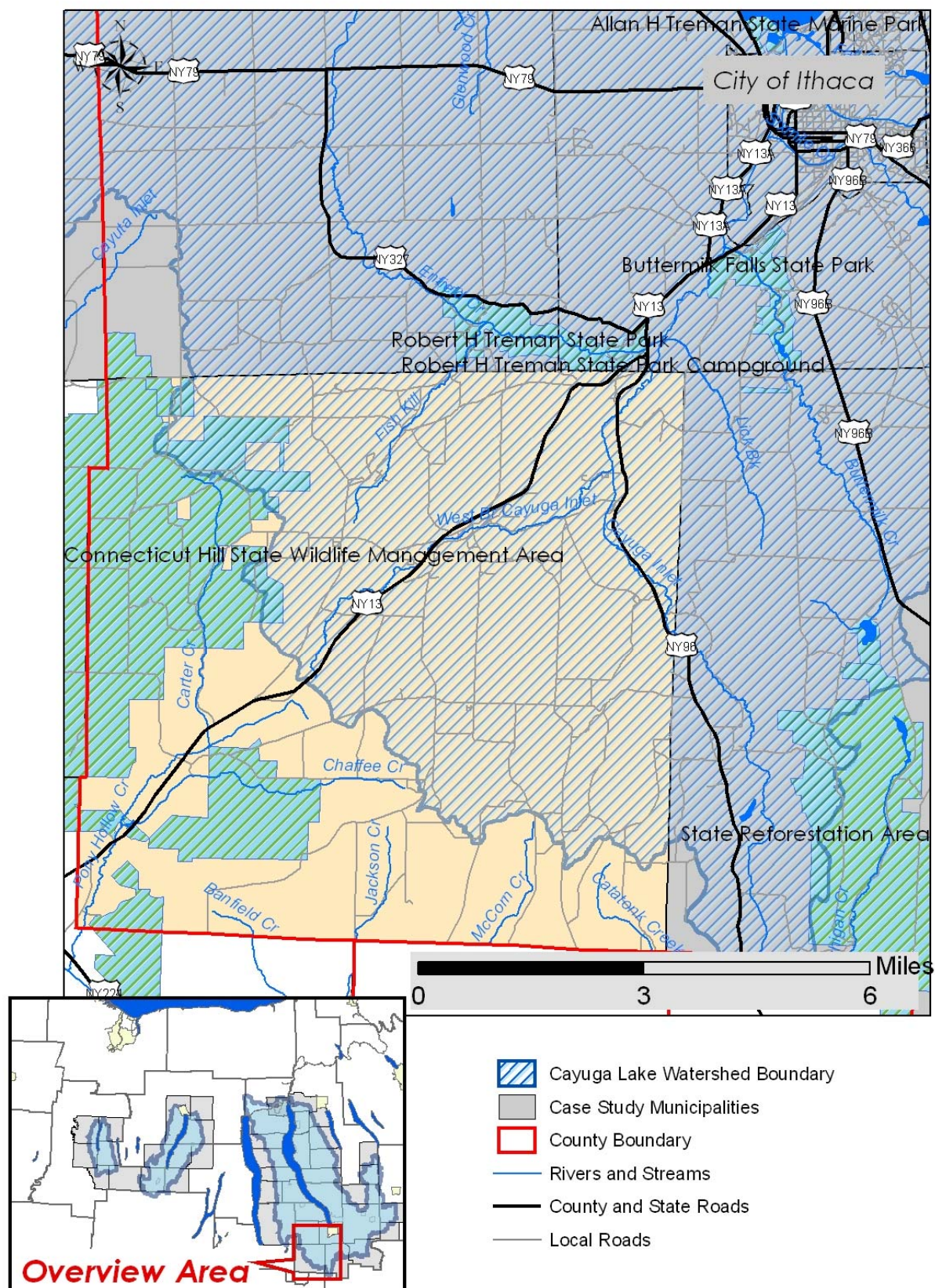
Percent of Municipality
within Watershed: **25.8%**

Percent of Watershed
within Municipality: **1.21%**

<i>Town of Lodi</i>	Full or Partial Implementation	Not applicable
Development	8 of 42 (19%)	0
<i>Existing Development</i>	5 of 16 (31%)	0
<i>New Development/ Substantial Redevelopment</i>	3 of 26 (11%)	0
Forestry/Agriculture	1 of 12 (8%)	0
<i>Forestry</i>	0 of 10	0
<i>Agriculture</i>	1 of 2 (50%)	0
Waterways/Wetlands	0 of 16	0
<i>Modified Waterways</i>	0 of 10	0
<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
Marinas	0 of 48	0
<i>Existing</i>	0 of 20	0
<i>New</i>	0 of 18	0
<i>All</i>	0 of 10	0
Roads and Bridges	17 of 26 (65%)	0
<i>Existing</i>	4 of 6 (66%)	0
<i>New</i>	9 of 13 (69%)	0
<i>All</i>	4 of 7 (57%)	0
OWTS	1 of 7 (14%)	0



Town of Newfield • *Tompkins County*





Town of Newfield

Tompkins County

The Town of Newfield lies within the southern portion of the Cayuga Lake watershed. The town covers an area of 57.8 square miles, 54.1 percent of which lies within the Cayuga Lake watershed. While Newfield has no shoreline on Cayuga Lake, the Cayuga Inlet passes through its borders.

According to the 2000 Census, the Town of Newfield contains 5,109 people. The town experienced a population increase of 100.7 percent between 1960 and 1980, and an increase of 16 percent between 1980 and 2000. The median age in Newfield is 35.7 years and the average household size is 2.64 persons. Median household income is \$36,693, with a poverty rate of 6.9 percent. There are 2,191 housing units in the town, 20.1 percent of which have been built since 1990. The median value of owner-occupied homes is \$75,500.

Local Laws Reviewed:

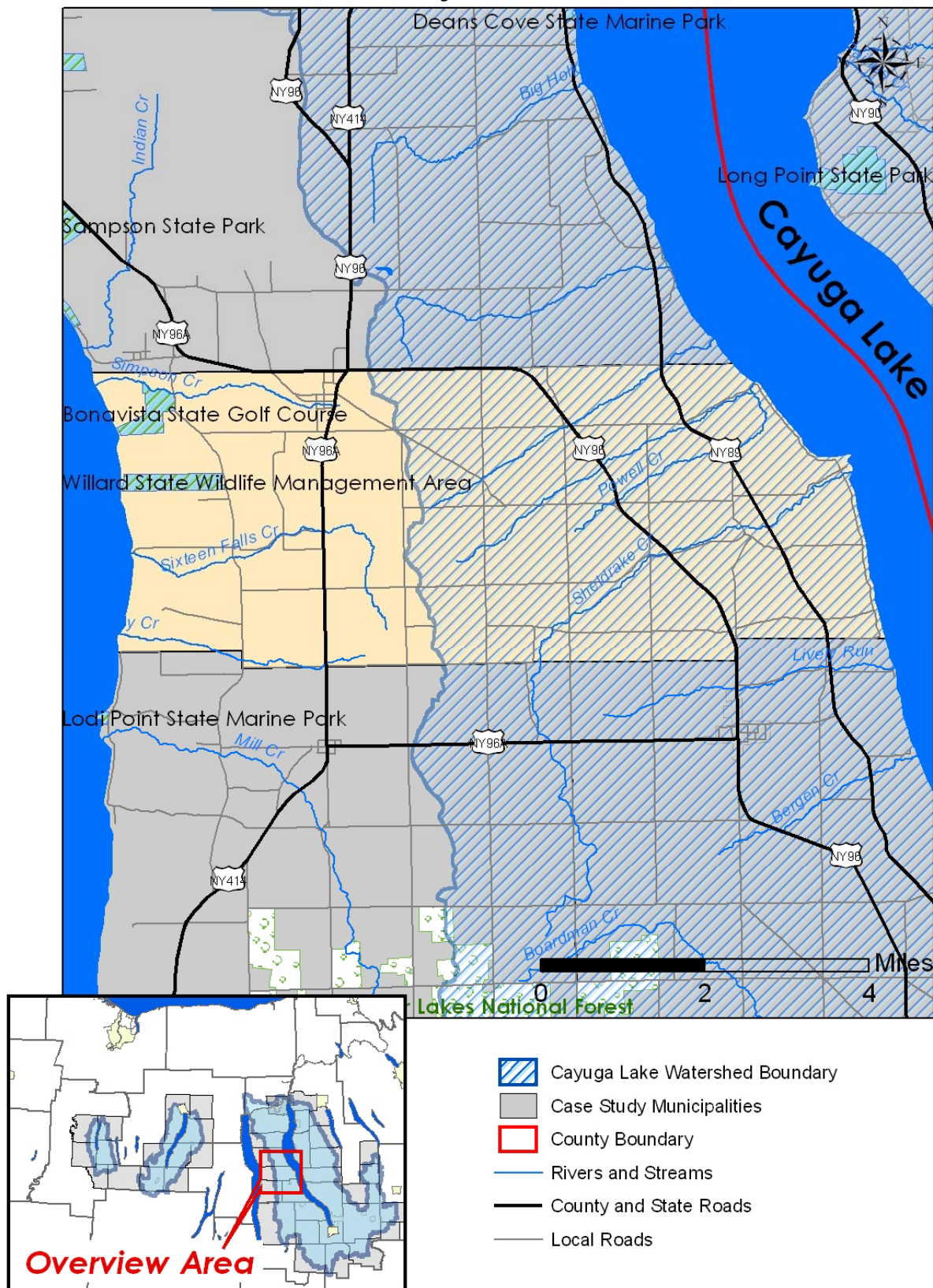
- No regulations on file

Assessment Results:

<i>Town of Newfield</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	57.8	8 of 42 (19%)	0
		5 of 16 (31%)	0
		3 of 26 (11%)	0
<i>Percent of Municipality within Watershed:</i>	54.1%	1 of 12 (8%)	0
		0 of 10	0
		1 of 2 (50%)	0
<i>Percent of Watershed within Municipality:</i>	4.35%	0 of 16	0
		0 of 10	0
		0 of 6	0
		0 of 48	48
		0 of 20	20
		0 of 18	18
		0 of 10	10
		15 of 26 (57%)	0
		4 of 6 (66%)	0
		9 of 13 (69%)	0
		2 of 7 (28%)	0
		2 of 7 (28%)	0



Town of Ovid • Seneca County





Town of Ovid

Seneca County

The Town of Ovid lies within the central western portion of the Cayuga Lake watershed. The town covers an area of 30.3 square miles, 60.8 percent of which lies within the Cayuga Lake watershed. Ovid has approximately 4 miles of shoreline on Cayuga Lake.

According to the 2000 Census, the Town of Ovid contains 2,757 people. The town experienced a population decline of 18.2 percent between 1960 and 1980, and an increase of 8.6 percent between 1980 and 2000. The median age in Ovid is 36.6 years and the average household size is 2.51 persons. Median household income is \$32,833, with a poverty rate of 4.4 percent. There are 1,118 housing units in the town, 12.4 percent of which have been built since 1990. The median value of owner-occupied homes is \$71,600.

Local Laws Reviewed:

- No regulations on file

Assessment Results:

Total Municipal
Land Area (sq miles): 30.3

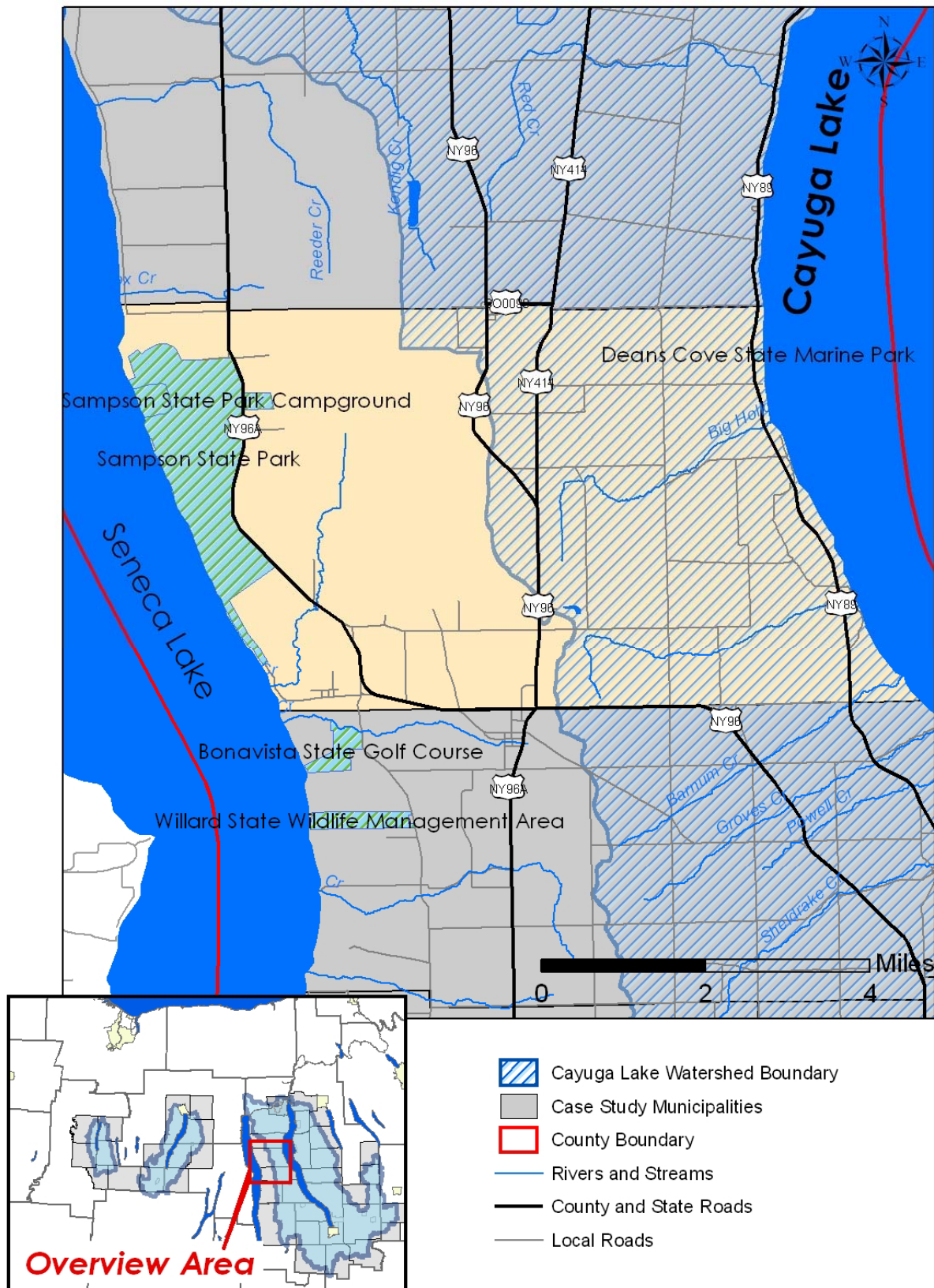
Percent of Municipality
within Watershed: 60.8%

Percent of Watershed
within Municipality: 2.57%

<i>Town of Ovid</i>	Full or Partial Implementation	Not applicable
Development	8 of 42 (19%)	0
<i>Existing Development</i>	5 of 16 (31%)	0
<i>New Development/ Substantial Redevelopment</i>	3 of 26 (11%)	0
Forestry/Agriculture	1 of 12 (8%)	0
<i>Forestry</i>	0 of 10	0
<i>Agriculture</i>	1 of 2 (50%)	0
Waterways/Wetlands	0 of 16	0
<i>Modified Waterways</i>	0 of 10	0
<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
Marinas	0 of 48	0
<i>Existing</i>	0 of 20	0
<i>New</i>	0 of 18	0
<i>All</i>	0 of 10	0
Roads and Bridges	17 of 26 (65%)	0
<i>Existing</i>	4 of 6 (66%)	0
<i>New</i>	8 of 13 (61%)	0
<i>All</i>	5 of 7 (71%)	0
OWTS	1 of 7 (14%)	0



Town of Romulus • Seneca County





Town of Romulus

Seneca County

The Town of Romulus lies within the central western portion of the Cayuga Lake watershed. The town covers an area of 37.1 square miles, 46.9 percent of which lies within the Cayuga Lake watershed. Romulus has approximately 5 miles of shoreline on Cayuga Lake.

According to the 2000 Census, the Town of Romulus contains 2,036 people. The town experienced a population decline of 30 percent between 1960 and 1980, and continued to decline by 17.3 percent between 1980 and 2000. The median age in Romulus is 35.6 years and the average household size is 2.76 persons. Median household income is \$42,404, with a poverty rate of 9.1 percent. There are 809 housing units in the town, 11.3 percent of which have been built since 1990. The median value of owner-occupied homes is \$68,900.

Local Laws Reviewed:

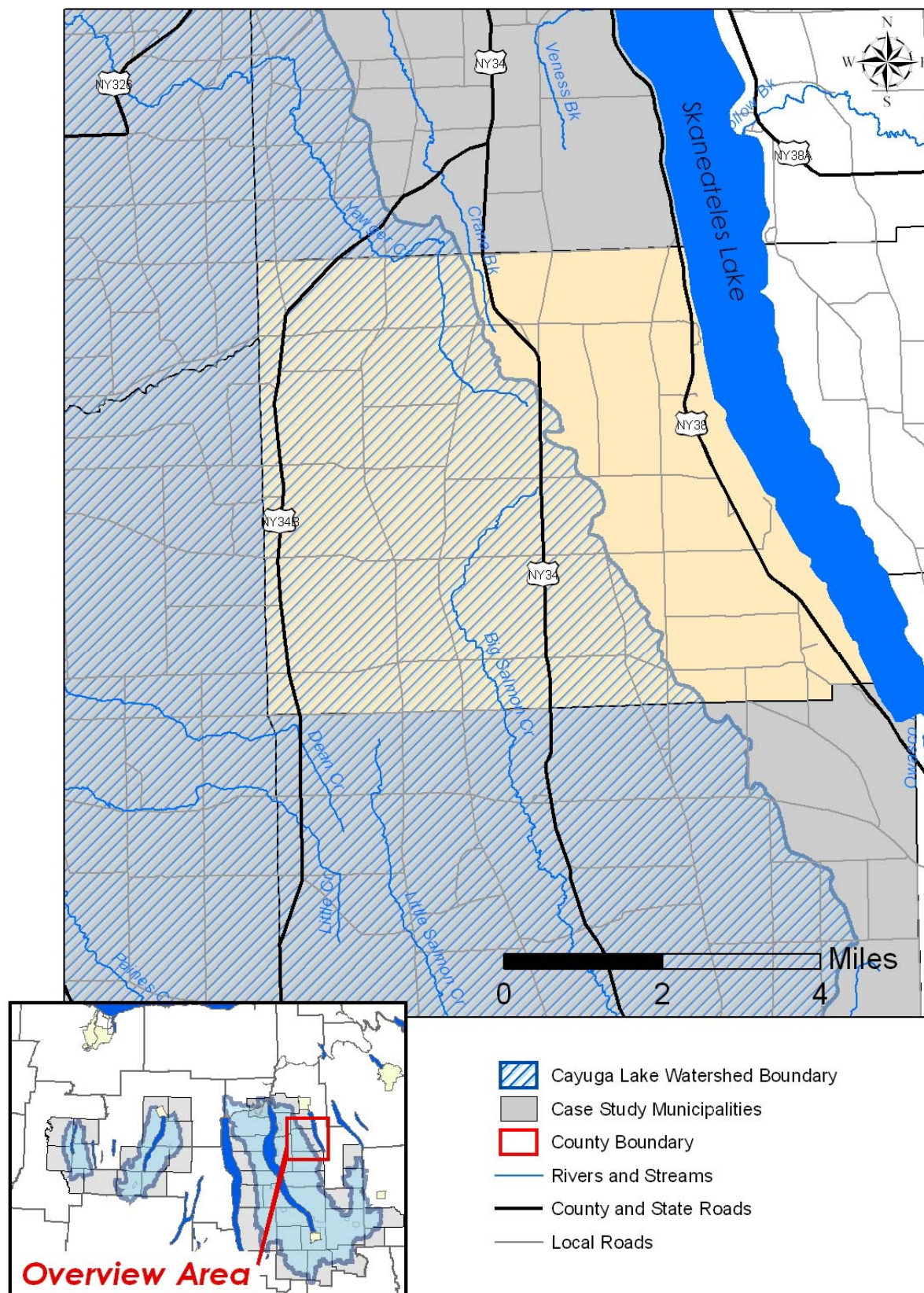
- *Town of Romulus Mobile Home Park Code and Snowmobile Ordinance, 1972*
- *Town of Romulus: Dog Control Ordinance, 1996*
- *Town of Romulus Land Use Ordinance, 1996*
- *Town of Romulus Local Law Regulating Construction, Maintenance, and Charges for the Willard Water and Willard Water Extension Districts, 1996*
- *Town of Romulus: Peddler and Solicitor Regulations, 1996*
- *Town of Romulus Comprehensive Plan: Final Draft Proposal, 1998*

Assessment Results:

<i>Town of Romulus</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	37.1	15 of 42 (35%)	0
	<i>Existing Development</i>	6 of 16 (37%)	0
	<i>New Development/ Substantial Redevelopment</i>	9 of 26 (34%)	0
<i>Percent of Municipality within Watershed:</i>	46.9%	1 of 12 (8%)	0
	<i>Forestry</i>	0 of 10	0
	<i>Agriculture</i>	1 of 2 (50%)	0
<i>Percent of Watershed within Municipality:</i>	2.42%	2 of 16 (12%)	0
	<i>Modified Waterways</i>	2 of 10 (20%)	0
	<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
<i>Marinas</i>	0 of 48	0 of 48	0
	<i>Existing</i>	0 of 20	0
	<i>New</i>	0 of 18	0
	<i>All</i>	0 of 10	0
<i>Roads and Bridges</i>	19 of 26 (73%)	19 of 26 (73%)	0
	<i>Existing</i>	5 of 6 (83%)	0
	<i>New</i>	9 of 13 (69%)	0
	<i>All</i>	5 of 7 (71%)	0
<i>OWTS</i>		1 of 7 (14%)	0



Town of Scipio • Cayuga County





Town of Scipio

Cayuga County

The Town of Scipio lies within the central western portion of the Cayuga Lake watershed. The town covers an area of 35.9 square miles, 62.4 percent of which lies within the Cayuga Lake watershed. While Scipio has no shoreline on Cayuga Lake, several contributing tributaries of the lake originate within its boundaries.

According to the 2000 Census, the Town of Scipio contains 1,537 people. The town experienced a population increase of 28.7 percent between 1960 and 1980, and a 4.5 percent increase between 1980 and 2000. The median age in Scipio is 37.2 years and the average household size is 2.69 persons. Median household income is \$44,491, with a poverty rate of 2.8 percent. There are 702 housing units in the town, 13.7 percent of which have been built since 1990. The median value of owner-occupied homes is \$77,500.

Local Laws Reviewed:

- *Town of Scipio: Zoning Law, 1990*
- *Town of Scipio: Local Law #1, 1992 & 1995*
- *Town of Scipio: Local Law #2, 1995*
- *Town of Scipio: Local Law #3, 1995*

Assessment Results:

*Total Municipal
Land Area (sq miles):* **35.9**

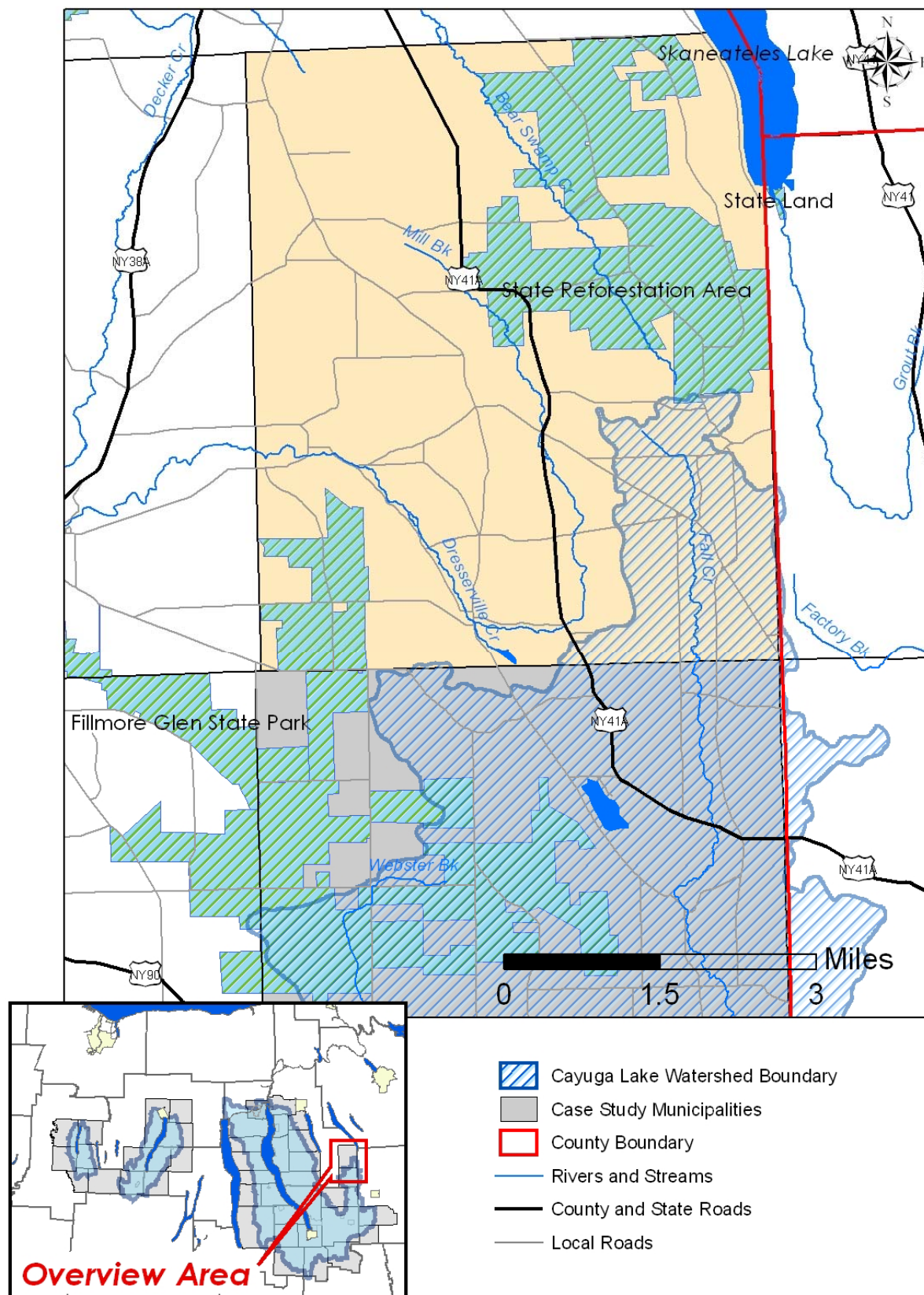
*Percent of Municipality
within Watershed:* **62.4%**

*Percent of Watershed
within Municipality:* **3.12%**

<i>Town of Scipio</i>	Full or Partial Implementation	Not applicable
Development	18 of 42 (42%)	0
<i>Existing Development</i>	7 of 16 (43%)	0
<i>New Development/ Substantial Redevelopment</i>	11 of 26 (42%)	0
Forestry/Agriculture	5 of 12 (41%)	0
<i>Forestry</i>	4 of 10 (40%)	0
<i>Agriculture</i>	1 of 2 (50%)	0
Waterways/Wetlands	1 of 16 (6%)	0
<i>Modified Waterways</i>	1 of 10 (10%)	0
<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
Marinas	0 of 48	0
<i>Existing</i>	0 of 20	0
<i>New</i>	0 of 18	0
<i>All</i>	0 of 10	0
Roads and Bridges	6 of 26 (23%)	0
<i>Existing</i>	0 of 6	0
<i>New</i>	6 of 13 (46%)	0
<i>All</i>	0 of 7	0
OWTS	3 of 7 (42%)	0



Town of Sempronius • Cayuga County





Town of Sempronius

Cayuga County

The Town of Sempronius lies within the eastern portion of the Cayuga Lake watershed. The town covers an area of 28.8 square miles, 12.5 percent of which lies within the Cayuga Lake watershed. While Sempronius is located a significant distance from Cayuga Lake—approximately 15 miles—it is nonetheless home to the headwaters of contributing tributaries, including Fall Creek.

According to the 2000 Census, the Town of Sempronius contains 893 people. The town experienced a population increase of 33.8 percent between 1960 and 1980, and an increase of 21.8 percent between 1980 and 2000. The median age in Sempronius is 32.6 years and the average household size is 2.85 persons. Median household income is \$38,611, with a poverty rate of 6.3 percent. There are 405 housing units in the town, 13.6 percent of which have been built since 1990. The median value of owner-occupied homes is \$62,300.

Local Laws Reviewed:

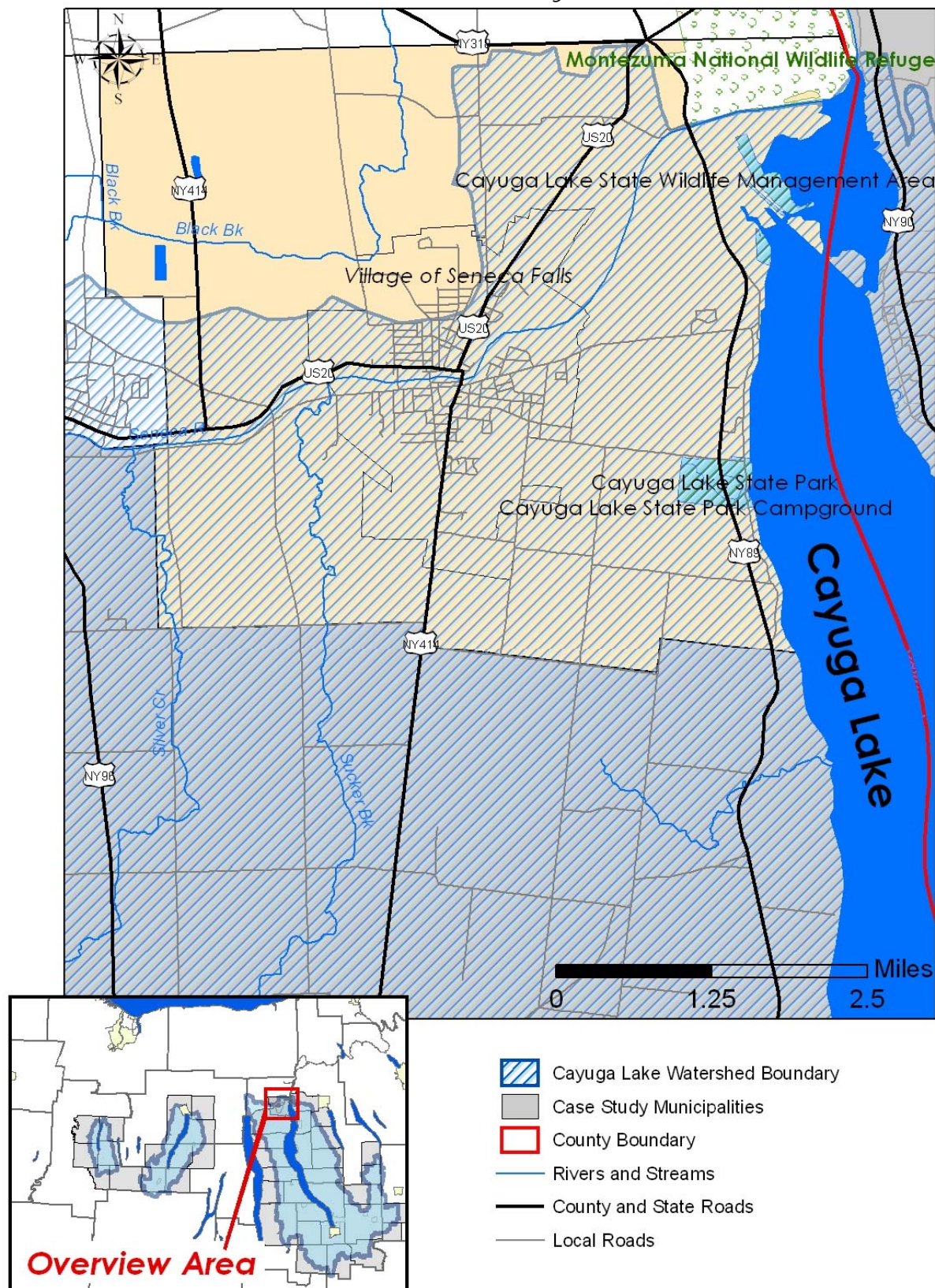
- *Town of Sempronius Local Law #1 1993: Setback and Lot Area Law, 1993*
- *Town of Sempronius Local Law #2 1993: Mobile Home Law, 1993*
- *Town of Sempronius Local Law #1 1997: Amendments to Mobile Home Law, 1997*
- *Town of Sempronius Local Law #2 1997: Setback and Lot Area Law, 1997*

Assessment Results:

<i>Town of Sempronius</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	28.8	11 of 42 (26%)	0
	<i>Existing Development</i>	7 of 16 (43%)	0
	<i>New Development/ Substantial Redevelopment</i>	4 of 26 (15%)	0
<i>Percent of Municipality within Watershed:</i>	12.5%	5 of 12 (41%)	0
	<i>Forestry</i>	4 of 10 (40%)	0
	<i>Agriculture</i>	1 of 2 (50%)	0
<i>Percent of Watershed within Municipality:</i>	.50%	0 of 16	0
	<i>Modified Waterways</i>	0 of 10	0
	<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
	Marinas	0 of 48	48
	<i>Existing</i>	0 of 20	20
	<i>New</i>	0 of 18	18
	<i>All</i>	0 of 10	10
	Roads and Bridges	17 of 26 (65%)	0
	<i>Existing</i>	4 of 6 (66%)	0
	<i>New</i>	7 of 13 (53%)	0
	<i>All</i>	6 of 7 (85%)	0
OWTS		3 of 7 (42%)	0



Town of Seneca Falls • Seneca County





Town of Seneca Falls

Seneca County

The Town of Seneca Falls lies within the northwestern portion of the Cayuga Lake watershed. The town covers an area of 23.9 square miles, 15 percent of which lies within the Cayuga Lake watershed. Seneca Falls has over 6 miles of shoreline on Cayuga Lake.

According to the 2000 Census, the Town of Seneca Falls contains 9,347 people. The town experienced a population increase of 6.7 percent between 1960 and 1980, and a decline of 5.5 percent between 1980 and 2000. The median age in Seneca Falls is 37.4 years and the average household size is 2.38 persons. Median household income is \$37,245, with a poverty rate of 9.7 percent. There are 4,167 housing units in the town, 5.9 percent of which have been built since 1990. The median value of owner-occupied homes is \$62,600.

Local Laws Reviewed:

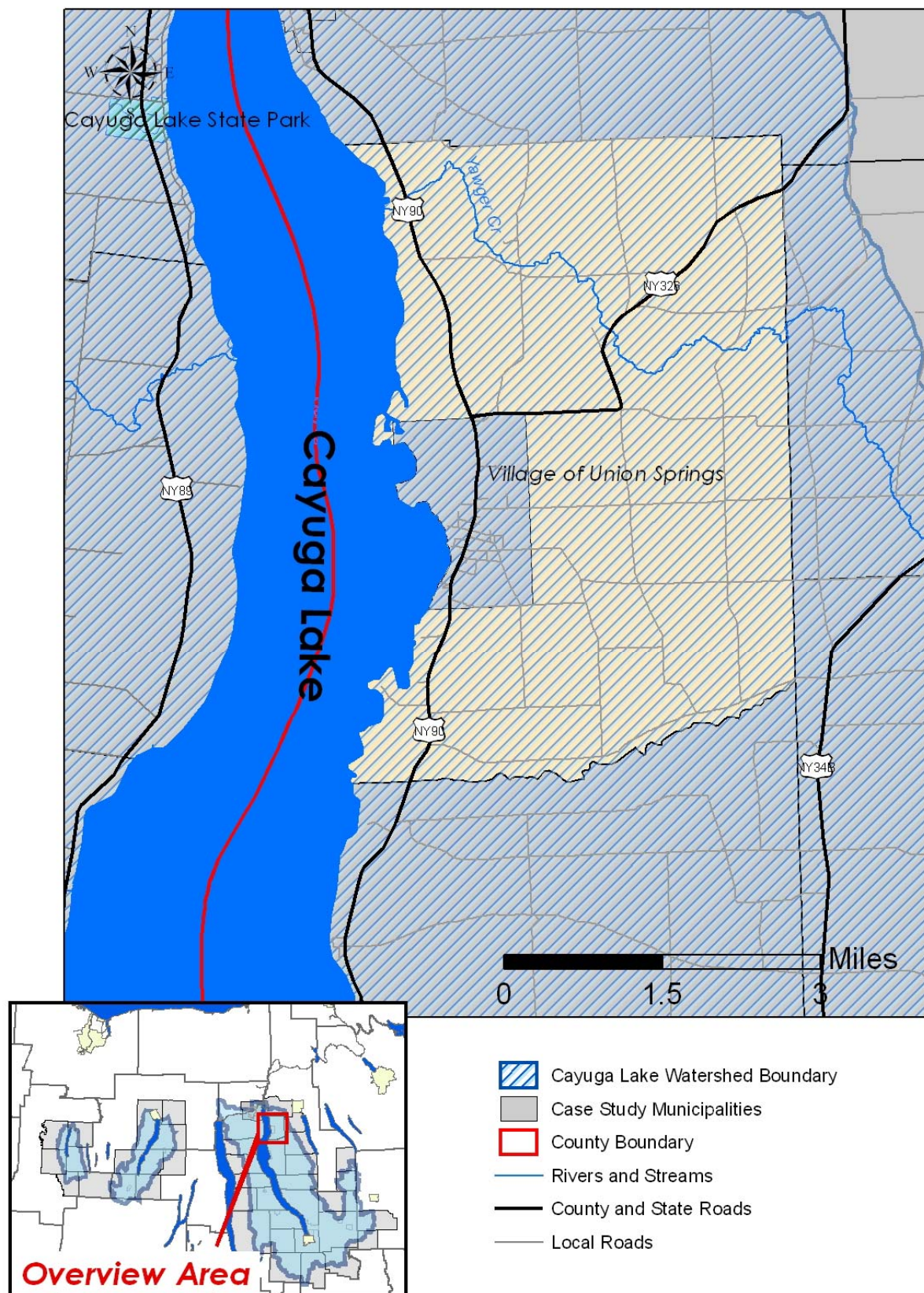
- *Town of Seneca Falls Comprehensive Plan for both the Town and Village of Seneca Falls, 1969*
- *Town of Seneca Falls Zoning Chapter 103, 1998*

Assessment Results:

		<i>Town of Seneca Falls</i>	Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	23.9	Development	15 of 42 (35%)	0
		<i>Existing Development</i>	5 of 16 (31%)	0
		<i>New Development/ Substantial Redevelopment</i>	10 of 26 (38%)	0
		Forestry/Agriculture	1 of 12 (8%)	0
<i>Percent of Municipality within Watershed:</i>	3.6%	<i>Forestry</i>	0 of 10	0
		<i>Agriculture</i>	1 of 2 (50%)	0
		Waterways/Wetlands	3 of 16 (18%)	0
		<i>Modified Waterways</i>	2 of 10 (20%)	0
<i>Percent of Watershed within Municipality:</i>	.50%	<i>Wetlands - Riparian Management/Restoration</i>	1 of 6 (16%)	0
		Marinas	0 of 48	0
		<i>Existing</i>	0 of 20	0
		<i>New</i>	0 of 18	0
		<i>All</i>	0 of 10	0
		Roads and Bridges	17 of 26 (65%)	0
		<i>Existing</i>	3 of 6 (50%)	0
		<i>New</i>	9 of 13 (69%)	0
		<i>All</i>	5 of 7 (71%)	0
		OWTS	2 of 7 (28%)	0



Town of Springport • Cayuga County





Town of Springport

Cayuga County

The Town of Springport lies within the northeastern portion of the Cayuga Lake watershed. The town covers an area of 21.2 square miles, 100 percent of which lies within the Cayuga Lake watershed. Springport has over 5 miles of shoreline on Cayuga Lake.

According to the 2000 Census, the Town of Springport contains 2,256 people. The town experienced a population increase of 30 percent between 1960 and 1980, and an increase of 2.1 percent between 1980 and 2000. The median age in Springport is 39 years and the average household size is 2.61 persons. Median household income is \$44,792, with a poverty rate of 6.3 percent. There are 1,165 housing units in the town, 14.2 percent of which have been built since 1990. The median value of owner-occupied homes is \$83,000.

Local Laws Reviewed:

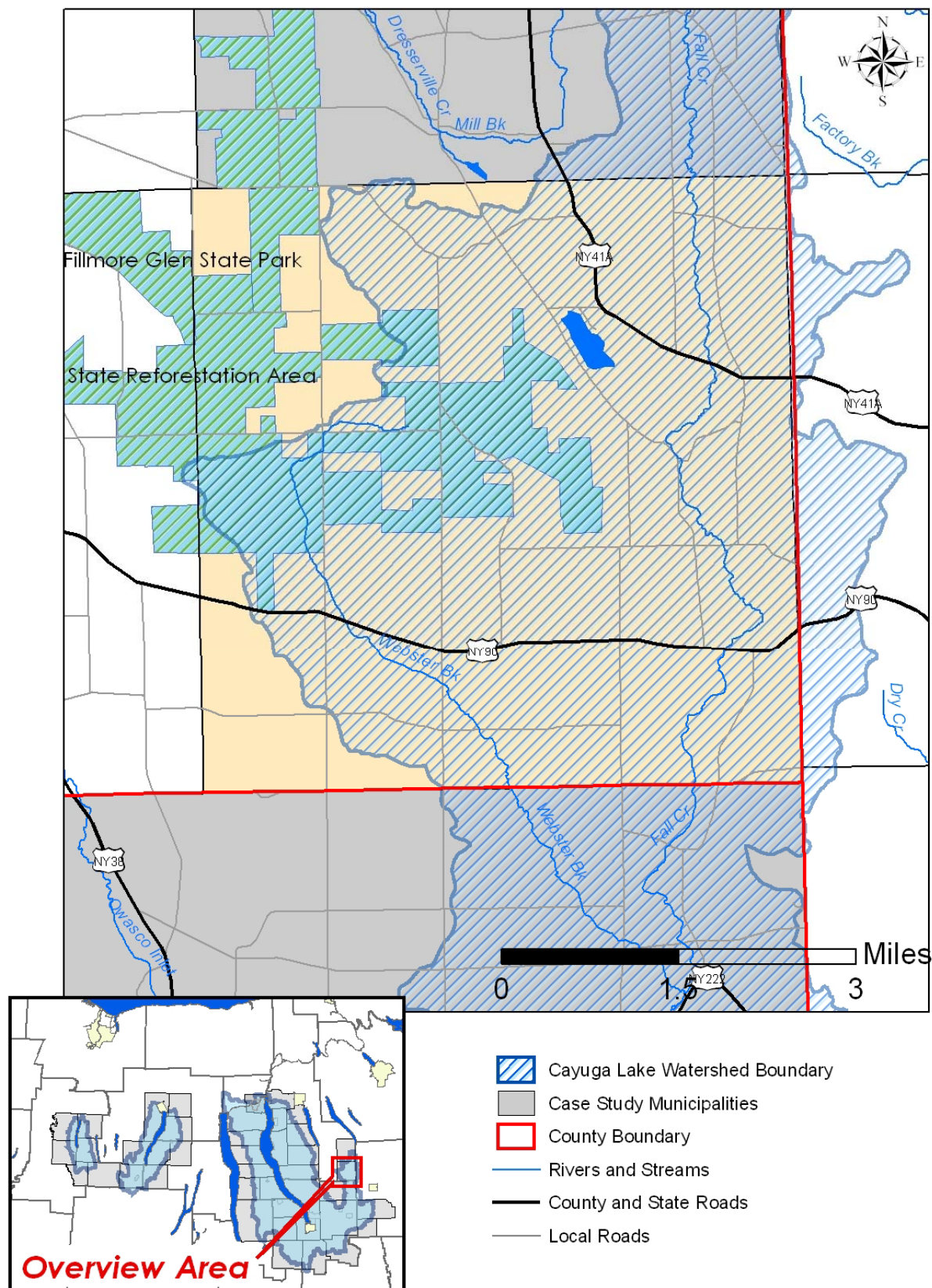
- *Town of Springport Zoning Law, Local Law #2, 1991*
- *Town of Springport Land Use Regulation and Control Information, 2000*

Assessment Results:

<i>Town of Springport</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	Development	13 of 42 (30%)	0
	<i>Existing Development</i>	7 of 16 (43%)	0
	<i>New Development/ Substantial Redevelopment</i>	6 of 26 (23%)	0
<i>Percent of Municipality within Watershed:</i>	Forestry/Agriculture	5 of 12 (41%)	0
	<i>Forestry</i>	4 of 10 (40%)	0
	<i>Agriculture</i>	1 of 2 (50%)	0
<i>Percent of Watershed within Municipality:</i>	Waterways/Wetlands	1 of 16 (6%)	0
	<i>Modified Waterways</i>	0 of 10	0
	<i>Wetlands - Riparian Management/Restoration</i>	1 of 6 (16%)	0
	Marinas	0 of 48	0
	<i>Existing</i>	0 of 20	0
	<i>New</i>	0 of 18	0
	<i>All</i>	0 of 10	0
	Roads and Bridges	2 of 26 (7%)	0
	<i>Existing</i>	0 of 6	0
	<i>New</i>	2 of 13 (15%)	0
	<i>All</i>	0 of 7	0
	OWTS	3 of 7 (42%)	0



Town of Summerhill • Cayuga County





Town of Summerhill

Cayuga County

The Town of Summerhill is located in Cayuga County and lies within the eastern portion of the Cayuga Lake watershed. The town covers an area of 25.5 square miles, 80.3 percent of which lies within the Cayuga Lake watershed. Summerhill has no shoreline on Cayuga Lake, although several contributing tributaries pass through its borders.

According to the 2000 Census, the Town of Summerhill contains 1,098 people. The town experienced a population increase of 27.4 percent between 1960 and 1980, an increase of 29.2 percent between 1980 and 2000. The median age in Summerhill is 35.5 years and the average household size is 2.79 persons. Median household income is \$39,000, with a poverty rate of 6.9 percent. There are 463 housing units in the town, 6.9 percent of which have been built since 1990. The median value of owner-occupied homes is \$71,800.

Local Laws Reviewed:

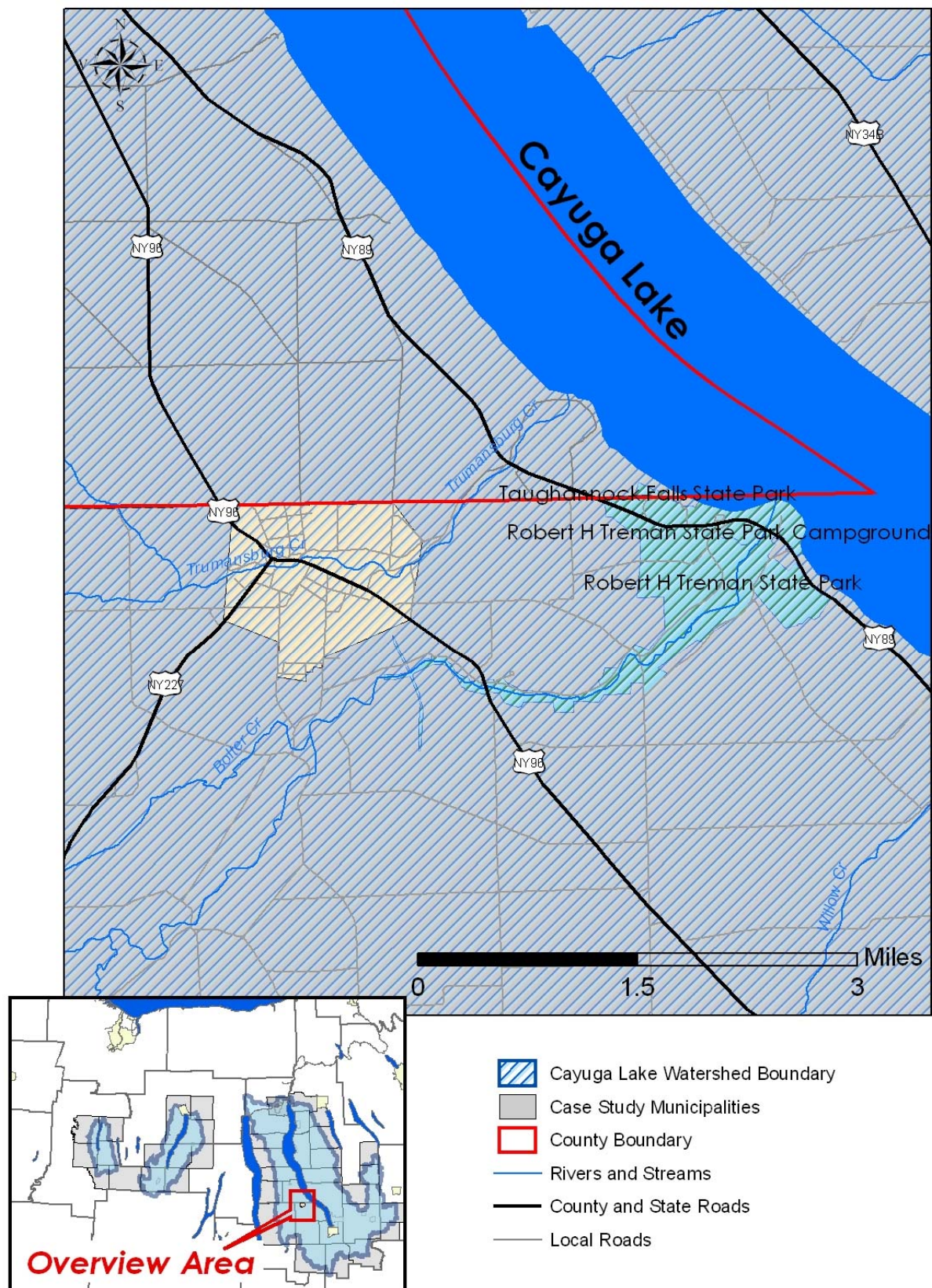
- *Town of Summerhill Local Law #1 Site Plan Review Plan, 1991*

Assessment Results:

<i>Town of Summerhill</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	25.5	14 of 42 (33%)	0
	<i>Existing Development</i>	7 of 16 (43%)	0
	<i>New Development/ Substantial Redevelopment</i>	7 of 26 (26%)	0
<i>Percent of Municipality within Watershed:</i>	80.3%	5 of 12 (41%)	0
	<i>Forestry</i>	4 of 10 (40%)	0
	<i>Agriculture</i>	1 of 2 (50%)	0
<i>Percent of Watershed within Municipality:</i>	2.86%	5 of 16 (31%)	0
	<i>Modified Waterways</i>	5 of 10 (50%)	0
	<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
	Marinas	0 of 48	48
	<i>Existing</i>	0 of 20	20
	<i>New</i>	0 of 18	18
	<i>All</i>	0 of 10	10
	Roads and Bridges	17 of 26 (65%)	0
	<i>Existing</i>	4 of 6 (66%)	0
	<i>New</i>	7 of 13 (53%)	0
	<i>All</i>	6 of 7 (85%)	0
OWTS		4 of 7 (57%)	0



Town of Trumansburg • *Tompkins County*





Village of Trumansburg

Tompkins County

The Village of Trumansburg lies within the central western portion of the Cayuga Lake watershed. The village covers an area of 1.2 square miles, 100 percent of which lies within the Cayuga Lake watershed. The village has no shoreline on Cayuga Lake but does contain contributing tributaries of the lake.

According to the 2000 Census, the Village of Trumansburg contains 1,581 people. The village experienced a population decline of 2.6 percent between 1960 and 1980, and another decrease of 8.2 percent between 1980 and 2000. The median age in the village is 41.9 years and the average household size is 2.32 persons. Median household income is \$39,423, with a poverty rate of 5 percent. There are 705 housing units in the town, 7.5 percent of which have been built since 1990. The median value of owner-occupied homes is \$112,200.

Local Laws Reviewed:

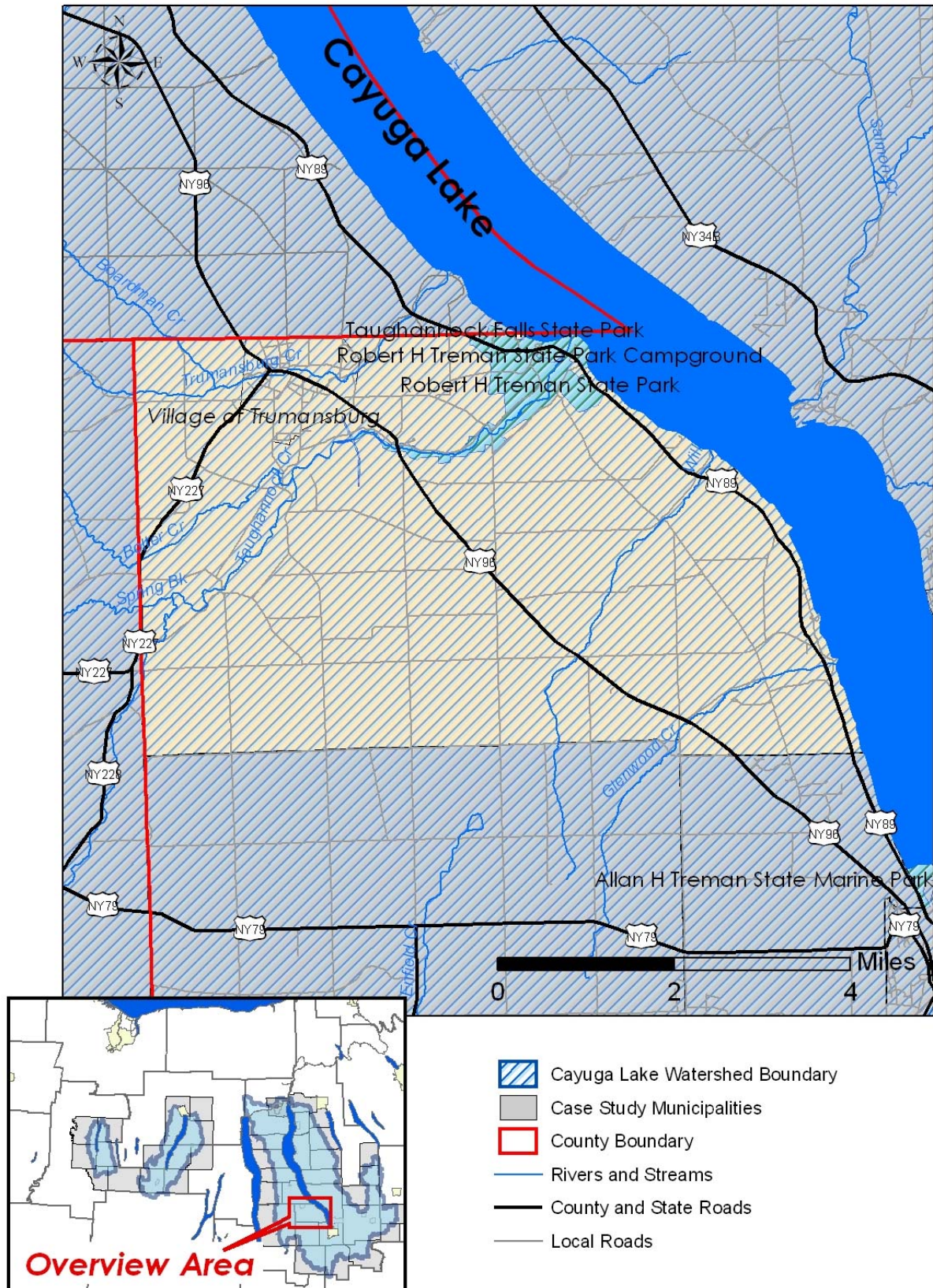
- *Village of Trumansburg Zoning Ordinance, 1971*
- *Village of Trumansburg Subdivision Regulations, 1990*
- *Village of Trumansburg Environmental Review, 1990*
- *Village of Trumansburg Environmental Quality Review, 1991*
- *Village of Trumansburg General Development Plan, 1992*
- *Village of Trumansburg Zoning Ordinance, 1993*
- *Village of Trumansburg Local Law #1: 1998 Zoning Ordinance, 1998*
- *Village of Trumansburg Subdivision Regulations, 2000*

Assessment Results:

<i>Village of Trumansburg</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	1.2	11 of 42 (26%)	0
		<i>Existing Development</i>	5 of 16 (31%)
		<i>New Development/ Substantial Redevelopment</i>	6 of 26 (23%)
			0
<i>Percent of Municipality within Watershed:</i>	100%	0 of 12	12
		<i>Forestry</i>	0 of 10
		<i>Agriculture</i>	0 of 2
			2
<i>Percent of Watershed within Municipality:</i>	.17%	1 of 16 (6%)	0
		<i>Modified Waterways</i>	0 of 10
		<i>Wetlands - Riparian Management/Restoration</i>	1 of 6 (16%)
			0
		0 of 48	48
		<i>Existing</i>	0 of 20
		<i>New</i>	0 of 18
		<i>All</i>	0 of 10
		1 of 26 (3%)	0
		<i>Existing</i>	0 of 6
		<i>New</i>	1 of 13 (7%)
		<i>All</i>	0 of 7
OWTS		2 of 7 (28%)	0



Town of Ulysses • *Tompkins County*





The Town of Ulysses lies within the southeastern portion of the Cayuga Lake watershed. The town covers an area of 32.4 square miles, 100 percent of which lies within the Cayuga Lake watershed. Ulysses has over 6 miles of shoreline on Cayuga Lake.

According to the 2000 Census, the Town of Ulysses contains 4,775 people. The town experienced a population increase of 8.3 percent between 1960 and 1980, and an increase of 2.3 percent between 1980 and 2000. The median age in Ulysses is 41.7 years and the average household size is 2.37 persons. Median household income is \$45,066, with a poverty rate of 4.3 percent. There are 2,200 housing units in the town, 11.7 percent of which have been built since 1990. The median value of owner-occupied homes is \$103,000.

The Town of Ulysses felt that there were gaps in its ability to regulate development, especially in light of increasing growth emanating from the Ithaca area, and the unique landscape of the Town, where much growth pressure is concentrated on very steep land along the Cayuga Lake shoreline. In addition, the Town of Ulysses was designated a regulated Municipal Separate Storm Sewer System (MS4) (as part of the Ithaca urbanized area) in 2003, and developing and adopting greater regulatory tools was a priority so that the Town would comply with the Minimum Measures of the Stormwater Phase II requirements.

Because Ulysses already had many of the basic land use tools (zoning, subdivision regulations, etc.), and was in the midst of a comprehensive zoning update process, the Town chose to focus on a particular aspect of that zoning update: an Environmental Protection Overlay District (EPOD). Working with the Town's Deputy Supervisor, Dick Coogan, and the Town's special Stormwater Committee, G/FLRPC provided significant assistance in developing EPOD language for the new zoning code, as well as helping the Town review various model Sediment Control and Stormwater Management Laws as required by the Phase II program.

Local Laws Reviewed:

- *Town of Ulysses Zoning Ordinance, 1978*
- *Town of Ulysses Site Plan Review Flowchart, 1998*
- *Town of Ulysses Comprehensive Land Use Plan, 1999*
- *Town of Ulysses Land Subdivision regulations*

Assessment Results:

Development		Forestry/Ag.		Water/Wetlands		Marinas		Roads/Bridges		OWTS
8 of 42 (19%)		0 of 12		0 of 16		0 of 48		17 of 26 (65%)		2 of 7 (28%)
Existing Development	5 of 16 (31%)	Forestry	0 of 10	Modified Waterways	0 of 10	Existing	0 of 20	Existing	4 of 6 (66%)	(no sub-categories)
New Development/ Substantial Redevelopment	3 of 26 (11%)	Ag..	0 of 2	Wetlands/ Riparian Management & Restoration	0 of 6	New	0 of 18	New	9 of 13 (69%)	
						All	0 of 10	All	4 of 7 (57%)	

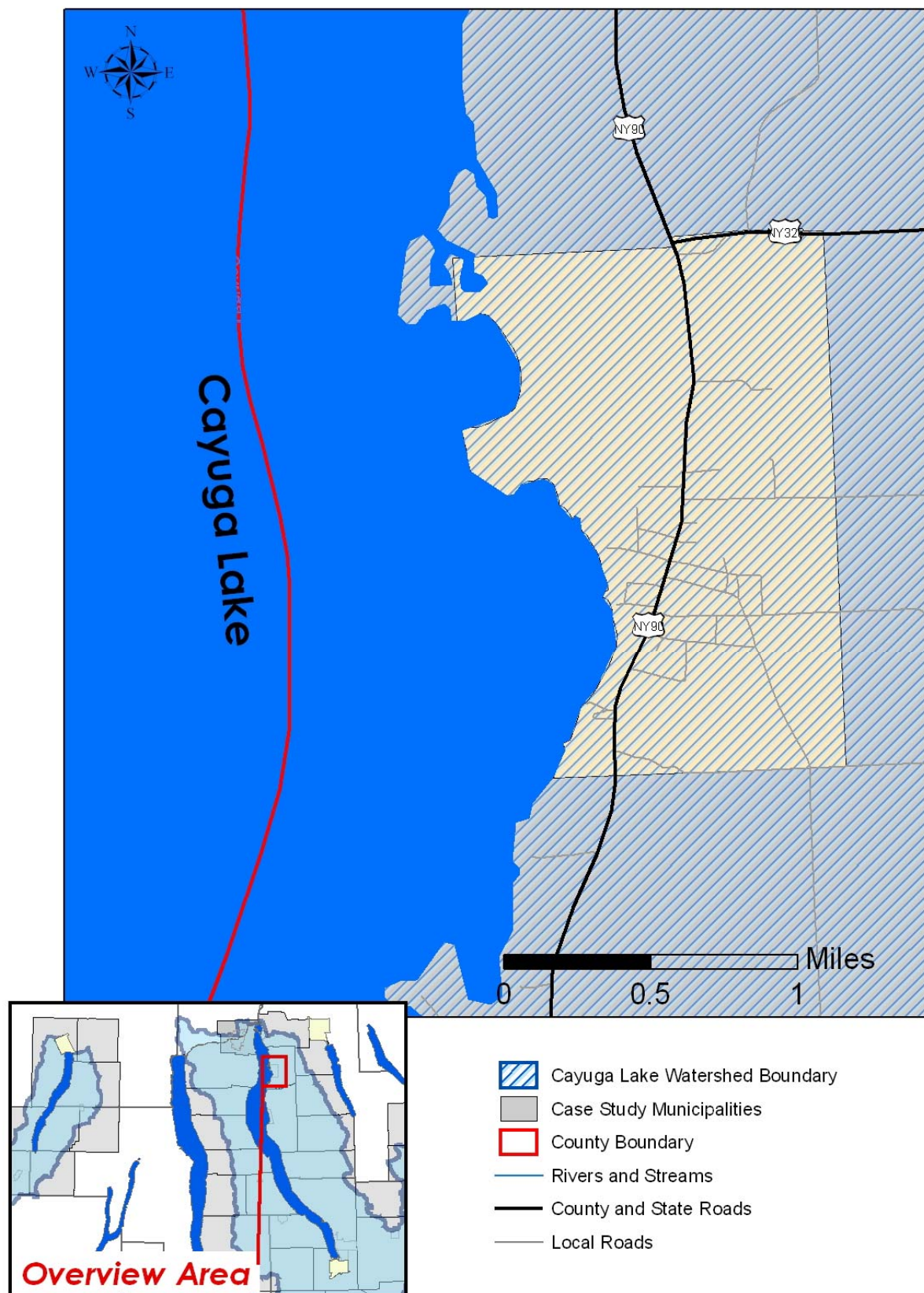
*Total Municipal
Land Area (sq miles):*
32.4

*Percent of
Municipality in
Watershed:*
100%

*Percent of
Watershed in
Municipality:*
4.52%



Village of Union Springs • Cayuga County





Village of Union Springs

Cayuga County

The Village of Union Springs lies within the northeastern portion of the Cayuga Lake watershed. The village covers an area of 1.8 square miles, 100 percent of which lies within the Cayuga Lake watershed. The village has over 2 miles of shoreline on Cayuga Lake.

According to the 2000 Census, the Village of Union Springs contains 1,074 people. The town experienced a population increase of 12.7 percent between 1960 and 1980 followed by a 10.6 percent decline between 1980 and 2000. The median age in the village is 39.6 years and the average household size is 2.5 persons. Median household income is \$42,778, with a poverty rate of 5.2 percent. There are 481 housing units in the town, 6.6 percent of which have been built since 1990. The median value of owner-occupied homes is \$75,100.

Local Laws Reviewed:

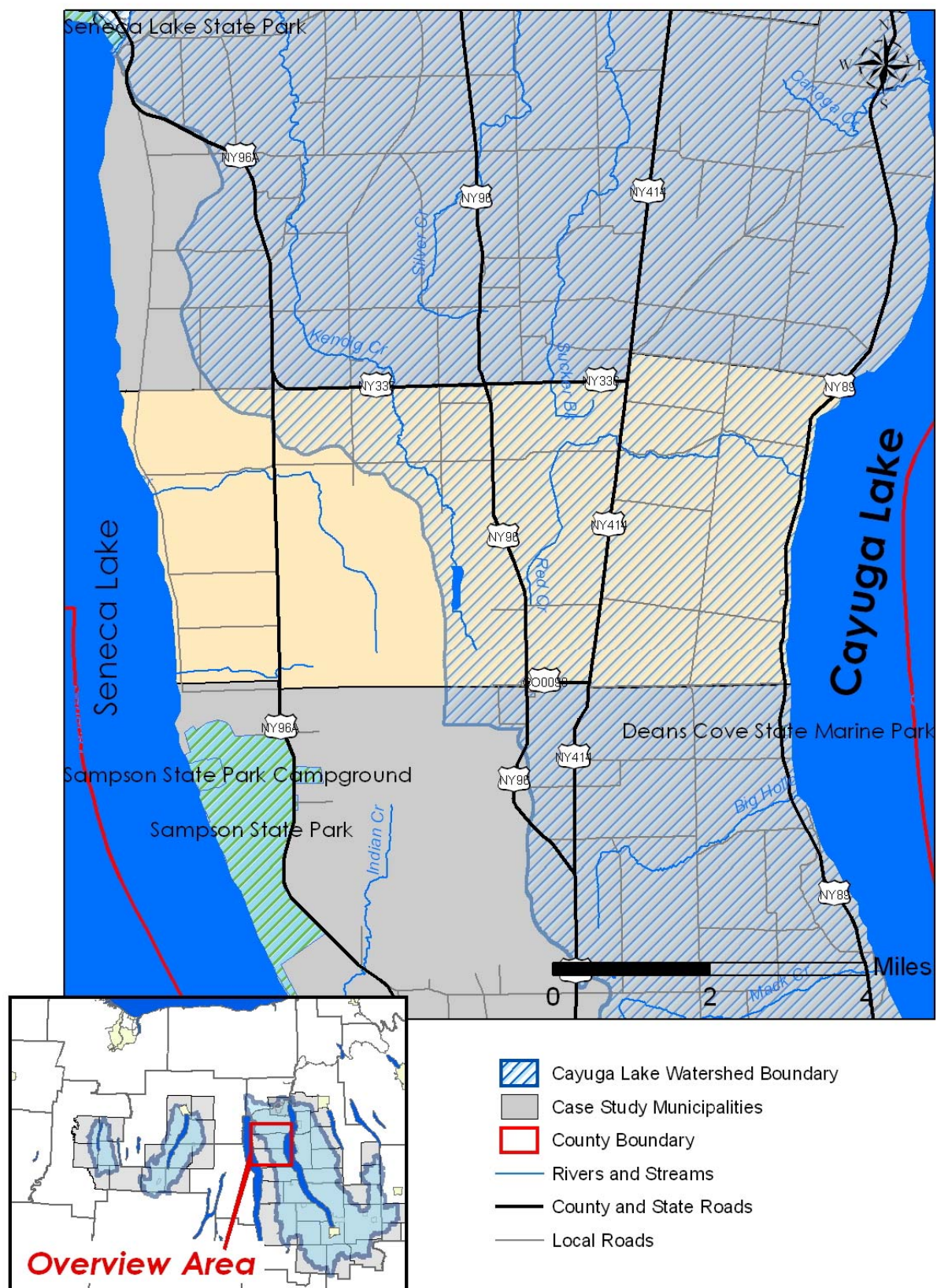
- *Village of Union Springs Policy Development Plan*, 1982
- *Village of Union Springs Local Law#3: Subdivision Regulations*, 1987
- *Village of Union Springs Zoning Ordinance*, 1987

Assessment Results:

<i>Village of Union Springs</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	Development	15 of 42 (35%)	0
	<i>Existing Development</i>	7 of 16 (43%)	0
	<i>New Development/ Substantial Redevelopment</i>	8 of 26 (30%)	0
<i>Percent of Municipality within Watershed:</i>	Forestry/Agriculture	0 of 12	12
	<i>Forestry</i>	0 of 10	10
	<i>Agriculture</i>	0 of 2	2
<i>Percent of Watershed within Municipality:</i>	Waterways/Wetlands	0 of 16	0
	<i>Modified Waterways</i>	0 of 10	0
	<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
	Marinas	0 of 48	0
	<i>Existing</i>	0 of 20	0
	<i>New</i>	0 of 18	0
	<i>All</i>	0 of 10	0
	Roads and Bridges	18 of 26 (69%)	0
	<i>Existing</i>	5 of 6 (83%)	0
	<i>New</i>	8 of 13 (61%)	0
	<i>All</i>	5 of 7 (71%)	0
	OWTS	3 of 7 (42%)	0



Town of Varick • Seneca County





The Town of Varick lies within the northwestern portion of the Cayuga Lake watershed. The town covers an area of 31.6 square miles, 45.79 percent of which lies within the Cayuga Lake watershed. Varick has over 4 miles of shoreline on Cayuga Lake.

According to the 2000 Census, the Town of Varick contains 1,729 people. The town experienced a population increase of 26.2 percent between 1960 and 1980, and then declined by 7.4 percent between 1980 and 2000. The median age in Varick is 38.1 years and the average household size is 2.73 persons. Median household income is \$40,110, with a poverty rate of 6.6 percent. There are 843 housing units in the town, 8.5 percent of which have been built since 1990. The median value of owner-occupied homes is \$89,000.

The Town of Varick demonstrated a need for assistance with development-related issues. The when the Local Laws to Protect Finger Lakes Water Quality project got underway and G/FLRPC approached the Town, Varick was in a unique situation. They were in the process of developing a new comprehensive plan jointly with the neighboring Town of Fayette, just to the north. This example of intermunicipal cooperation deserves commendation.

So, although the Comprehensive Plan process was underway, guided by a planning consulting firm, the Town felt that G/FLRPC could contribute to the process. The established process for the Comprehensive Plan was to review a different issue facing the community at each month's meeting of the Comprehensive Plan Committee. The April 2005 meeting was designated as the water resources meeting and both the Town and the consultant stressed the desire for *specific tools* that a municipality could incorporate into their comprehensive plan. That is, they already knew that water is a valuable resource and needed to be protected. What they wanted to know was *how specifically* a Town could do this.

G/FLRPC coordinated a "Water Quality Tools and Techniques Workshop" that took place at this April meeting of the Comprehensive Plan committee. Representatives from NYSDEC, Seneca Lake Pure Waters Association, Cayuga Watershed Intermunicipal Organization, and G/FLRPC spoke about agricultural issues related to water quality, onsite wastewater issues related to water quality, lakeshore development issues related to water quality, and stormwater issues. This four issues having previously been identified by the Comprehensive Plan committee as priority concerns for Varick.

Thus the real assistance provided to Varick was less of a hardcopy paper or report, but more in the coordination and organization of this workshop, which the Town found very beneficial to its Comprehensive Planning Process.



Town of Varick, cont.

📍 Targeted Municipality

Seneca County

Local Laws Reviewed:

- *Town of Varick Zoning Codes, 1975*
- *Town of Varick Local Law: Zoning Ordinance, 1975*
- *Town of Varick Subdivision Regulations, 1977*

Assessment Results:

Total Municipal
Land Area (sq miles): **31.6**

Percent of Municipality
within Watershed: **45.8%**

Percent of Watershed
within Municipality: **2.02%**

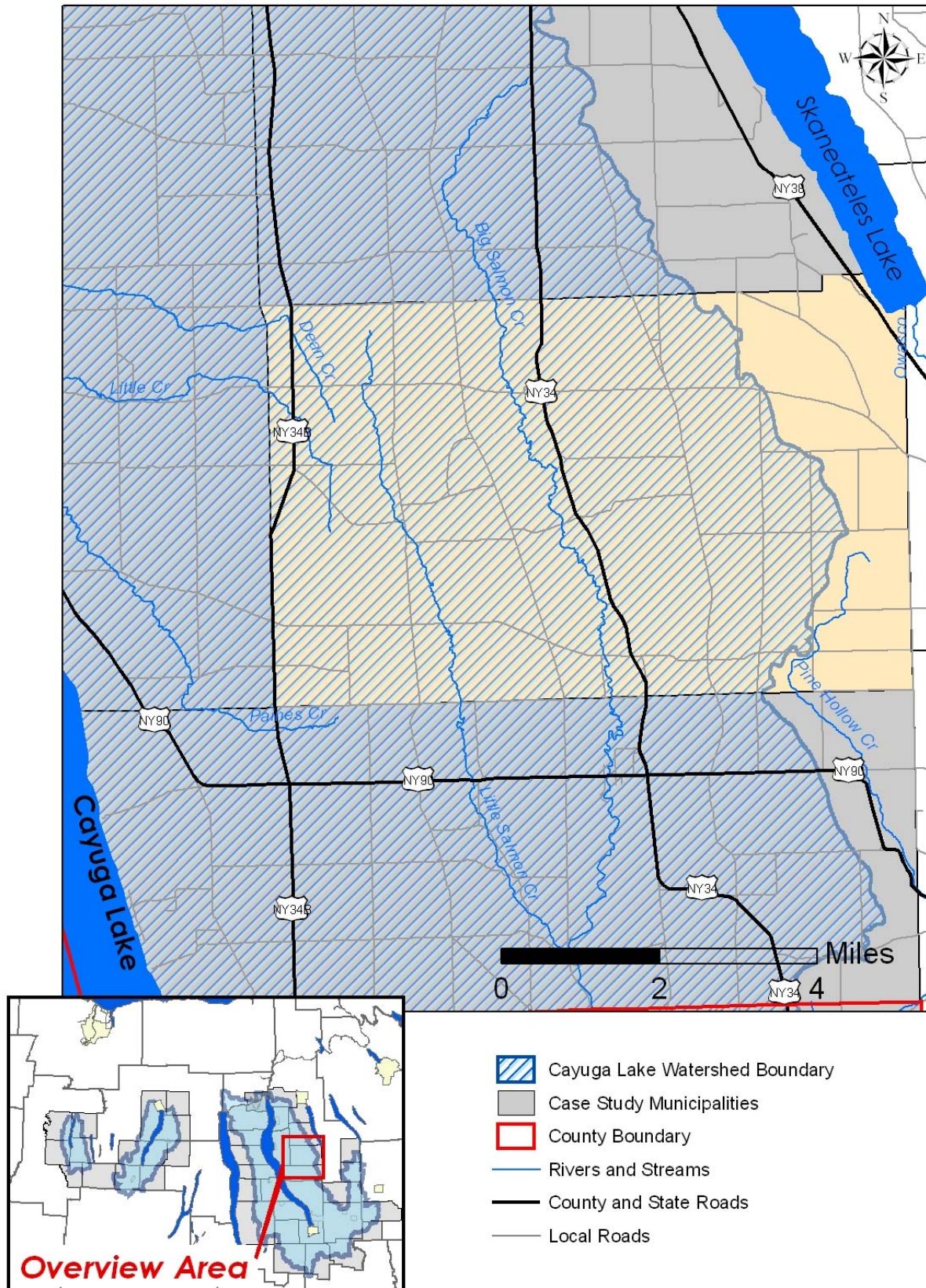
<i>Town of Varick</i>	Full or Partial Implementation	Not applicable
Development	14 of 42 (33%)	0
<i>Existing Development</i>	5 of 16 (31%)	0
<i>New Development/ Substantial Redevelopment</i>	9 of 26 (34%)	0
Forestry/Agriculture	1 of 12 (8%)	0
<i>Forestry</i>	0 of 10	0
<i>Agriculture</i>	1 of 2 (50%)	0
Waterways/Wetlands	0 of 16	0
<i>Modified Waterways</i>	0 of 10	0
<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
Marinas	0 of 48	0
<i>Existing</i>	0 of 20	0
<i>New</i>	0 of 18	0
<i>All</i>	0 of 10	0
Roads and Bridges	3 of 26 (11%)	0
<i>Existing</i>	0 of 6	0
<i>New</i>	3 of 13 (23%)	0
<i>All</i>	0 of 7	0
OWTS	1 of 7 (14%)	0



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Town of Venice • Cayuga County





Town of Venice

Cayuga County

The Town of Venice lies within the northeastern portion of the Cayuga Lake watershed. The town covers an area of 40.3 square miles, 80.13 percent of which lies within the Cayuga Lake watershed. Venice has no shoreline on Cayuga Lake but does have several tributaries that contribute to the Salmon Creek, which is a significant tributary of the lake.

According to the 2000 Census, the Town of Venice contains 1,286 people. The town experienced a population increase of 5.4 percent between 1960 and 1980, and an increase of 1.4 percent between 1980 and 2000. The median age in Venice is 36.8 years and the average household size is 2.77 persons. Median household income is \$41,184, with a poverty rate of 5.5 percent. There are 533 housing units in the town, 11.8 percent of which have been built since 1990. The median value of owner-occupied homes is \$73,300.

Local Laws Reviewed:

- No regulations on file

Assessment Results:

Total Municipal
Land Area (sq miles): **40.3**

Percent of Municipality
within Watershed: **80.1%**

Percent of Watershed
within Municipality: **4.5%**

<i>Town of Venice</i>	Full or Partial Implementation	Not applicable
Development	11 of 42 (26%)	0
<i>Existing Development</i>	7 of 16 (43%)	0
<i>New Development/ Substantial Redevelopment</i>	4 of 26 (15%)	0
Forestry/Agriculture	5 of 12 (41%)	0
<i>Forestry</i>	4 of 10 (40%)	0
<i>Agriculture</i>	1 of 2 (50%)	0
Waterways/Wetlands	0 of 16	0
<i>Modified Waterways</i>	0 of 10	0
<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
Marinas	0 of 48	0
<i>Existing</i>	0 of 20	0
<i>New</i>	0 of 18	0
<i>All</i>	0 of 10	0
Roads and Bridges	13 of 26 (50%)	0
<i>Existing</i>	4 of 6 (66%)	0
<i>New</i>	5 of 13 (38%)	0
<i>All</i>	4 of 7 (57%)	0
OWTS	3 of 7 (42%)	0



Town of Virgil

Cortland County

The Town of Virgil lies within the southeastern edge of the Cayuga Lake watershed. The town covers an area of 46.5 square miles, 39.6 percent of which lies within the Cayuga Lake watershed. While Virgil has no shoreline on Cayuga Lake, the headwaters of the Virgil Creek originate within the town.

According to the 2000 Census, the Town of Virgil contains 2,287 people.⁴ The median age in Virgil is 37.4 years and the average household size is 2.73 persons. Median household income is \$42,292, with a poverty rate of 5.2 percent. There are 985 housing units in the town, 17.9 percent of which have been built since 1990. The median value of owner-occupied homes is \$74,600.

Local Laws Reviewed:

- *Town of Virgil Zoning Law, 1979*
- *Town of Virgil Local Law #1: Subdivision Regulations, 1995*

Assessment Results:

*Total Municipal
Land Area (sq miles):* **46.5**

*Percent of Municipality
within Watershed:* **39.6%**

*Percent of Watershed
within Municipality:* **2.56%**

<i>Town of Virgil</i>	Full or Partial Implementation	Not applicable
Development	13 of 42 (30%)	0
<i>Existing Development</i>	5 of 16 (31%)	0
<i>New Development/ Substantial Redevelopment</i>	8 of 26 (30%)	0
Forestry/Agriculture	1 of 12 (8%)	0
<i>Forestry</i>	0 of 10	0
<i>Agriculture</i>	1 of 2 (50%)	0
Waterways/Wetlands	0 of 16	0
<i>Modified Waterways</i>	0 of 10	0
<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
Marinas	0 of 48	48
<i>Existing</i>	0 of 20	20
<i>New</i>	0 of 18	18
<i>All</i>	0 of 10	10
Roads and Bridges	15 of 26 (57%)	0
<i>Existing</i>	4 of 6 (66%)	0
<i>New</i>	8 of 13 (61%)	0
<i>All</i>	3 of 7 (42%)	0
OWTS	2 of 7 (28%)	0

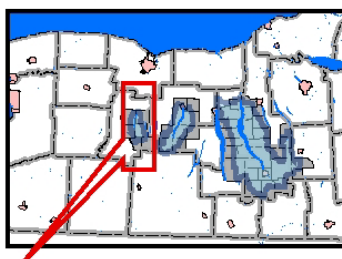
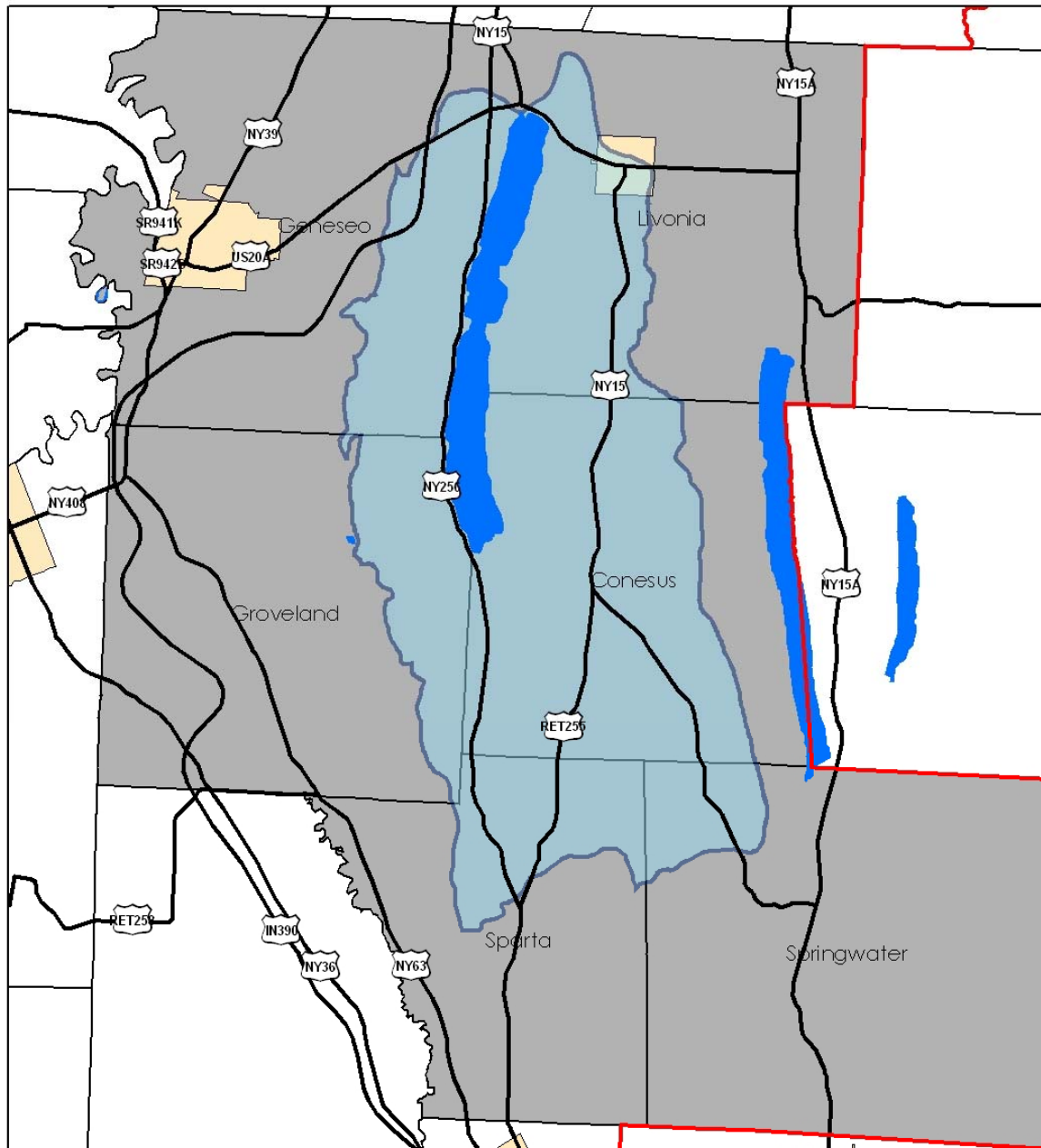
⁴ Virgil is missing population data for 1960 and 1980; no population growth/decline statement could be provided.



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Overview of the Conesus Lake Watershed



- Canandaigua Lake Watershed
- Towns within the Watershed Boundaries
- County Boundary
- Villages
- County and State Roads



0 2.5 5 Miles

Overview Area

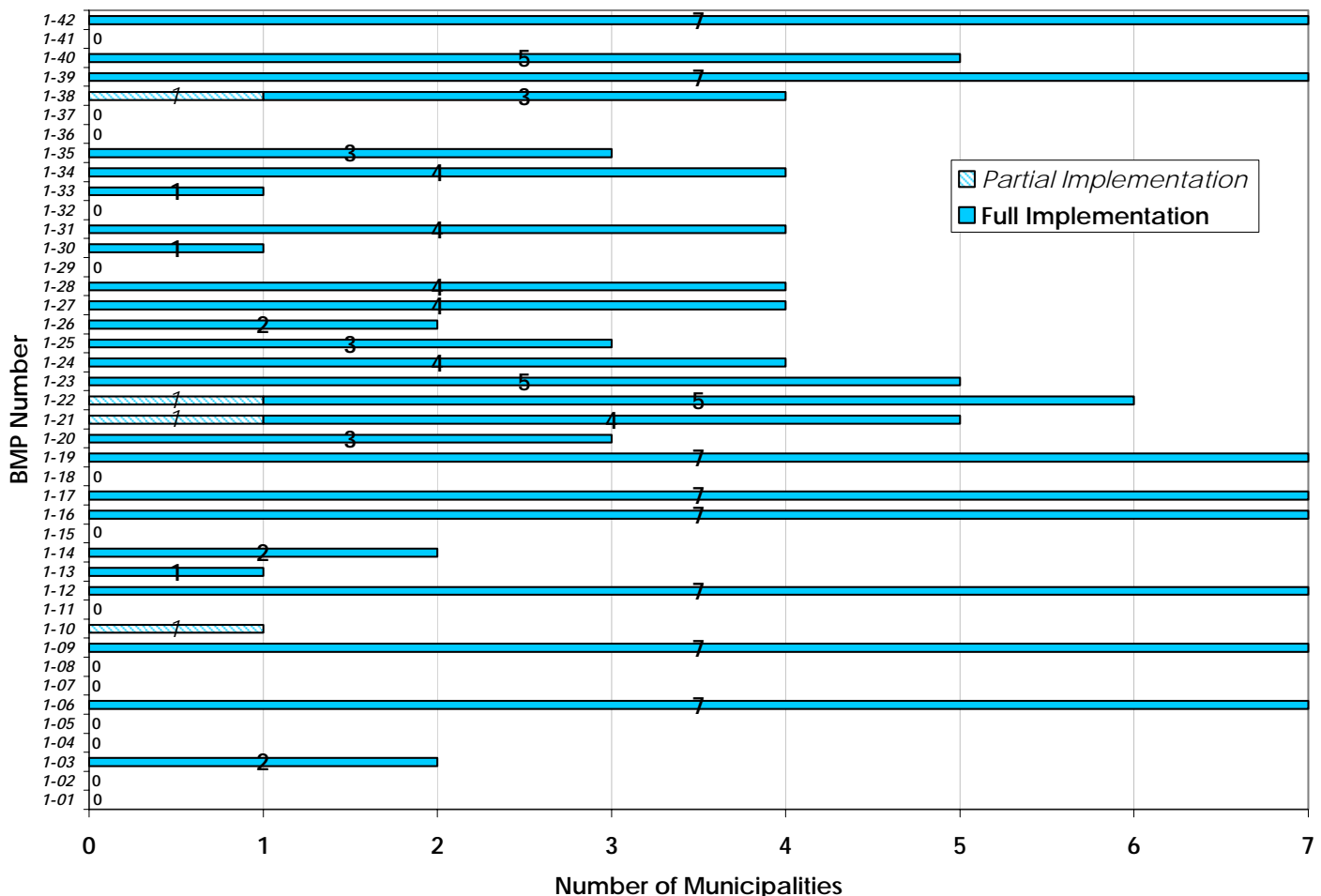


Development – Conesus Lake Watershed

Within the Conesus Lake Watershed, 28 of the 42 *Development* BMPs –nearly 67% – were found to be addressed to some degree. Those BMPs that were not found to be addressed include:

- 1-01: Identify retrofit opportunities
- 1-02: Identify habitat and natural conveyance system restoration opportunities
- 1-04: Acquire additional land for locating treatment facilities
- 1-05: Encourage homeowners to place compost piles away from waterbodies and roadways
- 1-07: Institute turf management practices on golf courses and parks and recreation areas
- 1-08: Undertake storm drain stenciling
- 1-15: Discourage feeding of waterfowl
- 1-18: Effective and consistent application and enforcement of stormwater regulations and requirements
- 1-29: Redistribute topsoil within the boundaries of the disturbed land for seeding and planting
- 1-32: Use appropriate solid and hazardous waste generation and disposal practices including source controls and recycling
- 1-36: Require tree surveys and/or cutting plans
- 1-37: Develop priority list for BMP's - use of vegetative low areas for retention/infiltration
- 1-41: For redevelopment, employ regulations that provide for technologically advanced (on and off) site wastewater treatment systems to optimize efficiencies and address "challenging" sites

Development: Conesus Lake Watershed





Forestry and Agriculture – Conesus Lake Watershed

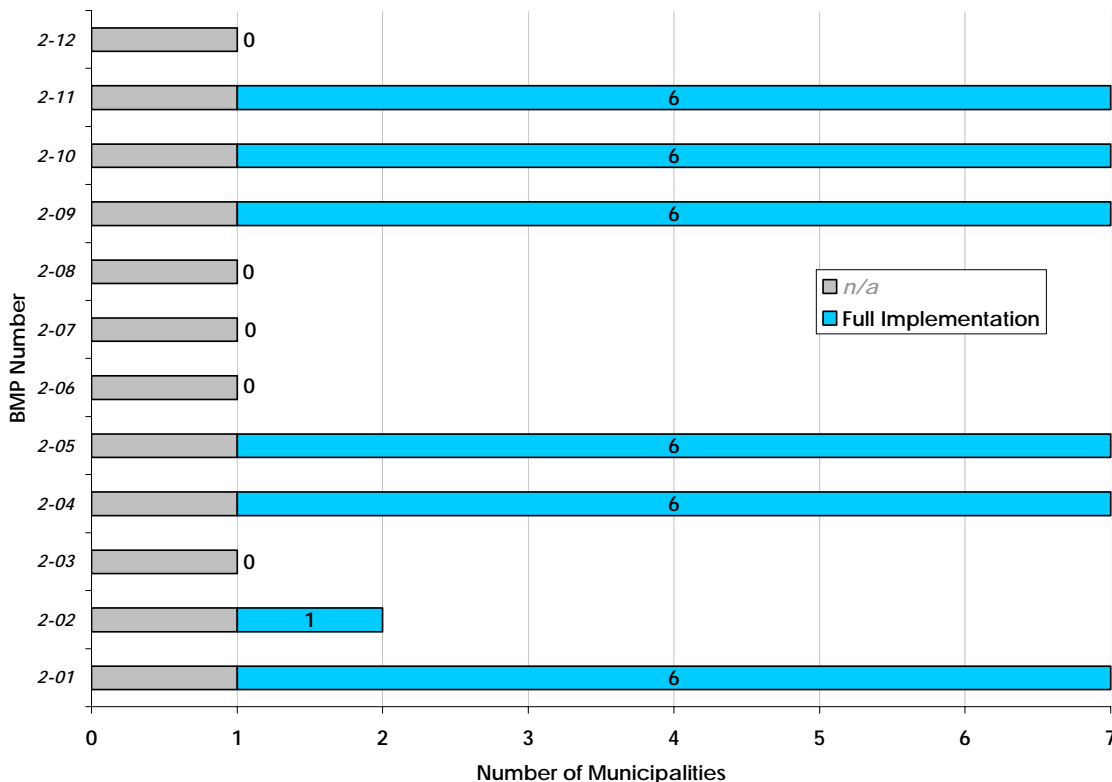
Within the Conesus Lake watershed, 7 of 12 *Forestry and Agriculture* BMPs – or 58% – were found to be implemented to some degree. Those BMPs that were not found include:

- **2-03:** Seasonal preference for logging operations
- **2-06:** Limit grades of access roads.
- **2-07:** Require stabilization of roads/drives to forestry site
- **2-08:** Employ natural topography and contour for design of road network
- **2-12:** Require farms seeking agricultural value assessment to participate in AEM

One municipality – the Village of Livonia – was not considered capable of supporting viable forestry or agricultural operations. It was determined that the remaining municipalities in the watershed were effectively addressing six BMPs. This can be directly attributed to a model demonstration project that is currently taking place throughout the watershed. Known as the “Upland Watershed Protection Program,” the initiative will fund projects to reduce the flow of sediment and nutrients into the lake and its tributary streams. Specific farm projects include assisting farmers with terrace systems, agricultural run-off, gutter systems, concrete pads, and fencing in the Southwest Creek, Northwest Creek, and Cottonwood sub-watersheds, thereby addressing the BMPs illustrated below across a the entire case-study area. .

As stated earlier, BMP 2-11 (AEM) is addressed throughout all of the watersheds in the case study area.

Forestry and Agriculture: Conesus Lake Watershed



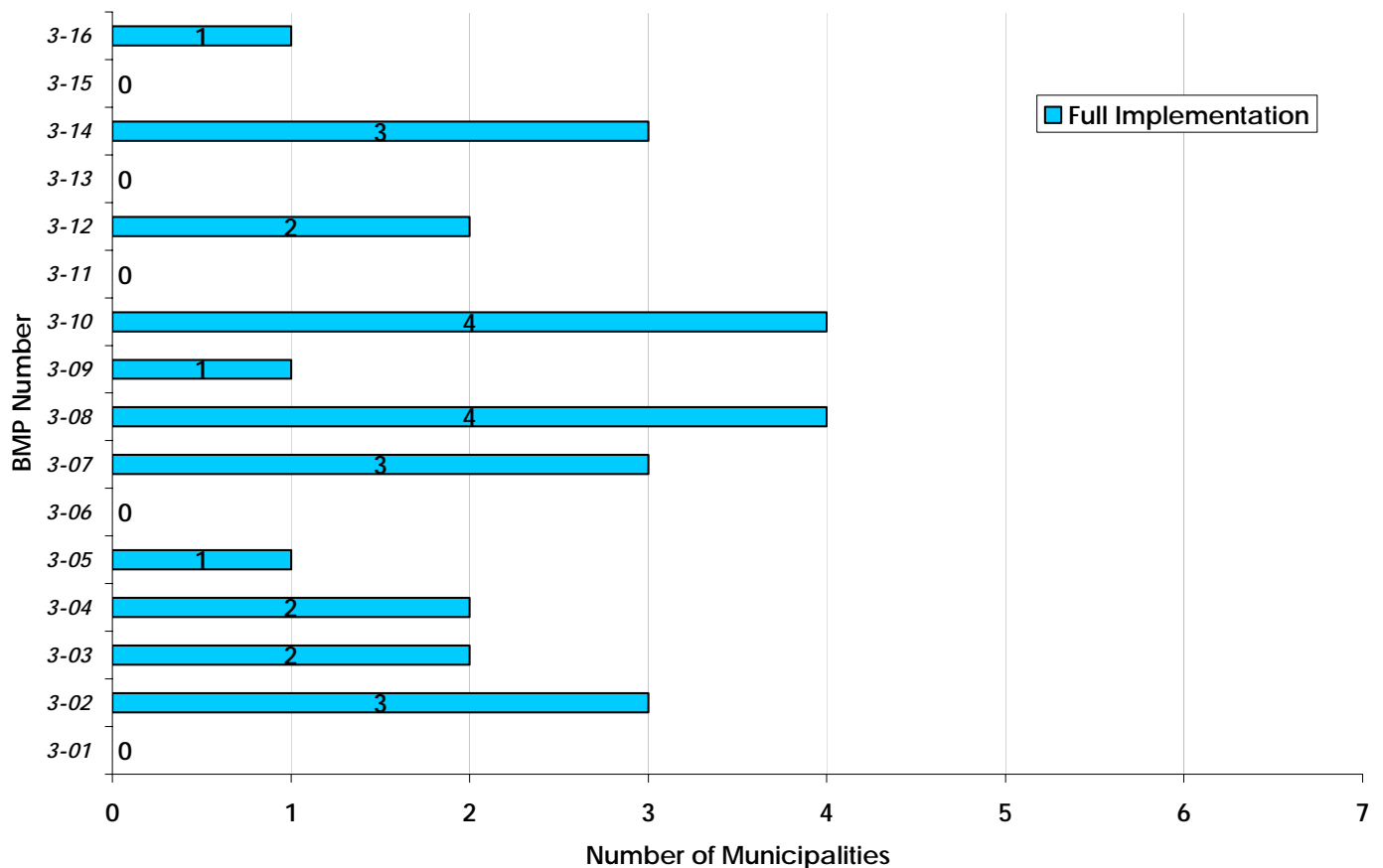


Waterways and Wetlands – *Conesus Lake Watershed*

Within the Conesus Lake watershed, 11 of 16 – or 69% – of the BMPs under *Waterways and Wetlands* are being addressed to some degree. Those BMPs that were not found to be addressed included:

- **3-01:** Develop an operation and maintenance program for existing modified streams that includes identification of opportunities and actions to restore habitat and the physical and chemical characteristics of these streams
- **3-06:** Design and construct shore erosion control facilities, in accordance with an erosion and sedimentation control plan, in areas where marsh creation and soil bioengineering are ineffective or where existing protection methods are being flanked or are falling
- **3-11:** Consider wetlands and riparian areas and their non-point source (nps) control potential on a watershed scale
- **3-13:** Conduct permitting, licensing, certification and non-regulatory nps pollution activities in a manner that protects wetland functions
- **3-15:** Use appropriate pretreatment practices such as vegetated systems or detention or retention basins to prevent adverse impacts to wetland functions that affect nps pollution abatement from hydrologic changes, sedimentation, or contaminants

Waterways and Wetlands: Conesus Lake Watershed





Marinas – *Conesus Lake Watershed*

Within the Conesus Lake Watershed, 2 of 38 BMPs under *Marinas* –or 5% – were found to be addressed to some degree. This low showing of BMP implementation among marinas can be attributed to a variety of reasons, including:

- Three out of the seven municipalities in the watershed are without significant waterfront space or are not likely to have the opportunity to locate a new marina.
- There was 1 site in the Conesus Lake watershed that could be classified as a municipally-run marina – Vitale Park (a.k.a. Sand Point). While the site occupied a relatively large land area, the site contained mainly day-use slips for visiting boats. It did not offer an array of amenities that one would expect to find at a large marina.
- On-the-ground BMPs practiced among private marinas and state-managed marinas fell outside of the scope of this analysis. To this end, the remainder of marinas found within the Conesus Lake watershed were found to be either: a) privately operated and not subject to local ordinances regarding activities on or near marinas or b) administered by state agencies (NYSDEC, Office of Parks, Recreation and Historic Preservation), which are exempt from most local laws.

The following *Marina* BMPs were found during a site visit to Vitale Park in the Town of Livonia:

- **4-03:** Provide proper disposal/recycling facilities to marina patrons, preferably covered receptacles
- **4-09:** Target outreach programs about proper disposal at marina patrons through the use of signs, mailings, and other means

[The chart for *Marinas* has been omitted due to a lack of significant data to illustrate.]



Roads and Bridges – *Conesus Lake Watershed*

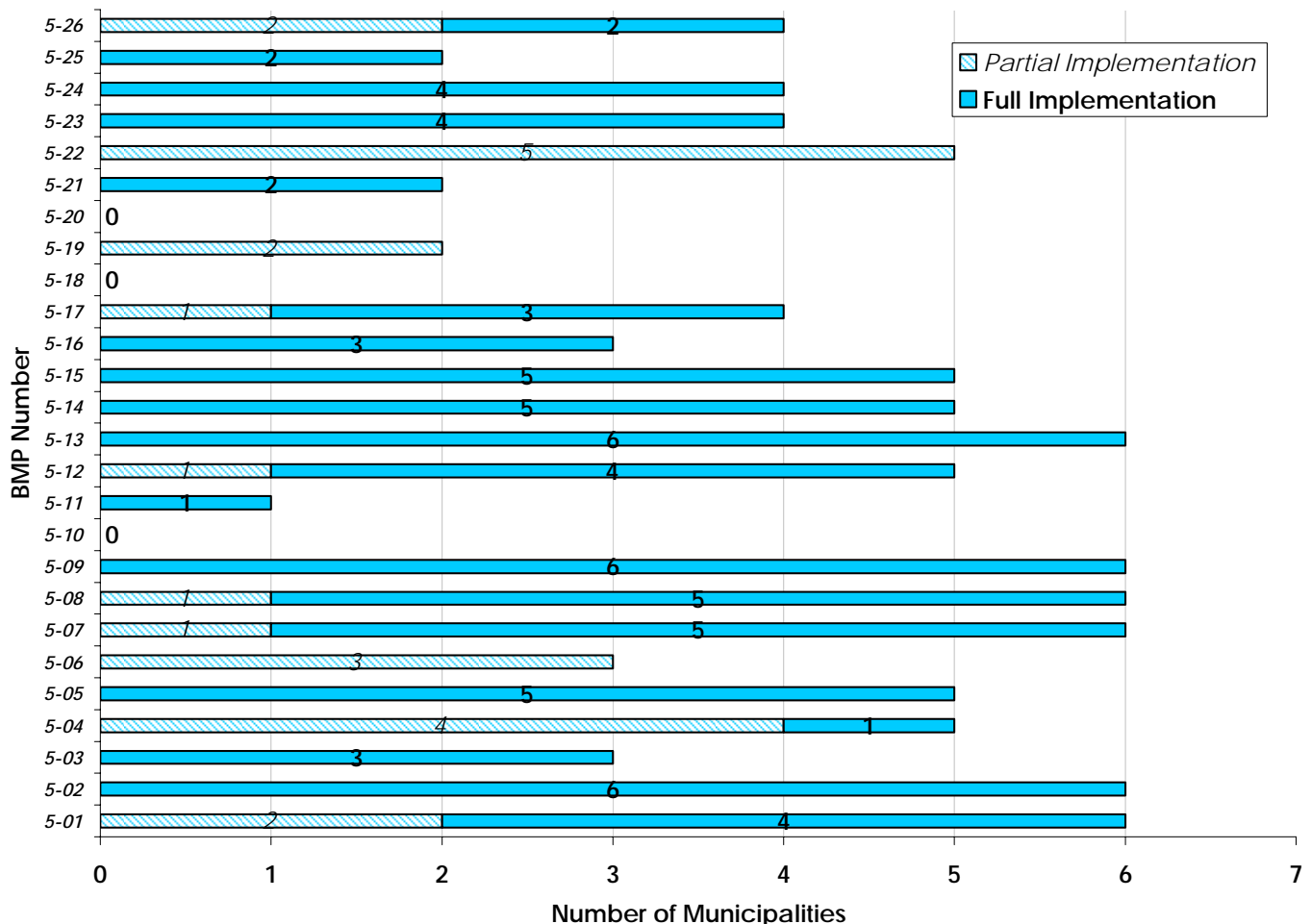
Within the Conesus Lake Watershed, 25 of 26 BMPs under *Roads and Bridges* – or 96% – were found to be addressed to some degree. The BMP that was not found to be addressed was:

- **5-10:** Retain additional runoff sites
- **5-18:** Require long-term stormwater management plan
- **5-20:** Target existing public holdings, such as parks, for removing unnecessary impervious surfaces

The description for BMP 5-10 was somewhat vague, making it difficult to find specific applications of this BMP in any of the three watersheds. Furthermore, considering that the entire Conesus Lake watershed is very rural, the absence of mandates for long-term stormwater management plans was not surprising.

It is also important to note that two municipalities – the Town of Livonia and Springwater – were unable to provide input regarding this analysis. Even so, a high level of BMP implementation was found under this category.

Roads and Bridges: Conesus Lake Watershed





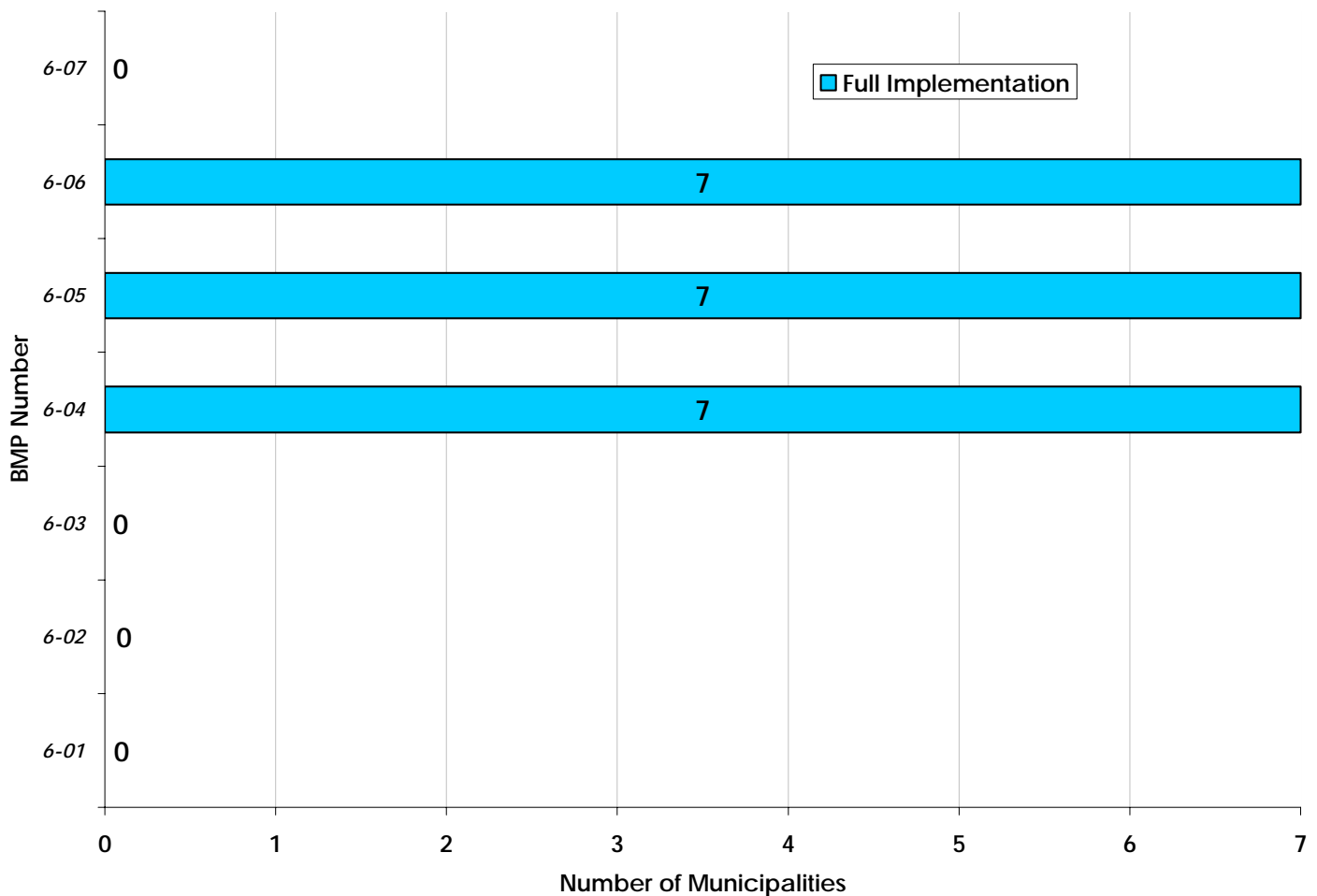
OWTS – Conesus Lake Watershed

Within the Conesus Lake Watershed, 3 of 7 BMPs under *Onsite Wastewater Treatment Systems* were found to be fully addressed throughout the watershed. The BMPs that were not found to be addressed include:

- **6-01:** Conduct regular inspections of OWTS at a frequency adequate to determine failure and undertake required maintenance
- **6-02:** Institute setback guidelines
- **6-03:** Promulgate plumbing codes that require practices that are compatible with OWTS
- **6-07:** Set goals for effluent limits (nitrogen, phosphorous, BOD, etc)

While mandatory, routine inspections of OWTSs provide the best mechanism for decreasing the risk of failing systems across a wide area, education and outreach and inspections at property transfers are two very important steps that are covered throughout this watershed. Furthermore, the entire shoreline area of the lake has been provided with a centralized sewer system, eliminating the concern of failing septic systems in the near-shore area of the lake.

Onsite Wastewater Treatment Systems: Conesus Lake Watershed





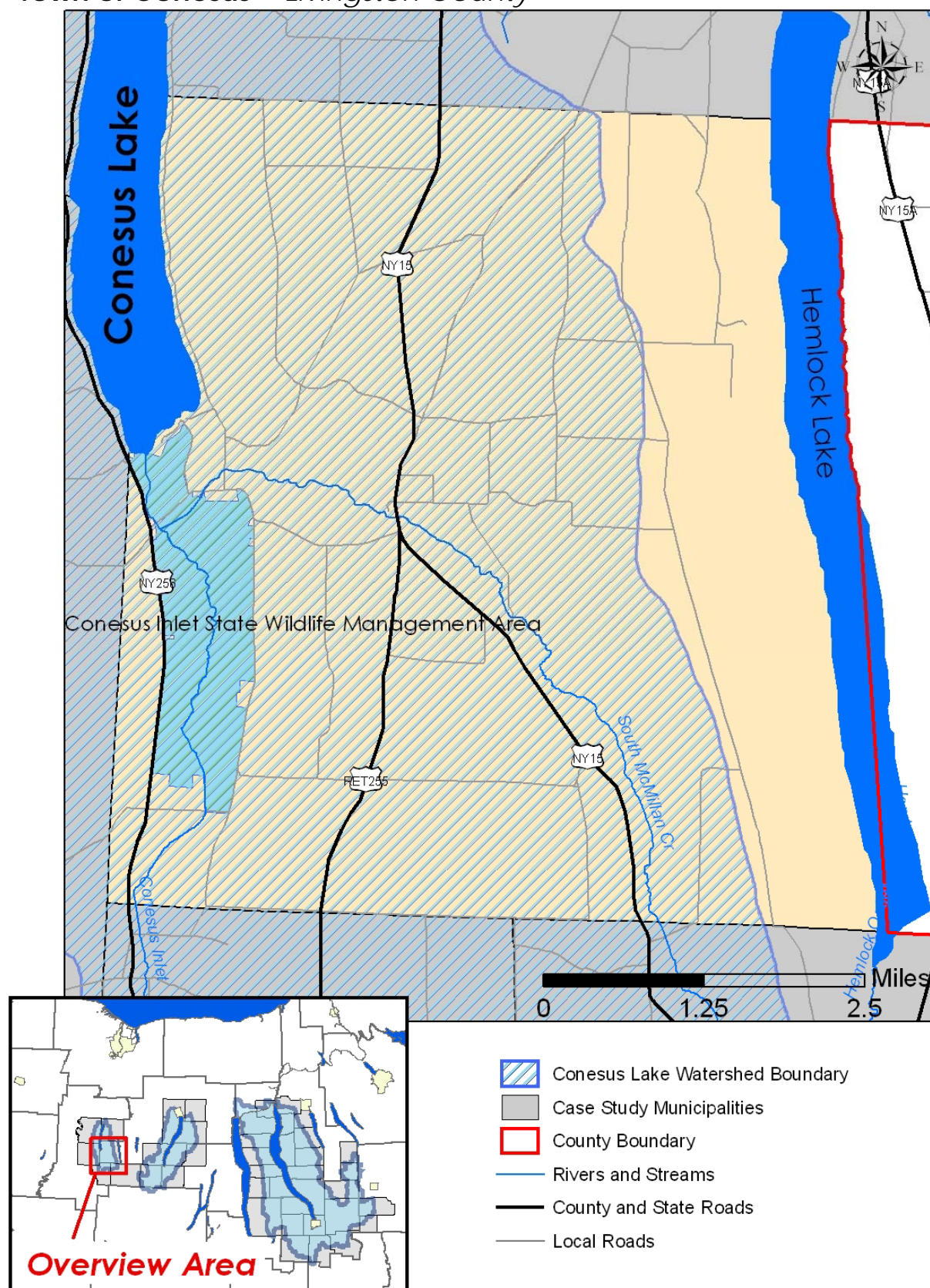
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Municipal Summaries for the Conesus Lake Watershed



Town of Conesus • Livingston County





The Town of Conesus lies within the central eastern portion of the Conesus Lake watershed. The town covers an area of 32.3 square miles, 77.5 percent of which lies within the Conesus lake watershed. Conesus has approximately 3.5 miles of shoreline on Conesus Lake.

According to the 2000 Census, the town of Conesus contains 2,353 people. Conesus experienced a population increase of 61.3 percent between 1960 and 1980 and an increase of 19.4 percent between 1980 and 2000. The median age in Conesus is 37.5 years and the average household size is 2.69 persons. Median household income is \$48,200, with a poverty rate of 3.9 percent. There are 963 housing units in the Town, 19 percent of which have been built since 1990. The median value of owner-occupied homes is \$100,900.

Although showing a relatively high percentage of BMP implementation, the Town of Conesus desired more tools to assist with development-related issues. The when the Local Laws to Protect Finger Lakes Water Quality project got underway and G/FLRPC approached the Town, Conesus was in the process of developing a new comprehensive plan.

So, although the Comprehensive Plan process was underway, guided by a planning consulting firm, the Town and the consultant felt that G/FLRPC could contribute to the process. The established process for the Comprehensive Plan was to review a different issue facing the community at each month's meeting of the Comprehensive Plan Committee. The October 2004 meeting was designated as the water resources meeting at which G/FLRPC presented on the importance of including water resource protecting in a Comprehensive Plan and building on the work done as part of Conesus Lake Watershed Management Plan.

In addition, the Town wanted particular protections for areas of steep slopes, so G/FLRPC developed Environmental Protection Overlay District (EPOD) language for eventual inclusion in any re-codified zoning that would come out of the Comprehensive Planning process.

Local Laws Reviewed:

- *Town of Conesus Zoning Ordinance, 1997*
- *Town of Conesus Zoning: Chapter 155, 2002*
- *Town of Conesus Subdivision of Land: Chapter 134, 2002*
- *Town of Conesus Erosion and Sediment Control Law*

Assessment Results:

Development		Forestry/Ag.		Water/Wetlands		Marinas		Roads/Bridges		OWTS
20 of 42 (47%)		6 of 12 (50%)		5 of 16 (31%)		0 of 48		22 of 26 (84%)		3 of 7 (42%)
Existing Development	5 of 16 (31%)	Forestry	5 of 10 (50%)	Modified Waterways	5 of 10 (50%)	Existing	0 of 20	Existing	6 of 6 (100%)	(no sub-categories)
New Development/ Substantial Redevelopment	15 of 26 (57%)	Ag..	1 of 2 (50%)	Wetlands/ Riparian Management & Restoration	0 of 6	New	0 of 18	New	10 of 13 (76%)	
						All	0 of 10	All	6 of 7 (85%)	

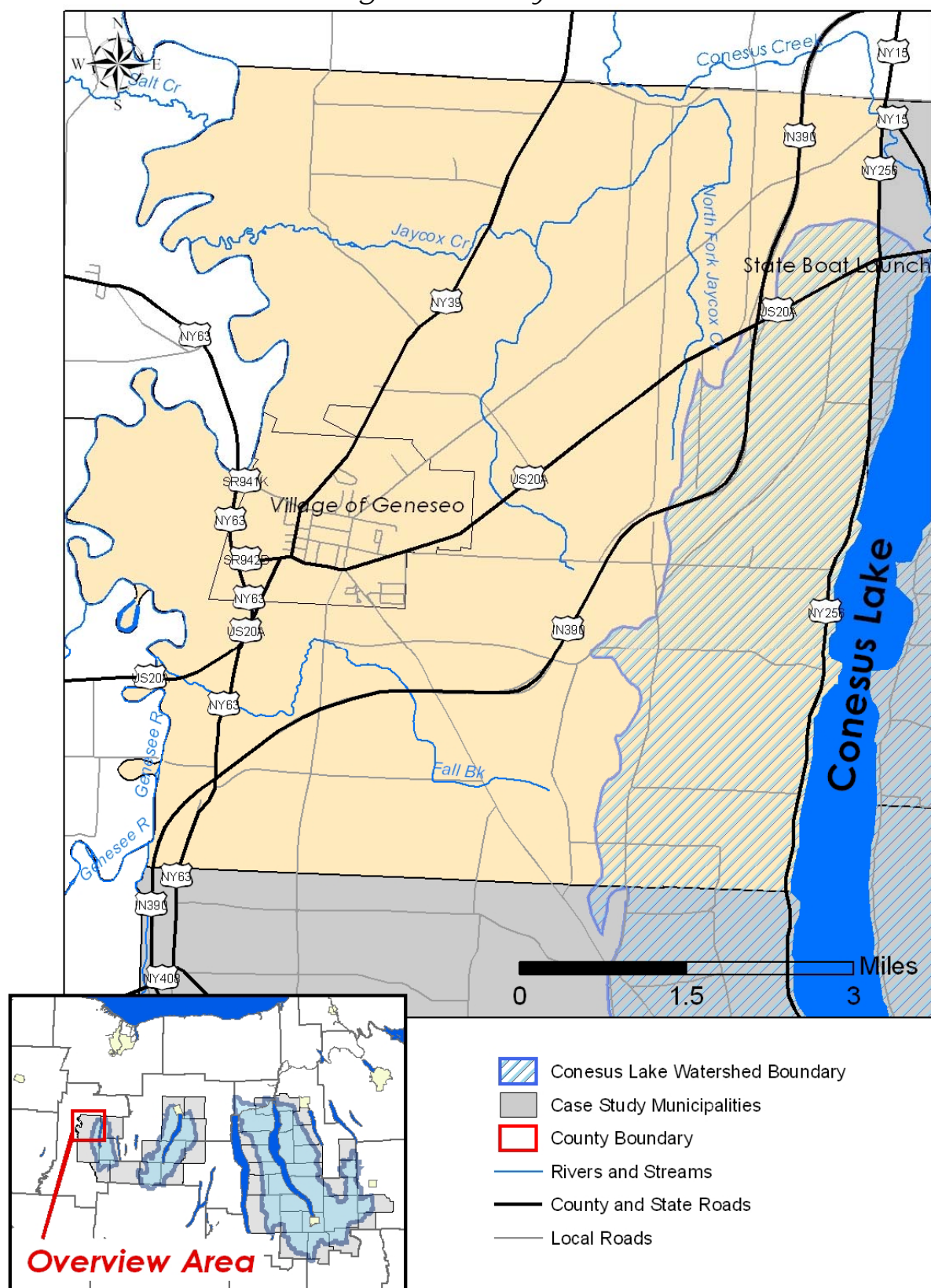
*Total Municipal
Land Area (sq miles):*
32.3

*Percent of
Municipality in
Watershed:*
77.5%

*Percent of
Watershed within
Municipality:*
29.44%



Town of Geneseo • Livingston County





The Town of Geneseo lies within the northwestern portion of the Conesus Lake watershed. The town covers an area of 43.2 square miles, 20.1 percent of which lies within the Conesus lake watershed. Geneseo has approximately 4 miles of shoreline on Conesus Lake, which is largely developed with seasonal and year-round lakefront homes.

According to the 2000 Census, the Town of Geneseo contains 9,654 people. This includes the campus of SUNY Geneseo and the Village of Geneseo. The town experienced 100 percent population growth between 1960 and 1980; the town then grew by 11.3 percent between 1980 and 2000. The median age in Geneseo is 21.6 years and the average household size is 2.53 persons. Median household income is \$40,660, with a poverty rate of 8.7 percent. There are 2,663 housing units in the Town, 14.7 percent of which have been built since 1990. The median value of owner-occupied homes is \$114,100.

The Town of Geneseo viewed waterway protection as one of its primary gaps in local law, one of the few targeted municipalities to focus on this issue. Development in Geneseo was a primary concern, however the Town had many existing regulatory tools to use. The impact that development had on the streams in the Town was one area that lacked required attention. Largely due to an enthusiastic Town Planning Board, in particular, Planning Board member Dwight Folts, G/FLRPC provided assistance in reviewing techniques to protect sensitive riparian lands. With the input of the Planning Board and Code Enforcement officer, the technique to be utilized was revisions to the existing Sediment and Erosion Control Law to provide additional protection to riparian buffer areas.

Local Laws Reviewed:

- *Town of Geneseo Comprehensive Plan, 1992*
- *Town of Geneseo Subdivision of Land Code: Chapter 93, 1999*
- *Town of Geneseo Zoning Regulations: Chapter 106, 2002*
- *Town of Geneseo Erosion and Sediment Control: Chapter 54, 2002*

Assessment Results:

Development		Forestry/Ag.		Water/Wetlands		Marinas		Roads/Bridges		OWTS
17 of 42 (40%)		6 of 12 (50%)		3 of 16 (18%)		0 of 48		17 of 26 (65%)		3 of 7 (42%)
Existing Development	4 of 16 (25%)	Forestry	5 of 10 (50%)	Modified Waterways	3 of 10 (30%)	Existing	0 of 20	Existing	5 of 6 (83%)	(no sub-categories)
New Development/ Substantial Redevelopment	13 of 26 (50%)	Ag..	1 of 2 (50%)	Wetlands/ Riparian Management & Restoration	0 of 6	New	0 of 18	New	10 of 13 (76%)	
						All	0 of 10	All	2 of 7 (28%)	

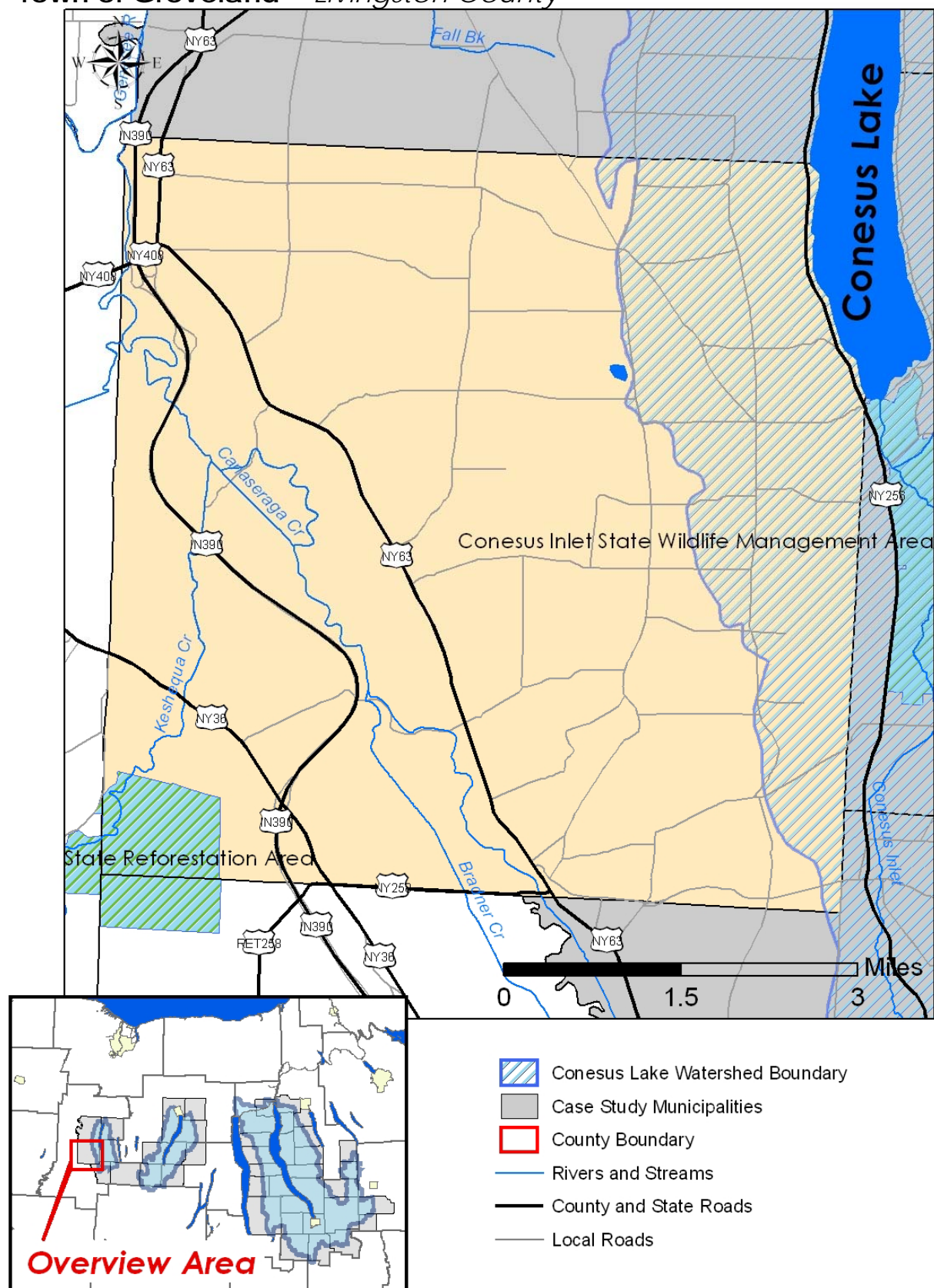
*Total Municipal
Land Area (sq miles):*
43.2

*Percent of
Municipality in
Watershed:*
21.0%

*Percent of
Watershed within
Municipality:*
10.65%



Town of Groveland • Livingston County





The Town of Groveland lies within the central southern portion of the Conesus Lake watershed. The town covers an area of 38.5 square miles, 19.9 percent of which lies within the Conesus lake watershed. Groveland has approximately 2 miles of shoreline on Conesus Lake.

According to the 2000 Census, the town of Groveland contains 3,853 people. The town experienced a population decline of 11.5 percent between 1960 and 1980 but then an increase of 80 percent between 1980 and 2000. The median age in Groveland is 35.9 and the average household size is 2.63 persons. Median household income is \$46,797, with a poverty rate of 7.7 percent. There are 648 housing units in the Town, 6.1 percent of which have been built since 1990. The median value of owner-occupied homes is \$ 91,800.

The Town of Groveland identified three gaps in its land use review and control laws. First, the Town wanted to adopt a Junk Storage Law, which not only serves to protect the aesthetics of the Town, but also its environment and water resources. This law was developed by G/FLRPC with the active input of the Town's Planning Board. Second, the Town had a significant issue with dock placement problems on Conesus Lake, especially with regard to coves and bays. Working with the Planning Board and the Code Enforcement Officer, Ron Maxwell, G/FLRPC provided revisions to the existing Docks and Moorings Law. Finally, the Town had a zoning ordinance dating from 1966 that was pretty much unworkable in terms of its readability and ease of use. G/FLRPC re-codified this zoning ordinance, integrating changes since 1966, and providing a clear, concise, land use regulatory tool for the Town to use.

Local Laws Reviewed:

- *Town of Groveland Building Permits Fee Schedule, 1989*
- *Town of Groveland Land Subdivision Fee Schedule, 1993*
- *Town of Groveland Zoning Map, 2001*

Assessment Results:

Development		Forestry/Ag.		Water/Wetlands		Marinas		Roads/Bridges		OWTS
15 of 42 (35%)		6 of 12 (50%)		1 of 16 (6%)		0 of 48		20 of 26 (76%)		3 of 7 (42%)
<i>Existing Development</i>	<i>4 of 16 (25%)</i>	<i>Forestry</i>	<i>5 of 10 (50%)</i>	<i>Modified Waterways</i>	<i>0 of 10</i>	<i>Existing</i>	<i>0 of 20</i>	<i>Existing</i>	<i>6 of 6 (100%)</i>	<i>(no sub-categories)</i>
<i>New Development/ Substantial Redevelopment</i>	<i>11 of 26 (42%)</i>	<i>Ag..</i>	<i>1 of 2 (50%)</i>	<i>Wetlands/ Riparian Management & Restoration</i>	<i>1 of 6 (16%)</i>	<i>New</i>	<i>0 of 18</i>	<i>New</i>	<i>8 of 13 (61%)</i>	
						<i>All</i>	<i>0 of 10</i>	<i>All</i>	<i>6 of 7 (85%)</i>	

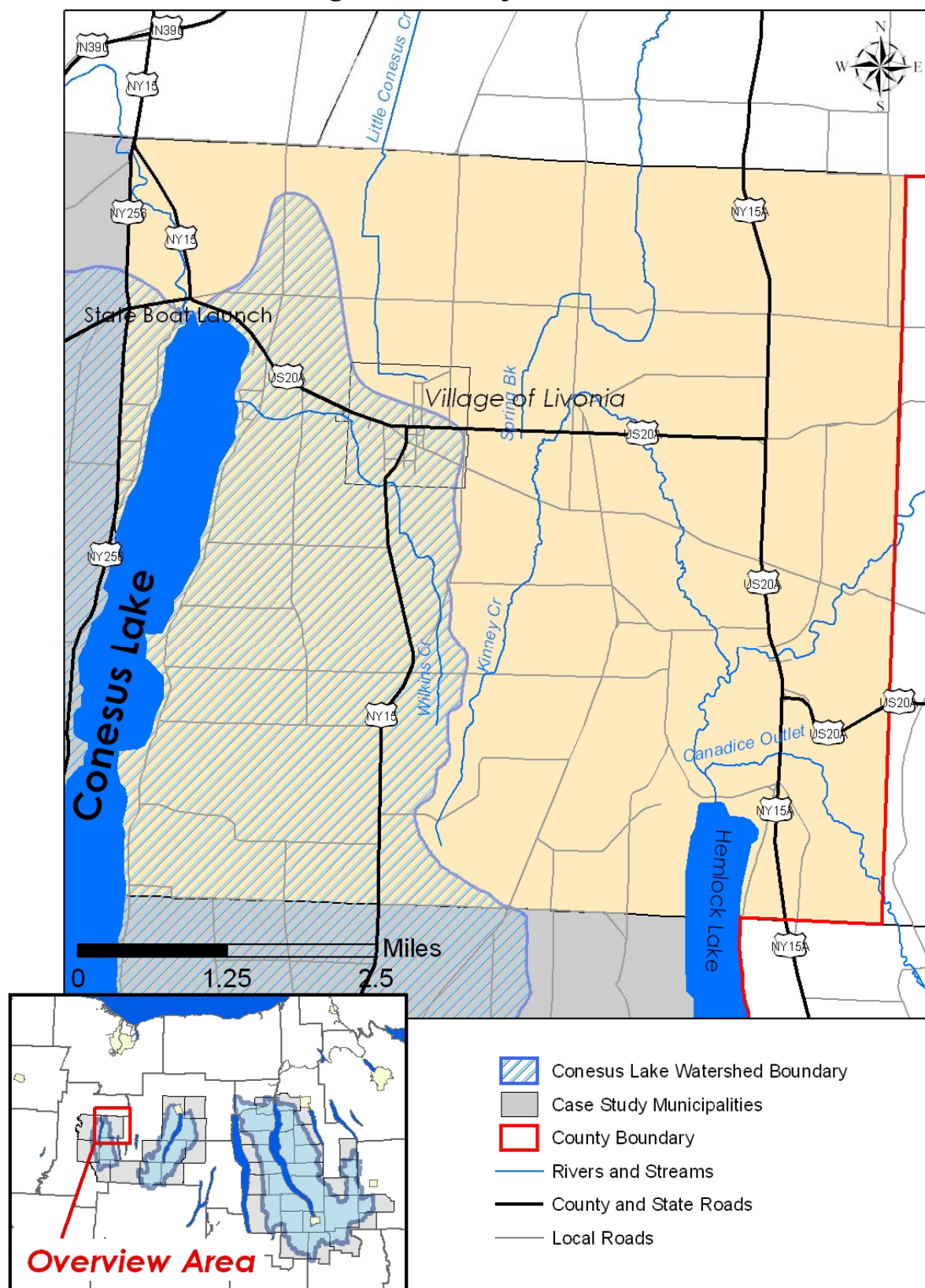
Total Municipal Land Area (sq miles):
38.5

Percent of Municipality in Watershed:
19.9%

Percent of Watershed within Municipality:
9.01%



Town of Livonia • Livingston County





Town of Livonia

Livingston County

The Town of Livonia lies within the northeastern portion of the Conesus Lake watershed. The town covers an area of 37.6 square miles, 30.6 percent of which lies within the Conesus lake watershed. Livonia has approximately 7.75 miles of shoreline on Conesus Lake.

According to the 2000 Census, the town of Livonia contains 7,286 people. Livonia experienced a population increase of 55.2 percent between 1960 and 1980 and an increase of 33.2 percent between 1980 and 2000. The median age in Livonia is 36.9 years and the average household size is 2.68 persons. Median household income is \$51,197, with a poverty rate of 2.6 percent. There are 3,004 housing units in the town, 19.4 percent of which have been built since 1990. The median value of owner-occupied homes is \$ 95,400.

Local Laws Reviewed:

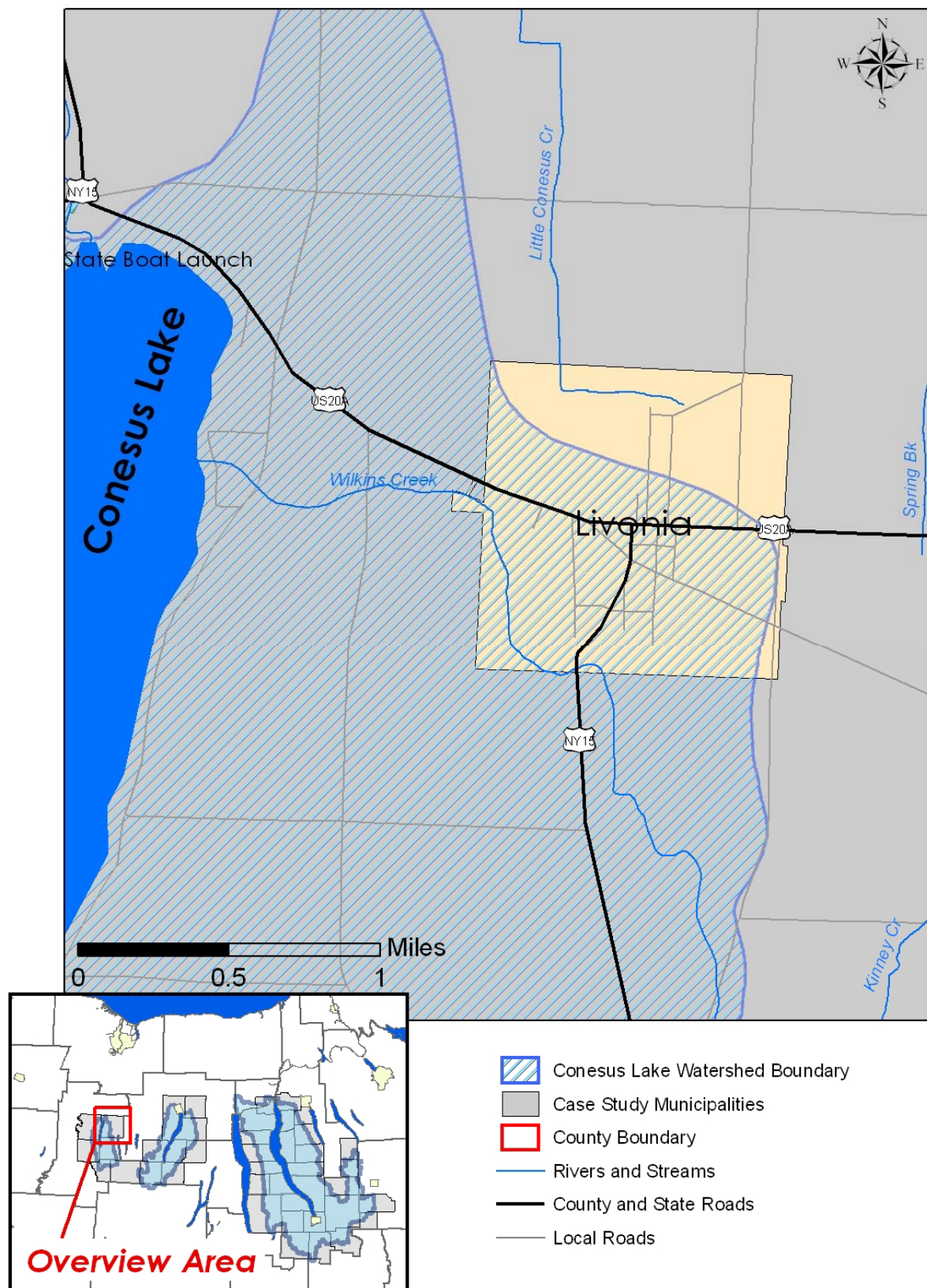
- *Town of Livonia Design Criteria and Construction Specifications for Land Development*, 1991
- *Livonia Comprehensive Plan*, 1996
- *Town of Livonia Zoning Map*, 1998
- *Town of Livonia Subdivision of Land Regulations: Chapter 125*, 1998
- *Town of Livonia Zoning Code: Chapter 150*, 1998
- *Livonia Zoning Article XIV*, 2003

Assessment Results:

<i>Town of Livonia</i>		Full or Partial Implementation	Not applicable
<i>Total Municipal Land Area (sq miles):</i>	37.6	24 of 42 (57%)	0
	<i>Existing Development</i>	7 of 16 (43%)	0
	<i>New Development/ Substantial Redevelopment</i>	17 of 26 (65%)	0
<i>Percent of Municipality within Watershed:</i>	30.6%	7 of 12 (58%)	0
	<i>Forestry</i>	6 of 10 (60%)	0
	<i>Agriculture</i>	1 of 2 (50%)	0
<i>Percent of Watershed within Municipality:</i>	13.53%	9 of 16 (56%)	0
	<i>Modified Waterways</i>	6 of 10 (60%)	0
	<i>Wetlands - Riparian Management/Restoration</i>	3 of 6 (50%)	0
	Marinas	2 of 48 (4%)	0
	<i>Existing</i>	2 of 20 (10%)	0
	<i>New</i>	0 of 18	0
	<i>All</i>	0 of 10	0
	Roads and Bridges	9 of 26 (34%)	0
	<i>Existing</i>	2 of 6 (33%)	0
	<i>New</i>	7 of 13 (53%)	0
	<i>All</i>	0 of 7 (85%)	0
OWTS		3 of 7 (42%)	0



Village of Livonia • Livingston County





Village of Livonia

Livingston County

The Village of Livonia lies within the northeastern portion of the Conesus Lake watershed and is located entirely within the Town of Livonia. The village covers an area of 1 square mile, 10.2 percent of which lies within the Conesus lake watershed. The village has no waterfront acreage, although Wilkins Creek—a tributary of Conesus Lake—passes through the village.

According to the 2000 Census, the Village of Livonia contains 1,373 people. The village experienced a 52.1 percent increase between 1960 and 1980 and a decline of 6.8 percent between 1980 and 2000. The median age in the village is 2.57 years and the average household size is 2.57 persons. Median household income is \$49,688, with a poverty rate of 3.5 percent. There are 558 housing units in the town, 10.2 percent of which have been built since 1990. The median value of owner-occupied homes is \$ 95,800.

Local Laws Reviewed:

- *Livonia Comprehensive Plan*, 1996
- *Village of Livonia Subdivision of Land: Chapter 130*, 1998
- *Livonia Zoning Article XIV*, 2003

Assessment Results:

Total Municipal
Land Area (sq miles):

1.0

Percent of Municipality
within Watershed:

65.9%

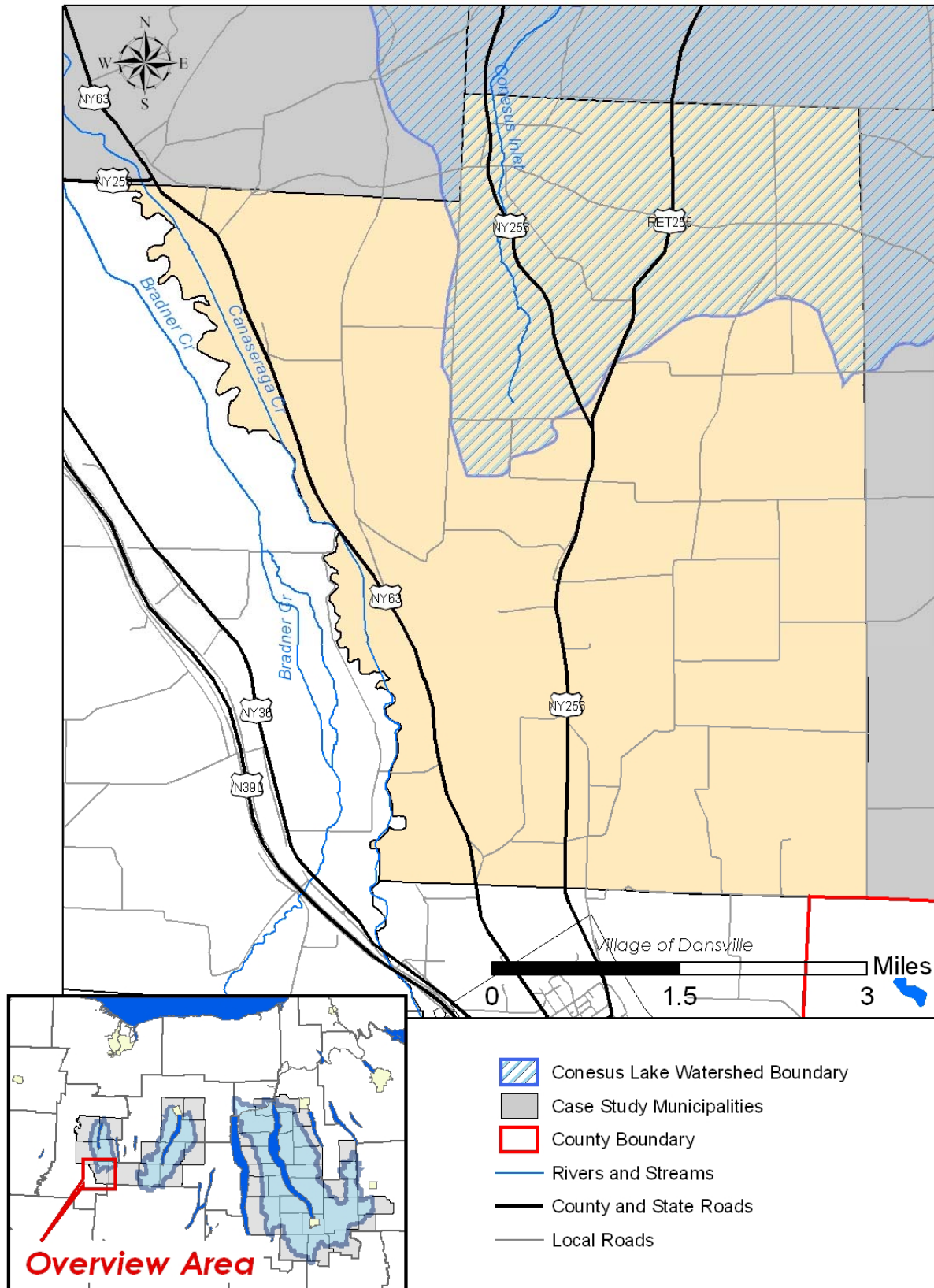
Percent of Watershed
within Municipality:

.78%

<i>Village of Livonia</i>	Full or Partial Implementation	Not applicable
Development	24 of 42 (57%)	0
<i>Existing Development</i>	6 of 16 (37%)	0
<i>New Development/ Substantial Redevelopment</i>	18 of 26 (69%)	0
Forestry/Agriculture	0 of 12	12
<i>Forestry</i>	0 of 10	10
<i>Agriculture</i>	0 of 2	2
Waterways/Wetlands	7 of 16 (43%)	0
<i>Modified Waterways</i>	5 of 10 (50%)	0
<i>Wetlands - Riparian Management/Restoration</i>	2 of 6 (33%)	0
Marinas	0 of 48	48
<i>Existing</i>	0 of 20	20
<i>New</i>	0 of 18	18
<i>All</i>	0 of 10	10
Roads and Bridges	15 of 26 (57%)	0
<i>Existing</i>	5 of 6 (83%)	0
<i>New</i>	6 of 13 (46%)	0
<i>All</i>	4 of 7 (57%)	0
OWTS	3 of 7 (42%)	0



Town of Sparta • Livingston County





Town of Sparta

Livingston County

The Town of Sparta lies within the southern portion of the Conesus Lake watershed. The town covers an area of 27.3 square miles, 25.6 percent of which lies within the Conesus lake watershed. While Sparta has no waterfront acreage, the headwaters of the Conesus Inlet originate here.

According to the 2000 Census, the town of Sparta contains 1,627 people. The town experienced a 43 percent increase between 1960 and 1980, and an increase of 11.6 percent between 1980 and 2000. The median age in Sparta is 40 years and the average household size is 2.73 persons. Median household income is \$43,155, with a poverty rate of 8%. There are 638 housing units in the town, 13.8 percent of which have been built since 1990. The median value of owner-occupied homes is \$ 77,400.

Local Laws Reviewed:

- *Town of Sparta Zoning Map*, 1990
- *Town of Sparta Comprehensive Plan*, 1993
- *Town of Sparta Zoning Code*, 1994
- *Town of Sparta Local Law #2: Regulations for Junk Yards*, 1998

Assessment Results:

*Total Municipal
Land Area (sq miles):* **27.3**

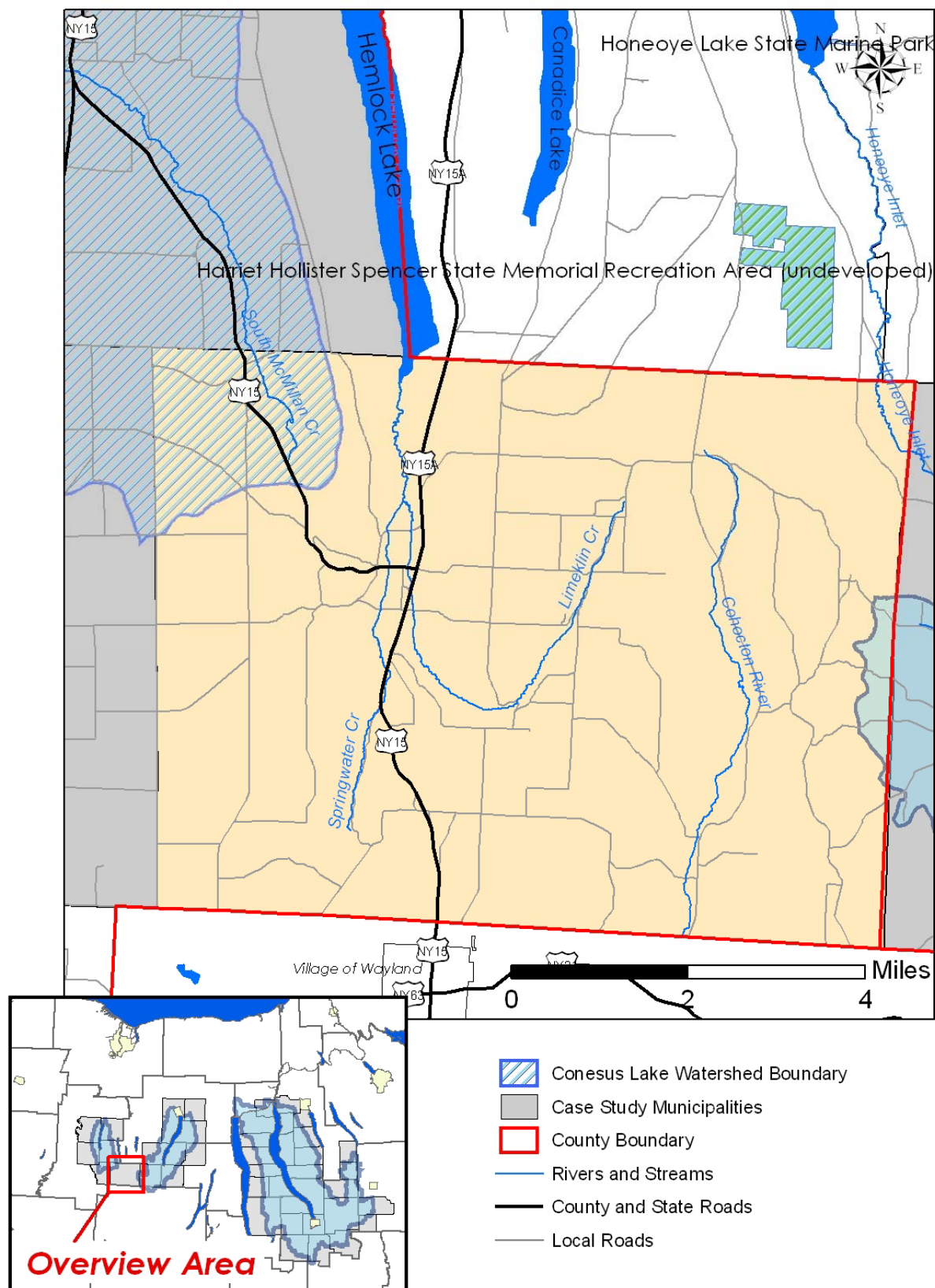
*Percent of Municipality
within Watershed:* **25.6%**

*Percent of Watershed
within Municipality:* **8.23%**

<i>Town of Sparta</i>	Full or Partial Implementation	Not applicable
Development	13 of 42 (30%)	0
<i>Existing Development</i>	4 of 16 (25%)	0
<i>New Development/ Substantial Redevelopment</i>	9 of 26 (34%)	0
Forestry/Agriculture	6 of 12 (50%)	0
<i>Forestry</i>	5 of 10 (50%)	0
<i>Agriculture</i>	1 of 2 (50%)	0
Waterways/Wetlands	0 of 16	0
<i>Modified Waterways</i>	0 of 10	0
<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
Marinas	0 of 48	48
<i>Existing</i>	0 of 20	20
<i>New</i>	0 of 18	18
<i>All</i>	0 of 10	10
Roads and Bridges	16 of 26 (61%)	0
<i>Existing</i>	5 of 6 (83%)	0
<i>New</i>	8 of 13 (61%)	0
<i>All</i>	3 of 7 (42%)	0
OWTS	3 of 7 (42%)	0



Town of Springwater • Livingston County





Town of Springwater

Livingston County

The Town of Springwater lies within the southeastern portion of the Conesus Lake watershed. The town covers an area of 52.2 square miles, 7.5 percent of which lies within the Conesus lake watershed. While Springwater has no waterfront acreage on Conesus Lake, the South McMillan Creek passes through the municipality, which is a contributing tributary of the lake.

According to the 2000 Census, the Town of Springwater contains 2,322 people. The town experienced a 65.7 percent growth in population between 1960 and 1980, and an 8.4 percent increase between 1980 and 2000. The median age in Springwater is 39.2 years and the average household size is 2.63 persons. Median household income is \$43,059, with a poverty rate of 5.2 percent. There are 1,021 housing units in the town, 16.2 percent of which have been built since 1990. The median value of owner-occupied homes is \$ 72,600.

Local Laws Reviewed:

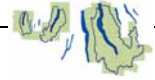
- *Town of Spring water Comprehensive Emergency Plan, 1994*

Assessment Results:

		<i>Town of Springwater</i>	Full or Partial Implementation	Not applicable
		Development	8 of 42 (19%)	0
		<i>Existing Development</i>	4 of 16 (25%)	0
		<i>New Development/ Substantial Redevelopment</i>	4 of 26 (15%)	0
<i>Total Municipal Land Area (sq miles):</i>	52.2	Forestry/Agriculture	6 of 12 (50%)	0
		<i>Forestry</i>	5 of 10 (50%)	0
		<i>Agriculture</i>	1 of 2 (50%)	0
		Waterways/Wetlands	1 of 16 (6%)	0
<i>Percent of Municipality within Watershed:</i>	7.4%	<i>Modified Waterways</i>	1 of 10 (10%)	0
		<i>Wetlands - Riparian Management/Restoration</i>	0 of 6	0
		Marinas	0 of 48	48
		<i>Existing</i>	0 of 20	20
		<i>New</i>	0 of 18	18
		<i>All</i>	0 of 10	10
		Roads and Bridges	0 of 26	0
		<i>Existing</i>	0 of 6	0
		<i>New</i>	0 of 13	0
		<i>All</i>	0 of 7	0
		OWTS	3 of 7 (42%)	0



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Appendix A: List of BMPs used in the Assessment Form

1. Development

a. Existing Development

1-01	Identify retrofit opportunities	1-11	Encourage water conservation
1-02	Identify habitat and natural conveyance system restoration opportunities	1-12	Develop outreach programs targeted at specific problems related to water quality management & resource conservation
1-03	Establish retention/detention areas		
1-04	Acquire additional land for locating treatment facilities	1-13	Encourage proper control of pet wastes
1-05	Encourage homeowners to place compost piles away from waterbodies and roadways	1-14	Encourage continued operation of private storm water runoff control structures
1-06	Encourage proper use and disposal of lawn and other household chemicals	1-15	Discourage feeding of waterfowl
1-07	Institute turf management practices on golf courses and parks and recreation areas	1-16	Discourage the introduction of exotic aquatic species (Eurasian water milfoil, zebra mussels, water chestnut, etc)
1-08	Undertake storm drain stenciling	1-17	Encourage continued (periodic) operation and maintenance of private septic disposal systems
1-09	Encourage volunteer programs, such as adopt-a-highways and adopt-a-stream, etc.	1-18	Effective and consistent application and enforcement of stormwater regulations & requirements
1-10	Include high percentage of indigenous plants in new landscaping on privately-owned properties (excluding arboretums, horticultural gardens, and sites requiring turf grasses)	1-19	Require certification of existing on site septic systems for property transfers or building expansions.
		1-20	Require entire property (existing as well as proposed) to be included in stormwater analysis/calculation.



(Development, continued)

b. New Development and Substantial Redevelopment

1-21	Minimize the amount of land disturbed and the duration of disturbance	1-32	Use appropriate solid and hazardous waste generation and disposal practices including source controls and recycling
1-22	Preserve natural features and conform substantially with the natural boundaries and alignment of waterbodies	1-33	Encourage construction site management techniques which include the proper handling and disposal of pesticides and petroleum products and containers
1-23	Retain and protect trees and other natural vegetation on and near disturbed sites	1-34	Ensure proper operation and maintenance of runoff management facilities
1-24	Account for topography and soil type in efforts to minimize erosion potential	1-35	Target training for contractors, inspectors and zoning and planning officials.
1-25	Maintain runoff rates similar to pre-construction levels	1-36	Require tree surveys and/or cutting plans.
1-26	Minimize the creation of impervious areas	1-37	Develop priority list for BMP's - use of vegetative low areas for retention/infiltration.
1-27	Control increased runoff caused by changed surface conditions to minimize the danger of flooding, erosion, sedimentation and pollutants entering waterbodies prior to, during and after construction	1-38	Encourage cluster development.
1-28	Use temporary vegetation and mulching to protect exposed and critical areas during development	1-39	Require connection to and/or extension of existing water & sewer if project is within 500 feet of existing infrastructure
1-29	Redistribute topsoil within the boundaries of the disturbed land for seeding and planting	1-40	Enact limits on driveway grades.
1-30	Stabilize disturbed soils as soon as possible	1-41	For redevelopment, employ regulations that provide for technologically advanced (on and off) site wastewater treatment systems to optimize efficiencies and address "challenging" sites
1-31	Minimize the use of cut and fill operations. Conform such operations to topography and soils to minimize erosion potential and adequately accommodate runoff	1-42	Implement Federal/State Stormwater (SPDES) Phase II requirements



2. Forestry and Agriculture

a. Forestry

2-01	Consider potential water quality impacts when selecting silviculture system (yarding system, site preparation, pesticides employment, etc)	2-05	Preplan harvest areas, skid trails, and access so as to be on stable soils, avoiding steep gradients, multiple stream crossings, poor drainage areas, etc.
2-02	Consider harvesting practices	2-06	Limit grades of access roads.
2-03	Seasonal preference for logging operations	2-07	Require stabilization of roads/drives to forestry site.
2-04	Have specialists (geologist, soil scientist, geotechnical engineer, wildland hydrologist) review plans in high erosion hazard areas	2-08	Employ natural topography and contour for design of road network
		2-09	Require stormwater controls for increased runoff from ground cover modification
		2-10	Consider site restoration

b. Agriculture

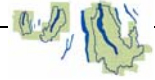
2-11	Use Agricultural Environmental Management (AEM)	2-12	Require farms seeking agricultural value assessment to participate in AEM
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3. Waterways and Wetlands

a. Modified Waterways

3-01	Develop an operation and maintenance program for existing modified streams that includes identification of opportunities and actions to restore habitat and the physical and chemical characteristics of these streams.	3-08	Protect streambanks through direct nonstructural means, such as new vegetation or protection of existing vegetation; direct structural means, such as revetments and bulkheads; indirect nonstructural means, such as regulating irrigation near streambanks or rerouting overbank drainage; or indirect structural means, such as deflecting channel flow away from streambanks with dikes, board fences and gabions
3-02	Improve stream quality by controlling in-stream sedimentation and selectively clearing debris		
3-03	Establish or reestablish riparian buffers		
3-04	Prevent animal wastes from entering waterbodies		
3-05	Attempt vegetative stabilization before undertaking structural measures	3-09	Use setbacks to minimize disturbance of land adjacent to streambanks and shorelines
3-06	Design and construct shore erosion control facilities, in accordance with an erosion and sedimentation control plan, in areas where marsh creation and soil bioengineering are ineffective or where existing protection methods are being flanked or are falling	3-10	Prevent discharges to waterbodies in amounts that would adversely affect the taste, color or odor of the waters, or would impair the waters for their best usages
3-07	Schedule the periodic maintenance of sediment control measures, and inspect and repair them as needed in conformance with established schedule.		



(Waterways and Wetlands, continued)

b. Wetlands and Riparian Area Management and Restoration

- | | | | |
|------|---|------|---|
| 3-11 | Consider wetlands and riparian areas and their non-point source (nps) control potential on a watershed scale | 3-15 | Use appropriate pretreatment practices such as vegetated systems or detention or retention basins to prevent adverse impacts to wetland functions that affect nps pollution abatement from hydrologic changes, sedimentation, or contaminants |
| 3-12 | Identify existing functions of those wetland and riparian areas with significant nps control potential when implementing nps management practices. Do not alter wetlands or riparian areas to improve their water quality at the expense of their other functions | 3-16 | All projects should require wetlands certification. |
| 3-13 | Conduct permitting, licensing, certification and non-regulatory nps pollution activities in a manner that protects wetland functions | | |
| 3-14 | Special zoning considerations to protect wetland areas | | |



4. Marinas

a. Existing

4-01	Clean maintenance areas regularly preferably by vacuuming to remove trash, sandings, paint chips, etc.	4-12	Prohibit in-water hull scraping or any underwater process to remove paint from boat hulls
4-02	Prevent residue from being carried into surface waters by performing abrasive blasting within plastic tarp enclosures on windless days or within spray booths	4-13	Wash the boat hull above the waterline by hand, using only necessary amounts of detergents and cleaning compounds that are phosphate-free and biodegradable
4-03	Provide proper disposal/recycling facilities to marina patrons, preferably covered receptacles	4-14	Prohibit the use of detergents and cleaning compounds containing ammonia, sodium hypochloride, chlorinated solvents, petroleum distillates, alcohol, or lye
4-04	Establish fish cleaning areas, and implement rules governing the conduct of fish cleaning operations		
4-05	Educate boaters on the importance of proper fish cleaning practices		Educate individuals about the importance of trash reduction and recycling through: interpretive and instructional signs placed at marinas and boat-launching sites, pamphlets or flyers, newsletters, inserts in billings, meetings and presentations, workshops, and certification programs
4-06	Implement fish composting where appropriate	4-15	
4-07	Store materials in areas impervious to the type of material stored. Build curbs, berms, or other barriers around the areas to contain spills		
4-08	Use separate, clearly labeled containers for the disposal of oil, gasoline, antifreeze, diesel, kerosene, and mineral spirits	4-16	Inspect pump-out facilities regularly, and repair them, if practical, under a maintenance contract with a competent contractor
4-09	Target outreach programs about proper disposal at marina patrons through the use of signs, mailings, and other means	4-17	Add language to slip lease agreements mandating the use of pump-out facilities and specifying penalties for failure to comply
4-10	Promote the use in bilges of oil-absorbing materials, and replace them as necessary, preferably recycling, or disposing of them in accordance with petroleum disposal regulation	4-18	Place dye tablets in holding tanks to identify and discourage illegal disposal
		4-19	Prohibit motorized vessels from areas (define areas) that contain important shallow-water habitats
4-11	Use a container under the air vent while refueling inboard tanks if the tank vents are not equipped with a fuel/air separator	4-20	Establish and enforce no-wake zones to decrease turbidity and reduce erosion potential from boat wakes

**(Marinas, continued)****b. New**

4-21	Design and site marinas to maximize exchange of marina basin water. Limit basins and channels with square corners that tend to trap flotsam, and place dock structures in a manner that promotes circulation	4-30	Use properly designed and constructed engineering practices that minimize shoreline disturbance in areas where soil bioengineering and plants are ineffective
4-22	Perform a preconstruction assessment, which includes a water quality monitoring and modeling methodology, to predict post-construction water quality conditions	4-31	Use appropriate shore erosion control methods, such as returns or return walls, in areas where existing protection methods are being flanked or are falling
4-23	Monitor water quality during construction to protect ambient water quality to the maximum practicable extent	4-32	Plan and design all steambank, shoreline, and navigation structures so that they do not transfer erosion energy to or otherwise cause visible loss of surrounding streambanks or shorelines
4-24	Develop a marina siting policy to discourage development in areas containing important habitat designated by local, State, or federal agencies	4-33	Locate and design fuel stations so that spills can be contained in a limited area
4-25	Conduct surveys and employ rapid bioassessment techniques to assess historic habitat function (e.g. spawning, nursery, and migration pathways) and potential impacts to these and other biological functions and resources	4-34	Design and install underground fuel storage tanks according to State regulations, including the provision of detection systems and automatic fuel tank and pump leak shut-offs
4-26	Encourage the redevelopment or expansion of existing marina facilities that have demonstrated minimal environmental impacts instead of developing new marina facilities	4-35	Provide aboveground fuel tanks and fueling areas with a curbed or diked storage area to handle containment volumes meeting State (and local) codes and inspect regularly
4-27	Consider alternative sites with minimal potential environmental impacts when the use of previously disturbed sites is not feasible	4-36	Use preferred pumpout systems: fixed-point, portable, dedicated slipside, and pumpout boats
4-28	Minimize disturbance of indigenous vegetation in the riparian area	4-37	Design onsite wastewater treatment systems to specifically handle waste from vessels
4-29	Use soil bioengineering or plants, wherever conditions allow, to restore damaged habitat along shorelines and streambanks	4-38	Post pumpout facility location and regulations at the marina. Charge fees that encourage rather than discourage facility use. Consider offsetting the cost of maintaining pumpout facilities by fuel sales where these facilities are conveniently located in close proximity to one another



(Marinas, continued)

c. All

4-39	Restrict boat repair and maintenance activities to clearly marked designated areas to prevent debris from falling into the water and preventing invasive species	4-44	Have a trained operator present and prepared to respond to accidental spills
		4-45	Maintain daily inventory records to identify abnormal loss or gain of liquid
4-40	Secure all fueling facilities and storage areas with appropriate shut-off devices and security locks and inspect regularly	4-46	Prohibit the cleaning of hoses, fittings, pumps, and other accessory equipment on piers, docks or adjacent upland to prevent runoff into the marina basin or other surface or groundwater
4-41	Design fueling stations with spill containment equipment that is stored in a clearly marked location, accessible to work and storage areas. Post emergency phone numbers in a prominent location	4-47	Create and/or maintain a dedicated fund for maintenance in the case of government-owned facilities
4-42	Design a spill contingency plan	4-48	Restrict the operation of pumpout facilities to trained marina personnel only
4-43	Inspect and maintain all containment berms or devices in accordance with State regulations. Investigate immediately signs of leakage or spillage, and undertake cleanup in accordance with applicable best management practices		



5. Roads and Bridges

a. New Roads and Bridges

5-01	Conduct road and bridge maintenance (de-icing material usage and storage, pot-hole repair, bridge washing, scraping and painting, etc) according to best management practices	5-04	Implement a regular inspection and maintenance plan of existing structures
5-02	Conduct right-of-way activities (mowing, brush removal, pesticide and fertilizer use, etc) - according to best management practices	5-05	Develop and identify erosion/sediment control areas (examples include steep slopes, easily erodible soils, and nearby sensitive areas) and retrofit opportunities
5-03	Include high percentage of indigenous plants in new landscaping on public-owned properties (excluding arboretums, horticultural gardens, and site requiring turf grasses)	5-06	Require percentage of roads to be tested with non-salt and non-sand de-icing.

b. Existing Roads and Bridges

5-07	Minimize the amount of land disturbed and the duration of disturbance	5-14	Redistribute topsoil within the boundaries of the disturbed land for seeding and planting
5-08	Preserve natural features and conform substantially with the natural boundaries and alignment of waterbodies	5-15	Stabilize disturbed soils as soon as possible
5-09	Retain and protect trees and other natural vegetation on and near disturbed sites	5-16	Minimize the use of cut and fill operations. Conform such operations to topography and soils to minimize erosion potential and adequately accommodate runoff
5-10	Retain additional runoff sites	5-17	Control erosion and sedimentation prior to, during and after site preparation and construction
5-11	Minimize the creation of impervious areas	5-18	Require long term stormwater management plan.
5-12	Treat increased runoff caused by changed surface conditions to minimize the danger of flooding, erosion and pollutants entering waterbodies prior to, during and after construction	5-19	Require long term sedimentation control & maintenance.
5-13	Use temporary vegetation and mulching to protect exposed and critical areas during development		

**(Roads and Bridges, continued)****c. All**

5-20	Target existing public holdings, such as parks, for removing unnecessary impervious surfaces	5-24	Participate in Cornell Local Roads Program activities and training
5-21	Incorporate New York State Department of Transportation design and guidance documents, standard specifications, and procedural manuals (Highway Design Manual, Environmental Procedures Manual, Maintenance Guidelines, etc) into local laws and operating procedures	5-25	Target training programs at highway officials, contractors, construction workers, inspectors, zoning and planning officials
5-22	Ensure application of appropriate solid and hazardous waste generation and disposal practices including source controls and recycling	5-26	Target training and outreach programs about the proper handling of materials, leakage and spill prevention and spill response procedures at maintenance staff and workers
5-23	Ensure proper operation and maintenance of runoff management facilities		

6. Onsite Wastewater Treatment Systems

6-01	Conduct regular inspections of OWTS at a frequency adequate to determine failure and undertake required maintenance	6-05	Inspection of all OWTS at property transfer or within 1 year prior to transfer
6-02	Institute setback guidelines	6-06	Require all properties within 500' of municipal service to connect.
6-03	Promulgate plumbing codes that require practices that are compatible with OWTS	6-07	Set goals for effluent limits (nitrogen, phosphorous, BOD, etc)
6-04	Target outreach programs at homeowners, contractors and developers		



Appendix B: Land Area of Case Study Municipalities

Cayuga Lake Watershed: 38 Municipalities

Total Watershed Area = 712 sq. miles

Municipality	Type	County	Total Land Area (sq. miles)*	Percent of Municipality in Watershed*	Percent of Watershed in Municipality*	Order of Magnitude (1 = largest watershed area)
Aurelius	Town	Cayuga	29.8	57.5%	2.39%	21
Aurora	Village	Cayuga	0.9	100.0%	0.12%	36
Caroline	Town	Tompkins	54.0	37.1%	2.79%	17
Cayuga	Village	Cayuga	0.9	91.0%	0.12%	37
Cayuga Heights	Village	Tompkins	1.7	100.0%	0.24%	32
Covert	Town	Seneca	30.8	100.0%	4.29%	10
Danby	Town	Tompkins	52.8	52.5%	3.86%	12
Dryden	Town	Tompkins	92.3	91.2%	11.73%	1
Dryden	Village	Tompkins	1.6	100.0%	0.23%	33
Enfield	Town	Tompkins	36.1	93.5%	4.70%	6
Fayette	Town	Seneca	54.0	20.8%	1.56%	23
Fleming	Town	Cayuga	21.4	23.4%	0.70%	26
Freeville	Village	Tompkins	1.1	100.0%	0.15%	35
Genoa	Town	Cayuga	38.9	89.0%	4.83%	5
Groton	Town	Tompkins	48.5	42.6%	2.88%	15
Harford	Town	Cortland	23.7	21.0%	0.69%	27
Hector	Town	Schuyler	100.6	43.6%	6.10%	3
Interlaken	Village	Seneca	0.3	100.0%	0.04%	38
Ithaca	City	Tompkins	5.4	100.0%	0.75%	25
Ithaca	Town	Tompkins	28.7	100.0%	3.99%	11
Lansing	Town	Tompkins	59.6	97.1%	8.06%	2
Lansing	Village	Tompkins	4.4	100.0%	0.62%	28
Ledyard	Town	Cayuga	35.6	100.0%	4.96%	4
Lodi	Town	Seneca	33.6	25.8%	1.21%	24
Newfield	Town	Tompkins	57.8	54.1%	4.35%	9
Ovid	Town	Seneca	30.3	60.8%	2.57%	18
Romulus	Town	Seneca	37.1	46.9%	2.42%	20
Scipio	Town	Cayuga	35.9	62.4%	3.12%	13
Sempronius	Town	Cayuga	28.8	12.5%	0.50%	29
Seneca Falls	Town	Seneca	23.9	3.6%	0.50%	30
Springport	Town	Cayuga	21.2	100.0%	2.95%	14
Summerhill	Town	Cayuga	25.5	80.3%	2.86%	16
Trumansburg	Village	Tompkins	1.2	100.0%	0.17%	34
Ulysses	Town	Tompkins	32.4	100.0%	4.52%	7
Union Springs	Village	Cayuga	1.8	100.0%	0.25%	31
Varick	Town	Seneca	31.6	45.8%	2.02%	22
Venice	Town	Cayuga	40.3	80.1%	4.50%	8
Virgil	Town	Cortland	46.5	39.6%	2.56%	19



Canandaigua Lake Watershed: 11 Municipalities

Total Watershed Area = 165 sq. miles

Municipality	Type	County	<i>Total Land Area (sq. miles)*</i>	<i>Percent of Municipality in Watershed*</i>	<i>Percent of Watershed in Municipality*</i>	<i>Order of Magnitude (1 = largest watershed area)</i>
Canandaigua	City	Ontario	4.6	52.7%	1.46%	9
Canandaigua	Town	Ontario	55.9	50.7%	17.07%	3
Gorham	Town	Ontario	48.0	59.8%	17.31%	2
Hopewell	Town	Ontario	35.0	8.5%	1.80%	8
Italy	Town	Yates	39.4	42.1%	10.00%	6
Middlesex	Town	Yates	30.3	92.3%	16.90%	4
Naples	Town	Ontario	38.9	80.3%	18.87%	1
Naples	Village	Ontario	0.9	100.0%	0.57%	10
Potter	Town	Yates	36.5	13.4%	2.94%	7
Rushville	Village	Ontario/ Yates	0.6	100.0%	0.34%	11
South Bristol	Town	Ontario	38.3	46.3%	10.71%	5

Conesus Lake Watershed: 7 Municipalities

Total Watershed Area = 64 sq. miles

Municipality	Type	County	<i>Total Land Area (sq. miles)*</i>	<i>Percent of Municipality in Watershed*</i>	<i>Percent of Watershed in Municipality*</i>	<i>Order of Magnitude (1 = largest watershed area)</i>
Conesus	Town	Livingston	32.3	77.5%	29.44%	1
Geneseo	Town	Livingston	43.2	21.0%	10.65%	3
Groveland	Town	Livingston	38.5	19.9%	9.01%	4
Livonia	Town	Livingston	37.6	30.6%	13.53%	2
Livonia	Village	Livingston	1.0	65.9%	0.78%	7
Sparta	Town	Livingston	27.3	25.6%	8.23%	5
Springwater	Town	Livingston	52.2	7.4%	4.57%	6

** For all tables, town figures include any villages contained within*



Appendix C: Basic Land Use Control Inventory

Cayuga Lake Watershed

Municipality	Type	County	Comprehensive Plan?	Date	Zoning ?	Date	Subdivision Regulations?	Date
Aurelius	Town	Cayuga	No	N/A	Yes	1993	No	N/A
Aurora	Village	Cayuga	Yes	TBD	Yes	1993	Yes	2003
Caroline	Town	Tompkins	No	N/A	No	N/A	Yes	2000
Cayuga	Village	Cayuga	No	N/A	Yes	1988	Yes	1988
Cayuga Heights	Village	Tompkins	Yes	TBD	Yes	TBD	Yes	TBD
Covert	Town	Seneca	No	N/A	No	N/A	Yes	1981
Danby	Town	Tompkins	Yes	1989	Yes	1991	Yes	1991
Dryden	Village	Tompkins	No	N/A	Yes	1996	Yes	1989
Dryden	Town	Tompkins	No	N/A	Yes	1988	Yes	1988
Enfield	Town	Tompkins	No	N/A	No	N/A	Yes	TBD
Fayette	Town	Seneca	In the process	N/A	Yes	1976	Yes	1976
Fleming	Town	Cayuga	No	N/A	Yes	1988	Yes	1989
Freeville	Village	Tompkins	Yes	2001	Yes	1987	Yes	1987
Genoa	Town	Cayuga	No	N/A	No	N/A	No	N/A
Groton	Town	Tompkins	Yes	1993	Yes	1995	Yes	1995
Harford	Town	Cortland	No	N/A	Yes	1973	No	N/A
Hector	Town	Schuyler	No	N/A	No	N/A	No	N/A
Interlaken	Village	Seneca	In the process	N/A	No	N/A	No	N/A
Ithaca	Town	Tompkins	Yes	1993	Yes	1997	Yes	1993
Ithaca	City	Tompkins	Yes	1971	Yes	1975	Yes	1988
Lansing	Village	Tompkins	Yes	1999	Yes	1976	Yes	1975
Lansing	Town	Tompkins	Yes	1994	Yes	2004	Yes	1990
Ledyard	Town	Cayuga	In the process	N/A	Yes	1994	No	N/A
Lodi	Town	Seneca	No	N/A	No	N/A	No	N/A
Newfield	Town	Tompkins	No	N/A	No	N/A	No	N/A
Ovid	Town	Seneca	No	N/A	No	N/A	No	N/A
Romulus	Town	Seneca	Yes	1998	No	N/A	No	N/A
Scipio	Town	Cayuga	No	N/A	Yes	1990	No	N/A
Sempronius	Town	Cayuga	No	N/A	No	N/A	No	N/A
Seneca Falls	Town	Seneca	No	N/A	Yes	1967	Yes	1967
Springport	Town	Cayuga	No	N/A	Yes	1991	No	N/A
Summerhill	Town	Cayuga	No	N/A	No	N/A	No	N/A
Trumansburg	Village	Tompkins	Yes	1992	Yes	1971	Yes	1990
Ulysses	Town	Tompkins	Yes	1999	Yes	1978	Yes	1986
Union Springs	Village	Cayuga	No	N/A	Yes	1987	Yes	1987
Varick	Town	Seneca	In the process	N/A	Yes	1975	Yes	1977
Venice	Town	Cayuga	No	N/A	No	N/A	No	N/A
Virgil	Town	Cortland	No	N/A	Yes	1979	Yes	1972
Waterloo	Village	Seneca	No	N/A	Yes	1996	No	N/A
Waterloo	Town	Seneca	Yes	TBD	Yes	2000	No	N/A



Canandaigua Lake Watershed

Municipality	Type	County	Comprehensive Plan?	Date	Zoning?	Date	Subdivision Regulations?	Date
Canandaigua	City	Ontario	Yes	1993	Yes	1960	Yes	1975
Canandaigua	Town	Ontario	Yes	2003	Yes	1989	Yes	1989
Gorham	Town	Ontario	Yes	1997	Yes	1965	Yes	1969
Hopewell	Town	Ontario	Yes	1991	Yes	1986	Yes	1983
Italy	Town	Yates	In the process	N/A	No	N/A	No	N/A
Middlesex	Town	Yates	Yes	2000	Yes	1999	No	N/A
Naples	Town	Ontario	Yes	1987	Yes	1974	Yes	1993
Naples	Village	Ontario	No	N/A	Yes	1999	Yes	2003
Potter	Town	Yates	Yes	1979	Yes	1979	Yes	1979
Rushville	Village	Ontario/Yates	Yes	TBD	Yes	TBD	Yes	TBD
South Bristol	Town	Ontario	Yes	1999	Yes	1969	Yes	1979

Conesus Lake Watershed

Municipality	Type	County	Comprehensive Plan?	Date	Zoning?	Date	Subdivision Regulations?	Date
Conesus	Town	Livingston	In the process	N/A	Yes	1970	Yes	1974
Geneseo	Town	Livingston	Yes	1992	Yes	1977	Yes	1977
Groveland	Town	Livingston	No	N/A	Yes	1966	Yes	1966
Livonia	Town	Livingston	Yes	1996	Yes	1998	Yes	1998
Livonia	Village	Livingston	Yes	1996	Yes	1994	Yes	1998
Sparta	Town	Livingston	Yes	1998	Yes	1994	Yes	1998
Springwater	Town	Livingston	No	N/A	No	N/A	No	N/A



Appendix D: List of Municipal Contacts

The following local officials were contacted and interviewed regarding best management practices within their respective jurisdictions:

- Kent Walter, Superintendent of Highways, Town of Aurelius
- Kurt Wilmot, Public Works Department, Village of Aurora
- Louis Loy, Public Works Coordinator, City of Canandaigua
- James Hecker, Superintendent of Highways, Town of Canandaigua
- Cindy Whittaker, Superintendent of Highways, Town of Caroline
- Brent Cross, Superintendent of Highways, Village of Cayuga Heights
- Michael White, Superintendent of Highways, Town of Conesus
- Jeffrey MacCheyne, Superintendent of Highways, Town of Covert
- William Hall, Superintendent of Highways, Town of Danby
- Jack Bush, Superintendent of Highways, Town of Dryden
- Ron Moore, Sup. of Public Works, Village of Dryden
- David Miller, Superintendent of Highways, Town of Enfield
- Dale Freier, Superintendent of Highways, Town of Fayette
- Paul A. Chipman, Superintendent of Highways, Town of Fleming
- D. Arthur Carney, Superintendent of Highways, Town of Geneseo
- Frank Sellen, Superintendent of Highways, Town of Genoa
- Kelly Ayers, Superintendent of Highways, Town of Gorham
- Richard Case, Jr., Superintendent of Highways, Town of Groton
- Greg Adamson, Superintendent of Highways, Town of Groveland
- Vern Hecker, Superintendent of Highways, Town of Hopewell
- Joe Lincoln, Supt. of Public Works, Village of Interlaken
- John Caves, Superintendent of Highways, Town of Italy
- Fred Noteboom, Superintendent of Highways, Town of Ithaca
- Jack French, Jr., Superintendent of Highways, Town of Lansing
- Patrick Tyrrell, Recreation Supervisor (Marina Contact), Town of Lansing
- Dennis Reinhart, Supt. of Public Works, Village of Lansing
- James Bailey, Superintendent of Highways, Town of Ledyard
- Dennis Palmer, Supt. of Public Works, Village of Livonia
- Robert Sibley, Superintendent of Highways, Town of Lodi
- Thomas Reifsteck, Superintendent of Highways, Town of Middlesex
- Hugh Chapman, Superintendent of Highways, Town of Naples
- Charles Harris, Supt. of Public Works, Village of Naples
- Glen Casterline, Superintendent of Highways, Town of Newfield
- John Wickham, Superintendent of Highways, Town of Ovid
- Lewis Thompson, Superintendent of Highways, Town of Potter
- Jim Williamson, Superintendent of Highways, Town of Romulus
- Arthure Rilands, Supt. of Public Works, Village of Rushville
- Stanley Cole, Superintendent of Highways, Town of Sempronius
- Donald Wood, Superintendent of Highways, Town of Seneca Falls
- Gary Kreiley, Superintendent of Highways, Town of Sparta
- Carl Rote, Superintendent of Highways, Town of Summerhill
- James Meeker, Superintendent of Highways, Town of Ulysses
- Robert Kneaskern, Jr., Supt. of Public Works, Village of Union Springs
- Bill Rejman, Superintendent of Highways, Town of Venice
- John Morse, Superintendent of Highways, Town of Virgil



The following individuals were unavailable for comment:

- Dan Patterson Supervisor of Public Works Village of Cayuga
- Patt Brennan, Superintendent of Highways, Village of Freeville
- Ronald Carpenter, Superintendent of Highways, Town of Harford
- Arnold E. Grover, Superintendent of Highways, Town of Hector
- William Gray Supt. of Public Works City of Ithaca
- David Coty, Superintendent of Highways, Town of Livonia
- Ronald Walter, Superintendent of Highways, Town of Scipio
- Richard Waldron, Superintendent of Highways, Town of Springport
- Ronald Mastin, Superintendent of Highways, Town of Springwater
- Lawrence Duel, Superintendent of Highways, Town of South Bristol
- Bruce Vann Supt. of Public Works Village of Trumansburg
- Richard McCulloch, Superintendent of Highways, Town of Varick



Appendix E: Inventory of Marinas

Cayuga Lake Watershed

Marina Name	County	Operator/Facilities	Municipality
Beacon Bay Marina	Cayuga	<i>Private facility</i>	Cayuga Village
Cayuga Marina	Cayuga	<i>Private facility</i>	Cayuga Village
Lockview Marina	Cayuga	<i>Private facility</i>	Cayuga Village
Troy's Marina	Cayuga	<i>Private facility</i>	Cayuga Village
Cayuga Wooden Boat Works	Tompkins	<i>Private facility</i>	Ithaca City
Ithaca Yacht Club	Tompkins	<i>Private facility</i>	Ithaca City
Johnson Boat Yard Marina	Tompkins	<i>Private facility</i>	Ithaca City
Old Port Harbor	Tompkins	<i>Private facility</i>	Ithaca City
Treman State Marina Park	Tompkins	NYS Office of Parks, Recreation and Historic Preservation; concrete ramp, pumpout	Ithaca City
Finger Lakes Marine Service	Cayuga	<i>Private facility</i>	Lansing
Lansing Town Park and Marina	Cayuga	Town of Lansing; concrete ramp, docking	Lansing
Long Point State Park	Cayuga	NYS Office of Parks, Recreation and Historic Preservation; concrete ramp	Ledyard Town
Dean's Cove	Seneca	<i>Private facility</i>	Ovid
Dean's Cove State Marine Park	Seneca	NYS Office of Parks, Recreation and Historic Preservation; concrete ramp	Ovid
Cayuga Lake State Park	Cayuga	NYS Office of Parks, Recreation and Historic Preservation; concrete ramp, pumpout	Seneca Falls Town
Taughannock Falls State Park	Tompkins	NYS Office of Parks, Recreation and Historic Preservation; concrete ramp, pumpout	Ulysses
Castelli's Marina	Cayuga	<i>Private facility</i>	Union Springs V.
Hibiscus Harbor	Cayuga	<i>Private facility</i>	Union Springs V.
Willis Marina	Cayuga	<i>Private facility</i>	Union Springs V.



Canandaigua Lake Watershed

Marina Name	County	Operator/Facilities	Municipality
Canandaigua Lake State Marine Park	Ontario	NYS Office of Parks, Recreation and Historic Preservation;; boat launch/fishing access	Canandaigua Cty
City Pier	Ontario	City of Canandaigua; docking	Canandaigua Cty
Kershaw Park	Ontario	City of Canandaigua; small craft launch/docking/pumpout facility	Canandaigua Cty
Seager Marine	Ontario	<i>Private facility</i>	Canandaigua Cty
Onanda Site	Ontario	Town of Canandaigua; concrete ramp-limited access	Canandaigua Twn
Canandaigua Yacht Club	Ontario	<i>Private facility</i>	Canandaigua Twn
West River Site	Ontario	DEC; car top boat launch	Middlesex V.
Hunter's Marina	Ontario	<i>Private facility</i>	Naples
Jansen Marina	Ontario	<i>Private facility</i>	Naples
Woodville Site	Ontario	DEC; concrete ramp	Naples

Conesus Lake Watershed

Marina Name	County	Operator/Facilities	Municipality
Conesus Inlet Wildlife Management Area	Livingston	DEC; car top boat launch	Conesus Town
Jansen Marina	Livingston	<i>Private facility</i>	Conesus Town
Leisure Time Marina	Livingston	<i>Private facility</i>	Conesus Town
Conesus Lake Public Boat Launch	Livingston	NYS Office of Parks, Recreation and Historic Preservation; concrete ramp	Livonia Town
Pebble Beach Site	Livingston	DEC; car top boat launch	Livonia Town
Sand Point/Vitale Park	Livingston	DEC/Town of Livonia; car top boat launch	Livonia Town



Appendix F: Summary of Municipal Budgets

The following summary has been created in order to provide insight regarding a municipality's general expenditures on zoning, inspections and code enforcement. Information on how figures were derived for each municipality has been provided at the back of the tables.

2004 Expenditures by Municipality					
Municipality	General Expenditures	Zoning/Code Enforcement	% of General Expenditures	2000 Population	\$/citizen
Aurelius, Town	\$ 1,124,277.00	\$ 12,226.38	1.09%	2,936	\$ 4.16
Aurora, Village	\$ 243,154.80	\$ 7,200.00	2.96%	720	\$ 10.00
Canandaigua, City ¹	\$10,786,560.00	\$ 131,710.00	1.28%	11,264	\$ 11.69
Canandaigua, Town ²	\$ 5,140,642.00	\$ 178,858.00	3.48%	7,649	\$ 23.38
Caroline, Town	\$ 1,432,541.00	\$ 33,550.00	2.34%	2,910	\$ 11.53
Cayuga, Village	<i>not provided</i>			509	\$ -
Cayuga Heights, Village	\$ 2,764,700.00	\$ 27,280.00	0.98%	3,273	\$ 8.33
Conesus, Town ³	\$ 498,939.00	\$ 37,065.00	7.43%	2,353	\$ 15.75
Covert, Town	\$ 210,291.00	\$ 2,800.00	1.33%	2,227	\$ 1.26
Danby, Town	\$ 1,291,161.00	\$ 46,624.00	3.61%	3,007	\$ 15.51
Dryden, Town	\$ 1,276,522.00	\$ 163,980.00	12.85%	13,532	\$ 12.12
Dryden, Village	<i>not provided</i>			1,832	\$ -
Enfield, Town	<i>not provided</i>			3,369	\$ -
Fayette, Town	<i>not provided</i>			3,643	\$ -
Fleming, Town	<i>not provided</i>			2,647	\$ -
Freeville, Village	\$ 185,158.00	\$ 3,125.00	1.69%	505	\$ 6.19
Geneseo, Town†	\$ 1,645,205.00	\$ 102,862.00	6.30%	9,654	\$ 10.65
Genoa, Town	\$ 803,511.00	\$ 8,250.00	1.03%	1,914	\$ 4.31
Gorham, Town‡	\$ 1,212,941.00	\$ 61,405.00	5.06%	3,776	\$ 16.26
Groton, Town	\$ 458,099.00	\$ 27,666.00	6.04%	5,794	\$ 4.77
Groveland, Town‡	\$ 852,768.00	\$ 8,500.00	1.02%	3,853	\$ 2.21
Harford, Town	not provided			920	\$ -
Hector, Town	\$ 1,155,336.46	\$ 40,160.00	3.48%	4,854	\$ 8.27
Hopewell, Town	\$ 1,359,658.00	\$ 47,457.00	3.49%	3,346	\$ 14.18



2004 Expenditures by Municipality					
Municipality	General Expenditures	Zoning/Code Enforcement	% of General Expenditures	2000 Population	\$/citizen
Interlaken, Village	\$ 297,240.00	\$ -	no expenditures listed	674	\$ -
Italy, Town	\$ 699,160.00	\$ -	no expenditures listed	1,087	\$ -
Ithaca, City†	\$36,559,638.00	\$ 916,629.00	2.51%	29,287	\$ 31.30
Ithaca, Town	\$ 2,824,877.00	\$ 156,100.00	5.53%	18,198	\$ 8.58
Lansing, Town†	\$ 1,149,481.00	\$ 134,127.00	11.67%	10,521	\$ 12.75
Lansing, Village	<i>not provided</i>			3,417	\$ -
Ledyard, Town	\$ 272,426.00	\$ 12,270.00	4.50%	1,832	\$ 6.70
Livonia, Town	\$ 688,725.00	\$ 113,575.00	16.49%	7,286	\$ 15.59
Livonia, Village	\$ 745,950.00	\$ 11,500.00	1.54%	1,373	\$ 8.38
Lodi, Town	\$ 191,854.00	\$ -	no zoning	1,476	\$ -
Middlesex, Town	\$ 1,045,108.00	\$ 25,550.00	2.37%	1,345	\$ 19.00
Naples, Town	\$ 466,735.00	\$ 36,422.00	7.80%	2,441	\$ 14.92
Naples, Village	\$ 692,340.70	\$ 28,679.39	4.14%	1,072	\$ 26.75
Newfield, Town	<i>not provided</i>			5,109	\$ -
Ovid, Town	\$ -	\$ -	no zoning	2,757	\$ -
Potter, Town	\$ 306,030.00	\$ 14,930.00	4.88%	1,830	\$ 8.16
Romulus, Town	\$ 473,511.00	\$ 5,275.00	1.11%	2,036	\$ 2.59
Rushville, Village	not provided			621	\$ -
Scipio, Town	\$ 392,343.00	\$ 6,300.00	1.61%	1,537	\$ 4.10
Sempronius, Town	<i>not provided</i>			893	\$ -
Seneca Falls, Town	<i>not provided</i>			9,347	\$ -
South Bristol, Town†	\$ 1,661,057.00	\$ 39,132.00	2.36%	1,645	\$ 23.79
Sparta, Town	<i>not provided</i>			1,627	\$ -
Springport, Town	\$ 460,006.00	\$ 7,045.00	1.53%	2,256	\$ 3.12
Springwater, Town	\$ 1,305,870.00	\$ 17,000.00	1.30%	2,322	\$ 7.32
Summerhill, Town	\$ 526,125.00	\$ 5,700.00	1.08%	1,098	\$ 5.19
Trumansburg, Village	\$ 938,004.00	\$ 12,400.00	1.32%	1,581	\$ 7.84
Ulysses, Town	\$ 341,994.00	\$ 35,258.00	10.31%	4,775	\$ 7.38



2004 Expenditures by Municipality					
Municipality	General Expenditures	Zoning/Code Enforcement	% of General Expenditures	2000 Population	\$/citizen
Union Springs, Village	<i>not provided</i>			1,074	\$ -
Varick, Town	\$ 380,527.00	\$ 2,663.00	0.70%	1,729	\$ 1.54
Venice, Town	\$ 177,807.00	\$ 5,200.00	2.78%	1,286	\$ 4.04
Virgil, Town	\$ 985,570.00	\$ 20,880.00	2.12%	2,287	\$ 9.13

¹ Appropriations for the Canandaigua Lake Watershed Council have been excluded (2004 = \$175,890; 2005 = \$345,370)

² Appropriations for the Canandaigua Lake Management Plan have been excluded (2004 = \$11,338; 2005 = \$11,600)

³ Appropriations for the Conesus Watershed Inspector have been excluded (2004 = \$6,136; 2005 = \$6,568)

† Code enforcement duties are shared between the town and village governments. Population includes SUNY campus and village.

‡ Appropriations for Canandaigua Lake Watershed Inspection have been excluded (2004 = \$13,000; 2005 = \$13,000)

¶ Appropriations for Watershed Inspector have been excluded (2004 = \$4,352; 2005 = \$4,352)

¶ Appropriations for Flood/Erosion control were excluded (2004 = \$61,020/ 2005 = \$105,623)

¶ Appropriations for Flood and Erosion Control were excluded (2004 = \$40,468; 2005 = \$40,468)

¶ Appropriations for Watershed Inspector have been excluded (2004 = \$7,659; 2005 = \$7,438)



<i>2005 Expenditures by Municipality</i>					
Municipality	General Expenditures	Zoning/Code Enforcement	% of General Expenditures	2000 Population	\$/citizen
Aurelius, Town	\$ 897,758.00	\$ 11,926.00	1.33%	2,936	\$ 4.06
Aurora, Village	\$ 240,533.00	\$ 7,200.00	2.99%	720	\$ 10.00
Canandaigua, City ¹	\$ 10,786,560	\$ 134,990.00	1.25%	11,264	\$ 11.98
Canandaigua, Town ²	\$5,295,477.00	\$ 215,809.00	4.08%	7,649	\$ 28.21
Caroline, Town	\$1,697,648.00	\$ 35,803.00	2.11%	2,910	\$ 12.30
Cayuga, Village	not provided			509	\$ -
Cayuga Heights, Village	\$2,897,000.00	\$ 28,520.00	0.98%	3,273	\$ 8.71
Conesus, Town ³	\$ 576,880.00	\$ 26,965.00	4.67%	2,353	\$ 11.46
Covert, Town	\$ 207,192.00	\$ 2,800.00	1.35%	2,227	\$ 1.26
Danby, Town	\$1,397,024.00	\$ 49,155.00	3.52%	3,007	\$ 16.35
Dryden, Town	\$1,295,442.00	\$ 159,722.00	12.33%	13,532	\$ 11.80
Dryden, Village	not provided			1,832	\$ -
Enfield, Town	not provided			3,369	\$ -
Fayette, Town	not provided			3,643	\$ -
Fleming, Town	not provided			2,647	\$ -
Freeville, Village	\$ 217,584.00	\$ 3,700.00	1.70%	505	\$ 7.33
Geneseo, Town†	\$1,770,739.00	\$ 96,315.00	5.44%	9,654	\$ 9.98
Genoa, Town	\$ 805,860.00	\$ 8,250.00	1.02%	1,914	\$ 4.31
Gorham, Town‡	\$1,021,699.00	\$ 58,933.00	5.77%	3,776	\$ 15.61
Groton, Town	\$ 472,048.00	\$ 30,324.00	5.79%	5,794	\$ 5.23
Groveland, Town‡	\$ 852,768.00	\$ 11,200.00	1.31%	3,853	\$ 2.91
Harford, Town	not provided			920	\$ -
Hector, Town	\$1,154,955.00	\$ 47,500.00	4.11%	4,854	\$ 9.79
Hopewell, Town	\$1,323,896.00	\$ 48,765.00	3.68%	3,346	\$ 14.57
Interlaken, Village	\$ 305,150.00	\$ -		674	\$ -
Italy, Town	\$ 777,492.88	\$ -		1,087	\$ -



<i>2005 Expenditures by Municipality</i>					
Municipality	General Expenditures	Zoning/Code Enforcement	% of General Expenditures	2000 Population	\$/citizen
Ithaca, City†	\$ 33,818,890.00	\$ 845,818.00	2.50%	29,287	\$ 28.88
Ithaca, Town	\$2,910,683.00	\$ 179,500.00	6.17%	18,198	\$ 9.86
Lansing, Town†	\$1,268,053.00	\$ 149,387.00	11.78%	10,521	\$ 14.20
Lansing, Village	not provided			3,417	\$ -
Ledyard, Town	\$ 304,727.00	\$ 12,150.00	3.99%	1,832	\$ 6.63
Livonia, Town	\$ 727,963.00	\$ 131,338.00	18.04%	7,286	\$ 18.03
Livonia, Village	\$ 724,867.00	\$ 12,000.00	1.66%	1,373	\$ 8.74
Lodi, Town	\$ 196,310.00	\$ -	no zoning	1,476	\$ -
Middlesex, Town	\$1,078,680.00	\$ 29,550.00	2.74%	1,345	\$ 21.97
Naples, Town	\$ 497,453.00	\$ 43,335.00	8.71%	2,441	\$ 17.75
Naples, Village	\$ 964,070.00	\$ 32,340.00	3.35%	1,072	\$ 30.17
Newfield, Town	not provided			5,109	\$ -
Ovid, Town	\$ -	\$ -	no zoning	2,757	\$ -
Potter, Town	\$ 318,000.00	\$ 15,000.00	4.72%	1,830	\$ 8.20
Romulus, Town	\$ 525,648.00	\$ 6,475.00	1.23%	2,036	\$ 3.18
Rushville, Village	not provided			621	\$ -
Scipio, Town	\$ 389,975.00	\$ 6,300.00	1.62%	1,537	\$ 4.10
Sempronius, Town	not provided			893	\$ -
Seneca Falls, Town	not provided			9,347	\$ -
South Bristol, Town†	\$1,570,242.00	\$ 39,941.00	2.54%	1,645	\$ 24.28
Sparta, Town	not provided			1,627	\$ -
Springport, Town	\$ 525,329.00	\$ 42,111.00	8.02%	2,256	\$ 18.67
Springwater, Town	\$1,305,654.00	\$ 17,400.00	1.33%	2,322	\$ 7.49
Summerhill, Town	\$ 540,840.00	\$ 5,700.00	1.05%	1,098	\$ 5.19
Trumansburg, Village	\$1,002,390.00	\$ 11,014.00	1.10%	1,581	\$ 6.97
Ulysses, Town	\$ 331,665.00	\$ 37,690.00	11.36%	4,775	\$ 7.89



<i>2005 Expenditures by Municipality</i>					
Municipality	General Expenditures	Zoning/Code Enforcement	% of General Expenditures	2000 Population	\$/citizen
Union Springs, Village	not provided			1,074	\$ -
Varick, Town	\$ 396,030.00	\$ 3,728.00	0.94%	1,729	\$ 2.16
Venice, Town	\$ 187,220.00	\$ 5,200.00	2.78%	1,286	\$ 4.04
Virgil, Town	\$1,106,639.00	\$ 14,800.00	1.34%	2,287	\$ 6.47

¹ Appropriations for the Canandaigua Lake Watershed Council have been excluded (2004 = \$175,890; 2005 = \$345,370)

² Appropriations for the Canandaigua Lake Management Plan have been excluded (2004 = \$11,338; 2005 = \$11,600)

³ Appropriations for the Conesus Watershed Inspector have been excluded (2004 = \$6,136; 2005 = \$6,568)

† Code enforcement duties are shared between the town and village governments.

Population includes SUNY campus and village.

‡ Appropriations for Canandaigua Lake Watershed Inspection have been excluded (2004 = \$13,000; 2005 = \$13,000)

† Appropriations for Watershed Inspector have been excluded (2004 = \$4,352; 2005 = \$4,352)

† Appropriations for Flood/Erosion control were excluded (2004 = \$61,020/ 2005 = \$105,623)

† Appropriations for Flood and Erosion Control were excluded (2004 = \$40,468; 2005 = \$40,468)

† Appropriations for Watershed Inspector have been excluded (2004 = \$7,659; 2005 = \$7,438)



Budget Analysis: Method of Calculation

Town of Aurelius

Schedule B appropriations for Zoning (contractual expenses and personal services) were calculated as a percentage of total Schedule B appropriations (general fund and highway combined) for FY 04 budgeted and FY 05 proposed.

Village of Aurora

Appropriations for all contractual expenses and personal services associated with Zoning within the village were calculated as a percentage of total Schedule 1-A (general fund) appropriations for 03/04 and 04/05.

City of Canandaigua

Appropriations for Code Enforcement were calculated as a percentage of total general fund expenditures for FYs 04 and 05. For the purposes of this study, appropriations for the Canandaigua Lake Watershed Council were excluded.

Town of Canandaigua

Appropriations for Zoning/Code Enforcement and Zoning Board of Appeals were combined and calculated as a percentage of total general expenditures (general and highway) for FYs 04 and 05. Appropriations for the Canandaigua Lake Management Plan were excluded.

Town of Caroline

Appropriations for Safety Inspections were calculated as a percentage of expenditures (general and highway) for FYs 2004 and 2005.

Village of Cayuga Heights

Appropriations for NYS Uniform Building and Fire Code (personal services and contractual expenses) were combined with those for Zoning Board of Appeals and calculated as a percentage of the Modified FY04 total general fund and the adopted FY05 total general fund.

Town of Conesus

Appropriations for code enf. officer, deputy code enf. officer, code enf. rec. mgmt. svc., code equipment, code enf. contractual, deputy code enf. off. cont., zoning board svc., and zoning board contr. were combined and calculated as a percentage of general expenditures for 2004 budgeted and 2005 adopted. Appropriations for the Watershed Inspector were excluded.

Town of Covert

Appropriations for Safety Inspections were calculated as a percentage of the general fund for adopted budget years 2004 and 2005.

Town of Danby

Total appropriations for Zoning (personal services, equipment/capital outlay, and contractual expenses) were calculated as a percentage of total general expenditures (highway and general) for FYs 2004 and 2005.

Town of Dryden

Appropriations for Building Inspector and Zoning as were combined and calculated as a percentage of total schedule B appropriations (general outside and highway outside) for 2004 and 2005. Appropriations for Conservation and Flood/Erosion Control were excluded.

Village of Freeville

Appropriations for Inspections (personal services and contractual expenses) and Zoning (contractual expenses) were combined and calculated as a percentage of total general appropriations for FYs 2004 and 2005. Appropriations for Drainage and Cayuga Lake watershed dues have been excluded.



Town of Geneseo

Appropriations for Code Enforcement/Inspection and Zoning were combined and calculated as a percentage of total townwide appropriations for FYs 2004 and 2005. (Zoning services are shared between the town and village governments.)

Town of Genoa

Appropriations for Safety Inspection (personal services and contractual expenses) were calculated as a percentage of total 2004 budgeted expenditures and tentative 2005 expenditures (general and highway).

Town of Gorham

Appropriations for Zoning (personal, equipment and contractual) were calculated as a percentage of Schedule B and DB expenditures (general and highway) for FYs 2004 and 2005. Appropriations associated with the Canandaigua Lake Watershed program are excluded.

Town of Groton

Appropriations for Zoning (salaries, equipment, contractual) were calculated as a percentage of total Schedule B expenditures (general and highway) for FYs 2004 and 2005.

Town of Groveland

Appropriations for Safety Insp. (personal serv., secretary, equipment and contractual) and Zoning (services, ZBA, contractual) were combined and calculated as a percentage of Schedule A and DA (general and highway) expenditures for FYs 2004 and 2005. Appropriations for the town watershed inspector were excluded.

Town of Hector

Budgeted appropriations for FY 2004 and proposed appropriations for FY 2005 for Public Safety (inspections/code enforcement, equipment/capital outlay, contractual expenses) were calculated as a percentage of total general fund Schedule B appropriations (general and highway) for said years.

Town of Hopewell

Appropriations for Zoning (personal, equipment, contractual) and ZBA were combined and calculated as a percentage of total general appropriations (general and highway) for FYs 2004 and 2005.

Village of Interlaken

No appropriations for zoning, code enforcement, etc.

Town of Italy

No appropriations for zoning, code enforcement, etc.

City of Ithaca

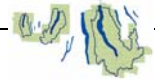
Total appropriations for the Building Department (Public Safety) were combined and calculated as a percentage of total General Expenditures, Public Safety, Transportation, Economic Development, Culture/Recreation, Home/Community Services and Dept Services/Interfund Transfers for the amended 2003 budget and adopted 2004 budget. Appropriations for Flood/Erosion control were excluded.

Town of Ithaca

Appropriations for zoning were calculated as a percentage of Schedule B expenditures (general and highway) for FYs 2004 and 2005.

Town of Lansing

Appropriations for Safety Inspections and Zoning were calculated as a percentage of total Schedule 1-B appropriations (general and highway) for FY 2004 and proposed appropriations for FY 2005. Appropriations for Flood and Erosion Control were excluded.



Town of Ledyard

Appropriations for Code Enforcement and Zoning were combined and calculated as a percentage of total Schedule B expenditures (general and highway) for FYs 2004 and 2005.

Town of Livonia

Appropriations for Bldg/Zoning Officer, Clerk, ZBA, equipment and contractual expenses were combined and calculated as a percentage of total Schedule B expenditures (general and highway) for FYs 2004 and 2005.

Village of Livonia

Appropriations for Code Enforcement were calculated as a percentage of total general expenditures for FYs 2004 and 2005.

Town of Lodi

No expenditures for code enforcement listed.

Town of Middlesex

Appropriations for zoning (personal services, equipment, contractual) were calculated as a percentage of total expenditures (general and highway) for FYs 2004 and 2005.

Town of Naples

Appropriations for Safety Inspection and Zoning were combined and calculated as a percentage of total Schedule B appropriations (general and highway) for FYs 2004 and 2005.

Village of Naples

Appropriations for Zoning were calculated as a percentage of total general expenditures for FYs 2004 and 2005.

Town of Ovid

No zoning

Town of Potter:

Appropriations for zoning were calculated as a percentage of Schedule B expenditures (general and highway) using the amended 2004 budget figures and adopted 2005 budget figures.

Town of Romulus

Appropriations for zoning from Schedule's A and B were combined and calculated as a percentage of the sum of schedule A and B (general and general outside village) for FYs 2004 and 2005.

Town of Scipio

Appropriations for zoning and safety inspection were combined and calculated as a percentage of total general fund appropriations for FYs 2004 and 2005.

Town of South Bristol

Appropriations for zoning were calculated as a percentage of total expenditures (general and highway) for FYs 2004 and 2005. Appropriations for watershed inspector have been excluded.

Town of Springport

Appropriations for safety inspection and zoning were combined and calculated as a percentage of the Schedule B appropriations (general and highway) for FYs 2004 and 2005. *Special note: the marked increase in expenditures between 2004 and 2005 can be accounted for by the addition of \$36,000 in contractual expenses for safety inspections in 2005.



Town of Springwater

Appropriations for safety inspection were calculated as a percentage of total expenditures (general and highway) for FYs 2004 and 2005.

Town of Summerhill

Appropriations for safety inspection/code enforcement were calculated as a percentage of total expenditures (general and highway) for FYs 2004 and 2005.

Village of Trumansburg

Appropriations for code enforcement and zoning were combined and calculated as a percentage of total appropriations for the 2003-2004 budget and the approved 2004-2005 budget.

Town of Ulysses

Appropriations for Building Insp PS, Zoning Officer PS, D.Zoning officer, Bldg Insp. CE and Zoning CE were combined and calculated as a percentage of general part town and highway part town appropriations for FYs 2004 and 2005.

Town of Varick

Appropriations for zoning were calculated as a percentage of total appropriations (general and highway) for FYs 2004 and 2005.

Town of Venice

Appropriations for safety inspections were calculated as a percentage of total general expenditures for FYs 2004 and 2005.

Town of Virgil

Appropriations for zoning were calculated as a percentage of the total town-wide appropriations (general and highway) for FYs 2004 and 2005.



Appendix G: Glossary and Acronyms

Agriculture Environmental Management (AEM): A voluntary, multi-agency New York State program that provides farm operators with assistance in protecting land and water resources and sustaining their agricultural markets. Usually administered through the county Soil and Water Conservation Districts

Berm: A linear mound or series of mounds of earth, planted with, and maintained as, grass

Best Management Practice (BMP): (1) A measure that is implemented to protect water quality and reduce the potential for pollution associated with stormwater runoff. (2) Any program, technology, process, siting criteria, operating method, measure, or device that controls, prevents, removes, or reduces pollution.

Canandaigua Lake Council (CLWC): The Canandaigua Lake Watershed Council, consisting of publicly elected representatives from each of the fourteen watershed and water purveying municipalities is the lead organization regarding the implementation of the watershed plan. It is the goal of the Watershed Council to maintain and enhance the high water quality of the Canandaigua Lake watershed through education, research, restoration and if necessary regulation. The Watershed Council strives to cooperate and partner with the various citizen groups along with county, state and federal agencies to more effectively and efficiently implement the plan.

Cayuga Lake Watershed Intermunicipal Organization (CLWIO): To create, modify, and implement a watershed management plan to allow local governments within the watershed to work together for the purposes of accessing dollars, cost savings, cost sharing, and efficiency of activities among municipalities. This plan will prioritize water quality problems and solutions. The Intermunicipal Organization will provide direction for the regional planning boards and other staff, and oversee the entire project.

Cornell Cooperative Extension (CCE): Cornell Cooperative Extension <http://www.cce.cornell.edu/>.

Cluster Development: A subdivision where houses are sited on smaller parcels of land, while the additional land that would have been allocated to individual lots is retained as open space

Conesus Watershed Council (CWC): The Conesus Watershed Council, consisting of publicly elected representatives from eight of the nine watershed and water purveying municipalities is the lead organization regarding the implementation of the watershed plan. The Watershed Council strives to cooperate and partner with the various citizen groups along with county, state and federal agencies to more effectively and efficiently implement the plan.

Cut and Fill: When the terrain is not flat, it may be necessary to level spots for a proposed road. This is done by taking soil (cut) from high areas and placing it (fill) in the low areas. Cuts and fills should be balanced to minimize the need for extra material and to maximize roadbed stability.

Detention Area/Pond/Basin: A low-lying area that is designed to temporarily hold a set amount of water while slowly draining it into another location. Generally designed for purposes of flood control when large amounts of rain could cause flash flooding if allowed to flow unrestrained

Finger Lakes/Lake Ontario Watershed Protection Alliance (FL/LOWPA): FL/LOWPA is a coalition of all 25 counties in New York State's Lake Ontario drainage basin. FL-LOWPA fosters coordinated watershed management programs across the Lake Ontario Basin based on local needs. Website: <http://www.fllowpa.org/>.

Gabion: Steel wire-mesh basket to hold stones or crushed rock to protect a stream bank or bottom from erosion

Hickenbottom: commercial piping product specially designed for efficient, low-maintenance stormwater conveyance

Impervious/Impermeable Areas: Areas where the infiltration of water or other liquids (gasoline, oil, antifreeze, etc.) into the ground is difficult or impossible, contributing to increased runoff, especially of rain or melting snow (Examples include streets, sidewalks, paved driveways and parking lots, roofs, etc.)

Non-point Source Water Pollution: Pollution coming from many diffuse sources; caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up pollutants such as residential and agricultural chemicals, petroleum residue and de-icing materials from roads and parking lots, and dust and sediment, and deposits them into water bodies. (By contrast, "Point Source Water Pollution" is generally discharged from an outflow or pipe that should be reviewed and permitted by the New York State Department of Environmental Conservation. Point Source Pollution is typically thought of as "traditional" sources of pollution such as industrial waste and sewage).

Onsite Wastewater Treatment Systems (OWTS): individual systems designed to treat sewage and other household waste products for a single home or business or cluster thereof.



Retention Area/Pond/Basin: Area intended to capture diverted stormwater runoff from streets and gutters and hold the runoff indefinitely. Secondary benefits include pollutant removal through settling and biological uptake as well as habitat creation for various types of organisms

Return/Return Wall: A facing, usually made of stone or concrete, installed to protect an eroding shoreline from the force of water (see also revetment)

Revetment: Sloping surface of stone, concrete or other material used to protect an embankment, natural coast or shoreline against erosion (see also return wall)

Riparian Buffer: Zone of vegetation along a river or stream that works to trap and filter pollutants and stabilize bank sediments

Rip-Rap: angular, irregularly-shaped stone of various size intended for ground stabilization, usually applied to steep slopes or other land areas considered to be susceptible to erosion, such as road banks, ditches, stream embankments or swales

Silviculture: The science, art, and practice of caring for forests with respect to human objectives

Seneca Lake Area Partners in Five Counties (SLAP-5): A watershed management protection alliance which focuses on water quality issues in the Seneca Lake Watershed; member counties include Chemung, Ontario, Schuyler, Seneca, and Yates.

Soil Bio-engineering: Techniques used to stabilize land by using live plant materials to provide erosion control, slope and stream bank stabilization, landscape restoration, and wildlife habitat. Used alone or in conjunction with conventional engineering techniques

Watershed Management Plan (WMP): The overall goal of watershed management plans are to develop a framework for improving water quality in a particular watershed. Increasing development pressure, degradation of the water quality in lakes and rivers, and more stringent federal and state standards for water supplies make it crucial that a comprehensive watershed management approach to conserving and protecting water resources be developed. Plans will involve continued data collection and analysis, strengthened partnerships among regional stakeholders, consensus on priority watershed issues, pooled funding and staff resources among project partners, and review and selection of management strategies and restoration projects for improved water quality. Plans are designed to encourage community-based partners to look beyond municipal and agency boundaries as they work together to protect, preserve and restore valuable water resources.

Wing Wall: Wall attached to the headwall of a culvert, set at an angle with the centerline, which prevents earth from spilling into a channel and improves hydraulic efficiency.

Yarding system: A method of log transport that allows for the harvesting of timber in an environmentally sound manner. A tractor with a mounted tower and winches moves through forests to preplanned locations, while a "yarding" cable is run down to an anchor tree. There are no wide landing areas to bulldoze and no excessive ground disturbances. Narrow skid trails replace the high disturbance skid roads of the past