

# Chapter I

## Introduction

The Canandaigua Lake Watershed extending along either side of the Lake from the City and Town of Canandaigua in the north to the Village and Town of Naples in the south provides an outstanding place to live, work and play. The purpose of this Watershed Management Plan is to maintain the ecological integrity and the quality of life in this watershed by protecting the lifeblood of this region- the high quality of water produced by the Canandaigua Lake Watershed.

Although the waters of Canandaigua Lake are of high quality, several environmental problems pose long-term threats to the Lake if left unchecked. Sedimentation, phosphorus, nitrogen, toxic substances, deicing salt and pathogens are the major pollutants entering the Lake at an increased rate originating from sixteen potential sources. Planning and implementation of the endorsed actions described in this report will help to decrease the levels of these pollutants entering the Lake so as to maintain its current high quality.

### An Evolving Plan:

The planning process preceding the actual production of this plan is very important to understand. A brief history of this process will provide some insight into and appreciation for the hard work and cooperation provided by a wide spectrum of stakeholders. In 1993, a group of local agency personnel from various



Ontario and Yates County agencies, Canandaigua Lake Watershed Task Force and Canandaigua Lake Pure Waters received a grant from New York State to produce *The State of the Canandaigua Lake Watershed-1994*. This six-hundred page report produced in late 1994 established an extremely comprehensive foundation and baseline of information regarding the six major types of pollution (phosphorus, nitrogen, sediments, pathogens, chloride and pesticides) and the sixteen potential sources of these pollutants. Also included were recommendations on how to minimize the impact from these types and sources of pollution. The personnel who worked on this trail-blazing effort should be commended.

Momentum built from the *State of the Watershed Report* to create a “Watershed Compact” calling on businesses, groups and government to protect Canandaigua Lake. Over fifty organizations signed the Canandaigua Lake Watershed Compact with each of the signatories recognizing and accepting responsibility to care for the

resources of the watershed so that they may be available for the use and enjoyment of present and future generations.



Members of the LGWPC.

Equally important has been the effort by the elected leaders who serve or have served on the Local Government Watershed Policy Committee (LGWPC). This committee is made up of elected representatives (mayors, supervisors and municipal board members) from each of twelve watershed communities. Their job from 1995 to 1998 was to review on a monthly basis each of the *State of the Watershed's* recommendations and reach consensus based decisions about the acceptance, revision or rejection of each recommendation.

There were over one-hundred recommendations voted on during this period and over ninety of those recommendations passed the stringent review of this committee. Consensus style decision making was used, and elected leaders were willing to listen and learn about each individual action before they made a decision about the recommendation. The ninety plus recommendations endorsed by the LGWPC form the centerpiece of the Plan. Elected leaders who serve or have served on this committee should also be commended for their diligence and commitment.

### **Partnership Approach:**

Based on the wide spectrum of signatories of the *Watershed Compact* and the active involvement of the watershed municipalities; numerous agencies, municipalities and organizations are involved in putting together this Watershed Management Plan. Implementation of the Plan should rely upon these groups to continue these successful efforts and expand their capabilities through partnerships. A formal yet voluntary partnership through the use of the Intermunicipal Agreement can increase communication and coordination among various levels of government. The use of a **watershed manager** can also reduce duplication of effort; increase effectiveness and efficiency in the use of human and financial resources; evolve as needed; accomplish the objectives without the use of new regulations or new layers of government; inform and involve the public and ensure a sharing of responsibility for implementing the Plan.



*Members of the LGWPC in action!*

### **Non-point Source Pollution:**

Canandaigua Lake is primarily impacted by non-point source pollution. Point source pollution is pollution that enters a waterbody from a pipe or other well known source. Non-point source pollution is carried to waterbodies like Canandaigua Lake through runoff from the land. Thus a vast array of land use activities can potentially be a non-point source of pollution. Many of these activities have been identified in Chapter III of this report. Being general and indefinite, non-point source pollution is difficult, if not impossible, to regulate out of existence. Each individual non-point source is usually insignificant, but the cumulative effects of multiple non-point sources creates the significance. Education and working with watershed residents are the best ways to decrease the levels coming from non-point source pollution.

### **Watershed Approach:**

A watershed can be defined as a catch basin in which all water that lands in the basin eventually ends up in one specific delivery point (Canandaigua Lake). The Canandaigua Lake Watershed can roughly be defined by the hills surrounding the Lake. However, this is not entirely accurate because the West River valley, which is located behind Bare and South Hills is in the watershed (see picture). The watershed can be broken down into 34 sub-watersheds based on the different tributaries and areas that flow into the Lake. Detailed maps of the watershed can be seen on the inside cover and pages 8-13.



*Water respects neither property nor political boundaries. View of Naples Creek and West River coming into the south end of the Lake.*

An action plan based on watershed boundaries rather than political boundaries can better target polluted or threatened areas for protection or restoration. This Plan calls for a watershed-based approach to planning and management that considers the Lake and its drainage area as a whole, interconnected, complex system. At the same time it is necessary to break down this complex watershed into subwatersheds to increase the ability to identify specific pollution sources and focus management efforts.

## Watershed Resources

Canandaigua Lake is 15.5 miles long, on average a mile wide, has a maximum depth of 276 feet and holds approximately 429 billion gallons of water. In terms of volume, Canandaigua Lake is the third largest Finger Lake. The drainage area, or watershed, of Canandaigua Lake consists of a land area of 174 square miles, or about 111,360 acres. The watershed also contains a number of streams that run into the lake: Naples Creek, West River, Barnes Gully, Tichenor Gully, Sucker Brook, Deep Run, Menteth Gully, Seneca Point, Fall Brook and Vine Valley Creek. Because of Canandaigua Lake's high water quality, the Lake and surrounding watershed can be used in a variety of ways.

**Water Use:** The highest and best use of Canandaigua Lake is as a water supply. The Lake provides high-quality drinking water for over 50,000 people served by municipal sources and most of the approximately 1,500 residences along the lake shore. Many of the residents living in the southern two-thirds of the watershed rely on ground water from within the watershed boundaries. Activities occurring within the watershed can affect both ground and surface water sources.

**Recreation and Tourism:** Swimming, boating and fishing are the three main recreational activities associated with the Lake. The NYS Department of Environmental Conservation estimates that approximately \$8,000,000 is generated through fishing on the Lake alone. The NYS Department of Economic Development estimates that the total economic impact from recreation and tourism in Ontario and Yates Counties was over \$80,000,000 in 1998, much attributed to the beauty and quality of the lakes.

**Land Value:** Over twenty-thousand people live in the watershed. The estimated total Canandaigua Lake watershed assessed land value is over \$1 billion with an estimated lake influenced value of \$750 million. Studies of other lakes and watersheds have shown that up to 20% of lake property value is directly related to perceptions of lake water quality.

## Goal of the Plan

### **To protect the place in which we live, work and play**

A clean Canandaigua Lake plays a vital role in the local and regional economy. However, the most compelling reason for watershed protection may come not from the various economic benefits of the watershed, but from a more intrinsic community based reason. Our watershed provides an outstanding quality of life for all its residents. Whether you live on the lakeshore, have a majestic hillside view or simply live within the watershed boundaries, the natural resources of this watershed enhance your quality of life. The main goal of this management plan is to maintain the quality of life this watershed provides by protecting the lifeblood of this region.