

Introduction

Eleven management action categories were developed to reflect the priority setting by the Intermunicipal Organization (IO) and the major water quality issues in the Cayuga Lake Watershed. The process used to determine these priorities is described in Chapter II. Sediment loading is the highest priority issue in the Cayuga Lake Watershed, with phosphorus loading an important second. The action categories address Agricultural Practices, Stormwater Management & Erosion Control, Monitoring & Assessment, Wetland, Shoreline & Riparian Corridor Management, Forestry & Silviculture, and Regulatory Management. There are specific recommendations in each section designed to effectively reduce the potential for nonpoint source pollution from sediment, phosphorus, and other contaminants. Recommendations are both technical and institutional: the what, who, how, where and when of watershed restoration and protection.

As noted in Chapter II, the three main sources of sediment loss from the watershed are streambank erosion, roadbank and road ditch erosion and maintenance, and human alteration of the landscape. Agriculture and development practices are the land uses with the greatest potential for increased sediment loss. Overall, the most effective means to reduce sediment loss from the Cayuga Lake Watershed is to protect and restore the riparian corridors along the many tributaries. The highest priority areas for these actions are specific segments of Big Salmon Creek, Cayuga Inlet, and Fall Creek (see Appendix S - Very Severe Segments/Riparian Corridors) that were identified through a quantitative streambank assessment as described in the *Cayuga Lake Preliminary Watershed Characterization* (2000) and summarized in the Wetland, Shoreline & Riparian Corridor Management section of this chapter. Controlling streambank erosion can be difficult and costly and will require a firm commitment from many levels of government.

Controlling roadbank erosion and reducing the adverse environmental impacts of roadway maintenance will require changes in practices by highway construction and maintenance personnel. Some roadway segments require immediate stabilization, especially in the Towns of Caroline, Danby, Enfield, Genoa, Hector, Lansing, Ledyard, Newfield, and Summerhill (see Appendix I - Very Severe Roadbank/Road Ditch Erosion). These are identified through a quantitative roadbank assessment and described in the *Cayuga Lake Preliminary Watershed Characterization*. The highest priority actions for mitigation include practical measures (vegetating ditches using hydroseeders) and enhanced training for construction and maintenance personnel. These actions are summarized in the Stormwater Management & Erosion Control Section of this chapter.

Specific actions for agriculture and development are described that will reduce the loss of sediment and associated pollutants from the landscape. There are two central recommendations for controlling agricultural nonpoint source pollution. First, continue to develop and implement whole farm plans using the Agricultural Environmental Management (AEM) framework (see Appendix H - Agricultural Programs). Second, protect and/or restore riparian corridors adjacent to agricultural lands throughout the watershed. Adverse impacts of development can be mitigated through the adoption and enforcement of local Stormwater & Erosion Control ordinances (see Appendix I). The

priority subwatersheds where controls on land use will effect the greatest overall reduction of loading to the lake were highlighted in Chapter II and include the Towns of Venice, Genoa, Lansing, Summerhill, Groton, Dryden, Virgil, Ithaca, Lodi, Ovid, Ledyard, Aurelius, Springport, Fleming and Scipio, the City of Ithaca, and the Villages of Dryden and Freeville.

Two other issues of high concern are the potential pollution to both surface water and groundwater associated with on-site wastewater (septic) systems and hazardous material storage. The findings of the *Cayuga Lake Preliminary Watershed Characterization* (2000), as well as other documents, strongly suggest that most on-site systems in the Cayuga Lake Watershed are installed in areas considered marginal for optimal operation of septic systems. These environmental constraints include high groundwater table, poor soils, or inadequate depth to bedrock. Compounding this problem are inadequate maintenance and inspection. The primary recommendation for on-site wastewater systems is the use of regular assessments and inspections through the institution of local on-site waste water regulation, county public health law (similar to the process already in use in Cayuga County), or Watershed Rules and Regulations coupled with hiring a watershed inspector. These recommendations are discussed in the Wastewater Systems Management and Regulatory Management sections of this chapter.

Hazardous material storage has already had a devastating effect on many groundwater supplies in the watershed. The primary recommendation in this category is information gathering: determine the location and type of sites and design effective methods for their remediation. Another significant recommendation is to implement regular hazardous waste collection days. Only Tompkins County has a permanent hazardous waste collection facility. The hazardous materials recommendations are covered in the Hazardous Waste Management section of this chapter.

It is important to point out that all the recommendations, regardless of priority or perceived importance, will be difficult or impossible to implement without continued public discourse. Targeted education, along with coordination, collaboration, and partnerships and public participation are critical. Efforts to engage watershed residents have been a major focus of the RPP process. As these activities transcend the individual issues, sources, and management strategies they are included as action categories.

The success of the *RPP* will be measured using three interrelated processes: (1) achievement of measures and targets for the action category recommendations, (2) assessment of the health of the watershed and lake through continued monitoring, and (3) evaluation techniques recommended by the IO Organizational Consultant (see Appendix A) and adopted by the IO in the Fall of 2001. Through regular and systematic monitoring, priority sources and issues can be identified and mitigated or protected, and the success of targeting resources through strategies such as the RPP itself can be evaluated. Recommendations for sampling and monitoring are covered in the Monitoring & Assessment section of this chapter.

Each section of this chapter has an introductory matrix (with the exception of Public Participation) associating the issues outlined in Chapter II with the management option (associated if shaded), followed by an introduction stating the situation, a set of goals, a listing of existing measures, and a matrix of recommendations.

The recommendation matrix for each action category (with the exception of Public Participation and Forestry and Silviculture Management) has six columns. The first column lists the prioritized recommendation number. The second column lists the prioritized recommendation. The third column lists the abbreviation of the issues as discussed in Chapter II, addressed by each recommendation. Use the issues matrix at the beginning of each section as a key to the abbreviation. The fourth column lists the abbreviation for the potential organizations responsible for the recommendation (see recommendation key). The fifth column lists the measure and/or target that will be used to implement and evaluate the recommendation. The sixth column lists the approximate cost of the recommendation. The recommendation matrixes use a color coding scheme, which relates the recommendation to the other major management option category (see recommendation key).

Recommendation Key

Potential Responsible Organization(s)

AI	Academic Institutions
C	County Agencies
CCE	Cornell Cooperative Extension
CLWN	Cayuga Lake Watershed Network
CWQCC	County Water Quality Coordinating Committees
IO	Intermunicipal Organization
IOAC	Intermunicipal Organization Agriculture Committee
KLA	Keuka Lake Association
LO	Land Owner
LC	Land Trust
M	Municipalities
NRCS	Natural Resource Conservation Service
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	New York State Department of Transportation
NYSDOH	New York State Department of Health
NYPF	New York Planning Foundation
ORPS	Office of Real Property Services
PC	Private Consultant
RPB	Regional Planning Boards
SLAP5	Seneca Lake Area Partners in the Five County of the Seneca Lake Watershed
SWCD	Soil & Water Conservation District
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USGS	United States Geologic Survey
WWTF	Wastewater Treatment Facility
WSS	Watershed Steward

Related Strategies, Recommendations and Management Options

	Agricultural Practices
	Education
	Cooperation
	Hazardous Waste
	Monitoring & Assessment
	On-Site Wastewater Systems
	Public Participation
	Regulatory Management
	Stormwater Management & Erosion Control
	Wetland & Riparian Corridor Management

The following are the action categories with their associated strategies, recommendations, and management options:

- Public Participation
- Coordination, Collaboration, and Partnerships
- Watershed Education
- Agricultural Practices
- Stormwater Management & Erosion Control
- Wastewater Systems Management
- Hazardous Waste Management
- Monitoring & Assessment
- Wetland, Shoreline & Riparian Corridor Management
- Forestry and Silviculture Management
- Regulatory Management

1. Public Participation

The RPP is a process that culminates with a document of shared goals, objectives, strategies, and recommendations that will serve as a guide in the restoration and protection of the watershed. Over the past four years there have been several planned opportunities for individuals and groups to voice their interests and concerns on issues effecting the Cayuga Lake Watershed (see Appendix B - Public Participation). Additionally, individuals and groups are encouraged to take a more active role by working with the IO member in your municipality, attending or becoming an active member of an IO committee (see Appendix A - IO Structure), commenting on draft documents as they become available, and/or becoming an active member of other organizations concerned with the future of the Cayuga Lake Watershed.