

Appendix D
Issues Prioritization

Cayuga Lake Watershed Issues Prioritization

Please discuss Cayuga Lake Watershed Issues Prioritization with your municipal board. Each Intermunicipal Organization representative has a total of 15 points, which can be used in any combination to rank the following items:

Use Concerns

- Access to the lake
- Aesthetics/scenic beauty/viewsheds
- Lake water levels
- Water quantity
- Fisheries
- Swimming
- Drinking water
- Invasive/exotic plants and animals
- Sewage smell and bacteria
- Weed growth
- Algae blooms
- Groundwater and groundwater/surface water interaction
- Other – specify _____

- Industry (including material stockpiles, transport and transfer stations, wells, mines and industrial processes)
- Commercial sources of contamination
- Municipal sources of contamination (including road deicing material)
- Residential lawn care and household hazardous waste
- Stormwater runoff (including impervious surfaces and roadside ditches)
- Waste water and waste water treatment plants
- On-site septic
- Motorized recreational vehicles (including noise)
- Habitat protection
- Other – specify _____

Environmental Threats

- Development (including urban/rural sprawl, shoreline development)
- Natural areas (including loss of open space, diminishing natural habitat)
- Shoreline and riparian corridor degradation
- Sediment loading (including siltation and streambank/roadbank erosion)
- Nutrient loading
- Heavy metals
- Organics (including pesticides and chemical and petroleum storage systems)
- Pathogens & viruses (including coliform, giardia and cryptosporidia)
- Thermal loading
- Land fills, dumps and hazardous spills and materials
- Agriculture sources of contamination

Management Issues

- Economic revitalization and sustainability
- Tourism and other economic development
- Comprehensive planning (vs. short-term, site specific planning)
- Funding
- Sampling and monitoring (tributaries and lake)
- Modeling (loading)
- Water quality standards
- Municipal resources (including expertise, time, funding)
- Enforcement of existing law
- Indian land claims
- Permitting process
- Regulations – give example _____
- Infrastructure (public sewer and water)
- Watershed Education
- Other – specify _____

Municipality: _____

Representative: _____

Description and Resources - Prioritized Issues

Agriculture sources of contamination - Refer to the *Cayuga Lake Preliminary Watershed Characterization* Sections 3.12 and 4.3.2, Chapter 6 of the *Cayuga Lake Preliminary Watershed Characterization Executive Summary* pages 13 and 18, and the *RPP* Agricultural Practices section.

Comprehensive planning (vs. short-term, site specific planning) – long-term regional or watershed-wide comprehensive planning. Refer to the draft *Cayuga Lake Watershed Restoration & Protection Plan* Regulatory Management section.

Development (including urban/rural sprawl, shoreline development) – Residential, commercial, and industrial development. Refer to the *RPP* Stormwater Management and Erosion Control and Regulatory Management sections.

Drinking water – Cayuga Lake is a drinking water supply and many communities and individuals in the Cayuga Lake Watershed use a groundwater drinking supply. There are many issues associated with the drinking water supply in the Watershed. For more information refer to the *Cayuga Lake Preliminary Watershed Characterization* Sections 2.7, 2.8, 4.3.2, 4.3.4 and Chapters 3 and 6, the *Cayuga Lake Preliminary Watershed Characterization Executive Summary* pages 4, 6, 7, 10-13, and 18-20, the *RPP* Water Quality Status, Water Quality Issues and Areas of Concern section, and the initial finding of the Cayuga Lake Watershed Source Water Assessment Program (NYSDOH, April 2001).

Economic revitalization and sustainability - the *Preliminary Watershed Characterization* and the draft *RPP* deal with this through identification, strategies and recommendations to increasing water quality.

Education - education has been and must continue to be a focus of the draft *RPP* and other organizations and processes in the watershed. Refer to the draft *RPP* Public Participation and Education sections.

Infrastructure – including public sewer and water and its relation to land use, development, water quality and long-range planning.

Nutrient loading – Referring mainly to phosphorus and nitrogen. Refer to the *Cayuga Lake Preliminary Watershed Characterization* Sections 4.3.2.2 and Chapter 6, the *Cayuga Lake Preliminary Watershed Characterization Executive Summary* page 7, and the draft *RPP* Water Quality Status, Water Quality Issues and Areas of Concern section.

On-site wastewater systems - Refer to the *Cayuga Lake Preliminary Watershed Characterization* Section 3.13 and Chapter 6, the *Cayuga Lake Preliminary Watershed Characterization Executive Summary* page 19, and draft *RPP* Wastewater Systems Management section.

Sewage smell and bacteria – Most of the Watershed uses on-site systems. When properly designed, on-site systems adequately reduce phosphorus and pathogens to levels that are protective of public health and the environment. Siting, design, installation, operation, and maintenance must be focused on reducing the environmental impact of the release. To avoid contamination of drinking water systems and other problems, soil absorption systems must be situated at prescribed distances from wells, surface waters, springs, and property boundaries.

The more densely populated areas of the watershed are on sewer systems with sewage treatment plants (STPs), the discharge of which are permitted through the NYSDEC. While STP performance has improved in recent years, they still account for fairly high percent of phosphorus loading. Additional improvements to reduce phosphorus loading to the southern basin are underway. For more information refer to the *Cayuga Lake Preliminary Watershed Characterization* Sections 3.11 and 4.2.4 and Chapter 6 or the *Cayuga Lake Preliminary Watershed Characterization Executive Summary* pages 12 and 13.

Pathogens & viruses – Pathogens (disease causing microorganisms) originate from untreated or inadequately treated human sewage and wild and domestic animal waste. Refer to the *Cayuga Lake Preliminary Watershed Characterization* Sections 3.11, 3.12, 3.13 and 4.3.3.7 and Chapter 6 or the *Cayuga Lake Preliminary Watershed Characterization Executive Summary* pages 18 and 20.

See also Nutrient Loading

Sediment loading (including siltation and streambank/roadbank erosion) – This is the water quality issue of greatest concern in the Cayuga Lake Watershed. Some of the sediment loading in the Watershed is natural, much of which however, is related to land use (e.g. devegetation (especially along streams), grazing, development activity, road ditch development and maintenance, and stormwater along impervious services). The sediment from erosion is notable both from the sediment itself and the potential sources of contamination locked up within the sediment. Refer to the *RPP Stormwater Management and Erosion Control* section.

Stormwater runoff (including impervious surfaces and roadside ditches) – which carries many nonpoint source pollutants. Refer to the *Cayuga Lake Preliminary Watershed Characterization* 3.1, 3.2, 3.4 and 3.12 and Chapter 6, the *Cayuga Lake Preliminary Watershed Characterization Executive Summary* pages 10, 11, 18-20, and the *RPP Stormwater Management and Erosion Control* section.

Tourism and other economic development – Tourism account for a large portion of the economic activity in the Finger Lakes Region. Refer to the *Cayuga Lake Preliminary Watershed Characterization* Section 2.13 or the *Cayuga Lake Preliminary Watershed Characterization Executive Summary* page 14.

Waste water and wastewater treatment plants

Sewage smell and bacteria – Most of the Watershed uses on-site systems with many of the more densely populated areas on sewer systems with sewage treatment plants (STPs) the discharge of which are permitted through the NYSDEC. While the loading of the Lake and tributaries by this discharge has declined in recent years, STPs still account for fairly high percent of loading. For more information refer to the *Cayuga Lake Preliminary Watershed Characterization* Sections 3.11 and 4.2.4 and Chapter 6 or the *Cayuga Lake Preliminary Watershed Characterization Executive Summary* pages 12 and 13 and the Wastewater Management section of the *RPP*.

Pathogens & viruses – Pathogens (disease causing microorganisms) originate from untreated or inadequately treated human sewage and wild and domestic animal waste. Refer to the *Cayuga Lake Preliminary Watershed Characterization* Sections 3.11, 3.12, 3.13 and 4.3.3.7 and Chapter 6 or the *Cayuga Lake Preliminary Watershed Characterization Executive Summary* pages 18 and 20.

See also Nutrient Loading

See also RPP Wastewater Systems Management

Water quantity – Cayuga Lake provides for many uses which includes its highest use as a drinking water supply. Refer to the ranked list of water quality issues provided in the Water Quality Issues section of Chapter II.

Water quality standards - Refer to the *Cayuga Lake Preliminary Watershed Characterization* Section 4.3.4.