Honeoye Lake Conditions Presentation to the Richmond Town Board September 14, 2010

Lake Science as it Relates to Algal Bloom Dr. Bruce Gilman, FLCC Environmental Conservation Department

Management of Honeoye Lake Including Alum Application Dr. Steve Souza, Princeton Hydro

Honeoye Lake Watershed Management Plan Jack Starke, Honeoye Lake Watershed Taskforce

Who Manages Honeoye Lake?

- NYS owns the lake
- NYS-DEC is proactive in fishery management
- NYS-DEC not proactive in lake management- regulatory only
- State encourages lake management through grants
- Towns of Canadice & Richmond
- Honeoye Valley Association (1985) and predecessors

• HLWTF formed in 1998 with watershed towns and HVA as voting members and supported by technical professionals

Honeoye Lake Watershed Management Plan

Available at www.co.ontario.ny.us/planning/honeoye_lk.htm Developed by HLWTF under an Environmental Protection Fund grant from NYS

Objectives

- **To improve the water quality of Honeoye Lake**
- To protect the Honeoye Lake Watershed's natural resources
- **To improve water-dependent recreational opportunities**

Approach & Purpose

- Science Based
- Environmentally Sound
- Improve chance of follow- on grants from NYS

Results

- **Extensive Compilation Scientific Data for Lake and Watershed**
- Review of Local Law and their Effect on Water Quality
- Prioritized List of 76 Action Items

- 6.1.1: Wetland Restoration
- 6.1.2: Riparian Zone Management
- 2. Conduct field survey to identify and prioritize the most severely eroding streambanks and shorelines. Received grant
- 3. Where feasible, restore severely eroding streambanks and shorelines
- *4. Identify opportunities whereby stormwater management structures could be installed or stormwater bio-treatment areas could be constructed*

6.2.1: General Watershed Education

- 5. Educate residents on a "lake-friendly" lawn program to reduce nutrient input to the lake and perform survey of resident practices. Provide & promote use of zero phosphorus fertilizer.
- 6. Educate riparian property owners about proper management of streambanks and shoreline to minimize erosion.
- 8. Conduct training session for highway superintendents on recommended BMPs for road maintenance. Develop a written inspection and maintenance plan intended for use by highway department employees for the efficient management and maintenance of highway-related facilities.
- 9. Conduct training session for highway superintendents on recommended winter road de-icing practices.

6.3.1: Nutrients

- 14. Develop Macrophyte Management Plan according to DEC guidelines considering all forms of macrophyte management.
- 15. Manage excessive macrophytes with weed harvesting until the WMP is completed
- 16. Expand the tributary sampling program to assess the actual contribution of streams and direct drainage areas to the lake's overall nutrient budget under baseline and storm conditions.
- 17. Evaluate nutrient sources from highways, shoreline and streambanks.
- 18. Institute a monitoring program to evaluate the effectiveness and longevity of the alum treatment performed in 2006-2007.

6.3.2: Onsite Wastewater Systems (Septic)

6.3.3: Forestry

27. Adopt Timber Harvest Regulations at the town level. Require pre-harvest planning and project inspection by a trained inspector.

6.3.4: Streambank/Shoreline Erosion

30. Maintain lake outlet weir.

31. Adopt municipal land use regulations to minimize peak flows in watershed streams and avoid shoreline erosion.

6.3.5: Development

34. Municipalities recognize Phase II Stormwater Regulations within local laws and/or adopt the full NYS Sample Local Law to minimize erosion.

35. Planning boards review of the adequacy of municipal land use regulations to minimize erosion.

36. Municipalities evaluate current minimum setback and bulkhead/breakwall standards for new structures along the shoreline.

- 6.3.6: Recreational Uses
- 6.3.7: Agriculture
- 6.3.8: Pesticides
- 6.3.9: Salt Usage and Storage
- 6.3.10: Spills
- 6.3.11: Bulk Storage Facilities
- 6.3.12: Landfills, Dumps and Inactive Hazardous Waste Sites
- 6.3.13: Mined Lands

Reasonable Expectations

- Action Items Address Potential Threats to Lake Water Quality
- No Silver Bullet
- Shallow Lake Imposes Limitations on Water Quality

