

Title: LakeErieFuturesBlog Nine: Bi-National Priorities Need Local Support and Local Priorities Need Bi-National Support

Fourth Quarter: October, November and December, 2015.

By Terry H. Martin, Ph.D., and Guest Co-Author Joanna Panasiewicz, Coordinator, Lake Erie Watershed Protection Alliance.

New York State has a grass-roots organization called, The Lake Erie Watershed Protection Alliance (LEWPA). This local alliance is devoted to protecting Lake Erie's watersheds, water, and the quality of all life within those environments. The driving forces behind this local alliance are municipalities, community leaders, counties, and state environmental officials.

The area covered by this alliance includes all of the sub-basins in New York State that drain into Lake Erie and the Niagara River near the City of Buffalo. What makes the people behind this effort stand out is their desire to protect their environment in the context of a newly emerging, binational Great Lakes management framework. This new management framework was authorized by the Great Lakes Water Quality Agreement of 2012, between the U.S. and Canada (GLWQA 2012).

A. Introduction.

This new binational management framework is being established by the Great Lakes Executive Committee (GLEC). The purpose of GLEC is "to help coordinate and implement the programs and other measures undertaken to achieve the purpose of the GLWQA 2012." It meets two times each year, once in the U.S, and once in Canada.

Ten special Annexes to the GLEC have also been created to implement this complex task around the five Great Lakes, including for each lake the following implementation mechanisms:

1. Areas of Concern
2. Lakewide Management
3. Chemicals of Mutual Concern
4. Nutrients
5. Discharges from Vessels
6. Aquatic Invasive Species
7. Habitat and Species
8. Groundwater
9. Climate Change Impacts
10. Science

In addition to these direct management functions, the GLWQA 2012 also created a new Great Lakes Public Forum to meet once every three years under the sponsorship of the International Joint Commission (IJC). The purpose of these meetings is to include a wide range of stakeholder participants, and "to discuss and receive public comments on the state of the lakes and binational priorities for science and action... " as well as informing the IJC as it evaluates progress in Great Lakes management.

For an excellent source of additional information on the GLWQA 2012, GLEC and its Ten Annexes, and the new Great Lakes Public Forum, go to the following website: binational.net, which also has a wealth of information on Great Lakes facts, events and issues.

In 2015, several webinars have been held by the U.S. EPA and Environment Canada, in which we participated. Some very brief highlights from two of these webinars are presented here, on lakewide management and public engagement:

In the long term, issues are most effectively managed on a lakewide scale using an ecosystem approach.

Public participation is essential to getting better results from the GLWQA 2012, by including federal agencies and First Nations and Native American Tribes, state and provincial agencies, and a wide variety of stakeholders including municipalities and conservation organizations.

Lakewide Action Management Plans (LAMPS), need to be prepared for each of the five Great Lakes, using an adaptive management method that updates the LAMP for each lake every five years on a rotating basis, with short update documents in the in-between years as follows: Lake Superior (2015), Lake Huron (2016), Lake Ontario (2017), Lake Erie (2018), Lake Michigan (2019), and Lake Superior (2020), etc. A focus is on establishing targets for phosphorus loadings.

Three levels of management are being created for each of the five Great Lakes, a lakewide management committee, a working group to develop LAMP documents, and task groups to assist and carry out successful public outreach and engagement (O&E) efforts. At these three levels of management, ongoing communications is the objective in order to assure that relevant actions actually solve problems and meet community sustainability requirements.

In summary, at the conclusion of the webinar held on September 15, 2015, both USEPA and Environment Canada representatives admitted, although enormous progress has been made organizing GLEC and its ten Annexes, and at enabling public engagement and outreach at federal and state, provincial levels, that figuring out how to engage local and municipal levels in these binational still needs more work to figure it out successfully.

And that is why one of the major purposes of this LakeErieFuturesBlog at this point is to put a spotlight on local efforts to help clean up the Great Lakes. In this case, we are looking at what is being done at local and regional levels in western New York State.

B. Municipalities Create the Lake Erie Watershed Protection Alliance (LEWPA).

It sometimes takes a crisis to prompt longer term actions to solve problems. This is what happened on the night of August 9-10, 2009. Heavy rains bombarded portions of Cattaraugus, Chautauqua, and Erie counties as two storm systems converged over the area. These storms caused flash floods and massive, widespread destruction in the tri-county area of Erie, Chautauqua, and Cattaraugus counties, New York. Damages from the flooding included washed-out transportation and drinking-water infrastructure, as well as destruction to residential and commercial properties.

Approximately six inches of rain fell over a 1.5 hour period. The probability of this type of storm is less than 0.2% per year, yet with climate change, these types of storms are expected to occur more frequently.

(1) The History of LEWPA.

The tri-county area was declared a Federal disaster area and the combined total estimate of damages from the flash floods was greater than \$90 million according to a [report by the United States Geological Survey](#). Faced with these storm damages, municipal officials led a grassroots effort to take the initiative for better managing their local watersheds in the hopes of alleviating such impacts in the future.

Recognizing that water doesn't stop flowing at political boundaries, local municipal officials joined with regional elected officials to work together on watershed protection. They identified the following concerns:

- localized flooding problems,
- excessive debris accumulation in area streams,
- erosion and sediment deposition,
- the need to conserve natural lands for water quality and quantity benefits, and
- overall non-point source pollution issues affecting their respective communities and ultimately, Lake Erie.

As a result of this regional discussion, the [Lake Erie Watershed Protection Alliance \(LEWPA\)](#) began meeting in 2012 with Cattaraugus, Chautauqua, and Erie counties as a membership of stakeholders. Their commitment was to address water quality issues affecting the New York State portion of the Lake Erie watershed and its shoreline. Modeled after the Finger Lakes-Lake Ontario Watershed Protection Alliance, LEWPA has been a voice for Lake Erie in New York State Great Lakes conversations, as well as the twenty year old Lake Erie Binational Public Forum.

In early 2015, member counties officially signed on to an Intermunicipal Agreement to work together through LEWPA.

(2) Organizational Structure of LEWPA.

LEWPA is made up of a nine member board including three members from each county. Cattaraugus, Chautauqua, and Erie counties each designate a county Soil & Water Conservation District representative, a local municipal representative, and a regional/countywide representative. The goal of this breakdown is to ensure continued participation at the local level, while gaining the regional perspective on watershed-wide issues.

The LEWPA Board meetings are open to the public and are often attended by representatives of local elected officials and various stakeholder organizations such as [Southern Tier West Regional Planning and Development Board](#) and the New York State Department of Environmental Conservation (NYSDEC).

(3) Relationship with NYSDEC.

New York State's Great Lakes sub-basins include watersheds that drain into Lake Erie, Lake Ontario, and the St. Lawrence River. As a result, the NYSDEC has created the [New York State Interim Great Lakes Action Agenda](#) to focus the work happening across the state in the Great Lakes watersheds. Work groups have been created for Lake Erie, SW Lake Ontario, SE Lake Ontario, and NE Lake Ontario including St. Lawrence River.



NYSDEC has supported LEWPA's work in the Lake Erie basin since the beginning. Local NYSDEC representatives regularly attend LEWPA meetings and LEWPA representatives participate in Lake Erie Work group meetings to enhance the synergistic nature between the two organizations.

(4) Budget and Funding Sources.

The Southern Tier West Regional Planning and Development Board (STWRP&DB) has also supported LEWPA from the beginning. By funding the initial grant through [604\(b\) Clean Water Act funds from NYSDEC](#), Southern Tier West subcontracted to allow LEWPA to hire a coordinator, organize the three counties, establish an Intermunicipal Agreement, and survey the needs of over 80 municipalities in the watershed to determine priorities of the region.

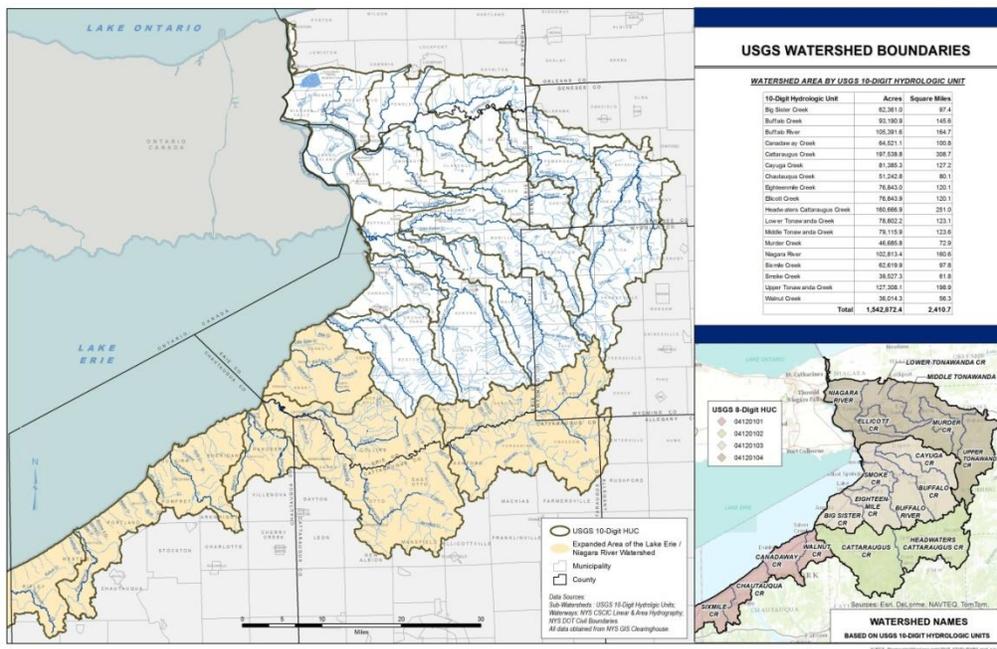
In addition, New York State received the Scott® Naturals Award, which was distributed among watershed organizations throughout the state. LEWPA received \$5,000 to use to plant trees at various locations throughout the three counties to restore habitat and protect waterways in the region.

Currently, LEWPA is undergoing watershed management planning with Buffalo Niagara Riverkeeper. Erie County applied for funds on behalf of LEWPA and Buffalo Niagara Riverkeeper for the project, "Regional Niagara River Lake Erie Watershed Management Plan – Phase 2." LEWPA will expand and update the

Watershed Atlas and the Watershed Characterization Report, as well as update the Watershed Citizen’s Guide and Local Law Assessment to include the area draining to Lake Erie.

This is an expansion of the work completed in the Niagara River watershed by Buffalo Niagara Riverkeeper under the, “[Healthy Niagara](#)” project and the result will be a comprehensive Niagara River/ Lake Erie Watershed Management Plan. Buffalo Niagara Riverkeeper will also continue the planning process in the Niagara River watershed by conducting water quality sampling and stream visual assessments that will result in sub-watershed implementation plans in the five (5) priority sub-watersheds of the original watershed area.

A desired outcome would be to incorporate these local and regional efforts into New York State’s priorities and into future updates of the Lake Erie LAMP, which is under binational management.



The original Niagara River watershed area for the “Healthy Niagara” project is in white. Expanded Lake Erie watershed area is shaded in orange.

C. LEWPA Progress and Accomplishments.

LEWPA has completed projects at various locations throughout Cattaraugus, Chautauqua, and Erie counties with the funding allotted. The Scott® Naturals Award money was leveraged to provide habitat restoration at five (5) locations in the watershed. Projects were led by Soil & Water Conservation District staff in each county.

Trees and shrubs were planted at Times Beach Nature Preserve in Erie County near the Buffalo Harbor to complement over \$300,000 being invested by the U.S. Army Corps of Engineers to combat invasive species at the site.

A habitat restoration project at Bennett Beach adjacent to Big Sister Creek in Erie County leveraged an additional \$1,525 in partnership with the Alliance for the Great Lakes, HSBC, and Home Depot resulting in trees, shrubs, wildflowers, and dune grass being planted, as well as the installation of bluebird boxes.

A FEMA site along Slippery Rock Creek in Chautauqua County received additional trees for restoration after severe flooding.

Trees were planted along 500 ft. of Elton Creek and 250 ft. of Mansfield Creek in Cattaraugus County in cooperation with NYSDEC and Red House Brook Chapter Trout Unlimited to prevent erosion in these high quality wild trout streams.

LEWPA has also created several educational brochures and has distributed them along with other information at various events throughout the watershed. The purpose is to educate citizens on the ways they impact water quality and how they can work to improve it.

D. LEWPA's Next Steps.

In fall 2013, LEWPA members presented to the WNY delegation of elected state officials on the benefits of working together on a watershed basis to plan and implement water quality projects. Delegates recognized the great work accomplished using this model in the Finger Lakes-Lake Ontario Watershed Protection Alliance and designated \$250,000 in the 2015 NYS Environmental Protection Fund as a line item for LEWPA.

Moving forward, LEWPA plans to utilize the funding to conduct water quality sampling in order to reach [the U.S. Environmental Protection Agency's nine minimum elements of watershed-based plans](#) with the intention of leveraging additional federal funds. The state funding will also be used to implement water quality improvement projects based upon the priorities identified earlier in the survey process such as beach contamination, habitat restoration, flooding, erosion, etc.

E. Conclusion - Binational Processes Also Need Local, Regional Support & Action.

It should be clear by now that this Great Lakes situation, in its vast geological areas and complicated histories in two different nations, needs a two-way process from top to bottom and from bottom to top. All levels in both nations need each other to succeed, in cooperation with each other.

In other words, binational priorities need local support, and local priorities need binational support.

NOTE 1: Links have been provided for access to additional information on specific topics, organizations, and referenced reports.

NOTE 2: The third quarter 2015 (July-September) for this blog did not have an article due to vacations and other essential commitments. This article (#8) is for the 4th quarter, 2015, October-December.

NOTE 3: The **1st blog article** introduces the blog's author and purpose, which is to orient people who are new to Great lakes issues. The **2nd blog article** presents a "social system within the ecosystem" approach so we can more

easily visualize the full complexity this huge ecosystem. The **3rd blog article** looks at the condition of hypoxia (“dead zone”) in Lake Erie and describes many new, binational organizations and procedures that have been created for solving related problems. The **4th blog article** presents a sampling of what’s being done around Lake Erie, including the situation in the Maumee River watershed in Ohio, the Province of Ontario, and with the new Great Lakes Executive Committee (GLEC) and its ten annexes. The **5th blog article** presents an overview of how the water column flows from Lake Superior all the way through the Great Lakes Basin into the St. Lawrence River and then into the Atlantic Ocean. The **6th blog article** looks at the intermixing of pollutants throughout this flowing water column and discusses potentially emerging cumulative effects problems that could eventually overwhelm existing program capabilities. The **7th blog article** identifies a need to raise awareness about the binational Lake Erie LAMP and related issues among professional planners, architects, and engineers at local and regional levels in both Ontario, Canada, and in the U.S (Future articles will describe efforts being made to protect Lake Erie at local and regional levels in New York, Pennsylvania, Ohio, and Michigan). The **8th blog article** describes how different environmental emergencies can become deadly serious. It mentions toxic algae and nuclear waste disposal as areas of recent concern, and presents a detailed eyewitness account of one emergency from 1977 that was created by the climate in Buffalo. It concludes with a call to take all environmental issues seriously by improving institutional capabilities to prevent or seriously mitigate emerging problems. We can accept “phasing in” strategies, but please, no more half measures. This 9th blog article describes a major local and regional effort in western New York to clean up Lake Erie and its watersheds. It is called the Lake Erie Watershed Protection Alliance (LEWPA), with the title, “Binational Priorities Need Local Support, and Local Priorities Need Binational Support.

NOTE 4: Any errors or omissions are the responsibility of the author.

NOTE 5: You are invited to leave comments on any of these nine blog articles ([CLICK here to register and leave comments](#)).

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