

**Assessment of New York's Capacity
to Implement the Recommendations of the
Great Lakes Regional Collaboration Strategy**
**A Report to New York Great Lakes Basin Advisory Council &
New York Sea Grant's Great Lakes Leaders Group**

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I. Background

Protection and restoration of the Great Lakes are major state responsibilities and commitments considering that nearly three million New Yorkers depend on the Great Lakes for their drinking water, and millions fish, boat, play in and appreciate the beauty of Lakes Erie, Ontario and the Niagara and St. Lawrence Rivers. In the U.S., New York is at the receiving end of the pollution and other problems generated by the other seven Great Lakes states, and the front end where ships arrive from overseas via the St. Lawrence Seaway, the likely source of many aquatic invasive species. There are numerous state agencies and authorities with responsibility for some aspect of Great Lakes protection and restoration including the Departments of Agriculture and Markets; Economic Development; Environmental Conservation; general services; parks, recreation and historic preservation; energy research and development authority, the State University of New York and the NY Department of State. Recently these agencies and authorities have been brought together by legislation creating the New York Ocean and Great Lakes Ecosystem Conservation Council.

Table 1. A brief history of the effort for protection of the Great Lakes

Years	Months	Event
1972	-	US and Canada sign Great Lakes Water Quality Agreement (GLWQA) of 1972, focus on conventional pollutants. US Clean Water Act.
1978	-	US and Canada sign GLWQA of 1978, focus expands to toxic chemical pollution, Ecosystem approach.
1987	-	GLWQA amended, 42 Areas of Concern designated.
1988	-	NY Great Lakes Basin Advisory Council, NY Great Lakes Protection Fund established by legislature
1992	Jun.	NYS 25 year plan for the New York Great Lakes Basin adopted
2003	-	Great Lakes Governors identify 9 priorities for Great Lakes restoration
2004	May	Presidential Executive Order signed recognizing Great Lakes as a national treasure and creating a Federal Great Lakes Interagency Task Force to improve federal coordination
	Dec.	GLRC launched for developing a strategic restoration plan
2005	Jan.	8 Strategy Teams under GLRC begin work to develop recommendations for action
	Jul	Draft strategy released for public comment
	Dec.	GLRC develops and releases Great Lakes Regional Strategy to Restore and Protect the Great Lakes
2006		Various efforts to implement regional strategy. Enabling legislation introduced in Congress.
2007		Legislature creates NY Ocean and Great Lakes Council integrating state agencies and adopting Ecosystem-based management approach.

This report looks at how well New York is positioned to implement the recommendations basin-wide restoration strategy developed under the auspices of the Great Lakes Regional Collaborative (GLRC), a federal-state partnership to design and implement a strategy for restoration, protection and sustainable use of the Great Lakes. The strategy emerged in response to the need to better coordinate state, federal and local Great Lakes restoration activities. Initially Congress asked the Great Lakes Governors to prepare a list of priorities, the President created an interagency task force and directed the US Environmental Protection Agency (EPA) to undertake

a collaborative process to develop what became the Strategy to Restore and Protect the Great Lakes (see <http://www.glrc.us/strategy.html>). The Collaboration has included the federal Great Lakes Interagency Task Force, the Council of Great Lakes Governors, the Great Lakes and St. Lawrence Cities Initiative, Great Lakes tribes (represented by the Great Lakes Indian Fish and Wildlife Commission) and the Great Lakes Congressional Task Force. More than 1500 people participated in the writing of the Strategy.

In response to New York's own interest in improving communication between organizations working on behalf of the Great Lakes, Dave White, New York Sea Grant's Great Lakes Coordinator for extension and outreach activities, convened an informal Great Lakes Leaders Group. Since it appeared that the GLRC regional restoration strategy was likely to drive federal Great Lakes action, the leaders group requested an assessment of how New York's existing Great Lakes programs were aligned with the strategy. New York Sea Grant agreed to fund a graduate student, Katherine Barnhill, to work with Dr. Jack Manno, then Executive Director of the NY Great Lakes Research Consortium to undertake a gap analysis to uncover both the strengths and the gaps in the programs with respect to implementing the regional restoration strategy and to report to the leaders' group and to the NY Great Lakes Basin Advisory Council and the NY Council of Great Lakes Legislators. Since this project was initiated, a coalition of advocates for Great Lakes restoration, called Healing Our Waters coalition, who will also receive this report.

II. Methods

We considered each of the recommendation under the headings of the Strategy. These include:

- Aquatic Invasive Species
- Habitat/Species
- Coastal Health
- AOC/Sediments
- Nonpoint Source
- Toxic Pollutants
- Indicators and Information
- Sustainable Development

We analyzed New York's Great Lakes initiatives to see which of the GLRC strategy elements were already being addressed by New York, which were in the works, and for which little appeared to be happening. Furthermore, we wanted to the extent practicable to determine the reasons for the gaps we identify. In some cases the reasons might be financial, in others, lack of clarity about responsibility or jurisdiction, or perhaps lack of authority. With this information, Great Lakes legislators and citizens interested in the eventual success of the Great Lakes regional restoration strategy in New York should be better able to focus their efforts on filling the implementation gaps.

Because in the early 1990s, New York had undertaken a multi-agency 25-year Great Lakes plan, we began by comparing the recommendations in the Regional Collaboration with those in 25-Year Plan. In 2001 Michael Connerton of the Great Lakes Research Consortium

completed an analysis for the Great Lakes Basin Advisory Council of status of the state's implementation of the 25 year plan a decade after its adoption. Since there was considerable overlap between the commitments in the state's plan and the items in the Restoration Strategy, we were able to utilize many of the findings of Connerton's earlier report and update others' findings.

For most of the gap analysis we obtained information from both agency websites and 'key informants' from the agencies and non-governmental organizations. The information that we gathered from key informants came in the form of interviews, presentations, discussions, conferences and meetings.

For this analysis we focused on four agencies with the most extensive Great Lakes responsibilities:

- NYS Department of Environmental Conservation (DEC)
- NYS Department of State (DOS)
- NYS Department of Health (DOH)
- NYS Department of Agriculture & Markets

We also gathered information from:

- The Sea Grant Great Lakes Leaders Group in September 06 and February 07 to set the goals for the project. The members of the leaders group helped us prepare a list of contacts and provided additional direction for the research.
- The Healing Our Waters' Coalition conference, Restoring the Gateway to the Great Lakes conference held in Rochester December 2006. Many presenters and break-out sessions provided status reports, as well as highlighted individual organizations' concerns regarding the Lakes.
- The Winter 2007 meeting of the Great Lakes Basin Advisory Council – we were able to gather information on current status of various issues related to the Great Lakes via presentations and discussions.
- Several individuals were very helpful in providing information about NYS programs and initiatives. These individuals include
 - Don Zelazny, NYSDEC, Great Lakes Program
 - Dave White, NY Sea Grant
 - Dereth Glance, Citizens Campaign for the Environment
 - Sean Mahar, Audubon NY
 - Katy Wallace, Office of Senator George Maziarz
 - Peter Manning, NYSDOS
 - Greg Boyer, current director of the Great Lakes Research Consortium

With this information we prepared a spreadsheet with the 120 GLRC Strategy recommendations as the rows and as the columns:

- **Organizational Jurisdiction:** The state, federal or local institution most closely associated with or most responsible for actions to implement the recommendation.
- **25 Year Plan action item:** identical or closely related recommendations from the state's 25-year plan for the Great Lakes.
- **25 Year Plan Assessment:** Results from the 2001 assessment of progress under the 25 year plan.

- **Action Taken:** Snapshot of an ongoing assessment of actions relevant to the GLRC Strategy, prepared and regularly updated by Don Zelazny, NYS DEC Great Lakes Program.
- **NYS Program & Agency:** Agency(ies) most directly involved. This is a compilation of our assessment and Don Zelazny’s.
- **Research Priorities**
- **Comments**

Table 2. Example of the assessment matrix¹

Recommendation	Organizational Jurisdiction	25 Year Plan	25 Year Plan Assessment	Action Taken	NYS Program & Agency	Research Priorities
<i>I. Open/Nearshore waters</i>				Established Fish Community Objectives for Lake Erie/upper Niagara River	DEC	
Develop, evaluate lake trout restoration (fishery mgmt)	Existing Fishery Mgmt Plans?? - FWS & DEC	a. Establish and maintain self-sustaining fish populations; b. Request additional stocks of lake trout from fed gov't to meet needs of Lake Ontario	a. Underway; b. "Some naturally spawned lake trout & concerns about excessive predation preclude additional lake trout stocking."	Updating Fish Community Objectives for Lake Ontario/lower Niagara River	DEC	Assessing potential for habitat/spp restoration 3.1; restoration of historic conditions 3.6; restoration of native spp, habitat restoration 3.7

III. Analysis

1. Aquatic Invasive Species (AIS)

This section of the collaboration is perhaps where NYS is least able to implement currently. A NYS Aquatic Nuisance Species Plan exists and is being updated. The Invasive Species Task Force produced a report that includes many recommendations that parallel those of the GLRC.

Capacity is lacking with respect to AIS for a host of reasons.

- Aquatic Invasive Species are problems that span political boundaries, and anything implemented in NYS alone would likely prove futile. Most studies indicate that once a species is entrenched, eradication is next to impossible. As such, prevention is key – therefore a broader framework is needed.
- Clearly, much of what would prevent future invasions has major economic implications, and thus building political will for action is necessary.

¹ The full matrix is separately attached to this report.

There are significant gaps in the Aquatic Invasive Species matrix. The following list highlights the Collaboration's Recommendations that are not addressed effectively in NYS, and thus require new or amended legislation and/or regulatory adjustments.

- Aquatic Invasive Species Prevention – *more effective ballast water regulations, management plans and monitoring programs are needed. Legislation regulating NOBOB (no-ballast-on-board) vessels is also needed.*
- Little or no programming exists to address the spread of invasives via canal systems and cross-drainage connections. *Additional preventative legislation is needed! These connections need to be addressed.*
- *Legislative programming needed to address spread of AIS via live organisms trade.*
- While NY Sea Grant has covered much of the education and outreach related to AIS, we were unable to determine if this included educating the 'maritime commerce industry,' and if so, to what degree? Further information is needed – *perhaps additional outreach is needed to better educate industry about AIS prevention.*

2. Habitat/Species

Habitat/Species arguably is NYS' most thoroughly covered priority; there is a wide range of state programs that cover the action items recommended. Perhaps better alignment could be addressed – especially linking federal programs such as the Wetlands Reserve Program (WRP) to state goals. Moreover, though NYS has a fairly comprehensive wetlands program (which is a key component of the GLRC habitat preservation and restoration priorities), its funding (and implementation effectiveness?) is limited.

Gap in the habitat matrix:

- Detailed monitoring of Areas of Concerns (AOC) in coastal shore areas – *monitoring programming needed*

3. Coastal Health

The action items in the Coastal Health priority focus on aligning of interagency and inter-jurisdictional communication, as well as funding appropriations. Most of the relevant legislation delegates responsibility to the local/municipal level on these matters – drinking water, etc. Therefore, many of the recommendations highlight the need for agencies and levels of government to integrate implementation and monitoring.

Though programs exist, they are not necessarily funded fully due to various administrative constraints. For example, the US Environmental Protection Agency (EPA)'s State Revolving Fund has to spread an average budget of \$4.5 billion among the states and territories under the EPA's jurisdiction – NYS's portion is then administered jointly by the Environmental Facilities Corporation (EFC) and the DEC.

Gap in the Coastal Health matrix:

- State programming to address the potential non-point source pollution from bathers. The (federal) Beaches Environmental Assessment and Coastal Health (BEACH) Act delegates this responsibility to the NYSDOH, but specifics are needed.

4. Areas of Concern/Sediments

The action items related to the AOC's are predominantly outside of the jurisdiction of NYS. The legislation cited in the action items are federal policies (i.e. Legacy Act, CERCLA², RCRA³, WRDA⁴) – and require much needed Congressional appropriations for effective implementation.

5. Nonpoint Source (NPS) Pollution

New York State's programs are guided by a Nonpoint Source Management Plan⁵. Most programs to control the agricultural runoff are voluntary and incentive-based. NYS, like most states, has been reluctant to regulate agricultural practices directly.

The programs that are designed to restore and protect wetlands seem to be focused primarily on state land acquisition (the Open Space program), or permitting programs that focus on acreage and not quality of habitat or function. Perhaps there could be a shift to working with private landowners on a state level – like the Natural Resources Conservation Service (NRCS) WRP.

6. Toxic Pollutants

While most legislation regulating toxics has been on the federal (or even international) level, there is a range of NYS programs that cover toxic substances. Similarly, programs designed to protect human health – fish consumption advisories administered by the NYSDOH – are fairly clear-cut. See the Toxics matrix for details.

However, pollution prevention incentives, as well as monitoring and surveillance, have far more diffuse sources. In fact, New York State has no real programming in place to monitor toxic pollutants. *New legislation or regulatory amendments certainly are needed to implement a toxics monitoring system.* The pollution prevention and energy efficiency (P2 and E2) programs may need consolidation. Monitoring and surveillance of toxic chemicals in the environment should be more closely coordinated throughout the basin.

7. Information & Indicators

Successful Great Lakes policies and actions require a sound information base. Information sharing is paramount. There are innumerable organizations and agencies conducting research and advocating on behalf of the Great Lakes – yet communication amongst these various groups is limited.

While creating a basin-wide Great Lakes clearinghouse would be ideal, NYS has the capacity to initiate a statewide clearinghouse. While the need for a clearinghouse is widely accepted, the best forum for it is unclear. The forums suggested include the new Oceans & Great

² Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund

³ Resource Conservation and Recovery Act, the public law that creates the framework for the proper management of hazardous and nonhazardous solid waste

⁴ Water Resources Development Act

⁵ www.dec.ny.gov/docs/water_pdf/npsmgmt.pdf

Lakes Council, the Great Lakes Basin Advisory Council, and the Great Lakes Research Consortium.

We would like to highlight the importance of such a clearinghouse. As our students have collected information about NYS Great Lakes policies, their greatest challenge was having to deal with so many different organizations and agencies. They had to contact and/or research each agency independently, and were never certain that we had gathered all of the relevant information. Moreover, very few of the agencies and organizations knew over what issues other agencies had jurisdiction – the compartmentalization of the bureaucracies became a fast hindrance. A ‘one stop shopping’ database would make collaboration much easier. Such a clearinghouse should ideally contain (at least) the following information:

- Great Lakes policies – both federal and state, as well as over which regulatory issues municipal governments are meant to have jurisdiction and how they fit together.
- Sources of funding for municipalities and industries to implement policies.
- How to access research projects and their results as they relate to the Lakes. Also how municipalities and businesses could use this data to implement best management practices.
- A calendar of events – major Great Lakes related activity throughout the state. Emphasis on conferences, research projects, and policy updates. Keeping everyone on the same page prevents different organizations from simultaneously working on redundant projects, or allows them to join forces as appropriate.
- Contact information for the major players in the basin – opening the channels of communication.

8. Sustainability

‘Sustainability’ policies involve a host of sectors, levels of governmental jurisdiction, and operate over a long time. The NYS Dep’t of State has a range of programs, that are listed in the Sustainability matrix.

IV. Other Issues

There are factors that have affected Great Lakes policies in NYS that do not fit squarely into any of the recommended action items from the Regional Collaboration. Some of the key issues are highlighted below.

1. Revitalization of the Coalition of Great Lakes Legislators

The initial meeting of the revitalized coalition was held on 14 March 2007, with their first issue forum held on 18 April 2007. However, for various procedural reasons, the Assembly is not yet a part of the Coalition. The Senate is proceeding with the Coalition, with plans for future forums in the works. Effective progress for the Coalition obviously requires the inclusion of the Assembly.

Table 3. Main recommendations for each action item

Action Item	Main Recommendation	Remarks
AIS	More effective ballast water regulations, management plans and monitoring programs are needed	The problems span political boundaries
Habitat	Detailed monitoring of Areas of Concerns (AOC) in coastal shore areas – monitoring programming needed	Better alignment could be addressed – especially linking federal programs such as the Wetlands Reserve Program to state goals
Coastal health	State programming is needed to address the potential non-point source pollution from bathers.	The (federal) BEACH Act delegates this responsibility to the NYSDOH, but specifics are needed.
AOC	NYSDEC’s more active participation in the federal-state collaboration	Predominantly outside of the jurisdiction of NYS. The legislation cited in the action items are federal policies.
NPS	Regulate the agricultural practices in an enforceable way	NPS Management Plan had minimal on the ground effects on NPS pollution.
Toxic	New legislation or regulatory amendments certainly are needed to implement a toxics monitoring system.	NYS has no real programming in place to monitor toxic pollutants
I&I	initiate a statewide GL information clearinghouse.	There are innumerable groups conducting research and advocating on behalf of GL – yet communication among them is extremely limited.
Sustainability	Utilize the framework of Ecosystem Based Management, enabled by New York Ocean and Great Lakes Ecosystem Conservation Act	It is under this framework that Great Lakes policies and actions could be most effectively integrated.

2. The ‘Compact’

Water withdrawals were not addressed in the Regional Collaboration, and are the subject of legislation each state in the basin must ratify in order for the Great Lakes Water Resources Compact to come into effect. The Assembly approved it last year. The Compact, however, did not get the necessary votes from the Senate, and the bill cycled out – meaning the Assembly will have to re-vote.

3. Great Lakes Basin Advisory Council

We heard repeatedly from agency and NGO representatives that the Council has been without a chair since 2003. The Council represents diverse environmental, social, and economic interests throughout NYS, and should be serving as a vital link between the public and government. The absence of an appointed leader substantially limited the Council’s effectiveness.

4. Administrative Limitations – DEC

The NYSDEC experienced significant personnel cutbacks during the Pataki administration – leaving many offices and programs understaffed and thus less effective. For example, there is a substantial SPDES⁶ backlog – clearly problematic for waterbodies in the Great Lakes basin. The Spitzer administration has made efforts to reverse the personnel losses, though how quickly and effectively this will occur remains to be seen.

Moreover, with all of the Great Lakes-related issues for which the DEC is responsible, the Great Lakes Program is limited to a single office (Buffalo, Region 9). Advocates in the state that argue that Great Lakes Program is grossly understaffed, and that this Program should be expanded to include offices in other regions with additional personnel.

5. Funding

As with any environmental programming, funding is limited – thus implementation is hindered. Many funding constraints cannot be remedied on the state level alone. Federal programs such as the State Revolving Fund disperse funds to states for projects – but this means the funds must be spread throughout the USEPA’s jurisdiction. Increased Congressional appropriations are needed.

While limited, there are state-level programs that provide funding for Great Lakes-related projects. Some of these programs are listed below.

- NYS Great Lakes Protection Fund (www.dec.ny.gov/25582.html) – primarily for research, monitoring and data collection. Perhaps a means of funding a possible clearinghouse as recommended above.
- Environmental Facilities Corporation (www.nysefc.org/home/index.asp) – funding available for projects related to drinking water, wastewater treatment, nonpoint pollution, watershed/estuary preservation and restoration. Provides both financial and technical assistance to municipalities, state agencies and small businesses for appropriate projects.
- NYS Energy Research and Development Authority (ERDA) (www.nyserda.org/funding/funding.asp?i=2) – Among other things, provides financing for energy efficiency and pollution prevention programs.
- State Revolving Fund (www.epa.gov/owm/cwfinance/cwsrf/index.htm) – though technically a federal program, the funds are administered by state agencies to be used for water quality protection. Qualifying projects include wastewater treatment, NPS pollution control, and watershed/estuary management.
- Lake Ontario Coastal Initiative has local implementation grants, as well as research and monitoring grants (<http://ceinfo.org/loci/grants.php>). We are uncertain as to the extent of the role LOCI plays in the context of the Recommendations. LOCI was never mentioned to us – we found the organization accidentally via Google and thought it needed mentioning at some point in the analysis.

⁶ State Pollutant Discharge Elimination System

6. Depopulation

Most of the Great Lakes basin faces population losses, which make for political and economic challenges. Such losses will likely produce a reshuffling of Congressional representation in the next national census – a loss of seats in Congress. Therefore, many advocates in the state believe that the need to enact Great Lakes legislation is pressing – before the region loses votes in the House, rendering legislation more difficult to pass.

V. Conclusions

In sum, two main conclusions can be drawn. New York State does indeed have the capacity to implement most of the recommended action items in the Regional Great lakes Restoration Strategy. Many of the needed programs exist, but the decision-makers and those who are affected are not necessarily aware a.) that they even exist, and/or b.) of the policies and programs connections' to the Great Lakes. Again, it is a matter of establishing a communication network to coordinate programs and stakeholders.

Secondly, NYS can only address so many of the Great Lakes questions independently. Many action items can only be implemented via federal funding and programming – all the State can do is cooperate. Moreover, most of the Great Lakes issues do not adhere to political boundaries. Stage two of this sort of analysis should include the ways in which the states and provinces in the region are already working together, as well as the ways in which such cooperation can improve in order to implement the Collaboration.