The Great Lakes: A Report Card

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INTRODUCTION

Good evening, everyone. It is a pleasure to join you this evening and, particularly, to share the podium with John Mills. John is here representing Canada, our great neighbor to the south. The reason I say that is because I am from Ann Arbor, and those of you from Cleveland and elsewhere may not realize that the southeast area of Michigan is the only place along the Canada-U.S. border where you need go south to get into Canada. That is certainly one difference between the Detroit area and Cleveland, but there are many similarities as well. For example, Detroit is going through something of an urban waterfront renaissance similar to the one that Cleveland has enjoyed for the past decade or so. Also, Cleveland and Detroit are certainly among the great coastal communities of the Great Lakes region. Furthermore, a final similarity that I would point out is the fact Cleveland has a major league baseball team and, up until this year, Detroit had one as well!

I would like to begin my presentation where John Mills left off. I will first start by talking about the Great Lakes Commission, because it is truly a unique organization in the U.S. and in Canada, and add to what John said about the resource attributes of the Great Lakes system. Then, I will then talk about means of assessing progress, focus on trends in governance, and discuss some of the leading challenges we face as we move toward restoration of the Great Lakes. Finally, I will talk about the notion of a “report card” for the Great Lakes region and some of the fundamental considerations for creating it.

THE GREAT LAKES COMMISSION: AN OVERVIEW

By way of background, the Great Lakes Commission is a binational agency that represents the interests of the Great Lakes states and provinces. We were formed by an interstate compact in the mid 1950s, and then
through a declaration of partnership with Ontario and Quebec the came aboard as associate members in 1999.\(^2\)

It is our responsibility to promote sound public policy decisions on issues that range from environmental protection and resource management to transportation and sustainable economic development. We do this through information sharing, policy research and advocacy and communications. We have no regulatory function. In one of the articles in the background materials, one of the authors made a comment about the Great Lakes Basin Compact and about other institutional arrangements in the Great Lakes region, and dismissed them by saying that, since they do not have a regulatory function, they have limited impact.\(^3\) I would argue, and I think those that are affiliated with the Great Lakes Fishery Commission and International Joint Commission would agree, that the absence of regulatory authority, combined with the ability to *voluntarily* bring our jurisdictions together to deal with common issues is probably the reason why our organizations *have* been so effective. When you get into the regulatory arena, there are many complications that go along with it. Both are needed, but there is an important function for the non-regulatory entities as well.

We like to describe ourselves as an "information research broker" that ignores geopolitical boundaries and focuses more on hydrological boundaries. In our strategic plan, we talk about the notion of sustainable development. Every project we accept must have an economic component and an environmental component, or we do not recognize it as consistent with our mission.

The Resource We Focus On

The Great Lakes is the largest system of fresh water on the face of the earth. There is an inextricable interrelationship between the physical system and our socioeconomic system; you cannot pull one away from the other. We at the Great Lakes Commission maintain a computerized water-use database into which the states and provinces contribute information.\(^4\) As an indication of the importance of our water resources, every single day a little less than *one trillion gallons* of water are withdrawn or used in stream daily. Most of that is for hydroelectric power generation purposes, but, even if we

\(^2\) See, e.g., *Ontario, Quebec Take Seats on Great Lakes Commission Board*, at http://www.glc.org/announce/02/05samupdate.html (May 23, 2002).

\(^3\) See Steven M. Siros, *Transboundary Pollution in the Great Lakes: Do Individual States Have Any Role to Play in Its Prevention?*, 20 S. ILL. U. L.J. 287, 287 (1996) ("The Great Lakes' ecosystem contains a variety of different jurisdictional and regulatory bodies, with borders beyond which their respective rules and regulations have little or no effect.").

do not account for this, approximately 60 billion gallons of water are withdrawn daily and, of that, about 3 billion gallons are consumed and are not returned to the system.5

Institutional Components of Great Lakes Management

The "institutional ecosystem for Great Lakes governance" compliments and complicates the physical ecosystem. David Allee of Cornell University once said the hydrology of a river basin is rivaled in complexity only by the complexity of the institutions that manage that basin. I think that is a very good and accurate point.

Within the Great Lakes region, we have a variety of public and private agencies that either influence or establish public policy. In addition to these regional organizations, such as the Great Lakes Commission, International Joint Commission, Council of Great Lakes Governors, and the Great Lakes Fishery Commission, there are a series of treaties, agreements and other arrangements that help us focus on an ecosystem-based approach to Great Lakes management.6

When we speak of the Great Lakes, we are not just talking about an isolated system of fresh water in the Midwest. We are talking about a system with regional and global prominence, a system that is the centerpiece of our region and has a tremendous role in advancing and sustaining economic activity from the local to the global level. Also, we are talking about a system that, even though it is huge, it is not endlessly resilient. It is a finite system, highly sensitive to climate change, to management decisions, and to socioeconomic changes.

The bottom line is this: we are stewards of a precious, finite resource, and we are participants in what I refer to as a grand institutional experiment with tremendous implications. Many people like to talk about the Great Lakes from a scientific perspective and say it is the largest freshwater laboratory for scientific inquiry in the world.7 I would also like to say that it is the world's largest freshwater laboratory for institutional experimentation as well. By my own count, there are fifteen different types of institutional forms that

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6 I must admit that Henry Regier has influenced a lot of my thinking on this notion of an "institutional ecosystem," and even though I can only comprehend only about 17 percent of everything he says, that 17 percent is really good stuff.
have been applied in North America for water management, and we have experimented with eleven of those in the Great Lakes region.

**ASSESSING OUR PROGRESS**

Let us take a look at assessing our progress. My focus is heavy on the governance side and, while my remarks may be more applicable to the U.S. side rather than for Canada, I think they are relevant to both nations.

How has the system of Great Lakes governance evolved over the last several decades? We have gone from a top-down command-and-control regulatory emphasis to more of a bottom-up, participatory, partnership-based emphasis. We have gone from where we were 20 years ago – from developing our institutional infrastructure – to having a very well-structured regime that is now focusing more on enhancing its efficiency. Twenty years ago, we talked about “balancing” economic and environmental issues, as though we could envision a pound of “bad” being offset a pound of “good,” and it all evens out in the end. Now, we talk about integrating economic and environmental solutions. And, also, 20 years ago, few non-governmental organizations (NGOs), whether they were citizen environmental groups or industry groups, participated constructively in the public policy process; for the most part, governments proposed, and NGOs opposed. I think that has changed quite dramatically as well.

Furthermore, there has been much more of a shift from the federal agency-like, “top-down” approach to a “partnership” approach with regard to states and the local communities. We have recognized that socioeconomic considerations are an important part of the decision making process, not just an afterthought. We have started to focus seriously on watershed-based planning, rather than using geopolitical boundaries as the basis for our decisions. We have embraced a multi-media emphasis in terms of the interactions of land, air and water. Moreover, we have started to rediscover some of those basic conservation principles that date back to the era of Theodore Roosevelt. Indeed, we talk much more about conservation and sustainability these days.

**IMPORTANT CHALLENGES FOR THE GREAT LAKES**

Today, we face a number of important challenges. I have selected seven or eight that should be placed on the “report card” we are discussing.

Certainly, water quantity is a very big issue these days, along with diversion, consumptive use and withdrawal. The current challenge is to develop some type of binational regime that will allow the Great Lakes states and provinces to make decisions relating to water withdrawal in a legally-defensible and scientifically-sound manner.
Accelerating progress with cleanup of our "toxic hot spots" is critically important, as is the addressing of non-point source pollution problems, which now collectively contribute more than point sources to pollutant loadings into the Great Lakes system.

As far as land use is concerned, wherever anyone asks me what the number one issue in the Great Lakes region is, I say that we need to "turn our backs" to the lakes and focus inland. What we do with our land and land use planning can have more of an impact on water quality than anything you can do in the lakes themselves. It is an extremely important issue.

Climate change has many implications and requires us to live with and adapt to uncertainty.

Human health and its linkage to environmental conditions is also a leading challenge of our day. Through the Science Advisory Board of the International Joint Commission, we are becoming more concerned with such problems, including pharmaceuticals in the drinking water supplies, and the connection between community health and environmental conditions.

Aquatic nuisance species is another one of our problems. Commercial navigation is a leading pathway for their introduction and spread, but it is also an important part of our economic heritage. The challenge is, how do we recognize the economic and environmental dimensions and address prevention and control in an effective way?

Another challenge is the complexity of governance. How do we insure a seamless web of cooperation at all levels? Through our regional institutions, such as the tremendous contributions of the Great Lakes Commission and the International Joint Commission, we have much more of a seamless web than we otherwise would have.

On the U.S. side of the equation: we are very concerned that, every time there is a new census, we lose nine or ten members of our Congressional delegation. We have a shrinking Congressional delegation, and it becomes a much greater challenge to make those in Washington realize the Great Lakes are here. The Lakes are defined in law as one of the nation's four seacoasts, and they need to be given their due.

A couple of additional leading challenges can be added to this list. One of them has to do with energy issues. Many of us have heard about directional drilling in the Great Lakes, natural gas pipelines and energy transmission lines. Energy issues are going to continue to be important, as well as security issues, whether they relate to drinking water, energy facilities, border management, or commercial shipping.

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8 33 U.S.C.A. § 2309(a) (West 2002) (declaring the Great Lakes and the St. Lawrence Seaway as the "'Fourth Seacoast' of the United States").
THE GREAT LAKES PROGRAM

The Great Lakes Commission is an association of the Great Lakes states and provinces. Through an inclusive process, we have identified the key issues and priorities for Great Lakes restoration, and we have done that in a document that was officially endorsed by the Great Lakes states through the governors' representatives on our organization. It is called the Great Lakes Program to Ensure Environmental and Economic Prosperity, and it is basically a list for Congress of the issues that need to be dealt with during the current session if we are to get moving in the right direction in the Great Lakes region. The seven key themes in our Great Lakes Program are as follows:

1. **Cleaning up toxic hot spots.** John Mills mentioned the need to restore and maintain the beneficial uses of our Areas of Concern (AOCs);
2. **Shutting the door on invasive species** by not only preventing invasion of new ones, but also limiting the spread of ones already in the system;
3. **Controlling nonpoint source pollution.** Nonpoint source has a tremendous adverse impact on economic productivity, as well as environmental quality;
4. **Restoring and conserving wetlands and critical costal habitat.** Only a fraction of the original wetlands left in the Great Lakes region are intact, yet these are the single most biologically productive areas in the system. We need to reverse that trend;
5. **Ensuring the sustainable use of our water resources.** This goes back to the challenge in the 1985 Great Lakes Charter and the Annex 2001 initiatives: to come up with a binational approach to addressing water withdrawal issues so we can accommodate our current needs, but at the same time not compromise the ability of future generations to do the same;

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10 See id.
(6) Strengthening our decision support capability. This relates to securing adequate funding for research, monitoring, surveillance and all the activities that will ensure that our decisions are, indeed, scientifically sound.

(7) Enhancing the commercial and recreational value of our waterways. This is a critically important component of Great Lakes system usage. Some time ago, the GLC compared waterborne transportation of cargo with rail and roadway options from safety, fuel consumption, and environmental pollution standpoints. There is no question that a safe and environmentally-responsible commercial navigation industry is by far the best way to go. And, waterborne recreation is a multi-billion-dollar industry in the region and provides another link between environmental and economic considerations.

DEVELOPING A "REPORT CARD"

I want to conclude by talking about how one might fashion a "report card" for the Great Lakes. (The moderator said that I had a 4.3 grade-point average in college. That, indeed, is true, but only if you add up all of my averages from my freshman year through graduate school.) I thought about this in terms of how I prepare a report card for my students. What are the sort of things we need to keep in mind? First, we have to identify performance standards. Then, we need to establish benchmarks to evaluate the student’s progress, monitor that progress over time, allow for mid-course feedback and corrections, and report out the results to all affected parties. This will ensure consistency and continuity from one term to the next. I would argue that this "report-card" approach applies to the Great Lakes region as well, but we are not really quite there yet. On an issue-specific basis, we can quantify progress, whether it is PCB concentrations in fish or number of wetlands created, but, for the most part, we are not at the point that we need to be in order to evaluate our progress.

First of all, we need a Great Lakes Restoration Plan that has a vision, goals, and measurable objectives so we all know where we are going and how to get there. We need to have an ecosystem-based focus that recognizes the interrelationships of the environmental, economic and social dimensions of this region we live in. We need indicators to identify problems and assess our progress; monitoring and surveillance programs to address the health of the system; and periodic checkups and program refinements. And, finally, we need a forum for reporting and receiving feedback.

While considerable progress on these fronts has already been made, the State of Lakes Ecosystem Conference (SOLEC), a conference held every
other year, sponsored by Environment Canada and the U.S. EPA, is starting to get at these questions.\textsuperscript{13} We are currently doing the hard work of identifying those indicators, and are finding agencies and organizations that will "sponsor" each of the indicators, enabling us to track them over time. I am convinced that, eventually, we will be able to get to the point where we can put together a quantifiable, measurable, legitimate "report card" for the Great Lakes, one that is not as qualitative as the one we have right now.

CONCLUSION

I will conclude my presentation with a quote from an essay published by Loren Eiseley in 1954 titled "The Flow of the River:" "If there is magic on this planet, it is contained in water."\textsuperscript{14} Although the work had nothing to do with the Great Lakes, whenever I see the quote, I cannot help but think that he possibly could have had the Basin in mind.
