I’m delighted to be with you today. When I was a state legislator in Michigan I worked harder on environmental protection than any other issue. I’m heartened so many state legislators are also making environmental protection a priority, and banding together to learn from each other. Together, we can successfully make the case that environmental protection and economic growth go hand in hand.

In our region there is almost nothing as fiercely debated – and fiercely defended – as water. Thinking about the issue, I always recall Michigan’s state motto – Tuebor – “I will defend”. That passion has worked to good effect. Many Great Lakes states have put in place strong water pollution control and water conservation measures. That passion resulted in the 2008 Great Lakes Compact, about which I’ll speak today. But first I’d like to set the stage with some history and the natural forces that largely control Great Lakes water levels.

The Boundary Waters Treaty of 1909 between the U.S. and Canada established the IJC to prevent and resolve transboundary water conflicts. The Commission bases its decisions on science and attempts to provide equity between the two countries. Each nation appoints three commissioners who strive to achieve consensus on all important decisions. We also take dual oaths – one to uphold our respective constitutions, and one to serve without national bias in achieving the objectives of the Treaty.

Article VIII of the Boundary Waters Treaty confers on the Commission authority to issue orders of approval that place conditions on the application and operation of projects, such as dams, diversions or bridges that would affect the natural flow or level of waters anywhere along the US – Canada boundary, from the Atlantic to the Pacific and along the Yukon – Alaska boundary.

In addition to authority over water quantity issues, the IJC can advise the two federal governments on water quality issues. The Great Lakes Water Quality Agreement, first signed in 1972 and most recently revised in 2012, assigns to IJC responsibility for reporting on how well the two federal governments are implementing their commitments. Although water pollution is not the focus of our discussion today, I want to stress that the Agreement has been very important in driving forward many environmental protections, because each country has taken quite seriously its promises not to pollute the waters they share.

While human activities have substantially determined the quality of Great Lakes water, when it comes to water quantity, the story is different. To date, human impacts on water levels have been
relatively small, whether we are looking at dams, diversions or dredging. Compared to the forces of nature that control water levels, the Great Lakes are mostly too large to have been tamed by engineered projects.

There are just two major dams on the Great Lakes. One is at the outfall of Lake Superior and the other near the head of the St. Lawrence River. Only the latter has any lake level impact, and that is limited to compressing the variability of Lake Ontario. On the one hand, this compression has protected homeowners from shoreline erosion and flooding, but on the other, it has negatively affected the health of coastal ecosystems.

The Chicago diversion is frequently cited as determinative of Great Lakes water levels. But this is not true. There is a positive inflow of approximately 3.5 inches from diversions that were built during World War II to bring water for hydropower from the Hudson Bay basin into Lake Superior. This is partially offset by a 1.5-inch outflow of Lake Michigan at Chicago, leaving Lakes Michigan and Huron about two inches higher as a result of both diversions.

Finally, dredging operations in the St. Clair River from about 1860 to 1960 have made some difference. Although 19th century dredging impacts are unknown, operations in the 20th century prior to 1960 lowered Lakes Michigan-Huron, perhaps by 15-16 inches. Whether you think the lower level caused by St. Clair River dredging is good or bad depends on whether you are a Lake Michigan riparian still traumatized by the high water damage of the mid-1980s, or a Lake Huron cottager suffering from a 14-year run of low water. A majority report of the IJC has called for a feasibility and impact study of potential structural options at the outfall of Lake Huron to provide relief during low water but not exacerbate high water conditions.

Now before turning to the more recent threats of out-of-basin diversions, let’s look at the precipitation and evaporation forces that have the greatest impact on Great Lakes water levels. The record going back to the 19th century shows a natural variation of about six feet. Lakes Michigan and Huron have been hovering for nearly a decade and a half at unusually low levels. Scientists explain this extended period of low levels by noting that climate change has resulted in substantially less winter ice cover on the lakes, leading to greater winter evaporation. Unless this higher evaporation is offset by exceptional precipitation (or an unanticipated return of greater ice), lower water levels are anticipated. But more study is needed. In IJC’s recent International Upper Great Lakes Study, scientists found that future Great Lakes levels are uncertain, and that we should be prepared to deal with extreme highs as well as lows.

Over the last 30 years, major controversies also have erupted over proposals to take Great Lakes water somewhere else – and each time the states and Ontario and Quebec have responded to the public clamor for protection by enacting historic measures.

The first controversy caught fire in the early 1980s. In 1981, the Powder River Coal Company proposed to build a $2.1 billion coal slurry pipeline to the Great Lakes to bring western low-sulfur coal to the Midwest. The proposal included a fresh water line from the Great Lakes to Gillette, Wyoming to feed the coal slurry line.
In 1982, the U.S. Army Corps of Engineers performed a study on the possibility of diverting Great Lakes water to recharge the Ogallala Aquifer, which stretches from Wyoming to Texas. Neither proposal went forward – but they served the useful purpose of awakening residents of the Great Lakes states to the possibility that in an increasingly thirsty world, the lakes would be a tempting target for diversion. The response of the states was swift. In 1983, the Great Lakes governors launched negotiations on an agreement to resist diversions. In early 1985, they consummated the Great Lakes Charter. The Charter committed the states and Ontario and Quebec, for the first time, to notify and consult among themselves on proposals for major water withdrawals, to regulate those withdrawals and to implement water conservation measures.

The Charter rightly won acclaim as a major step forward. But it also contained a great vulnerability – it was not legally binding. It was a good faith agreement only. Congressman Henry Nowak took care of that – sort of – in 1986 when he slipped a brief section into a massive water projects bill. The seemingly innocuous section provided that no new diversion of water out of the Great Lakes Basin could occur without the approval of all eight Great Lakes governors. In effect, each governor now had a veto over new diversions. Take note, legislators, what you do makes a difference. And sometimes the shortest bills or amendments have the biggest impact.

The next alarm bell rang in 1998. A Canadian company, the Nova Group, obtained a permit from the Ontario government to capture up to 156 million gallons per year of Lake Superior and put it in tankers to sell in Asia. When this news broke, the furor within the Great Lakes public washed right over the Nova Group, which gave up its permit. It also exposed a major flaw in the protections against Great Lakes diversion. The Charter and federal law defended against diversions – pipes, canals and aqueducts – but had nothing to say about exports in tankers or vehicles.

With the public clamoring for action against the new threat, in 1999 the United States and Canada jointly requested that IJC study the effects of bulk removals and diversions from boundary waters such as the Great Lakes, and provide recommendations to the two federal governments. That resulted in a 2000 IJC report recommending the states, Ontario and Quebec develop a decision-making standard for new or increased removals of Great Lakes water. The report also framed the debate in a new way:

“The waters of the Great Lakes are, for the most part, a nonrenewable resource. They are composed of numerous aquifers (groundwater) that have filled with water over the centuries, waters that flow in the tributaries of the Great Lakes, and waters that fill the lakes themselves. Although the total volume in the lakes is vast, on average less than 1 percent of the waters of the Great Lakes is renewed annually by precipitation, surface water runoff, and inflow from groundwater sources.”

The Commission’s advice was consistent with a report from the Great Lakes Commission arguing that the states were vulnerable to legal attack under the interstate commerce clause of the U.S. Constitution as practicing “protectionism” over water resources. A ban on diversions and exports, the report reasoned, would hold up in courts only if the states and provinces had legal mechanisms in place to prudently manage water withdrawals within their own borders. The only
way to withstand such a challenge, the Commission said, was to develop a resource-based standard.

The IJC report and the Great Lakes Commission report galvanized state action.

In 2001, the Great Lakes governors and premiers of Ontario and Quebec pledged to work on an agreement to develop a common resource-based standard to be applied to all proposed new or increased water withdrawals. Four years of painstaking negotiation followed, culminating in December 2005 with a proposed Great Lakes interstate compact endorsed by all of the Great Lakes governors. A separate non-binding agreement among the states, Ontario and Quebec mirrored the proposed Great Lakes Compact.

Key features of the Compact included:

- A ban on bulk exports and new diversions of water from the Basin. Limited exceptions could be allowed, such as for public water supply purposes in so-called “straddling” communities near the Basin, but exceptions would be strictly regulated.
- The States would use a consistent standard to review proposed uses of Great Lakes water.
- Regional goals and objectives for water conservation and efficiency would be developed, and reviewed every five years. Each State would develop and implement a water conservation and efficiency program.

Three years later, in the fall of 2008, something almost unimaginable occurred – the process of state and Congressional ratification concluded, and the President signed the Compact into federal law.

The Compact was justly hailed as a milestone in Great Lakes protection. The legislatures of all eight Great Lakes states had approved verbatim a law that in addition to banning diversions would impose new requirements on themselves. Sixteen legislative chambers approved the Compact without amendment. Such unity was historic.

But would the Compact work? That would be tested in two ways by the states. What would happen when the first proposal for a diversion to a community just outside the Great Lakes Basin came along?

And would the states actually pass the water conservation standards and rules to which they had committed themselves?

The answer to the first question is developing. The City of Waukesha, Wisconsin – a community in a county that straddles the Great Lakes Basin divide – is applying for permission to divert up to 10.1 million gallons per day of Lake Michigan water, to be returned to the lake through a tributary. Key issues are whether the city has no feasible alternative for replacing its radium-tainted groundwater supply, and whether the diversion will be used to support the growth of Waukesha rather than merely serving existing customers. Water for sprawl does not meet the standards of the Compact.
The answer to the second question – would the states do the politically tough work and actually pass the water conservation standards and rules to which they had committed themselves? – is also playing out. The answer is mixed. The States have put in place laws of varying strength. The question is whether all eight states and the two provinces will fund the staff, monitoring, and enforcement needed to make them more than just words on paper.

As you well know, passing a law is one thing. Implementing it is another. Setting forth rules that govern your constituents is not easy. No one ever got re-elected on the platform that he or she obtained funding for monitoring. But this unglamorous work is absolutely essential if the Great Lakes are to be protected from diversions and exports.

It all comes down to political will and to the economics of moving water out of the basin. Unfortunately, with water an increasingly scarce resource, the long-term economics are not on the side of protecting Great Lakes water. While the states embraced IJC’s recommendations in adopting the 2008 Compact, it is my personal opinion that greater protection will require even stronger water conservation measures.

Forty years ago, when Lake Erie was declared dead and rivers had repeatedly caught fire, there was political will. Leaders from both Canada and the U.S. came together, signed an historic agreement – and more importantly, thanks in part to public pressure – kept the commitments they made to restore the Great Lakes.

Can we afford to do anything less today? My hope is that legislators in this room – and throughout the Great Lakes region – will see to it that the promise of the Compact is kept.