Balancing the Interests of the Economy & Great Lakes Ecosystem

by Tim Anderson

BATTLE OVER INVASIVE SPECIES
CHICAGO —Brett Kirbach of Illinois Marine Towing stands watch while working on the Windy City tow boat. State leaders are striving to balance the sometimes competing interests of the economy and the Great Lakes ecosystem.

Policymakers are striving to find a balance between protecting the delicate ecosystem of the Great Lakes and preserving much-needed jobs.

The problem comes in the form of invasive aquatic species entering the Great Lakes.

Take, for example, the case of sea lamprey, a fish native to the Atlantic Ocean that came to, and then spread throughout, the lakes via manmade shipping canals built in the 1800s.

By the middle of the 20th century, sea lampreys were wreaking havoc on the Great Lakes ecosystem and fishing industry. The population of lake trout was decimated. To this day, the U.S. and Canadian governments are spending millions of dollars a year to control this non-native fish.

More than 180 nonindigenous species have been detected in the Great Lakes. Some are harmless, but others—such as the sea lamprey—have had a profound ecological impact.

Wisconsin Rep. Cory Mason, whose district borders Lake Michigan and also includes some of the state's treasured 15,000 inland lakes, is all too familiar with the impact these invasions can have.

"We've certainly had to deal with the zebra mussel problems in Lake Michigan, and invasive species in our inland lakes change how people can use them," Mason said. "They affect our quality of life. And once they're here, there is no redoing it. They're here permanently."

Tough New Standards

Led in part by lawmakers like Mason, states have taken a lead role over the past decade in trying to keep invasive species out of the Great Lakes.

Today, the fight is centered in New York, which plans to begin enforcing the toughest standards on ballast water discharges in the country next year.

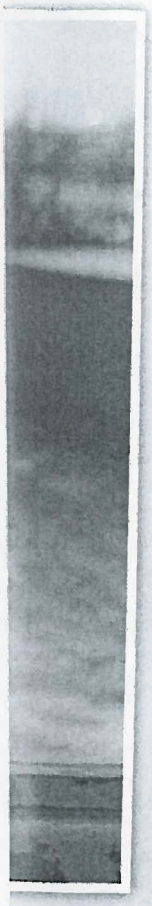
Late in 2011, Mason spearheaded a letter-writing campaign—signed by 21 Wisconsin lawmakers—urging New York to stand by its rules.

"Because of its geographic location, New York is a first-in port of entry, so a tougher standard in that state means protecting the entire basin," Mason said.

He points out that invasive species are not only an ecological threat, but also have an economic consequence. A study by University of Notre Dame researcher David Lodge estimated that these non-native species cost the Great Lakes region $200 million a year.

But some state and federal leaders believe New York's rules go too far in trying to address the threat.

While the seaway has opened up a new pathway for invasive species to come to the Great Lakes, it has opened up new economic opportunities for the region to trade with the



rest of the world.

Governors in Indiana, Ohio and Wisconsin say New York's new rules will close these opportunities.

The state's discharge standard is incompatible with current ballast water treatment technologies, the governors wrote in a letter last year to New York Gov. Andrew Cuomo, and will "possibly force the closure of the St. Lawrence Seaway and imperil thousands of maritime-related jobs."

That letter prompted Mason's letter to New York.

Since the seaway began operating in 1959, more than 2.5 billion metric tons of goods valued at more than $375 million have been moved through it. A 2011 study done on behalf of the Great Lakes shipping industry estimated that the economic activity related to the seaway supports 227,000 jobs in the region.

Over the past half-century, the ballast water of ocean-going ships has been the leading source of nonindigenous species introductions in the Great Lakes, and is the cause of notorious invaders such as the zebra mussel and round goby entering the freshwater system.

States have responded by adopting mandatory ballast water treatment programs and discharge standards. Michigan established the first state-level permitting program in 2005; other states have since followed.

"States like New York have basically said, 'We are not going to tolerate this source of pollution anymore, and we're going to try and figure out how to deal with it,'" said Joel Brammeier, president and CEO of the Alliance for the Great Lakes. "One way to deal with it is through the rapid development of (ballast water) technology, in order to achieve a standard to protect the Great Lakes."

The idea is to establish a standard of treatment that reduces the number of viable organisms in ballast water discharges. But as Brammeier noted, "States are not of one mind on this issue."

The letters written by Mason and the three governors illustrate this divide.

Still, some lawmakers would like the eight Great Lakes states to find consensus on a uniform discharge standard for ballast water.

In late 2011, the Michigan Legislature passed a package of bills that in part call on the state's Department of Environmental Quality to lead such an effort.

The legislative package, sponsored by Sen. Howard Walker, also establishes a 19-member Aquatic Invasive Species Advisory Council, which will revise Michigan's laws, regulations and programs, as well as update the state's Aquatic Invasive Species Management Plan.

The Federal Response

Meanwhile, New York's proposed rules have prompted a strong response from some federal lawmakers. In late 2011, the U.S. House passed legislation stripping states of their authority to create ballast water regulations stronger than those at the federal level.

The same measure would establish a federal ballast water discharge standard that is the same as the one set by the United Nations' International Maritime Organization, known as the IMO. As of early 2012, not enough member countries had ratified the IMO standard to be enforced.

New York's pending discharge standard is 100 times more stringent than the UN standard for existing vessels.

In contrast, states such as Minnesota and Wisconsin have established ballast water programs using the IMO standard. And both the U.S. Environmental Protection Agency and U.S. Coast Guard are moving ahead with plans to tie a federal standard to the IMO standard.

While a discharge standard remains a priority for many, some past actions have helped in the fight against invasive species. Starting in 2006, all overseas vessels entering the Great Lakes were required to conduct saltwater flushing and ballast water exchanges. Since then, there have been no reports of invasive species entering the lakes via ocean-going vessels.

But there are limits to the efficacy of these practices in preventing the introduction of invasive species.

The IMO standard adds another layer of protection to these existing practices. States such as New York and California have decided that even this standard is not enough, while others say anything above it simply is not feasible.

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—Wisconsin Rep. Cory Mason