

EPA, Army Corps urged to consider separating Great Lakes, river basin

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The once-radical idea of somehow plugging the Chicago Sanitary and Ship Canal to stop the flow of unwanted species from spilling between the Great Lakes and Mississippi River basin is quickly picking up political support.

On Friday, a bipartisan group of 50 members of Congress representing the [Great Lakes](#) states fired off a letter to the bosses of the U.S. Army Corps of Engineers and [Environmental Protection Agency](#), urging them to "immediately consider" re-establishing the natural hydrologic separation between the Great Lakes and the Mississippi [River basin](#).

"There may be no greater threat to the ecosystem of the Great Lakes than the introduction of the Asian carp, and we must do all that we can to prevent this from happening," the coalition wrote to those two agencies and to the heads of the U.S. Coast Guard and U.S. Fish and Wildlife Service.

The canal, an engineering marvel when it opened in 1900, reversed the flow of the Chicago River, allowing the city to flush its sewage away from its drinking water intake pipes in Lake Michigan -- all the way to the Gulf of Mexico. The sewage-carrying channel created an artificial link between the Mississippi and the Great Lakes basins and also established a navigational corridor between the lakes and the heart of the continent.

Now more than a century later, the economic and ecological costs of that

ambitious project are causing a lot of people to reconsider the wisdom of tinkering with nature on such a grand scale.

For much of the 20th century, the natural biological seal between two of America's grandest drainage basins remained essentially intact because the canal was too polluted for most fish.

But better sewage treatment has created a cleaner canal and as a result opened a pathway for a number of invasive species, including Asian carp, [zebra mussels](#) and the pesky round gobies, to move up and down it. Think of those species as a biological infection; the canal provides a pathway for that infection to spread -- in both directions.

The Army Corps' first electric barrier, after all, was initially conceived to stop the migration of the invasive round goby out of the Great Lakes and into the Mississippi River and its vast tributary systems. But that barrier didn't get built in time to stop the inland advance of the gobies, brought into the Great Lakes by overseas freighters traveling up the St. Lawrence Seaway.

So by the time it was turned on in 2002 it was dubbed an Asian carp barrier because the hope was it could stop those leaping, ecosystem-ravaging fish from moving in the opposite direction -- from the Mississippi into the Great Lakes.

The Army Corps has since built a more robust Asian carp electric barrier just downstream from the old barrier, about 20 miles from the shore of Lake Michigan. Those two barriers were considered the best chance to protect Lake Michigan from a carp invasion, but bad news came last month when the Army Corps acknowledged that water samples taken above the barrier revealed the presence of Asian carp DNA within about six miles of Lake Michigan.

No fish have been found, but the lawmakers who signed Friday's letter said they want two nearby navigational locks closed if fishery officials think "there is a reasonable likelihood" of fish above the electric barriers. Fishery officials have said they have faith in the accuracy of the DNA tests, and despite the fact that a weeklong netting operation at the beginning of the month yielded no fish, they think at least a small population has breached the barrier. Closing the navigational lock doors would provide a physical barrier between the lakes and the fish, but it also would severely disrupt the barge operators and industries that rely on the products they move.

The Army Corps has said it is studying the issue, though it has received some significant push-back from barge operators, who note the equivalent of the cargo carried by 230,000 semitrailer trucks moves through just one of those locks each year.

Actually damming the canal, as the coalition is suggesting, would have more dramatic impacts, both on the barge industry and the Chicago sewage system because at least some of the city's treated waste would begin to flow back into Lake Michigan.

That would require significant -- and likely expensive -- upgrades to the city's sewage treatment infrastructure.

Conservationists and others say that likely would be money well spent because the toll of the "biological pollution" unleashed by invasive species is becoming astronomical. The Asian carp are the species of concern today, they note, but what might be swimming up -- or down -- the canal next year?

The Sanitary and Ship Canal eventually fans into several waterways that connect to Lake Michigan. A study released a year ago by the Alliance for the Great Lakes suggested that there are strategic areas to install

barriers that would allow some sewage to continue to flow down the canal toward the Mississippi and still allow for much of the barge traffic in the Chicago area.

"You don't have to shut the canal down to commerce," Marc Gaden, spokesman for the Great Lakes Fishery Commission, said at the time of the study's release.

The Army Corps already has agreed to explore the feasibility of re-creating such a separation, but the agency is notorious for its plodding pace.

Now it is starting to face loads of external pressure.

Friday's letter indicates there might be some political muscle behind a legal fight launched this month by Michigan Attorney General Mike Cox, who said he intends to sue in federal court to force the Army Corps to do more to protect the lakes. The Wisconsin Assembly passed a resolution this week urging Wisconsin Attorney General J.B. Van Hollen to "pursue every legal means available" to prevent invasive carp from entering the Great Lakes, something Van Hollen said he intends to do. He has contacted Cox's office.

Cox's suit could conceivably bring to life a decades-old -- and technically ongoing -- U.S. Supreme Court case over Chicago's 1900 reversal of its namesake river and resulting daily diversion of billions of gallons of Lake Michigan water down the Chicago Sanitary and Ship Canal and into the [Mississippi River](#) basin.

Illinois' neighboring states sued over the diversion, but the court decreed in 1967 that the Chicago diversion could continue, provided it was capped at a certain level. Today that level is 2.1 billion gallons a day. But the lawsuit isn't closed; the justices ruled that the states that sued can

bring the case back into court if they believe the Chicago diversion is causing damage to the shared Great Lakes. Wisconsin and Michigan are both plaintiffs in the case.

The EPA, meanwhile, announced this week that it would set aside an additional \$13 million in the effort to beat back the fish that threaten the Great Lakes \$7 billion fishery. The filter-feeding machines that can grow bigger than 50 pounds and consume 20 percent of their weight in plankton per day have a history of overwhelming the ecosystems they invade.

Much of the additional money will go toward fortifying areas around the banks of the canal so adjacent waterways already infested with the fish, including the Des Plaines River, won't overflow in floods and spill into the canal, giving the fish a bypass around the electric barriers.

That is a good step, but it isn't enough, Sen. Russ Feingold, D-Wis., said Friday.

"The devastating environmental, ecological and economic impact Asian carp would have on the Great Lakes is well known," Feingold said. "I greatly appreciate the \$13 million the administration will spend to prevent [Asian carp](#) from using floodwaters to bypass the electric barrier, but we need to quickly consider all our options and take action."

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