

The Great Asian Carp Story

On Monday, December 21 the State of Michigan filed suit in federal court to force closure of the shipping locks in the Chicago area and create interim and permanent barriers to prevent Asian Carp from entering Lake Michigan. The suit, filed against the state of Illinois, the U.S. Army Corps of Engineers and the Metropolitan Water Reclamation District of Greater Chicago goes right to the Supreme Court because it has original jurisdiction in disputes between states.

This sounds like quite a story, but what is the story exactly? It is difficult to find a complete and accurate account of the threat posed to the Great Lakes by the Asian carp (“bighead” and “silver” carp to be precise). The issues, if not the answers, are clear: 1) can these fish be kept out of the Great Lakes? 2) what is the best way to keep them out? and 3) if we fail what damage will they do to the Great Lakes?

The Asian Carp were imported from Asia to clean sewage lagoons and fish ponds in the Mississippi Delta. Accounts vary on when they escaped these ponds, but it could have happened as early as the late 1960’s. During the huge floods of the 1990’s the carp got into the Mississippi River and began working their way north, up the Illinois River towards Chicago. They are now reported to be about 25 miles, but perhaps as close as 6-7 miles, from Lake Michigan.

Carp are those fish you see in ponds at zoos, parks, etc. that mass where people feed them. These particular carp species are the worst of them all: big (up to 100 pounds and 4 feet long), ravenous, invasive and aggressive. The really interesting thing is that they jump, high, especially when disturbed by boat motors. There is a 2009 picture of hundreds of them jumping out of the water of the Illinois River.

So the Army Corps of Engineers has watched the northward march of these fish for years. The connection between the Illinois River and Lake Michigan is man-made, part of the great engineering feat that reversed the flow of the Chicago River. The principal waterway is the Chicago Sanitary and Ship Canal, but it splits into channels and there are actually four access points to Lake Michigan from the canal system—the whole known as the Chicago Water System. An electric barrier was installed in the Canal in 2002 by the Corps to deter the carp. During a recent shut down for maintenance, 6 miles of the Canal was poisoned to prevent carp from using this opportunity to advance, but thousands of many varieties of fish died.

More detailed information on the electric barriers is harder to find, but the Corps built a second barrier and may be planning a third. A December article in the Detroit Free Press says the second barrier was completed in 2006 but wasn’t turned on until April 2009 because of the safety concerns of barge and tugboat groups. There is a huge amount of shipping that uses the canal, an important fact, and the barges are made of steel. The barriers are located north of the Lockport Lock, 28 miles south of downtown Chicago. It seems it was the new, more powerful barrier that was shut down for maintenance.

The canals are the most direct pathway to Lake Michigan, but in places beyond the electric barriers the Des Plaines River is so close to the Canal, a matter of feet, that in heavy rains the area between the two floods. On December 14, the head of the EPA announced \$13 million in Great Lakes Restoration Funds would be used to shore up the land between the Canal and other waterways and close any conduits to keep the carp from literally floating from one waterway to another.

Michigan is leading the fight against the carp. Governor Granholm (Democrat) and Attorney General Cox (Republican) are the principals behind the lawsuit to close the locks. The entire Michigan Congressional delegation has joined to lobby for extra funding for the Corps and authority to “build up the barrier.” (It’s so nice to see a real bipartisan effort!) Senator Levin asked the Corps to “consider” permanent separation. Many people feel that the only sure way to keep the carp out of the Great Lakes is to close the locks and disconnect the canal system permanently from the Chicago River.

The Corps wants more time to study the problem. It would seem they have had time enough, but they are required by law to study anything as major as the closing of the canal and separation of the two great water systems. A group called Alliance for the Great Lakes (they participated in a program with us and the World Wildlife Fund on the Michigan environment in Three Oaks a few years ago) has already conducted a study and released it in 2008. They identify many problems, the most important being the lack of political leadership, multiple jurisdictions and funding. All still an issue in spite of the 2003 Chicago Invasive Species Summit hosted by Mayor Daley.

There are practical problems in an ecological separation, summed up in the Canal’s name-- the Chicago Sanitary and Ship Canal. The Chicago water treatment system discharges treated wastewater into the system where it is carried downriver from the city instead of into Lake Michigan, the real reason for that triumph of engineering. There would have to be some major re-piping of the water system but it could be done thanks to improved water treatment methods and the Chicago Deep Tunnel wastewater storage system. The other problem is shipping. This is not a growing business, but 25 million tons of commodities move on the Chicago Water System annually (mostly coal and building materials). Rather than the much simpler solution of plugging up the Canal where it is the only route for the carp, the Alliance proposes multiple physical barriers so that shipping could continue. It would require some new infrastructure, but that could turn out to be an economic benefit for Chicago.

The main point the Alliance makes in its report is that it is not just about carp, it’s about all invasive species (fish and plant) that can now pass with relative ease in both directions in the Canal pipeline between the two great watersheds of the Great Lakes and the Mississippi. Other recent invaders are zebra mussels and the round goby. The Asian carp seems the most serious threat yet, however. Some scientists have adopted a fatalist attitude that it’s probably too late already or an optimistic one that perhaps the carp won’t thrive in the Great Lakes and degrade water quality and destroy the ecosystem. However, as Henry Henderson said in a December 15 article in USA Today arguing for permanent separation of the waterways “The carp issue is not just one of invasive species, but also

of crumbling infrastructure and protection of our non-renewable water resources. Those are big issues that require a big solution.”