

Barrier to keep Asian carp out of Great Lakes faces criticism

August 24 2009, By Dan Egan

The last stand in the battle to keep Asian carp from invading the Great Lakes is under way. The Army Corps began tests last week to see whether it can permanently crank up the power on its new electrical fish barrier on the Chicago Sanitary and Ship Canal to a strength that will actually turn back all sizes of the fish.

The carp have been migrating north from Arkansas since escaping their government containment ponds in the 1970s, and recent tests show the fish are within about seven miles of the barrier -- the last line of defense for the Great Lakes.

The fear is that if the voracious filter feeders make it past the barrier they could devastate what's left of native Great Lakes fish species and unleash havoc on the region's recreation industry because of their penchant for porpoising out the water and smacking unsuspecting boaters.

The problem is the barrier has not been operating at a high enough voltage to turn away juvenile carp. The barrier was designed to shoot as many as 4 volts an inch into the canal but because of safety concerns for boaters and barge operators, the Army Corps has been operating it at only 1 volt an inch.

Conservationists pointed out the problem when the barrier was first turned on in April, and some are now grumbling that the Army Corps moved too slowly on tests to determine whether the barrier can be



operated at a higher strength.

"They waited too long. They had no sense of urgency," said Dan Thomas, president of the Great Lakes Sport Fishing Council. "They had all this time since April to do this, and they waited until now _ peak boating season. This is nothing short of incredible, what's going on here."

The voltage problem, however, was not considered a front-burner issue until July 31.

That's when water samples revealed the presence of Asian carp DNA a mere seven miles below the barrier -- about 10 miles closer than anyone expected.

The Army Corps responded by turning to a "crisis action plan" that calls for turning up the power on barrier -- as soon as safety tests are completed.

No one can say when that will be, or even if the tests will show that the barrier is safe to operate at a higher voltage.

During the tests, the canal will be closed to all traffic in the area of the barrier.

But even if the Army Corps does decide it is safe to permanently crank up the power, the barrier will not always work when it is needed.

The Army Corps acknowledged this month that the firm it contracted to design and build the barrier dropped a surprise just before it turned it on this spring. The company told the Army Corps that the barrier will have to be shut down about every six months for maintenance.

An old experimental barrier about 800 yards upriver from the new



barrier, with a maximum capacity of 1 volt per inch, will continue to run during those shutdowns, which are expected to last a couple of hours.

But all the fish need is a couple of minutes to scoot through.

"That could allow the fish to get between the barriers, and that is a problem," said Marc Gaden, spokesman for the Great Lakes Fishery Commission. "There is talk, basically, about a rotenone treatment between the barriers."

Rotenone is a fish poison.

Army Corps Col. Vincent Quarles acknowledged the quandary and noted that a twin barrier immediately upstream from the new barrier is under design. He said that barrier was supposed to be ready for action in 2011, but the Army Corps hopes to get it running by late next year.

He also hopes it can be designed in a way that won't require regular shutdowns.

More bad news arrived in May when the engineers who built the new barrier informed the Army Corps that its strength also might have to be turned down from the hoped-for higher levels if water temperatures in the canal top 80 degrees because of fears that it will overheat.

Two weeks ago, thermometers showed the canal was at 79.4 degrees, and temperatures have exceeded 90 degrees in late summer.

"I don't think the designers understood that the Chicago Sanitary and Ship Canal has temperatures that typically go much higher than other bodies of water," said Army Corps Maj. Gen. John Peabody.

The Army Corps is installing external chillers on the barrier, and it hopes



to have them operating by September.

A general, an admiral and President Barack Obama's handpicked Great Lake czar Cameron Davis headlined a news conference Aug. 11 at the precise place where biologists had expected the fish to breach the lakes -- the navigation lock where Lake Michigan water mixes with the Chicago River. The message: The federal government will do everything in its power to protect the lakes.

Conservationists and those who have pushed to get the barrier built for much of the past decade were happy with the impressive show of federal firepower. But many have grumbled for years that the federal government was moving too slowly to protect the Great Lakes from the fish.

"We could have had this barrier up and running at optimum strength three years ago," said Joel Brammeier, acting president of the Alliance for the Great Lakes.

The fish have been migrating north for decades. They were imported to Arkansas in the 1960s and used in federally funded sewage treatment experiments, but they quickly escaped their containment ponds.

"Nothing has seemed to stop them, and we knew they would eventually get to this point," said John Rogner, assistant director of the Illinois Department of Natural Resources. "And here they are."

So is a **Great Lakes** invasion imminent?

"I'd prefer to think that this isn't inevitable," said Mike Weimer of the U.S. Fish and Wildlife Service. "We'll see in the near future what shakes out."



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