

## New plan would fight invasive Asian carp with air bubbles, electric shocks, noise

May 27 2019, by Todd Spangler, Detroit Free Press

The head of the Army Corps of Engineers has signed off on a \$778 million plan to stop the spread of Asian carp toward the Great Lakes with air bubbles, electric shocks and noise, sending it to Congress for approval.

The plan sent by Lt. Gen. Todd Semonite would block the <u>invasive</u> species' advance toward Lake Michigan at a key choke point at the Brandon Road Lock and Dam along the Des Plaines River in Illinois.

## It would:

- Put in place additional electric barriers in the waterway to stop most Asian carp from moving through the lock and dam.
- Use special underwater speakers while ships were moving through the locks to blast sound waves at decibels and frequencies sufficient to make Asian carp species uncomfortable enough to turn back.
- Create what the Corps is calling an air bubble curtain, of a kind currently used to keep ice from building up near some locks and dams, which have "been found to cause an avoidance response in fish."

If Asian carp, which are actually several species of voracious carp not native to North America, reach Lake Michigan, there are worries that they could decimate food sources for other fish and quickly spread throughout the Great Lakes.



The plan, which was revealed in draft form some years ago after initially being delayed by the Trump administration, also calls for a flushing lock that would more forcefully flush water that could contain Asian carp species before a ship can move toward Lake Michigan. According to the report, research still must be done on some of the technology in order to make it effective, including on the noise barrier or "acoustic fish deterrent."

Electric barriers elsewhere in the Chicago-area waterways have generally been found to be effective, though some studies have suggested some small fish may be able to pass through. Asian carp DNA recently was found in Lake Calumet beyond the existing electric barriers, though no fish were found.

Now that the Army Corps has signed off on the report, it will fall to Congress to authorize and fund the Brandon Road Lock and Dam project. And the timing could be crucial

According to the report, the leading edge of the adult Asian carp population is only 4 to 6 miles from the site and about 47 miles from Lake Michigan. The Army Corps says with full, expedited funding, it hopes to complete the project by 2027, though some of the barriers should be in place much earlier if construction is approved.

"Two (Asian carp species), Silver Carp and Bighead Carp, are currently about 4 miles below (Brandon Road)," the final report on the project said. "The proposed implementation strategy allows (barriers) to commence immediately following project authorization."

Michigan members of Congress, who have been pushing for approval of the plan for years, welcomed the announcement.

"This report gives Congress what it needs to authorize funding for the



project and finally advance a much-needed, long-term solution," said U.S. Sen. Debbie Stabenow, D-Mich. U.S. Sen. Gary Peters, also D-Mich., called it "an important step forward" and said that "every step possible" must be taken to prevent Asian carp from reaching Lake Michigan.

U.S. Rep. Bill Huizenga, R-Zeeland, meanwhile, called on Congress to "act quickly to protect the Great Lakes ecosystem," saying he has "been stressing the importance of this project from the beginning."

"Time is of the essence," he said, "and the Great Lakes cannot wait."

U.S. Rep. Paul Mitchell, R-Dryden, echoed those sentiments, saying, "If invasive species get into the Great Lakes, it will have a catastrophic effect on our commerce and way of life."

At the Alliance for the Great Lakes in Chicago, Vice President for Policy Molly Flanagan said, "Asian carp pose a clear and present danger to the Great Lakes. ... After five years of study, the report provides Congress the information it needs to act."

©2019 Detroit Free Press Distributed by Tribune Content Agency, LLC.

Citation: New plan would fight invasive Asian carp with air bubbles, electric shocks, noise (2019, May 27) retrieved 2 May 2024 from <a href="https://phys.org/news/2019-05-invasive-asian-carp-air-electric.html">https://phys.org/news/2019-05-invasive-asian-carp-air-electric.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.