



November 29, 2017

Colonel Aaron Reisinger
Commander, Chicago District
U.S. Army Corps of Engineers
231 S. LaSalle St., Suite 1500
Chicago, IL 60604

Dear Colonel Reisinger:

Thank you for the opportunity to comment on the draft GLMRIS-Brandon Road Report, Tentatively Selected Plan. The Great Lakes Fishery Commission, appreciates the careful work conducted by the Corps concerning this proposed project and for the Corps' continued efforts to help prevent the movement of Asian carps into the Great Lakes. Tourism generates billions of dollars in economic benefits to the region and the international Great Lakes Fishery is worth at least \$7 billion to the people of Canada and the United States. Action at the Brandon Road location will help protect this valuable resource.

The people of the Great Lakes basin know the scourge of invasive species all too well. From top predators like sea lampreys to planktivores like zebra mussels, invasive species have changed the ecosystem irreparably and cost the region billions of dollars in economic harm. Economics alone, of course, cannot quantify ecosystem damage, lost opportunities for recreation with family, aesthetic beauty, intrinsic value, and all of the other things that people and wildlife appreciate from a healthy, vibrant environment. Asian carps are destructive at both economic and non-economic levels and must be kept out of the Great Lakes.

According to a peer-reviewed, bi-national risk assessment (of which the Great Lakes Fishery Commission was co-author), Asian carps, if allowed into the Great Lakes, would spread throughout the basin within 20 years. Lakes Michigan, Huron, and Erie would likely experience a rapid colonization, with spread into Lakes Superior and Ontario taking longer. The Great Lakes would provide Asian carps with ample food and spawning opportunities, as well as with suitable thermal habitat. The most attractive areas would be Lakes Erie and St. Clair and high productivity nearshore areas and embayments in all other areas of the basin. As few as 10 spawning adult Asian carp of each sex could be enough to establish a population. Asian carps would be expected to change the planktonic communities of the Great Lakes, resulting in a reduction of plankton biomass (thus harming all species that depend on plankton, either directly or indirectly). The Asian carps would also reduce the recruitment of prized fish species and reduce the abundances of top predators

The risk assessments also considered the socio-economic impact of Asian carps, should they enter the Great Lakes. The assessments found that Asian carps would cause "moderate to high" damage to all aspects of fishing in the Great Lakes, including sport, commercial, and subsistence fishing. The carps would also harm recreational boating, wildlife viewing, and beaches.

GREAT LAKES FISHERY COMMISSION

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The risk assessment stressed that the impact of bigheaded carps on the Great Lakes is directly related to establishment. Since the species are not established, the assessment concluded, preventing the establishment of Asian carp in the Great Lakes is the best means of avoiding harmful ecological and economic effects. The authors of the report emphasized that the Chicago Area Waterway System (CAWS) is the riskiest route for Asian carps and that action is still possible to prevent introduction and establishment via that pathway.

The Great Lakes community has the responsibility to prevent the introduction of new, harmful species, especially species like Asian carps that have laid waste to the Mississippi, Ohio, and Illinois Rivers and changed those ecosystems forever. We know harmful Asian carps are within striking distance of the Great Lakes. Therefore, all appropriate action must be taken to stop that advancement. We cannot stress strongly enough the urgency to take immediate action. Asian carps are on the move and, if allowed to spread, would cause irreversible, detrimental harm to the region's ecosystem, economy, and people who depend on the lakes for food, recreation, and subsistence. The negative impact of Asian carps would be felt far and wide. The Corps and others have a solemn obligation to take all appropriate steps to prevent the introduction and spread.

To date, the Great Lakes Fishery Commission has joined many other partners, most notably the State of Illinois, to physically manage Asian carp populations. During 2009, the partners undertook needed maintenance at the electric dispersal barrier to rotenone more than 7 miles of the Chicago Sanitary and Ship Canal, resulting in the collection of a bighead carp below the barrier system. Moreover, in its role as a co-chair of the Asian Carp Regional Coordinating Committee's (ACRCC) Monitoring and Response Work Group (MRWG), the Commission regularly works with state and federal partners, including the State of Illinois and the Corps, to reduce the threat of invasion by bigheaded carps into the Great Lakes. Since 2010, MRWG actions have removed more than 5 million pounds of Asian carp below the electric barriers, reducing the probability of these invaders pushing past the barrier system. MRWG also aggressively samples the CAWS above the barriers to ensure that any Asian carps do not enter the Great Lakes if they happen to move above the barriers. These and other MRWG efforts directly enhance and support the operational effectiveness of the electric barrier system.

The Commission strongly believes this action has made a difference. Nevertheless, the Commission will be the first to acknowledge that such action, alone, is not sufficient to prevent the movement of Asian carps into the Great Lakes via the CAWS. This past summer, for example, a live silver carp was captured well above the electrical barrier. This carp originated in the Illinois or Mississippi River, which demonstrates it somehow passed the barrier system. Nobody should be lured into a false sense of security based on the pace of Asian carp migration to date. Asian carp will migrate, perhaps at an accelerated speed, perhaps not. Regardless, the Corps needs to be ready.

The Great Lakes Fishery Commission is a partner, along with the Corps, in the ACRCC. As ACRCC work to date, and the GLMRIS-Brandon Road Report, Tentatively Selected Plan (TSP) emphasize, the Corps clearly understands the aforementioned threat Asian carps pose to the Great Lakes and that actions taken by the Corps are critical to keeping the species out of the lakes. Existing MRWG actions, and Corps operation of the electric dispersal barrier system, certainly reduce the risk of Asian carp invasion, but they do not eliminate it. As such, additional work at the Brandon Road Lock and Dam is essential to continue to reduce the risk of Asian carp invasion.

The Commission has reviewed the draft TSP and offers the following comments:

- The Commission believes the location selected (Brandon Road) is appropriate for protecting the Great Lakes from upstream migration of Asian carps and other invasive species. The use of an existing lock

and dam, which is downstream of major confluences, in addition to the upstream existence of the Lockport Lock and Dam and the electrical dispersal barrier, means that the Brandon Road options will provide a strong, redundant invasive species control structure that can thwart the carps' ability to challenge structures closer to Lake Michigan.

- The TSP proposes the use of a suitable mix of structural and non-structural control methods that include known, effective mechanisms to deter invasive species as well as new technologies that will heighten our capabilities to stop the movement of organisms.
 - As noted above, the use of monitoring, overfishing, and management (non-structural mechanisms) have already resulted in the removal of millions of pounds of Asian carps from the system, thus limiting the ability of the fish to challenge the dispersal barrier. This non-structural work, carried out jointly by a number of agencies, has significantly reduced the risk of Asian carp migration. Ongoing monitoring, coupled with contingency actions, ensure the management agencies know where the fish are and are ready to take quick action if necessary. The Great Lakes Restoration Initiative has been an important authorization and source of funding for this work, as has the Corps' contributions.
 - On the structural side, technologies, such as complex noise, electrical fields, a flushing lock, water jets, and a carefully engineered channel, take full advantage of controls that meld tested and new technologies into a fully integrated lock structure. The Commission appreciates the considerable thought that went into including redundant invasive species measures at the Brandon Road location. Moreover, the Brandon Road plan anticipates future opportunities to introduce new technologies into the structure through the careful and creative use of the engineered channel.
- The TSP takes into account multiple objectives and interests and, therefore, is a reasonable, effective approach. The proposal is sensitive to the needs of the transportation industry in particular. For example, the selection of the Brandon Road site—an existing lock and dam structure—means that waterway users already have experience with navigational behaviors that must occur on the waterway. Moreover, the TSP proposes shifting to the use of non-structural measures when ships are in the lock system. The transportation industry must be a true partner in the prevention of introduction of Asian carps to the Great Lakes, and the Brandon Road proposal minimizes the disruption of vessel traffic. The plan also takes into account the objectives of those who wish to prevent invasive species movement into the Great Lakes by incorporating key structural and non-structural methods into an existing lock and dam structure. The Commission observes that the report also addresses well the flood risk and water quality issues. The only concern the Commission has, of course, is the fact that the Brandon Road structure would not do much to prevent the downstream migration of invasive species from the Great Lakes to the Mississippi River watershed.
- The Commission believes that the projected cost of this structure is reasonable given the high economic value of tourism and the fishery and the immeasurable value of a healthy ecosystem. On the other hand, the Commission believes the timetable proposed for full implementation of the TSP is not appropriate to the immediacy of threat of invasion. Time is of the essence, as Asian carps and other species continue to challenge the electrical barrier system. We must act as quickly as possible. The projected completion date of 2025 is simply too far into the future and is insensitive to the fact that Asian carps will advance with every opportunity. We recommend that a date of 2022 be set for completion of the work. The Commission asks the Corps and Congress to take any and all steps necessary to expedite the planning, authorization, design, and construction phases so that this project can be completed prior to the establishment of Asian carps near the Brandon Road site.

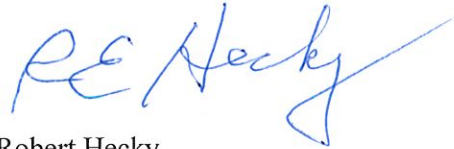
- The Commission believes that although Brandon Road is an essential project, it remains but one component of the larger strategy for the Chicago Area Waterway System. The end objective, the Commission believes, should be physical separation of the Great Lakes and Mississippi River watersheds. Separation maximizes the reduction of risk for invasive species transfers and provides both upstream and downstream protection; protection the Brandon Road project only partially provides.
- Like the electrical dispersal barrier, the Commission believes the Brandon Road project should be funded fully by the federal government, particularly given the national and international implications of invasive species movement. The Commission urges the Corps to support full federal funding and pledges to work with the Congressional delegation to seek authorization and appropriation for the project.

Thank you, again, for the thorough work put forward by the Army Corps in developing the Brandon Road TSP. We appreciate the vigor with which the Corps has participated in joint efforts to stop the spread of these destructive fish and we value the outstanding engineering expertise that has gone into the report. Because of our deep concerns about the timeline for project completion, we urge a fast-tracked acceptance of the TSP, an immediate authorization from Congress to move forward with the project at full federal expense, and the appropriation of funds to complete the work. The Commission appreciates the consideration of its comments.

Sincerely,



David Ullrich
Chair



Robert Hecky
Vice-Chair