



The American Waterways Operators

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March 31, 2014

Mr. Dave Wethington
GLMRIS Project Manager
U.S. Army Corps of Engineers, Chicago District
231 South LaSalle Street, Suite 1500
Chicago, IL 60604

Re: Great Lakes and Mississippi River
Interbasin Study (GLMRIS) Report

Dear Mr. Wethington:

On behalf of the American Waterways Operators, the national trade association for the tugboat, towboat and barge industry, thank you for the opportunity to comment on the U.S. Army Corps of Engineers' Great Lakes and Mississippi River Interbasin Study (GLMRIS) Report.

The U.S. tugboat, towboat and barge industry is a vital segment of America's transportation system. The industry safely and efficiently moves over 800 million tons of cargo each year, including more than 60 percent of U.S. export grain, energy sources such as coal and petroleum, and other bulk commodities that are the building blocks of the U.S. economy. The fleet consists of more than 4,000 tugboats and towboats, and over 27,000 barges of all types. These vessels transit 25,000 miles of inland and intracoastal waterways, the Great Lakes, and the Atlantic, Pacific and Gulf coasts. The tugboat, towboat and barge industry provides the nation with a secure, safe, low-cost, environmentally friendly means of transportation for America's domestic commerce.

Over 20 AWO members utilize and rely upon the Chicago Area Waterway System to transport petroleum products for fuel, chemicals for manufacturing, iron and steel for construction, and other cargoes that keep the region's economic engines running, as well as U.S. export grain bound for markets around the world. Moreover, all 350 member companies of AWO and their customers depend on the federal government's commitment to maintaining Congressionally authorized waterways to support the long-term transportation needs of the nation.

AWO and its members have a long history of working with our federal and state partners to ensure that aquatic nuisance species (ANS), including Asian carp, are not transferred from one basin to the other. For the last decade, we have actively participated in several joint efforts between government and industry to control ANS populations and minimize the risk of their interbasin transfer, including the following:

- AWO members were involved in the development of a 2005 Memorandum of Understanding between the Corps, the Coast Guard, first responders, and industry to ensure that life was safeguarded as vessels passed over the electric fish barriers in the Chicago Sanitary and Ship Canal (CSSC).
- AWO members provided equipment to facilitate a study that evaluated whether Asian carp eggs or young-of-year could be transported across the CSSC electric barriers in water contained in barge voids.
- The industry worked with the Coast Guard to develop guidelines for vessel operators to manage the discharge of ballast water as vessels cross from one side of the CSSC electric barriers to the other.
- AWO staff and members assisted with the creation and distribution of a brochure educating commercial and recreational boaters about Asian carp and providing them with recommendations for the removal of Asian carp carcasses from vessels before transiting the CSSC electric barriers to ensure environmental DNA (eDNA) tests would result in fewer false positives.
- AWO staff and members are currently participating in work to study and possibly mitigate the potential transfer of Asian carp across the CSSC electric barriers if they become trapped between barge rakes or if the barriers' electrical charge is adversely impacted by passing tows.

The industry has paid an economic price for its cooperation with the Corps and the Coast Guard to ensure the safe and effective operation of the CSSC electric barriers. AWO members paid for assist vessels to ensure safe transit through the CSSC and have seen a financial impact to their businesses as their vessels' movements have been disrupted by the Corps' ongoing construction, testing, and operation and maintenance of the CSSC electric barriers. However, the industry has borne these costs in good faith because the industry believes it is possible to protect the Great Lakes and the Mississippi River systems while preserving the flow of waterborne commerce. It is our intention to continue to work closely and collaboratively with the Corps and the Coast Guard in the interests of the economy and the environment.

The Corps has done an outstanding job of presenting a vast amount of substantive information that provides the foundation for a well-informed, science-based discussion among stakeholders about possible paths forward to prevent the interbasin transfer of ANS. The GLMRIS Report, to the Corps' credit, is extremely comprehensive and deserves careful consideration which will allow stakeholders an ability to provide more specific and thoughtful feedback before the discussion begins. AWO respectfully requests that the Corps provide a minimum of 60 more days to fully digest and respond to this extensive report.

Today's Reality

AWO strongly believes that Alternative 1 presented in the GLMRIS Report, "No New Federal Action – Sustained Activities," should not be perceived as the "do-nothing" alternative. In 2013, the federal government, under the direction and coordination of the Asian Carp Regional Coordinating Committee (ACRCC), spent over \$51 million to ensure that Asian carp did not enter the Great Lakes. Spending from fiscal years 2010 to 2013 totaled over \$206 million.

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The expenditure of these funds has been based on a well-conceived plan, the Asian Carp Control Strategy Framework authored and annually updated by the ACRCC, which includes a comprehensive set of actions to prevent the introduction and establishment of Asian carp in the Great Lakes via all viable pathways. These actions include monitoring, commercial harvesting, electric barrier efficacy evaluations, closing other pathways besides the CAWS between the two basins, testing of new technologies including a carbon dioxide barrier, assessing available food sources, development of traps, studies using acoustic video to determine the behavior of the fish, review of feeding habits of the Asian carp, eDNA analysis and refinement, and continued investigations of towboats and barges as potential vectors, in which AWO members have and will continue to actively participate.

Available evidence demonstrates that all of that work has effectively prevented the entry of Asian carp into Lake Michigan. The CSSC electric barriers are working. Analysis by the Corps, both in the field and in their research facility, confirms that the barriers are functioning well and the redundancy provides solid backup protection. A wide range of federal and state agencies' work also indicates that the barrier is functioning per its design. Of the several thousand attempts by tagged common carp, none have crossed the barriers. The electricity has successfully turned common carp back again and again.

One fact that is often lost or goes unstated is that the breeding population of Asian carp has not advanced toward Lake Michigan in seven years. Does the area 50 miles from the electric barriers lack a food source or a habitat the fish need? Is there some other reason the population is not moving toward Lake Michigan? Study needs to continue on these questions to further understand how we can contain the species. For now, it appears that the area is a natural biological barrier to the Asian carp.

Another question that is yet unanswered but is critical to understanding how to control Asian carp is why Asian carp have not developed a breeding population in Lake Erie. At least three Asian carp (Bighead) have been fished out of Lake Erie since 1995. By all definitions, this is a fish that is very difficult to catch with a hook, so one would assume there are several more Asian carp in Lake Erie. If the fish has been or still is in the lake, why did it not populate the lake? Do the Great Lakes not provide an abundant food source or a needed habitat? These questions deserve answers based on sound science. Recently, Asian carp eDNA has been identified in Lake Erie, and grass carp have been found to be breeding in the lake's tributaries.

It is clear that we need time to continue the development of better science and control strategies. It seems obvious that this should be the first goal of all stakeholders that want to ensure that Asian carp do not survive or thrive in the Great Lakes.

Options and Next Steps

AWO appreciates that the Corps has worked to simplify the discussion by tying several ANS control options together into eight neat alternatives. However, AWO and its members believe that no single alternative can effectively prevent the interbasin transfer of ANS. AWO suggests that the Corps, working in coordination with the other federal and state agencies through the

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ACRCC, look to implement a comprehensive set of options versus a single alternative, such as the diverse, inclusive options already underway in the Asian Carp Control Strategy Framework. The options should include actions that would minimize the risk of transfer of ANS of concern from one basin to another and minimize the risk of introduction of new ANS into either basin (such as the introduction of Asian carp to the Mississippi River system by the U.S. Fish and Wildlife Service via catfish ponds). AWO believes that the identification and implementation of many available ANS control options will be critical in developing a “gauntlet” that ANS must run to move from one basin to another. This gauntlet approach must become a well-conceived and scientifically-based risk reduction system for both basins and all ANS, including Asian carp.

As stakeholders consider what options to implement, it is critical that a rational understanding of the constrained resources of current federal, state, and local budgets be considered. Limited funding streams require all actions to be cost effective. Certainly, much of the work planned or already underway by the ACRCC meets this requirement. In the GLMRIS Report and during the public meetings, the Corps stated that the estimated price tag of every alternative is based on perfect conditions, including that implementation of the chosen alternative would start immediately, that Congress would be able to fully fund the chosen alternative each year to completion, that other state and federal agencies would be able to respond quickly to needed improvements to mitigate water quality, flood control, and environmental impacts, and that a local sponsor would step forward. Unfortunately, history should inform stakeholders and Congress alike that the costs forecast in the GLMRIS report are a vast underestimate of the true costs. A recent review of the study by DePaul University’s Dr. Joseph J. Schwieterman, Director of the Chaddick Institute for Metropolitan Development, found that, accounting for all relevant factors, the costs of the structural alternatives is likely to range from \$13 to \$32 billion, more than twice the costs estimated in the GLMRIS Report.

The Corps’ current annual civil works budget of approximately \$5.5 billion is not sufficient to keep pace with the much-needed maintenance of our nation’s aging infrastructure or many of the agency’s other missions as directed by Congress. It seems highly unlikely that a multi-billion dollar new-start project could find sufficient support or funding nationwide.

To ensure the cost-effectiveness of this work, options that have been demonstrated to be effective against the interbasin transfer of multiple ANS of concern, including Asian carp, is important. GLMRIS was never meant to be a one-species, one-direction study, and the focus of stakeholders and Congress should not be limited to a single ANS either.

The options must also be timely. Is a 25-year time horizon reasonable or rational? If protection of the two basins is our goal – and it is AWO’s goal – actions must be immediate and ongoing. The length of estimated time until many of the structural alternatives can be completed, assuming all goes according to plan, underscores the importance of not focusing on a single alternative; instead, we need a gauntlet approach that can (and probably will) be adapted as other ANS become a more urgent threat to one or the other of the basins. The initial demonstration electric barrier was installed in the CSSC to keep the Round Goby from moving from the Great Lakes to the Mississippi River system. This is a great example of a technology that has transferrable application.

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One of the options that cannot be endorsed strongly enough is education. Without ensuring that the public is careful about placement of bait fish, for example, the transfer of Asian carp or other ANS between the basins is inevitable. A perfect example of the high risk of human transfer of ANS from one waterway to another was seen in the Chicago lagoons. Although none of the lagoons are connected to the CAWS, Asian carp were recently found in 15 of the 17 lagoons. It appears that the Illinois Department of Natural Resources (DNR) accidentally introduced Asian carp as they stocked the lagoons with catfish. The young-of-year are very difficult to differentiate. If a responsible and knowledgeable agency like the Illinois DNR can make such a mistake, we need to focus first on education for ordinary citizens. Evidence strongly suggests that accidental introduction of Asian carp has already occurred in Lake Michigan. Forensics on the single Asian carp found north of the CSSC electric barriers in Lake Calumet strongly indicated that it was placed there at a very early age, probably in a bait bucket. And, unfortunately, there is always the threat of bioterrorism.

AWO members believe that the work that the ACRCC is presently undertaking is representative of the types of options that will be cost effective, timely, transferrable, and widely accepted by stakeholders. AWO endorses further research, and implementation once research is complete, on a mobile electric barrier, sound and carbon dioxide barriers, fish serialization, fish pellets, increased controlled commercial fishing, developing markets for fish utilization (human and animal food, organic fertilizer, etc.), incentives to increase consumption in government facilities, tax incentives to increase exports, and federal agency promotion of Asian carp consumption to U.S. and international customers.

To develop this plan, AWO believes the primary coordinator must continue to be the White House Council on Environmental Quality's Asian Carp Director. The current director, John Goss, is uniquely qualified because of his environmental and economic understanding of this complicated situation. As a member of the executive branch, he is best positioned to take decisional action. If this coordination is turned over to another agency and there is no longer a central figure, the ability to efficiently develop a comprehensive risk reduction system is likely to become an unwieldy and ineffective multi-agency, multi-philosophy waste of taxpayer money. AWO strongly suggests that Congress legislate that all actions are to be coordinated through the Asian Carp Director, providing a one-stop shop for Congress to direct federal action, appropriate necessary funds, and conduct its oversight responsibilities.

AWO welcomes the development of a regional consensus under the direction of the Asian Carp Director. At this point, there is no other group or person that is respected by all stakeholders and is not openly biased towards one alternative or another.

Last but certainly not least, it is unfortunate that this study, due to time constraints placed on the Corps by Congress, did not allow for an Environmental Impact Statement (EIS) to be conducted as required under the National Environmental Protection Act. This process is necessary and critical if all stakeholders' views are to be properly considered by the Corps. Without an EIS, the GLMRIS Report is simply the beginning of discussions.

GLMRIS Lock

The conceptual “GLMRIS Lock,” which is discussed at various locations under alternatives 3, 4, 7 and 8, is a control option the industry believes needs further consideration and study. Items that need to be studied and fully understood include, but are not limited to: the impact to commercial navigation before, during and after GLMRIS Lock construction; whether the ANS control technology installed at existing lock locations will make the locks more or less reliable and whether the technology will impact the life expectancy of the locks; a more accurate estimate of cost and timeline; and how the construction, operation, and maintenance of the GLMRIS Lock would be funded. AWO and its members stand ready to work with the Corps to explore this promising ANS control option.

Transportation Impacts

While the impact of separating the individual segments of the waterborne transportation network is understood, less understood is the impact that separation would have on the overall freight network. Illinois is the freight hub of North America, located at the center of America’s waterways, highways, and railroads. The economic vitality of our country depends on a diverse freight network to move goods. A series of freight reports by the Illinois Department of Transportation (IDOT) in 2013 estimates that the amount of freight passing through Illinois will increase from 1.26 billion tons of goods in 2010 to 1.7 billion tons of goods in 2040.

Over the last several years, there has been a movement to look at America’s freight system as an interdependent whole, rather than as individual and discrete components. A change of capacity in one mode impacts other modes, and not always positively. As freight shifts modes, the likelihood of increased congestion rises, which has a negative economic impact.

The Transportation for Illinois Coalition (TFIC) estimates that the immediate funding needs to maintain Illinois’ surface transportation networks is over \$75 billion. This doesn’t even consider the funds that would be required to expand or create new roads or railroads. While our waterways are in need of at least \$13 billion to improve them and reduce delays, according to the 2013 Report Card for America’s Infrastructure, additional investment in our waterways could expand capacity. Conversely, closing any portion of our waterways would have the opposite effect, resulting in increased congestion on most modes of transportation and the loss of well-paying jobs along the waterways.

The projection of an increase in commodities through the CAWS of 45 percent by 2020 is a strong indicator of the potential this waterway has to the future prosperity of the region and the nation. Growth of roughly 6.5 percent per year is considered exceptional in business. Certainly, other businesses that are growing, such as Canadian and Bakken crude, are looking at transporting more and more product through the CAWS. Agricultural groups in Michigan are also urging the Coast Guard to implement a non-load line route from Muskegon, MI, to Chicago for dry cargoes, similar to the routes already in place from Chicago to Burns Harbor and Milwaukee. The farmers appear to believe that with the opening of the new Panama Canal, corn and soybean products will increase in value if they can be shipped through the CAWS to export

markets in New Orleans. Ensuring the reliability of the CAWS for waterway transportation is simply good public policy.

Hydrological Separation

AWO must state, in the strongest possible terms, that the GLMRIS Report alternatives that include hydrological separation – that is, alternatives 5, 6, 7 and 8 – are not viable options. First and perhaps foremost, this option is ineffective. Consider the Asian carp in the lagoons in Chicago or Lake Erie, where hydrological separation already exists. Consider Zebra Mussels that have been introduced in several waterways that are not connected to any other waterway. It is irrational to consider an alternative that is not only ineffective at preventing the risk of interbasin ANS transfer, but also does not meet the goals of cost-effectiveness and timeliness.

AWO strongly agrees with the summary in Appendix A of what would happen if physical separation was implemented. *“In regards to permanent lock closures, the majority of the responders indicated that they would either: (1) chose a different method of moving their respective commodities (e.g. truck or rail), (2) relocate their business, or (3) go out of business. When asked about the transloading options all docks and shippers (representing over 90% of the docks in the CAWS and 93% of all tonnage) responded that they would not undertake this option.”*

The towing industry would be happy to provide further details of the negative environmental and societal impacts of moving commodities from the waterways to roads or railroads. Pursuing an alternative involving physical separation would increase air pollution, required funding for highway maintenance, traffic fatalities and traffic congestion. This is just not good public policy.

Completed Studies

Given the truncated timeline and the Corps’ desire to utilize information already available, AWO commends the Corps for its wise use of completed studies and expert panels. However, one report that is not a study, but an advocacy piece, should not be considered in the Corps’ analysis. The Great Lakes Commission’s publication, *Restoring the Natural Divide*, was founded on the premise that hydrological separation is the only and best solution to control ANS. The publication features work by consultants that were hired to find ways to make it work, not to examine whether or not it is the most effective solution. The lack of rigorous scientific analysis in this report is patently obvious. The Corps should not utilize or consider this or any other study that is based in advocacy.

Conclusion

In closing, AWO commends the Corps’ GLMRIS Team for producing a robust report and helping to facilitate public discussion of available options to prevent the transfer of ANS between the Great Lakes and the Mississippi River basins. Given the density and complexity of the report, AWO requests at least another 60 days to review this report and provide a more detailed response.

AWO fully supports: 1) creating a team of stakeholders to develop a consensus recommendation under the leadership of the Asian Carp Director; 2) the continuation of work under the ACRCC’s

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Asian Carp Control Strategy Framework; 3) developing a robust education program for the citizens of the two basins in all Great Lakes states, not just Illinois; and 4) increasing the ANS controls implemented under the coordination of the ACRCC that is cost-effective, timely, and science-based, especially options that are effective against other ANS of concern, not just Asian carp.

Thank you again for the opportunity to comment on the GLMRIS Report. We would be happy to provide further information as needed.

Sincerely,

A handwritten signature in cursive script that reads "Lynn M. Muench".

Lynn M. Muench