

GLMRIS REPORT ANSWERS  
GREAT LAKES SENATORS letter dated March 14, 2014

Q1: How are you planning to use the \$3,000,000 Congress appropriated for GLMRIS in fiscal year 2014 (FY2014)? The GLMRIS report explains that you will work to "build consensus toward a collaborative path forward for GLMRIS." What does that statement mean? What exactly will you be doing to further define a collaborative path forward?

A1: During Fiscal Year (FY) 2014, the U.S. Army Corps of Engineers utilized annual appropriations to successfully prepare and submit the GLMRIS Report to Congress. The Corps conducted eleven public and eight state agency meetings, as well as briefings for congressional staff, Canadian stakeholders, regional organizations and local interest groups. The Corps continues to utilize FY2014 appropriations for public engagement and to provide technical input in response to stakeholder requests. A report summarizing rollout activities was released in May 2014. At the end of FY2014, it is estimated that approximately \$1.5 million of FY2014 appropriations will remain available to support further study efforts, as appropriate.

The Corps is currently evaluating additional study efforts that may be pursued with the remaining FY2014 funding. In response to stakeholder input, activities may involve further development of the aquatic nuisance species (ANS) control technologies originally identified in the GLMRIS Report, including the GLMRIS Lock or engineered channel concepts, as well as further investigation into the feasibility of application of these controls at one or more sites in the Chicago Area Waterway System. In consideration of stakeholder appeals to enhance risk reduction for Asian carp species, near-term efforts would focus on the Brandon Road Lock and Dam site, which acts as a one-way control point for species potentially moving upstream from the Mississippi River basin toward the Great Lakes.

Q2: The GLMRIS report identifies a number of nonstructural control technologies that could be implemented in the short-term. You note in the report that these activities are not traditionally performed by the Army Corps of Engineers (the Corps). For that reason, are you finished with the evaluation of this alternative? Will you be recommending to the Asian Carp Regional Coordination Council (ARCC) that these measures be implemented immediately?

A2: As ANS control is a shared responsibility among federal, state, regional and non-governmental organizations, continued engagement toward building a collaborative path forward is a critical element of identifying a consensus-based solution to existing ANS control concerns and issues. The near-term implementation of nonstructural measures is most appropriately assumed by those entities that have appropriate alignment of authorities and resources. While the Corps has identified possible implementation of nonstructural measures as a best management practice in the GLMRIS Report, the document does not rank the plans or make any specific recommendations. Instead,

agency groups like the Asian Carp Regional Coordinating Committee (ACRCC) have been provided with a suite of alternatives for further evaluation. At this time, the Corps does not anticipate further development of a nonstructural control technology alternative, but stands ready to provide additional technical support, as necessary or appropriate.

Q3: To move forward with a long-term solution, a phased implementation may be needed. What interim measures could the Corps move forward with that would allow for the most flexibility with a long term solution?

A3: While a phased implementation of a large-scale infrastructure project may be appropriate, the GLMRIS Report did not determine which alternative, interim measure, or combination thereof, is preferable. Pursuant to the study authority, the Corps identified a range of potential solutions. In order for the Corps to provide recommendations with respect to interim steps or particular locations, additional study including a tradeoff analysis, economic evaluation and National Environmental Policy Act (NEPA) compliance analyses would be necessary.

Q4: The Brandon Road Lock has been identified as one location at which work could be undertaken as an intermediate solution (e.g . including a GLMRIS lock and an electrical barrier). Does the Corps need further direction from Congress to study interim ANS control technologies at Brandon Road?

A4: The GLMRIS Report identifies the Brandon Road Lock and Dam as a downstream control point for the one-way control of Mississippi River ANS moving into the Chicago Area Waterway System in several alternatives (Alts #4, #7 and #8). In consideration of stakeholder input, the Corps is currently evaluating activities that could further demonstrate the feasibility of implementing additional ANS controls at the Brandon Road site. While the Corps may not need further authority from Congress to study interim ANS control strategies, the Corps would need implementation authority, as well as commensurate appropriations, to construct an intermediate project at Brandon Road Lock and Dam.

Q5: Legislation passed in July 2012, "Moving Ahead for Progress in the 21<sup>st</sup> Century Act," authorizes the Corps to proceed directly to preconstruction engineering and design if a project is 'justified.' How would the Corps determine if a project is justified? Is it correct to assume that this process would be less involved than when making a recommendation in a "Chiefs Report"?

A5: Under the MAP-21 Act (Public Law 112-141), the Secretary of the Army is authorized to proceed to preconstruction engineering and design if a project is determined to be justified. Typically, the Corps employs a structured process to identify plans for recommendation for implementation. Requirements include an evaluation of

alternatives and selection of a recommended plan, as well as compliance with applicable environmental statutes including NEPA, an independent external peer review, planning model certification, as well as the identification of a viable non-federal sponsor. While these elements are traditionally included as part of a Corps recommendation, congressional authorization may obviate any one of these requirements. Absent specific congressional authorization, the Corps would apply existing policies and procedures such as using a combination of National Ecosystem Restoration and National Economic Development outputs, toward the justification and selection of a recommended alternative.

Q6: To study and implement an interim demonstration of control technologies at Brandon Road (including a GLMRIS lock, an electrical barrier in the channel, and any additional necessary ANS control technologies), can the Corps provide a cost estimate to perform this work (and a breakdown between direct and mitigation costs)? Could you provide a rough time estimate for completing the study, design and construction of this project? Does the Corps have current authority to undertake this effort? What trigger or direction would the Corps require to further study such an interim demonstration project?

A6: The Corps is currently identifying activities that would be required to evaluate the feasibility of implementing ANS controls at Brandon Road as a demonstration project. Through this scoping effort, the Corps will provide a cost estimate to study and implement an interim demonstration of control technologies at Brandon Road. Conceptual-level cost estimates and timelines for construction for the major elements of the GLMRIS alternatives can be found in the Cost Engineering Appendix (K) in the GLMRIS Report. Further study of a site-specific demonstration project, such as that at Brandon Road, will further refine these estimates.

As described in Appendix (A) of the GLMRIS Report, the Corps estimates a 15-month timeline and an approximate cost of \$1.1 million to validate the GLMRIS Lock concept with computational and physical models. This validated concept of the flushing-lock system could be further applied to site-specific design conditions, like those at Brandon Road. It is likely that a similar magnitude of time and cost would be incurred with the further evaluation of each possible control technology, as well as the engineered channel concept.

Implementation of any demonstration project would require Congressional action to obtain construction authority and commensurate appropriations.

Q7: Does the Corps need a non-federal partner if the project is funded at full federal funding?

A7: Additional study efforts could be carried out at full federal expense and would not require a non-federal partner. However, the process to identify a recommended water

resources project would utilize traditional Corps principles, guidelines, and policies to guide the justification and recommendation of a specific project alternative. In response to existing cost-sharing statutes, the Corps would seek a viable non-federal sponsor to support the policy recommendation for construction of a specific alternative. Alternately, Congress could authorize the construction and operation of a project at 100% federal cost, thus eliminating the requirement for a non-federal sponsor.

Q8: Will the Corps undertake an independent peer review of the GLMRIS alternatives?

A8: The Corps employed three levels of review for the GLMRIS Report; these included study team review by ten District offices and two divisional headquarters; Agency Technical Review by an independent, technically-diverse team of engineers, scientists, biologists, economist and experts in risk assessment from throughout the Corps of Engineers organization; as well as Planning and Policy review by the Corps Headquarters team in Washington, D.C. Additional, independent review of the alternatives presented in the GLMRIS Report will not be pursued pending further direction.

Q9: What triggers the Corps to further study potential long term control alternatives?

A9: In response to stakeholder input, the Corps is currently evaluating activities that could further demonstrate the feasibility of implementing additional ANS controls at the Brandon Road site. These efforts are limited by the receipt of annual appropriations to continue study efforts. ANS controls developed for Brandon Road could serve as a demonstration project, which would assist with the evaluation of potential long-term solutions.

Q10: A typical Corps Feasibility Study includes a detailed evaluation of alternatives, along with cost and benefit estimates, and a recommended alternative. We understand that for navigation and flood control projects, benefit-cost ratios for each of the alternatives are calculated. For environmental projects, we understand the Corps selects the preferred alternative as the most cost effective means of producing environmental benefits. If the Corps moves forward with making a recommendation, what metrics would the Corps use to select a preferred alternative?

A10: Under the MAP-21 Act (Public Law 112-141), the Secretary of the Army is authorized to proceed to preconstruction engineering and design if a project is determined to be justified. Typically, the Corps employs a structured process to identify plans for recommendation for implementation. Typical milestones include compliance with applicable environmental statutes including NEPA, an independent external peer review, planning model certification, as well as the identification of a viable non-federal sponsor. While these elements are traditionally included as part of a Corps recommendation, congressional authorization may obviate any one of these

requirements. Absent specific congressional authorization, the Corps would apply existing policies and procedures – such as using a combination of National Ecosystem Restoration and National Economic Development outputs – toward the justification and selection of a recommended alternative.

Q11: The fiscal year 2014 omnibus appropriations bill provided authority to the Corps to implement emergency measures to prevent invasive species from, dispersing into the Great Lakes by way of any hydrologic connection to the Mississippi River basin. What decision criteria will be used by the Corps to determine whether there exists an emergency? If the Asian carp continue to move toward the Brandon Road lock, would the Corps consider using the emergency authority provided in the omnibus appropriations bill to implement measures at the Brandon Road lock, such as fixing the lock gates and/or constructing an electric barrier at the mouth of the lock?

A11: In a shared commitment to your expressed interest in protecting the Great Lakes, the Corps currently operates and maintains three electric dispersal barriers on the Chicago and Sanitary Ship Canal. Construction of a fourth barrier is underway with full operation scheduled to begin in FY2017. The Corps is also conducting a study of the efficacy of the electric barriers. The emergency authority identified in your letter, Section 105 of the Consolidated Appropriations Act, 2014, allows the Secretary to approve the implementation of measures to prevent dispersal of ANS between the basins. However, such measures must be implemented during the fiscal year covered by the Act, limiting the Corps ability to construct any significant structural controls. If the Water Resources Reform and Development Act of 2014 becomes law, any amendments to the Section 105 authority would need to be evaluated. Criteria for the implementation of measures under this authority include the availability of appropriate funding, as well as compliance with other applicable federal laws, statutes and regulations such as NEPA.

The ongoing monitoring and evaluation of risk regarding Asian carp populations is a collaborative, multi-agency effort. Prescriptively identified decision criteria do not exist to determine if there exists an “emergency” regarding Asian carp. Multiple federal and state agencies work together with other stakeholders to routinely monitor and provide combined input toward the strategic management of the dynamic and complex Asian carp situation.