

### THE GREAT LAKES AND MISSISSIPPI RIVER INTERBASIN STUDY NEWSLETTER

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#### Inside this issue:

- Meet the new program, project managers
- Brandon Road update
- Eagle Marsh update
- Partner news US Fish and Wildlife Service

If you have questions or comments about the GLMRIS Newsletter or have suggestions for future topics you would like to see addressed, please contact the U.S. Army Corps of Engineers, Chicago District Public Affairs Office at ChicagoDistrict.PAO @usace.army.mil, or call us at 312-846-5330.

Additional information about GLMRIS, including previous issues of the newsletter, press releases and interim products are available online at glmris.anl.gov.

The purpose of GLMRIS is to evaluate a range of options and technologies to prevent aquatic nuisance species transfer via aquatic pathways between the Great Lakes and Mississippi River basins by aquatic pathways.

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### Meet the new GLMRIS program, Brandon Road project managers

2015 brought some key personnel changes to the GLMRIS Program. Jeffrey Heath became the new GLMRIS Program Manager, responsible for oversight of the programmatic aspects of the program. Andy Leichty joined the GLMRIS team as the Project Manager for the GLMRIS Brandon Road Study.

*Jeffrey Heath* began his career with the Corps in 1984 as a civil engineering technician in the Chicago District's Civil Design Section. In 1990, he accepted a position overseas with Army



Installation Management Command (IMCOM) as the Engineer Resource Manager in Grafenwoehr, Germany. He returned to Chicago District in 1996 as a project manager where he was instrumental in the implementation of the Corps finanacial management system, CEFMS.

He accepted a second overseas tour with IMCOM in 1998 as the chief of Engineering Plans and Services Division in Grafenwoehr, Germany. He returned to Chicago District in 2005 as a project manager, and completed an 18 month developmental assignment with the U.S. Environmental Protection Agency, Region 5, Superfund. He accepted a third overseas tour with IMCOM in 2007 as the chief of the Operations and Maintenance Division in Grafenwoehr, Germany. He returned to Chicago District in 2013 as a project manager. In January 2015, he took over as GLMRIS Program Manager. Heath also manages several other projects, including the Chicago Shoreline project.

A native of Chicago, Ill., Heath received his bachelor's degree in civil engineering from Southern Illinois University in Carbondale in 1983.

*Andrew Leichty* began his career with the U.S. Army Corps of Engineers in 2002 as a planner in the Rock Island District. In 2009, he accepted a position as project manager in the Rock Island District working on flood damage reduction, navigation, flood plain management and ecosystem restoration projects. In 2014, he accepted a position as program manager for the Illinois River Basin Restoration (IRBR) Program, and in 2015, he accepted a position as assistant chief of the Rock Island District Project Management Branch. Currently, Leichty serves as the program manager for the IRBR Program, assistant chief of the Project Management Branch, and the project manager for the GLMRIS Brandon Road Study.

In 2014, Leichty received the Corps' Project Manager of the Year award for his work on several projects including multiple projects on the Upper Mississippi River Restoration Program and others in both Iowa and Illinois.



Prior to working with the Corps, Leichty worked in the private sector for an engineering firm in Cedar Rapids, Iowa, and a pre-cast pre-stressed concrete company in Kansas City, Kansas.

Leichty is a certified Project Management Professional and a member of the Project Management Institute.

A native of Southeast, Iowa, Leichty received his bachelor's degree in civil engineering from Iowa State University in 1993.

### *Q&A with the GLMRIS team:*

#### What is your plan as it relates to outreach and engagement?

We have reviewed and updated our outreach strategy and look forward to future opportunities to engage with the public. Some examples include continued Facebook postings and press releases of significant updates, public meetings, stakeholder, and congressional updates as needed. Quarterly we will publish a newsletter summarizing past and known future actions within the GLMRIS program (including Brandon Road) and other items of interest such as the electric barriers and monitoring activities.

#### Where can I find information about GLMRIS?

GLMRIS.anl.gov is the official internet site for GLMRIS. On the website you can find information related to the GLMRIS Report, archived information and documents from previous study efforts and copies of past newsletters. There are also specific sections of the website dedicated to Focus Area 2 - Other Pathways and the Brandon Road study.

# **GLMRIS - Brandon Road**

The GLMRIS Brandon Road study officially began on April 6 with headquarters USACE approval of the study cost and schedule. The study will cost \$8.2 million and take 46 months to complete, with a Chiefs report scheduled to be delivered in January 2019. The study includes five major milestones which are shown below:

Alternatives Milestone (completed)	June 2015
Tentatively Selected Plan Milestone	Jan 2017
Agency Decision Milestone	Nov 2017
Civil Works Review Board Milestone	July 2018
Chief's Report Milestone	Jan 2019

A public comment and scoping period for the GLMRIS Brandon Road effort was completed in January 2015. Comments were compiled and posted to the GLMRIS website in May. The purpose of scoping was to identify topics of interest in order to refine the scope of the study to focus on significant issues and eliminate issues that are considered not significant from further detailed study.

Comments included:

-- Steps must be taken to control the spread of Asian carp and that this effort is a sharedresponsibility.

-- Brandon Road is a good short-term measure but a project at that location should not be thought of as a permanent solution.

-- Alternatives should contain Aquatic Nuisance Species (ANS) controls that are effective at preventing ANS movement through the Chicago Area Waterways while minimizing impacts. Stakeholders are concerned with potential navigation and life-safety impacts of installing a control point at this location.

-- Stakeholders expressed the need to have continued stakeholder involvement in the study and encouraged the continuation of the GLMRIS executive steering committee.

The Alternatives Milestone was achieved in June 2015. The study team developed an array of alternatives and the process to be used for analysis and evaluation of the alternatives. The team is



*Aerial view of Brandon Road Lock and Dam, Joliet, Ill., April 22, 2014. The lock has been operational since 1933.* 

currently working toward the Tentatively Selected Plan Milestone and has gathered data from those federal and state agencies which have conducted research on various proposed control measures such as hydroguns, complex sound and carbon dioxide. The team is compiling the field data for each measure under consideration and working with experts to assess the effectiveness of each control measure. The team will then utilize the effectiveness determinations of individual control measures in the analysis and evaluation of alternatives.

The team continues to work with multiple federal and state agencies regarding research efforts that are being conducted on multiple control technologies. Research and expert assistance provided by the U.S. Fish and Wildlife Service, the U.S. Geological Survey, U.S. Coast Guard, U.S. Environmental Protection Agency, Illinois Department of Natural Resources and other stakeholders has been extremely valuable in the development of the GLMRIS Brandon Road Study and is key to finding solutions to prevent the spread of ANS.

## Focus Area 2 - Eagle Marsh

The intermittent connection between the Great Lakes and Mississippi River basins at Eagle Marsh in Fort Wayne Ind. has been severed. The marsh drains into both the Lake Erie and Mississippi River watersheds, making it a potential crossroads for Asian carp that are in the Wabash River. During flood events the waters in Eagle Marsh spilled from the Wabash River watershed into the Maumee River, which empties into Lake Erie at Toledo, Ohio. This connection during high water at Eagle Marsh could serve as a pathway for Aquatic Invasive Species (AIS) to transfer from one basin to the other. The phase one berm, separating the waters of Eagle Marsh, was completed by the Natural Resource Conservation Service (NCRS) this summer.

Eagle Marsh is an NRCS Wetland Reserve Program (WRP) wetland site near Fort Wayne, Ind. owned jointly by Little Rivers Wetland Project and the Indiana Department of Natural Resources (InDNR). The owners had been actively maintaining a temporary fence constructed in the marsh by InDNR to prevent movement of Asian carp from the Wabash watershed into the Maumee watershed during flooding conditions. Through ongoing efforts at Eagle Marsh, the NRCS has worked with the Corps and other federal, state, and local agencies to design a berm to permanently restrict Asian carp entry into the Great Lakes via the Eagle Marsh. To implement the closure, WRP funding covered costs within the area of the easement, and Great Lakes Restoration Initiative (GLRI) funding was expended to tie the berm in at the ends of the project, off the WRP property.

The summer of 2015 was the wettest on record for Fort Wayne, which delayed work on the 2 mile-long berm through Eagle Marsh. The phase one \$3.5 million berm project included the construction of 9,100 feet of berm, which is 80 feet wide and ranges in height from 6 to 12 feet, and topped with a walking trail. A mesh screen is installed along the length of a notch (200'-300' long), up to the top of the berm at both ends to prevent alteration of the flood crests, which will block AIS at elevations that exceed the 100 year, 1 percent chance flood event. The second phase, scheduled for 2016, will consist of removing the screen and filling in the notch but cannot be completed until all flood risk in the area has been mitigated.



The Eagle Marsh project created an earthen berm across the floodway to prevent mixing of the watersheds at the 100-year flood level. The first phase was completed in fall 2015.



Notched berm with screening to stop Asian Carp transfer. The second phase, scheduled for 2016, will consist of removing the screen and filling the notch. This phase cannot be completed until all flood risk in the area has been mitigated.

# ANS Partner News from the US Fish and Wildlife Service

This past year, the U.S. Fish and Wildlife Service conducted studies to test whether small fish could become trapped in the underwater spaces between barges and inadvertently transported over various distances and across electric barriers. The U.S. Army Corps of Engineers operates a system of electric dispersal barriers in the Chicago Sanitary and Ship Canal, which are designed to prevent the movement of fish, including Asian carp, between the Great Lakes and Mississippi River basins. Research used golden shiners to examine the impact of commercial barge traffic on small fish movement to better understand the potential risk of small fish passing through the electric dispersal barriers in the Chicago Sanitary and Ship Canal.

Preliminary results of this research indicate that small fish can become entrained between barges and subsequently transported measurable distances, through a lock and dam system, and across electric barriers. Since this study exclusively used golden shiners, we do not know if small Asian carp (fish less than six inches in length) would respond the same way.

We have no evidence that Asian carp have ever crossed the electric barriers in this way. To date, the nearest we have documented juvenile Asian carp (two fish captured that were approximately 6.5 inches in length) is 39.5 miles downstream of the electric barriers. However, this study indicates that there is the potential risk that barge traffic could inadvertently facilitate the movement of small fish, including Asian carp, by entraining and transporting them upstream through locks and across the electric barriers.

The Service is working with the U.S. Army Corps of Engineers and other federal and state partners to explore actions we can take to reduce these risks. We will also continue to assist the state of Illinois and the U.S. Army Corps of Engineers in monitoring the Chicago Sanitary and Ship Canal for any presence of Asian carp.

