GLMRIS – Brandon Road

Appendix K - Coordination

August 2017

US Army Corps of Engineers ®
Rock Island & Chicago Districts

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Attachment Number	Coordinator	Purpose	Date	Distribution List	Responses
1	USACE	Press Release: Corps announces plans to evaluate options at Brandon Road site as continuance of Great Lakes and Mississippi River Interbasin Study (GLMRIS), initiates public comment period	18-Nov-14	No	No
2	USACE	Notice of Intent to Prepare a Draft EIS, Initiate the Public Scoping Period and Host Public Scoping Meetings for the GLMRIS Evaluation of ANS Controls near Brandon Rd Lock and Dam	19-Nov-14	No	No
3	USACE	GLMRIS-BR NEPA Scoping	9-Dec-14	No	No
4	USACE	Notice of Intent to Prepare a Draft EIS, Initiate the Public Scoping Period and Host Public Scoping Meetings for the GLMRIS Evaluation of ANS Controls near Brandon Rd Lock and Dam: Extension of the Public Scoping Period and Announcement of an Additional PUblic Scoping Meeting Location	2-Jan-15	No	No
5	USACE	Press Release: New Orleans Public Meeting for GLMRIS Brandon Road	5-Jan-15	No	No
6	USACE	Press Release: Army Corps Details Aquatic Nuisance Species Study at Brandon Road Lock and Dam	1-May-15	No	No
7	USACE	GLMRIS-BR SHPO Coordination Regarding GLMRIS-BR Alternatives	25-Jun-15	Yes	Yes
See Appendix A - USFWS Draft FWCAR	USACE	GLMRIS-BR Fish and Wildlife Coordination Act Report	1-Jul-15	No	No
8	USACE	FWOP Request for Information from agencies, organizations, Native American Tribes, stakeholders, and consulting parties	6-Aug-15	Yes	Yes
9	USACE	Coordination with Great Lake States and Canada Regarding Potential Mississippi River Basin ANS Impacts on GLMRIS-BR	1-Jun-16	Yes	Yes
10	USACE	Supplemental FWOP Coordination Request for Information Regarding ongoing Monitoring, Control and Management by ACRCC Member Agencies	14-Jul-16	Yes	Yes
11	USACE	GLMRIS-BR NEPA Coordination for Proposed Mooring Cell Location	26-Aug-16	Yes	Yes
12	USACE	Section 7 of the Endangered Species Act - Consultation with USFWS	18-Nov-16	Yes	Yes

Attachment 1:

USACE PRESS RELEASE

NEWS RELEASE

For Immediate Release:
November 18, 2014

Contact:
Lynne Whelan
(312) 846-5330
lynne.e.whelan@usace.army.mil

Corps announces plans to evaluate options at Brandon Road site as continuance of Great Lakes and Mississippi River Interbasin Study (GLMRIS), initiates public comment period

CHICAGO - As a next step in the Great Lakes and Mississippi River Interbasin Study (GLMRIS), the Assistant Secretary of the Army (Civil Works) has directed the U.S. Army Corps of Engineers to proceed with a formal evaluation of potential aquatic nuisance species (ANS) control technologies. The focus of this analysis will be to reduce the risk of interbasin transfer of ANS to the maximum extent possible through the Chicago Area Waterway System (CAWS) in the vicinity of Brandon Road Lock and Dam.

The GLMRIS – Brandon Road effort will assess the viability of establishing a single point to control the one-way, upstream transfer of aquatic nuisance species from the Mississippi River basin into the Great Lakes basin near the Brandon Road Lock and Dam located in Joliet, Illinois. While the GLMRIS Report describes alternatives to prevent aquatic inter-basin transfer of ANS between the Great Lakes and Mississippi River watersheds, implementation of one-way ANS controls at Brandon Road is believed to be one of the most rapidly achievable structural options. Construction of one-way ANS controls at Brandon Road is expected to enhance protections for the Great Lakes basin while providing additional information and experience to inform two-way risk reduction solutions.

The Corps is scoping the development of a feasibility-level decision document to support an agency decision that could provide the basis for further possible action.

“The Brandon Road control point was identified in the GLMRIS analyses as the only single location that can address upstream transfer of Mississippi River species through all CAWS pathways,” said Dave Wethington, GLMRIS Project Manager for the U.S. Army Corps of Engineers. “That makes it an ideal location to evaluate potential control technologies.”

As part of the Corps announcement, a public comment period on the proposed GLMRIS-Brandon Road effort is beginning on November 17, 2014 and will run through January 17, 2015. Comments can be submitted by attending either of two public meetings that will be held in December in the Chicago region, through electronic submittal on the GLMRIS website, as well as via conventional mail.

Public meetings are being conducted to allow stakeholders to learn more about the upcoming effort and provide comment on the proposed activities involving the Brandon Road site. Public meetings are currently scheduled for Saturday, December 6, 2014 near Joliet, IL and on Tuesday, December 9, 2014 in Chicago, IL. Virtual attendance via the Web or call-in will be made available to maximize opportunities for participation. Additional information,

including advance registration to speak at one of the upcoming public meetings, can be found on the GLMRIS Website at: http://glmris.anl.gov.

The location of the Brandon Road Lock and Dam also serves as a valuable control point for species of particular public and stakeholder concern – the Silver and Bighead carp. Placement of technologies at- or downstream of- the Brandon Road lock structure enhances effectiveness of the controls by incorporating a mechanical fail-safe (lock closure) in the event of technology malfunction.

The Brandon Road site is located south (downstream) of the confluence of the Des Plaines River and the Chicago Sanitary and Ship Canal (CSSC). Previous investigations have indicated that a potential hydrologic bypass can occur during periods of high precipitation from the Des Plaines River to the CSSC. A one-way control point at the Brandon Road site would minimize the likelihood of bypass of Mississippi River ANS into the Great Lakes basin during flood events.

A project at the Brandon Road site is likely to minimize a number of previously identified adverse impacts to existing waterway uses and users, such as increased potential for flooding or degradation of water quality. These impacts contributed significantly to the lengthy timeframes and significant costs of the structural alternatives presented by the GLMRIS Report.

As strategic control of ANS is a shared responsibility among federal, state, regional and public stakeholders, the GLMRIS Team will continue to collaborate with agency and nongovernmental partners to support an integrated management approach to control Mississippi River ANS transfer into the Great Lakes. In order to achieve the maximum effectiveness of an ANS control program, nonstructural measures, including biological, educational, and management controls, must be incorporated into any technological solution. This management strategy requires the close coordination of a variety of local, state and federal agencies to implement actions commensurate with their resources and authorities, toward achieving a comprehensive ANS solution.

A teleconference for stakeholders to ask questions about the upcoming efforts at the Brandon Road site will be held Nov. 25, 2014, at 11 a.m. EST. Call Information: Dial-in: 1-888-621-9649 or 1-617-231-2734. Event ID: 417591.

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Attachment 2:

NOTICE OF INTENT TO PREPARE DRAFT EIS - INITIAL

special government employees shall serve without compensation except that travel and per diem expenses associated with official Committee activities are reimbursable.

Additional information about the Committee is available on the Internet at: *http://www.arlingtoncemetery.mil/AboutUs/Advisory.aspx*

Brenda S. Bowen,

Army Federal Register Liaison Officer.

[FR Doc. 2014–27491 Filed 11–19–14; 8:45 am]

BILLING CODE 3710–08–P

DEPARTMENT OF DEFENSE

Department of the Army; Corps of Engineers

Notice of Intent To Prepare a Draft Environmental Impact Statement (EIS), Initiate the Public Scoping Period and Host Public Scoping Meetings for the Great Lakes and Mississippi River Interbasin Study (''GLMRIS'')—Evaluation of Aquatic Nuisance Species Controls Near Brandon Road Lock and Dam

AGENCY: Department of the Army, U.S. Army Corps of Engineers, DoD.

ACTION: Notice of intent.

SUMMARY: The Chicago District, U.S. Army Corps of Engineers (USACE) announces its intent to (1) prepare a Draft EIS, (2) accept public comments and (3) host public scoping meetings in Lemont, Illinois at Argonne National Laboratories and Chicago, Illinois for GLMRIS—Evaluation of Aquatic Nuisance Species Controls near Brandon Road Lock and Dam (GLMRIS—Brandon Road).

In collaboration with other Federal, State, and local agencies as well as non-governmental entities, USACE is evaluating structural and nonstructural options and technologies near the Brandon Road Lock and Dam site. This effort is an interim response to the GLMRIS authority. The purpose of the GLMRIS—Brandon Road evaluation is to consider a control point to reduce the risk of upstream transfer of ANS, from the Mississippi River (MR) Basin into the Great Lakes (GL) Basin through the Chicago Area Waterway System (CAWS), to the maximum extent possible. The GLMRIS—Brandon Road effort will seek to minimize adverse impacts to waterway users or resources.

DATES: The NEPA scoping period ends on January 16, 2015. The GLMRIS—Brandon Road NEPA Public Scoping meetings are scheduled for December 6, 2014 in Lemont, Illinois at Argonne National Laboratories, and December 9, 2014 in Chicago, Illinois. Please refer to the ''Scoping and Public Involvement'' section below for information regarding the public scoping meeting and for instructions on how to submit public comments.

FOR FURTHER INFORMATION CONTACT: For further information and/or questions about GLMRIS, please contact USACE, Chicago District, Project Manager, Mr. David Wethington, *by mail:* USACE, Chicago District, 231 S. LaSalle, Suite 1500, Chicago, Illinois 60604, or *by email: david.m.wethington@usace.army.mil.*

For media inquiries, please contact USACE, Chicago District, Public Affairs Officer, Ms. Lynne Whelan, *by mail:* USACE, Chicago District, 231 S. LaSalle, Suite 1500, Chicago, Illinois 60604, *by phone:* 312.846.5330 or *by email: lynne.e.whelan@usace.army.mil.*

SUPPLEMENTARY INFORMATION:

1. *Background.* In January 2014, USACE released the GLMRIS Report, which evaluated the potential range of alternatives to control ANS transfer between the GL and MR basins via the CAWS. In GLMRIS, USACE has interpreted the term ''prevent'' to mean the reduction of risk to the maximum extent possible, because it may not be technologically feasible to achieve an absolute solution.

The GLMRIS Report identified eight alternatives, six of which were structural alternatives. Three structural alternatives established an ANS control point near Brandon Road Lock and Dam in Joliet, Illinois. The GLMRIS Report identified the Brandon Road control point as a single location that can address upstream transfer of MR ANS through the CAWS.

Based on evaluations presented in the GLMRIS Report and in response to stakeholder input, USACE has been directed by the Assistant Secretary of the Army (Civil Works) to proceed with a formal evaluation of potential ANS controls to be applied near the Brandon Road Lock and Dam, located near Joliet, Illinois. The GLMRIS—Brandon Road effort will evaluate the range of options or technologies available to prevent additional MR ANS transfer through the CAWS into the GL Basin.

This effort will assess the potential of various ANS controls to address the one-way, upstream transfer of ANS through the approach channel and/or lock chamber at Brandon Road Lock and Dam, and seek to minimize any adverse impacts to waterway users or resources.

The Brandon Road Lock and Dam Historic District includes the Brandon Road Lock and Dam and was retroactively listed on the National Register of Historic Places on March 11, 2004.

GLMRIS will be conducted in accordance with NEPA and with the *Economic and Environmental Principles and Guidelines for Water and Related Land Resource Implementation Studies,* Water Resources Council, March 10, 1983.

2. *Scoping and Public Involvement.* USACE will accept comments related to GLMRIS—Brandon Road until January 16, 2014.

All forms of comments received during the scoping period will be weighted equally. Using input obtained during the scoping period, USACE will refine the scope of GLMRIS to focus on significant issues, as well as eliminate issues that are not significant from further detailed study.

Comments may be submitted in the following ways:

- GLMRIS project Web site: Use the web comment function found at *http://glmris.anl.gov/.*
- NEPA Scoping Meeting: USACE is hosting scoping meetings and asks those who wish to make oral comments in person to register on the GLMRIS project Web site at *http://glmris.anl.gov/.* Each meeting's on-line registration to speak will be closed at 10 a.m. central time the day of the meeting. Those who do not register to speak via the GLMRIS Web site may register at the meeting. Those registering through the Web site may be given a preference over those that register to make an oral comment at the meeting. Each individual wishing to make oral comments shall be given three (3) minutes, and a stenographer will document oral comments;
- Mail: Mail written comments to GLMRIS—Brandon Road Scoping, 231 S. LaSalle, Suite 1500, Chicago, Illinois 60604. Comments must be postmarked by January 16, 2014; and
- Hand Delivery: Comments may be hand-delivered to the Chicago District, USACE office located at 231 S. LaSalle, Suite 1500, Chicago, Illinois 60604 between 8:00 a.m. and 4:30 p.m. Comments must be received by January 16, 2014.

The public meetings will begin with a brief presentation regarding the study followed by an oral comment period. During the meeting, USACE will also collect written comments.

The public meetings are scheduled for the following:

- 1:00 p.m. to 4:00 p.m. on Saturday, December 6, 2014, at Argonne National Laboratory's Theory and Computing Sciences Building, located at Theory and Computing Sciences Building, Building 240, Argonne National

Laboratory, 9700 S. Cass Avenue, Argonne, Illinois 60439 (directions available on the GLMRIS project Web site), and

• 3:00 p.m. to 6:00 p.m. on Tuesday, December 9, 2014, at the Gleacher Center, located at 450 North Cityfront Plaza Drive, Chicago, Illinois 60611.

Please see the GLMRIS project Web site at *http://glmris.anl.gov/* for directions, more information regarding the meeting and if you wish to make an oral comment.

Comments received during the scoping period will be posted on the GLMRIS project Web site and will become part of the EIS.

If you require assistance under the Americans with Disabilities Act, please contact Ms. Lynne Whelan via email at *lynne.e.whelan@usace.army.mil* or phone at (312) 846–5330 at least seven (7) working days prior to the meeting to request arrangements.

3. *Significant Issues.* Issues associated with the proposed study are likely to include, but will not be limited to impacts of ANS on current waterway uses and resources; impacts of potential ANS controls on current waterway uses and resources; and statutory and legal responsibilities relative to the lakes and waterways. Examples of waterway uses and resources that may be impacted by ANS include significant natural resources such as ecosystems and threatened and endangered species, commercial and recreational fisheries, and current recreational uses of the lakes and waterways. Examples of current waterway uses that may be impacted by potential ANS controls are commercial and recreational navigation, flood risk management and water supply and quality.

4. *Availability of the Draft Environmental Impact Statement.* Availability of the Draft EIS is contingent upon sufficient allocation of funding for the study. Draft EIS availability will be announced to the public in the **Federal Register** in compliance with 40 CFR 1506.9 and 1506.10.

5. *Authority.* This action is being undertaken pursuant to the Water Resources and Development Act of 2007, Section 3061, Pub. L. 110–114, 121 STAT. 1121, and the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4321, et seq., as amended.

Dated: November 14, 2014.

Susanne J. Davis, P.E.,

Chief, Planning Branch, Chicago District, Corps of Engineers.

[FR Doc. 2014–27531 Filed 11–19–14; 8:45 am]

BILLING CODE 3720–58–P

DEPARTMENT OF EDUCATION

[Docket No. ED–2014–ICCD–0152]

Agency Information Collection Activities; Comment Request; Personal Authentication Service (PAS) for FSA ID

AGENCY: Federal Student Aid (FSA), Department of Education (ED).

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3501 *et seq.*), ED is proposing a new information collection.

DATES: Interested persons are invited to submit comments on or before January 20, 2015.

ADDRESSES: Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at *http://www.regulations.gov* by selecting Docket ID number ED–2014–ICCD–0152 or via postal mail, commercial delivery, or hand delivery. If the regulations.gov site is not available to the public for any reason, ED will temporarily accept comments at *ICDocketMgr@ed.gov. Please note that comments submitted by fax or email and those submitted after the comment period will not be accepted; ED will ONLY accept comments during the comment period in this mailbox when the regulations.gov site is not available.* Written requests for information or comments submitted by postal mail or delivery should be addressed to the Director of the Information Collection Clearance Division, U.S. Department of Education, 400 Maryland Avenue SW., LBJ, Mailstop L–OM–2–2E319, Room 2E103, Washington, DC 20202.

FOR FURTHER INFORMATION CONTACT: For specific questions related to collection activities, please contact Beth Grebeldinger, 202 377–4018.

SUPPLEMENTARY INFORMATION: The Department of Education (ED), in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public's reporting burden. It also helps the public understand the Department's information collection requirements and provide the requested data in the desired format. ED is soliciting comments on the proposed information collection request (ICR) that is described below. The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: Personal Authentication Service (PAS) for FSA ID.

OMB Control Number: 1845–NEW.

Type of Review: A new information collection.

Respondents/Affected Public: Individuals or Households.

Total Estimated Number of Annual Responses: 55,300,000.

Total Estimated Number of Annual Burden Hours: 7,370,000.

Abstract: Federal Student Aid (FSA) is replacing the current PIN system with the Personal Authentication Service (PAS) which will employ an FSA ID, a standard user name and password solution. In order to create an FSA ID to gain access to certain FSA systems (FAFSA on the Web, NSLDS, StudentLoans.gov, etc.) a user must register on-line for an FSA ID account. The FSA ID will allow the customer to have a single identity, even if there is a name change or change to other personally identifiable information. The information collected to create the FSA ID enables electronic authentication and authorization of users for FSA web-based applications and information and protects users from unauthorized access to user accounts on all protected FSA sites.

Dated: November 17, 2014.

Kate Mullan,

Acting Director, Information Collection Clearance Division, Privacy, Information and Records Management Services, Office of Management.

[FR Doc. 2014–27509 Filed 11–19–14; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF ENERGY

Secretary of Energy Advisory Board; Meeting

AGENCY: Department of Energy.

ACTION: Notice of Open Meeting.

Attachment 3:

GLMRIS-BR NEPA SCOPING

This attachment only contains the GLMRIS-BR NEPA Scoping Letter and the associated Distribution List. Comments that were received during the scoping period are available on the GLMRIS website (http://www.glmris.anl.gov/brandon-rd/scoping-comments/). The GLMRIS-BR Team also released a GLMRIS-BR Environmental Impact Statement Scoping Summary Report May 2015 which is also available on the GLMRIS website (http://www.glmris.anl.gov/documents/docs/GLMRIS_Brandon_Rd_Scoping_Summary.pdf).

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET, SUITE 1500
CHICAGO IL 60604

Planning Branch
Environmental Formulation Section

Illinois Dept. of Transportation
Diane O'Keefe
Region One Engineer
201 W. Center Ct.
Schaumburg, IL 60196

0 9 DEC 2016

Dear Ms. O'Keefe:

The Chicago District invites your comments on a proposed project near Brandon Road Lock and Dam. Consistent with the National Environmental Policy Act (NEPA), we will evaluate the impacts of the potential project, proposed as part of the Great Lakes and Mississippi River Interbasin Study (GLMRIS). The project area is located within the Chicago Area Waterway System near Joliet, Illinois. The project area is supported by the Chicago District of the Great Lakes & Ohio River Division, and the Rock Island District of the Mississippi Valley Division, of the U.S. Army Corps of Engineers.

In January 2014, the U.S. Army Corps of Engineers, Chicago District (USACE), released the GLMRIS Report, which evaluated the potential range of alternatives to control Aquatic Nuisance Species (ANS) transfer between the Great Lakes and the Mississippi River basins via the Chicago Area Waterway System. The GLMRIS Report identified eight alternatives, six of which were structural alternatives. Three structural alternatives envisioned an ANS control point near Brandon Road Lock and Dam. The GLMRIS Report identified the Brandon Road control point as a single location that could address upstream transfer of ANS from the Mississippi River through the Chicago Area Waterway System.

Based on evaluations presented in the GLMRIS Report, in response to stakeholder input, and in collaboration with local, state, federal and non-governmental entities, the USACE intends to proceed with a formal evaluation of potential ANS controls near the Brandon Road Lock and Dam. The GLMRIS–Brandon Road effort will evaluate the range of options or technologies available to prevent the transfer of Mississippi River ANS transfer through the Chicago Area Waterway System into the Great Lakes Basin to the maximum extent possible. The GLMRIS–Brandon Road effort will seek to minimize adverse impacts to waterway users or resources, and will build upon the analyses completed for the

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET, SUITE 1500
CHICAGO IL 60604

GLMRIS Report. The GLMRIS Report and supporting documentation are available at http://www.glmris.anl.gov .
Participation is encouraged and comments are welcome. Please comment by letter or email to reach our office not later than January 16, 2015, marking your reply to the attention GLMRIS–Brandon Road Scoping, U.S. Army Corps of Engineers, Chicago District, 231 S. LaSalle Street, Suite 1500, Chicago, Illinois 60604. Questions may be directed to Mr. Bullock at 312/846-5587, or at peter.y.bullock@usace.army.mil, Your assistance is appreciated.

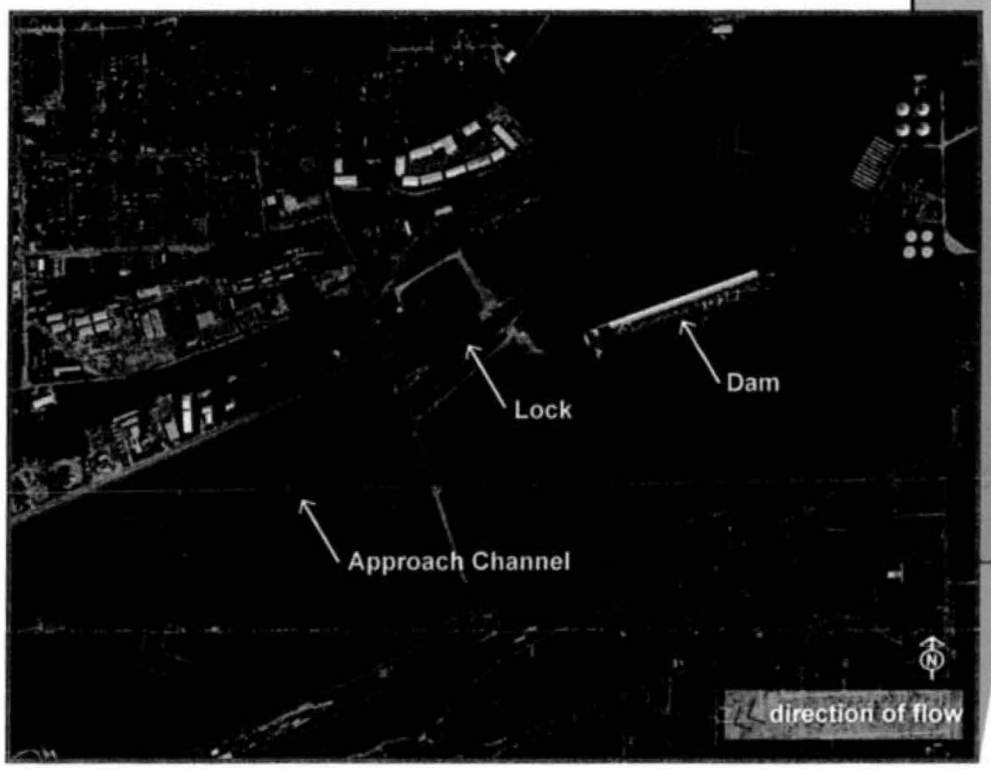
Sincerely,

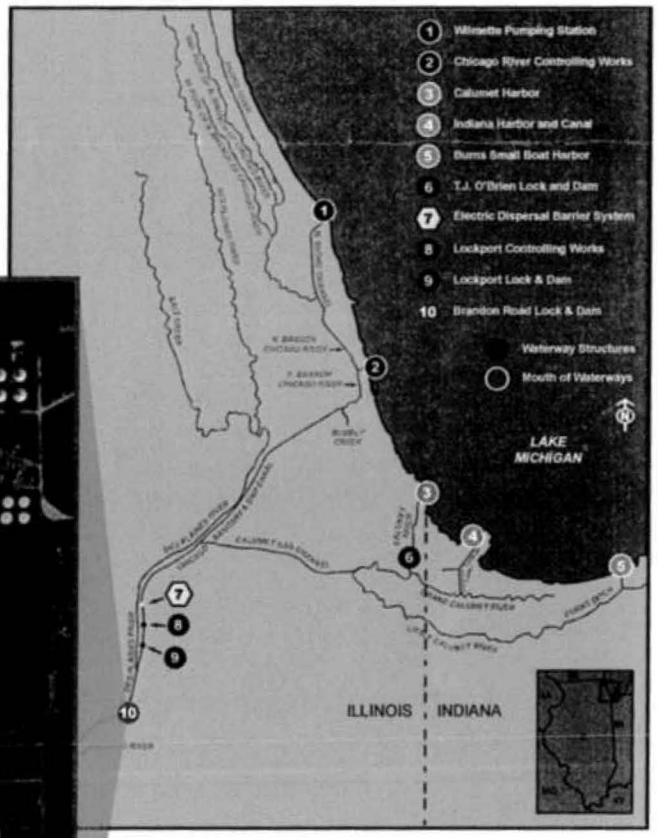
Susanne J. Davis, P. E.
Chief, Planning Branch

Enclosure

GLMRIS

Brandon Road





U.S. Army Corps of Engineers

GLMRIS-Bandon Road Scoping Distribution List

International Joint Commission U. S. Section Office (Washington)
Frank Bevacqua, Public Information Officer
2401 Pennsylvania Avenue, NW
Fourth Floor
Washington, DC 20440

U.S. Department of Agriculture, Natural Resources Conservation Service
Conservation Planning and Technical Assistance Division 14th and
Independence Ave., SW.
Room 6015-S
Washington, DC 20250

National Invasive Species Council
U. S. Department of the Interior Office of the Secretary
(OS/NISC)
1849 C Street NW
Washington, DC 20240

U.S. Department of Commerce
1401 Constitution Ave., NW
Washington, DC 20230

U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
ATTN: Lisa Jackson

Environmental Review Branch
Environmental Protection Agency
290 Broadway
New York, NY 10007-1866

Environmental Review Branch
Environmental Protection Agency
1650 Arch Street
Philadelphia, PA 19103-2029

U.S. Coast Guard Headquarters
2100 2nd St. SW
Washington, DC 20593-0005

Executive Office, MSO-Chicago
U.S. Coast Guard
215 W. 83rd St. Suite D
Burr Ridge, IL 60521

Executive Office-MSO-Toledo
U.S. Coast Guard
420 Madison Ave. Suite 700
Toledo, OH 43604

Executive Office-MSO-Duluth
U.S. Coast Guard
515 W. 1st Street
Rm 145.
Duluth, MN 55802

U.S. Geological Survey National Center
Environmental Planning-Eastern Region 12201
Sunrise Valley Dr.
Reston, VA 20192

Great Lakes Observing System,
National Oceanic and Atmoshperic Administration
Executive Director
229 Nickels Arcade
Ann Arbor, MI 48104

U.S. Department of Transportation
Executive Office-Maritime Administration
West Building
1200 New Jersey Ave. SE
Washington, DC 20590

Joseph Sobanski
Metropolitan Water Reclamation District of Greater Chicago
100 East Erie Street
Chicago, IL 60611

U.S. Fish and Wildlife Service
Main Interior
1849 C St. NW
Washington, DC 20240-009

US Fish and Wildlife Service
Chicago Illinois Field Office
1250 South Grove, Suite 103
Barrington, IL 60010
ATTN: Louise Clemency

U.S. Fish and Wildlife Service,
One Federal Drive
Fort Snelling, MN 55111-4056

U.S. Fish and Wildlife Service
2661 Scott Tower Drive
New Franken, WI 54229

U.S. Fish and Wildlife Service
Field Supervisor: Richard Nelson
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Moline, IL 61265

U.S. Fish and Wildlife Service
8588 Route 148
Marion, IL 62959-4565
ATTN: Joyce Collins, Assistant Field Supervisor

U.S. Fish and Wildlife Service
P.O. Box 2616
Chesterton, IN 46304-5716
ATTN: Elizabeth McCloskey

U.S. Fish and Wildlife Service
2651 Coolidge Road
East Lansing, MI 48823
ATTN: Craig Czarnecki, Field Supervisor

U.S. Fish and Wildlife Service
4101 American Boulevard East
Bloomington, MN 55425
ATTN: Tony Sullins, Field Supervisor

U.S. Fish and Wildlife Service
4625 Morse Road, Suite 104
Columbus, OH 43230

U.S. Fish and Wildlife Service
Pennsylvania Field Office
315 South Allen Street, Suite 322
State College, PA 16801-4850

Northeast Regional Office
U.S. Fish and Wildlife Service
300 Westgate Center Drive
Hadley, MA 01035-9589

U.S. Fish and Wildlife Service
New York Field Office
3817 Luker Rd.
Cortland, NY 13045

Illinois Department of Natural Resources
Office of Resource Review
One Natural Resources Way
Springfield, IL 62702-1271
ATTN: Todd Rettig

U.S. Environmental Protection Agency
Environmental Review Branch ME-19J
77 West Jackson
Chicago, IL 60604
ATTN: Kenneth Westlake, Chief

Illinois Department of Natural Resources,
Office of Realty and Environmental Planning 1
Natural Resource Way
Springfield, IL 62702
ATTN: Nathan Grider and Karen M. Miller

Illinois Department of Natural Resources
Illinois Coastal Management Program
160 N. LaSalle St,
Suite S-700
Chicago, IL 60601
ATTN: James Casey

Illinois Environmental Protection Agency
Water Pollution Division
1001 N. Grand
Springfield, IL 62794
ATTN: Dan Heacock

Federal Aviation Administration
Chicago Airports District Office, CHI-ADO-600
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ATTN: Bobb A. Beauchamp,
Environmental Program Manager

Federal Aviation Administration
Chicago Airports District Office, CHI-ADO-600
2300 East Devon Avenue
Des Plaines, IL 60018
ATTN: Barry Cooper

U.S. Department of Agriculture-APHIS Wildlife Services
3430 Constitution Drive, Suite 121
Springfield, Illinois 62711
ATTN: Scott Beckerman,
State Director TWS-Certified Wildlife Biologist

Illinois Department of Natural Resources
I&M Canal State Trail
401 Ottawa St. Morris, IL 60450-1630
ATTN: Dan Bell

Illinios Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271
ATTN: Dr. Harold Hassen, Archaeologist

Illinois Department of Natural Resources,
Office of Water Resources
160 N. LaSalle St, Suite S-700
Chicago, IL 60601
ATTN: Dan Injerd

Illinois Historic Preservation Agency
1 Old State Capitol Plaza
Springfield, IL 62701
ATTN: Anne Haaker

Illinois Department of Transportation
201 W. Center Ct.
Schaumburg, IL 60196
ATTN: Diane O'Keefe, Region One Engineer

U.S. Fish & Wildlife Service
620 S. Walker St.
Bloomington, IN 47403
ATTN: Scott Pruitt

Metropolitan Water Reclamation District
of Greater Chicago
Engineering Department
111 East Erie Street
Chicago, IL 60611-3154
ATTN: Joseph M. Schuessler, P.E.
Principal Civil Engineer

Senator Joe Donnelly
720 Hart Senate Office
Building Washington, DC20510

Senator Dan Coats
United States Senate
493 Russell Office Bldg
Washington, DC, 20510

GLMRIS-BR Tribal Consultations

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Tahlequah, OK 74465
ATTN: Dr. Richard Allen

Honorable Chief Michael Hicks
Eastern Band of Cherokee
P.O. Box 455
Cherokee, NC 28713
ATTN: Russ Townsend

Honorable George Wickliffe, Chief
United Keetoowah Band of Cherokee
P.O. Box 746
Tahlequah, OK 74465
ATTN: Lisa LaRue, Tribal Historic Preservation Officer

Honorable Deputy Chief, Charles Thurmond
Georgia Tribe of Eastern Cherokee
Tembrook Rt. 2
Clarksville, GA 35023

Honorable Bill Anoatubby, Governor
Chickasaw Nation
P.O. Box 1548
Ada, OK 74820
ATTN: Gary White Deer, Cultural Affairs

Honorable Mitchell Cypress, Chairman
Seminole Tribe of Florida
6073 Sterling Road
Hollywood, FL 33024
ATTN: Willard Steel, Tribal Historic Preservation Officer

Honorable Leonard Harjo, Principal Chief
Seminole Nation of Oklahoma
P.O. Box 1498
Wewoka, OK 74884
ATTN: Natalie Deere, Tribal Historic Preservation Officer

Honorable Principal Chief Perry Beaver
Muscogee (Creek) Nation of Oklahoma
P.O. Box 580
Okmulgee, OK 74447

Honorable Tiger Hobia Mekko
Kialegee Tribal Town of the
Creek Nation of Oklahoma
108 N. Main St. P.O. Box 332
Wetumka, OK 74883

Honorable Buford Rolin, Chairman
Poarch Band of Creek Indians
5811 Jack Springs Rd.
Atmore, AL 36502
ATTN: Emmett Ellis

Honorable Chief Beasley Denson
Mississippi Band of Choctaw Indians
P.O. Box 6005-Choctaw Branch
Philadelphia, MS 39350
ATTN: Kenneth Carleton, Tribal Historic Preservation Officer

Honorable Gregory Pyle, Chief
Choctaw Nation of Oklahoma
P.O. Drawer 1210
Durant, OK 74702
ATTN: Terry Cole, Tribal Historic Preservation Officer

Honorable Chief Christine Norris
Jena Band of Choctaw Indians
P.O. Box 14
Jena, LA 71342
ATTN: Michael Tarpley, Tribal Historic Preservation Officer

Honorable John Blackhawk, Chairman
Winnebago Tribe of Nebraska
P.O. Box 687
Winnebago, NE, 68071
ATTN: Charles Aldrich

Honorable Chief John Froman
Peoria Tribe
P.O. Box 1527
Miami, OK 74355-1527
ATTN: Frank Heckshar

Honorable Michael Dougherty, Chairman
Sac and Fox Nation of Missouri in Kansas
305 N. Main St.
Reserve, KS 66434
ATTN: Rick Campbell, Environment

Honorable Frank Blackcloud,
Chairman Sac and Fox of the Mississippi in Iowa
349 Meskwaki Road
Tama, IA 52339-9629
ATTN: Kelly Schott, Natural Resources Dept.

Honorable Principal Chief George Thurman
Sac and Fox Nation of Oklahoma
Route 2, Box 246
Stroud, OK 74079
ATTN: Daniel Wind, Environment

Honorable Raymond Butler, Chairman
Otoe-Missouria Tribe
8151 Highway 177
Red Rock, OK 74651
ATTN: Mildred Hudson

Honorable Timothy Rhodd, Chairman
Iowa Tribe of Kansas and Nebraska
3345 Trasher Road #8
White Cloud, KS 66094

Honorable Janice Rowe-Kurak, Chairwoman
Iowa Tribe of Oklahoma
Route 1, Box 721
Perkins, OK 74059
ATTN: Phillip Cravatt, Dept. of Environment

Honorable Principal Chief, John Red Eagle
Osage Nation
813 Grandview Ave.
Pawhuska, OK 74056
ATTN: Dr. Andrea Hunter, Tribal Historic Preservation Officer

Honorable Jerry Berrey, Chairman
Quapaw Tribe of Oklahoma
P.O. Box 765
Quapaw, OK 74363
ATTN: Jean Ann Lambert, Tribal Historic Preservation Officer

Honorable George E. Howell, Chairman
Ponca Tribe of Oklahoma
20 White Eagle Drive
Ponca City, OK 74601
ATTN: Cheryl Roughface

Honorable Earl Barbry, Chairman Tunica-
Biloxi Tribe of Louisiana
P.O. Box 1589
Marksville, LA 71351
ATTN: Earl Barbry Jr., Cultural Director

Honorable Chief Tarpie Yargee
Alabama-Quassarte Tribal Town
P.O. Box 187
Wetumka, OK 74883
ATTN: Augustine Asbury

Honorable Brenda Shemayne Edwards, Chairwoman
Caddo Nation
P.O. Box 487
Binger, OK 73009
ATTN: Robert Cast, Tribal Historic Preservation Officer

Honorable Chief John Ballard
Ottawa Tribe of Oklahoma
PO Box 110
Miami, OK 74355
ATTN: Charles Todd

Honorable Kerry Holton, President
Delaware Nation, Oklahoma
P.O. Box 825
Anadarko, OK 73005
ATTN:Tamara Francis

Honorable Paula Pechonick, Chief
Delaware Tribe of Oklahoma
107 N. Barbara
Bartlesville, OK 74003
ATTN: Dr. Bryce Obermeyer

Honorable Ron Sparkman, Chairman
Shawnee Tribe, Oklahoma
P.O. Box 189
Miami, OK 74355
ATTN: Jody Hays

Honorable Chief Glenna Wallace
Eastern Shawnee Tribe of Oklahoma
127 W. Oneida
P.O. Box 350
Seneca, MO 64865
ATTN: Robin DuShane

Honorable Chief Leaford Bearskin
Wyandotte Tribe of Oklahoma
PO Box 250
Wyandotte, OK 74370
ATTN: Sherrie Clemons, Tribal Historic Preservation Officer

Honorable Scott Miller, Governor
Absentee-Shawnee Tribe
2025 s. Gordon Cooper Dr.
Shawnee, OK 74810
ATTN: Henretta Ellis, Tribal Historic Preservation Officer

Honorable Warren Swartz Jr.
President Keweenaw Bay Indian Community
Tribal Center Building
107 Bear Town Road
Baraga, MI 49908-9678
ATTN: Chris Chosa, Tribal Historic Preservation Officer

Honorable Alan Shively, Chairman
Lac Vieux Desert Band of Lake Superior Chippewa Indians of Michigan
Tribal Office
P.O. Box 249 - Choate Road
Watersmeet, MI 49969
ATTN: George Beck, Dept. Of Planning and Environment

Honorable Derek Bailey, Chairman
Chippewa Ottawa Resource Authority
179 W Three Mile Rd.
Sault Ste. Marie, MI 49783

Honorable Ken Harrington, Chairman
Little Traverse Bay Band of Odawa Indians, Inc.
7500 Odawa Circle
Harbor Springs, MI 49740
ATTN: Eric Hemenway

Honorable Chief Denis Keqoum
Saginaw Chippewa Indian Tribe of Michigan
Tribal Office
7070 E. Broadway Road
Mt. Pleasant, MI 48858
ATTN: Phillips Peters

Honorable Joe McCoy, Chairman
Sault Ste. Marie Tribe of Chippewa Indians of Michigan
Tribal Office
523 Ashmun Street
Sault Ste. Marie, MI 49783
ATTN: Cecil Pavlet

Honorable Homer Mandoka, Chairman
Nottawaseppi Huron Potawatomi Tribal Office
2221 One-and-a-half Mile Rd.
Fulton, MI 49052
ATTN: John Rodwan, Environmental Director

Honorable Kenneth Meshigand, Chairman
Hannahville Potawatomi Comm., Council
N 14911 Hannahville Road
Wilson, MI 49896-9728
ATTN: Carol Bergquist , Director Environmental Programs

Honorable Matthew Wesaw, Chairman
Pokagon Band of Band of Potawatomi Indians
P.O. Box 180
Dowagiac, MI 49047
ATTN: Mike Zimmerman, Tribal Historic Preservation Officer

Honorable Derek Bailey, Chairman
Grand Traverse Band of Ottawa & Chippewa Indians of Michigan
2605 N.W. Bayshore Drive
Peshawbestown, MI 49682
ATTN: Cindy Patek, Museum Director

Honorable D.K. Sprague, Chairman
Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians of Michigan
P.O. Box 218
Dorr, MI 49323

Honorable Kurt Perron, Chairman
Bay Mills Indian Community
12140 W. Lakeshore Drive
Brimley, MI 49715
ATTN: Don Carrick Jr., Conservation

Honorable Floyd Jourdain Jr., Chairman
Red Lake Band of Chippewa Indians
P.O. Box 550
Red Lake, MN 56671
ATTN: Allen Pemberton, Natural Resources Dept.

Honorable Kevin Jensuold, Chairman
Upper Sioux Community
P.O. Box 147
5722 Travers Lane
Granite Falls, MN 56241

Honorable Jon Greendeer, President
Ho-Chunk Nation
P.O. Box 667
Black River Falls, WI 54615
Attn: Sara Matleli, Natural Resources Dept.

Honorable Stanly Crooks, Chairman
Shakopee Mdewakanton Sioux Community
2330 Sioux Trail, NW
Prior Lake, MN 55372
Attn: Stan Ellison, Land Manager

Honorable Gabe Prescott, Chairman
Lower Sioux Indian Community
32469 County Highway
Morton, MN 5627
Attn: Deb Dirlum, Office of Environment

Honorable Erma Vizenor Chairwoman White Earth
Band of Ojibwe
P.O. Box 418
White Earth, MN 56591
ATTN: Mike Swan, Dept. of Natural Resources

Honorable Kevin Leecy, Chairman
Bois Forte Band of Chippewa
5344 Lakeshore Drive
P.O. Box 16
Nett Lake, MN 55772
ATTN: Cory Strong, Dept. of Natural Resources

Honorable Arthur LaRosa, Chairman
Leech Lake Band of Ojibwe
115 6th Street, NW, Suite E
Cass Lake, MN 56633
ATTN: Bruce Johnson, Dept. of Natural Resources

Honorable Marge Anderson, Chief Executive Mille
Lac Band of Ojibwe
43408 Oodena Drive
Onamia, MN 56359
ATTN: Bradley Kalk, Dept. National Resources

Honorable Karen Driver, Chairwoman
Minnesota Chippewa Tribe
Fond Du Lac Reservation
Tribal Office
105 University Rd
Cloquet, MN 55720
ATTN: Wayne DuPuis, Environmental Program Manager

Honorable Norman Descompe, Chairman
Minnesota Chippewa Tribe
Grand Portage Reservation
Tribal Office
P.O. Box 428
Grand Portage, MN 55605
ATTN: Margret Watkins, Environment

Honorable Edward Delgado, Chairman
Oneida Tribe of Indians of Wisconsin
Tribal Office
N7210 Seminary Road
P.O. Box 365
Oneida, WI 54155-0365
ATTN: Pat Pelky, Environment

Honorable Michael Wiggins Jr., Chairman
Bad River Tribal Council
Bad River Band of Lake Superior Chippewa Indians of Wisconsin
Tribal Office
P.O. Box 39
Odanah, WI 54861
ATTN: Ervin Soulier, Dept. of Natural Resources

Honorable Merle St. Claire, Chairman
Turtle Mountain Band of Chippewa Indians
P.O. Box 900
Highway 5 West
Belcourt, ND 58316
ATTN: Rhonda Azure, Environment

Honorable Craig Corn, Chairman
Menominee Indian Tribe of Wisconsin
P.O. Box 910
Keshena, WI 54135-0910
ATTN: Gary Schuttpelz, Tribal Historic Preservation Officer

Honorable Gordan Thayer, Chairman
Lac Courte Oreilles Band of Lake Superior Chippewa Indians of Wisconsin
13394 West Trapania Road, Bldg. No. 1
Hayward, WI 54843
ATTN: Mark Thayer, Tribal Historic Preservation Office

Honorable Tom Maulson, President
Lac Du Flambeau Band of Lake Superior Chippewa Indians of Wisconsin
Tribal Office
P.O. Box 67
Lac Du Flambeau, WI 54538.
ATTN: Larry Wawronowicz, Environmental Program Manager

Honorable Rose Gurneoe-Soulier, Chairwoman
Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin
Tribal Office
88385 Pike Road
Bayfield, WI 54814
ATTN: Ed Melonee, Environmental Dept.

Honorable Garlan McGeshick, Chairman
Sokaogon Chippewa Community of Wisconsin
3051 Sand Lake Road
Crandon, WI 54520-8815
ATTN: Tina Van Zile, Environmental Dept.

Honorable Stuart Bearheart, President
Croix Chippewa Indians of Wisconsin
24663 Angeline Ave
Webster, WI 54893
ATTN: Katie Starjha, Environmental Dept.

Honorable Robin Chicks, President
Stockbridge Munsee Community of Wisconsin
N. 8476 Moh He Con Nuck Road
Bowler, WI 54416
ATTN: Greg Butler, Environment

Honorable Raymond Parker
Chippewa-Cree Tribe of the Rocky Boy's Reservation
RR 1, Box 544
Box Elder, MT 59521
ATTN: Alvin Windy Boy

Minnesota Mdwakanton Sioux
Prairie Island Indian Community
5636 Sturgeon Lake Rd.
Welch, MN 55089-9540

Great Lakes Intertribal Council
P.O. Box 9
Lac Du Flambeau, WI
ATTN: Mike Allen

Great Lakes Indian Fish & Wildlife Commission
P.O. Box 9, Maple Lane
New Odanah, WI 54861

Great Lakes Agency, Bureau of Indian Affairs
916 W. Lakeshore
Ashland, WI 54806-0237
ATTN: Diane Rosen

Minnesota Agency, Bureau of Indian Affairs
Federal Building Room #418
522 Minnesota Ave. NW
Bemidji, MN 56601-3062
ATTN: Eugene Virden

Honorable Tony Salazar, Chairman
Kickapoo Tribe of Oklahoma
P.O. Box 70
McCloud, OK 74851
ATTN: Danny Kaskaskie

Honorable Arlen Whitebird, Chairman
Kickapoo of Kansas
1107 Goldfinch Rd.
Horton, KS 66434
ATTN: Mark Kahbeah

Honorable Juan Garza, Chairman
Kickapoo Tribe of Texas
Box HC 1 9700
Eagle Pass, TX 78853

Miami Nation in Indiana
P.O. Box 41
Peru, IN 46970
ATTN: Brenda Hartleroad

Honorable Thomas E. Gamble, Chief
Miami Tribe of Oklahoma
P.O. Box 1326
Miami, OK 74355
ATTN: George Strack, Tribal Historic Preservation Officer

Honorable John Barrett, President
Citizen Potawatomi Nation
1901 S. Gordon Cooper Dr.
Shawnee, OK 74801
ATTN: Karen Phillips, Tribal Historic Preservation Officer

Honorable Harold Frank, Chairman
Forest County Potawatomi Tribe
P. O. Box 340
Crandon, WI 54520
ATTN: Lawrence Daniels, Natural Resources Dept.

Honorable Steve Ortiz, Chairman
Prairie Band Potawatomi Tribal Council
16281 Q RD
Mayetta, KS 66509
ATTN: Jancita Warrington, Tribal Historic Preservation Officer

Haudenosaunee Environmental Task Force (HETF)
P.O.Box 992
Hogansburg, NY 13655
ATTN: Director David Arquette

Honorable Chief Henry
Tuscarora Nation
2006 Mt. Hope Road
Via Lewiston, NY 14092
ATTN: Neil Patterson Jr., Environmental Program

Honorable Robert Odawi Porter, President
Seneca Nation of Indians
Wm Seneca Building
12837 Route 438
Irving, NY
ATTN: Anthony Memmo, Environmental Protection Dept.

Honorable Raymond Halbritter, Nation Representative
Oneida Indian Nation
5218 Patrick Road
Verona, NY 13478
ATTN: Peter Carman, General Counsel

Honorable Chief Roger Hill
Tonawanda Seneca Nation
7027 Meadville Road
Via Basom, NY 14013
ATTN: Mardell Sundown

Honorable Chief Randy Hart
St. Regis Mohawk Tribe
Akwesasne Community Bldg.
Route 37
Akwesasne, NY 13655
ATTN: Ken Jock, Environmental Division

Honorable Tadodaho Sid Hill
Onondaga Nation of New York
P.O. Box 319B, Hemlock Road
Nedrow, NY 13120
ATTN: Jeanne Shenandoah

Cayuga Nation of New York
P.O.Box 803
Seneca Falls, NY 13148-0803
ATTN: Tim Twoguns

Attachment 4:

NOTICE OF INTENT TO PREPARE DRAFT EIS - EXTENSION

options for locations of parking structures, and acquisition of additional space at two existing, offsite leased locations. These alternatives will be further developed during preparation of the Draft EIS as a result of public and agency input and environmental analyses of the activities. The No Action Alternative (not undertaking the East Campus Integration Program) will also be analyzed in detail.

This notice of intent is required by 40 Code of Federal Regulations (CFR) 1508.22 and briefly describes the Proposed Action and possible alternatives and our proposed scoping process. The EIS will comply with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 *et seq.*), the Council on Environmental Quality regulations in 40 CFR parts 1500 through 1508, and DoD Instruction 4715.9 (Environmental Planning and Analysis).

Significant Issues: Environmental issues to be analyzed in the EIS will include potential impacts on air quality, noise, natural resources, water use, solid waste, hazardous materials and wastes, transportation, and cumulative impacts from increased burdens on the installation and neighboring community based on projected development.

Scoping Process: Public scoping is an early and open process for identifying and determining the scope of issues to be addressed in the EIS. Scoping begins with this notice, continues through the public comment period (see **DATES**), and ends when the DoD has completed the following actions:

—Invites the participation of Federal, State, and local agencies, any affected Indian tribes, and other interested persons;
—Determines the actions, alternatives, and impacts described in 40 CFR 1508.25;
—Identifies and eliminates from detailed study those issues that are not significant or that have been covered elsewhere;
—Indicates any related EISs or environmental assessments (EAs) that are not part of the EIS;
—Identifies other relevant environmental review and consultation requirements;
—Indicates the relationship between timing of the environmental review and other aspects of the proposed program;
—At its discretion, exercises the options provided in 40 CFR 1501.7(b).

Once the scoping process is complete, DoD will prepare a Draft EIS, and will publish a **Federal Register** notice announcing its public availability. If you want that notice to be sent to you, please contact the DoD Project Office point of contact identified in **FOR FURTHER INFORMATION CONTACT**. You will have an opportunity to review and comment on the Draft EIS. Additionally, the DoD anticipates holding a public meeting after publication of the Draft EIS in the vicinity of Fort Meade, Maryland, to present the Draft EIS and receive public comments regarding the document. The DoD will consider all comments received and then prepare the Final EIS. As with the Draft EIS, the DoD will announce the availability of the Final EIS and once again give you an opportunity for review and comment.

Dated: December 19, 2014.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2014–30343 Filed 1–2–15; 8:45 am]

BILLING CODE 5001–06–P

DEPARTMENT OF DEFENSE

Department of the Army, Corps of Engineers

Termination of Environmental Impact Statement (EIS) for the Alaska Department of Transportation & Public Facilities Foothills West Transportation Access Project

AGENCY: U.S. Army Corps of Engineers, Department of Defense.

ACTION: Withdrawal of notice of intent.

SUMMARY: The Alaska District, U.S. Army Corps of Engineers (Corps) is notifying interested parties that it has terminated the process to develop an Environmental Impact Statement and has withdrawn the application for a Department of the Army permit from the Alaska Department of Transportation and Public Facilities (DOT&PF) proposed Foothills West Transportation Access Project (Foothills Project). The original Notice of Intent to Prepare the EIS was published in the **Federal Register** on May 20, 2011 (76 FR 29218).

FOR FURTHER INFORMATION CONTACT: Questions regarding the termination of this EIS process should be addressed to: Ms. Melissa Riordan, Regulatory Division, telephone: (907) 474–2166, or mail: U.S. Army Corps of Engineers, CEPOA–RD, 2175 University Avenue, Suite 201(E), Fairbanks, AK 99709–4927. Or email: *melissa.c.riordan@usace.army.mil.* Emailed questions, including attachments, should be provided in .doc, .docx, .pdf or .txt formats.

SUPPLEMENTARY INFORMATION: The Alaska District published the original Notice of Intent to prepare the EIS for the proposed Foothills project in the **Federal Register** on Friday, May 20, 2011 (76 FR 29218). In the summer of 2013 the Alaska DOT&PF decided to re-evaluate plans for future EIS work, and in response the Corps suspended work and closed the EIS project file. After confirming on October 21, 2014 that the DOT&PF has no future plans to proceed with the project, the Corps officially determined that it is appropriate to terminate the EIS. The Corps' neutral role in the EIS process was to evaluate the environmental consequences of the proposed project under the authority of Section 10 of the River and Harbors Act of 1899 and Section 404 of the Clean Water Act. The preparation of the EIS was being conducted by a third-party contractor directed by the Corps, and funded by the applicant, which is typical of the Corps Regulatory EIS studies. Withdrawal of the permit application and termination of the EIS process will not prevent DOT&PF from reapplying at a later date.

Dated: November 3, 2014.

Approved by:

Michael Salyer,

North Branch Chief, Alaska District, U.S. Army Corps of Engineers.

[FR Doc. 2014–30862 Filed 1–2–15; 8:45 am]

BILLING CODE 3720–58–P

DEPARTMENT OF DEFENSE

Department of the Army, Corps of Engineers

Notice of Intent To Prepare a Draft Environmental Impact Statement (EIS), Initiate the Public Scoping Period and Host Public Scoping Meetings for the Great Lakes and Mississippi River Interbasin Study (''GLMRIS'')—Evaluation of Aquatic Nuisance Species Controls Near Brandon Road Lock and Dam: Extension of the Public Scoping Period and Announcement of an Additional Public Scoping Meeting Location

AGENCY: U.S. Army Corps of Engineers, DoD.

ACTION: Notice.

SUMMARY: Reference the Notice of Intent published in the **Federal Register** on Thursday, November 20, 2014, volume 79, number 224, pages 69099–100 (79 FR 69099). This notice extends the public comment period and identifies an additional location for a GLMRIS public scoping meeting. For convenience, the **SUPPLEMENTARY INFORMATION** section of the November 20, 2014 notice has been reprinted with

new text announcing the extension of the public comment period and the additional location where USACE will host a scoping meeting.

DATES: The NEPA public scoping period ends on January 30, 2015. Please refer to the ''*Scoping and Public Involvement*'' section below for instructions on ways to submit public comments.

FOR FURTHER INFORMATION CONTACT: For further information and/or questions about GLMRIS, please contact USACE, Chicago District, Project Manager, Mr. David Wethington, *by mail:* USACE, Chicago District, 231 S. LaSalle, Suite 1500, Chicago, Illinois 60604, or *by email: david.m.wethington@usace.army.mil.*

For media inquiries, please contact USACE, Chicago District, Public Affairs Officer, Ms. Lynne Whelan, *by mail:* USACE, Chicago District, 231 S. LaSalle, Suite 1500, Chicago, Illinois 60604, *by phone:* 312.846.5330 or *by email: lynne.e.whelan@usace.army.mil.*

SUPPLEMENTARY INFORMATION:

1. *Background.* In January 2014, USACE released the GLMRIS Report, which evaluated the potential range of alternatives to prevent ANS transfer between the GL and MR basins via the CAWS. In GLMRIS, USACE has interpreted the term ''prevent'' to mean the reduction of risk to the maximum extent possible, because it may not be technologically feasible to achieve an absolute solution.

The GLMRIS Report identified eight alternatives, six of which were structural alternatives. Three structural alternatives established an ANS control point near Brandon Road Lock and Dam in Joliet, Illinois. The GLMRIS Report identified the Brandon Road control point as a single location that can address upstream transfer of MR ANS through the CAWS.

Based on evaluations presented in the GLMRIS Report and in response to stakeholder input, USACE has been directed by the Assistant Secretary of the Army (Civil Works) to proceed with a formal evaluation of potential ANS controls to be applied near the Brandon Road Lock and Dam, located near Joliet, Illinois. The GLMRIS—Brandon Road effort will evaluate the range of options or technologies available to prevent MR ANS transfer through the CAWS into the GL Basin.

This effort will assess the potential of various ANS controls to address the one-way, upstream transfer of ANS through the approach channel and/or lock chamber at Brandon Road Lock and Dam, and seek to minimize any adverse impacts to waterway users or resources.

The Brandon Road Lock and Dam Historic District includes the Brandon Road Lock and Dam and was retroactively listed on the National Register of Historic Places on March 11, 2004.

GLMRIS will be conducted in accordance with NEPA and with the *Economic and Environmental Principles and Guidelines for Water and Related Land Resource Implementation Studies,* Water Resources Council, March 10, 1983.

2. *Scoping and Public Involvement.* USACE will accept comments related to GLMRIS—Brandon Road until January 30, 2015.

All forms of comments received during the scoping period will be weighted equally. Using input obtained during the scoping period, USACE will refine the scope of GLMRIS to focus on significant issues, as well as eliminate issues that are not significant from further detailed study.

Comments may be submitted in the following ways:

- GLMRIS project Web site: Use the web comment function found at *http://glmris.anl.gov/.*
- NEPA Scoping Meeting: USACE is hosting scoping meetings and asks those who wish to make oral comments in person to register on the GLMRIS project Web site at *http://glmris.anl.gov/* . Each meeting's on-line registration to speak will be closed at 10 a.m. central time the day of the meeting. Those who do not register to speak via the GLMRIS Web site may register at the meeting. Those registering through the Web site may be given a preference over those that register to make an oral comment at the meeting. Each individual wishing to make oral comments shall be given three (3) minutes, and a stenographer will document oral comments;
- Mail: Mail written comments to GLMRIS—Brandon Road Scoping, 231 S. LaSalle, Suite 1500, Chicago, Illinois 60604. Comments must be postmarked by January 30, 2015; and
- Hand Delivery: Comments may be hand-delivered to the Chicago District, USACE office located at 231 S. LaSalle, Suite 1500, Chicago, Illinois 60604 between 8:00 a.m. and 4:30 p.m. Comments must be received by January 30, 2015.

The public meetings will begin with a brief presentation regarding the study followed by an oral comment period. During the meeting, USACE will also collect written comments.

The additional public meeting is scheduled for 3:00 p.m. to 6:00 p.m. on Thursday, January 8, 2015, at the U.S. Army Corps of Engineers, New Orleans District Office, Assembly Room A located at 7400 Leake Avenue, New Orleans, Louisiana. Please see the GLMRIS project Web site at *http://glmris.anl.gov/* for directions, more information regarding the meeting and if you wish to make an oral comment.

Comments received during the scoping period will be posted on the GLMRIS project Web site and will become part of the EIS.

If you require assistance under the Americans with Disabilities Act, please contact Ms. Lynne Whelan via email at *lynne.e.whelan@usace.army.mil* or phone at (312) 846–5330 at least seven (7) working days prior to the meeting to request arrangements.

3. *Significant Issues.* Issues associated with the proposed study are likely to include, but will not be limited to impacts of ANS on current waterway uses and resources; impacts of potential ANS controls on current waterway uses and resources; and statutory and legal responsibilities relative to the lakes and waterways. Examples of waterway uses and resources that may be impacted by ANS include significant natural resources such as ecosystems and threatened and endangered species, commercial and recreational fisheries, and current recreational uses of the lakes and waterways. Examples of current waterway uses that may be impacted by potential ANS controls are commercial and recreational navigation, flood risk management and water supply and quality.

4. *Availability of the Draft Environmental Impact Statement.* Availability of the Draft EIS is contingent upon sufficient allocation of funding for the study. Draft EIS availability will be announced to the public in the **Federal Register** in compliance with 40 CFR 1506.9 and 1506.10.

5. *Authority.* This action is being undertaken pursuant to the Water Resources and Development Act of 2007, Section 3061, Pub. L. 110–114, 121 STAT. 1121, and the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4321, *et seq.,* as amended.

Dated: December 29, 2014.

Susanne J. Davis,

Chief Planning Branch, Chicago District, Corps of Engineer.

[FR Doc. 2014–30859 Filed 1–2–15; 8:45 am]

BILLING CODE 3720–58–P

Attachment 5:

PRESS RELEASE: NEW ORLEANS PUBLIC MEETING FOR GLMRIS-BR

NEWS RELEASE

For Immediate Release:
January 5, 2015

Contact:
Lynne Whelan
(312) 846-5330
Chicagodistrict.pao@usace.army.mil

New Orleans Public Meeting for GLMRIS Brandon Road

CHICAGO -- Thursday, Jan. 8, 2015 the U.S. Army Corps of Engineers (USACE) will host a public meeting and webinar to present information on the Great Lakes and Mississippi River Interbasin Study (GLMRIS)-Brandon Road effort. The public is invited to attend. The Jan. 8 meeting will be held at the Army Corps of Engineers, New Orleans District office, Assembly Room A, 7400 Leake Avenue, New Orleans, La. from 3 p.m. to 6 p.m. (central time).

USACE plans to evaluate a range of aquatic nuisance species (ANS) controls that could be applied near the Brandon Road Lock and Dam to address the transfer of ANS from the Mississippi River Basin to the Great Lakes Basin. In accordance with the National Environmental Policy Act (NEPA), an environmental impact statement (EIS) will be developed concurrently with the technical evaluations of possible ANS controls at the Brandon Road Lock and Dam, located near Joliet, Ill.

As part of the NEPA scoping process, USACE is seeking input from stakeholders, tribes, and the public on the scope of issues to be addressed by the GLMRIS-Brandon Road evaluation and any significant issues related to potential actions at or near the Brandon Road site. Using input obtained during the scoping period, USACE will refine the GLMRIS-Brandon Road effort to focus on significant issues, as well as eliminate issues that are not significant from further detailed study.

The meeting will begin with a presentation followed by an oral comment period. During the meeting, USACE will also collect written comments. Virtual participation will also be available via a web-enabled format.

For additional information about the public meeting including webinar details, meeting locations, or to submit an electronic comment, please visit http://glmris.anl.gov/brandon-rd. In addition to the public meetings, public comments can be submitted to USACE through Jan. 30, 2015, by using the website at http://glmris.anl.gov/brandon-rd, or through mail or hand delivery to GLMRIS - Brandon Road Scoping, 231 S. LaSalle St., Suite 1500, Chicago, IL 60604.

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Attachment 6:

PRESS RELEASE: ARMY CORPS DETAILS AQUATIC NUISANCE SPECIES STUDY AT BRANDON ROAD LOCK AND DAM

News Release

U.S. ARMY CORPS OF ENGINEERS BUILDING STRONG®

May 1, 2015
Release No: FY15-04-08
Contacts:

U.S. Army Corps of Engineers, Rock Island District
Andrew Leichty, project manager, Brandon Road Study, (309) 794-5399, Andrew.L.Leichty@usace.army.mil
Ron Fournier, chief, Corporate Communications, (309) 794-5274, Ronald.F.Fournier@usace.army.mil

Army Corps Details Aquatic Nuisance Species Study at Brandon Road Lock and Dam

ROCK ISLAND, Illinois – The U.S. Army Corps of Engineers, Rock Island District, has completed a draft Project Management Plan for accomplishing the Great Lakes and Mississippi River Interbasin Study (GLMRIS) Brandon Road Study. The Study will evaluate potential control options and technologies at the Illinois River Brandon Road Lock & Dam to prevent the upstream Interbasin transfer of aquatic nuisance species (ANS) while minimizing impacts to waterway uses and users and identify a recommended plan.

The draft Project Management Plan details the tasks, costs and schedule necessary for planning decisions and general estimates for tasks necessary to complete the study. Due to the complexities involved in evaluating potential options and technologies for the control of aquatic nuisance species at the Brandon Road Lock and Dam, it is estimated that the study effort can be completed by January 2019 at an estimated additional cost of $8.2 million.

Incorporating Corps' SMART Planning processes, the Study Team will have multiple decision points throughout the study to evaluate progress and to look for efficiencies that may result in reduced cost, reduced schedule or both.

The Brandon Road control point was identified in the GLMRIS analyses as the only location that can address upstream transfer of Mississippi River species through all Chicago Area Waterway System pathways. Implementation of technologies at the Brandon Road control point was a feature of three out of six structural alternatives presented in the GLMRIS Report.

The alternatives presented in the GLMRIS Report were conceptual. Further technical analyses and evaluation of possible control measures is necessary to determine whether there is a viable, efficient and justifiable solution. The detailed scope of work for study efforts at the Brandon Road site includes a multi-agency study team, additional technical analysis and synthesis, policy evaluation, National Environmental Policy Act analysis, site-specific detailed engineering analyses, interagency coordination and public comment which must be accomplished prior to making an agency recommendation.

Accomplishing these engineering tasks and policy analyses are critical to the selection of a particular alternative for implementation at the Brandon Road site.

ANS control is a shared responsibility among federal, state, regional and public stakeholders. The GLMRIS Brandon Road Team will continue to collaborate with agency and nongovernmental partners to support an integrated management approach to control Mississippi River ANS transfer into the Great Lakes.

The GLMRIS Brandon Road Draft Project Management Plan is available at http://www.mvr.usace.army.mil/About/Offices/ProgramsandProjectManagement/BrandonRoadPMP.aspx. Transcripts from public meetings, copies of all written scoping comments and additional study information are available on the GLMRIS project website http://glmris.anl.gov/brandon-rd/.

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Attachment 7:

ILLINOIS STATE HISTORIC PRESERVATION OFFICE COORDINATION REGARDING GLMRIS-BR ALTERNATIVES

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
PO BOX 2004 CLOCK TOWER BUILDING
ROCK ISLAND, ILLINOIS 61204-2004

REPLY TO
ATTENTION OF

August 29, 2016

Regional Planning and Environmental
Division North (RPEDN)

SEE DISTRIBUTION LIST

Log #002021015

The U.S. Army Corps of Engineers (Corps) is currently preparing National Environmental Policy Act (NEPA) documentation for the Great Lakes and Mississippi River Interbasin Study (GLMRIS) at the Brandon Road Lock and Dam and the vicinity of the Illinois Waterway (IWW) near Joliet, Illinois. The GLMRIS–Brandon Road effort has been ongoing to assess feasible alternatives for the control aquatic nuisance species between the Mississippi River basin and the Great Lakes basin through the Chicago Area Waterway System (CAWS). The Corps is coordinating to evaluate a new proposed feature required for the electric barrier alternative, which involves the construction of mooring cells, dredging, and dredged material placement downstream of Brandon Road Lock and Dam.

The Corps has coordinated potential activities and alternatives for GLMRIS-Brandon Road Project Feasibility Study since 2014 (Enclosure 1). In addition to the features described in previous correspondence, the Corps has identified that mooring cells may be required to facilitate navigational traffic if an aquatic nuisance species electrical barrier is constructed in the channel below the lock chamber. The Brandon Road lock chamber is 600 feet in length, and navigation tows longer than the lock must split apart to pass through the lock. Currently, tows split along upper and lower guide walls adjacent to the lock chamber. If an electrical barrier is included as the selected plan, it is likely that upbound tows would be required to split farther downstream in a mooring area in order to comply with future U.S. Coast Guard safety standards.

The proposed mooring area consists of two mooring cells in the river approximately 600 feet apart for tow docking and staging located adjacent to the navigation channel between IWW River Miles (RM) 276-285. The two most likely locations are depicted on Enclosure 2 (IWW RM 278-279 or 283-284). These mooring areas would potentially need to be dredged to a depth of greater than 9 feet. Dredged material would be moved to a temporary placement site for dewatering on the right descending bank, downstream of the Brandon Road Lock and Dam between IWW RM 285.1-285.5 (Enclosure 3). After desiccation is complete, final placement will be at a landfill regulated to accept contaminated materials due to the potential for the material to contain pollutants.

An Investigation of the Submerged Historic Properties in the Upper Mississippi River and Illinois Waterway, dated October 1997 (Contract Number DACW25-93-D-0-012, Order No. 27) and *The Historic Properties Management Plan for the Illinois Waterway System*, Rock Island District, Corps of Engineers, Volumes I and II, dated February 1999 (Contract Number DACW25-93-D-0014, Order. No. 0021) are two reports that focus on historic properties potentially affected by this project. Final copies of these reports are on permanent file at the

Illinois Historic Preservation Agency (IHPA , Springfield, Illinois. No submerged historic properties were documented within either mooring area nor between the IWW RM 277.8-284.2 reach of the Des Plaines River. It is the opinion of the Corps that no know historic ship wrecks are located in the Des Plains River reach of the IWW. Until the construction of the IWW, the Des Plaines River was typically too shallow for commercial navigation.

The proposed temporary dredged material placement site has been previously coordinated as an access area required for GLMRIS construction activities. The tract of land was previously excavated and used as a commercially developed fly ash pit, as a byproduct of energy production. The IHPA concurred this tract of land had no potential for historic properties by letter stamped concur dated February 18, 2016 (IHPA Log# 002021015).

Interested and consulting parties (Enclosure 4) have been, and will continue to be, provided with notifications of any public meeting announcements, special releases, and notifications of the availability of report(s), as stipulated by 36 CFR Part 800.5(3) and Part 800.5(3)(b) of the NHPA. By comment dated February 17, 2016, the Advisory Council of Historic Places reserved the right to participate once the Corps makes a determination of effect.

The undersigned requests formal concurrence of "No Historic Properties" for the APE within main channel (between IWW RM 277.8-184.2 of the Des Plaines River) for the construction of mooring cells and dredging, to include the proposed temporary dredged material placement site. Please consider this letter an invitation to comment and provide additional information with respect to concerns, or anticipated effects, and any reports, studies, or other research concerning environmental resources in the project vicinity that may provide additional information or contribute to determining affects to the natural and built environment. Please provide your comments within 30 days of the date of this letter.

Should you have any questions or would like additional information, please contact Kat Herzog of our Environmental Branch, (309) 794-5231, email: Kathryn.Herzog@usace.army.mil, or by writing to our address, ATTN: Planning Division-Environmental Planning Section (Kat Herzog).

CONCUR

By: Rachel Leibowitz
Deputy State Historic Preservation Officer

Date: 9-28-16

Sincerely,

Kenneth A. Barr
Chief, Environmental Planning Branch,
RPEDN

Enclosures (4)

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
PO BOX 2004 CLOCK TOWER BUILDING
ROCK ISLAND, ILLINOIS 61204-2004

REPLY TO
ATTENTION OF

June 25, 2015

Regional Planning and Environmental
Division North (RPEDN)

Rachel Leibowitz, Ph.D.
Deputy State Historic Preservation Officer
Preservation Services Division Manager
Illinois Historic Preservation Agency
1 Old State Capitol Plaza
Springfield, Illinois 62701

Dear Dr. Leibowitz:

The U.S. Army Corps of Engineers (Corps), Rock Island District (District), proposes Great Lakes and Mississippi River Interbasin Study (GLMRIS) at Brandon Road Rock Lock and Dam on the Illinois Waterway (IWW) river mile 285.9, Will County, Illinois (Enclosure 1). GLMRIS was authorized in Section 3061(d) of WRDA 2007, Public Law 110-114 as follows

> FEASIBILITY STUDY – The Secretary, in consultation with appropriate Federal, State, local and nongovernmental entities, shall conduct, at Federal expense, a feasibility study of the range of options and technologies available to prevent the spread of aquatic nuisance species between the Great Lakes and Mississippi River Basins through the Chicago Sanitary and Ship Canal and other aquatic pathways

The GLMRIS stemmed from an overwhelming response to a growing consensus of Congressional, nongovernmental, and public stakeholders concerning the potential urgency associated with the threat of ANS, especially Asian carp species

In January 2014, USACE released a report that provided a range of options that could be implemented to prevent the transfer of aquatic nuisance species (ANS) through the Chicago Area Waterway System between the Mississippi River and the Great Lakes basins (Enclosure 2). The Assistant Secretary of the Army directed the Corps to precede with a formal evaluation of potential aquatic nuisance species ANS control technologies at Brandon Road Rock Lock and Dam (Project) as a next step in GLMRIS. The District will be coordinating the ANS Project located at Brandon Road Lock and Dam with your agency, as promulgated under Section 106 of the National Historic Preservation Act, as amended (NHPA) and its implementing regulations 36 CFR 800: "Protection of Historic Properties."

By letter dated December 9, 2014, the Chicago District requested comments from your agency and other interested and consulting parties on the ANS Project located near Joliet, Illinois (Enclosure 3). Your agency commented by letter dated February 11, 2015, noting that listing Brandon Road Lock and Dam Historic District was contributing as an historic district in the

IWW Navigation Facilities that was listed on the National Register of Historic Places (NRHP). No other comments were received from the Interested and Consulting Parties relative to the Section 106 of NHPA.

Planning and development of the Project has identified the Project Area of Potential Effect (APE). The Project ANS structural alternatives are all within the Project APE, between IWW river miles 285.0 and 286.5 and the preliminary APE consists of approximately 110 terrestrial acres (Enclosure 4). Assessment for the potential of archeological properties is part of the planning process and a documentary background search was conducted. The Project is within the NRPH-listed Brandon Road Lock and Dam Historic District as part of the IWW Navigation System Facilities (Enclosure 5). All of the historic districts for the IWW Navigation Facilities were listed on the NRHP on March 11, 2004 (Enclosure 6). Portions of the Illinois and Michigan Canal National Heritage corridor is within the Project APE, consisting of a canal segment, lock, and undocumented loading facility and abandoned barges with ancillary equipment.

The District conducted a site files search using the Illinois Department of Natural Resources *Inventory of Illinois Archaeological Sites* which document that site 11WI24 is adjacent to the Project and portions of the left descending bank and islands within the APE has been previously surveyed for archeological sites (Weedman and Klippel 1975). This previously surveyed area contained no historic properties. A background research was conducted using the following references to determine the potential for archeological sites.

Hajic, Edwin R.
2000 *Landform Sediment Assemblage (LSA) Units in the Illinois River Valley and the Lower Des Plaines River Valley.* Prepared by Illinois State Museum Society Archaeological Services, Springfield, Illinois (Illinois State Museum Quaternary Studies Program Technical Report No, 99-1255-16, Vol. I May and Vol. II June), under Contract No. DACW25-93-D-0014, Delivery Order No. 0025, for the U.S. Army Corps of Engineers, Rock Island, Illinois.

Claire F. Martin, and Michael D. Wiant
1998 *Historic Properties Potential and Geomorphological Assessment Along the Illinois Waterway for the Rock Island District of the U.S. Army Corps of Engineers.* Prepared by Illinois State Museum Society Archaeological Services, Springfield, Illinois (Illinois State Museum Quaternary Studies Program Technical Report No. 95-939-20, March 10), under Contract No. DACW25-93-D-0014, Delivery Order No. 0008, for the U.S. Army Corps of Engineers, Rock Island, Illinois.

Custer, Jack E. and Sandra M. Custer
1997 *An Investigation of Submerged Historic Properties in the Upper Mississippi River and Illinois Waterway.* Prepared by Steamboat Masters & Associates, Louisville, Kentucky, as a Cultural Resources Subcontractor to American Resources Group, Ltd., Carbondale, Illinois (Cultural Resources Management Report No. 306, October), under Contract No., DACW25-93-D-0012, Delivery Order No. 0037, for the U.S. Army Corps of Engineers, Rock Island, Illinois.

Henning, Barbara J.
2002 *National Register of Historic Places Multiple Property Submission: Illinois Waterway Navigation Study Facilities.* Prepared by Illinois State Museum Society, Springfield, Illinois (Illinois State Museum Quaternary Studies Program Technical Report No. 01-1463-17, June), under Contract No. DACW25-93-D-0017, Delivery Order No. 0008, for the U.S. Army Corps of Engineers, Rock Island, Illinois.

Martin, Claire F., Edwin R. Hajic, and Michael D. Wiant
1998 *Historic Properties Potential and Geomorphological Assessment Along the Illinois Waterway for the Rock Island District of the U.S. Army Corps of Engineers.* Prepared by Illinois State Museum Society Archaeological Services, Springfield, Illinois (Illinois State Museum Quaternary Studies Program Technical Report No. 95-939-20, March), under Contract No. DACW25-93-D-0014, Delivery Order No. 0008, for the U.S. Army Corps of Engineers, Rock Island, Illinois.

Roberts, Timothy E., Claire F. Martin, Edwin R. Hajic, Christy S. Rickers, Erich K. Schroeder, James S. Oliver and Michael D. Wiant
1999 *The Historic Properties Management Plan for the Illinois Waterway System, Rock Island District, Corps of Engineers: Volumes I and II.* Prepared by Illinois State Museum Society Archaeological Services, Springfield, Illinois (Illinois State Museum Quaternary Studies Program Technical Report No, 98-1182-7, February), under Contract No. DACW25-93-D-0014, Delivery Order No. 0021, for the U.S. Army Corps of Engineers, Rock Island, Illinois.

Weedman, William and Walter E. Klippel
1975 An Archaeological Assessment and Impact Statement of the Proposed Soil Disposal Tracts for the Illinois Waterway Duplicate Locks Project (Joliet-Lockport Region). Prepared for the Department of the Army, Chicago District Corps of Engineers by the Illinois State Museum Society, Springfield, Illinois.

The referenced Martin, *et al.*, (1998) describes the presence of an alluvial fan and disturbed soils from landscaping during lock construction (Enclosure 7) within the APE. Also, Martin, *et al.*, describes that Brandon Road Lock and Dam esplanade associated

facilities and grounds as having no to moderate potential to contain undocumented archeological properties. The reference Custer and Custer (1997) documented no known submerged historic properties within the main (bank to bank) channel of the Des Plains River. All referenced reports are on permanent file with the Illinois Historic Preservation Agency, Springfield, Illinois.

Pursuant to Section 800.3 of the Council's regulations and to meet the responsibilities under the NEPA of 1969, this correspondence includes consultation with Interested and Consulting Parties (Enclosure 8, Distribution List). The Corps will comply with any requests to be removed from, or be added to, the Distribution List. The development and maintenance of the list allows agencies, tribes, individuals, organizations, and other interested parties an opportunity to provide views on any effects of this Project undertaking, to participate in the review of the project, and to provide comments within 30 days receipt of this correspondence.

The District recognizes that sacred sites, properties of traditional religious and cultural importance, may have significance to a Tribe and others on the Distribution List which may be affected by the Project. In order to preserve, conserve, and encourage the continuation of the diverse traditional prehistoric, historic, ethnic, and folk cultural traditions within the Project APE, the Project will be implemented in compliance with Executive Order 13007, the NHPA, and other Corps guidance.

Interested and consulting parties have been, and will continue to be, provided with public meeting announcements, special releases, and notifications of the availability of report(s), including all draft and final agreement documentation, as stipulated by 36 CFR Part 800.14(b)(ii) of the NHPA. Those on the Distribution List may not get all of the enclosures, since specific locations of historic and archaeological properties are subject to protection through nondisclosure under Section 304 of the NHPA. This information is not to be released in order to protect the resources at the sites.

Based on the background research in this correspondence, the District recommends that no aquatic survey be conducted in the main channel (bank to bank) of the Des Plains River since no known historic properties are documented as being submerged between IWW river miles 285.0 and 286.5. The Des Plains River was considered too shallow for commercial navigation, and boats preferred the Illinois and Michigan Canal. For clarification to this finding, the semi-submerged Department of Natural Resources leased "commercial dock and marina" lands directly upstream of the mouth of the Illinois and Michigan Canal, and side channel/floodplain tributaries, drainages, and wetlands will be included in the terrestrial survey.

Since there is potential for terrestrial archeological properties, the District will conduct a Phase I intensive archeological survey to search for undocumented archeological sites, to determine the extent of documented land disturbances, and interpret the historic land use within the APE. This report will be provided to your agency for review under Section 106 of the

NHPA. When the District has formulated plans and specifications for the preferred ANS alternatives, these will be coordinated with your agency and others, with determinations of effect on historic properties which have been identified in this correspondence and documented in the aforementioned recommended report.

The District requests formal concurrence of "no historic properties affected" for the APE within main channel (between IWW river miles 285.0 and 286.5) of the Des Plains River and requests comment on our proposal to conduct a Phase I intensive archeological survey. If no comments or response is received within 30 days receipt of this correspondence, the Corps will assume that your agency agrees with our findings and recommendations, and we will proceed with the Phase I survey. If you have any questions, please call Mr. Ron Deiss of our Environmental Planning Branch, 309/794-5185, email (Ronald.W.Deiss@usace.army.mil), or write to our address above, ATTN: Planning, Programs, and Project Management Division (Ron Deiss).

Sincerely,

Kenneth A. Barr

Kenneth A. Barr
Chief, Environmental Planning Branch RPEDN

Enclosures (8)

Illinois Historic Preservation Agency

1 Old State Capitol Plaza, Springfield, IL 62701-1512

FAX (217) 524-7525
www.illinoishistory.gov

Will County
Joliet
Control Aquatic Nuisance Species
Brandon Road Lock and Dam, Illinois River Mile 286
IHPA Log #002021015

July 15, 2015

Ron Deiss
U.S. Army Corps of Engineers, Rock Island District
ATTN: Planning, Programs, & Project Management Division
Clock Tower Building
P.O. Box 2004
Rock Island, IL 61204-2004

Dear Mr. Deiss:

We are in receipt of your submission dated June 25, 2015. We concur with your finding of "no historic properties affected" for the APE within the main channel of the Des Plains River between IWW river miles 285.0 and 286.5.

We also concur that the Corps of Engineers should conduct a Phase I archaeological reconnaissance survey for the project, and look forward to further consultation as plans are developed.

If you have questions please contact David J. Halpin, Cultural Resources Manager, at 217-785-4998.

Sincerely,

Rachel Leibowitz, Ph.D.
Deputy State Historic
Preservation Officer

c: Peter Bullock, U.S. Army Corps of Engineers, Chicago District

For TTY communication, dial 888-440-9009. It is not a voice or fax line.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
PO BOX 2004 CLOCK TOWER BUILDING
ROCK ISLAND, ILLINOIS 61204-2004

RECEIVED
MAR - 9 2016
PRESERVATION SERVICES

REPLY TO
ATTENTION OF

March 8, 2016

NHPA and NAE
IHPA REVIEW
H/A Concur JJH 3/14/16
AC Concur JP 3/19/16
AR
File

Regional Planning and Environmental
Division North (RPEDN)

Rachel Leibowitz, Ph.D.
Deputy State Historic Preservation Officer
Preservation Services Division Manager
Illinois Historic Preservation Agency
1 Old State Capitol Plaza
Springfield, Illinois 62701

Log # 002021015

Dear Dr. Leibowitz:

The U.S. Army Corps of Engineers (Corps), Rock Island District (District), proposes the Great Lakes and Mississippi River Interbasin Study (GLMRIS) at Brandon Road Lock and Dam on the Illinois Waterway (IWW) located at river mile 285.9, Will County, Illinois (Enclosure 1). GLMRIS was authorized in Section 3061(d) of WRDA 2007, Public Law 110-114 as follows:

> FEASIBILITY STUDY – The Secretary, in consultation with appropriate Federal, State, local and nongovernmental entities, shall conduct, at Federal expense, a feasibility study of the range of options and technologies available to prevent the spread of aquatic nuisance species between the Great Lakes and Mississippi River Basins through the Chicago Sanitary and Ship Canal and other aquatic pathways.

The District has been coordinating and consulting with your agency, since December 2014. This correspondence included the proposed Aquatic Nuisance Species study alternatives, compliance, and potential effects to significant Historic Properties required by Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), and its Implementing Regulations 36 CFR Part 800: "Protection of Historic Properties." As an update, the District provides a revised map of the Area of Potential Effect (APE), due to a reduction in acreage from approximately 114 to approximately 100 total acres (Enclosure 2). The majority of the land removed from the APE was on the left descending backline of the Des Plaines River in Tract 3 and of corporate ownership.

By letters dated December 9, 2014 and June 25, 2015, the Corps contacted your agency to initiate consultation and determine the affects to archeological sites resulting from the implementation of the GLMRIS feasibility study. Consultation included the Advisory Council on Historic Preservation (ACHP), Federal and state agencies, Native American tribes, landowners, historical societies, and other parties. Your agency concurred with the APE and proposals regarding Phase I surveys, the lack of significant archeological sites, and potential effects to listed National Register of Historic Places (NRHP) or National Historic Landmarks districts.

These listed properties are the Brandon Road Lock and Dam and the Illinois and Michigan Canal. Portions of the Illinois and Michigan Canal were designated a National Historic Landmark in 1964. The junction lock at the northeastern terminus of the Illinois and Michigan Canal was constructed by the Corps and contributes to the Brandon Road Lock and Dam Historic District.

Your agency concurred with the District's finding within the APE of no historic properties within the Des Plaines River watercourse and the District's recommendation for Phase I surveys for archeological sites (Enclosure 3 dated, July 15, 2015, IHPA Log #001012015). The District conducted archeological investigations on Tracts 1 and 2 that are documented in the following reports:

> Phase I Intensive Archeological and Geomorphological Investigations at the Brandon Road Lock and Dam, Will County, Illinois, which was prepared by David W. Benn and Lowell Blikre of Bear Creek Archaeology (September 2015) for the Rock Island District under Contract Number W912EK-12-D-001, Work Order 0018.
>
> Phase I Intensive Archeological and Geomorphological Investigations at the Brandon Road Lock and Dam, Will County, Illinois, which was prepared by David W. Benn and Lowell Blikre of Bear Creek Archaeology (January 2016) for the Rock Island District under Contract Number W912EK-12-D-0001, Work Order 0018, Modification Number 2

The Phase I reports discovered and evaluated two archeological sites inventoried as 11WI4159 and 11WI4165. Your agency concurred with the District that these sites were ineligible to the NRHP (Enclosure 4, dated January 14, 2016, IHPA LOG #002021015 and (Enclosure 5, dated January 27, 2016) and concurred with the District that no archeological properties would be affected by construction efforts within those tracts. All final Phase I archeological reports have been provided for the permanent files of your agency, as evidence of our compliance under Section 106 of the NHPA, as amended and its implementing regulation 36 CFR Part 800: "Protection of Historic Properties."

Ownership Tract 3 within the APE was determined to be fully disturbed with a previously constructed, commercial fly ash pit. Prior construction involved complete excavation of the subsoil and refilling with fly ash as a byproduct of energy production. Your agency concurred with that District's determination of no historic properties (Enclosure 6, February 18, 2016, IHPA LOG# 002021015).

The District has formulated six alternatives for the GLMRIS project, which are summarized as follows:

1. Future Without Project Condition (Asian Carp and A. lacustre): This alternative assumes that the monitoring and fishing response will continue to be funded through 2019 and does not include any new actions against Asian carp or scud except the potential use of the mobile electric barrier. Operation of at least two of the three Romeoville Electric Barriers would continue throughout the period of analysis.

2. Nonstructural Alternatives (Asian Carp and A. lacustre): In addition to the activities identified in the Sustained Current Activities condition, this alternative consists of implementing applicable non-structural measures of education and outreach, ballast and bilge management, monitoring, threat assessment, adaptive management, pesticides, more robust removal, habitat alteration, and/or laws and regulations. This is estimated to be implemented beginning in 2021.

3. Technology Alternative 1: Electric Barrier: This alternative includes continued operation of at least two of the three Romeoville barriers, the activities outlined in the Nonstructural Alternative, a new electric barrier at Brandon Road Lock and Dam that would operate continuously, fish entrainment mitigation, engineered channel, and flushing lock. The nonstructural activities would begin in 2021 and the implementation of new structural features would be completed by 2031.

4. Technology Alternative 2: Complex Noise: This alternative includes continued operation of at least two of the three Romeoville electric barriers, the activities outlined in the Nonstructural Alternative, complex noise at Brandon Road Lock and, fish entrainment mitigation, engineered channel, and flushing lock. The nonstructural activities would begin in 2021 and the barriers and implementation of new structural features would be completed in 2031.

5. Technology Alternative 3: Complex Noise and Intermittent Electric Barrier: This alternative combines Alternatives 3 and 4. The electric barrier would operate when no vessels are present, and complex noise would operate at least when the electric barrier is not in use. The nonstructural activities would begin in 2021 and the implementation of new structural features would be completed in 2031.

6. Lock Closure: This alternative includes continued operation of at least two of the three Romeoville electric barriers and the activities outlined in the Nonstructural Alternative. The lock would be closed in 2021 and the nonstructural activities would begin in 2021.

Enclosure 7, Description of the Six Alternatives and Enclosure 8, Draft Preliminary Plans for the Technological Alternatives and the Lock Closure provide additional detailed information.

Alternatives 3 through 6—Technical Alternatives 3 through 5 and the Lock Closure—are potentially determined to have an Adverse Effect upon the Brandon Road Lock and Dam Historic District as shown in the following table.

Great Lakes and Mississippi River Interbasin Study
Brandon Road Lock and Dam Historic District Determination of Effect

GLIMRS Alternatives	Effects to NRHP Brandon Road L/D Historic District
Future Without Project Condition	No Effect
Nonstructural Alternatives	No Effect
Technology Alternative 1: Electric Barrier	Adverse Effect
Technology Alternative 2: Complex Noise	Adverse Effect
Technology Alternative 3: Complex Noise and Intermittent Electric Barrier	Adverse Effect
Lock Closure	Adverse Effect

The new construction alternatives will result in destruction of original fabric and modifications to the dam with visual changes to the esplanade and navigable channel. Any new structure and alterations will, in part, retain the existing navigable lock profile and use concrete coloration adhering to the Secretary of the Interiors Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. It is the Corps' opinion that the modifications to the Brandon Road navigable lock will retain the overall historical nature or engineering attributes characteristics under 36 CFR Part 60.4, criteria A and C, will not be lost, and thereby, the lock and esplanade context will be retained as a significant contribution to the Brandon Road Lock and Dam Historic District.

The District acknowledges that the additions or modification to the original fabric of the dam and the new construction within the Brandon Road Lock and Dam Historic District boundaries may be considered to have adverse and visual effects as a result of the Technological Alternatives or the Lock Closure. To mediate those effects, the District has made a finding permissible under 36 CFR Part 800.5(a)(3) and 800.5(a)(3)(b) for a condition for a determination of no adverse effect.

Under the conditional requirements, the District will contract with the National Park Service to produce and publish a book for historical and educational purposes focusing on the significance of the history and engineering of the IWW system using information. This information will be partially gleaned from the final NRHP Nomination Registration Form (http://www.nationalregisterofhistoricplaces.com/il/will/state.html) combined with the National Park Service of the Department of the Interior's Historic American Engineering Record for the IWW Navigation Facilities.

The National Park Service under funding with the U.S. Army Corps of Engineers will complete:

1. An illustrated history of the IWW (Publication) commensurate in scale, subject matter/pictures, layout, and scope to:

O'Brien, William Patrick, Mary Yeater Rathbun, and Patrick O'Bannon1992 *Gateways to Commerce*. Funded by the National Park Service and the U.S. Army Corps of Engineers and Published as a part of the Division of Cultural Resource, Rocky Park Regions, National Park Service, Denver, CO (see http://www.nps.gov/parkhistory/online_books/rmr/2/index.htm);

2. The publication and distribution of one hard copy to all those on this Distribution List, libraries located in the county seat, and the county historical societies in those 22 counties within the State of Illinois that border the IWW; and

3. The funding for the development of a digital copy of the publication will be placed on the National Park Service site similar to that for Gateways to Commerce depicted at: http://www.npshistory.com/series/archeology/rmr/2/index.htm for a minimum of 5 years.

The condition will be initiated upon funding of any of the Technical Alternative for the Lock Closure with the published versions distributed within 3 years of the date of the authorized funding for the construction of the tentatively accepted plan (preferred alternative).

Pursuant to the ACHP's regulations promulgated under Section 106 of the NHPA and to meet the responsibilities under the National Environmental Policy Act of 1969, the District is required to consult with the SHPO and other interested and consulting parties concerning our finding of a conditional no adverse effect.

The Distribution List (Enclosure 9) contains approximately 200 addresses to include Federal and state agencies, historical societies, tribes, landowners, and the general public. The Distribution List was used to share information concerning historic properties and provided with all pertinent correspondence for comment and review during the consultation process. The development and maintenance of the Distribution List allows agencies, tribes, individuals, organizations, and other interested parties an opportunity to provide views on any effects of this undertaking, to participate in the review of the project, and to be provided with all reports, to review and comment on the NHPA and NEPA process, be provided with access to this Aquatic Nuisance Species draft Environmental Impact Statement report, titled *Great Lakes and Mississippi River Interbasin Study – Brandon Road Draft Feasibility Report.* (GLMRIS Draft Report).

The District recognizes that sacred sites, properties of traditional religious and cultural importance, may have significance to tribes and others on the Distribution List which may be affected by the Aquatic Nuisance Species alternatives. In order to preserve, conserve, and encourage the continuation of the diverse traditional prehistoric, historic, ethnic, and folk cultural traditions within the Project APE, the Project will be implemented in compliance with EO13007, the NHPA, and other Corps guidance. The District will continue to consider the notification and identification of traditional religious and sacred sites throughout the planning process. The District has investigated its trust responsibilities emendating from federally- recognized Tribes

and associated treaty rights and trust responsibilities. No direct treat responsibilities were found to preclude project implementation within the APE or the Illinois or Great Lake waterways.

Interested and consulting parties have been, and will continue to be, provided with public meeting announcements, special releases, and notifications of the availability of report(s), as stipulated by 36 CFR Part 800.5(3) and Part 800.5(3)(b) of the NHPA. Those on the Distribution List may not get all of the enclosures, since specific locations of historic and archaeological properties are subject to protection through nondisclosure under Section 304 of the NHPA. Thus far, comments have been received from Miami Tribe of Oklahoma, Citizen Potawatomi Nation, and the Pokagon Band of Potawatomi (Enclosure 10).

By comment dated February 17, 2016, the ACHP reserved the right to participate once the District makes a determination of effect (Enclosure 11). By copy of this letter with the District's determination of a conditional No Adverse Effect pursuant to CFR Part 800.5(c)(3) and ancillary documentation specified in 36 CFR Part 800.11(e), those on the Distribution List and the ACHP are invited to participate in the consultation process.

The District requests formal concurrence with the Finding of No Effect for the Future Without and Nonstructural Alternatives and the conditional No Adverse Effect for the proposed Technological Alternatives 3 through 6. The Tentatively Selected Plan (proposed alternative) will be fully coordination with your agency in the forms of the GLMRIS Draft Report. Your agency and Distribution List parties will be notified of the availability of this report. All referenced reports, NRHP forms, and correspondence, comments and reviews are on permanent file with the Illinois Historic Preservation Agency, Springfield, Illinois and U.S. Army Corps of Engineers, Rock Island District, Rock Island, Illinois.

If no comments or responses are received within 30 days of receipt of this correspondence, the Corps will assume that your agency agrees with our ancillary documentation for determination of No Effect for GLMRIS Alternatives 1 and 2, and a conditional No Adverse Effect for GLMRIS Alternatives 3 through 6, and we will proceed with finalizing the *Great Lakes and Mississippi River Interbasin Study – Brandon Road Draft Feasibility Report*. The point of contact is Mr. Ron Deiss of our Environmental Planning Branch, 309/794-5185, email Ronald.W.Deiss@usace.army.mil, or write to our address above, ATTN: Programs and Project Management Division (Ron Deiss).

Sincerely,

CONCUR

By: R. Leibowitz SJH
Deputy State Historic Preservation Officer

Date 3/23/16

Kenneth A. Barr
Chief, Environmental Planning Branch RPEDN

Enclosures (11)

September 10, 2015

Ron Deiss
District Archeologist/Tribal Liaison
Clock Tower Building
P.O. Box 2004
Rock Island, Illinois 61264-2004

Re: Phase I Intensive Archeological Survey, Brandon Road Lock and Dam; Contract Number W912EK-12-D-0001; Delivery Order 0018; BCA 2183

Dear Mr. Deiss:

We have completed the fieldwork of the Brandon Road Lock and Dam areas indicated in the Scope of Work. The geomorphological assessment resulted in an interpretation that most of the project areas possess little to no potential to contain in situ cultural deposits. The largest project area, the landform on the south side of the lock was found to consist primarily of mixed rock. A similar interpretation was reached by Hajic (2000), who mapped the landform to the south of the lock as Disturbed Land. The islands in the Des Plains River channel were found to be clusters of rocks, possibly a result of the lock and dam construction. The area on the east bank, north of the dam is a disturbed, concrete clad berm.

The project area north of the lock and east of Brandon Road, including the former locations of the Lock Keeper houses (Hajic et al. 1996) is the only portion of the project area that was considered to have archeological site potential. Shovel and auger testing (n = 35) in this area exposed layers of rocky fill over alluvium. The fill contains both historic and prehistoric artifacts, but no cultural materials were recovered from the underlying alluvium. The prehistoric and historic artifacts in the fill are mixed and often historic materials were recovered below the prehistoric. Therefore, all of the prehistoric and most of the historic artifacts recovered are considered to be in a secondary context. Some materials associated with the Lock Keeper houses are present, but these appear to provide little if any new information about the buildings. I am considering whether or not to recommend the archeological remnants of the Lock Keeper houses as contributing features to the Brandon Road Lock and Dam National Register of Historic Places district. However, as a separate site, the archeological remnants of the Lock Keeper houses are not National Register of Historic Places eligible. We will complete a site form and register this property with the Illinois State Museum. The site area is marked as “Site 1” on the enclosed aerial photograph of the project area.

The artifact analysis is currently proceeding and will be completed shortly. Once we’ve received a site number of the Illinois State Museum, the artifacts will be readied for curation. The text of the report is also prepared and the draft will be submitted by the September 28 due date.

Thank you for the opportunity to work with you on this project. If you have any comments or questions, please contact our office.

Sincerely,

Lowell Blikre
Principal Investigator

References Cited:

Hajic, Edwin R.
2000 *Landform Sediment Assemblage (LSA) Units in the Illinois River Valley and the Lower Des Plains River Valley*. Illinois State Museum, Quaternary Studies Program, Springfield, Illinois. Submitted to the U.S. Army Corps of Engineers, Rock Island District, Rock Island, Illinois.

Hajic, Edwin R., Claire F. Martin, and Michael D. Wiant
1996 *Historic Property Potential and Geomorphological Assessment Along the Illinois Waterway for the Rock Island District of the United States Army Corps of Engineers*. Illinois State Museum, Research and Collections Center, Springfield, Illinois. Submitted to the U.S. Army Corps of Engineers, Rock Island District, Rock Island, Illinois.

Brandon Road Lock and Dam Phase I Area

0 125 250 500 750 1,000 Meters

Pokégnek Bodéwadmik • Pokagon Band of Potawatomi
Department of Language and Culture

32142 Edwards Street • Dowagiac, MI 49047 • www.PokagonBand-nsn.gov
(269) 462-4325 • (269) 783-0452 fax

July 16, 2015

Kenneth A. Barr
Chief, Environmental Planning Branch RPEDN
Dept. of the Army Corps of Engineers, Rock Island District
PO Box 2004 Clock Tower Building
Rock Island, Illinois 61204
Ronald.W.Deiss@usace.army.mil

RE: Great Lakes and Mississippi River Interbasin Study at Brandon Road Rock Lock and Dam on the Illinois Waterway (IWW) river mile 285.9 Will County, Illinois.

Dear Mr. Barr:

My name is Marcus Winchester and I am the Tribal Historic Preservation Officer for the Pokagon Band of Potawatomi Indians. My position is responsible for handling Section 106 consultation on behalf of the tribe. I am writing to inform you that after reviewing the study at Brandon Road Rock Lock and Dam on Illinois Waterway river mile 285.9 Will County, Illinois details, we determined that we are unaware of any historical, religious, or culturally significant resources to the Pokagon Band of Potawatomi Indians in the vicinity of the project area. However, if any archaeological resources are uncovered during this undertaking, please contact me immediately. Should you have any other questions, please don't hesitate to contact me at your earliest convenience.

Sincerely,

Marcus Winchester
Tribal Historic Preservation Officer
Pokagon Band of Potawatomi Indians
Office: (269) 462-4224
Cell: (269) 783-9269
marcus.winchester@pokagonband-nsn.gov

Miami Tribe of Oklahoma
P.O. Box 1326
Miami, OK 74355
February 10, 2016

Re: Great Lakes and Mississippi River Interbasin Study

Dear Mr. Barr:

Aya, kikwehsitoole. My name is Diane Hunter, and I am the Acting Tribal Historic Preservation Officer for the Federally Recognized Miami Tribe of Oklahoma. In this capacity, I am the Miami Tribe's point of contact for all Section 106 issues.

In reference to the above-mentioned project, the Miami Tribe is not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, as this site is within the aboriginal homelands of the Miami Tribe, should any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence be discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery.

The Miami Tribe offers no objection to the proposed project at this time. However, should human remains and/or cultural objects be discovered, regardless of initial determination as to site dating or cultural affiliation, please contact me at 918-541-8966, by email at dhunter@miamination.com, or by mail at the address listed above to initiate consultation.

Please update your Interested and Consulting Parties List to include me as the contact for the Miami Tribe of Oklahoma.

Sincerely,
Diane Hunter
Diane Hunter
Acting Tribal Historic Preservation Officer
Miami Tribe of Oklahoma

From: Diane Hunter [dhunter@miamination.com]
Sent: Thursday, December 10, 2015 10:18 AM
To: Deiss, Ronald W @ MVR
Subject: [EXTERNAL] Great Lakes and Mississippi River Interbasin Study at Brandon Road Lock and Dam

Dear Mr. Deiss,

Aya, kikwehsitoole. My name is Diane Hunter, and I am the Acting Tribal Historic Preservation Officer for the Federally Recognized Miami Tribe of Oklahoma. In this capacity, I am the Miami Tribe's point of contact for all Section 106 issues.

In reference to the above-mentioned project, the Miami Tribe is not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the site. However, as this site is within the aboriginal homelands of the Miami Tribe, should any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence be discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery.

The Miami Tribe offers no objection to the proposed project at this time. However, should human remains and/or cultural objects be discovered, regardless of initial determination as to site dating or cultural affiliation, please contact me at 918-541-8966, by email at dhunter@miamination.com <mailto:dhunter@miamination.com> , or by mail at the address listed below to initiate consultation.

Sincerely,

Diane Hunter
Acting Tribal Historic Preservation Officer
Miami Tribe of Oklahoma
P.O. Box 1326
Miami, OK 74355
dhunter@miamination.com
918-541-8966

Deiss, Ronald W @ MVR

From: Andrew Gourd [andrew.gourd@potawatomi.org]
Sent: Wednesday, November 04, 2015 1:35 PM
To: Deiss, Ronald W @ MVR
Cc: Kelli Mosteller
Subject: [EXTERNAL] Updated mailing information

Mr. Ron Deiss

Planning, Programs, and Project Management Division

The Citizen Potawatomi Nation has historic ties to the land area referenced in your letter of October 26, 2015. However, at this time we know of no specific historic or archaeological sites relevant to the Citizen Potawatomi that fall within the APE for this project. Upon discovery of any archaeological remains or resources during construction, demolition, or repair, the applicant should immediately stop and notify the tribe pursuant to 47 C.F.R. Section 1.1312.

Please see that your records for the offices and persons to be notified are updated to those listed below. Consultant Lisa A. Kraft and Karen Phillips are no longer affiliated with our THPO offices or staff.

Thank you for your time,

Andrew Gourd

Citizen Potawatomi Nation

Assistant Tribal Historic Preservation Officer

1899 S Gordon Cooper Drive

Shawnee, OK 74801

(405) 878-5834

Illinois Historic Preservation Agency

1 Old State Capitol Plaza, Springfield, IL 62701-1512

FAX (217) 524-7525
www.illinoishistory.gov

Will County
Joliet
Control Aquatic Nuisance Species
Brandon Road Lock and Dam, Illinois River Mile 286
IHPA Log #002021015

July 15, 2015

Ron Deiss
U.S. Army Corps of Engineers, Rock Island District
ATTN: Planning, Programs, & Project Management Division
Clock Tower Building
P.O. Box 2004
Rock Island, IL 61204-2004

Dear Mr. Deiss:

We are in receipt of your submission dated June 25, 2015. We concur with your finding of "no historic properties affected" for the APE within the main channel of the Des Plains River between IWW river miles 285.0 and 286.5.

We also concur that the Corps of Engineers should conduct a Phase I archaeological reconnaissance survey for the project, and look forward to further consultation as plans are developed.

If you have questions please contact David J. Halpin, Cultural Resources Manager, at 217-785-4998.

Sincerely,

Rachel Leibowitz, Ph.D.
Deputy State Historic
Preservation Officer

c: Peter Bullock, U.S. Army Corps of Engineers, Chicago District

For TTY communication, dial 888-440-9009. It is not a voice or fax line.

RECEIVED

JAN 28 2016

PRESERVATION SERVICES

IHPA REVIEW
H/A
AC NHPA 2/23/16
AR
File

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
PO BOX 2004 CLOCK TOWER BUILDING
ROCK ISLAND, ILLINOIS 61204-2004

REPLY TO
ATTENTION OF

January 22, 2016

Regional Planning and Environmental
Division North (RPEDN)

Rachel Leibowitz, Ph.D.
Deputy State Historic Preservation Officer
Preservation Services Division Manager
Illinois Historic Preservation Agency
1 Old State Capitol Plaza
Springfield, Illinois 62701

Dear Dr. Leibowitz:

The U.S. Army Corps of Engineers (Corps), Rock Island District (District), has been coordinating with your agency concerning the proposed Great Lakes and Mississippi River Interbasin Study (GLMRIS) at Brandon Road Rock Lock and Dam on the Illinois Waterway (IWW) river mile 285.9, Will County, Illinois. In our initial correspondence (logged by your agency as IHPA #002021015) promulgated under Section 106 of the National Historic Preservation Act, as amended, the Corps identified a preliminary Area of Potential Effect (APE) between IWW river miles 285.0 and 286.5, which includes 112 terrestrial acres. The District proposed to conduct a Phase I archeological survey of the entire APE, later identified as Tracks 1, 2, and 3. The Corps has conducted Phase I archeological Surveys of Tracts 1 and 2, coordinated the draft reports with your agency, with a documented finding of No Historic Properties.

The Draft Report: ***Hazardous Toxic and Radioactive (HTRW) and Non-HTRW Investigation*** (Enclosure 1) for Brandon Road Lock and Dam GLMRIS published in May 2015 by the Chicago District's Hydraulic and Environmental Engineering Section. The Report documents that Tract 3 (approximately 50 acres), has been disturbed by soil borrowing and filling. This finding is illustrated, via aerial photography on Page 10, that the land is being borrowed for soil, inundated by water, filled with refuse, possible fly ash, and then capped. Therefore, the Draft Report indicates that subsoils in Tract 3 had been removed or disturbed to the extent that Tract 2 has little to no potential for containing significant historic properties. Please note that because this report is in the draft stage, Attachments A, B, C, D, and F are not yet included.

All those listed on Interested and Consulting Parties List (Enclosure 2) are welcome to comment on the consultation process or the District's finding of No Historic Properties, and can request address changes or additions or removals addressed to the undersigned. By copy of this correspondence, the Advisory Council on Historic Preservation is invited to participate in the consulting process and comment on the undertaking.

The District requests formal concurrence of "no archeological properties affected" for the privately owned approximately 50 acres (Tract 3) and/or provide comments on the enclosed Draft Report. If no comments or response is received within 30 days receipt of this correspondence, the Corps will assume that your agency agrees with our findings and recommendations. If you have any questions, please call Mr. Ron Deiss of our Environmental Planning Branch, 309/794-5185, email (Ronald.W.Deiss@usace.army.mil), or write to our address above, ATTN: Planning, Programs, and Project Management Division (Ron Deiss).

Sincerely,

Kenneth A. Barr
Chief, Environmental Planning Branch RPEDN

Enclosures

CONCUR

By: Rachel Leibowitz
Deputy State Historic Preservation Officer

Date: 2-18-16

Illinois Historic Preservation Agency

1 Old State Capitol Plaza, Springfield, IL 62701-1512

FAX 217/524-7525
www.illinoishistory.gov

Will County
Joliet
Brandon Road Lock and Dam, Illinois River Mile 286
11WI4150, Section:20-Township:35N-Range:10E, Section:21-Township:35N-Range:10E
BCA-2183, COEC, COERI-W912EK-12-D-0001
Control Aquatic Nuisance Species

PLEASE REFER TO: IHPA LOG #002021015

January 14, 2016

Ron Deiss
U.S. Army Corps of Engineers, Rock Island District
ATTN: Planning, Programs, & Project Management Division
Clock Tower Building, P.O. Box 2004
Rock Island, IL 61204-2004

Dear Mr. Deiss:

Thank you for requesting comments from our office concerning the possible effects of the project referenced above on cultural resources. Our comments are required by Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties".

We have reviewed the report and find it to be adequate. We look forward to receiving the survey for the remainder of the project area to which access was denied. If you have any question please contact Joe Phillippe at (217) 785-1279.

Sincerely,

Rachel Leibowitz, Ph.D.
Deputy State Historic
Preservation Officer

RL/JSP

c: Peter Bullock, U.S. Army Corps of Engineers, Chicago District

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
PO BOX 2004 CLOCK TOWER BUILDING
ROCK ISLAND, ILLINOIS 61204-2004

REPLY TO
ATTENTION OF

RECEIVED
JAN 27 2016
PRESERVATION SERVICES

IHPA REVIEW
H/A
AC
AR
File

2/16/16

January 22, 2016

Regional Planning and Environmental
Division North (RPEDN)

Rachel Leibowitz, Ph.D.
Deputy State Historic Preservation Officer
Preservation Services Division Manager
Illinois Historic Preservation Agency
1 Old State Capitol Plaza
Springfield, Illinois 62701

2 copies rcvd.
NO CD

Dear Dr. Leibowitz:

The U.S. Army Corps of Engineers (Corps), Rock Island District (District), has been coordinating with your agency concerning the proposed Great Lakes and Mississippi River Interbasin Study (GLMRIS) at Brandon Road Rock Lock and Dam on the Illinois Waterway (IWW) river mile 285.9, Will County, Illinois. In our initial correspondence (logged by your agency as IHPA #002021015) promulgated under Section 106 of the National Historic Preservation Act (NHPA), as amended, the Corps identified a preliminary Area of Potential Effect between IWW river miles 285.0 and 286.5, which includes 112 terrestrial acres.

On the Corps-owned land, the District focused on conducting a Phase I archeological survey of the 33 acres (also called Tract 1) encompassed by the Brandon Road Lock and Dam Historic District. These Phase I investigations are documented in the draft *Phase I Archeological and Geomorphological Investigations at the Brandon Road Lock and Dam*), which was prepared by David W. Benn and Lowell Blikre of Bear Creek Archaeology (September 2015) for the Rock Island District under Contract No. W912EK-12-D-001, Work Order 0018. This draft report is still under review by your agency.

An additional 29.2 acres was surveyed for historic properties in late August and early September in 2015 on privately owned lands (also called Tract 2). These Phase I investigations are documented in the draft *Phase I Intensive Archeological and Geomorphological Investigations at Radanovich Property Near the Brandon Road Lock and Dam, Will County, Illinois* (Draft Report), which was prepared by David W. Benn and Lowell Blikre of Bear Creek Archaeology (January 2016) for the Rock Island District under Contract Number W912EK-12-D-0001, Work Order 0018, Modification Number 2 (Draft Report, 2 copies provided).

The Draft Report documents one archeological site (designated as 11WI4165), and page 20 recommendation states: "11WI4165 is interpreted to be not National Register of Historic Places (NRHP) eligible. No additional archeological investigation is recommended for this site." The site consists of a mix of historic artifacts and partial foundation interpreted to be middle 20th century (page 19).

All those listed on Interested and Consulting Parties List (Enclosure 2) are welcome to comment on the consultation process and can request address changes or additions or removals addressed to the undersigned. Under Section 304 of the NHPA, copies of the archeological reports containing site location information are not for public distribution. Permission for accessibility or copies of the enclosed Draft Report can be requested from Dr. Rachel Leibowitz, Deputy State Historic Preservation Officer, at the address above

Further Phase I archeological investigations will continue on the remaining approximately 50 acres of privately owned land (also called Tract 3) within the Area of Potential Effect (APE), when the Corps has refined the proposed alternatives for the proposed GLMRIS project and have executed rights-of-entry. The District will continue to: 1) keep your agency informed of changes in the APE as it continues to be refined to reflect changes in the planning and engineering processes in GLMRIS plan formulation, 2) identify historic properties, and (3) determine effects to the NRHP-listed Brandon Road Lock and Dam. The Advisory Council on Historic Preservation will be continued to be updated on the GLMRIS consultation process and is formally invited to participate in drafting of any proposed agreement documentation, any proposed conditions, and/or avoidance, to protest significant historic properties, including Brandon Road Lock and Dam Historic District.

The District requests formal concurrence of "no archeological properties affected" for the privately owned 22.9 acres (Tract 2) and/or provide comments on the enclosed Draft Report. If no comments or response is received within 30 days receipt of this correspondence, the Corps will assume that your agency agrees with our findings and recommendations, and we will provide your agency with 2 paper and 2 CD copies of the final report and proceed with the Phase I archeological survey of the remainder of the APE (Tract 3) when the right-of-entry is executed.

If you have any questions, please contact Mr. Ron Deiss of our Environmental Planning Branch, 309/794-5185, email (Ronald.W.Deiss@usace.army.mil), or write to our address above, ATTN: Planning, Programs, and Project Management Division (Ron Deiss).

Sincerely,

Kenneth A. Barr
Chief, Environmental Planning Branch RPEDN

Enclosures

CONCUR
By: Rachel Leibowitz
Deputy State Historic Preservation Officer
Date: 2-17-16

Deiss, Ronald W @ MVR

From: Brian Lusher [blusher@achp.gov]
Sent: Wednesday, February 17, 2016 3:12 PM
To: Deiss, Ronald W @ MVR
Subject: [EXTERNAL] GLMRIS correspondence

Hi Ronald,

I'm in receipt of the 1.22.16 letters the Corps sent to the IL SHPO. Thanks for including us; I have opened a case for this in our database. I noted that both letters were an invitation to the ACHP to participate and I also noted that both letters requested concurrence from the SHPO on the absence of archaeological properties within parts of the APE. We will hold off on deciding on our participation until such time as the Corps may make a finding of adverse effect and then be required to invite the ACHP to participate at that time.

Thanks,
Brian

New ACHP Guidance on Agreement Documents now available at:

Blockedhttp://www.achp.gov/agreementdocguidance.html
<Blockedhttp://www.achp.gov/agreementdocguidance.html>

Brian Lusher

Program Analyst

Advisory Council on Historic Preservation

401 F Street NW, Suite 308

Washington, DC 20001-2637

202.517.0221

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
PO BOX 2004 CLOCK TOWER BUILDING
ROCK ISLAND, ILLINOIS 61204-2004

REPLY TO
ATTENTION OF

March 8, 2016

Regional Planning and Environmental
Division North (RPEDN)

Rachel Leibowitz, Ph.D.
Deputy State Historic Preservation Officer
Preservation Services Division Manager
Illinois Historic Preservation Agency
1 Old State Capitol Plaza
Springfield, Illinois 62701

Dear Dr. Leibowitz:

The U.S. Army Corps of Engineers (Corps), Rock Island District (District), proposes the Great Lakes and Mississippi River Interbasin Study (GLMRIS) at Brandon Road Lock and Dam on the Illinois Waterway (IWW) located at river mile 285.9, Will County, Illinois (Enclosure 1). GLMRIS was authorized in Section 3061(d) of WRDA 2007, Public Law 110-114 as follows:

> FEASIBILITY STUDY – The Secretary, in consultation with appropriate Federal, State, local and nongovernmental entities, shall conduct, at Federal expense, a feasibility study of the range of options and technologies available to prevent the spread of aquatic nuisance species between the Great Lakes and Mississippi River Basins through the Chicago Sanitary and Ship Canal and other aquatic pathways.

The District has been coordinating and consulting with your agency, since December 2014. This correspondence included the proposed Aquatic Nuisance Species study alternatives, compliance, and potential effects to significant Historic Properties required by Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), and its Implementing Regulations 36 CFR Part 800: "Protection of Historic Properties." As an update, the District provides a revised map of the Area of Potential Effect (APE), due to a reduction in acreage from approximately 114 to approximately 100 total acres (Enclosure 2). The majority of the land removed from the APE was on the left descending backline of the Des Plaines River in Tract 3 and of corporate ownership.

By letters dated December 9, 2014 and June 25, 2015, the Corps contacted your agency to initiate consultation and determine the affects to archeological sites resulting from the implementation of the GLMRIS feasibility study. Consultation included the Advisory Council on Historic Preservation (ACHP), Federal and state agencies, Native American tribes, landowners, historical societies, and other parties. Your agency concurred with the APE and proposals regarding Phase I surveys, the lack of significant archeological sites, and potential effects to listed National Register of Historic Places (NRHP) or National Historic Landmarks districts.

These listed properties are the Brandon Road Lock and Dam and the Illinois and Michigan Canal. Portions of the Illinois and Michigan Canal were designated a National Historic Landmark in 1964. The junction lock at the northeastern terminus of the Illinois and Michigan Canal was constructed by the Corps and contributes to the Brandon Road Lock and Dam Historic District.

Your agency concurred with the District's finding within the APE of no historic properties within the Des Plaines River watercourse and the District's recommendation for Phase I surveys for archeological sites (Enclosure 3 dated, July 15, 2015, IHPA Log #001012015). The District conducted archeological investigations on Tracts 1 and 2 that are documented in the following reports:

> Phase I Intensive Archeological and Geomorphological Investigations at the Brandon Road Lock and Dam, Will County, Illinois, which was prepared by David W. Benn and Lowell Blikre of Bear Creek Archaeology (September 2015) for the Rock Island District under Contract Number W912EK-12-D-001, Work Order 0018.
>
> Phase I Intensive Archeological and Geomorphological Investigations at the Brandon Road Lock and Dam, Will County, Illinois, which was prepared by David W. Benn and Lowell Blikre of Bear Creek Archaeology (January 2016) for the Rock Island District under Contract Number W912EK-12-D-0001, Work Order 0018, Modification Number 2

The Phase I reports discovered and evaluated two archeological sites inventoried as 11WI4159 and 11WI4165. Your agency concurred with the District that these sites were ineligible to the NRHP (Enclosure 4, dated January 14, 2016, IHPA LOG #002021015 and (Enclosure 5, dated January 27, 2016) and concurred with the District that no archeological properties would be affected by construction efforts within those tracts. All final Phase I archeological reports have been provided for the permanent files of your agency, as evidence of our compliance under Section 106 of the NHPA, as amended and its implementing regulation 36 CFR Part 800: "Protection of Historic Properties."

Ownership Tract 3 within the APE was determined to be fully disturbed with a previously constructed, commercial fly ash pit. Prior construction involved complete excavation of the subsoil and refilling with fly ash as a byproduct of energy production. Your agency concurred with that District's determination of no historic properties (Enclosure 6, February 18, 2016, IHPA LOG# 002021015).

The District has formulated six alternatives for the GLMRIS project, which are summarized as follows:

1. Future Without Project Condition (Asian Carp and A. lacustre): This alternative assumes that the monitoring and fishing response will continue to be funded through 2019 and does not include any new actions against Asian carp or scud except the potential use of the mobile electric barrier. Operation of at least two of the three Romeoville Electric Barriers would continue throughout the period of analysis.

2. Nonstructural Alternatives (Asian Carp and A. lacustre): In addition to the activities identified in the Sustained Current Activities condition, this alternative consists of implementing applicable non-structural measures of education and outreach, ballast and bilge management, monitoring, threat assessment, adaptive management, pesticides, more robust removal, habitat alteration, and/or laws and regulations. This is estimated to be implemented beginning in 2021.

3. Technology Alternative 1: Electric Barrier: This alternative includes continued operation of at least two of the three Romeoville barriers, the activities outlined in the Nonstructural Alternative, a new electric barrier at Brandon Road Lock and Dam that would operate continuously, fish entrainment mitigation, engineered channel, and flushing lock. The nonstructural activities would begin in 2021 and the implementation of new structural features would be completed by 2031.

4. Technology Alternative 2: Complex Noise: This alternative includes continued operation of at least two of the three Romeoville electric barriers, the activities outlined in the Nonstructural Alternative, complex noise at Brandon Road Lock and, fish entrainment mitigation, engineered channel, and flushing lock. The nonstructural activities would begin in 2021 and the barriers and implementation of new structural features would be completed in 2031.

5. Technology Alternative 3: Complex Noise and Intermittent Electric Barrier: This alternative combines Alternatives 3 and 4. The electric barrier would operate when no vessels are present, and complex noise would operate at least when the electric barrier is not in use. The nonstructural activities would begin in 2021 and the implementation of new structural features would be completed in 2031.

6. Lock Closure: This alternative includes continued operation of at least two of the three Romeoville electric barriers and the activities outlined in the Nonstructural Alternative. The lock would be closed in 2021 and the nonstructural activities would begin in 2021.

Enclosure 7, Description of the Six Alternatives and Enclosure 8, Draft Preliminary Plans for the Technological Alternatives and the Lock Closure provide additional detailed information.

Alternatives 3 through 6—Technical Alternatives 3 through 5 and the Lock Closure—are potentially determined to have an Adverse Effect upon the Brandon Road Lock and Dam Historic District as shown in the following table.

Great Lakes and Mississippi River Interbasin Study
Brandon Road Lock and Dam Historic District Determination of Effect

GLIMRS Alternatives	Effects to NRHP Brandon Road L/D Historic District
Future Without Project Condition	No Effect
Nonstructural Alternatives	No Effect
Technology Alternative 1: Electric Barrier	Adverse Effect
Technology Alternative 2: Complex Noise	Adverse Effect
Technology Alternative 3: Complex Noise and Intermittent Electric Barrier	Adverse Effect
Lock Closure	Adverse Effect

The new construction alternatives will result in destruction of original fabric and modifications to the dam with visual changes to the esplanade and navigable channel. Any new structure and alterations will, in part, retain the existing navigable lock profile and use concrete coloration adhering to the Secretary of the Interiors Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. It is the Corps' opinion that the modifications to the Brandon Road navigable lock will retain the overall historical nature or engineering attributes characteristics under 36 CFR Part 60.4, criteria A and C, will not be lost, and thereby, the lock and esplanade context will be retained as a significant contribution to the Brandon Road Lock and Dam Historic District.

The District acknowledges that the additions or modification to the original fabric of the dam and the new construction within the Brandon Road Lock and Dam Historic District boundaries may be considered to have adverse and visual effects as a result of the Technological Alternatives or the Lock Closure. To mediate those effects, the District has made a finding permissible under 36 CFR Part 800.5(a)(3) and 800.5(a)(3)(b) for a condition for a determination of no adverse effect.

Under the conditional requirements, the District will contract with the National Park Service to produce and publish a book for historical and educational purposes focusing on the significance of the history and engineering of the IWW system using information. This information will be partially gleaned from the final NRHP Nomination Registration Form (http://www.nationalregisterofhistoricplaces.com/il/will/state.html) combined with the National Park Service of the Department of the Interior's Historic American Engineering Record for the IWW Navigation Facilities.

The National Park Service under funding with the U.S. Army Corps of Engineers will complete:

1. An illustrated history of the IWW (Publication) commensurate in scale, subject matter/pictures, layout, and scope to:

O'Brien, William Patrick, Mary Yeater Rathbun, and Patrick O'Bannon1992
Gateways to Commerce. Funded by the National Park Service and the U.S. Army Corps of Engineers and Published as a part of the Division of Cultural Resource, Rocky Park Regions, National Park Service, Denver, CO (see http://www.nps.gov/parkhistory/online_books/rmr/2/index.htm);

2. The publication and distribution of one hard copy to all those on this Distribution List, libraries located in the county seat, and the county historical societies in those 22 counties within the State of Illinois that border the IWW; and

3. The funding for the development of a digital copy of the publication will be placed on the National Park Service site similar to that for Gateways to Commerce depicted at: http://www.npshistory.com/series/archeology/rmr/2/index.htm for a minimum of 5 years.

The condition will be initiated upon funding of any of the Technical Alternative for the Lock Closure with the published versions distributed within 3 years of the date of the authorized funding for the construction of the tentatively accepted plan (preferred alternative).

Pursuant to the ACHP's regulations promulgated under Section 106 of the NHPA and to meet the responsibilities under the National Environmental Policy Act of 1969, the District is required to consult with the SHPO and other interested and consulting parties concerning our finding of a conditional no adverse effect.

The Distribution List (Enclosure 9) contains approximately 200 addresses to include Federal and state agencies, historical societies, tribes, landowners, and the general public. The Distribution List was used to share information concerning historic properties and provided with all pertinent correspondence for comment and review during the consultation process. The development and maintenance of the Distribution List allows agencies, tribes, individuals, organizations, and other interested parties an opportunity to provide views on any effects of this undertaking, to participate in the review of the project, and to be provided with all reports, to review and comment on the NHPA and NEPA process, be provided with access to this Aquatic Nuisance Species draft Environmental Impact Statement report, titled *Great Lakes and Mississippi River Interbasin Study – Brandon Road Draft Feasibility Report.* (GLMRIS Draft Report).

The District recognizes that sacred sites, properties of traditional religious and cultural importance, may have significance to tribes and others on the Distribution List which may be affected by the Aquatic Nuisance Species alternatives. In order to preserve, conserve, and encourage the continuation of the diverse traditional prehistoric, historic, ethnic, and folk cultural traditions within the Project APE, the Project will be implemented in compliance with EO13007, the NHPA, and other Corps guidance. The District will continue to consider the notification and identification of traditional religious and sacred sites throughout the planning process. The District has investigated its trust responsibilities emendating from federally- recognized Tribes

and associated treaty rights and trust responsibilities. No direct treat responsibilities were found to preclude project implementation within the APE or the Illinois or Great Lake waterways.

Interested and consulting parties have been, and will continue to be, provided with public meeting announcements, special releases, and notifications of the availability of report(s), as stipulated by 36 CFR Part 800.5(3) and Part 800.5(3)(b) of the NHPA. Those on the Distribution List may not get all of the enclosures, since specific locations of historic and archaeological properties are subject to protection through nondisclosure under Section 304 of the NHPA. Thus far, comments have been received from Miami Tribe of Oklahoma, Citizen Potawatomi Nation, and the Pokagon Band of Potawatomi (Enclosure 10).

By comment dated February 17, 2016, the ACHP reserved the right to participate once the District makes a determination of effect (Enclosure 11). By copy of this letter with the District's determination of a conditional No Adverse Effect pursuant to CFR Part 800.5(c)(3) and ancillary documentation specified in 36 CFR Part 800.11(e), those on the Distribution List and the ACHP are invited to participate in the consultation process.

The District requests formal concurrence with the Finding of No Effect for the Future Without and Nonstructural Alternatives and the conditional No Adverse Effect for the proposed Technological Alternatives 3 through 6. The Tentatively Selected Plan (proposed alternative) will be fully coordination with your agency in the forms of the GLMRIS Draft Report. Your agency and Distribution List parties will be notified of the availability of this report. All referenced reports, NRHP forms, and correspondence, comments and reviews are on permanent file with the Illinois Historic Preservation Agency, Springfield, Illinois and U.S. Army Corps of Engineers, Rock Island District, Rock Island, Illinois.

If no comments or responses are received within 30 days of receipt of this correspondence, the Corps will assume that your agency agrees with our ancillary documentation for determination of No Effect for GLMRIS Alternatives 1 and 2, and a conditional No Adverse Effect for GLMRIS Alternatives 3 through 6, and we will proceed with finalizing the *Great Lakes and Mississippi River Interbasin Study – Brandon Road Draft Feasibility Report*. The point of contact is Mr. Ron Deiss of our Environmental Planning Branch, 309/794-5185, email Ronald.W.Deiss@usace.army.mil, or write to our address above, ATTN: Programs and Project Management Division (Ron Deiss).

Sincerely,

Kenneth A. Barr
Chief, Environmental Planning Branch RPEDN

Enclosures (11)

Attachment 8:

FUTURE WITHOUT PROJECT (FWOP) REQUEST FOR INFORMATION FROM AGENCIES, ORGANIZATIONS, NATIVE AMERICAN TRIBES, STAKEHOLDERS, AND CONSULTING PARTIES

GLMRIS-BR INFO REQUESTS, JUNE '15

Organization	Letter Sent	Info Deadline	Receive Info	Name	Title	Phone Number	Address	department	Email
Major impact on conditions/operations of the CAWS									
USEPA	8/6/2015	9/7/2015	9/23/2015	Kenneth Westlake	NEPA Compliance Coordinator	312-886-9296	77 West Jackson Blvd. Chicago, IL 60604 Mail Code: E-19J Chicago, IL 60604	Water Division (W-15J)	westlake.kenneth@epa.gov
	8/6/2015	9/7/2015	9/23/2015	Cameron Davis	Senior Advisor to the Administrator/co-chair ACRCC	312-886-4957	77 W Jackson Blvd. Chicago, IL 60604 Mail Code: R-19J Chicago, IL 60604		davis.cameron@epamail.epa.gov
	8/6/2015	9/7/2015	9/23/2015	Bill Bolen	GLNPO Coordinator	312-353-6316	77 W Jackson Blvd. Chicago, IL 60604 Mail Code: G-17J Chicago, IL 60604		bolen.bill@epamail.epa.gov
USGS	8/6/2015	9/7/2015		Doug Yeskis	Director Illinois Water Science Center	217-328-9706	405 North Goodwin Urbana, Illinois 61801	USGS Midwest Region	djyeskis@usgs.gov
	8/6/2015	9/7/2015		Sandra Morrison	USGS Midwest Region Staff Scientist	734-214-9393	1451 Green Rd. Ann Arbor, MI 48105	USGS Midwest Region	smorrison@usgs.gov
	8/6/2015	9/7/2015		Leon Carl	Regional Director, Midwest, USGS	734-214-7207	1451 Green Road Ann Arbor, MI 48105	USGS	lcarl@usgs.gov
	8/6/2015	9/7/2015		Paul Buszka	Supervisory Hydrologist, Hydrologic Investigation Section	317-452-0164	5957 Lakeside Boulevard Indianapolis, Indiana 46278	Indiana-Kentucky Water Science Center	pmbuszka@usgs.gov
	8/6/2015	9/7/2015		Mark Gaikowski	USGS Upper Midwest Environmental Sciences Center (UMESC), Research Physiologist	608-781-6284	2630 Fanta Reed Road La Crosse, WI 54603	USGS-UMESC	mgaikowski@usgs.gov
NOAA	8/6/2015	9/7/2015	9/8/2015	Deborah Lee	Director	734-741-2244	Great Lakes Environmental Research Laboratory 4840 South State Road Ann Arbor, MI 48108		deborah.lee@noaa.gov
FEMA	8/6/2015	9/7/2015		Bill Heyse	Civil Engineer	312-408-5323	536 S Clark St, 6th Floor Chicago, IL 60605	FEMA Region V	william.heyse@fema.dhs.gov
IEPA	8/6/2015	9/7/2015	9/2/2015	Marcia Willhite	Chief, Bureau of Water for Illinois EPA	217-782-1654 217-782-3362	1021 N Grand Ave E P.O. Box 19276 Springfield, IL 62794	IEPA	marcia.willhite@illinois.gov
IL DNR (Illinois Department of Natural Resources)	8/6/2015	9/7/2015	9/8/2015	Dan Injerd	Director, Office of Water Resources	312-793-3123	160 N Lasalle Suite 700 Chicago, IL 60601	Office of Water Resources	dan.injerd@illinois.gov
	8/6/2015	9/7/2015	9/8/2015	James Herkert	Director, Office of Resource Conservation	217-785-8272	One Natural Resources Way - Floor 001 Springfield, IL 62702	Office of Resource Conservation	james.herkert@illinois.gov
	8/6/2015	9/7/2015	9/8/2015	Wayne Rosenthal	Director of DNR	217-785-0075	One Natural Resources Way - Floor 003 Springfield, IL 62702	DNR	wayne.rosenthal@illinois.gov
	8/6/2015	9/7/2015	9/8/2015	Kevin Irons	Aquaculture and ANS Program Manager, IDNR	217-557-0719	One Natural Resources Way - Floor 001 Springfield, IL 62702	DNR	kevin.irons@Illinois.gov
IDEM	8/6/2015	9/7/2015		Anne Remek	Sr. Environmental Manager, Office of Legal Counsel/National Resource Damage Assessment	317-233-0447	100 N Senate Ave IGCN 1307 Indianapolis, IN 46204	Indiana Department of Environmental Managmenet	aremek@idem.in.gov
IN DNR	8/6/2015	9/7/2015		Doug Keller	Aquatic Habitat Coordinator	317-232-4080	Division of Fish and Wildlife 402 W. Washington St. W273 Indianapolis, IN 46204	Indiana DNR	dkeller@dnr.in.gov
	8/6/2015	9/7/2015		John Davis	DNR Deputy Director	317-232-4025	402 W. Washinton St. Room W256 Indianapolis, IN 46204	Executive Office	jdavis@dnr.in.gov
City of Chicago	8/6/2015	9/7/2015		Joe Deal	Deputy Chief Operating Officer	312-744-3300	Mayor's Office - Room 509 121 North La Salle Street Chicago, Illinois 60602		joe.deal@cityofchicago.org
	8/6/2015	9/7/2015		Aaron Koch	Deputy Commissioner for Sustainability, City of Chicago Department of Water Management	312-744-4420	333 S. State Street Chicago, IL 60604	GLMRIS POC	aaron.koch@cityofchicago.org
City of Joliet	8/6/2015	9/7/2015		Bob O'Dekirk	Mayor, City of Joliet	815-724-3700	150 W. Jefferson Street Joliet, IL 60432		ROdekirk@jolietcity.org
	8/6/2015	9/7/2015		Kendall B. Jackson	Director, Planning & Economic Department	815-724-4040	150 W. Jefferson Street Joliet, IL 60432		kjackson@jolietcity.org
	8/6/2015	9/7/2015		James D. Hock	City Manager	815-724-3720	150 West Jefferson Street Joliet, IL 60432	City Manager's Office	jhock@jolietcity.org
	8/6/2015	9/7/2015		Jim Trizna	Director of Public Works	815-724-4200	150 W. Jefferson Street Joliet, IL 60432	Public Works Department	cdevivo@jolietcity.org
	8/6/2015	9/7/2015		Dominic Egizio	Chief Executive Officer, Joliet Park District	815-741-7275 EXT: 102	3000 W. Jefferson Street Joliet, IL 60435		degizio@jolietpark.org
Will County	8/6/2015	9/7/2015		Bruce D. Gould	PE Director of Transportation, County Engineer	815-727-8476	16841 W. Laraway Road Joliet, IL 60433	Will County Division of Transportation	highways@willcountyillinois.com
	8/6/2015	9/7/2015		Lawrence M. Walsh	County Executive	815-774-7480	Will County Office Bldg. 302 N. Chicago Street Joliet, IL 60432	Will County	countyexec@willcountyillinois.com
	8/6/2015	9/7/2015		David Dubois, AICP	Will County Land Use Department		58 E. Clinton St, Suite 500 Joliet, IL 60432		
	8/6/2015	9/7/2015		Marcy DeMauro	Executive Director, Will County Forest Preserve District	815-727-8700	17450 W. Laraway Road Joliet, IL 60433	Will County Forest Preserve District	mdemauro@fpdwc.org
MWRDGC	8/6/2015	9/7/2015	9/15/2015	David St. Pierre	Executive Director	312-751-7900	100 E Erie St 3rd Flr Rm 313 Chicago, IL 60611		david.stpierre@mwrd.org

GLMRIS-BR INFO REQUESTS, JUNE '15

Organization	Letter Sent	Info Deadline	Receive Info	Name	Title	Phone Number	Address	department	Email
ANS Control Agencies									
USDA - Natural Resources Conservation Service	8/6/2015	9/7/2015		Tom Krapf	Great Lakes Coordinator	608-577-3033 ext. 232	Natural Resources Conservation Service 8030 Excelsior Drive, Ste. 200 Madison, WI 53707-2906		tom.krapf@usda.gov
US Coast Guard	8/6/2015	9/7/2015	8/27/2015	CDR Ryan Manning	U.S. Coast Guard Marine Safety Unit Chicago	630-986-2155 EXT: 126	555 Plainfield Road, Suite A Willowbrook, IL 60527		ryan.d.manning@uscg.mil
	8/6/2015	9/7/2015	8/27/2015	CDR Dan Somma	U.S. Coast Guard Marine Safety Unit Milwaukee	414-747-7182	2420 S Lincoln Memorial Dr Milwaukee, WI 53207		dan.t.somma@uscg.mil
USFWS	8/6/2015	9/7/2015	9/11/2015	Mike Weimer	Co-chair ACRCC (Chief of Hatcheries)	612/713-5102 (703-358-1715)	U.S. Fish and Wildlife Service Division of Fisheries and Aquatic Resource Conservation 4401 North Fairfax Drive MS-ARLSQ 770 Arlington, Virginia 22203	USFWS, Region 3	mike_weimer@fws.gov
	8/6/2015	9/7/2015	9/11/2015	Charlie Wooley	Deputy Regional Director	612-713-5360	U.S. Fish & Wildlife Service 5600 American Blvd W, Ste 900 Bloomington, MN 55437		charles_wooley@fws.gov
	8/6/2015	9/7/2015	9/11/2015	Nate Caswell	Fish Biologist	618-997-6869	9053 Rt. 148, Suite A Marion, IL 62959		nate_caswell@fws.gov
	8/6/2015	9/7/2015	9/11/2015	Aaron Woldt	Assistant Regional Director, Fisheries Program	612-713-5110	Fisheries & Aquatic Resources Progam 5600 American Blvd. West Bloomington, MN 55437-1173	USFWS, Region 3	aaron_woldt@fws.gov
	8/6/2015	9/7/2015	9/11/2015	Todd Turner	Assistant Regional Director, Fisheries Program	612-713-5127	Fisheries & Aquatic Resources Progam 5600 American Blvd. West Bloomington, MN 55437-1173	USFWS, Region 3	todd_turner@fws.gov
	8/6/2015	9/7/2015	9/11/2015	Karen Harrington	Fish Biologist	850-348-6495	US Fish and Wlidlife Service Home Office 360 Pearson Court Saint Charles, MO 63304	USFWS	karen_harrington@fws.gov
	8/6/2015	9/7/2015	9/11/2015	Ann Runstrom	Lake Sturgeon Coordinator	608-783-8433	US Fish and Wildlife Service La Crosse FWCO 555 Lester Ave. Onalaska, WI 54650	USFWS	ann_runstrom@fws.gov
	8/6/2015	9/7/2015	9/11/2015	Kraig McPeek	Field Supervisor	309-757-5800 ext. 202	Ecological Services Field Office 1511 47th Avenue Moline, IL 61265	USFWS	kraig_mcpeek@fws.gov
	8/6/2015	9/7/2015	9/11/2015	Rob Simmonds	Project Leader	618-997-6869 ext. 14	Fish & Wildlife Conservation Office 9053 Route 148, Suite A Marion, IL 62959	USFWS	rob_simmonds@fws.gov
	8/6/2015	9/7/2015	9/11/2015	Louise Clemency	Chicago Ecological Services Field Office	847-381-2253 x 11	1250 South Grove Avenue Suite 103 Barrington, IL 60010	USFWS	louise_clemency@fws.gov
Other dischargers to the CAWS									
GLC	8/6/2015	9/7/2015	8/12/2015	Tim Eder	Executive Director, GLC	734-971-9135	2805 S. Industrial Hwy, Ste. 10 Ann Arbor, MI 48104-6791	Great Lakes Commission	teder@glc.org
Fisheries and Oceans Canada	8/6/2015	9/7/2015		Dave Burden	Acting Regional Director General, Department of Fisheries and Oceans	519-383-1810	520 Exmouth Street Sarnia, ON N7t8B1		dave.burden@dfo-mpo.gc.ca
	8/6/2015	9/7/2015		Becky Cudmore	Senior Science Advisor	905-336-4474	867 Lakeshore Rd Burlington, ON L7t8B1		Becky.Cudmore@dfo-mpo.gc.ca
Ontario MNR	8/6/2015	9/7/2015	10/7/2015	Bruce Bateman	Executive Director of Ontario Parks	705-755-1702	Ministry of Natural Resources PO Box 7000, 300 Water Street Peterborough ON K9J 8M5		bruce.bateman@ontario.ca
DUPage County Stormwater Management Planning Committee	8/6/2015	9/7/2015		Anthony Charlton, P.E.	Director	630-407-6700	Jack T. Knuepfer Admin Bldg 2nd Floor South 421 N. County Farm Road Wheaton, IL 60187	DuPage County Stormwater Management	charlton@dupageco.org
Will County Stormwater Management Planning Committee		9/7/2015		David Dubois, AICP	Director, Will County Land Use Management	815-740-8140	58 E. Clinton St, Suite 500 Joliet, IL 60432	Will County Land Use Department	ddubois@willcountylanduse.com
Transportation within CAWS									
USDOT	8/6/2015	9/7/2015		Polly Trottenberg	Acting Under Secretary for Policy		400 , 7Th Street, S.W. Room 9410 Washington D.C., 20590		polly.trottenberg@dot.gov
CenterPoint	8/6/2015	9/7/2015					CenterPoint Properties HQ 1808 Swift Drive Oak Brook, Illinois 60523		
USDOT	8/6/2015	9/7/2015		Floyd Miras	Director	312-353-1032	500 West Madison St, Suite 1110 Chicago, IL 60661	Maritime Administration Great Lakes Gateway Office	floyd.miras@dot.gov
IDOT	8/6/2015	9/7/2015		John Fortmann	Deputy Director, Region 1 Engineer	847-705-4000	201 West Center Court Schaumburg, IL 60196	Division of Highways	john.fortmann@illinois.gov
	8/6/2015	9/7/2015		Rick Wojcik	Section Chief of Hydraulics Unit		201 West Center Court Schaumburg, IL 60196	IDOT District 1	rick.wojcik@illinois.gov
Ports of Indiana - Indianapolis	8/6/2015	9/7/2015		Jody Peacock	Vice President	317-233-6225	150 W. Market Street Ste. 100 Indianapolis, IN 46204		Jpeacock@PortsofIndiana.com
	8/6/2015	9/7/2015		Rich Cooper	Chief Executive Officer	317-232-9200	150 W. Market Street Ste. 100 Indianapolis, IN 46204		rcooper@portsofindiana.com
Illinois International Port District	8/6/2015	9/7/2015		Michael Forde	Chair, Board of Directors		3600 East 95th Street Chicago, Illinois 60617	Illinoi International Port District	IIPD@IIPD.com
	8/6/2015	9/7/2015		Anthony Ianello	Executive Director	773-646-4400	3600 E. 95th Street Chicago, IL 60617	Illinois International Port District	IIPD@IIPD.com

GLMRIS-BR INFO REQUESTS, JUNE '15

Organization	Letter Sent	Info Deadline	Receive Info	Name	Title	Phone Number	Address	department	Email
State Management Plan-Detailed Study Area									
IOWA	8/6/2015	9/7/2015		Kim Bogenschutz	Aquatic Nuisance Species Coordinator	515-432-2823	Ledges State Park 1436 255th St. Boone, IA 50036	Iowa Department of Natural Resources	kim.bogenschutz@dnr.iowa.gov
	8/6/2015	9/7/2015		Scott Gritters	Fisheries Biologist	563-872-4976	24142 Hwy. 52 Bellevue, IA 52031	Iowa Department of Natural Resources	scott.gritters@dnr.iowa.gov
MICHIGAN	8/6/2015	9/7/2015		Jon Allan	Director	517-284-5035	Michigan Department of Natural Resources Executive Division P.O. Box 30473 Lansing, MI 48909-7973	Michigan Department of Environmental Quality	allanj@michigan.gov
	8/6/2015	9/7/2015		Tammy Newcomb	Senior Executive	517-284-5832	Michigan Department of Natural Resources Executive Division P.O. Box 30473 Lansing, MI 48909-7973	Michigan Dept. of Natural Resources	newcombt@michigan.gov
MINNESOTA	8/6/2015	9/7/2015		Luke Skinner	Director of Ecological and Water Resources	651-259-5106	Box 25 500 Lafayette Rd. Saint Paul, MN 55155	Minnesota Department of Natural Resources	luke.skinner@state.mn.us
	8/6/2015	9/7/2015		Nick Frohnauer	Invasive Fish/River Habitat Coordinator	651-259-5670	Box 25 500 Lafayette Rd. Saint Paul, MN 55155	Minnesota Department of Natural Resources	nick.frohnauer@state.mn.us
MISSOURI	8/6/2015	9/7/2015		Dave Herzog	Fisheries Biologist	573-243-2659	Big Rivers and Wetlands Field Station 3815 East Jackson Boulevard Jackson, MO 63755	Missouri Department of Conservation	dave.herzog@mdc.mo.gov
	8/6/2015	9/7/2015		Travis Moore	Fish Section Chairperson	573-248-2530	8965 US-36 Suite 1 Hannibal, MO 63401	Missouri Department of Conservation	ross.dames@mdc.mo.gov
NEW YORK	8/6/2015	9/7/2015		Don Einhouse	New York Dept. of Environmental Conservation	716-366-0228	178 Point Drive North Dunkirk, NY 14048	Lake Erie Fisheries Unit	dweinhou@gw.dec.state.ny.us
	8/6/2015	9/7/2015		Don Zelazny	Great Lakes Program Coordinator	716-851-7130	NY SDEC Region 9 Office 270 Michigan Avenue Buffalo, NY 14203	New York Dept. of Environmental Conservation	dezelazn@gw.dec.state.ny.us
OHIO	8/6/2015	9/7/2015	9/8/2015	John Navarro	ANS Coordinator	(614) 265-6346	2045 Morse Rd. Building G3 Columbus, OH 43229		john.navarro@dnr.state.oh.us
	8/6/2015	9/7/2015	9/8/2015	Rich Carter	Executive Administrator of the Fish Mgmt Group for the OH DNR	614-265-6345	2045 Morse Road Columbus, OH 43229-6693		rich.carter@dnr.state.oh.us
PENNSYLVANIA	8/6/2015	9/7/2015		Lori Boughton	Environmental Program Manager	814-332-6984	DEP Northwest Regional Office 230 Chestnut Street Meadville, Pennsylvania 16335	Pennsylvania Dept. of Environmental Protection	lboughton@state.pa.us
	8/6/2015	9/7/2015		Jim Grazio		814-217-9636	301 Peninsula Drive, Suite 4 Erie, Pennsylvania 16505	Pennsylvania Dept. of Environmental Protection	jagrazio@state.pa.us
	8/6/2015	9/7/2015		Timothy D. Schaeffer	Director, Policy and Planning Office	717-705-7807	1601 Elmerton Avenue PO Box 67000 Harrisburg, PA 17106-7000	Pennsylvania Fish and Boat Commission	tischaeffe@state.pa.us
WISCONSIN	8/6/2015	9/7/2015		Byron Karns	Aquatic Biologist	715-483-2281	St. Croix National Scenic Riverway 401 Hamilton Street St. Croix Falls, WI 54024	National Park Service	byron_karns@nps.gov
	8/6/2015	9/7/2015		Bob Wakeman	AIS Program Coordinator	(262) 574-2149	141 NW Barstow St Room 180 Waukesha, WI 53188	Department of Natural Resources	robert.wakeman@wisconsin.gov
	8/6/2015	9/7/2015		Russ Rasmussen	Division Administrator	608-264-6278	PO Box 7921 Madison, WI 53707-7921	Wisconsin Department of Natural Resources	russell.rasmussen@wisconsin.gov
	8/6/2015	9/7/2015		Stephen Galarneau	Director, Office of Great Lakes	608-266-1956	PO Box 7921 Madison, Wi 53703	Department of Natural Resources	stephen.galarneau@wisconsin.gov

GLMRIS-BR INFO REQUESTS, JUNE '15

Organization	Letter Sent	Info Deadline	Receive Info	Name	Title	CC.	Phone Number	Address	department	Email
Tribes										
Kickapoo Tribe of Oklahoma	8/6/2015	9/7/2015						P.O. Box 70 McCloud, Oklahoma 74851		
Kickapoo of Kansas	8/6/2015	9/7/2015						1107 Goldfinch Road Horton, Kansas 66434		
Kickapoo Tribe of Texas	8/6/2015	9/7/2015						Box HC 1 9700 Eagle Pass, Texas 78853		
Miami Nation in Indiana	8/6/2015	9/7/2015						P.O. Box 41 Peru, Indiana 46970		
Miami Tribe of Oklahoma	8/6/2015	9/7/2015		Attn. Joshua Sutterfield				P.O. Box 1326 Miami, Oklahoma 74355		
Citizen Potawatomi Nation	8/6/2015	9/7/2015						1901 South Gordon Cooper Drive Shawnee, Oklahoma 74801		
Forest County Potawatomi Executive Council	8/6/2015	9/7/2015						P.O. Box 340 Crandon, Wisconsin 54520		
Huron Potawatomi Tribal Office	8/6/2015	9/7/2015						2221 One-and-a-half Mile Road Fulton, Michigan 49052		
Hannahville Potawatomi Community, Council	8/6/2015	9/7/2015						North 14911 Hannahville Road Wilson, Michigan 49896		
Pokagon Band of Potawatomi Indians	8/6/2015	9/7/2015						P.O. Box 180 Dowagiac, Michigan 49047		
Prairie Band Potawtomi Tribal Council	8/6/2015	9/7/2015						16281 Q Road Mayetta, KS 66509		
Inter-Tribal Council of Michigan	8/6/2015	9/7/2015						2956 Ashmun Street Sault Ste. Marie, Michigan 49783		
Sault Ste. Marie Tribe of Chippewa Indians	8/6/2015	9/7/2015		Inter-Tribal Fisheries and Assessment Program				179 West Three Mile Road Sault Ste. Marie, Michigan 49783		

Great Lakes Indian Fish & Wildlife Commission	8/6/2015	9/7/2015						P.O. Box 9, Maple Lane New Odanah, Wisconsin 54861		
Great Lakes Intertribal Council	8/6/2015	9/7/2015		Mr. Mike Allen	Senior Executive Director			P.O. Box 9 Lac Du Flambeau, Wisconsin 54538		
Great Lakes Agency, Bureau of Indian Affairs	8/6/2015	9/7/2015		Ms. Diane Rosen	Superintendent			916 West Lakeshore Ashland, Wisconsin 54806		
Chippewa Ottawa Resource Authority	8/6/2015	9/7/2015						179 West Three Mile Road Sault Ste. Marie, Michigan 49783		
Bay Mills Indian Community	8/6/2015	9/7/2015						12140 West Lakeshore Drive Brimley, Michigan 49715		
Keweenaw Bay Indian Community	8/6/2015	9/7/2015		Attn. Tribal Historic Preservation Office				Tribal Center Building 107 Bear Town Road Baraga, Michigan 49908		
Little Traverse Bay Band of Odawa Indians, Inc.	8/6/2015	9/7/2015		Attn. Cultural Preservation Director				7500 Odawa Circle Harbor Springs, Michigan 49740		
Saginaw Chippewa Indian Tribe of Michigan	8/6/2015	9/7/2015	8/31/2015	Attn. Ziibiwing Cultural Society				Tribal Office 7070 East Broadway Road Mount Pleasant, Michigan 48858		
Sault Ste. Marie Tribe of Chippewa Indiana of Michigan	8/6/2015	9/7/2015		Attn. Cultural Division				Tribal Office 523 Ashmun Street Sault Ste. Marie, Michigan 49783		
Grand Traverse Band of Ottawa & Chippewa Indians of Michigan	8/6/2015	9/7/2015						2605 North West Bayshore Drive Peshawbestown, Michigan 49682		
Lac Vieux Desert Band of Lake Superior Chippewa Indians of Michigan	8/6/2015	9/7/2015		Attn. Tribal Historic Preservation Office				Tribal Office P.O. Box 249 - Choate Road Watersmeet, Michigan 49969		
Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians of Michigan	8/6/2015	9/7/2015						P.O. Box 218 Dorr, Michigan 49323		

Minnesota Chippewa Tribe Fond Du Lac Reservation Business Committee	8/6/2015	9/7/2015						Tribal Office 105 University Road Cloquet, Minnesota 55720		
Bad River Band of Lake Superior Chippewa Indians of Wisconsin	8/6/2015	9/7/2015		Bad River Tribal Council				Tribal Office P.O. Box 39 Odanah, Wisconsin 54861		
Lac Du Flambeau Band of Lake Superior Chippewa Indians of Wisconsin	8/6/2015	9/7/2015		Attn. Tribal Historic Preservation Officer				Tribal Office P.O. Box 67 Lac du Flambeau, Wisconsin 54538		
Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin	8/6/2015	9/7/2015		Attn. Tribal Historic Preservation Officer				Tribal Office 88385 Pike Road Bayfield, Wisconsin 54814		
Sokaogon Chippewa Community of Wisconsin	8/6/2015	9/7/2015						Tribal Office 3051 Sand Lake Road Crandon, Wisconsin 54520		
St. Croix Chippewa Indians of Wisconsin	8/6/2015	9/7/2015						Tribal Office 24663 Angeline Avenue Webster, Wisconsin 54893		
Stockbridge Munsee Community of Wisconsin	8/6/2015	9/7/2015						North 8476 Moh He Con Nuck Road Bowler, Wisconsin 54416		
Oneida Indian Nation	8/6/2015	9/7/2015		Legal Department				P.O. Box 662 Oneida, New York 13421		
Tuscarora Nation	8/6/2015	9/7/2015						2006 Mount Hope Road Via Lewiston, New York 14092		
Seneca Nation of Indians	8/6/2015	9/7/2015						P.O. Box 231 Salamanca, New York 14779		
Oneida Tribe of Indians of Wisconsin	8/6/2015	9/7/2015						Tribal Office N7210 Seminary Road P.O. Box 365 Oneida, Wisconsin 54155		
Tonawanda Seneca Nation	8/6/2015	9/7/2015						7027 Meadville Road Via Basom, New York 14013		
St. Regis Band of Mohawk Indians of New York	8/6/2015	9/7/2015						Akwesasne Community Building Route 37 Akwesasne, New York 13655		

Onondaga Nation of New York	8/6/2015	9/7/2015						716 E. Washington Street Suite 104 Syracuse, New York 13210		
Seneca-Cayuga Tribe	8/6/2015	9/7/2015						P.O. Box 1283 Miami, Oklahoma 74355		
Onondaga Nation of New York	8/6/2015	9/7/2015						P.O. Box 319B Hemlock Road Via Nedrow, New York 13120		
Cayuga Nation	8/6/2015	9/7/2015						P.O. Box 11 Versailles, New York 14168		
Chippewa-Cree Tribe of the Rocky Boy's Reservation	8/6/2015	9/7/2015						RR1 Box 544 Box Elder, Montana 59521		
Little River Band of Ottawa Indians	8/6/2015	9/7/2015						375 River Street Manistee, Michigan 49660		
Red Lake Band of Chippewa Indians	8/6/2015	9/7/2015						P.O. Box 550 Red Lake, Minnesota 56671		
Shawnee Tribe, Oklahoma	8/6/2015	9/7/2015						P.O. Box 189 Miami, Oklahoma 74355		
Turtle Mountain Band of Chippewa Indians	8/6/2015	9/7/2015						P.O. Box 900 Highway 5 West Belcourt, North Dakota 58316		
Menominee Indian Tribe of Wisconsin	8/6/2015	9/7/2015		Attn. Tribal Historic Preservation Officer				P.O. Box 910 Keshena, Wisconsin 54135		
Minnesota Chippewa Tribe Fond Du Lac Reservation Business Committee	8/6/2015	9/7/2015		Bois Forte Band (Nett Lake) Business Center				P.O. Box 16 Nett Lake, Minnesota 55772		
Lac Courte Oreilles Band of Lake Superior Chippewa Indians of Wisconsin	8/6/2015	9/7/2015		Attn. Tribal Historic Preservation Office				13394 West Trapania Road Building No. 1 Hayward, Wisconsin 54843		
Ho-Chunk Nation	8/6/2015	9/7/2015						P.O. Box 667 Black River Falls, Wisconsin 54615		
Wyandotte Tribe of Oklahoma	8/6/2015	9/7/2015		Attn. Historic Preservation Director				P.O. Box 250 Wyandotte, Oklahoma 74370		

Peoria Tribe of Oklahoma	8/6/2015	9/7/2015						P.O. Box 1527 Miami, Oklahoma 74355		
Sac and Fox Nation of Missouri in Kansas	8/6/2015	9/7/2015						305 North Main Street Reserve, Kansas 66434		
Sac and Fox of the Mississippi in Iowa	8/6/2015	9/7/2015						349 Meskwaki Road Tama, Iowa 52339		
Sac and Fox Nation of Oklahoma	8/6/2015	9/7/2015						Route 2, Box 246 Stroud, Oklahoma 74079		
Eastern Shawnee Tribe of Oklahoma	8/6/2015	9/7/2015						127 West Oneida P.O. Box 350 Seneca, Missouri 64865		
Absentee Shawnee	8/6/2015	9/7/2015		Attn. Tribal Historic Preservation Officer				2025 South Gordon Cooper Drive Shawnee, Oklahoma 74801		
Delaware Nation, Oklahoma	8/6/2015	9/7/2015		Delaware Executive Committee				P.O. Box 825 Anadarko, Oklahoma 73005		
Delaware Tribe of Indians	8/6/2015	9/7/2015		Delaware Tribal Headquarters				220 NW Virginia Avenue Bartlesville, Oklahoma 74003		
Ottawa Tribe of Oklahoma	8/6/2015	9/7/2015						P.O. Box 110 Miami, Oklahoma 74355		
Haudenosaunee Environmental Task Force (HETF)	8/6/2015	9/7/2015		David Arquette	Director			P.O. Box 992 Hogansburg, New York 13655		

U.S. Fish and Wildlife Service
Asian Carp Prevention Efforts in Support of WRRDA 2014 (Sec 1039)

WRRDA 2014: SEC. 1039. INVASIVE SPECIES.

(b) AQUATIC INVASIVE SPECIES PREVENTION.—

(1) MULTIAGENCY EFFORT TO SLOW THE SPREAD OF ASIAN CARP IN THE UPPER MISSISSIPPI AND OHIO RIVER BASINS AND TRIBUTARIES.—

> (A) IN GENERAL.—The Director of the United States Fish and Wildlife Service, in coordination with the Secretary, the Director of the National Park Service, and the Director of the United States Geological Survey, shall lead a multiagency effort to slow the spread of Asian carp in the Upper Mississippi and Ohio River basins and tributaries by providing technical assistance, coordination, best practices, and support to State and local governments in carrying out activities designed to slow, and eventually eliminate, the threat posed by Asian carp.

- The Service is working with State and Federal agency partners to implement priority projects in support of basinwide Asian carp prevention strategies in the Ohio River basin. In FY2015, the Service is providing $400,000 in base appropriations to implement priority projects in support of the "Management and Control Plan for Bighead, Black, Grass, and Silver Carps in the United States" (http://asiancarp.us/documents/Carps_Management_Plan.pdf) and the "Ohio River Basin Asian Carp Control Strategy Framework" (http://fw.ky.gov/Fish/Documents/ORFMT_Asian_Carp_Strategy.pdf). Please see following for list of projects and funding amounts: http://www.fws.gov/midwest/news/790.html. In addition, the Service is supporting collaboration and providing biological expertise and other support by providing technical assistance through its Fish and Wildlife Conservation Offices, Genetics Laboratory and Fish Health Center, in support of State/Federal actions to address the threat of Asian carp in the basin. Additional information on activities conducted by the Service and its partners is included in the "Annual Report to Congress: Summary of Activities and Expenditures to Manage the Threat of Asian Carp in the Upper Mississippi and Ohio River Basins-June 2012 to June 2014" (http://www.fws.gov/midwest/fisheries/asian-carp/WRRDA2014.pdf). The Service will continue to work with partners to implement actions in support of these strategies, based on availability of resources.

- The Service is working with State and Federal agency partners to implement priority projects in support of basinwide Asian carp prevention strategies in the Upper Mississippi River (UMR) basin. In FY2015, the Service is providing $400,000 in base appropriations to implement priority projects in support of the "Management and Control Plan for Bighead, Black, Grass, and Silver Carps in the United States" (http://asiancarp.us/documents/Carps_Management_Plan.pdf), the "Minnesota Asian Carp Action Plan" , the draft "Action Plan for Management of Asian Carp in the Upper

Mississippi River Basin" and other basinwide partnership plans. Please see following for list of projects and funding amounts: http://www.fws.gov/midwest/news/790.html. In addition, the Service is supporting collaboration and providing biological expertise and other support by providing technical assistance through its Fish and Wildlife Conservation Office, Genetics Laboratory and Fish Health Center, in support of State/Federal actions to address the threat of Asian carp in the basin. Additional information on activities conducted by the Service and its partners is included in the "Annual Report to Congress: Summary of Activities and Expenditures to Manage the Threat of Asian Carp in the Upper Mississippi and Ohio River Basins-June 2012 to June 2014" (http://www.fws.gov/midwest/fisheries/asian-carp/WRRDA2014.pdf). The Service will continue to work with partners to implement actions in support of these strategies, based on availability of resources.

- The Service also supports actions to provide benefits to the UMR basin, as described in the Asian Carp Regional Coordinating Committee's annual prevention strategy the "Asian Carp Control Strategy Framework" (Framework): http://asiancarp.us/documents/2015Framework.pdf. While the goal of the Framework strategy is focused on protecting the Great Lakes from the introduction and establishment of Asian carp populations, certain actions included in the plan provide benefits to both the UMR and Ohio River basins. For example, the Framework includes projects that address the potential exchange of aquatic nuisance species through secondary pathways/temporary hydrologic connections between the Great Lakes and Ohio River basins, as indicated on the GLMRIS Report, and thus afford long-term protection to the Ohio River basin from potential introduction of non-native species currently found in the Great Lakes basin. Specific projects supported by the Service and other partners are found at Eagle Marsh (Indiana), and Killbuck Creek and the Ohio Erie Canal (Ohio) (see Framework for project descriptions).

(B) BEST PRACTICES.—To the maximum extent practicable, the multiagency effort shall apply lessons learned and best practices such as those described in the document prepared by the Asian Carp Working Group entitled ''Management and Control Plan for Bighead, Black, Grass, and Silver Carps in the United States'' and dated November 2007, and the document prepared by the Asian Carp Regional Coordinating Committee entitled ''FY 2012 Asian Carp Control Strategy Framework'' and dated February 2012.

2) REPORT TO CONGRESS.—

(A) IN GENERAL.—Not later than December 31 of each year, the Director of the United States Fish and Wildlife Service, in coordination with the Secretary, shall submit to the Committee on Appropriations and the Committee H. R. 3080—46 on Environment and Public Works of the Senate and the Committee on Appropriations, the Committee on Natural Resources, and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report describing the coordinated strategies

established and progress made toward the goals of controlling and eliminating Asian carp in the Upper Mississippi and Ohio River basins and tributaries.

(B) CONTENTS.—Each report submitted under subparagraph (A) shall include—

(i) any observed changes in the range of Asian carp in the Upper Mississippi and Ohio River basins and tributaries during the 2-year period preceding submission of the report;
(ii) a summary of Federal agency efforts, including cooperative efforts with non-Federal partners, to control the spread of Asian carp in the Upper Mississippi and Ohio River basins and tributaries;
(iii) any research that the Director determines could improve the ability to control the spread of Asian carp;
(iv) any quantitative measures that the Director intends to use to document progress in controlling the spread of Asian carp; and
(v) a cross-cut accounting of Federal and non-Federal expenditures to control the spread of Asian carp.

- The Service and its partners completed and delivered the first-ever Report to Congress (RTC) in January 2015. The 2014 RTC can be accessed at: http://www.fws.gov/midwest/fisheries/asian-carp/WRRDA2014.pdf

- The Service and it partners are currently developing the 2015 RTC, for delivery to Congress by December 31, 2015 (as required).

- Per our request, State and federal agencies should report all Asian carp management activities conducted in the Ohio River and Upper Mississippi River basins between July 15, 2014 to September 30, 2015. For the purposes of the RTC, Asian carp management activities include any activities that support Asian carp monitoring/early detection, control, containment, and/or eradication. Examples include: Asian carp population monitoring (both traditional gears and eDNA), population control, rapid response, public outreach/awareness, law enforcement, research and development, barrier development and related studies, and interagency coordination. This applies to all four species of Asian carp: bighead, silver, black, and grass.

- State and federal agencies will report all expenditures incurred within each respective agency's 2015 Fiscal Year and broken out by source, as follows:
    - State or Federal Agency Base Appropriations
    - EPA Appropriations (Great Lakes Restoration Initiative funds)
    - Other

- The geographic boundaries of the area being summarized in the RTC include the following:
    - USGS Hydrologic delineations for Ohio River Basins (Regional Code 5) -- The drainage of the Ohio River Basin, (includes parts of - Illinois, Indiana, Kentucky, Maryland, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia and West Virginia) and Tennessee Region (Regional Code 6) -The drainage of the Tennessee River Basin. Includes parts of Alabama, Georgia, Kentucky, Mississippi, North Carolina, Tennessee, and Virginia.

    - USGS Hydrologic delineations for Upper Mississippi Region (Regional Code 7) - The drainage of the Mississippi River Basin above the confluence with the Ohio River, excluding the Missouri River Basin. This also includes the CAWS, up to RM 333 of the IWW, where it ends at the entrance to Lake Michigan (includes parts of - Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, South Dakota, and Wisconsin)

- All entries for new occurrence data in both basins (for any of the four Asian carp species) are entered into the USGS Nonindigenous Aquatic Species database at: http://nas.er.usgs.gov/ and maintained by USGS.

- As required in WRRDA 2014, the Service will develop and deliver the RTC on an annual basis, unless otherwise directed by Congress.

From: Potthoff, Johnna J LRC
To: Herleth-king, Shawna S LRC
Subject: FW: [EXTERNAL] Letter from Sue Davis, Aug 6 (UNCLASSIFIED)
Date: Wednesday, August 12, 2015 1:30:21 PM
Attachments: FWOP Solicitation Enclosures - All Others.pdf
GLMRIS_BR_FWOP_ANS_Fishery_Binational-Eder.pdf

One response...can you save this discussion in their folder?

-----Original Message-----
From: Davis, Susanne J LRC
Sent: Wednesday, August 12, 2015 1:25 PM
To: Tim Eder; johnna.j.pottoff@usace.army.mil; Leichty, Andrew L MVR
Cc: 'Matt Doss'; Potthoff, Johnna J LRC
Subject: RE: [EXTERNAL] Letter from Sue Davis, Aug 6 (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Tim

Thank you for letting us know that you received our letter and did not receive the enclosure. We are sorry for the oversight, and I have enclosed a digital copy of both the letter and the attachment with this message.

As part of our planning process, we are soliciting input from numerous stakeholders from the GLMRIS Brandon Road study area regarding future plans that could affect our the physical conditions in the study area within our planning horizon. We included the GLC in this effort because you are such an engaged stakeholder. We will be cataloging the responses we receive from our stakeholders, so if there are specific efforts relating to aquatic nuisance species that the GLC is supporting or advocating, that would be useful information. We are available if you have any questions about the request. If you cannot reach me, you can contact Johnna. I have cc'd her on this message.

An announcement on the next ESC will be coming out shortly. The meeting will be in October.

Thank you so much for contacting us.

Sue

Susanne J. Davis, P.E.
Chief, Planning Branch
Chicago District
susanne.j.davis@usace.army.mil

231 S. LaSalle Street, Suite 1500
Chicago, IL 60604

Office: 312-846-5580
Mobile: 312-823-3530

-----Original Message-----
From: Tim Eder [mailto:teder@glc.org]
Sent: Wednesday, August 12, 2015 11:41 AM

To: johnna.j.pottoff@usace.army.mil; Leichty, Andrew L MVR; Davis, Susanne J LRC
Cc: 'Matt Doss'
Subject: [EXTERNAL] Letter from Sue Davis, Aug 6

Hello Sue, Johnna and Andrew:

I received a letter from Sue looking for information to inform "future without project conditions" for the Brandon Road study. Some questions:

- Unless I am missing something, I don't believe the Great Lakes Commission would have anything to contribute. However, if you think there may be something relevant, please let me know. The GLC will be continuing to advocate for programs and funding to prevent and control invasive species in the Great Lakes, especially through the CAWS.

- I received the letter via snail mail, but none of the enclosures referred to in the letter were included. Could you please send me the letter and the enclosures electronically?

- What are your plans for next meetings of the Exec Steering Committee?

- Finally, do you have any other meetings of briefings scheduled on the project?

Thank you,

Tim Eder, Executive Director

Great Lakes Commission

734-971-9135, ext. 101

teder@glc.org <mailto:teder@glc.org>

BLOCKEDglc.org/BLOCKED

BLOCKEDgreat-lakes.net/BLOCKED

Classification: UNCLASSIFIED
Caveats: NONE

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

BRUCE RAUNER, GOVERNOR LISA BONNETT, DIRECTOR

September 2, 2015

Ms. Susanne Davis
Chief, Planning Branch
Chicago District, U.S. Army Corps of Engineers
231 South La Salle Street, Suite 1500
Chicago, Illinois 60604

Dear Ms. Davis:

Illinois EPA is pleased to assist in the GLMRIS – Brandon Road effort by providing information requested in your August 6, 2015 letter. The information we can provide is limited to that requested under items #1 and #2 in the letter.

1. *Any proposed amendments to laws or regulations impacting water quality of the Upper Illinois Waterway, CAWS and Lake Michigan including total maximum daily loads and discharge standards for current and emerging contaminants.*

a) Water Quality Uses and Standards for the CAWS--The CAWS waterways and the Lower Des Plaines River (Upper Dresden Island Pool and Brandon Pool) recently went through a rulemaking (R2008-009) at the Illinois Pollution Control Board. The purpose of the rulemaking was to reevaluate the "Use Designations" and the water quality standards to protect those uses. The results of the rulemaking are that the "Use Designations" and water quality standards have been upgraded. In order for the rulemaking to become enforceable, it must be approved by USEPA. The Agency is currently assembling the record for submittal to USEPA for approval. Details of the revised uses and standards can be found on the Illinois Pollution Control Board website http://www.ipcb.state.il.us/COOL/external/cases.aspx by entering "R2008-009" as the case you are seeking records on. All five dockets are included.

b) TMDL—There are three TMDLs that are being either completed or implemented that are responsive to your question. Enclosed is a document briefly describing the TMDLs and links to the full reports for more information.

4302 N. Main St., Rockford, IL 61103 (815) 987-7760
595 S. State, Elgin, IL 60123 (847) 608-3131
2125 S. First St., Champaign, IL 61820 (217) 278-5800
2009 Mall St., Collinsville, IL 62234 (618) 346-5120

9511 Harrison St., Des Plaines, IL 60016 (847) 294-4000
412 SW Washington St., Suite D, Peoria, IL 61602 (309) 671-3022
2309 W. Main St., Suite 116, Marion, IL 62959 (618) 993-7200
100 W. Randolph, Suite 10-300, Chicago, IL 60601 (312) 814-6026

2. *Any proposed amendments to laws or regulations impacting air quality of the Chicagoland region, including emission standards.*

   The Illinois EPA has proposed amendments to its sulfur dioxide (SO2) regulations in the Lemont area, and those proposals are near the end of the Illinois Pollution Control Board rulemaking process. The emission standards impact specific named facilities in that area. There are no other proposed regulatory amendments related to air quality, nor any that are expected to impact the Chicagoland region, in the near future.

If you or your staff have additional questions, please contact me.

Sincerely,

Marcia T. Willhite

Marcia T. Willhite
Chief
Bureau of Water

TMDLs projects in the Chicago Area Waterways and Lake Michigan

Upper North Branch Chicago River Watershed TMDL Draft Project
(from the **Executive Summary** of the TMDL Stage 1 Report)

The Upper North Branch Chicago River Watershed is located in northern Illinois (Lake and Cook Counties) and drains approximately 87,000 acres, including the North Shore Channel. The North Branch Chicago River originates as three tributary streams: the 14.7 mile West Fork, 22.1 mile Middle Fork, and the 19.1 mile Skokie River. From their origins in Lake County, these tributaries flow south into Cook County. The Skokie River ends when it enters the Middle Fork, the Middle Fork ends when it joins the West Fork, and the North Branch begins at the junction of the Middle and West Forks and ends at the junction of the North Branch and the North Shore Channel. It then joins the South Branch of the river in downtown Chicago. The South Branch flows into the Chicago Sanitary and Ship Canal where it is diverted westward joining with the Des Plaines River as a tributary of the Illinois River. The Illinois River flows southwest across the state and is a major tributary of the Mississippi River. The TMDL Report will address the water body segments identified below:

Waterbody Designated Uses and Impairments

Impaired Waters	*Designated Uses*	*Impairments*
North Branch Chicago River (HCC-07) West Fork N Branch Chicago R. (HCCB-05) Middle Fork N Branch Chicago R. (HCCC-02, HCCC-04) Skokie River (HCCD-01, HCCD-09)	Aquatic life	Chloride, dissolved oxygen
	Primary contact recreation (swimming)	Fecal coliform bacteria
Middle Fork of the North Branch Chicago River	Aquatic life	Water temperature
Skokie Lagoons (RHJ) Chicago Botanical Garden (RHJA) Eagle Lake (UHH)	Aesthetic quality	Phosphorus (total)

The report is available at: http://www.epa.state.il.us/water/tmdl/report/chicago-river/stage-1-report.pdf

The project is currently in the early stages of the Draft Stage 3 TMDL development process and is expected to be completed in spring of 2017.

At this time the Agency does not have a TMDL for the Chicago Area Waterway System (CAWS) in the vicinity of Brandon Road Lock and Dam located near Joliet, Illinois.

Lake Michigan Beaches Bacteria (*E. coli*) TMDL and Implementation Plan

Illinois EPA has developed the Illinois Lake Michigan Beaches Bacteria (*E. coli*) TMDL and USEPA has approved the TMDL report on July 31, 2013. The TMDL report is comprised of three Sections and addresses 51 Lake Michigan shoreline segments (10-digit HUC 0404000205) located in the Chicago Metropolitan Area within Cook County -29 segments, Suburban Cook County-13 segments, and Lake County - 9 segments, that were identified to be in nonattainment of their designated use - primary contact recreation.

The three Section of the TMDL report are available on the Agency's TMDL website at:
(http://www.epa.state.il.us/water/tmdl/report/lake-michigan-beaches/final-chicago.pdf
http://www.epa.state.il.us/water/tmdl/report/lake-michigan-beaches/final-suburban.pdf
http://www.epa.state.il.us/water/tmdl/report/lake-michigan-beaches/final-lake.pdf

The TMDL approval letter and supporting document is available at:
http://www.epa.state.il.us/water/tmdl/report/lake-michigan-beaches/usepa-final-approval.pdf

Illinois Lake Michigan (nearshore) Toxics – Mercury and PCBs TMDL Scoping Report

Illinois EPA is working with USEPA Region 5 to develop toxics (mercury and PCBs) TMDL Draft report. There are a total of fifty-six segments impaired due to PCBs and mercury. The impaired nearshore open water segment is 180 square miles in size, extending 5 km into Lake Michigan from the Illinois Lake Michigan shoreline, with Lake Michigan serving as its eastern boundary. Additionally, there are fifty-one shoreline (beach) segments identified as impaired due to mercury and PCBs. The term shoreline segment is used in this document because not all of the segments have beaches. The total length of these shoreline segments is approximately 63.5 miles, with segment lengths ranging from 0.07 to 5.5 miles. Finally, interspersed with the shoreline segments, are four harbors that are impaired due to mercury and PCBs. The four harbors are: Waukegan Harbor North (~0.07 square miles), North Point Marina (~0.12 square miles), Diversey Harbor (~0.05 square miles) and Calumet Harbor (~2.4 square miles).

The TMDL Scoping Report is available at: http://www.epa.illinois.gov/Assets/iepa/water-quality/watershed-management/tmdls/reports/lake-michigan-nearshore/maps.pdf

The draft TMDL report will be available for public comments in the next few months (Fall 2015).

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Bruce Rauner, Governor
Wayne A. Rosenthal, Acting Director

September 8, 2015

Susanne J. Davis, P.E.
Chief, Planning Branch
Chicago District, U.S. Army Corps of Engineers
231 So. LaSalle St., Suite 1500
Chicago, IL 60604

Dear Ms. Davis:

I'm writing in response to your recent correspondence to various members of my staff requesting comments on the Great Lakes and Mississippi River Interbasin Study (GLMRIS) – Brandon Road Lock and Dam Study Effort. These comments reflect the combined input from the Office of Water Resources, Office of Resource Conservation and the Office of Realty and Environmental Planning. We would also like to point out the in-depth communication with Asian Carp Regional Coordinating Committee (ACRCC) as well as the GLMRIS Executive Steering Committee and face to face meetings where we have shared details of all the information below.

With regards to your specific request for relevant information, we offer the following:

1. There have been recent changes to water quality standards in the Chicago Area Waterway System (CAWS), and the Illinois Environmental Protection Agency should be contacted for further information regarding this.

2. The Office of Water Resources is in the process of pursuing changes to Part 3700 - Construction in Floodways of Rivers, Lakes and Streams Rules, which includes the development of a Guidance Document. The proposed changes will be posted on the Department's website when they are filed, and will hopefully become final within the next 12 months.

3. IDNR Office of Resource Conservation reviews requests for habitat improvements from other agencies as well as working with local, regional, and municipal bodies. Many of the habitat projects in the CAWS are very site specific and represent mitigation for other ongoing work. The definition of "along the CAWS" is not clear, but IDNR, working closely with USACE and local agencies, have identified habitat improvements in the Des Plaines River such as the removal of low-head dams. We've also been involved with the installation of habitat structures within the CAWS for channel catfish use. IDNR will continue to identify habitat work that will benefit natural resources as part of its broad mission wherever the work may be. This is an ongoing project that has already shown some evidence of movement and establishment of native species in this river.

4. IDNR is operating under significant fiscal constraints. Currently, the majority of funding for Aquatic Nuisance Species (ANS) research, controls, and monitoring is funded by Federal funds, which originate within United States Fish and Wildlife Service (USFWS) to support Illinois' Statewide ANS Comprehensive Management Plan. Additionally, United States Environmental Protection Agency (USEPA) funds for Great Lakes Restoration Initiative (GLRI) through the USFWS are necessary to support ACRCC actions, including monitoring and response work. There are no current alternative funding strategies for Asian carp work near Chicago. However, prior to ACRCC formation and under near emergency conditions, the State of Illinois was able to facilitate a multi-million dollar response by coordinating with local, state, and federal partners.

5. The ANS Program in Illinois has launched several campaigns to prevent the spread of ANS. **Be A Hero–Transport Zero** was the face of this campaign along with continued work in a 'Don't Dump Bait' messaging initiative. We plan to continue these efforts in conjunction with the Illinois-Indiana Sea Grant Program. In addition, this fall we plan to launch a **Be A Hero–Release Zero** messaging campaign which will target Organisms in trade, but which should also help with bait releases. While annual funding of programs will vary, our Invasive Species Unit efforts to reach out to the public sector with a variety of enforcement, inspection, and prevention messages across the state are currently funded (using GLRI). By educating law enforcement agencies within Illinois and across the region, benefits will continue even if funding deteriorates on this initiative by having forms and protocols outlined. We are currently planning to continue these efforts under existing funding.

6. IDNR continues to review administrative rules and statutes to protect Illinois, as well as the 2 watersheds that exist there. Each of the last 3 years modifications have been forwarded to our legislature and regulations have been supported. As a member of the Council of Great Lakes Governors, Illinois co-chaired an Invasive Species Committee where a mutual aid agreement has been drafted with all Governors and Premiers becoming signatory to this. Further, under GLRI funding an Early Detection Rapid Response Plan is being crafted, the results of which are yet undetermined. Updating of our statewide plan is under review with an expected draft to be available within 12 months; this would update the plan which was first formed in 1999.

It is difficult to comment on future fiscal support or future plans as this is up to the support of legislation and a budget which is annually drafted and appropriated. IDNR has been a leader in regards to ANS control, using an approved species list approach in permitting species for import, possession, culture, enforcement, and specifically leading the efforts to control and manage Asian carp. In addition, Illinois has added to the Injurious Species list within our state to further provide tools for regulating the highest risk species. As evidence of our contributions to GLRI opportunities, IDNR will remain active in control and management of Asian carp as supported by GLRI or other funding mechanism.

Finally, I'm attaching a copy of a January 16, 2014 letter that was sent by one of my staff during the Corps' scoping process for the study. It provides some additional detail and concerns about the need to maintain connectivity within river systems. IDNR and its agencies will continue to fulfill its obligation to protect the natural resources of the state, as well as protect the citizens and interests within the state. We seek to work closely with you in the upcoming years to prevent the movement of ANS and implement reasonable strategies in management of these species.

Many more details not found in this response can be found in Monitoring and Response Plan of the ACRCC as posted on www.asiancarp.us as well as monthly updates on the same site, specifically at http://www.asiancarp.us/sampling/results.htm .

Sincerely,

Wayne A. Rosenthal
Director

C: OWR, ORC, OREP

Illinois Department of
Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
http://dnr.state.il.us

Pat Quinn, Governor
Marc Miller, Director

January 16, 2014

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

RE: Proposed GLMRIS - Brandon Road Project, Scoping Comments
County: Will

Dear Mr. Wethington:

The Illinois Department of Natural Resources has received your request for comments for the NEPA scoping process regarding a project near the Bandon Road Lock and Dam proposed as part of the Great Lakes and Mississippi River Interbasin Study (GLMRIS). The objective of the project is to control Aquatic Nuisance Species (ANS) transfer upstream from the Mississippi River basins to the Great Lakes. Structural control methods considered for implementation at this site may include a GLMRIS Lock, electric barriers, ANS treatments, and physical barriers.

The Department is concerned about potential negative impacts to uses and users of the Chicago Area Waterway System (CAWS) as identified in the GLMRIS Report. Of special interest to the Department is the ability of watercraft to navigate through the proposed project without unnecessary delay or exposure to risks. Other potential concerns worth investigating are the risks to workers during project construction and staff during project operation. Short and long-ternm exposures to specific aspects of the project, such as CO_2 infused zones, should be studied. The best alternatives and mitigation should be chosen to prevent negative impacts to uses and users at the Brandon Road project site.

As you are likely aware, the Department has been reviewing a proposed hydropower facility by Northern Illinois Hydropower (NIH), LLC at the Brandon Road Lock and Dam since 2009 (FERC # 12717). The Department is interested in how the proposed GLMRIS project will affect this proposal and if the hydropower project may still be developed in cooperation between NIH and USACE. If so, the cumulative environmental impacts of both hydropower operation and the GLMRIS project at the Brandon Road site should be studied.

Another significant concern of the Department is potential negative impacts on the ability of native aquatic organisms to traverse the proposed project at this location and continue to facilitate the ecological recovery of the Upper Des Plaines River (UDPR, upstream of Brandon Lock and Dam) and CAWS that has been observed in recent decades. The following concerns are validated with survey data and published reports collected from our Fisheries Division, Impact Assessment Section, and freshwater mussel experts with the Illinois Natural History Survey serving an

advisory role to the Department. The Department requests this information be evaluated in the environmental impact statement (EIS) with alternatives and mitigation measures identified that best address these issues.

Native Fishes:

- The primary targets for the GLMRIS – Brandon Road project are Bighead and Silver carps. While it is widely agreed that preventing upstream movement of these species into the Great Lakes Basin is an important goal, curtailing movement of these ANS fish species will also impact movement of desirable native fish species.

- Connectivity within river systems is critical to maintaining and/or restoring sustainable fisheries and native fish diversity. This is particularly true in systems such as the UDPR and the CAWS, which have experienced a long history of water quality degradation. While water quality problems remain and habitat is limited in many areas of the CAWS, conditions have improved markedly over the past 40 years, prompting review of water quality regulations and use attainment goals. On the UDPR there are many areas which retain natural habitat features and where improved water quality has resulted in restoration of sustainable sport fisheries and an increase in fish species richness. The recruitment source for many of the "new" species in the UDPR appears to be the Lower Des Plaines and Illinois rivers. The improvements in water quality in the CAWS and UDPR have stimulated expanded public investment in ecosystem improvements.

- In 1975 there were very few fish of any species present in the many areas of the CAWS, including the Chicago Sanitary and Ship Canal (CSSC; MWRD 1998). In 2012, there were 26 fish species collected in the CSSC during Asian carp monitoring efforts (Asian Carp MRWG 2013). Similar improvements have been observed in most areas of the CAWS. Recruitment sources for new fish species in the CAWS include: refugia within the system, Lake Michigan, and the lower Des Plaines/Illinois River. Among these sources, the lower Des Plaines/Illinois River has the most diverse assemblage of native riverine fish species.

- Since 1983, fish species richness and sport fish abundances have increased in the UDPR (upstream of Brandon Road Lock and Dam) in response to improved water quality conditions. Temporal changes in fish assemblages in the UDPR have been documented in fish surveys conducted by IDNR. A total of 100 fish collections were conducted at 24 locations from 1974 to 2014 (See Appendices, Table 1; Figure 1). Basin Surveys conducted in 1983, 1997, 2003, 2008, and 2013 comprise the majority of the collection data. Very few surveys were done prior to 1983, or between 1983 and 1997. Results of 1983 Des Plaines River Basin Survey are found in Bertrand (1984), and Pescitelli and Rung (2005, 2010).

- Seven of 15 stations sampled in the 1983 Basin Survey were resampled in 1997, 2003, 2008 and 2013. In 1983, these seven locations yielded 21 native fish species in 300 minutes of AC-electrofishing, an average of nine species per station. The AC-electrofishing surveys conducted at the same seven locations in 1997 with similar effort (323 minutes) yielded 37 native fish species for a mean of 16 species per location (Table 2). The number of fish species per station was similar for these seven stations in the subsequent surveys 2003 to 2013;

however, overall species richness has continued to increase over the period from 1997 to 2013(Table 2).

- For all 15 UDPR stations sampled by electrofishing and seining in 1983 there were 28 native fish species collected, including only one intolerant species- a single smallmouth bass collected at the Wisconsin State Line (Appendices, Table 3). No channel catfish were collected in the entire survey, and white sucker was the only sucker species found (Table 2). Twelve additional species were found in 1997 at only seven mainstem sampling stations. Additional new fish species were found in subsequent Basin Survey surveys (Table 3). The 2013 collection included five intolerant fish species, 86 channel catfish and three sucker species. For all surveys combined, 61 native species have been collected.

- Until 2012, the Hofmann Dam located at River Mile 44.5 (Des Plaines River) at Riverside presented a barrier to upstream fish movement. Species appearing since 1983 upstream of the dam would have likely come from refugia within the watershed, for example tributary streams within Illinois or from the Wisconsin portion of the river system. Tributary stations upstream of Hofmann Dam in 1983 included several fish species which appeared in the mainstem in more recent surveys (hornyhead chub, bigmouth shiner, central stoneroller, Johnny darter, and blackside darter; Table 4).

- Over the Basin Survey sampling period from 1997 to 2008, prior to removal of the Hofmann Dam, a number of large-bodied riverine species which were not observed in 1983 were found in the UDPR downstream of the Hoffman Dam, including: quillback, river carpsucker, silver redhorse, smallmouth buffalo, freshwater drum, and flathead catfish. The USFWS also recently collected bigmouth buffalo and black buffalo downstream of the Hofmann Dam (Asian Carp Monitoring Report 2014). Longnose gar, an additional "new" fish species, was captured in the area downstream of the former Hofmann Dam (Table 3; this species was also collected by USFWS, Asian Carp MRWG 2014).

- These large-bodied riverine species are relatively vulnerable to capture by electrofishing, therefore it is unlikely they originated from refugia within the UDPR, since they were absent in the 1983 Basin Survey at 15 locations. The most likely source for these species is the Lower Des Plaines/Illinois River populations where these species are present and common (Asian Carp Monitoring Report 2014). The migration route from the Lower Des Plaines River to the UDPR is through the Brandon Lock. The only other potential recruitment source for large-bodied riverine species is via downstream movement through CSSC (Asian Carp Monitoring Area A), where their presence is rare or undocumented (Asian Carp MRWG 2014). However, the pathway from Lake Michigan through the CAWS appears to be the source for the non-native fish species round goby, and the native species banded killifish (state-threatened), which is becoming more widespread throughout the system in recent years and seems to be advancing downstream in the Illinois River.

- In addition to potential movement of the large-bodied migrants, the appearance of several minnow species downstream of the Hoffman Dam suggests that the Brandon Lock may be used by smaller-bodied fishes as well. In particular, the appearance of rosyface shiner in 2013 indicates potential upstream movement into the UDPR. This species is listed as intolerant by

Illinois EPA and is typically found only in higher quality stream systems. Prior to 2013, there were no records for this species anywhere in the UDPR Watershed upstream of the Brandon Lock (Smogor 2004). Since 2013, rosyface shiner has also been found seven miles upstream of the former Hofmann Dam at Irving Park Road (G-30). Three other fish species found only downstream of Hofmann Dam - suckermouth minnow, striped shiner, and grass pickerel, are potential small-bodied migrants from the Lower Des Plaines River. Longear sunfish were documented for the first time in the UDPR in 2012 (Asian Carp MRWG 2013). The freckled madtom was discovered in the lower Des Plaines River near the confluence with the CSSC in 2005. This fish had not been collected in the Chicago region in 100 years. The most likely source population for this fish is 22 miles downstream, below the Brandon Road Lock and Dam. (Willink *et al.* 2006)

- There are only two tributaries to the Des Plaines River between the former Hofmann Dam and Brandon Lock, Flagg and Sawmill Creeks. In the 1983 Basin Survey, only seven species were collected from these tributaries, suggesting that Flagg and Sawmill Creeks did not serve as refugia for recently documented small-bodied species in the downstream area of UDPR (Table 5).

- In addition to the five Des Plaines River Basin Surveys conducted from 1983 to 2013, samples were collected during intervening years at selected stations. One location at Riverside (G-39, 32 miles upstream of the Brandon Road Dam) was sampled routinely during the period from 1997 to 2013 as part of the Hoffman Dam removal evaluation. This site was also sampled during the 1983 Basin Survey. Results at this location show an increase in species richness over time, similar to the results found for the basin surveys, with more frequent sampling events (Table 6). Another very likely migrant from the Lower Des Plaines River - skipjack herring, was found at this UDPR location in 2001.

- Bertrand (1984) described the Des Plaines River sport fishery as "insufficient to support even moderate angler use" based on the 1983 Basin Survey. Since the early 1990's, selected areas of the UDPR have become heavily used for sport fishing. The IDNR Fisheries Division has worked closely with local angler groups since 1995 to establish species harvest regulations, develop a successful sauger stocking program, reintroduce native aquatic plants, and remove dams to restore connectivity and riverine habitat. Electrofishing data indicates healthy populations for multiple fish species. For example, a survey conducted in 2014 downstream of the former Hofmann Dam site in Riverside yielded 25 native species and a diverse sport fishery including 10 walleye (15-20"), 10 sauger (three year classes, 8-17"), 15 smallmouth bass, 42 largemouth bass, seven northern pike, 25 channel catfish, and seven rock bass.

- Improvements in the sport fishery and in native fish species diversity observed for the UDPR in the past 40 years demonstrate the resiliency of fish and aquatic systems. However, an important component of the restoration equation is connection to diverse downstream recruitment sources. The sportfishery appears to have recovered to sustainable levels and can be supplemented by stocking. Although native fish species richness has increased and some species have become established, many others are represented by very few individuals. Even

in un-modified, natural stream systems, local extirpations can occur due to natural perturbations (eg. flood and drought). In urban streams, this risk is greater due to modified flow regimes and there is an increased potential for pollution caused fish kills.

- The UDPR will likely continue to rely on a downstream connection to the Lower Des Plaines/Illinois River to maintain and expand current fish assemblages. Moreover, there are additional species present in the lower Des Plaines River which would be potential candidates for migration into the UDPR through the Brandon Lock, most notably, the redhorse species. Silver redhorse has been collected in the UDPR, represented by only two individuals to date. All five redhorse species occur in the lower Des Plaines and Illinois Rivers, including the Illinois State listed species, river and greater redhorse.

- In addition, a significant amount of restoration effort has been implemented to improve the UPDR. The IDNR and the Army Corps of Engineers completed an Ecosystem Restoration project on the Des Plaines River in 2012 which included the removal of the Hofmann Dam and two other dams (Armitage Avenue and Fairbanks Road). Lake County removed the Ryerson Dam in 2011. During 2014, Dam #1 and Dam #2 were removed as a part of IL DNR Dam Removal Initiative. The five remaining dams on the Des Plaines River are currently in the design phase for removal. After completion of the Dam Removal Initiative work, the Des Plaines River will be free flowing from the Wisconsin State Line to Brandon Road.

- Injuries and mortality of fishes occur at pumping stations, dams, and other man-made structures in rivers due to impingement on trashracks and screens, entrainment into pumps and pipes, and barotrauma during sudden pressure changes. An analysis should be completed on injury and mortality rates of fishes from equipment installed at the project site that is capable of causing these issues. The study should consider all species potentially occurring at the project site, different size classes, and loss of fish hosting mussel larvae (called glochidia). The best alternatives and mitigation measures should be chosen to address these concerns.

Native Mussels:

- Freshwater mussels have a complex and unique reproductive cycle (Williams *et al.* 1993). The glochidia need fish to transform and complete the mussel life cycle. Some mussel species can use several species of fish as hosts, whereas others require a particular species or family of fish. Therefore, the freshwater mussel assemblage can be tightly correlated with the fish assemblage.

- Freshwater mussels are the most imperiled group of organisms in North America. Nearly 75% of the approximately 300 North American mussel taxa are extinct, federally-listed as endangered or threatened, or in need of conservation status (Williams *et al.* 1993). In Illinois, 25 of the 62 extant species (44%) are listed as threatened or endangered (Illinois Endangered Species Protection Board 2011). Impoundments are major factors affecting freshwater mussel populations (Vaughn and Taylor 1999; Watters 2000; Tiemann et al 2007b).

- Dams not only change physicochemical parameters (e.g., modified flow patterns and increased sedimentation), but also alter host fish assemblages and restrict host fish movement (Tiemann et al. 2004; Santucci et al. 2005; Slawski et al. 2008). The resulting effects for mussels include restricted distributions, blockage of gene flow, fragmented and declining populations, and altered community composition (Vaughn and Taylor 1999; Watters 1996; Tiemann et al 2007b). These effects occur upstream and downstream of impoundments, and are exacerbated by the presence of multiple impoundments or impoundments on tributaries (Watters 1996; Tiemann et al 2007b). Also, a dam near the river's mouth can hinder the (re)colonization of mussels into a basin because the dam prohibits the dispersal of host fishes.

- The Des Plaines River basin historically supported 38 species of freshwater mussels, but only 13 species have been found alive since 1969 (Tiemann et al. 2007a; Price et al. 2012a). The Kankakee River historically supported 40 species and 30 are still considered extant (Tiemann et al. 2007a; Price et al. 2012b). The upper Illinois River, long considered a wasteland and devoid of freshwater mussels (Starrett 1971), is recovering and now has 24 species inhabiting its waters (Sietman et al. 2001; INHS Mollusk Collection database, Champaign). The species from the lower Kankakee and upper Illinois River, which include the federally-endangered scaleshell (*Leptoda leptodon*), the federally-endangered sheepnose (*Plethobasus cyphyus*), the state-threatened purple wartyback (*Cyclonaias tuberculata*), and the state-threatened black sandshell (*Ligumia recta*), likely will not have the opportunity to recolonize the Des Plaines River and CAWS if their host fishes are not able to pass through the proposed project at Brandon Road Lock and Dam.

State-Threatened, Endangered, and Species Proposed for Listing:

- Numerous state-listed species, and species proposed for listing, are known to occur in the upper Illinois River, lower Kankakee River, and CAWS that may be negatively impacted by the proposed GLMRIS project at Brandon Road Lock and Dam. A list of these species is included in Table 7. Impediments in the river systems will cause challenges for successful recovery of these species in the state. Some of these species, such as the state-listed greater and river redhorses as described on Page 5, are known to occur downstream of the Brandon Road lock and Dam and possible range expansion upstream into the CAWS would be eliminated with project implementation. An investigation of the effects of the proposed project on recovery of these species in their historic ranges in Illinois should be completed. The study should include an estimate of the number of individuals expected to be lost due to mortality when the proposed facility is encountered. The best alternatives and mitigation measures should be chosen to address these concerns.

- American eel population declines are mostly attributed to dams and other river obstacles preventing access to habitats and migration routes. Many projects, such as hydropower development, have included eel ladders in design plans to provide a safe route for eel's to traverse barriers (U.S. Fish and Wildlife Service 2011). American eels are observed on occasion in the Illinois River and CAWS river systems. For example, an individual was caught recently (2014) by a fisherman in Tampier Lake, Cook County. It is suspected this fish likely migrated to this location from the Mississippi River basin or possibly from the Great Lakes basin. Pending publication in the Illinois Register, the American eel will be listed as a

state-threatened species. Project design should consider installing safe passage specific to the American eel at this location.

Gene Flow, Migration, and Range Shifts:

- Construction of the proposed project may cause fish and mussel populations to become disjunct in the CAWS and Illinois River basin with restricted gene flow. Gene flow and genetic variability is important to the well-being and future existence of a species, and perhaps even more so in modern times with anthropogenic climate change likely driving evolutionary responses (Parmesan 2006; Crozier and Hutchings 2014). The effects of the proposed project on gene flow should be investigated not only for state-listed fish and mussel species, but also ecologically and economically important aquatic species as well. The best alternatives and mitigation measures should be chosen to address this issue.

- Interference of migration and species range shifts as they respond to climate change is another issue that should be investigated. Many studies in recent years have documented range shifts attributed to climate change in freshwater, marine, and terrestrial ecosystems as species pursue optimal abiotic and biotic resource availability (Walther et al. 2002; Parmesan 2006). While range shifts may be difficult to predict for individual species, the ability of individuals to track optimal environmental conditions will increase in importance, and obstructions in travel corridors will pose significant challenges to future conservation strategies (Pearson and Dawson 2005). The effects the proposed project will have on range shifts of aquatic species in response to climate change should be investigated and the best alternatives and mitigation chosen to address these concerns.

Thank you for the opportunity to provide comments on the proposed GLMRIS project at Brandon Road Lock and Dam. Please contact Steve Pescitelli, Kevin Irons, or myself if you have further questions regarding these comments.

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Appendices

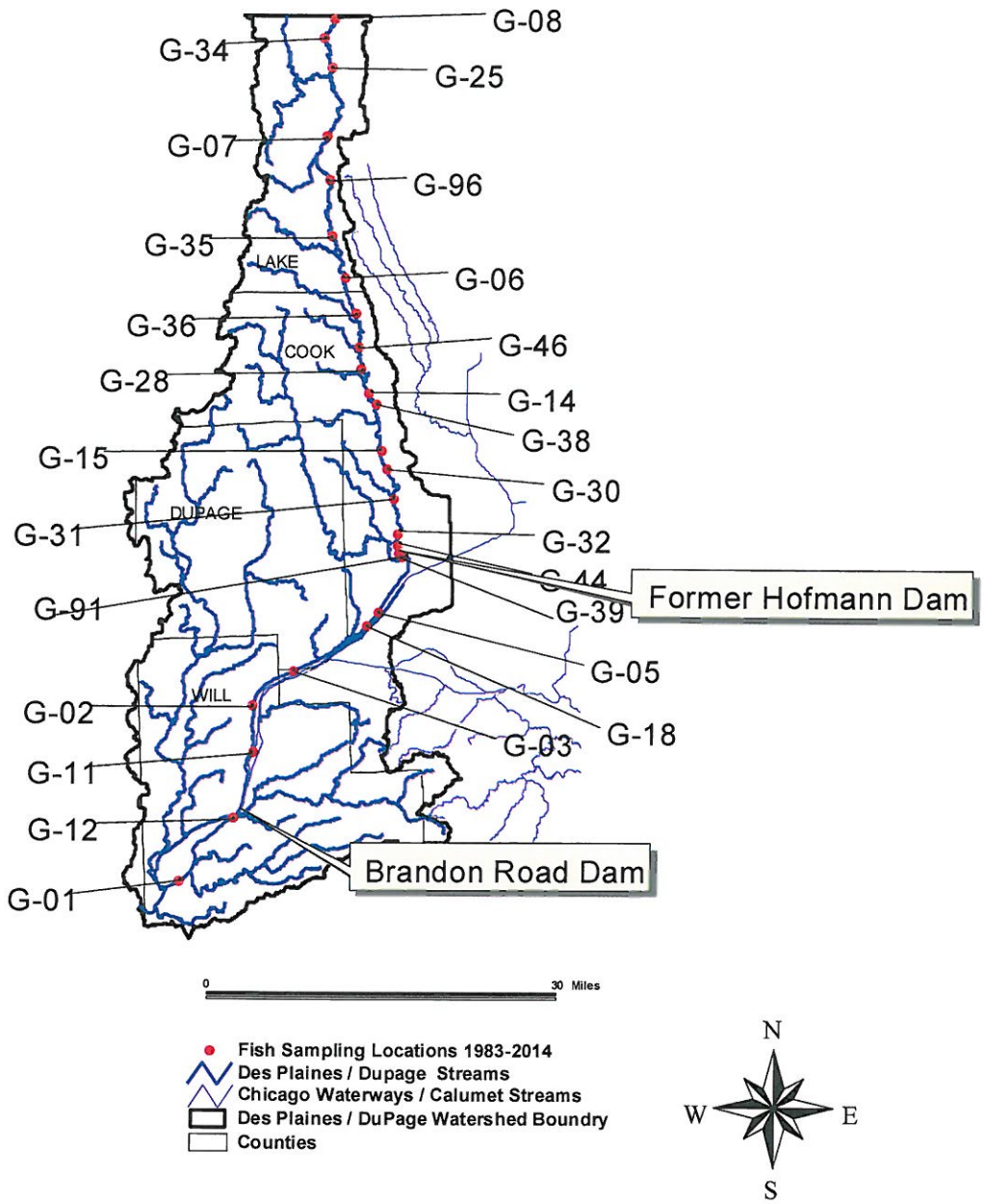


Figure 1. Location of Illinois Department of Natural Resources fish sampling locations on the mainstem of the Des Plaines River, 1983 - 2014.

Table 1. Illinios Department of Natural Resources sampling locations on the mainstem of the Des Plaines River, 1979-2014.

Location	IEPA CODE	1979	1980	1982	1983	1985	1987	1989	1990	1991	1993	1995	1997	1998	1999	2000	2001	2002	2003	2004	2005	2007	2008	2010	2012	2013	2014	Total No. Stations
Russel Rd	G-08	X	X	X	X	X	X	X			X		X						X				X			X		12
Rt. 173	G-34				X																							1
Wadsworth Rd	G-25				X				X	X			X						X				X			X		7
Rt 120 Belvidere Rd	G-07				X							X	X						X				X			X		6
Oak Springs Rd	G-96				X																					X		2
Danl Wright Woods	G-35				X								X						X				X			X		5
Deerfield Road - Ryerson	G-06																		X							X		2
Dam #1 Dwnstrm	G-36				X																					X		2
DAM #2 Dwnstrm	G-46																		X									1
Golf Rd	G-28				X								X															2
Oakton St US Touhy	G-14																		X							X		2
Touhy Ave	G-38																		X							X		2
Irving Park Rd	G-15																X		X							X	X	4
Grand Ave (Armitage)	G-30				X														X							X	X	4
Chicago Ave	G-31																							X				1
Cermak Rd	G-32				X																							1
Forest Ave US Hofmann	G-44											X		X			X								X	X		5
Upstream Hofmann Salt Ck	G-91																		X								X	2
Swan Pond DS Hoff.	G-39				X								X	X	X	X	X		X	X	X	X	X	X		X	X	14
Sante Fe Prairie Rt. 45	G-05																	X	X	X								3
Wentworth Ave Willow Spgs	G-18				X								X						X			X	X			X		6
Lemont Rd	G-03				X																		X			X		3
135th St Romeoville	G-02																				X		X			X		3
Division St. Lockport	G-11				X								X						X				X			X		5
DS Brandon Rd. Dam	G-12				X																		X			X		3
I-55 Bridge	G-01																						X			X		2
Total No. Stations		1	1	1	15	1	1	1	1	1	1	2	8	2	1	1	3	1	15	2	2	2	11	2	1	19	4	100

Table 2. Mean number of species collected and mean electrofishing (EF) period at common stations sampled in all IDNR Basin Surveys, 1983 - 2013

	1983	1997	2003	2008	2013
No. Stations	7	7	7	7	7
Mean No. Fish Species/Station	8	16	16	15	18
Mean EF Period (min.)	46	44	53	57	56

Table 3. Native fish species collected at all locations for each IDNR Basin Survey on the mainstem of the Des Plaines River.

Common name	Scientific name	1983	1997	2003	2008	2013
Bowfin	Amia calva	X	X	X	X	X
Gizzard shad	Dorosoma cepedianum	X	X	X	X	X
Central mudminnow	Umbra limi	X	X		X	
Northern pike	Esox lucius	X	X	X	X	X
Golden shiner	Notemigonus crysoleucas	X	X	X	X	X
Creek chub	Semotilus atromaculatus	X	X	X	X	X
Common shiner	Luxilius cornutus	X	X	X		
Spotfin shiner	Cyprinella spiloptera	X	X	X	X	X
Red shiner*	Cyprinella lutrensis	X				
Fathead minnow	Pimephales promelas	X	X	X	X	X
Bluntnose minnow	Pimephales notatus	X	X	X	X	X
Emerald shiner	Notropis atherinoides	X	X	X	X	X
Sand shiner	Notropis ludibundus	X	X	X	X	X
White sucker	Catostomus commersoni	X	X	X	X	X
Yellow bullhead	Ameiurus natalis	X	X	X	X	X
Black bullhead	Ameiurus melas	X	X	X	X	X
Blackstripe topminnow	Fundulus notatus	X	X	X	X	X
Black crappie	Pomoxis nigromaculatus	X	X	X	X	X
White crappie	Pomoxis annularis	X		X	X	
Rock bass	Ambloplites rupestris	X	X	X	X	X
Largemouth bass	Micropterus salmoides	X	X	X	X	X
Smallmouth bass	Micropterus dolomieu	X	X	X	X	X
Green sunfish	Lepomis cyanellus	X	X	X	X	X
Bluegill	Lepomis macrochirus	X	X	X	X	X
Pumpkinseed	Lepomis gibbosus	X	X	X	X	X
Yellow perch	Perca flavescens	X		X	X	X
Blackside darter	Percina maculata	X	X	X	X	X
Johnny darter	Etheostoma nigrum	X	X	X	X	X
Hornyhead chub	Nocomis biguttatus		X	X	X	X
Bigmouth shiner	Notropis dorsalis		X	X	X	X
Quillback*	Carpiodes cyprinus		X	X	X	X
Spotted sucker	Minytrema melanops		X	X	X	X
Silver redhorse*	Moxostoma anisurum		X			
Channel catfish	Ictalurus punctatus		X	X	X	X
Tadpole madtom	Noturus gyrinus		X	X	X	X
Brook silverside	Labidesthes sicculus		X			X
Yellow bass	Morone mississippiensis		X		X	X
Orangespotted sunfish	Lepomis humilis		X	X	X	X
Walleye	Stizostedion vitreum		X	X	X	X
Freshwater drum*	Aplodinotus grunniens		X	X	X	X
Central stoneroller	Campostoma anomalum			X	X	
Redfin shiner	Lythrurus umbratilus			X		
Blackchin shiner	Notropis heterodon			X		
Mimic shiner	Notropis volucellus			X		
Spottail shiner	Notropis hudsonius			X	X	X
Smallmouth buffalo*	Ictiobus bubalus			X	X	X
Stonecat	Noturus flavus			X	X	X
Mosquitofish	Gambusia affinis			X	X	X
Warmouth	Lepomis gulosus			X	X	X
Sauger	Stizostedion canadense			X	X	X
Striped shiner*	Luxilus chrysocephalus				X	
River carpsucker*	Carpiodes carpio				X	X
Flathead catfish*	Pylodictis olivaris				X	
Logperch	Percina caprodes				X	X
Longnose gar*	Lepisosteus osseus					X
Grass pickerel*	Esox americanus					X
Muskellunge	Esox masquinongy					X
Suckermouth minnow*	Phenacobius mirabilis					X
Rosyface shiner**	Notropis rubellus					X
Banded killifish*	Fundulus diaphanus					X
Redear sunfish	Lepomis microlophus					X
	Total Native Species	28	37	45	47	50
	Cummulative Species Total	28	40	50	54	61
	No. Stations	15	8	19	8	17

*collected only downstream of former Hofmann Dam

Table 4. Fish species found in Des Plaines River tributaries, upstream of the Hofmann Dam in 1983. Streams include Mill Creek, Indian Creek, Bull Creek, Willow Creek, Salt Creek, and Addison Creek.

Common name	Scientific name
Goldfish	Carassius auratus
Carp	Cyprinus carpio
Golden shiner	Notemigonus crysoleucas
Creek chub	Semotilus atromaculatus
Hornyhead chub	Nocomis biguttatus
Unidentified Stoneroller	Campostoma sp.
Common shiner	Luxilius cornutus
Spotfin shiner	Cyprinella spiloptera
Fathead minnow	Pimephales promelas
Bluntnose minnow	Pimephales notatus
White sucker	Catostomus commersoni
Brown bullhead	Ameiurus nebulosus
Stonecat	Noturus flavus
Blackstripe topminnow	Fundulus notatus
Brook silverside	Labidesthes sicculus
Black crappie	Pomoxis nigromaculatus
Largemouth bass	Micropterus salmoides
Green sunfish	Lepomis cyanellus
Bluegill	Lepomis macrochirus
Pumpkinseed	Lepomis gibbosus
Blackside darter	Percina maculata
Johnny darter	Etheostoma nigrum
Fantail darter	Etheostoma flabellare

Table 5. Fish species found in Des Plaines River tributaries, downstream of Hofmann Dam in 1983. Streams include Flagg Creek and Sawmill Creek.

Common name	Scientific name
Golden shiner	Notemigonus crysoleucas
Creek chub	Semotilus atromaculatus
Fathead minnow	Pimephales promelas
White sucker	Catostomus commersoni
Largemouth bass	Micropterus salmoides
Green sunfish	Lepomis cyanellus
Bluegill	Lepomis macrochirus

Table 6. ILDNR sampling results downstream of the former Hofmann Dam (Removed 2012) at Station G-39 on the Des Plaines River mainstem, 32 miles upstream of Brandon Lock, 1983 - 2014.

Common name	Scientific name	1983	1996	1997	1998	1998	1999	2000	2001	2003	2005	2008	2010	2013	2014
Black bullhead	Ameiurus melas	X			X	X									
Black crappie	Pomoxis nigromaculatus	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bluegill	Lepomis macrochirus	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bluntnose minnow	Pimephales notatus	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carp	Cyprinus carpio	X	X	X	X	X	X	X	X	X	X	X	X		X
Creek chub	Semotilus atromaculatus	X		X										X	X
Gizzard shad	Dorosoma cepedianum	X	X	X	X	X	X		X	X	X	X	X	X	X
Goldfish	Carassius auratus	X	X	X	X	X	X			X		X	X		X
Green sunfish	Lepomis cyanellus	X	X	X	X	X	X	X		X	X	X	X	X	X
Largemouth bass	Micropterus salmoides	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Pumpkinseed	Lepomis gibbosus	X	X		X	X	X			X					X
Red shiner	Cyprinella lutrensis	X													
White sucker	Catostomus commersoni	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bowfin	Amia calva		X	X							X	X			X
Channel catfish	Ictalurus punctatus		X	X	X	X	X	X	X	X	X	X	X	X	X
Golden shiner	Notemigonus crysoleucas		X	X			X		X			X			
Orangespotted sunfish	Lepomis humilis		X	X	X	X	X	X		X	X	X	X	X	
Sand shiner	Notropis ludibundus		X	X	X	X	X	X	X	X	X	X	X	X	X
Smallmouth bass	Micropterus dolomieu		X	X	X	X	X	X	X	X				X	X
Smallmouth buffalo	Ictiobus bubalus		X								X				X
Spotfin shiner	Cyprinella spiloptera		X	X		X	X	X	X	X	X	X	X	X	X
Walleye	Stizostedion vitreum		X	X		X	X	X	X	X	X	X	X		X
Bigmouth shiner	Notropis dorsalis			X	X	X	X			X		X		X	
Fathead minnow	Pimephales promelas			X			X					X		X	
Northern pike	Esox lucius			X	X	X	X	X	X	X	X	X		X	X
Silver redhorse	Moxostoma anisurum			X											X
Yellow bass	Morone mississippiensis				X	X	X								
Yellow bullhead	Ameiurus natalis				X	X	X			X		X	X		
Emerald shiner	Notropis atherinoides						X				X				
Rock bass	Ambloplites rupestris						X			X	X	X	X	X	X
Spottail shiner	Notropis hudsonius						X		X	X	X				X
White crappie	Pomoxis annularis						X					X			
Yellow perch	Perca flavescens						X				X				
Spotted sucker	Minytrema melanops							X	X				X		X
Tadpole madtom	Noturus gyrinus							X	X						
Johnny darter	Etheostoma nigrum							X	X	X		X		X	
Sauger	Stizostedion canadense								X	X	X	X	X		X
Skipjack herring	Alosa chrysochloris								X						
Suckermouth minnow	Phenacobius mirabilis								X					X	
Blackstripe topminnow	Fundulus notatus									X		X		X	
Common shiner	Luxilius cornutus									X					
Freshwater drum	Aplodinotus grunniens									X		X			X
Hornyhead chub	Nocomis biguttatus									X	X	X	X	X	X
Blackside darter	Percina maculata										X				
Striped shiner	Luxilus chrysocephalus										X	X			
Round goby	Neogobius melanostomus											X	X	X	X
Logperch	Percina caprodes													X	
Mosquitofish	Gambusia affinis													X	
Quillback	Carpiodes cyprinus													X	
River carpsucker	Carpiodes carpio													X	X
Rosyface shiner	Notropis rubellus													X	X
	Native Fish Species	11	17	20	17	18	25	16	20	25	23	26	17	26	26
	Cummulative Species Total	11	20	24	26	26	31	34	37	41	43	43	43	49	49
	Electrofishing minutes	30	38	60	30	60	60	50	30	53	60	60	60	60	45

Table 7: List of state-threatened, endangered and species proposed for listing which may be negatively impacted by implementation of the proposed GLMRIS project at Bandon Road Lock and Dam.

Common Name	Scientific Name	State Status
American eel	*Anguilla rostrata*	Proposed as threatened
American brook lampray	*Lethenteron appendix*	Proposed as threatened
Banded killifish	*Fundulus diaphanus*	Threatened
Black sandshell	*Ligumia recta*	Threatened
Blacknose shiner	*Notropis heterolepis*	Endangered
Brassy minnow	*Hybognathus hankinsoni*	Proposed as threatened
Greater redhorse	*Moxostoma valenciennesi*	Endangered
Iowa Darter	*Etheostoma exile*	Threatened
Longnose sucker	*Catostomus catostomus*	Threatened
Mudpuppy	*Necturus maculosus*	Threatened
Purple wartyback	*Cyclonaias tuberculata*	Threatened
River redhorse	*Moxostoma carinatum*	Threatened
Pallid shiner	*Hybopis amnis*	Endangered
*Scaleshell	*Leptoda leptodon*	Proposed as endangered
*Sheepnose	*Plethobasus cyphyus*	Endangered

*Federally listed species

Protecting Our Water Environment

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET CHICAGO, ILLINOIS 60611-3154 312.751.5600

DAVID ST. PIERRE
Executive Director

312.751.7900 f: 312.751.7926
david.stpierre@mwrd.org

September 15, 2015

Ms. Susanne J. Davis, P.E.
Chief, Planning Branch
U.S. Army Corps of Engineers, Chicago District
231 South La Salle Street, Suite1500
Chicago, IL 60604

Dear Ms. Davis:

Subject: GLMRIS-Brandon Road Effort

Reference is made to your letter dated August 6, 2015, concerning the subject matter. The Metropolitan Water Reclamation District of Greater Chicago (MWRD) continues to support your Brandon Road efforts. We are providing the following according to the topics outlined in your letter:

1. The enclosed Conceptual Plan 20 Year Master Schedule provides an overview of planned projects at our wastewater treatment plants. Please note that, being a conceptual plan, the projects and initiatives themselves, timelines, and proposed activities are subject to change. Further detailed information on capital planning, including current projects may be found on our 2015 Budget Book. This is accessible on the MWRD website under Reports/Financial/Budget Reports.

2. MWRD's capital plan is focused on meeting current and anticipated regulatory requirements, while pursuing initiatives such as reuse of treated wastewater, phosphorus recovery, energy use reduction, and increasing energy production. As previously provided, the MWRD Tunnel and Reservoir Plan will see the McCook Reservoirs (McCook) coming on-line during the planning period indicated, i.e., through 2069. Specifically, McCook Stage 1 is scheduled to come on-line by December 31, 2017 and McCook Stage 2 is scheduled to come on-line by December 31, 2029.

3. The current diversion allocation is 270 cfs but is scheduled to decrease to 101 cfs in water year 2015. MWRD has petitioned IDNR to increase the diversion from the scheduled 101 cfs, and a hearing is scheduled for October. Depending on the outcome of the hearing, MWRD's allocation for discretionary diversion may change and is likely to change over the long term.

4. MWRD will deliver 10,000 rain barrels by January 2017 and a minimum of an additional 5,000 rain barrels by January, 2019, to be used throughout the MWRD area of responsibility. MWRD is also partnering with others on green infrastructure projects to reduce flooding.

5-8. MWRD does not see any of these items as within our mission. However, we will support efforts by others.

If you have any questions regarding this matter, please contact Joe Schuessler, Principal Civil Engineer, at 312-751-3236 (Joseph.Schuessler@mwrd.org).

Sincerely,

David St. Pierre

CO'C:WSS:ch
Enclosure

8/10/15 Mr. O'Connor: Please handle. [illegible]

D 8

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET, SUITE 1500
CHICAGO IL 60604

August 6, 2015

REPLY TO
ATTENTION OF

Planning Branch

Mr. David St. Pierre
Executive Director
Metropolitan Water Reclamation District of Greater Chicago
100 East Erie Street – 3rd Floor
Chicago, Illinois 60611

Dear Mr. St. Pierre:

As a next step in the Great Lakes and Mississippi River Interbasin Study (GLMRIS), the Assistant Secretary of the Army (Civil Works) has directed the U.S. Army Corps of Engineers (USACE) to proceed with a formal evaluation of potential aquatic nuisance species (ANS) control technologies near the Brandon Road Lock and Dam located in Joliet, Illinois (Enclosure 1). The GLMRIS – Brandon Road effort will assess the viability of establishing a single point to control the one-way upstream transfer of aquatic nuisance species from the Mississippi River basin through the Chicago Area Waterway System (CAWS) and into the Great Lakes basin. Aquatic nuisance species of concern for the GLMRIS – Brandon Road effort are Bighead Carp (*Hypophthalmichthys nobilis*), Silver Carp (*Hypophthalmichthys molitrix*), and *Apocorophium lacustre*. For more information regarding the GLMRIS – Brandon Road effort, please visit http://glmris.anl.gov/brandon-rd/.

To further the GLMRIS – Brandon Road effort, USACE is seeking information on relevant projects, programs, initiatives, regulations, guidance, and other authorities that your agency may propose or implement over the planning period of analysis to assist our assessment of "future without-project conditions" for the CAWS (Enclosure 2). The planning period of analysis extends to 2069. USACE will utilize this information to evaluate the impacts of alternative plans and to fully identify requirements for project implementation including permitting, design, construction, operation, maintenance, monitoring and mitigation.

Relevant information includes, but is not limited to, the following topics:

1. Any alterations in the Metropolitan Water Reclamation District of Greater Chicago's (MWRDGC) waste water treatment plants, Tunnel and Reservoir Plan, connector sewers or other infrastructure or property;

2. Any changes in operation of waste water treatment plants, Tunnel and Reservoir Project, connector sewers, other infrastructure or property;

3. Any changes in the operation of the waterways impacting CAWS or Lake Michigan;

4. Any changes/improvements anticipated to comply with terms of the Consent Decree in the case of United States of America and State of Illinois and the State of Illinois v. Metropolitan Water Reclamation District of Greater Chicago;

5. Any habitat improvements or other changes within the CAWS;

6. Any future inspection, prevention, education and control programs for ANS of concern;

7. Any change or emphasis in funding strategy for ANS inspection, prevention, education and control programs; and

8. Any future programs, efforts, or actions to prevent the transfer of ANS of concern between the Great Lakes and Mississippi River basins.

Please let us know if your agency has additional information that could assist USACE in better defining future conditions relevant to GLMRIS – Brandon Road.

As the projected time period within the planning horizon increases, USACE understands that the certainty of future activities may decrease. To address ucertainty, USACE asks that you group your agency's projected activities into categories that are specific to MWRDGC's long-range planning process while noting the relevant time periods for each category. As an example, categories for future infrastructure and operational alterations and time periods may be the following:

- construction and implementation phase – now
- design phase – 1 to 5 years
- budgeted infrastructure and operation changes – 5 to 10 years
- capital improvement or operations plan – 10 to 20 years
- long-range vision or plan – 20 to 50 years

Your participation will aid in developing a thorough and accurate evaluation of future without project conditions, project alternatives and any required mitigation measures. If you have questions or concerns related to this information request, please contact Ms. Johnna Potthoff at (312) 846-5446 or johnna.j.potthoff@usace.army.mil, or Mr. Andrew Leichty, the GLMRIS – Brandon Road Project Manager at (309) 794-5399 or at andrew.l.leichty@usace.army.mil. USACE asks the MWRDGC to submit a response by Monday, September 7, 2015 to the individuals listed above.

Sincerely,

Susanne J. Davis, P. E.
Chief, Planning Branch

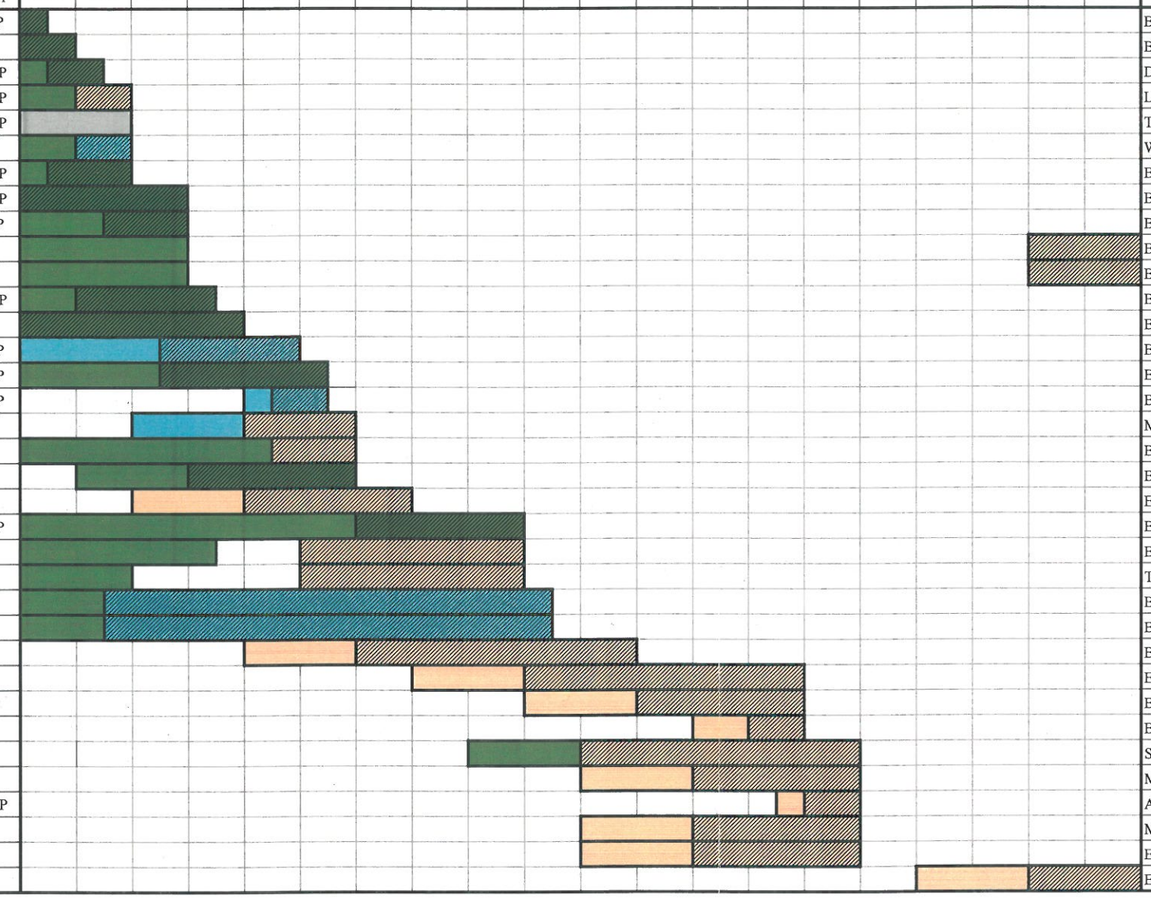
Enclosures:
GLMRIS – Brandon Road Map
Chicago Area Waterway System Map

Enclosure 1: GLMRIS – Brandon Road Map

Enclosure 2 – Chicago Area Waterway System Map

Conceptual Plan 20 Year Master Schedule
November 21, 2014

Project/Initiative	Workgroup	Comments
1. Stickney WRP Sidestream P Recovery	RW, SBP	Based on known project schedule which is ahead of permit compliance schedule for 1.0 mg/L P limit.
2. O'Brien WRP DO Standard	RW	Based on permit compliance schedule for meeting 5.0 mg/L limit 16 out of 24 hours a day.
3. Stickney WRP Water Reuse	DIW, SBP	Design for one user will be compete in 2015 followed by construction.
4. Calumet WRP Water Reuse	DIW, SBP	Low probability construction to show implementation, but no expected costs to District.
5. Recovery of Other Resources	DIW, SBP	Timeframe flexible. Internal study to evaluate opportunities and feasibility.
6. Ammonia Based Control for Air Delivery	DIW	Will be studied through 2015; perhaps implementation at plants if effective.
7. Stickney WRP WASSTRIP	DIW, SBP	Based on known project schedule. Needed for more effective P recovery.
8. Calumet WRP Digester Gas Utilization	DIW, SBP	Based on project schedule.
9. Stickney WRP P Removal (1.0 mg/L)	RW, SBP	Based on permit compliance schedule for 1.0 mg/L P limit
10. RAPS CSO Treatment	DIW	Based on need for plan in case CSO treatment needed after reservoir online.
11. NBPS CSO Treatment	DIW	Based on need for plan in case CSO treatment needed after reservoir online.
12. Stickney WRP Digester Gas Utilization	DIW, SBP	Based on project schedule.
13. Stickney WRP WS Primary/Grit Tanks	DIW	Based on project schedule.
14. Kirie WRP P Removal (1.0 mg/L)	RW, SBP	Based on permit compliance schedule for 1.0 mg/L P limit assuming final permit issued by end of 2014.
15. Calumet WRP P Removal (1.0 mg/L)	RW, SBP	Based on permit compliance schedule for 1.0 mg/L P limit. Method still to be determined.
16. Calumet WRP Sidestream P Recovery	RW, SBP	Based on permit compliance schedule for 1.0 mg/L P limit. Applicable if EBPR used.
17. Stickney WRP Sidestream NH_3 Removal for Seeding	DIW	May be dependent on implementation of mainstream shortcut N removal at Stickney WRP.
18. O'Brien WRP Algae Treatment	RW	Based on permit compliance schedule for 1.0 mg/L P limit. Testing to be done by a university.
19. Combined Sewer Flood Relief Program	DIW	Based on known project schedule.
20. Treatment of Thornton Reservoir Water (CWRP)	DIW	Earliest implementation in 2019 following termination of consent decree at Thornton Reservoir.
21. O'Brien WRP P Removal (1.0 mg/L)	RW, SBP	Based on permit compliance schedule for 1.0 mg/L P limit. Method still to be determined.
22. Mainstream Shortcut Nitrogen Removal	DIW	Based on study schedule. Implementation at plants dependent on study results.
23. Alternate Energy	DIW	Timeframe flexible. Internal study to document/gather all available information.
24. Biosolids Master Plan	DIW	Based on proposed project schedule.
25. Odor Master Plan	DIW	Based on proposed project schedule.
26. New Bacteriophage Limits (replace FC or EC)	RW	Based on EPA ruling in 2015 and assuming IEPA stakeholder process taking up to three years.
27. Nitrogen Limits - District Wide	RW	Estimated timeframe; probability low.
28. Stickney WRP Disinfection	RW	Based on estimated adoption of water quality standards. Community may drive earlier implementation.
29. Lemont WRP Disinfection	RW	Based on estimated adoption of water quality standards. Community may drive earlier implementation.
30. New Ammonia Limits	RW	Stakeholder process (~2 yrs). New limits most likely in next permit cycle. Need to determine impacts.
31. Egan WRP P Removal (1.0 mg/L)	RW	May depend on outcome of DRSCW.
32. Egan WRP Sidestream P Recovery	DIW, SBP	Applicable if P limit added and EBPR used.
33. Hanover Park WRP P Removal (1.0 mg/L)	RW	May depend on outcome of DRSCW.
34. Lemont WRP P Removal (1.0 mg/L)	RW	Estimated timeframe.
35. Treatment of McCook Reservoir Water (SWRP)	DIW	Earliest implementation in 2033 following termination of consent decree at McCook Reservoir.



Color Legend:

- Evaluation/Study/Design (certain)
- Construction (certain)
- Evaluation/Study/Design (high probability)
- Construction (high probability)
- Evaluation/Study/Design (low probability or schedule unknown)
- Construction (low probability or schedule unknown)
- Planning Study

Associated Workgroup Abbreviations:

DIW:	Identified by the District Initiative Workgroup
RW:	Identified by the Regulatory Workgroup
SBP:	Identified by the Strategic Business Plan

Notes:

1. Projects are not prioritized. Timelines are based on known or estimated schedules.

2. Projects and schedule will be further refined during each annual update.

3. Once the financial model is applied, the projects will be prioritized.

4. Legacy CIP projects are not included but will be added in as necessary in later stages of the planning process.

5. See attached tables for project synergies, projects with competing interests, and gaps in knowledge.

6. This schedule is conceptual in nature and is subject to change. This schedule does not not represent a comlete list of capital improvement projects and the timelines are subject to change.

From:	Potthoff, Johnna J LRC
To:	Doug Kluck
Cc:	Edward Fenelon; Herleth-king, Shawna S LRC; Davis, Susanne J LRC
Subject:	RE: [EXTERNAL] climate change information for the USACE Chicago
Date:	Tuesday, September 08, 2015 7:43:08 AM

Doug, Thank you for the information. Appreciate the follow up.
We'll include your response in our report.

Have a good week.

Regards,
Johnna

-----Original Message-----
From: Doug Kluck [mailto:doug.kluck@noaa.gov]
Sent: Friday, September 04, 2015 2:31 PM
To: Potthoff, Johnna J LRC
Cc: Edward Fenelon; Doug Kluck
Subject: [EXTERNAL] climate change information for the USACE Chicago

Hi Johnna,

Thanks for the taking the time to speak to us yesterday. It sounded like the type of information you are in need of are downscaled precipitation and future Great Lakes water levels but for application in and around Chicago.

For more general climate change information I would suggest using the National Climate Assessment (Blockedhttp://nca2014.globalchange.gov/).

You will see it has a main section on climate change impacts (Blockedhttp://nca2014.globalchange.gov/highlights/report-findings/our-changing-climate) which will show you general precip and temp information for the U.S.

Then there are sector breakouts. Here is one on water supply:
Blockedhttp://nca2014.globalchange.gov/highlights/report-findings/water-supply

And it is also broken out by geography. Here is the Midwest section:
Blockedhttp://nca2014.globalchange.gov/highlights/report-findings/water-supply

As far as people or organizations I would consider touching base with that have some experience or background on the type of information you need, I would suggest the following:

1) Precipitation Frequency information for Illinois: Illinois Water Survey - Jim Angel (jimangel@illinois.edu) and/or Momcilo Markus (mmarkus@illinois.edu). They both probably could help you also on climate change implications. Federally I would go to this NOAA page for the latest material: Blockedhttp://hdsc.nws.noaa.gov/hdsc/pfds/

2) Great Lakes future levels - Brent Lofgren (NOAA/GLERL - brent.lofgren@noaa.gov)

3) Army Corps people I know that might be helpful....Gus Drum

(Richard.G.Drum@usace.army.mil). He was responsible for a climate change project in the Ohio Basin. Kate White, Jeff Arnold (Jeffrey.r.arnold@usace.army.mil) are national USACE folks that deal with climate change issues.

4) Climate change scenarios for precip. in the Chicago region...again
I'd probably ask the Illinois State Water Survey or perhaps U of Wisconsin.

hope this helps and I remembered everything,

Doug

--
Doug Kluck
Central Region Climate Services Director
NOAA's National Center for Environmental Information (NCEI)
7220 NW 101st Terrace
Kansas City, MO 64153
O: 816-994-3008
C: 816-564-2417
doug.kluck@noaa.gov

Facebook: Blockedhttp://www.facebook.com/NOAANationalClimaticDataCenter Twitter: @NOAANCDC @NOAAOceanData

From: Potthoff, Johnna J LRC
To: Herleth-king, Shawna S LRC
Subject: FW: [EXTERNAL] USACE Request dated 6-Aug-2015 regarding GLMRIS support
Date: Thursday, August 27, 2015 11:54:33 AM

Fyi - j

-----Original Message-----
From: Deborah Lee - NOAA Federal [mailto:deborah.lee@noaa.gov]
Sent: Thursday, August 27, 2015 11:42 AM
To: Potthoff, Johnna J LRC
Cc: Leichty, Andrew L MVR; Felix Martinez - NOAA Federal; Davis, Susanne J LRC
Subject: Re: [EXTERNAL] USACE Request dated 6-Aug-2015 regarding GLMRIS support

Hi Johnna and Andrew,
The NOAA Great Lakes Regional Collaboration Team reviewed your letter today asking for information to support the Brandon Road effort, and Brian Miller (IL-Sea Grant), Doug Kluck (NOAA Central Region Climate Center), and Ed Fenelon (NWS-Chicago) will work to schedule a teleconference with you next week to respond to your request.
Best Regards (Essayons!),
Debbie

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Deborah H. Lee, <Blockedhttp://www.glerl.noaa.gov/about/pers/profiles/lee.html> PE, PH, D.WRE
Director
Great Lakes Regional Team Lead

Great Lakes Environmental Research Laboratory <Blockedhttp://www.glerl.noaa.gov/>
4840 South State Rd.

Ann Arbor, MI 48108
734-741-2244 office

734-277-9765 cell

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On Thu, Aug 27, 2015 at 9:23 AM, Potthoff, Johnna J LRC <Johnna.J.Potthoff@usace.army.mil> wrote:

Thank you, Deborah. We look forward to your response and meeting with Ed and his group in September.
Best, Johnna

-----Original Message-----

From: Deborah Lee - NOAA Federal [mailto:deborah.lee@noaa.gov]
Sent: Wednesday, August 26, 2015 12:59 PM
To: Potthoff, Johnna J LRC; Leichty, Andrew L MVR
Subject: [EXTERNAL] USACE Request dated 6-Aug-2015 regarding GLMRIS support

Johnna and Andrew,

Thank you for the subject letter. I'm writing to let you know that NOAA is preparing its response.

Regards,
Deborah

_____

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<Blockedhttp://www.glerl.noaa.gov/about/pers/profiles/lee.html> > PE, PH, D.WRE
Director
Great Lakes Regional Team Lead

Great Lakes Environmental Research Laboratory <Blockedhttp://Blockedwww.glerl.noaa.gov/
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4840 South State Rd.

Ann Arbor, MI 48108
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734-277-9765 cell

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<Blockedhttp://www.youtube.com/user/noaaglerl> >

From:	Potthoff, Johnna J LRC
To:	Rich.Carter@dnr.state.oh.us; Leichty, Andrew L MVR
Cc:	John.Navarro@dnr.state.oh.us; Herleth-king, Shawna S LRC
Subject:	RE: Request for information on Ohio's efforts to prevent the movement of AIS between the Great Lakes and Mississippi River basins
Date:	Tuesday, September 08, 2015 2:42:38 PM

Dear Mr. Carter, Thank you for your timely reply. We appreciate your support of GLMRIS-BR.

Regards,
Johnna

Johnna Potthoff
United States Army Corps of Engineers
Planner, Chicago District
231 South LaSalle Street, Suite 1500
Chicago, Illinois 60604

Office: (312)846-5446
BlackBerry: (312)576-8480
Facsimile: (312)886-2891

CHICAGO USACE WEB SITE: http://www.lrc.usace.army.mil
FACEBOOK: http://www.facebook.com/usacechicago

-----Original Message-----
From: Rich.Carter@dnr.state.oh.us [mailto:Rich.Carter@dnr.state.oh.us]
Sent: Tuesday, September 08, 2015 2:25 PM
To: Leichty, Andrew L MVR; Potthoff, Johnna J LRC
Cc: John.Navarro@dnr.state.oh.us
Subject: [EXTERNAL] Request for information on Ohio's efforts to prevent the movement of AIS between the Great Lakes and Mississippi River basins

Ms. Potthoff and Mr. Leichty,

Attached is the Ohio Department of Natural Resources Division of Wildlife's letter responding to USACE's August 6, 2015 request from Susanne Davis (Chief, Planning Branch) for information on our efforts to prevent the movement of AIS between the Great Lakes and Mississippi River basins.

Please let me know if you have any questions about the letter or information.

We appreciate USACE's efforts with respect to the GLMRIS – Brandon Road facility and look forward to working with you in the future.

Take care,

Rich

Rich Carter

Executive Administrator

Fish Management and Research

Ohio Department of Natural Resources

Division of Wildlife

2045 Morse Road, Building G-3

Columbus, Ohio 43229

Phone: 614-265-6345

Fax: 614-262-1143

rich.carter@dnr.state.oh.us <mailto:rich.carter@dnr.state.oh.us>

Blockedwww.wildohio.com <Blockedhttp://www.wildohio.com>

Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR JAMES ZEHRINGER, DIRECTOR

Division of Wildlife
Scott Zody, Chief
2045 Morse Road, G-3
Columbus, Ohio 43229

September 8, 2015

Ms. Johanna Potthoff
Mr. Andrew Leichty
Department of the Army
Chicago District, U.S. Army Corps of Engineers
231 South LaSalle Street, Suite 1500
Chicago, Il 60604

RE: Request for information on Ohio's efforts to prevent the movement of AIS between the Great Lakes and Mississippi River basins.

Dear Ms. Johanna Potthoff and Mr. Andrew Leichty:

This correspondence is in response to the August 2, 2015 US Army Corps of Engineers (USACE) request for information related to state efforts to prevent the movement of Aquatic Invasive Species (AIS) between the Great Lakes and Mississippi River basins. There were five areas for which information was requested and the following highlights Ohio's efforts on two of these:

- Any future inspection, prevention, education and control programs for AIS of concern –

  The Ohio Department of Natural Resources Division of Wildlife is currently working on several fronts to prevent he movement of AIS between the Mississippi River and Great Lakes basins, including:
  - Inspection: Bait transfer has been identified as a high risk for the movement of AIS; consequently, a statewide project is currently underway to inspect all bait shops in Ohio to assess the AIS transfer risk.
  - Prevention: Because of the risk of AIS being introduced through organisms in trade, we are currently working on a risk assessment process to screen out high risk organisms.
  - Education: We are currently teaming with Wildlife Forever on an outreach campaign focused on the prevention of AIS transfer through the release of bait.
  - Control: With recent collection of fertile Grass Carp in Ohio and Michigan, we are assessing the extent of the problem and looking at possible control options to prevent further spread.

- Any future programs, efforts, or actions to prevent the transfer of AIS of concern between the Great Lakes and Mississippi River basins –

  The USACE completed the Great Lakes Mississippi River Interbasin Study (GLMRIS) that analyzed hydraulic connections between the Mississippi River and Great Lakes Basins to determine the potential risk of AIS to cross between these major watersheds. The GLMRIS Focus Area 2 Summary Report detailed all the connections along the basin

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boundary and identified four connections in Ohio: 1) Grand Lake St Marys, 2) Mosquito Lake, 3) Little Killbuck Creek and 4) Ohio Erie Canal.

ODNR recognizes the importance of closing these connections to prevent to movement of AIS between the basins and we have completed a preliminary engineering assessment of all these connections.

- We are focusing our efforts on the two medium risk connections at Little Killbuck Creek and Ohio Erie Canal and have completed the preliminary closure analysis for these connections. We are now working on final closure designs and will then start the process for closing these connections.
- We are also working on the low risk connection at Grand Lake St Marys and have completed the preliminary closure analysis. We have implemented some of the steps identified in the assessment and will complete a final closure design before starting the process for closing this connection.
- The preliminary assessment of this low risk connection at Mosquito Lake indicates that the risk of AIS movement at this location is minimal so additional work at this site is not likely.

Please let me know if you need any additional information. I can be reached by phone at (614) 265-6345 or by email at rich.carter@dnr.state.oh.us.

Sincerely

Rich Carter
Executive Administrator
Fish Management & Research

From:	Potthoff, Johnna J LRC
To:	Richards, Jenn (MNRF); Leichty, Andrew L MVR
Cc:	Herleth-king, Shawna S LRC
Subject:	Re: [EXTERNAL] Brandon Road Lock and Dam - your letter requesting information
Date:	Wednesday, September 02, 2015 3:01:48 PM

Jenn, Thank you for your note. Yes, we can wait till Sept. 14 for your response. Regards, Johnna
Sent from my BlackBerry 10 smartphone.
From: Richards, Jenn (MNRF)
Sent: Wednesday, September 2, 2015 2:55 PM
To: Potthoff, Johnna J LRC; Leichty, Andrew L MVR
Cc: Hintz, David (MNRF)
Subject: [EXTERNAL] Brandon Road Lock and Dam - your letter requesting information

Johnna and Andrew,

I tried to call each of you but got your voicemails.

We have recently received your letter requesting information regarding aquatic nuisance species in the Great Lakes and our programs addressing this threat. Between busy field schedules and vacation time, this letter was only brought to our attention this week.

In order to give you a complete response, we will not be able to meet the September 7th date you requested but wanted you to know that we are working to get you a response by Monday September 14th.

Please let us know if this presents a problem for you, we are sorry for any inconvenience.

Jenn

Jenn Richards

COA Coordinator – Lake Erie

Lake Erie Management Unit

Ministry of Natural Resources & Forestry

email: jennrichards@ontario.ca <mailto:jenn.richards@ontario.ca>

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659 Exeter Rd, 4th Floor

London ON N6E 1L3

phone: (519) 873-4712

fax: (519) 873-4645

P

Please consider the environment before printing this email

From: Potthoff, Johnna J LRC
To: Abou-El-Seoud, Dena LRC; Herleth-king, Shawna S LRC; Davis, Susanne J LRC
Subject: FW: Efforts Towards Preventing the Invasion of Asian Carps into Great Lakes Waters
Date: Wednesday, October 07, 2015 1:25:15 PM

Shawna another response

Dena - they mention fish - thought you might be interested. j

-----Original Message-----
From: Sparks, Susan (MNRF) [mailto:Susan.Sparks@ontario.ca] On Behalf Of Bateman, Bruce (MNRF)
Sent: Wednesday, October 07, 2015 1:07 PM
To: Potthoff, Johnna J LRC; Leichty, Andrew L MVR
Cc: Boyd, Ala (MNRF); Brown, Dave M. (MNRF); Locke, Brian (MNRF); Blake, Marty (MNRF); Ferguson, Mary (MNRF)
Subject: [EXTERNAL] Efforts Towards Preventing the Invasion of Asian Carps into Great Lakes Waters

NEW_Ont_logo_blk

Ministry of Ministère des

Natural Resources and Forestry Richesses naturelles et des Forêts

Provincial Services Division Division des services provinciaux

Fish and Wildlife Services Branch Direction des services de gestion de la pêche et de la faune

P.O. Box 7000, 300 Water Street 300, rue Water, C.P. 7000

Peterborough, ON K9J 8M5 Peterborough (Ontario) K9J 8M5

Department of the Army

Chicago District, US Army Corp of Engineers

231 South La Salle St, Suite 1500

Chicago, IL 60604

Dear Ms. Potthoff & Mr. Leichty:

This reply is in response to Ms. Davis' letter of August 6, 2015 requesting information regarding our efforts towards preventing the invasion of Asian carps into Great Lakes waters. Please accept our apologies for not replying sooner.

The Ministry of Natural Resources and Forestry (MNRF) is committed to the prevention and management of invading species that threaten the biodiversity and ecosystem health of our native species and habitats. In recent years we have increased program efforts and policies to meet these goals. Our planning cycle does not extend to the end of your period of analysis (to 2069), but hopefully the answers to your information requests below will provide enough detail for your purposes.

Q: Any inspection, prevention, education and control programs for the ANS of concern within the Great Lakes?

· In Canada, the import, possession, transportation, or release of Asian carps (including Bighead Carp and Silver Carp) is prohibited under the Aquatic Invasive Species Regulations (made under the Fisheries Act) unless the fish are dead and eviscerated.

· Ontario has prohibited the live possession, purchase, and sale of these species since 2005 through the Ontario Fishery Regulations.

· Between 2005 and 2013 Ontario Conservation Officers, working with Canada Border Services, have intercepted more than 18,000 kg (40,000 lbs.) of live Asian carps at the border destined for Ontario markets. There have been no seizures or charges since 2013.

· Ontario has proposed an Invasive Species Act, which was reintroduced to the Ontario Legislature in November 2014. If passed, the Act will further enhance Ontario's ability to prevent and respond to aquatic and terrestrial invasive species.

· MNRF has partnered with the Ontario Federation of Anglers and Hunters (OFAH) for over 20 years to deliver the Invading Species Awareness Program. The purpose of the program is to prevent the introduction and spread of invasive species in Ontario by increasing public knowledge and awareness about invasive species.

· MNRF is a significant funding agency for the Invasive Species Centre, which is in Sault Ste. Marie, Ontario. The Invasive Species Centre brings together stakeholders in conducting research, innovation, outreach and education to prevent the introduction and spread of invasive species.

Q: Any change or emphasis in funding strategy for the ANS research, controls or monitoring

· No changes to funding or emphasis for ANS are anticipated.

· The Canada Ontario Agreement on Great Lakes Water Quality and Ecosystem Health, 2014 covers the current five year period from December 2014 to December 2019. Projects funded under Annex 6: Aquatic Invasive Species can involve the prevention, control, monitoring, or management of aquatic invasive species or related

research. When this agreement expires in 2019 it is hoped that a new agreement can be negotiated between the Ontario Provincial and Canadian Federal Governments.

Q: Any research to control the transfer of ANS of concern via aquatic pathways including ballast and bilge water and boat hulls within the Great Lakes

· Transport Canada has jurisdiction for commercial shipping on the Canadian portion of the Great Lakes. Transport Canada, Fisheries and Oceans Canada, and university and industry partners have a number of projects related to ballast water and hull fouling (e.g. risk assessment for these pathways, ballast water treatment systems, etc.). Additionally, regulations under the Canada Shipping Act were put in place in 2011 in order to close this pathway to aquatic invasive species entering the Great Lakes.

· MNRF conducts research on the spread of ANS in Ontario through pathways such as recreational boats. Much of the research to date has concentrated on spread from the Great Lakes to inland lakes and spread amongst inland lakes.

Q: Any fisheries management plans for species that are located in the Great Lakes and are commercially harvested by government and tribe-licenced commercial fishermen in Canada

· Fisheries management in Ontario is governed by the Fish and Wildlife Conservation Act (Ontario) and the Fisheries Act (Canada)

· Fisheries management policy and management planning flows from Ontario's Provincial Fish Strategy - Fish for the Future. Blockedhttp://www.ontario.ca/document/strategic-plan-ontario-fisheries <Blockedhttp://www.ontario.ca/document/strategic-plan-ontario-fisheries>

· In the Great Lakes, fisheries management plans exist on each lake and are either binational in nature and can be found at Blockedhttp://www.glfc.org <Blockedhttp://www.glfc.org> or they can exist as Ontario specific plans which can be obtained from directly from the MNRF.

Additionally, you requested information related to our Ministry's activities related to infrastructure planning and investment. At this time, there are no plans to specifically address this issue. However, our organization does work with government, industry, agency, and NGO partners in design approval and licensing of aquatic structures. When feasible, invasive species exclusion or fish passage measures are considered in the design and/or approval processes.

All of the above activities fall under a shorter time period than indicated in your letter. Utilizing adaptive management principles, and as resources, technology and science provide us with more options, we will adapt our legislation, policies and management activities as required.

I hope this satisfies your information needs. Please feel free to contact Brian Locke, Manager, Lake Erie Management Unit at brian.locke@ontario.ca <mailto:brian.locke@ontario.ca> or 519-825-7711 if you require more information.

Yours Truly,

Bruce Bateman

Director

Fish and Wildlife Services Branch

Copy to: Brian Locke, Manager, Lake Erie Management Unit

Ala Boyd, Manager, Natural Resources Conservation Policy Branch

Dave Brown, Manager, Fisheries Section

Saginaw Chippewa Indian Tribe of Michigan
Tribal Historic Preservation Office

6650 EAST BROADWAY, MT. PLEASANT, MI 48858
PHONE (989) 775-4751 • FAX (989) 775-4767

THPO

9/15/15
PM-PL

August 31, 2015

Department of the Army

RE: ANS Control Technologies near Joliet, IL

Dear Sir/Madam,

This letter is in response to the above referenced project.

At this time we do not have any information concerning the presence of any Indian Traditional Cultural Properties, Sacred Sites or other Significant Properties to the projected project area(s). This is not to say that such a site may not exist, just that this office does not have any available information of the area(s) at this time.

This office would be willing to assist if in the future or during the construction there is an inadvertent discovery of Native American human remains or burial objects. Feel free to call my office if you have any questions or requests at 989-775-4730.

We thank you for including this Tribe in your plans.

Sincerely,
William Johnson /sjh
Curator
Ziibiwing Center of Anishinabe Culture & Lifeways
Saginaw Chippewa Indian Tribe of Michigan

6650 E. Broadway • Mt. Pleasant, MI 48858•Phone (989) 775-4750 or (800) 225-8172
Fax (989) 775-4770•www.sagchip.org/ziibiwing•www.nativedirect.com

U.S. Department of Homeland Security
United States Coast Guard

Commander
Ninth Coast Guard District

1240 E 9th St
Cleveland, OH 44199
Staff Symbol: (dpi)
Phone: (216) 902-6343
Fax: (216) 902-6059

16000
August 27, 2015

Ms. Susanne J. Davis
Dept of the Army-Planning Branch
Chicago District, U.S. Army Corps of Engineers
231 South La Salle Street, Suite 1500
Chicago, IL 60604

Dear Ms. Davis,

Thank you for the opportunity to include Coast Guard concerns about future Aquatic Nuisance Species (ANS) controlled technologies near the Brandon Road Lock and Dam.

The following is offered regarding the topical items 1-5 in your letter dated 06 August 2015:

Items 1 – 3: We are unable to forecast any Coast Guard intentions beyond our traditional concerns for balancing mission priorities to ensure maritime safety, security, environmental protection, and facilitation of commerce. Any plans that could impact any of those priorities would, by necessity, require Coast Guard input.

Item 4: The implementation schedule for compliance with ballast water discharge standards in U.S. waters and for Coast Guard Type Approval for Ballast Water Management Systems (BWMS) requires compliance by the first scheduled drydock after 2014 or 2016, depending upon ballast tank capacity. Currently, vessels that operate solely on the Great Lakes are excluded from these requirements.

Item 5: There is currently a project underway seeking to clarify and de-conflict existing regulations governing a safety zone and restricted navigation area (RNA) in the Chicago Area Waterways System (CAWS). The result should be transparent and simplify operations in the CAWS without impacting Army Corps projects.

Beyond this, we cannot project future Coast Guard concerns in the Chicago Area Waterways System/Great Lakes Basin which may affect the GLMRIS-Brandon Road Project. If you have any questions concerning this matter, please contact Lieutenant Michael Collet at (216) 902-6343.

Sincerely,

P. D. J. ARNETT
Captain, U.S. Coast Guard
Chief, Prevention Division
By direction

Copy: Commander, Coast Guard Sector Lake Michigan
Coast Guard Marine Safety Unit Chicago

From:	Davis, Susanne J LRC
To:	Potthoff, Johnna J LRC; Herleth-king, Shawna S LRC
Subject:	FW: [EXTERNAL] USACE Brandon Road Request: USFWS response (UNCLASSIFIED)
Date:	Monday, September 21, 2015 1:00:23 PM
Attachments:	USFWS Reply to COE on Brandon Rd AIS Actions sept 11 2015.pdf

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Classification: UNCLASSIFIED
Caveats: NONE

-----Original Message-----
From: Kelly Baerwaldt [mailto:kelly_baerwaldt@fws.gov]
Sent: Friday, September 11, 2015 9:31 AM
To: Davis, Susanne J LRC; Potthoff, Johnna J LRC; Leichty, Andrew L MVR
Cc: Mike Weimer; Aaron_Woldt@fws.gov; Todd Turner
Subject: [EXTERNAL] USACE Brandon Road Request: USFWS response

Good Morning Sue, Johnna, and Andy,

Please find attached the USFWS Region 3 response to your August 6, 2015 letter requesting information regarding relevant actions at the Brandon Road Lock and Dam site for Bighead and Silver Carp. We do not have any planned activities regarding the scud.

Our apologies in the delay of submitting our response.

Please let me know if you have questions and thank you for the opportunity to provide comments.

Kelly Baerwaldt
US Fish and Wildlife Service Midwest Region
1511 47th Avenue
Moline, IL 61265
Office: 309-757-5800 x208
Cell: 309-429-1442

Classification: UNCLASSIFIED
Caveats: NONE

U.S. Fish and Wildlife Service

Projects Directly Related to the Management of Bighead Carp, Silver Carp, and/or (scud)

Current Actions:

The following actions are currently being conducted by the U.S. Fish and Wildlife Service to support the monitoring, control, and/or prevention of Bighead carp, silver carp, and/or *Apocorophium lacustre* (scud) in the Chicago Area Waterways System/Illinois Waterway. In the case of multi-year projects, timeframes and actions anticipated for completion in out-years are provided:

1. Great Lakes Asian Carp Monitoring

Agency Collaboration: Great Lakes States, USGS, USACE, Academic Institutions

Funding Table:

Funding	Base Funding Expected	Asian Carp GLRI Funding Requested	Other Funding
FY 2015	$1,097,088	$350,000	$0

*Assume flat-line funding for base funding.

Project Explanation: USFWS will continue development, implementation, and refinement of a comprehensive and complementary early detection and rapid assessment surveillance program for Bighead Silver, Grass, and Black Carp in and near the Great Lakes. This program would complement the eDNA sampling and monitoring programs implemented by the USFWS, USACE, academia, and other partners. Sampling would primarily target areas of high concern in the Great Lakes (such as southern Lake Michigan, western Lake Erie, and areas with past positive eDNA results) and use a diverse array of traditional and novel gears to sample all potential life stages.

Summary of Actions to Date: The USFWS continues to work with partners to refine and implement a Great Lakes basin-wide early detection protocol for Asian carps and other AIS. USFWS continues to coordinate with federal, state, and provincial partners to annually identify sampling locations (areas of concern), further develop and refine protocols, share information, and discuss ways to coordinate agency sampling efforts.

In 2013, USFWS worked with its partners to conduct coordinated and complementary sampling efforts in the Great Lakes basin with both emerging technologies and traditional gears. From May to November 2013, USFWS collected 2,240 eDNA water samples, electrofished, and set nets to assess the presence or absence of Asian carp. In 2013, no Asian carp were captured, but positive eDNA results were obtained from USFWS sampling in three locations.

In 2014, USFWS expanded its overall Great Lakes sampling efforts and collected more than 4,200 eDNA water samples, electrofished, fyke netted, trawled, sampled ichthyoplankton with a variety of gears, and set other nets (bongo nets) and traps (light traps, minnow traps, and windmere traps) to survey for adult, juvenile, and larval Asian carps and other aquatic invasive fishes. In Lake Superior, 87 electrofishing runs, 75 fyke net surveys, and 45 trawl surveys were completed across four sampling locations, and no new non-indigenous species were detected. In Lake Michigan, 90 electrofishing runs, 55 fyke net surveys, 29 gill net surveys, 52 minnow trap sets, eight trawl surveys, five windmere trap sets, 119 bongo net tows, and 145 light trap sets were completed across five sampling locations, and no new AIS species were confirmed. In Lake Huron and western Lake Erie, 86 bongo net tows, 31 light trap sets, 60 fyke net surveys, 43 electrofishing runs, 45 trawl surveys, and 15 minnow trap sets were completed across four sampling locations, and no new AIS species were observed. In eastern Lake Erie, 36 ichthyoplankton and 67 juvenile/adult fish surveys were completed across two sampling locations, and in Lake Ontario, 47 ichthyoplankton and 76 juvenile/adult fish surveys were completed across two sampling locations. In 2014, no Asian carp were captured, but positive eDNA results were obtained from USFWS sampling in two locations outside the CAWS (Kalamazoo River, Fox River—Lake Michigan).

FY 2015 Actions: USFWS will work with its partners to continue developing and refining standard sampling protocols for the Great Lakes and will continue implementing the protocol. USFWS staff and teams will be prepared, and may be mobilized, to respond to any Asian carp detected (using either traditional gear or eDNA) in the Great Lakes. USFWS and partner agencies will fully implement a comprehensive Great Lakes basin-wide early detection and monitoring program for Asian carps and other AIS. Efforts will continue on an annual basis to detect new invasions of Asian carps.

FY 2016 Actions: USFWS and its partner agencies will fully implement a comprehensive Great Lakes basin-wide early detection and monitoring program for Asian carp and other AIS. USFWS staff and teams will be prepared, and may be mobilized, to respond to any Asian carp detected (using either traditional gear or eDNA) in the Great Lakes. Efforts will continue on an annual basis to detect new invasions of Asian carps.

FY 2017 Actions: USFWS and its partner agencies will fully implement a comprehensive Great Lakes basin-wide early detection and monitoring program for Asian carp and other AIS. USFWS staff and teams will be prepared, and may be mobilized, to respond to any Asian carp detected (using either traditional gear or eDNA) in the Great Lakes. Efforts will continue on an annual basis to detect new invasions of Asian carps.

Expected Milestones:

- Fully implement a comprehensive and coordinated Great Lakes basin-wide early detection and monitoring program for Asian carp and other AIS species.
- Complete early detection surveys in suspected “hot spots” for AIS, in cooperation with partner agencies, as needed.
- Continue to refine SOPs for basinwide AIS monitoring with partner agencies.

Outcomes/Outputs:

- Ongoing early detection, rapid assessment, and rapid response program for the Great Lakes.
- Information that will build on existing knowledge of distribution and habitat requirements for Bighead, Silver, Grass, and Black Carp.

Potential Hurdles:

- Coordination among numerous agencies on a large landscape such as the Great Lakes basin.
- Attainment of agreement regarding sampling gears and sampling design among diverse partners.
- Possible issues regarding sampling site logistics.
- Inefficiency of traditional sampling gear, particularly in large water bodies.

2. Monitoring and Response Team Support

Agency Collaboration: Illinois DNR, USACE

Funding Table:

Funding Year	Base Funding Expected			Asian Carp GLRI Funding Requested			Other Funding
	USFWS	USACE	Total	USFWS	USACE	Total	
FY 2015	$300,000	$0	$300,000	$1,120,000	$55,000	$1,275,000	$0

*Assume flat line funding for base funding.

Project Explanation: This task encompasses long-term monitoring and rapid response activities regarding Asian carp throughout the CAWS, both above and below the electric barrier system. Enhanced sampling with both conventional (electrofishing, netting, sidescan sonar, hydroacoustics, and rotenone) and novel gears (eDNA, DIDSON, and Paupier net) will be used to document Asian carp population dynamics within the canal system and connecting waterways, provide data for modeling potential population movements (range expansion), document fish behavior in and around the barriers, and determine life stages of Asian carp potentially present. Response activities may be implemented where specific evidence indicates the presence of Asian carp above the electric barriers, or if a catastrophic event necessitates immediate action.

Summary of Actions to Date: In 2013, Illinois DNR, USFWS, and USACE conducted extensive sampling efforts in search of Asian carp above and below the barriers after implementation of the ACRCC MRWG's updated 2013 MRP — which included additional and novel sampling gear types, a juvenile distribution study, additional telemetry and DIDSON evaluations, an evaluation

of the impact of contract commercial fishing on Asian carp abundance, and a survey program of urban fishing ponds. Through June 2013, staff completed 400 electrofishing runs for a total of 100 hours. No Asian carp were observed through electrofishing. Service staff also conducted fish behavior studies (wild and caged) at the electric barriers. Service staff also participated in five responses, including Lake Calumet intensive surveillance, or barrier clearing exercises in 2013. In 2014, Illinois DNR, USFWS, and USACE again conducted extensive sampling efforts in search of Asian carp above and below the barriers after implementation of the ACRCC MRWG's updated 2014 MRP — which focused more efforts below the barriers and recommended evaluations at Brandon Road Lock. In 2014, four seasonal intensive monitoring events were completed in the CAWS. Staff completed 350 electrofishing runs and set more than 200 trammel/gill nets. No Asian carp were observed in 2014.

FY 2015 Actions: USFWS teams will support Asian carp monitoring and response activities throughout the region as necessary and help implement actions called for under the annually updated MRP.

FY 2016 Actions: USFWS teams will support Asian carp monitoring and response activities throughout the region as necessary and help implement actions called for under the annually updated MRP.

FY 2017 Actions: USFWS teams will support Asian carp monitoring and response activities throughout the region as necessary and help implement actions called for under the annually updated MRP.

Expected Milestones:

- Annual updating, approval, and implementation of the MRP.
- Attainment of goals and objectives set by the MRP.
- Completion of necessary monitoring with conventional and novel gears to determine the distribution and abundance of Asian carp in the CAWS.
- Participation in response efforts, as needed.
- Participation in necessary barrier clearing.
- Development of a comprehensive plan to react to changes in the risk of Asian carp increasing pressure on the barrier. These increased risks include but are not limited to, shifts in the population front of Asian carp, and lowered barrier performance. Tools to be used in the plan include CO2, speakers, traditional sampling, and developing technologies.

Outcomes/Outputs:

- Continued development of ACRCC's MRP, as needed, to monitor the leading edge of the Asian carp expansion.
- Support of Incident Command System (ICS) response operations as needed.

- Provision of staff, equipment, supplies, and ICS team members as needed.

Potential Hurdles:

- Weather conditions.
- Staff availability.
- Possible negative impacts on commercial vessel traffic movement, recreational uses, and resident aquatic life (other than Asian carp) from activities associated with this template.
- Possible public resistance to continuing monitoring and response efforts.

3. <u>Barge Entrainment and Interaction Study</u>

Agency Collaboration: USACE

Funding Table:

Funding	Base Funding Expected	Asian Carp GLRI Funding Requested	Other Funding
FY 2015	$0	$320,000	$0

*Assume flat line funding for base funding.

Project Explanation: This task encompasses follow-up investigations to laboratory work conducted by USACE and field work completed by USFWS in 2012 and 2013 which showed that live fish could be entrained across the electrical barriers in the CAWS by passing barges to varying degrees, depending on barge configuration. The proposed work also aims to address questions raised by the recently formed Government/Barge Workgroup regarding behavior of fish in barge void spaces and distances fish may be entrained.

Specific study objectives are to: (1) evaluate behavior of fish near and in the void spaces of barges as they traverse the electrical barriers; and (2) determine the length of time and distance fish may be entrained in areas and void spaces of barges. Studies of this nature have not been conducted before to the best of our knowledge. Therefore, it is unclear what methods (DIDSON, video camera, underwater camera, or other means) might be best suited for these studies. It is also unknown how turbulence from barge movements and water clarity may impact our abilities to monitor fish in and around barges with video equipment, so we will use several methods to attempt this work. To answer questions related to the possibility of wild fish (free swimming, non-tethered) entering areas around barges, nets will be designed and deployed in the void spaces between the barges while barges traverse the barriers. We will

attempt to deploy DIDSON units or video cameras around barges. The images from the DIDSON or underwater cameras will be used to view and count wild fish in barge junctions over time and distance traveled. Additional data on temperature, flow, speed of the barges, location, electrical measurements, and distances traveled by the barges will also be collected and compared with the images collected. Surrogate live, untethered fish may also be collected and dropped into the areas to collect additional images of fish behavior under simulated entrainment conditions if warranted.

The majority of project costs are to pay for contracts with barge companies to provide barges, time, and crew as a platform to conduct this work (est. 4 weeks of field work X approx. $100,000/week). Costs of this project could be reduced if barge operators were willing to provide barge platforms as an in-kind contribution.

Summary of Actions to Date: In 2013, USACE completed a laboratory-based model study using a scaled-down flume version of the CAWS barrier system and model fish and barges at its ERDC laboratory. This study showed that model fish assumed to be incapacitated by the barriers could be entrained beyond the barriers in void spaces between the barges. Further USACE studies of electric field strength around barges traversing the barriers showed distortion of the electric field and weakening of the electric field in some cases, particularly in the void space of a rake-to-box barge configuration. Field studies conducted by USFWS in 2012 and 2013 used tethered and wild surrogate fishes to test if barges would entrain these fish and propel them through the barrier system. Two general methods were used, one where fish were placed directly in the spaces around barges as they traversed the barrier, and another where fish were placed across the canal in front of northbound barges crossing the barrier. These studies (http://www.fws.gov/midwest/fisheries/carterville/didson-barge.html) found that live fish were entrained across the barriers by passing barges to varying degrees, depending on the barge configuration. Field work scheduled for 2014 was delayed by late receipt of framework funding and subsequent contracting logistics, but will be completed in 2015.

FY 2015 Actions: A USFWS team will conduct studies of fish behavior in and around barges traversing the CAWS electrical barriers as described above in an attempt to: (1) evaluate behavior of fish near and in the void spaces of barges as they traverse the electrical barriers; and (2) determine the length of time and distance fish may be entrained in areas and void spaces of barges.

FY 2016 Actions: A USFWS team will conduct additional studies as needed. It is assumed that work completed in 2014 may generate more questions from agencies or the barge industry,

similar to the manner in which work completed in past years generated additional questions from the Government/Barge Workgroup.

Expected Milestones:

- Data allowing agencies to determine the relative frequency of wild fish entering void spaces of barge tows.
- Data allowing agencies to determine the relative time spent and distance traveled by fish in void spaces of barge tows.
- Written project reports describing project results.

Outcomes/Outputs:

- Enhanced knowledge of behavior of fishes near barges and in void spaces of barge tows that could influence future operations in a manner that minimizes fish entrainment.
- Support of Government/Barge Workgroup.
- Satisfaction of USFWS partners in addressing potential entrainment issues at the barriers.

Potential Hurdles:

- Weather conditions.
- Staff availability.
- Turbulence and water clarity in and around barges may obscure systems used to monitor fish behavior.
- Possible issues regarding sampling site logistics.
- Potential difficulties in contracting or scheduling participation with barge operators.
- Potential conflicts with barrier maintenance activities.

4. <u>Hydroacoustic Assessment of Lock Mediated Passage</u>

Agency Collaboration: USACE

Funding Table:

Funding	Base Funding Expected	Asian Carp GLRI Funding Requested	Other Funding
FY 2015	$0	$160,000	$0

*Assume flat-line funding for base funding.

Project Explanation: There is great concern about upstream dispersal of Asian carp within the upper IWW and the effects of dispersal on the ecosystems of the Great Lakes. The Brandon Road Lock may presently act, or provide opportunity to be modified, as a barrier to fish movement within the upper IWW. Preliminary results of USFWS hydro-acoustic surveys within

the Brandon Road and Dresden Island pools suggest that fish density is greater below the Brandon Road Lock in the Dresden Island Pool than above the lock. Asian carp are known to inhabit the Dresden Island pool.

Here, we propose to extend and enhance our collective understanding of fish passage dynamics at the Brandon Road Lock by making fine scale, real-time observations of fish passage within the lock, examining variables that affect fish passage such as commercial shipping and abiotic variables, and relating our observations to new understanding on lock-mediated upstream dispersal by Asian carp. Specific study objectives are to: (1) quantify the amount of upstream fish passage that occurs between the Dresden Island and Brandon Road pools via the Brandon Road lock; (2) assess fish behavior within the Brandon Road lock before, during, and after lockage operations; (3) compare fish passage at Brandon Road with Lockport Lock and Dam; (4) Determine if interactions between fish and commercial barge traffic, on entry or exit from the Brandon Road lock, are a significant factor in fish passage dynamics; and (5) understand lock-mediated upstream dispersal dynamics of Asian carp by examining fish passage at a downstream lock and dam where Asian carp are in high abundance.

The objectives of this project will be attained by use of several methods: (1) mobile and stationary split beam hydro-acoustic assessments of fish abundance, location, and passage rates within and near the Brandon Road lock structure will be conducted under a variety of operational conditions in an attempt to determine the number and size frequency distribution of fish that are making upstream passage via the lock; (2) DIDSON acoustic cameras will be deployed within the lock chamber at different operational conditions to assess the movement and behavior patterns of fish within the lock chamber; (3) a comparison of fish passage rates will be made between Brandon Road and Lockport lock using the above methods; and (4) an Asian carp lock-mediated dispersal behavior study utilizing all of the above techniques will be performed at Starved Rock Lock and Dam, a lock on the Illinois River where abundances of Asian carp are high.

Summary of Actions to Date: Efforts are currently under way by partner agencies (IL DNR, SIU, USGS, and USACE) to understand different aspects of fish passage at Brandon Road lock by utilizing complimentary techniques. SIU is undertaking sonar and telemetry work on both a river-wide and a fine scale basis to understand and predict current and potential habitat use by Asian carp and other fishes. USGS is testing novel fish passage deterrent mechanisms. IL DNR has initiated intensive mark recapture studies to generate an understanding of cumulative fish passage by several species. USFWS has work currently under way that is explaining diel and seasonal patterns of fish abundance and behavior in Lockport, Brandon Road, and Dresden Island pools.

FY 2015 Actions: USFWS will conduct studies of fish behavior in and around the Brandon Road lock by deploying a split beam hydro-acoustic-equipped research vessel and stationary hydroacoustic fish detection system into and above and below the lock to survey fish abundance and size distribution during lock operation. Work will be attempted throughout the year. Preliminary trials of DIDSON deployment will be attempted to better understand the most appropriate methods for deployment within the lock chamber. Asian carp behavior will be examined at a downstream lock using split beam hydro-acoustic and DIDSON techniques.

FY 2016 Actions: USFWS will conduct additional studies as needed. It is assumed that work completed in 2015 may generate more questions from the Brandon Road work group or the barge industry.

Expected Milestones:

- Data allowing the Brandon Road work group and other collaborating agencies to determine the relative frequency and size structure of wild fish attaining passage from the Dresden Island pool upstream through the Brandon Road lock structure.
- Data allowing agencies to determine the fine scale spatial movement patterns of wild fish within and near the lock structure.
- Data that informs agencies and industry partners about potential fish passage vulnerabilities associated with commercial traffic.
- Data that describes lock mediated dispersal behavior of Asian carp.
- Written project reports and peer reviewed publications describing project results.

Outcomes/Outputs:

- Enhanced knowledge of behavior of fishes near the Brandon Road lock and fish interactions with barge tows that could influence future operations in a manner that minimizes fish passage.
- Enhanced knowledge of lock mediated dispersal behavior of Asian carp.
- Collaboration with partner agencies (USGS, IL DNR) to enhance value of individual research projects.

Potential Hurdles:

- Commercial traffic through the lock structure.
- Weather.
- Staff availability.
- Turbulence and air bubbles in and around the lock may obscure systems used to monitor fish behavior.
- Possible issues regarding sampling site logistics.

5. Characterizing Risk of Seasonal Changes on Electric Barrier Operating Parameters

Agency Collaboration: USACE

Funding Table:

Funding	Base Funding Expected	Asian Carp GLRI Funding Requested	Other Funding
FY 2015	$0	$100,000	$0

*Assume flat-line funding for base funding.

Project Explanation: Resource agencies and stakeholders are greatly concerned about the upstream dispersal of Asian carps within the Upper IWW and the potential effects on native ecosystems in the event of their introduction into the Great Lakes. The Electric Dispersal Barrier system located in the CSSC serves as a primary barrier to fish movement between basins. A demonstration barrier was operational between April 2002 and July 2014 and operated at 1.0 V/in., 5 Hz, 4 ms. Two newer barriers, Barrier IIA and Barrier IIB, were brought on line in 2009 and 2011. The newer barriers cover a much larger area than the Demonstration Barrier and are capable of generating electrical fields of much higher intensity. Initially, Barrier IIA had the same operating parameters as the Demonstration Barrier (1.0 V/in.). However, the operating parameters of Barrier IIA were increased to 2.0 V/in., 15Hz, 6.5 ms in August 2009 as a result of a pilot laboratory study conducted on Silver Carp ranging in size from 5.4-11.0 inches TL (Holliman 2011). Holliman (2011) found that at those parameters, 100 percent of those Silver Carp specimens were incapacitated. Barrier IIB began operation in April 2011 at 2.0 V/in. Barrier IIB operated at 2.0 V/in until 11/29/2011, when parameters for both barriers were increased to 2.3 V/in., 30 Hz, 2.5 ms. The increase to 2.3 V/in. was in response to intensive laboratory trials conducted on Bighead Carp that were 1.8-3.2 inches TL (Holliman 2011). Holliman (2011) found that those parameters incapacitated 100 percent of small Bighead Carp that were exposed to gradual increases in voltage in a Brett swim tunnel. Those parameters were also about 90 percent effective at preventing fish from swimming through a simulated barrier that small Bighead Carp were allowed to challenge.

Recently, due to unprecedented environmental conditions and resultant safety issues, the barriers have been operating at parameters that may be less than optimal for all size ranges of Asian carp at all temperatures (1.0 V/in, 34 Hz, 2.3 ms). To assess the potential for increased risk of fish challenging the barriers under sub-optimal operating parameters and under varying environmental scenarios, more robust and consistent monitoring and experimental testing are warranted. These data will inform refinement of management response plans and any

subsequently necessary response actions, especially if these operational parameters will persist or be considered for use again in the future.

USFWS proposes to enhance our collective understanding of fish passage risk, under lowered operating parameters, with empirical evidence provided by field based studies. Data requirements for high confidence in risk level assessments include: (1) characterization of fish incapacitation responses to the electrical field produced by the barriers, under ambient environmental conditions; (2) real-time quantification of relative fish abundance below the barriers; and (3) direct observational evidence of barrier efficacy. Abiotic variables, including water temperature, velocity, conductivity, and any other parameters that could affect fish behavior and susceptibility to electric current from the barriers will also be quantified. Experimental, field-based trials, conducted under ambient conditions, using surrogate fish of a range of sizes will be used to determine incapacitation responses to lowered operating parameters. This experiment will identify size classes of fish that may pose the greatest risk.

Fish behavior and abundance patterns will also be quantified under ambient environmental and electrical conditions by utilizing fixed or mobile split beam and multi-beam (DIDSON) hydroacoustic surveys. These techniques will allow real-time assessments of fish abundance and behavior in areas immediately below and within the barrier system.

Specific study objectives are to: (1) assess the responses of fish to the electrical field produced under the ambient conditions associated with reduced electrical intensity parameters at the barriers; (2) quantify fish abundance at the barriers in conjunction with changes in barrier operating parameters or environmental conditions on a fine spatial and temporal scale; and (3) assess fish behavior at the barriers in conjunction with changes in barrier operating parameters or environmental conditions. This work will be conducted in collaboration with USACE and the MRWG. Results from these evaluations will further inform other potential dispersal barrier projects utilizing in-water electrical current as a deterrent to fish movement.

The objectives of this project may be attained by use of several methods: (1) surrogate fish species electrical response experiments at the barriers under ambient field conditions; (2) mobile and stationary split beam hydro-acoustic assessments; (3) mobile and stationary multi-beam acoustic camera (DIDSON) surveys; and (4) trawling and or netting to confirm species composition of fish detected through remote sensing in areas below the barriers.

Summary of Actions to Date: From June 2011 to August 2013, USFWS completed evaluations of wild fish populations within the barrier system. Those evaluations showed multiple occurrences of wild fish (50-100 mm, likely Clupeids) appearing to cross the highest voltage

areas of the barriers, always in schools. During those trials, the barriers were being operated at 2.0 V/in. and 2.3 V/in. We have not previously collected empirical survey data on fish behavior near the barriers with operational parameters set to 1.0 V/in. In March 2015, USFWS completed weekly hydroacoustic scans of the areas immediately below the barrier system (within 500 m of the barriers) in response to changes in barrier operating parameters to 1.0 V/in, 34 Hz, 2.3 ms. Relatively few fish were observed.

FY 2015 Actions: USFWS will conduct seasonal, real-time, field observations of fish behavior and abundance in and near the barrier system, while examining abiotic variables like water temperature, velocity, and conductivity that may affect fish behavior and susceptibility to electric current in the water from the barriers. Work will be attempted throughout the year, particularly in times of anticipated changes to barrier operating parameters.

FY 2016 Actions: USFWS will conduct additional studies as needed. It is assumed that work completed in 2015 may generate more questions from the MRWG work group or other partners.

Expected Milestones:

- Data allowing the MRWG and other collaborating agencies to determine the relative risk and necessary response actions of operating the barriers at less than optimal parameters due to changes in environmental or safety conditions.
- Data allowing agencies to better determine the seasonal abundance and behavior of fishes in and near the barriers to inform future decisions regarding changes in barrier operating parameters.
- Written project reports and peer reviewed publications describing project results.

Outcomes/Outputs:

- Enhanced knowledge of behavior of fishes near the electric dispersal barriers and fish interactions with the barrier system that could influence future barrier operations in a manner that minimizes the potential risk of fish passage.
- Collaboration with partner agencies (USACE, USGS, and IL DNR) to enhance value of individual research projects.

Potential Hurdles:

- Commercial traffic through the barriers.
- Weather.
- Staff availability.
- Increases in water current or conductivity.
- Possible issues regarding sampling site logistics.

6. Program Capacity for eDNA

Agency Collaboration: Great Lakes States, USACE

Funding Table:

Funding	Base Funding Expected	Asian Carp GLRI Funding Requested	Other Funding
FY 2015	$400,000	$650,000	$0

*Assume flat-line funding for base funding.

Project Explanation: USFWS Great Lakes Fish and Wildlife Conservation Offices are uniquely poised to collect samples from around the Great Lakes basin to be analyzed for Asian carp eDNA at the Midwest Fisheries Center, Whitney Genetics Laboratory. In FY 2013, the Service began to implement a comprehensive, effective, and efficient program in the Great Lakes to detect incipient invasions. This task will provide USFWS Fish and Wildlife Conservation Office facilities with resources and expertise to conduct integrated, long-term early detection activities in areas outside of the CAWS using eDNA. Funding received under this action item will support water sample collection around the entire Great Lakes Basin, and samples will be analyzed for eDNA at the Midwest Fisheries Center, Whitney Genetics Laboratory.

Summary of Actions to Date: USFWS continues to work with its partners to refine a Great Lakes basin-wide early detection protocol for Asian carp, and potentially other AIS species, using eDNA. USFWS continues to coordinate with federal, state, and provincial partners to annually identify sampling locations (areas of concern), share information, and discuss ways to coordinate eDNA sampling efforts within affected jurisdictions. In 2013 and 2014, USFWS worked with our partners to conduct coordinated and complementary sampling efforts in the Great Lakes basin with both emerging and traditional gears. From May to November 2013, USFWS collected 2,240 eDNA water samples. Positive eDNA results were obtained from USFWS sampling in three locations. In 2014, USFWS expanded its overall sampling efforts and collected more than 4,000 eDNA water samples from all five Great Lakes. In 2014, positive eDNA results were obtained from USFWS sampling in three Great Lakes locations.

FY 2015 Actions: The Service, in cooperation with our partners, will continue to monitor for the presence of Asian carp eDNA in the Great Lakes basin utilizing a statistically tenable sampling protocol. The Service will continue to upgrade its field sampling infrastructure and its collection and sample processing techniques as new technologies emerge.

FY 2016 Actions: The Service, in cooperation with our partners, will continue to monitor for the presence of Asian carp eDNA in the Great Lakes basin utilizing a statistically tenable sampling

protocol. The Service will continue to upgrade its field sampling infrastructure and its collection and sample processing techniques as new technologies emerge.

FY 2017 Actions: The Service, in cooperation with our partners, will continue to monitor for the presence of Asian carp eDNA in the Great Lakes basin utilizing a statistically tenable sampling protocol. The Service will continue to upgrade its field sampling infrastructure and its collection and sample processing techniques as new technologies emerge.

Expected Milestones:

- Continued development of capacity for implementing an eDNA sampling program at USFWS Great Lakes Fish and Wildlife Conservation Offices.
- Continued implementation and refinement of an eDNA sampling protocol for other areas of concern, with particular focus on southern Lake Michigan and other potential hot spots for Asian carp invasions.

Outcomes/Outputs:

- Continued eDNA sampling in areas of concern by USFWS Great Lakes Fish and Wildlife Conservation Offices, conducted in close coordination with partners.
- Continued updating of the QAPP to include any necessary updates for collecting, handling, and processing water samples.

Potential Hurdles:

- Possible issues with eDNA calibration outcomes/output.
- Limitations due to weather and difficulties accessing sites.
- Maintaining QA/QC process regarding sample contamination in the field.

7. <u>Fisheries Capacity for eDNA Processing and Technology Refinement</u>

Agency Collaboration: USACE, USGS, Great Lakes States

Funding Table:

Funding	Base Funding Expected	Asian Carp GLRI Funding Requested	Other Funding
FY 2015	$900,000	$314, 000	$0

*Assume flat-line funding for base funding.

Project Explanation: This project will partially fund processing of eDNA samples for Asian carps at the USFWS Midwest Fisheries Center, Whitney Genetics Laboratory. Use of eDNA as a

monitoring tool for Asian carp and other AIS is being improved through research efforts within federal agencies and academic institutions. To implement new techniques and methods as they are published, new methods and techniques must be tested and validated to be included in the QAPP and then implemented in official monitoring programs. Adaptations from the methods must be researched and then validated in at least three different labs. Furthermore, as the Great Lakes monitoring program commences and additional monitoring sites are added, the laboratory will be required to increase capacity and efficiency. Higher throughput can be realized with modifications to current procedures and methods, all of which require testing and validation in three laboratories to be adopted into the QAPP.

Summary of Actions to Date: The USFWS Whitney Genetics Laboratory was constructed and staffed in 2012, and newly hired staff engaged USACE to transfer processing operations from ERDC to USFWS. A transition plan from USACE to the USFWS was implemented, and the USFWS assumed a lead role for processing eDNA samples from the CAWS and from additional invasional hot spots in the Great Lakes basin. Working with partners, Service staff reviewed and updated the eDNA QAPP as necessary. In 2013, the Whitney Genetics Lab processed 2,240 eDNA water samples collected by Service offices. In 2014, the Whitney Genetics Laboratory processed more than 5,000 eDNA water samples collected by Service offices, and sampling will likely expand in 2015.

FY 2015 Actions: The Service will continue to process water samples collected by our Fish and Wildlife Conservation Offices, in collaboration with our partners, to detect the presence of Asian carp DNA in areas of concern. The Service will continue to evaluate and implement new collection and processing techniques for eDNA surveillance, to identify factors that may influence test results (detection capability of various sampling and processing techniques; environmental inhibitors) and to increase laboratory throughput.

FY 2016 Actions: The Service will continue to process water samples collected by our Fish and Wildlife Conservation Offices, in collaboration with our partners, to detect the presence of Asian carp DNA in areas of concern. The Service will continue to evaluate and implement new collection and processing techniques for eDNA surveillance, to identify factors that may influence test results (detection capability of various sampling and processing techniques; environmental inhibitors) and to increase laboratory throughput.

FY 2017 Actions: The Service will continue to process water samples collected by our Fish and Wildlife Conservation Offices, in collaboration with our partners, to detect the presence of Asian carp DNA in areas of concern. The Service will continue to evaluate and implement new collection and processing techniques for eDNA surveillance, to identify factors that may

influence test results (detection capability of various sampling and processing techniques; environmental inhibitors) and to increase laboratory throughput.

Expected Milestones:

- Continued processing of water samples for Asian carp eDNA sampling from areas of concern.
- Continued updating of the QAPP to include any necessary updates for collection, handling, and processing of water samples.
- Increased throughput of samples processed at the Whitney Genetics Laboratory due to procedural modifications, where possible.

Outcomes/Outputs: USFWS eDNA sample processing and analysis; providing results to state partners within 1 month of when samples were received at the Whitney Genetics Laboratory.

Potential Hurdles:

- Possible uncertainty in eDNA calibration outcomes.

8. <u>Illegal Transport of Injurious Wildlife Enforcement</u>

Agency Collaboration: Great Lakes States

Funding Table:

Funding	Base Funding Expected	Asian Carp GLRI Funding Requested	Other Funding
FY 2015	$0	$400,000	$0

*Assume flat-line funding for base funding.

Project Explanation: Although transfer of AIS is currently illegal, stricter enforcement is necessary to mitigate the risk of transfer. Specific activities cannot be revealed, because disclosing those details will jeopardize law enforcement investigations under way. However, in FY 2015, the focus of this template will shift to equipping and training law enforcement personnel in the use of hand-held, genetic probes used to detect the presence of Asian carp in tanks of fish. These probes have been developed using past framework funding and should be available for testing and use in 2015. Funds may also be used to develop additional genetic markers for Black and Grass Carp as well, which can be used by law enforcement agents to interdict shipments of these fish.

Summary of Actions to Date: USFWS, Office of Law Enforcement expanded surveillance and enforcement of illegal transportation of federally listed invasive species. USFWS wildlife

inspectors increased their efforts to target and interdict federally listed invasive species at border locations. In addition, USFWS has acquired a van that can be utilized to remotely scan containers and vehicles and that can be deployed at all international ports of entry. This van will allow USFWS wildlife inspectors to be more effective and efficient in their search for invasive species. In addition, the Office of Law Enforcement is working with state partners to control the spread of invasive species (including Asian carp) through investigations here in the United States. Specifics are considered law enforcement sensitive.

FY 2015 Actions: Investigative and inspection work will continue and expand, where necessary, in 2015 using all available tools. Specifics are considered law enforcement sensitive.

FY 2016 Actions: Investigative and inspection work will continue and expand, where necessary, using all available tools. Specifics are considered law enforcement sensitive.

FY 2017 Actions: Investigative and inspection work will continue and expand, where necessary, using all available tools. Specifics are considered law enforcement sensitive.

Expected Milestones: None—specifics are considered law enforcement sensitive.

Outcomes/Outputs: Prosecutions of individuals involved in illegally importing or transporting federally listed injurious species in interstate commerce.

Potential Hurdles: None.

9. ***AsianCarp.us* Website Operations and Maintenance**

Agency Collaboration: Web content will be supplied by all members of the ACRCC

Funding Table:

Funding	Base Funding Expected	Asian Carp GLRI Funding Requested	Other Funding
FY 2015	$100,000	$50,000	$0

*Assume flat-line funding for base funding.

Project Explanation: The ability to provide information in a timely and accessible format is a critical component in the ACRCC's stakeholder participation efforts. The ongoing maintenance and continued expansion of AsianCarp.us as both a window into the ACRCC actions and source of trusted information on Asian carp requires extensive staff support.

Summary of Actions to Date: USFWS has built and managed AsianCarp.us since 2011. In 2014, AsianCarp.us continued to be the ACRCC's central platform for public outreach and education. As the site administrator, the Service maintained and developed the website, working toward increased visitation. Since AsianCarp.us launched in 2011, the site has reached more than 200,000 people. Website highlights from the last year include the addition of two educational videos; one on juvenile Asian carp identification (Michigan DNR) and the other on USGS's Asian carp control tools. The website was also expanded to include the Asian Carp Control Technology Toolkit, an on-line resource for managers to quickly learn more about ACRCC funded research related to control technologies, assessment technologies and communication efforts. With assistance from ACRCC Communication Work Group members, the Service also updated content throughout the website to ensure that it continues to be timely and accurate.

FY 2015 Actions: Recent research and subsequent media attention has placed new attention on Grass Carp, a species of Asian carp. A primary goal for the website in 2015 will be to enhance public understanding and awareness of grass carp issues. The website will also be expanded to reflect federal and state actions in the Upper Mississippi River and the Ohio River, as outlined in the WRRDA of 2014.

FY 2016 Actions: The website will be updated with current ACRCC documents and information. It will provide content that informs and educates the public on ACRCC actions and accomplishments.

FY 2017 Actions: The website will continue to provide up-to-date information on the current actions and accomplishments of ACRCC members. It will remain a trusted source of information on Asian carp issues.

Expected Milestones:

- The website will be enhanced with new information and outreach products in a routine and timely fashion from 2015 to 2017. It will take advantage of new and updated social media tools as appropriate.

Outcomes/Outputs:

- Fostering public understanding regarding the role of the ACRCC and the actions it undertakes.
- Identification of information gaps to better target outreach and communication activities.

Potential Hurdles: None

10. <u>The Use of Novel Sampling Gear Video Outreach</u>

Agency Collaboration: NA

Funding Table:

Funding	Base Funding Expected	Asian Carp GLRI Funding Requested	Other Funding
FY 2015	$0	$10,000	$0

*Assume flat-line funding for base funding.

Project Explanation: Brief educational videos available to the public on YouTube are an important outreach and communication tool. The proposed video project will focus on the Magna Carpa, the USFWS research vessel enhanced to support Asian carp assessment actions outlined in the framework. This vessel was designed to deploy multiple gears such as a Paupier net, an electrified Paupier net, and a Mamou trawl to more efficiently capture Asian carp species.

Summary of Actions to Date: Some footage and still images of these novel gears was already collected during previous filming trips for other projects. In 2014, video was collected to create an educational video that complements the newly released Asian Carp Toolkit. Video is currently in production at this time. In 2013, USFWS released the video, *Using eDNA in the Fight Against Asian Carp.* The year before, the Service released the video, *How to Identify an Asian Carp*. The videos continue to get public attention and to date have garnered more than 20,000 views.

FY 2015 Actions: In 2015, the video script would be developed, narration written and recorded, additional footage collected as needed, and the video editing completed. After the video is complete, the Service will launch it through social media, partner listservs, agency websites, and AsianCarp.us.

FY 2016 Actions: The video will continue to be a resource to the public and fisheries resource managers. It will therefore remain on AsianCarp.us and the Service's YouTube channel. It will be cross posted on websites and cited in press releases as appropriate.

FY 2017 Actions: The video will continue to be a resource to the public and fisheries resource managers. It will therefore remain on AsianCarp.us and the Service's YouTube channel. It will be cross posted on websites and cited in press releases as appropriate.

Expected Milestones:

Spring 2015	Script is drafted and finalized
Spring/Summer 2015	Additional footage is collected during field season as needed
Summer 2015	Video editing begins
Fall/Winter	Video is completed

Outcomes/Outputs:

- Fostering public understanding regarding the role of the ACRCC and the Service in enhancing the tools and techniques used in assessment activities.
- A product that complements the proposed Asian Carp Toolkit, a resource for fisheries managers.

Potential Hurdles: None.

11. **Studies to Support the Use of Carbon Dioxide Barrier for Deterrence and Lethal Control**

Lead Agencies: USGS and USFWS
Agency Collaboration: IL DNR, USACE, SIU, University of Illinois Urbana-Champaign, University of Minnesota-Duluth

Funding Table:

Funding Year	Base Funding Expected			Asian Carp GLRI Funding Requested			Other Funding
	USGS	USFWS	Total	USGS	USFWS	Total	
FY 2015	$100,000	$0	$100,000	$150,000	$300,000	$450,000	$0

Project Description: This project will support the use of CO_2 to control Asian carp. CO_2 is being evaluated as both a barrier to minimize expansion of Asian carp and as a lethal control tool in specific situations. As a barrier, CO_2 must be evaluated for its environmental impacts on species of concern to help meet the requirements of the Endangered Species Act (section 7 consultation). CO_2 as a lethal control tool must undergo a rigorous registration process before it may be used within integrated pest management control programs of federal or state natural resource agencies. The goals of this work will be to (1) provide regulatory affairs support for the use of CO_2 as a barrier to control Asian carp and (2) develop registration-specific data to support the registration of CO_2 as a lethal pesticide control. This project supports a larger project that is evaluating CO_2 to control Asian carp. This project includes the development of comprehensive SOPs and institutional guidance for use by approved State and Federal agencies when implementing the chemical or biological control agents in prevention actions. The SOPs will be developed based on models of existing and approved protocols currently in use by resource management agencies in the United States (e.g. bi-national Sea Lamprey Control

Program field protocols (currently in use in the Great Lakes basin), AFS Planning and Standard Operating Procedures for the Use of Rotenone in Fish Management). The chemical and biological control SOPs will serve as core components of the documentation required to use CO_2 as either a barrier or a lethal control agent, and will include protocols on safe transport, handling, storage, and dispersal of CO_2 and equipment; treatment site selection and management (including security and environmental monitoring); employee health and safety training and monitoring; and process for approval and compliance with all requisite Federal, State and local environmental regulations (including ESA Section 7 consultation, NEPA and Migratory Bird Treaty Act compliance, and other regulatory requirements).

The USGS UMESC will provide regulatory affairs support to USFWS in the development of biological and chemical pesticide controls of Asian carp. Regulatory affairs support will include compilation of data and reports for submission to regulatory agencies (e.g. USEPA), identification of required data to attain chemical registration, coordination of experimental use permits and other regulatory support as needed to attain and maintain chemical registrations of tools to control Asian carp. The UMESC will also develop specific data required to attain registration of CO_2 to control Asian carp including studies to describe product chemistry, physical/chemical properties and USEPA Group A acute toxicity (acute oral, dermal, and inhalation toxicity, eye and dermal irritation, skin sensitization).

USFWS will partner with USGS to complete the USEPA registration processes required for new toxicants under the FIFRA, and lead development of the multiple SOPs for implementation of the control techniques. The USFWS will provide support in preparing any needed Section 7 consultations to ensure that all actions taken regarding testing and implementation of Asian carp control technologies are compliant with the ESA. USFWS staff will provide site specific consultations for potential field test sites and wider consultations as appropriate for planned control/chemical application areas, which could include multiple states and multiple USFWS regions. USFWS will prepare any necessary biological opinions, if the consultation processes yields a finding of “likely to adversely affect” a listed species, and work with USGS and partners to prepare any needed incidental take permits or exemptions, if required under the ESA. USFWS will work with USGS to compile the required health and safety information and complete procedural requirements needed for USEPA to evaluate proposed control techniques and ensure that they will not pose unreasonable risks of harm to human health and the environment. In addition, USFWS will assist with developing use manuals and labeling requirements for control technologies developed under this template, and liaise with USGS, USEPA, and other partners to fulfill other requirements of the USEPA registration process. The Service will serve as eventual registrant of Asian carp control technologies developed under this template, and will work with USGS to ensure that any applications, including experimental or test applications, of control technologies developed under this template are compliant with NEPA.

FY 2014 Actions:

- During FY 2014, UMESC completed waiver requests for specific sections of CFR 40 parts 150 to 159 for sections that most likely do not apply to anticipated use of CO_2 as a control agent.
- During FY 2014, USFWS initiated development of SOPs to provide guidance for field use of microparticle-based Asian carp control agents by approved agents, and collaborated with USGS to identify and obtain target sensitive native fish and mussel species for laboratory testing to support registration process.

FY 2015 Actions:

- Complete review with USFWS to determine Section 7 ESA-consultation data requirements of a CO_2 barrier or the use of CO_2 as a control agent in limited open-water application sites.
- Coordinate submission of studies to complete USEPA registration for the use of CO_2 as a control agent in limited open-water application sites.
- Coordinate submission of studies to address USFWS Section 7 ESA-consultation data requirements of a CO_2 barrier or the use of CO_2 as a control agent in limited open-water application sites.
- Provide guidance for studies on effects of CO_2 on non-target organisms to ensure compliance with Section 7 ESA-consultation.
- Provide regulatory affairs support for control products registered by the USFWS and other public agencies.
- USFWS will continue development of protocols, SOPs, and supporting documentation in advance of registration and field allocation of CO_2 for control of Asian carp.
- USFWS, in partnership with USGS, will develop and initiate safety and training programs and protocols for agency staff for implementation of control technologies in the field.
- USFWS will initiate acquisition of materials and equipment needed for field implementation of control technologies at select site(s), TBD.
- USFWS will initiate Section 7 consultations and other necessary environmental regulatory reviews in preparation for potential implementation of control tools at the Brandon Road Lock and Dam in the IWW System, and other locations, if specified.

FY 2016 Actions:

- Respond to USEPA or state regulatory agencies regarding the use of CO_2 as a barrier or to register CO_2 as a control agent in limited open-water application sites.
- Respond to USFWS review of data submitted to address Section 7 ESA-consultation of the use of CO_2 as a barrier or the use of a CO_2 as a control agent in limited open-water application sites to control Asian carp.
- Assist management agencies that plan to deploy CO_2 as a barrier or the use of a CO_2 as a control agent in limited open-water application sites to control Asian carp.

- Provide regulatory affairs support for control products registered by USFWS and other public agencies.

2017 Actions:

- Coordinate submission of studies to address Section 7 ESA-consultation data requirements of CO_2.
- Provide regulatory affairs support for control products registered by USFWS and other public agencies.

Expected Milestones:

- Determination of USEPA registration and Section 7-ESA consultation data requirements for use of CO_2 as a barrier or the use of a CO_2 as a control agent in limited open-water application sites to control Asian carp.
- Acquisition of Experimental Use Permits to allow experimental use of CO_2 as a barrier or as a control agent in limited open-water application sites to control Asian carp.
- Registration of CO_2 as a barrier or as a control agent in limited open-water application sites to control Asian carp.

12. <u>Registration of Microparticle Technologies</u>

Lead Agency: USGS and USFWS
Agency Collaboration: IL DNR, USACE, SIU, University of Illinois Urbana-Champaign

Funding Table:

Funding Year	Base Funding Expected			Asian Carp GLRI Funding Requested			Other Funding
	USGS	USFWS	Total	USGS	USFWS	Total	
2015	$50,000	$0	$50,000	$100,000	$150,000	$250,000	$0

Project Description: The goals of this project are to (1) provide regulatory affairs support for the registration of microparticle controls, and (2) develop registration-specific data to support the registration of microparticle controls for Asian carp. This project supports a larger project that is evaluating the development of microparticles to selectively deliver chemical and potentially biological control agents to Asian carp. Currently, antimycin-incorporated microparticles are being evaluated for the potential to control populations of Asian carp. This tool, however, must complete a rigorous registration process before it may be used within integrated pest management control programs of state and federal natural resource agencies. Results from this project will include the development of comprehensive SOPs and institutional guidance for use by approved state or federal agencies in implementing the chemical or

biological control agents in prevention actions. The SOPs will be developed based on models of existing and approved protocols currently in use by resource management agencies in the United States (bi-national Sea Lamprey Control Program field protocols [currently in use in the Great Lakes basin], AFS Planning and Standard Operating Procedures for the Use of Rotenone in Fish Management) and tailored to each specific microparticle control formulation. The chemical and biological control SOPs will serve as core components of the registration application documentation and will include protocols on safe transport, handling, storage, and dispersal of control agents and equipment; treatment site selection and management (including security and environmental monitoring); employee health and safety training and monitoring; and process for approval and compliance with all requisite federal, state and local environmental regulations (including Endangered Species Act Section 7 consultation, NEPA and Migratory Bird Treaty Act compliance, and other regulatory requirements).

The USGS Upper Midwest Environmental Sciences Center (UMESC) will provide regulatory affairs support to the USFWS in the development of biological and chemical pesticide controls of Asian carp. Regulatory affairs support will include compilation of data and reports for submittal to regulatory agencies (such as USEPA), identification of required data to attain chemical registration, coordination of experimental use permits, and other regulatory support as needed to attain and maintain chemical registrations of tools to control Asian carp. The UMESC will also develop specific data required to attain registration of microparticles to control Asian carp, including studies to describe product chemistry, physical/chemical properties and USEPA Group A acute toxicity (acute oral, dermal, and inhalation toxicity, eye and dermal irritation, and skin sensitization).

USFWS will partner with USGS to complete the USEPA registration processes required for new toxicants under the FIFRA and lead development of the multiple SOPs for implementation of the control techniques. USFWS will provide support in preparing any needed Section 7 consultations to ensure that all actions taken regarding testing and implementation of Asian carp control technologies are compliant with the ESA. USFWS staff will provide site-specific consultations for potential field test sites and wider consultations as appropriate for planned control/chemical application areas, which could include multiple states and multiple USFWS regions. USFWS will prepare any necessary biological opinions, if consultation processes yield a finding of “likely to adversely affect” a listed species, and will work with USGS and partners to prepare any needed incidental take permits or exemptions, if required under the ESA. USFWS will work with USGS to compile the required health and safety information and complete procedural requirements needed for USEPA to evaluate proposed control techniques and ensure that they will not pose unreasonable risks of harm to human health and the environment. In addition, the USFWS will assist with developing use manuals and labeling requirements for control technologies developed under this template and liaise with USGS, USEPA, and other partners to fulfill other requirements of the USEPA registration process. The Service will serve as eventual registrant of Asian carp control technologies developed under this template and will work with USGS to ensure that any applications, including experimental or test applications, of control technologies developed under this template are compliant with NEPA.

FY 2014 Actions:

- During FY 14, UMESC participated in registration and control technology projects by initiating formulation review with the USFWS to determine Section 7 ESA-consultation data requirements of antimycin-incorporated microparticles.
- During FY 14, USFWS initiated development of SOPs to provide guidance for field use of microparticle-based Asian carp control agents by approved agents and collaborated with USGS to identify and obtain target sensitive native fish and mussel species for laboratory testing to support the registration process.

FY 2015 Actions:

- Complete formulation review with USEPA to determine registration data requirements of antimycin-incorporated microparticles.
- Initiate submission of studies to complete USEPA registration of antimycin-incorporated microparticles to USEPA.
- Coordinate submittal of studies to address Section 7 ESA-consultation data requirements of antimycin-incorporated microparticles.
- Assess registration requirements of alternative control agents of Asian carp.
- Provide regulatory affairs support for control products registered by the USFWS and other public agencies.
- USFWS will continue development of protocols, SOPs, and supporting documentation in advance of registration and field allocation of microparticle controls.
- USFWS, in partnership with USGS, will develop and initiate safety and training programs and protocols for agency staff for implementation of control technologies in the field.
- USFWS will initiate acquisition of materials and equipment needed for field implementation of microparticles at select sites that are yet to be determined.
- USFWS will work with USGS to prepare and submit required documentation to serve as the agency registrant for the microparticles.
- USFWS will initiate Section 7 consultations and other necessary environmental regulatory reviews in preparation for potential implementation of control tools at the Brandon Road Lock and Dam in the Illinois Waterways System, and other locations, if specified.

FY 2016 Actions:

- Complete review with USFWS to determine Section 7 ESA-consultation data requirements of antimycin incorporated microparticles in limited open-water application sites.
- Complete registration review with USEPA to determine registration data requirements of an antimycin incorporated microparticles in limited open-water application sites.
- Respond to USEPA and state regulatory agencies review of data submitted to register antimycin-incorporated microparticles.

- Respond to USFWS review of data submitted to address Section 7 ESA-consultation of antimycin-incorporated microparticles.

2017 Actions:

- Assess registration requirements of biologically derived controls of Asian carp
- Respond to USEPA or state regulatory agencies review of data submitted to register antimycin-incorporated microparticles in limited open-water application sites.
- Respond to USFWS review of data submitted to address Section 7 ESA-consultation of the use of antimycin-incorporated microparticles in limited open-water application sites to control Asian carp.
- Assist management agencies that plan to deploy antimycin-incorporated microparticles in limited open-water application sites to control Asian carp.
- Provide regulatory affairs support for control products registered by USFWS and other public agencies.
- Coordinate submission of studies to complete USEPA registration of biologically derived controls incorporated into microparticles to USEPA.
- Coordinate submittal of studies to address Section 7 ESA-consultation data requirements of alternative controls for Asian carp.
- Coordinate submittal of studies to address Section 7 ESA-consultation data requirements of biologically-derived controls incorporated microparticles.
- Provide regulatory affairs support for control products registered by USFWS and other public agencies.

Expected Milestones:

- Determination of USEPA registration and Section 7 ESA-consultation data requirements for antimycin-incorporated microparticle registration.
- Acquisition of Experimental Use Permits to allow experimental use of antimycin-incorporated microparticles in limited open-water application sites to control Asian carp.
- Registration of an antimycin-incorporated microparticle formulation.

13. Enhanced monitoring of Asian carps in the Upper Illinois Waterway

Lead Agency: USFWS

Agency Collaboration: Illinois DNR, USACE

Funding Table:

Funding	Base Funding Expected	Asian Carp GLRI Funding Requested	Other Funding
FY 2015	**$300,000**	**$1,120,000**	**$0**
FY 2016	**$300,000**	**$520,000**	**$0**
FY 2017	**$300,000**	**$520,000**	**$0**

*Assume flat line funding for base funding.

Project Explanation: In 2015 The Service and its partners have identified the need for additional sampling as a very high priority, especially in light of recent challenges to operations of the aquatic invasive species dispersal barriers near Romeoville, IL. Since February 2015, the dispersal barriers have been operating at sub-optimal levels (e.g. narrow arrays reduced from 2.3V/inch to as low as 1.0V/inch) due to both environmental and maintenance issues. Additionally, recent surveys have detected juvenile (age-1) Silver carp at Henry, IL (on April 15) about 100 miles downstream of the barriers, and near Spring Valley, IL (on April 16 and April 28) and Peru, IL (on April 29), about 85 miles and 73 miles respectively below the dispersal barriers, representing the most upstream observations of small Asian carp.

As a component of the enhanced field monitoring, the Service will be working with its partner agencies in the MRWG to ensure that assessments for Asian carp planned for the pools immediately below the barriers (Lockport Lock and Dam and Brandon Road Lock and Dam) include sufficient monitoring effort to provide a high degree of certainty in our knowledge of the status of Asian carp in those locations. Additionally, in support of the MRP and other Asian carp monitoring efforts, the Service will work with its partners to: 1) conduct a review of current sampling strategies, including methods, gear, seasonal timing and frequency to determine likelihood of detecting both large and small (juvenile) Asian carp under different sampling scenarios; and 2) complete additional small fish monitoring to determine their status on the leading edge, and for evaluating their use of backwater areas to guide subsequent exclusion/control efforts

Summary of Actions to Date: In 2013, Illinois DNR, USFWS, and USACE conducted extensive sampling efforts in search of Asian carp above and below the barriers following implementation of the ACRCC Monitoring and Response Workgroup's updated 2013 Monitoring and Response Plan—which included additional and novel sampling gear types, a juvenile distribution study,

additional telemetry and DIDSON evaluations, an evaluation of the impact of contract commercial fishing on Asian carp abundance, and a survey program of urban fishing ponds. Through June 2013, staff completed 400 electrofishing runs for a total of 100 hours. No Asian carp were observed through electrofishing. Service staff also conducted fish behavior studies (wild and caged) at the electric barriers. Service staff also participated in 5 responses, including Lake Calumet intensive surveillance, or barrier clearing exercises in 2013. In 2014, Illinois DNR, USFWS, and USACE again conducted extensive sampling efforts in search of Asian carp above and below the barriers following implementation of the ACRCC Monitoring and Response Workgroup's updated 2014 Monitoring and Response Plan—which focused more efforts below the barriers and recommended evaluations at Brandon Road Lock. In 2014, four seasonal intensive monitoring events were completed in the CAWS. Staff completed 350 electrofishing runs and set over 200 trammel/gill nets. No Asian carp were observed in 2014.

FY 2015 Actions: A USFWS team(s) will support Asian carp monitoring and response activities throughout the region as necessary, and help implement actions called for under the annually updated MRP.

FY 2016 Actions: A USFWS team(s) will support Asian carp monitoring and response activities throughout the region as necessary, and help implement actions called for under the annually updated MRP.

FY 2017 Actions: A USFWS team(s) will support Asian carp monitoring and response activities throughout the region as necessary, and help implement actions called for under the annually updated MRP.

Expected Milestones:

- Annual updating, approval, and implementation of the MRP
- Attainment of goals and objectives set by the MRP
- Completion of necessary monitoring with conventional and novel gears to determine the distribution and abundance of Asian carp in the CAWS
- Participation in response efforts, as needed
- Participation in necessary barrier clearing

Outcomes/Outputs:

- Continued development of ACRCC's MRP, as needed to monitor the leading edge of the Asian carp expansion
- Support of Incident Command System (ICS) response operations as needed
- Provision of staff, equipment, supplies, and ICS team members as needed.

Potential Hurdles:

- Weather conditions
- Staff availability
- Possible negative impacts on commercial vessel traffic movement, recreational uses, and resident aquatic life (other than Asian carp) from activities associated with this template
- Possible public resistance to continuing monitoring and response efforts.

Proposed/Potential Future Actions (in addition to projects indicated above):

NEW Proposed USFWS AC Framework Projects

Black Carp eDNA qPCR Marker Development--$300,000
Black carp (Mylopharyngodon piceus) are an emerging invasive species threat within the Mississippi River drainage. As of 2013, the US Fish and Wildlife Service ascertains that the species is already established or on the verge of establishment in the US. Tracking the geographic spread and changing population levels of black carp in North America will be essential for understanding associated ecological and economic impacts and for successful control efforts. As a tool, eDNA is the most sensitive means available for detecting new introductions or range expansions in aquatic organisms. A real time qPCR marker, similar to those currently being used to monitor for the presence of silver and bighead carp, is needed to effectively conduct early detection efforts and to monitor the range of black carp.

Analysis of Grass Carp in the CAWS--$200,000
Grass carp are regularly collected in the CAWS, which is directly connected to the Great Lakes Basin (i.e. Lake Michigan). We propose to mine previously collected collection data (standardized monitoring) and to perform targeted sampling of grass carp in the CAWS. Grass carp collected from these efforts would be sent to WGL, USGS, and SIU per predefined protocols to test them for age, relative abundance, ploidy, gonadal development, and diet. Additionally, grass carp telemetry in the CAWS (stationary and manual tracking) would be performed to assess any threat of grass carp moving into the Great Lakes from the CAWS may pose. Based on this initial analysis, management actions will be recommended.

Black Carp Demographics and Species Assessment in the CAWS & UMRB--$200,000
Given that there is currently very limited active sampling for black carp, we have no idea what habitats/locations are being used by early life stages. This knowledge is important for beginning to assess habitat requirements, verifying natural reproduction (and refining our understanding of where it's occurring), and potentially gaining insight into frequency and timing of reproduction. Lacking sampling data, it's unclear whether the increase in the number of fish reported by commercial fishermen in recent years is due to higher abundance, increasing reporting rates, or both. An evaluation of sampling techniques (for all life stages) would be very useful as a starting point for development of a more thorough, targeted monitoring program to better assess trends in black carp abundance and presence in locations not frequented by commercial fishermen. Both this effort and early life stage sampling would complement eDNA testing/surveillance that we're planning to begin next year. Habitat use could also be better evaluated with development of sampling techniques. An analysis of black carp diets is also need to determine effects on native mussels and other invertebrates.

Gear Evaluation for Mass Removal and Monitoring of Juvenile Asian Carp Species--$100,000
Based on past AC Framework funded GLRI gear development projects, the Columbia FWCO wishes to deploy two small mesh lightweight purse-type nets to target concentrations of juvenile

carps in an effort to decrease densities in large navigable rivers. To date, there is a large effort to target adult carps by commercial fisherman in an effort to depress populations. However, these efforts do not address the recruiting classes of carp that continue to pose a threat on the environment and the Great Lakes. After the documented recruitment success of the 2015 year-class, it is expected the system will have an abundance of fish that will not be vulnerable to commercial fishing gears for several years. The encirclement gears being constructed are a "Lampara" and "Danish" seine. Each net has unique utility in allowing a standard river vessel and crew to target a concentration of carp with relative ease in deployment and retrieval while focusing on small bodied fishes.

Barrier Defense Removal of Asian Carp Using Novel Gear--$80,000

Using past AC Framework funding, the Columbia FWCO has fully developed an electrified butterfly trawl (AKA Paupier) used for the collection of all sizes of Asian Carp. In 2015, we used this gear in concert with commercial fishing efforts in Starved Rock Pool. Results show that the Paupier is a viable tool to supplement commercial fishing efforts, because the Paupier could capture similar numbers and wider size ranges of fish, even down to age zero. If there is a sustained goal of reducing of the population of invasive carps this gear could be used to supplement commercial fishing efforts to ensure smaller year-classes are being targeted.

From:	Potthoff, Johnna J LRC
To:	Herleth-king, Shawna S LRC
Subject:	FW: EPA response to USACE 8-6-15 letter re future without project conditions
Date:	Thursday, September 24, 2015 7:27:05 AM
Attachments:	furture without project conditions reply to USACE.pdf

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-----Original Message-----
From: Westlake, Kenneth [mailto:westlake.kenneth@epa.gov]
Sent: Wednesday, September 23, 2015 4:24 PM
To: Davis, Susanne J LRC; Potthoff, Johnna J LRC; Leichty, Andrew L MVR
Subject: [EXTERNAL] EPA response to USACE 8-6-15 letter re future without project conditions

Sue,

We will send you paper copies of this letter as well. Hopefully, the information as updated from our 9-26-12 reply will be useful. We appreciate the additional time you provided us to pull our response together.

Ken

Kenneth A. Westlake

Chief, NEPA Implementation Section (E-19J)

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

SEP 23 2015

REPLY TO THE ATTENTION OF:

Susanne J. Davis, P.E.
Chief, Planning Branch
Chicago District
U.S. Army Corps of Engineers
231 S. LaSalle Street
Chicago, Illinois 60604

Dear Ms. Davis:

Thank you for your letter of August 6, 2015, requesting EPA comments on future projects, programs, initiatives, regulation, guidance, and other authorities that may be relevant to your assessment of "future without project conditions" for the Upper Illinois Waterway, the Chicago Area Waterway System, and Lake Michigan as part of the Great Lakes Mississippi River Interbasin Study (GLMRIS). Your current focus is on control options at the Brandon Road Lock and Dam in Will County, Illinois. Our comments (which update our September 26, 2012 letter) are enclosed, as is an updated map of Chicago area non-point source projects and water bodies listed as impaired under Section 303(d) of the Clean Water Act. In October, EPA's Pesticide Program will provide an update on aquatic pesticide registration information.

We value our ongoing involvement with the Corps and the other interagency partners engaged on GLMRIS. If you have follow-up questions on our comments, please contact Ken Westlake of my staff at 312-886-2910 and westlake.kenneth@epa.gov.

Sincerely,

Alan Walts, Director
Office of Enforcement and Compliance Assurance

Enclosures (2)

Cc: Johnna Potthoff, Corps of Engineers
Andrew Leichty, Corps of Engineers

EPA response to the U.S. Army Corps of Engineers (USACE) request for "future without project conditions for the Upper Illinois Waterway, the Chicago Area Waterway System (CAWS), AND Lake Michigan

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1. **Any proposed amendments to laws of regulations impacting water quality, including Total Maximum Daily Loads (TMDLs) and discharge standards for current and emerging contaminants.**

Great Lakes Water Quality Agreement

Since 1972, the United States and Canada have cooperated under the Great Lakes Water Quality Agreement to protect and restore the chemical, physical, and biological integrity of the Great Lakes. An amended Agreement was signed by the two nations on September 7, 2012. The Agreement articulates how the U.S. and Canada will coordinate their domestic efforts to reduce pollutants, such as toxic chemicals and nutrients. The amended Agreement added commitments to coordinate bi-nationally on additional threats to water quality, such as climate change, habitats, and aquatic nuisance species (ANS). EPA anticipates that the Agreement will continue to provide the framework for bi-national coordination on Great Lakes water quality for the foreseeable future.

Water Quality Standards (WQS)

Federal WQS Requirements

Section 303 of the Clean Water Act (CWA) requires states to adopt WQS for waters of the U.S. within their respective jurisdictions. Section 303(c) of the CWA requires in part that state WQS include the designated use or uses to be made of the waters and the criteria necessary to protect those uses. New and revised state WQS are then submitted to EPA for review. Upon EPA's approval, these WQS are effective for purposes of the CWA and serve as the basis and goals for water quality management (e.g., point source permitting, goals for restoration of water quality in state cleanup plans). In addition, WQS must include anti-degradation policies that protect existing uses of waters and allow for increased pollution only when consistent with 40 CFR 131.12, which explains that such reduced water quality is allowed only when "necessary to accommodate important economic or social development." Water quality must meet all federal and federally-approved criteria, as well as any other more stringent requirements described in state implementation procedures.

Section 101(a)(2) of the CWA states the national goal of achieving "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water" (the "Section 101(a)(2) uses") wherever attainable. Section 303(c)(2)(A) of the CWA requires WQS to "protect the public health and welfare, enhance the

quality of water, and serve the purposes" of the CWA. EPA's regulations at 40 CFR 131 interpret and implement these provisions by requiring water bodies to be designated for Section 101(a)(2) uses unless the state demonstrates that a Section 101(a)(2) use is not attainable for that water body. *See:* 40 CFR 131.10(j)(1) and (k). Where a state adopts WQS that do not include Section 101(a)(2) uses for a particular water body segment and EPA approves the new and/or revised WQS, the state is required to re-examine the water body segment every three years to determine if any new information has become available. *See:* 40 CFR 131.20(a). If such new information indicates that the uses specified in Section 101(a)(2) of the CWA are attainable, the state must revise its WQS accordingly. *Id.*

Current Federally Applicable WQS for the Chicago Area Waterway System (CAWS) and Lower Des Plaines River (LDPR)

As defined by Illinois WQS, the CAWS consists of 15 segments; and includes the North Shore Channel, a portion of the North Branch of the Chicago River, the Main and South Branch of the Chicago River, the Calumet River, a portion of the Little Calumet River, the Calumet-Sag Channel, Lake Calumet and its connecting channel, and the Chicago Sanitary and Ship Canal. (*See* further description at 35 Illinois Administrative Code 301.247). The Lower Des Plaines River consists of two segments that run from the confluence of the Des Plaines River with the Chicago Sanitary and Ship Canal to the I-55 bridge.

The federally applicable aquatic life use designations currently in effect for 3 of the 17 CAWS and LDPR segments provide for protection and propagation of fish, consistent with the Section 101(a)(2) aquatic life goal uses. The federally applicable recreational use designations currently in effect for 8 of the 17 segments (most segments upstream of the Ship Canal) provide for recreation in and on the water, consistent with the Section 101(a)(2) recreational goal uses. The federally applicable Indigenous Aquatic Life use designations currently in effect for 14 segments provides for less than Section 101(a)(2) aquatic life goal uses; and the federally applicable use designations currently in effect for 9 segments provide for less than Section 101(a)(2) recreational goal uses. A complete listing of the federally applicable use designations, and the criteria applicable for each use designation, currently in effect for the CAWS and LDPR can be found at http://www2.epa.gov/sites/production/files/2015-09/documents/caws-summary-20120510.pdf.

Other tributaries to the CAWS and LDPR (including, but not limited to the North Branch of the Chicago River upstream from its confluence with the North Shore Channel, the Little Calumet River upstream from its confluence with the Cal-Sag Channel, and the Upper Des Plaines River) in Illinois are designated for the protection of Section 101(a)(2) goals for aquatic life and recreation (*See:* 35 Illinois Administrative Code Sections 301-303 at http://water.epa.gov/scitech/swguidance/standards/wqslibrary/il_index.cfm for waters designated as "General Use"). Further, the portion of the Little Calumet and Grand Calumet River watersheds in Indiana are similarly designated to protect the Section 101(a)(2) aquatic life and recreation use goals (*See:* http://water.epa.gov/scitech/swguidance/standards/wqslibrary/in_index.cfm). Further, Indiana has developed more stringent anti-degradation requirements for waters of "outstanding" quality, which includes Indiana's portion of the open waters of Lake Michigan, as well as waters in the

Indiana Dunes National Lakeshore and Cedar Creek in Allen and DeKalb Counties in the Indiana portion of the Great Lakes watershed per 327 Indiana Administrative Code 2-1.5-19. In all other waters of Illinois and Indiana, anti-degradation policies apply as described at 35 Illinois Administrative Code 303.206 and 327 Indiana Administrative Code 2-1.3, respectively.

Near-Term Changes to WQS in CAWS and LDPR

Illinois recently adopted, but has not yet submitted to EPA, revised use designations and associated criteria for the protection of aquatic life and human health uses in the CAWS and LDPR (*See*: http://www.ipcb.state.il.us/documents/dsweb/Get/Document-89321 and http://www.ipcb.state.il.us/documents/dsweb/Get/Document-83286). These revisions include: (1) new or revised designated aquatic life and human health uses, (2) new criteria for chloride, sulfate, benzene, ethylbenzene, toluene, xylene, boron, and total recoverable chlorine, and (3) more stringent criteria for ammonia, dissolved oxygen, temperature, mercury, fluoride and metals including arsenic, cadmium, chromium, copper, cyanide, lead, manganese, nickel, and zinc. Upon submission of the standards, EPA will review and approve or disapprove the new and revised WQS in accordance with CWA Section 303(c). The WQS approved by EPA will then become effective under the CWA.

While the Illinois Pollution Control Board (IPCB) determined that the aforementioned criteria are necessary to protect the recently adopted designated uses for the CAWS and LDPR, several NPDES permit holders have requested that IPCB grant them variances from the new and revised water quality criteria for chloride, temperature, and dissolved oxygen. As explained in 40 CFR 131.14, which becomes effective October 20, 2015, variances to water quality standards are allowed when a facility or water body cannot attain the criteria necessary to protect the use for a specified timeframe in accordance with one of the factors in 40 CFR 131.10(g). While IPCB has not acted upon these requests, any variances authorized by IPCB must be reviewed and approved by EPA prior to becoming effective for CWA purposes. The same is true of any additional WQS variance requests received by the IPCB in the future.

Implementation of Potential New WQS in CAWS and LDPR

Future water quality management activities in the CAWS and LDPR, as guided by implementation of new and/or revised WQS, may include implementation of a Total Maximum Daily Load, more stringent point source permit limits, better stormwater control, and/or new, holistic strategies to improve aquatic life. To the extent that stricter permit limits, installation of stormwater controls, or improved in-stream habitat are shown to be necessary to remedy aquatic life use impairments in order to meet the applicable designated use for a water body, improvements in treatment technologies and/or habitat may be required. For example, various stakeholders have evaluated the cost and effectiveness of various habitat improvements in the CAWS that may serve as a basis for future habitat restoration strategies. The CAWS habitat studies are available at: http://www.ipcb.state.il.us/documents/dsweb/Get/Document-67439 and http://www.ipcb.state.il.us/documents/dsweb/Get/Document-67440. Additional management activities in the CAWS could also include: flow augmentation, aeration, and/or sediment removal in certain segments (*See*: Table 6-1 at http://www.ipcb.state.il.us/documents/dsweb/Get/Document-59252).

Long-Term Changes to WQS in Illinois and Indiana Watersheds

As noted above, Section 101(a)(2) of the CWA states the national goal of achieving "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water" wherever attainable. To the extent that the WQS for any segment of the CAWS or LDPR do not provide for either the aquatic life or the recreational goal uses consistent with Section 101(a)(2), states are required to re-examine the water body segment every three years to determine if any new information has become available; and, if such new information indicates that the uses specified in Section 101(a)(2) of the CWA are attainable, the state must revise its standards accordingly. EPA is hopeful that, at some point in the future, water quality consistent with Section 101(a)(2) goal uses and associated criteria will be attainable for all CAWS and LDPR segments.

EPA is assessing the consistency of Illinois' and Indiana's WQS with new and revised EPA criteria recommendations. Since 2012, EPA has finalized the following new criteria recommendations: ammonia aquatic life criteria, bacterial indicator recreational water quality criteria, and human health criteria for 94 chemicals. Currently, EPA is working on: revising aquatic life criteria for selenium, cadmium, copper, aluminum, and chloride criteria, evaluating human health criteria issues related to perchlorate, perfluorooctanoic acid, and perfluorooctane sulfonate, and developing recreational water quality criteria for viruses (bacteriophage).

TMDLs, CWA Section 303(d) list of impaired waters, and CWA 319 Programs

Federal TMDL, and 303(d) Impaired Waters List Requirements

Under Section 303(d) of the CWA and its supporting regulations (40 CFR 130.2 and 130.7), states, territories and authorized tribes are required to produce lists of water-quality-limited segments that do not meet or will not meet WQS even after technology-based CWA discharge permits are in place. "Impaired waters" are defined as those not meeting WQS, and "threatened waters" are those not expected to meet WQS by the next listing cycle. These lists of impaired and threatened waters, referred to as 303(d) lists, must be developed and submitted to EPA every two years. TMDLs need to be developed to address all water body/pollutant combinations on the list. EPA is responsible for reviewing and making a final decision on both the 303(d) lists and TMDLs.

Section 319 of the CWA

The CWA amendments of 1987 established Section 319 to support development of nonpoint source management program plans to be implemented by the states. The program seeks to address nonpoint sources of pollution through a variety of approaches and programs including: implementation projects, financial and technical assistance, education, training, and project demonstrations. EPA works with its state counterparts to administer the Section 319 program. Projects are selected by the state through a competitive process and should be aligned with the state Nonpoint Source Management Program Plan. Projects can be implemented by various partners including: state and local agencies, non-profit entities, and third parties. Nonpoint

source project location, status, and project descriptions are recorded in EPA's Grants Reporting and Tracking System (GRTS). Projects can be found through GRTS at http://iaspub.epa.gov/pls/grts/f?p=110:199:254205081988001.

An additional resource is the Coastal Nonpoint Pollution Control Program (Coastal Zone Management Act, Section 6217) which addresses nonpoint pollution problems in coastal waters. Section 6217 requires states and territories with approved Coastal Zone Management Programs to develop Coastal Nonpoint Pollution Control Programs. In its program, a state or territory describes how it will implement nonpoint source pollution controls, known as management measures, that conform to those described in *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters*. This program is administered jointly with the National Oceanic and Atmospheric Administration. The Illinois Department of Natural Resources' Coastal Zone Management program was approved in early 2012. The Coastal Nonpoint Pollution Control Program, once approved, will implement projects consistent with the state's management measures, and will be partially funded through the state's Section 319 program.

Current 303(d), TMDL, and 319 Activities

The enclosed map illustrates the spatial extent of 303(d) listed waters and the location of recent nonpoint source projects near the CAWS. Data for the attached figure were downloaded from https://edg.epa.gov/clipship . The map may not show all projects or impairments due to the variability in reporting that occurs and the lag between final agency decisions and completion of spatial data.

Nonpoint source projects on the map were reported in EPA's GRTS from 2010 to September, 2014. The scope of projects can range from education to restoration. While not all nonpoint source projects may be shown, the map identifies where efforts are focused and where water quality or habitat improvements could occur as a result of nonpoint source activities.

The 303(d) listed waters on the map reflect Illinois EPA's (IEPA) 2004 approved list and the Indiana Department of Environmental Management's (IDEM) 2008 approved list. The most recent EPA approved list for these states are 2006 and 2010, respectively. Therefore new waters identified by IEPA in the CAWS, Lower Des Plaines River (LDPR), and/or Lake Michigan in the 2006 or later 303(d) cycles are not reflected in the map. The 303(d) draft and EPA approved lists for Indiana are at *http://www.in.gov/idem/nps/2647.htm*; and those for Illinois are at *http://www.epa.illinois.gov/topics/water-quality/watershed-management/tmdls/303d-list/index*. IEPA also identifies TMDL project work by watershed in their 303(d) list appendices.

EPA-approved TMDLs that were developed for impairments within the CAWS include:

- Spring Brooke TMDL in Salt Creek HUC 0712000404. Completed in 2004 to address low dissolved oxygen and high biochemical oxygen demand.
- West and East Branch of the Du Page River in Du Page HUC 0712000408. Both were completed in 2004 to address chloride and conductivity related impairments.

- Addison Creek TMDL in Salt Creek HUC 0712000404. Completed in 2004 to address nutrients.
- Saganashkee Slough and Tampier Lake in Chicago Sanitary and Ship Canal-Des Plaines River HUC 0712000407. Completed in 2010 to address low dissolved oxygen and total phosphorus.
- Salt Creek (IN) TMDL in HUC 0404001. Completed in 2012 to address bacteria, total phosphorus and sediment impaired segments.
- Deep River-Portage Burns Watershed (IN) TMDL in HUC 04040001. Completed in 2013 to address bacteria, total phosphorus, and sediment impaired segments.
- Lake Michigan shore line (IL) TMDL in HUC 04060200. Completed in 2013 to address bacteria impaired segments.
- Upper Des Plaines (Higgins Creek) (IL) TMDL in HUC 0712000405. Completed in 2013 to address bacteria (fecal coliform), chloride, ammonia, total phosphorus and carbonaceous biochemical oxygen demand (CBOD) impaired segments.

IEPA is developing TMDLs for various parameters in the North Branch of the Chicago River watershed, the Lower Du Page River watershed, and the Lake Michigan shore line. TMDL report status can be accessed for IEPA at *http://www.epa.illinois.gov/topics/water-quality/watershed-management/tmdls/index* and for IDEM at *http://www.in.gov/idem/nps/2652.htm#development.*

For the reasonably foreseeable future, the Section 319 nonpoint source program will continue to provide funding to states to implement the schedules contained in the Management Program Plan document. IEPA has established and is maintaining a publicly accessible database which tracks all relevant nonpoint source projects – the Resource Management Mapping Service. EPA issued new guidance for the Section 319 program in April 2013. EPA approved revisions to IEPA's Management Program Plan in September, 2013, based on the new guidance. The next update to this program document is expected in 2018.

Anticipated Future Activities

EPA will continue to review and take final actions on the 303(d) lists and TMDL submittals, and to fund IEPA's program consistent with national Section 319 funding allocation methodology. Impaired waters lists are to be submitted by April 1 of even-numbered years. The 303(d) submissions by the state should include a priority ranking to help identify TMDL projects that are anticipated within the next two years. These waters should align with the states' recently developed TMDL Vision Process. The TMDL Vision outlines the water bodies and pollutants for which the state expects to develop TMDLs by 2022. In addition to the North Branch of the Chicago River, the Thorn Creek watershed in Illinois is also prioritized for TMDL development by 2022. Where EPA-approved TMDLs are developed within the CAWS, this may result in changes to existing effluent limits for point sources, nonpoint source project implementation, and overall reductions in pollutant loading to impaired water bodies.

National Pollutant Discharge Elimination System (NPDES) Permits for the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) Water Reclamation Plants (WRP)

Current Conditions

IEPA issued permits in 2013 for the O'Brien (formerly known as Northside), Calumet and Stickney plants requiring phosphorus removal, with associated lengthy compliance schedules. The 2013 issued permits for O'Brien and Calumet require disinfection by March 31, 2016. The Combined Sewer Overflow (CSO) overflows covered under these permits, which discharge untreated wastewater mixed with stormwater into the CAWS, are primarily controlled by MWRDGC's construction and operation of their Tunnel and Reservoir Plan (TARP) system. A schedule for completing the TARP by 2029 is included in a proposed Federal Consent Decree that has been lodged in Federal Court. The Federal Consent Decree has not yet been entered by the court and is not in effect.

Anticipated Future Improvements

The 2013 issued permits for the O'Brien and Calumet plants reflect the finalized upgrade of WQS for the CAWS, as they now contain fecal coliform limits and construction schedules for disinfecting the discharge from the two plants. The Calumet WRP began chlorination/ dechlorination in July 2015, ahead of its existing disinfection compliance schedule in its 2013 issued permit. The Calumet plant is moving forward per its compliance schedule for phosphorus removal in the 2013 issued permit. The O'Brien WRP construction for disinfection and phosphorus removal is moving forward per the compliance schedule in its 2013 issued permit. The Stickney WRP construction for phosphorus removal is moving forward per the compliance schedule in its 2013 issued permit. The O'Brien, Calumet and Stickney permits all contain a 1 milligram per liter (mg/L) phosphorus limit.

National Pollutant Discharge Elimination System (NPDES) Vessel General Permit and Ballast Water

Current Conditions

The final 2013 Vessel General Permit (VGP) covers vessels greater than 79 feet in length. The final 2014 Small Vessel General Permit (sVGP) covers vessels less than 79 feet in length, but a current moratorium makes the sVGP applicable only to ballast water discharges.

The VGP has numeric limits and best management practices for ballast water discharges, and exempts inland and certain seagoing vessels less than 1600 gross tons from the ballast water requirements. EPA has expanded the definition of "Lakers" in the 2013 VGP for the purpose of the ballast water standard to include all Great Lakes vessels, not just those confined by the Welland Canal. All Lakers are exempt from the numeric standards for ballast water but are subject to specific best management practices. Oceangoing vessels entering the Great Lakes are still required to exchange ballast water prior to entering the system as well as meet the numeric standards.

The sVGP contains best management practices to control ballast water, as EPA found that installation of ballast water treatment systems on small vessels is not practicable or economically achievable.

Anticipated Future Improvements
EPA intends to continue to assess the available ballast water treatment technologies and the risk of transfer of invasive species by vessels subject to the NPDES permitting program. EPA will establish numeric standards for ballast water discharges from additional classes of vessels as technologies are demonstrated as being available to these vessels. These efforts will be in conjunction with the U.S. Coast Guard, to achieve a consistent approach to ballast water management at the federal level within the constraints of the applicable statutes.

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2. Any proposed amendments to laws or regulations impacting air quality of the Chicagoland region, including emission standards.

Federal National Ambient Air Quality Standards (NAAQS) Requirements

Under the Clean Air Act (CAA), EPA must review, and revise (if necessary), the existing NAAQS for the six criteria pollutants every five years. These pollutants include: ozone, particulate matter, lead, sulfur dioxide, nitrogen dioxide, and carbon monoxide. The status for each NAAQS in Illinois is summarized below.

NAAQS	Level of Standard	Nonattainment areas in Illinois
8-hour ozone (2008 NAAQS)	0.075 ppm	Chicago-Naperville (Marginal) (6 counties [Cook, DuPage, Kane, Lake, McHenry, and Will] and 2 partial counties [Kendall and Grundy])
		St. Louis-St. Charles-Farmington, MO/IL (Marginal) (3 counties [Madison, Monroe, St. Clair])
Annual PM2.5 (1997 NAAQS)	15 $\mu g/m^3$	St. Louis, MO/IL (Moderate) (3 counties [Madison, Monroe, St. Clair] and 1 partial county [Randolph])
Annual PM2.5 (2012 NAAQS)	12 $\mu g/m^3$	None
24-hour PM2.5 (2006 NAAQS)	35 $\mu g/m^3$	None
1-hour sulfur dioxide (2010 NAAQS)	0.075 ppm	Lemont (2 partial counties [Cook, Will])
		Pekin (2 partial counties [Peoria, Tazewell])
Lead (2008 NAAQS)	0.15 $\mu g/m^3$	Chicago (1 partial county [Cook])
		Granite City (1 partial county [Madison])
1-hour carbon monoxide	35 ppm	None

8-hour carbon monoxide	9 ppm	None

ppm = parts per million
PM 2.5 = particulate matter 2.5 microns in diameter
$\mu g/m^3$ = micrograms per cubic meter

Near-Term Outlook

EPA intends to complete subsequent rounds of designations for the 1-hour sulfur dioxide (SO_2) standard by December 2020. In November 2014, the Administrator of EPA signed a proposal to strengthen the ozone NAAQS. If a revised standard is finalized, EPA will promulgate designations for areas in the nation, including Illinois.

Long-Term Outlook

EPA's long-term strategy is to continue implementing the NAAQS and enforcing criteria pollutant standards, New Source Review, Title V permits, National Emission Standards for Hazardous Air Pollutants, and new Source Performance Standards. CAA was amended in 1990 to include provisions to reduce emissions from acid rain, urban air pollution, and toxic air emissions. The amendments also include provisions requiring phase-out of stratospheric-ozone-depleting compounds, and strengthened EPA's permitting and enforcement programs. EPA will implement any future programs or provisions if Congress chooses to amend CAA in the future.

Climate Change Efforts

As we noted in our September 26, 2012 letter, EPA follows a common-sense approach to address greenhouse gas (GHG) emissions in the CAWS area and nationally, using means such as limiting GHG emissions in air permits for large sources (note that GHG emissions alone do not trigger air permitting per court order), mobile source standards, and stationary source performance standards under CAA and other authorities and programs. Potential future state and federal legislation related to GHG emissions, energy, transportation, etc., could impact EPA's future approach to reducing GHGs. The effects of climate change are already evident, but the intent of reducing GHGs is to decrease the magnitude of future climate change and related impacts.

Increased temperatures and precipitation extremes will present challenges in maintaining and improving air quality, including in the CAWS area. EPA is taking action to adapt to the impacts of climate change as they relate to EPA's work, including water quality, drinking water supplies, water infrastructure, environmental remediation, and air quality. One of the most important impacts relative to GLMRIS and the CAWS is the increased frequency of precipitation extremes (very heavy precipitation events, flooding, and droughts) and associated impacts on water quality and quantity. For more information, see http://epa.gov/climatechange, which includes tabs for EPA activities, Midwest impacts, and adaptation.

3. **Any future improvements, funding or grants to be given for habitat improvements along the Upper Illinois Waterway, CAWS, and Lake Michigan.**

Habitat improvement projects along the Lake Michigan shoreline have been and will continue to be accomplished using funds provided under the Great Lakes Restoration Initiative and the Great Lakes Legacy Act. Along the Upper Illinois Waterway, habitat improvement projects may be developed and implemented under the Corps-of-Engineers-led Upper Mississippi River Restoration program. If Congress were to fund the Upper Mississippi River Navigation and Ecosystem Restoration Program, that could be a long-term source of additional funding for habitat improvement projects on the Upper Illinois Waterway.

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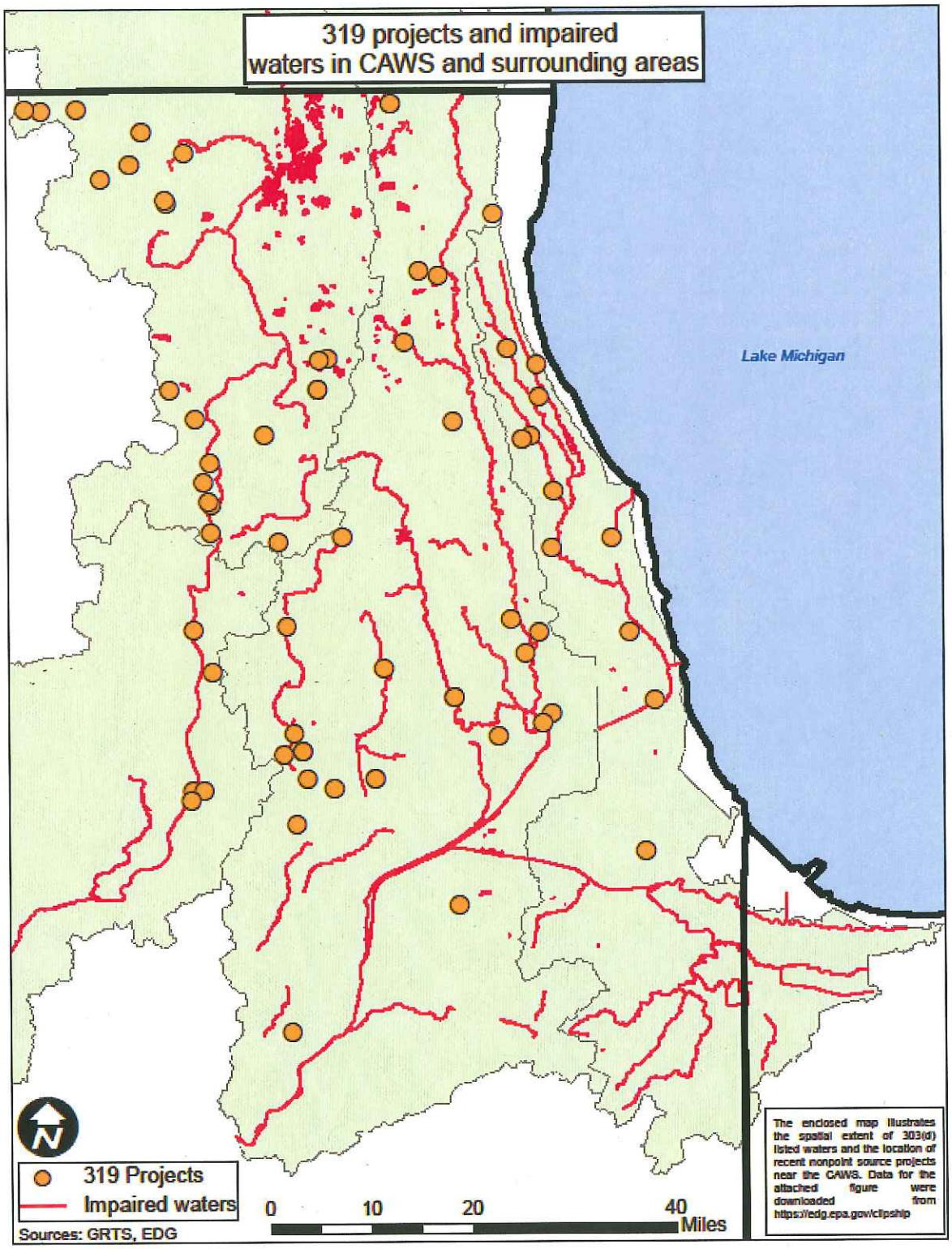
4. **Any future inspection, prevention, education, and control programs for aquatic nuisance species (ANS) of concern;**
5. **Any change or emphasis in funding strategies for ANS research, controls, or monitoring; and**
6. **Any future programs, directives, of actions to prevent the transfer of ANS of concern between the Mississippi river and Great Lakes basins.**

EPA anticipates continued funding of various Asian Carp activities as part of the Asian Carp Control Strategy Framework via the Great Lakes Restoration Initiative for local, state, and federal partners involved in this effort to prevent Asian carp from migrating upstream of the Corps of Engineers' electric barriers. The Framework presents a multi-tiered strategy to combat the spread of Asian carp into the Great Lakes and to ensure coordination and the most effective response across all levels of government. It represents a comprehensive Asian carp prevention plan that includes chemical, structural, monitoring, biological, management and operational strategies. The Framework complements the broader national approach to the management and control of Asian carp as presented in the Management and Control Plan for Bighead, Black, Grass, and Silver Carps in the United States (National Carp Plan), approved by the National Aquatic Nuisance Species Task Force in November 2007.


319 projects and impaired waters in CAWS and surrounding areas
Lake Michigan
319 Projects
Impaired waters
0
10
20
40
Miles
Sources: GRTS, EDG
The enclosed map illustrates the spatial extent of 303(d) listed waters and the location of recent nonpoint source projects near the CAWS. Data for the attached figure were downloaded from https://edg.epa.gov/clipship

From:	Davis, Susanne J LRC
To:	Herleth-king, Shawna S LRC
Cc:	Potthoff, Johnna J LRC
Subject:	FW: EPA Pesticides Program Response to GLMRIS future without project conditions (UNCLASSIFIED)
Date:	Tuesday, October 20, 2015 8:28:28 AM
Attachments:	TLP GLMRIS chem update request - final(EPA) 10 16 15 (3).docx

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CLASSIFICATION: UNCLASSIFIED

Shawna

More FWOP.

S

-----Original Message-----
From: Westlake, Kenneth [mailto:westlake.kenneth@epa.gov]
Sent: Monday, October 19, 2015 5:25 PM
To: Davis, Susanne J LRC; Potthoff, Johnna J LRC
Cc: Kowal, Kathleen; Bolen, Bill; Hopkins, Dan; Jones, Margaret; Steeger, Thomas
Subject: [EXTERNAL] EPA Pesticides Program Response to GLMRIS future without project conditions

Sue and Johnna,

This message is in response to the Corps of Engineers' request to EPA for without project conditions for the Great Lakes Mississippi River Interbasin Study pertaining to pesticides regulated under the Federal Insecticide, Fungicide, and Rodenticide Act. Below and attached please find the response from EPA's Pesticides Program, both here in Region 5 and in Headquarters. The narrative portion of our 2012 response has been updated below. For our response in 2012 we included the narrative along with the attached table.

Our Headquarters Office of Pesticide Programs solicited input from our Headquarters Office of Water. That request may generate additional information from OW. When Tom Steeger of OPP returns from travel next week, Margaret Jones of our Region 5 Pesticides Section will confirm with Tom whether additional information will be forthcoming from OW. She will let you know. (Note that EPA has not changed paragraph 2, below, which summarizes the response from OW in 2012. If additional information is received from OW, that paragraph will be revised.) If you have questions concerning the narrative below or the attached table, please contact Margaret Jones at jones.margaret@epa.gov <mailto:jones.margaret@epa.gov> and 312-353-5790.

Ken Westlake

Kenneth A. Westlake

Chief, NEPA Implementation Section (E-19J)

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

77 W. Jackson Boulevard

Chicago, Illinois 60604

312-886-2910

312-692-2148 (fax)

westlake.kenneth@epa.gov

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Pesticides Use and Permitting

Outlook on Pesticide Control Methods

All pesticides are subject to re-evaluation every 15 years under the Registration Review Program. The Office of Pesticide Programs (OPP) has summarized work that is anticipated on currently registered pesticides which are cited in GLMRIS Fact Sheets and materials. See Updated Information on Aquatic Pesticides attached, which summarizes work that is anticipated over the next 5 years. For more background on the Registration Review Program, please visit the following link on pesticide re-evaluation: Blockedhttp://www2.epa.gov/pesticide-reevaluation <Blockedhttp://www2.epa.gov/pesticide-reevaluation>

OPP made contact with the Office of Water (OW) to determine the outlook on pesticides and water. The OW's Office of Science and Technology/Health and Ecological Criteria Division is revising its Water Quality Criteria (WQC) prioritization process for developing new and updating existing WQC. For Aquatic Life WQC, OW currently has no plans to examine or re-examine any of the chemicals cited in the attached update in the next 5 years, with the exception of potentially developing an effects assessment for sulfate alone (not copper sulfate).

The attached table of pesticides with currently registered aquatic uses, were registered for the uses indicated at the time of the EPA response to USACE in November 2011 [indicated as "available" under the Status column of Appendix B]. Please note the list does not include the uses indicated as "Experimental or When a Use is Not Registered" in Appendix B of the GLMRIS Aquatic Nuisance Species Control Paper.

Experimental Use Permits and Pesticide General Permits

If an experimental use of a pesticide is anticipated in the effort to control aquatic nuisance species (ANS) in the Great Lakes Basin/Chicago Area Waterway System, the criteria for an Experimental Use Permit (EUP) under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) would need to be met as well as any requirements under the state Pesticide General Permits, according to the National Pollutant Discharge Elimination System
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(NPDES). An EUP is required for a new use or an already registered pesticide or for a new pesticide chemical. For aquatic uses of pesticides targeting specific ANS in lotic (flowing water) environments, test chemicals should be deactivated with potassium permanganate or another strong oxidizing agent in order to ensure the chemicals do not move outside the treatment area. Additional information on EUPs and the requirements can be found in the following chapter of the Registration Manual. The requirements for aquatic uses can be found at 40 CFR 172.3(c)(2) Blockedhttp://www2.epa.gov/pesticide-registration/pesticide-registration-manual-chapter-12-applying-experimental-use-permit <Blockedhttp://www2.epa.gov/pesticide-registration/pesticide-registration-manual-chapter-12-applying-experimental-use-permit>

For states in the Great Lakes Basin, Pesticide General Permits according to NPDES are issued by state water agencies, as follows:

[Please note these permits were established in 2012 and several may need to be renewed as they were issued with expiration dates- for example, the Ohio permit will expire on October 31, 2016.]

Illinois: Blockedhttp://www.epa.illinois.gov/topics/forms/water-permits/pesticide/ <Blockedhttp://www.epa.illinois.gov/topics/forms/water-permits/pesticide/>

Indiana: Blockedhttp://www.in.gov/idem/ctap/2350.htm <Blockedhttp://www.in.gov/idem/ctap/2350.htm>

Michigan: Blockedhttp://www.michigan.gov/deq/0,4561,7-135-3313_51002_3682_3713-241279--,00.html

Minnesota: Blockedhttp://www.pca.state.mn.us/index.php/water/water-permits-and-rules/water-permits-and-forms/pesticide-npdes-permit/pesticide-npdes-permit-program.html

Ohio: Blockedhttp://www.epa.state.oh.us/dsw/permits/GP_Pesticide.aspx <Blockedhttp://www.epa.state.oh.us/dsw/permits/GP_Pesticide.aspx>

Wisconsin: Blockedhttp://dnr.wi.gov/topic/wastewater/aquaticpesticides.html <Blockedhttp://dnr.wi.gov/topic/wastewater/aquaticpesticides.html>

For general information on pesticides permits, please visit the following web site. Please note, however, that all Region 5 states currently have state pesticide permit authority. The following information would apply to states where EPA is the NPDES permit issuing authority.

Blockedhttp://water.epa.gov/polwaste/npdes/pesticides/EPAs-Pesticide-General-Permit.cfm

PLEASE THINK CAREFULLY BEFORE PRINTING.

Margaret L. Jones

Pesticides Section

Chemicals Management Branch

Land and Chemicals Division

US EPA Region 5

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Chicago, IL 60604

312.353.5790 (phone)

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jones.margaret@epa.gov <mailto:jones.margaret@epa.gov>

Blockedwww.epa.gov/pesticides <Blockedhttp://www.epa.gov/pesticides>

CLASSIFICATION: UNCLASSIFIED

GLMRIS Request for Updated Information on Aquatic Pesticides

Below is EPA's summary of work expected on these pesticides over the next 5 years. The EPA's Registration Review Program is the primary mechanism that is anticipated to potentially change the current status of these chemicals. A more detailed description of this program is below, followed by a table that projects the timeframes for EPA's review.

EPA's Registration Review Program.

Through the registration review program, EPA periodically reevaluates pesticides every 15 years to make sure that as change occurs, products in the marketplace can still be used safely. This process provides multiple opportunities for stakeholders to provide public comments.

The initial **docket opening** allows EPA to present the types of risk assessments that may need to be updated and describe any additional data that needs to be generated.

A **risk assessment** will generally be completed about 4-5 years after the initial docket opening. This timeframe can change depending on how long it takes to complete the required studies.

Risks identified in the risk assessment will be mitigated, if they are found to be unreasonable and viable mitigation options exist, and a summary of the changes to a chemical's registration will be captured in a **proposed decision** that will be issued for public comment approximately 9 months after the risk assessment is completed. A final decision will be posted to the docket and capture any changes based on public comments.

Below we have captured the key registration review milestones and any additional actions anticipated for the chemicals listed as *registered* and *available* on the April 2012 Inventory of Available Controls for Aquatic Nuisance Species of Concern document.

If a chemical docket is already open, additional information on the chemical can be found at www.regulations.gov at the docket number noted.

Chemical	**Chem Info from GLMRIS**	**Type (Algaecide / Herbicide / Mollusci-cide / Piscicide)**	**Registration Review**		
			Date of Registration Review Docket Opening (initiates review process)	**Estimated Date of Risk Assess-ment**	**Estimated Date for an Interim Registra-tion Review Decision**
Copper sulfate and chelated copper formulations (ethanolamines, ethylene diamines, triethanolamines, triethanolamine + ethylene diamine and copper citrate/gluconate)		Algaecide/ Molluscicide	9/2010 Docket: EPA-HQ-OPP-2010-0212	3/2016	12/2016
Endothall (mono (N,N-dimethylalkylamin	CAS # 66330-88-9	Algaecide/ Molluscicide	12/2015 Docket EPA-HQ-OPP-	2017	2018

Chemical	Chem Info from GLMRIS	Type (Algaecide/ Herbicide/ Mollusci-cide/ Piscicide)	Registration Review		
			Date of Registration Review Docket Opening (initiates review process)	Estimated Date of Risk Assess-ment	Estimated Date for an Interim Registra-tion Review Decision
e) salt			2015-0591		
Sodium carbonate peroxyhydrate	CAS #: 15630-89-4	Algaecide	Not yet scheduled.		
Acrolein	CAS #: 107-02-8	Algaecide	09/2015	2019	2021
2.4-D (amine and butoxy-ethyl ester formulations)	CAS #: 94-75-7	Aquatic herbicide	12/2012 Docket: EPA-HQ-OPP-2012-0330	2018	2019
Diquat dibromide	CAS #: 85-00-7	Aquatic herbicide	12/2009 Docket: EPA-HQ-OPP-2009-0846	9/2015	2016
Fluridone	CAS #: 59756-60-4	Aquatic herbicide	9/2009 Docket: EPA-HQ-OPP-2009-0160	2016	2017
Glyphosate	CAS #: 1071-83-6	Aquatic herbicide	6/2009 Docket: EPA-HQ-OPP-2009-0361	10/2015	12/2016*
Imazapyr	CAS #: 81334-34-1	Aquatic herbicide	6/2014 Docket: EPA-HQ-OPP-2014-0200	2015	2015
Triclopyr	CAS #: 55335-06-3	Aquatic herbicide	6/2014 Docket: EPA-HQ-OPP-2014-0576	2019	2020
Quaternary and polyquaternary ammonium compounds		Molluscicide	9/2015	2020	2021
Aromatic hydrocarbons			This is not an active ingredient, rather a family of chemicals. If more specific chemical information is provided, EPA can provide more details.		
Niclosamide	CAS #: 1420-04-8	Molluscicide/ Piscicide	3/2013 Docket: EPA-	2017	2019

Chemical	Chem Info from GLMRIS	Type (Algaecide/ Herbicide/ Mollusci-cide/ Piscicide)	Registration Review		
			Date of Registration Review Docket Opening (initiates review process)	Estimated Date of Risk Assess-ment	Estimated Date for an Interim Registra-tion Review Decision
			HQ-OPP-2013-0137		
Antimycin A	CAS #: 1397-94-0	Piscicide	9/2015 EPA-HQ-OPP-2015-0480	09/2015 (published at docket opening)	2017
Rotenone	CAS #: 83-79-4	Piscicide	9/2015 Docket: EPA-HQ-OPP-2015-0572	2019	2020
TFM	CAS #: 88-30-2	Piscicide	3/2013 Docket: EPA-HQ-OPP-2013-0137	2017	2019

- Predicted based on increased volume of public comments.

From: Potthoff, Johnna J LRC
To: Herleth-king, Shawna S LRC
Subject: FW: GLMRIS further input
Date: Wednesday, October 21, 2015 11:31:48 AM

Please see below. thank you, j

-----Original Message-----
From: Westlake, Kenneth [mailto:westlake.kenneth@epa.gov]
Sent: Wednesday, October 21, 2015 11:28 AM
To: Davis, Susanne J LRC; Potthoff, Johnna J LRC
Cc: Kowal, Kathleen; Hopkins, Dan; Bolen, Bill; Jones, Margaret; Steeger, Thomas
Subject: [EXTERNAL] FW: GLMRIS further input

Sue and Johnna,

As promised, Tom Steeger of our HQ Office of Pesticides Programs followed up with our HQ Office of Water for input to EPA's response on the GLMRIS without future project conditions. Please add his message below to EPA's overall response regarding aquatic pesticides. Thanks.

Ken

From: Steeger, Thomas
Sent: Wednesday, October 21, 2015 3:23 AM
To: Westlake, Kenneth; Jones, Margaret
Cc: Hopkins, Dan; Kowal, Kathleen; Bolen, Bill
Subject: RE: GLMRIS

Ken,

I heard back from OW. They wished to caution/remind the Corps on the use of aquatic herbicides, notably copper compounds, as the compounds can contribute to the development of harmful algal blooms (HABs) that in turn aggravate public health risks.

Tom

From: Westlake, Kenneth
Sent: Monday, October 19, 2015 5:59 PM
To: Jones, Margaret <jones.margaret@epa.gov>
Cc: Hopkins, Dan <hopkins.dan@epa.gov>; Steeger, Thomas <Steeger.Thomas@epa.gov>; Kowal, Kathleen <kowal.kathleen@epa.gov>; Bolen, Bill <Bolen.Bill@epa.gov>
Subject: RE: GLMRIS

Tom, Margaret, and Dan,

Thanks to you for pulling together this update on aquatic pesticides. As I forward to the Corps, I will include your caveat that some additional information might be forthcoming from the Office of Water. Your work on this subject will ensure that the Corps has the benefit of EPA's latest work and schedules for regulating aquatic pesticides.

Ken

From: Jones, Margaret
Sent: Monday, October 19, 2015 1:06 PM
To: Westlake, Kenneth
Cc: Hopkins, Dan; Steeger, Thomas
Subject: FW: GLMRIS

Hi Ken,

Below and attached please find our response, with many thanks to Tom Steeger for turning this request around very quickly. I've updated the narrative portion of our 2012 response below. For our response in 2012 we included the narrative along with the attached table. I hope this will provide you with a response for USACE, however, let me know if you have any questions.

We may have additional information from the Office of Water in headquarters, from a request made by OPP. I will need to confirm that with Tom next week when he returns from travel. (I have not changed paragraph 2, below, which summarizes the response from OW in 2012. The paragraph can either be removed from this response or updated as we receive more information- hopefully by next week.)

Ken, if you have time today we'd like to have a short call with you to discuss the paragraph with summarizes the outlook on pesticides and water. Both Dan and I are available this afternoon. (I will be on travel the remainder of the week.)

Thank you.

Margaret

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Pesticides Use and Permitting

Outlook on Pesticide Control Methods
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All pesticides are subject to re-evaluation every 15 years under the Registration Review Program. The Office of Pesticide Programs (OPP) has summarized work that is anticipated on currently registered pesticides which are cited in GLMRIS Fact Sheets and materials. See Updated Information on Aquatic Pesticides attached, which summarizes work that is anticipated over the next 5 years. For more background on the Registration Review Program, please visit the following link on pesticide re-evaluation: Blockedhttp://www2.epa.gov/pesticide-reevaluation <Blockedhttp://www2.epa.gov/pesticide-reevaluation>

OPP made contact with the Office of Water (OW) to determine the outlook on pesticides and water. The OW's Office of Science and Technology/Health and Ecological Criteria Division is revising its Water Quality Criteria (WQC) prioritization process for developing new and updating existing WQC. For Aquatic Life WQC, OW currently has no plans to examine or re-examine any of the chemicals cited in the attached update in the next 5 years, with the exception of potentially developing an effects assessment for sulfate alone (not copper sulfate).

The attached table of pesticides with currently registered aquatic uses, were registered for the uses indicated at the time of the EPA response to USACE in November 2011 [indicated as "available" under the Status column of Appendix B]. Please note the list does not include the uses indicated as "Experimental or When a Use is Not Registered" in Appendix B of the GLMRIS Aquatic Nuisance Species Control Paper.

Experimental Use Permits and Pesticide General Permits

If an experimental use of a pesticide is anticipated in the effort to control aquatic nuisance species (ANS) in the Great Lakes Basin/Chicago Area Waterway System, the criteria for an Experimental Use Permit (EUP) under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) would need to be met as well as any requirements under the state Pesticide General Permits, according to the National Pollutant Discharge Elimination System (NPDES). An EUP is required for a new use or an already registered pesticide or for a new pesticide chemical. For aquatic uses of pesticides targeting specific ANS in lotic (flowing water) environments, test chemicals should be deactivated with potassium permanganate or another strong oxidizing agent in order to ensure the chemicals do not move outside the treatment area. Additional information on EUPs and the requirements can be found in the following chapter of the Registration Manual. The requirements for aquatic uses can be found at 40 CFR 172.3(c)(2) Blockedhttp://www2.epa.gov/pesticide-registration/pesticide-registration-manual-chapter-12-applying-experimental-use-permit <Blockedhttp://www2.epa.gov/pesticide-registration/pesticide-registration-manual-chapter-12-applying-experimental-use-permit>

For states in the Great Lakes Basin, Pesticide General Permits according to NPDES are issued by state water agencies, as follows:

[Please note these permits were established in 2012 and several may need to be renewed as they were issued with expiration dates- for example, the Ohio permit will expire on October 31, 2016.]

Illinois: Blockedhttp://www.epa.illinois.gov/topics/forms/water-permits/pesticide/ <Blockedhttp://www.epa.illinois.gov/topics/forms/water-permits/pesticide/>

Indiana: Blockedhttp://www.in.gov/idem/ctap/2350.htm <Blockedhttp://www.in.gov/idem/ctap/2350.htm>

Michigan: Blockedhttp://www.michigan.gov/deq/0,4561,7-135-3313_51002_3682_3713-241279--,00.html

Minnesota: Blockedhttp://www.pca.state.mn.us/index.php/water/water-permits-and-rules/water-permits-and-forms/pesticide-npdes-permit/pesticide-npdes-permit-program.html

Ohio: Blockedhttp://www.epa.state.oh.us/dsw/permits/GP_Pesticide.aspx
<Blockedhttp://www.epa.state.oh.us/dsw/permits/GP_Pesticide.aspx>

Wisconsin: Blockedhttp://dnr.wi.gov/topic/wastewater/aquaticpesticides.html
<Blockedhttp://dnr.wi.gov/topic/wastewater/aquaticpesticides.html>

For general information on pesticides permits, please visit the following web site. Please note, however, that all Region 5 states currently have state pesticide permit authority. The following information would apply to states where EPA is the NPDES permit issuing authority.

Blockedhttp://water.epa.gov/polwaste/npdes/pesticides/EPAs-Pesticide-General-Permit.cfm

PLEASE THINK CAREFULLY BEFORE PRINTING.

Margaret L. Jones

Pesticides Section

Chemicals Management Branch

Land and Chemicals Division

US EPA Region 5

77 West Jackson Boulevard

LC-8J

Chicago, IL 60604

312.353.5790 (phone)

312.408.2211 (fax)

jones.margaret@epa.gov

Blockedwww.epa.gov/pesticides <Blockedhttp://www.epa.gov/pesticides>

From: Steeger, Thomas

Sent: Friday, October 16, 2015 4:47 PM
To: Jones, Margaret; Hopkins, Dan
Cc: Westlake, Kenneth
Subject: Re: GLMRIS

From: Jones, Margaret
Sent: Friday, October 16, 2015 11:25 AM
To: Hopkins, Dan
Cc: Westlake, Kenneth; Steeger, Thomas
Subject: RE: GLMRIS

Hi Dan and Ken,

I checked with Headquarters and we do not have a response as yet. I understand there will be substantial changes to the information we provided in 2012. You may recall that in our previous response we decided to look only out as far as 5 years and not beyond (as requested by USACE) as in the review of pesticides the information can change a great deal within that "short" time frame.

I will keep monitoring this and Tom Steeger is also reminding headquarters staff and I expect we will have a response in the near future.

As I find out more I will keep you informed.

Thanks,

Margaret

PLEASE THINK CAREFULLY BEFORE PRINTING.

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Blockedwww.epa.gov/pesticides <Blockedhttp://www.epa.gov/pesticides>

From: Hopkins, Dan
Sent: Tuesday, October 13, 2015 9:31 AM
To: Jones, Margaret
Subject: RE: GLMRIS

No questions, but thank you for the update.

From: Jones, Margaret
Sent: Tuesday, October 13, 2015 9:07 AM
To: Hopkins, Dan
Cc: Westlake, Kenneth
Subject: FW: GLMRIS

Hi Dan,

This is an update on the request from USACE. We may need a few more days to complete the EPA response. We need to go to the Chemical Review Managers for each chemical to gather the information.

I don't think we can make any statements about CO2 as apparently USGS hasn't submitted their data package to EPA as yet. Perhaps we need to discuss this a bit before deciding what to include on this in the response.

I informed Johnna (informally) that we are working on the response so she is aware.

I hope we can finalize this by the end of this week.

Thanks and please let me know if there are any questions.

Margaret

PLEASE THINK CAREFULLY BEFORE PRINTING.

Margaret L. Jones

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Blockedwww.epa.gov/pesticides <Blockedhttp://www.epa.gov/pesticides>

From: Steeger, Thomas
Sent: Friday, October 09, 2015 5:21 AM
To: Jones, Margaret
Subject: GLMRIS

Margaret—thanks again for your voice mail message. The branch chiefs in PRD are looking at the table and will update the various chemicals; it will take them until later next week to complete though. ACE may be surprised at how the status of some of the pesticides has changed.

With respect to CO2, it's a little awkward since USGS has not [as of yet] submitted a package for EPA to consider relative to the proposed Section 18. I agree that it would be great to provide some projections, but OPP will first need a foundation on which to build the projections.

Are you coming to NAPPC?

I hope all is well with you.

Tom

From: Davis, Susanne J LRC
To: Bolen, Bill
Cc: Westlake, Kenneth; Potthoff, Johnna J LRC; Herleth-king, Shawna S LRC
Subject: Re: [EXTERNAL] FW: GLMRIS-Brandon Road (UNCLASSIFIED)
Date: Wednesday, October 28, 2015 9:01:05 AM

Thank you, Bill.

Sue

Sent from my BlackBerry 10 smartphone.
Original Message
From: Bolen, Bill
Sent: Wednesday, October 28, 2015 8:58 AM
To: Davis, Susanne J LRC
Subject: [EXTERNAL] FW: GLMRIS-Brandon Road (UNCLASSIFIED)

Sue -

While the GLRI is currently in the 2nd year of a five year Action Plan, we receive annual appropriations and therefore do not know what if any GLRI funding we will receive beyond this current fiscal year.

Regards.

Bill

-----Original Message-----
From: Westlake, Kenneth
Sent: Wednesday, October 28, 2015 8:34 AM
To: Bolen, Bill
Subject: FW: GLMRIS-Brandon Road (UNCLASSIFIED)
Importance: High

Bill,
Do you want to reply to this follow up question?

-----Original Message-----
From: Davis, Susanne J LRC [mailto:Susanne.J.Davis@usace.army.mil]
Sent: Tuesday, October 27, 2015 7:37 PM
To: Westlake, Kenneth <westlake.kenneth@epa.gov>
Cc: Potthoff, Johnna J LRC <Johnna.J.Potthoff@usace.army.mil>; Herleth-king, Shawna S LRC <Shawna.S.Herleth-King@usace.army.mil>; Leichty, Andrew L MVR <Andrew.L.Leichty@usace.army.mil>; Barr, Kenneth A MVP @ MVR <Kenneth.A.Barr@usace.army.mil>; Cornish, Mark A MVP@MVR <Mark.A.Cornish@usace.army.mil>
Subject: GLMRIS-Brandon Road (UNCLASSIFIED)
Importance: High

CLASSIFICATION: UNCLASSIFIED

Ken

Thank you for sending the September 23, 2015 letter in response to USACE's GLMRIS-Brandon Road Future

Without Project Condition information solicitation. On page 11 of your letter, you write in response to questions 4-6 [4) Any future inspection, prevention, education, and control programs for aquatic nuisance species of concern; (5) Any change of emphasis in funding strategies for ANS research, controls, or monitoring; and (6) Any future programs, directives, or actions to prevent the transfer of ANS of concern between the Mississippi River and Great Lakes basins?]:

"EPA anticipates continued funding of various Asian Carp activities as part of the Asian Carp Control Strategy Framework via the Great Lakes Restoration Initiative for local, state, and federal partners involved in this effort to prevent Asian carp from migrating upstream of the Corps of Engineers' electric barriers. The Framework presents a multi-tiered strategy to combat the spread of Asian carp into the Great Lakes and to ensure coordination and the most effective response across all levels of government. It represents a comprehensive Asian carp prevention plan that includes chemical, structural, monitoring, biological, management and operational strategies. The Framework complements the broader national approach to the management and control of Asian carp as presented in the Management and Control Plan for Bighead, Black, Grass, and Silver Carps in the United States (National Carp Plan), approved by the National Aquatic Nuisance Species Task Force in November 2007."

We are requesting clarification regarding your response to GLRI funding. Specifically, do you anticipate GLRI funding, or funding under another initiative, will be available through 2071 to support activities associated with Asian carp monitoring and control.

The Illinois Department of Natural Resources responded in their letter (dated September 8, 2015) that their activities related to aquatic nuisance species (ANS) research, control, and monitoring are almost exclusively funded through GLRI and currently there are no other alternative funding sources for their Asian carp work. Additionally, the U.S. Fish and Wildlife Service provided a letter (dated September 11, 2015) of their anticipated ANS activities through FY2017 of which all include requested funding from GLRI.

Any clarification you may be able to provide regarding the availability of future funds to support ANS control activities in the Chicago area would be greatly appreciated. This information would help the GLMRIS-BR Team correctly describe the anticipated future actions related to the monitoring and controls of Asian carp and other ANS of Concern and whether there is uncertainty related to future funding. Thank you for your time.

Thanks,
Sue

Susanne J. Davis, P.E.
Chief, Planning Branch
Chicago District
susanne.j.davis@usace.army.mil

231 S. LaSalle Street, Suite 1500
Chicago, IL 60604

Office: 312-846-5580
Mobile: 312-823-3530

CLASSIFICATION: UNCLASSIFIED

Attachment 9:

COORDINATION WITH GREAT LAKE STATES AND CANADA REGARDING POTENTIAL MISSISSIPPI RIVER BASIN ANS IMPACTS ON GMRIS-BR

Name	Organization	Phone	Email
OHIO			
Rich Carter	OH DNR - Fisheries Administrator	614-265-6345	rich.carter@dnr.state.oh.us
John Navarro	OH DNR - Administrator, Stream Conservation & Environmental Assessment Program	614-265-6346	john.navarro@dnr.state.oh.us
MINNESOTA			
Kelly Pennington	MN DNR - Species Prevention Program Coordinator	651-259-5131	kelly.pennington@state.mn.us
Nick Frohnauer	MN DNR - Invasive Fish Coordinator		nick.frohnauer@state.mn.us
Christine Jurek	MN DNR – Invasive Species Specialist	320-223-7847	christine.jurek@state.mn.us
WISCONSIN			
Justine Hasz	WI DNR – Fisheries Bureau Director	715-896-9558	justine.hasz@wisconsin.gov
Bob Wakeman	WI DNR – AIS Coordinator	262-574-2149	robert.wakeman@wisconsin.gov
INDIANA			
Eric Fischer	IN DNR – Aquatic Invasive Species Coordinator	317-234-3883	efisher@dnr.in.gov
PENNSYLVANIA			
Jim Grazio	PA DEP - Biologist	814-217-9636	jagrazio@pa.gov
Robert Morgan	PA DEP		robemorgan@pa.gov
NEW YORK			
Catherine McGlynn	NYS DEC – Aquatic Invasive Species Coordinator	518-408-0436	catherine.mcglynn@dec.ny.gov
Ontario Ministry of Natural Resources and Forestry			
Francine MacDonald	MNRF	705-755-5136	francine.macdonald@ontario.ca
Jeremy Downe			jeremy.downe@ontario.ca
Jeff Brinsmead			jeff.brinsmead@ontario.ca
David Hintz			david.hintz@ontario.ca
Quebec Ministry of Sustainable Development			
Isabelle Simard	MSD	418-521-3907 x4417	isabelle.simard@mddep.gouv.qc.ca
Fisheries and Oceans Canada			
David Burden	Fisheries and Oceans Canada – Regional Director General	519-383-1810	dave.burden@dfo-mpo.gc.ca

*Contacts listed in yellow were provided by State of Michigan DNR

From: Brown, Kirsten L MVR
Sent: Wednesday, June 01, 2016 10:00 AM
To: rich.carter@dnr.state.oh.us; john.navarro@dnr.state.oh.us; justine.hasz@wisconsin.gov; robert.wakeman@wisconsin.gov; efisher@dnr.in.gov; kelly.pennington@state.mn.us; joe.eisterhold@state.mn.us; christine.jurek@state.mn.us; jagrazio@pa.gov; catherine.mcglynn@dec.ny.gov; francine.macdonald@ontario.ca; isabelle.simard@mddep.gouv.qc.ca; dave.burden@dfo-mpo.gc.ca
Cc: Herleth-king, Shawna S LRC <Shawna.S.Herleth-King@usace.army.mil>; Potthoff, Johnna J LRC <Johnna.J.Potthoff@usace.army.mil>; Leichty, Andrew L MVR <Andrew.L.Leichty@usace.army.mil>; mgrippo@anl.gov; Brown, Kirsten L MVR <Kirsten.L.Brown@usace.army.mil>
Subject: US Army Corps of Engineers Request for Coordination on Efforts to Prevent/Control Asian Carp to the Great Lakes and its tributaries (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Dear Mr. Carter, Mr. Navarro, Ms. Hasz, Mr. Wakeman, Mr. Fischer, Ms. Pennington, Mr. Eisterhold, Ms. Jurek, Mr. Grazio, Ms. McGlynn, Ms. MacDonald, Ms. Simard, and Mr. Burden,

Each of you were identified as the Aquatic Nuisance Species (ANS) coordinator for the States/Provinces of Ohio, Wisconsin, Indiana, Minnesota, Pennsylvania, New York, Ontario, and Quebec. You are being contacted because you were referred to us by the State of Michigan's Department of Natural Resources. We are seeking information as noted below and to schedule a conference call. Please advise if we should coordinate the call with you or if someone else in your State/Province is better-suited to respond to our questions. We appreciate your assistance.

BACKGROUND:

As a next step in the Great Lakes and Mississippi River Interbasin Study (GLMRIS), the Assistant Secretary of the Army (Civil Works) has directed the U.S. Army Corps of Engineers (USACE) to proceed with a formal evaluation of potential aquatic nuisance species (ANS) control technologies near the Brandon Road Lock and Dam located in Joliet, Illinois. The GLMRIS-Brandon Road effort will assess the viability of establishing a single point to control the one-way upstream transfer of ANS from the Mississippi River Basin (MRB) through the Chicago Area Waterway System (CAWS) and into the

Great Lakes Basin. Mississippi River Basin ANS of concern for the GLMRIS-Brandon Road effort are Bighead Carp (Hypophthalmichthys nobilis), Silver Carp (Hypophthalmichthys molitrix), and Apocorophium lacustre. For more information regarding the GLMRIS-Brandon Road effort, please visit http://glmris.anl.gov/brandon-rd/. To further the GLMRIS-Brandon Road effort, USACE is searching for information regarding Great Lakes states and Canadian efforts to address the threat of potential establishment of MRB ANS such as those listed above into the Great Lakes. USACE will use this information to frame the discussion of potential consequences of MRB ANS establishment in the Great Lakes. The consequence analysis is an important part of our study and we appreciate any information your agency can share regarding this topic.

INFORMATION REQUEST:

Attached are specific questions regarding efforts your State/agency/Province may be undertaking to prevent the transfer of the ANS of concern into the Great Lakes Basin and its connected tributaries, as well as efforts your State/agency/Province would undertake if the ANS of concern were to become established in the Great Lakes Basin and its connected tributaries. We look forward to discussing the attached questions with you over the phone. A representative will be contacting you shortly to set up a conference call between June 20 and June 24. You are more than welcome to send written responses to the attached questions prior to June 20; however, we will still be contacting you via phone to go over and confirm the responses that you may have provided.

Kind Regards,

Kirsten Brown

Biologist/Project Manager

1500 Rock Island Drive

Clock Tower Building, 2nd floor

Rock Island, Illinois 61204

kirsten.l.brown@usace.army.mil

309-794-5129

CLASSIFICATION: UNCLASSIFIED

Questions for Minnesota, Wisconsin, Indiana, and Ohio:

1a.) Are there any specific efforts (e.g., public outreach and education, monitoring, barriers, behavioral deterrents, etc.) that your State/agency is currently undertaking to prevent the transfer of **Asian carp** (specifically, Silver Carp and Bighead Carp) from the Mississippi River and its connected tributaries to the Great Lakes and their connected tributaries?

1b.) If yes, what is the approximate cost of these efforts?

2a.) Are there any specific efforts (e.g., public outreach and education, monitoring, barriers, behavioral deterrents, etc.) that your State/agency is currently undertaking to prevent the transfer of **other ANS** (e.g., *Apocorophium lacustre*, etc.) from the Mississippi River and its connected tributaries to the Great Lakes and their connected tributaries?

2b.) If yes, what is the approximate cost of these efforts?

3a.) Are there any specific efforts that your State/agency is currently undertaking to control/reduce the population of **Asian Carp** (specifically, Silver Carp and Bighead Carp) in the Mississippi River and its connected tributaries where established (i.e., where a successful reproducing population occurs)?

3b.) If yes, what is the approximate cost of these efforts?

4a.) Does your State/agency have a current **Asian carp** (specifically, Silver Carp and Bighead Carp) Management Strategy Plan for the Mississippi River and its connected tributaries?

4b.) If yes, may we have a copy of the current management strategy plan?

4c.) What is the approximate cost of the efforts listed in the management strategy plan?

4d.) Is your State/agency planning to update its current management strategy plan?

4e.) If yes, when do you anticipate releasing the updated management strategy plan?

5a.) Does your State/agency have a current ANS prevention plan to address **Asian carp** or any **other Mississippi River Basin ANS** if they were to become established (i.e., successful reproducing population) within the Great Lakes and its connecting tributaries within your state?

5b.) If yes, may we have a copy of the prevention plan? If no, can you describe the efforts listed in the prevention plan?

5c.) What is the approximate cost of the efforts listed within the prevention plan? If possible, please separate costs related to Asian carp and those associated with other Mississippi River Basin ANS.

5d.) Is your State/agency planning to update its current ANS prevention plan?

5e.) If yes, when do you anticipate releasing the updated ANS prevention plan?

Questions for Pennsylvania, New York, and Canada:

1a.) Are there any specific efforts (e.g., public outreach and education, monitoring, barriers, behavioral deterrents, etc.) that your State/Province is currently undertaking to prevent the transfer of Mississippi River Basin ANS (specifically, Silver Carp, Bighead Carp, and *Apocorophium lacustre*) to the Great Lakes and their connected tributaries?

1b.) If yes, what is the approximate cost of these efforts?

2a.) Does your State/Province have a current ANS prevention plan to address **Asian carp** or any **other Mississippi River Basin ANS** if they were to become established (i.e., successful reproducing population) within the Great Lakes and their connected tributaries within your State/Province?

2b.) If yes, may we have a copy of the prevention plan? If no, can you describe the efforts listed in the prevention plan?

2c.) What is the approximate cost of the efforts listed within the prevention plan? If possible, please separate costs related to Asian carp and those associated with other Mississippi River Basin ANS.

2d.) Is your State/Province planning to update its current ANS prevention plan?

2e.) If yes, when do you anticipate releasing the updated ANS prevention plan?

Questions for Minnesota, Wisconsin, Indiana, and Ohio:

1a.) Are there any specific efforts (e.g., public outreach and education, monitoring, barriers, behavioral deterrents, etc.) that your State/agency is currently undertaking to prevent the transfer of **Asian carp** (specifically, Silver Carp and Bighead Carp) from the Mississippi River and its connected tributaries to the Great Lakes and their connected tributaries?

- **Mosquito Creek Lake ($50,000):** Preliminary engineering assessment determined that this connection is a minimal risk and no further action is planned.
- **Grand Lake St Marys ($1,000,000):** ODNR has been working to close this connection and we are on the final phase of this project which should be completed this year.
- **Ohio Erie Canal ($3,000,000):** USACE will complete the final design for closing this connection on September 29th, 2016. We will then implement closure of this connection.
- **Little Killbuck Creek ($6,000,000):** ODNR will select an engineering firm on June 30th to complete the final design for closing this connection. The final design will be completed in early 2017 and we will then implement closure of this connection.
- **Bait Inspection and Outreach ($100,000):** Implemented a comprehensive bait facility inspection program specifically geared towards the detection of Asian carp. Also teamed with Wildlife Forever on an outreach campaign targeting anglers to not release bait through the "Triash Unused Bait" slogan in print and billboard advertisement.
- **Early Detection and Monitoring ($100,000):** Monitoring for Asian carp in the Lake Erie basin, Ohio River, and Muskingum River to detect the presence and movement of Asian Carp.

2a.) Are there any specific efforts (e.g., public outreach and education, monitoring, barriers, behavioral deterrents, etc.) that your State/agency is currently undertaking to prevent the transfer of **other ANS** (e.g., *Apocorophium lacustre*, etc.) from the Mississippi River and its connected tributaries to the Great Lakes and their connected tributaries?

- All efforts described above are also used to monitor and prevent the movement of other AIS. Additional efforts are focused on monitoring for Grass Carp in the Lake Erie watershed.

3a.) Are there any specific efforts that your State/agency is currently undertaking to control/reduce the population of **Asian Carp** (specifically, Silver Carp and Bighead Carp) in the Mississippi River and its connected tributaries where established (i.e., where a successful reproducing population occurs)?

- All efforts described above are also used to monitor and prevent the movement of other AIS.

4a.) Does your State/agency have a current **Asian carp** (specifically, Silver Carp and Bighead Carp) Management Strategy Plan for the Mississippi River and its connected tributaries?

- Attached

4c.) What is the approximate cost of the efforts listed in the management strategy plan?

- Not Available

4d.) Is your State/agency planning to update its current management strategy plan?

- Yes. Fall of 2016.

4e.) If yes, when do you anticipate releasing the updated management strategy plan?

- Plan will be available on-line.

5a.) Does your State/agency have a current ANS prevention plan to address **Asian carp** or any **other Mississippi River Basin ANS** if they were to become established (i.e., successful reproducing population) within the Great Lakes and its connecting tributaries within your state?

- See attached plans

5c.) What is the approximate cost of the efforts listed within the prevention plan? If possible, please separate costs related to Asian carp and those associated with other Mississippi River Basin ANS.

- Not available

5d.) Is your State/agency planning to update its current ANS prevention plan?

- Not at this time.

Responses from: Nick Frohnauer (Minnesota Department of Natural Resources)
Conference Call Date and Time: June 30, 2016 @ 9 AM (CST)
Attendees: Nick Frohnauer (Minnesota DNR), Mark Grippo (Argonne), Kirsten Brown (USACE-MVR), Shawna King (USACE-LRC), and Amy Kryston (USACE)

1a) Are there any specific efforts (e.g., public outreach and education, monitoring, barriers, behavioral deterrents, etc.) that your State/agency is currently undertaking to prevent the transfer of Asian Carp (specifically, Silver Carp and Bighead Carp) from the Mississippi River and its connected tributaries to the Great Lakes and their connected tributaries?

- No specific programs for the prevention of AC from the MR Basin to the GL Basin; rather, focused on state-wide programs to prevent invasion into Minnesota
- Laws and regulations in place to reduce risk from other modes of transport (eg. bait buckets)
    - Statutes to mitigate ANS movement, prevent transportation:
        - 84-D
        - 97-C
        - 17.498586
    - More regulations than activities
- Can send latest action plan which details related accomplishments

1b) If yes, what is the approximate cost of these efforts?

- Difficult to assess what costs are geared toward overall ANS management and AC specific

2a) Are there any specific efforts (e.g., public outreach and education, monitoring, barriers, behavioral deterrents, etc.) that your State/agency is currently undertaking to prevent the transfer of other ANS (e.g., *Apocorophium lacustre*, etc.) from the Mississippi River and its connected tributaries to the Great Lakes and their connected tributaries?

- Some general regulations for movement/transport of ANS
- Watercraft Inspection Program, along with public outreach and education
- These regulations may be found on website (http://www.dnr.state.mn.us/invasives/preventspread_watercraft.html)

2b) If yes, what is the approximate cost of these efforts?

- Budget analysis may be found in regulations on website

3a) Are there any specific efforts that you State/agency is currently undertaking to control/reduce the population of Asian carp (specifically, Silver Carp and Bighead Carp) in the Mississippi River and its connected tributaries where established (i.e., where a successful reproducing population occurs)?

- There is an extensive carp program focused on prevention
- In recent years, approximately ten carp have been caught annually, though these numbers are likely lower if only Bighead and Silver Carp are included in numbers
    - Historical catch information to be sent, along with Annual Report
- Examples of projects and related research being conducted:
    - Upper St. Anthony Falls Closure

    - University of Minnesota research on sound deterrents at lock structures
    - Minnesota State University, Mankato habitat management
    - Barriers in southwest MN to prevent carp from Missouri River Basin entering the Minnesota River Basin
    - Interagency cooperation: MRWG, ACRCC, etc.
    - Note: WRRDA (2014 & 2015 editions) provide greater detail of efforts and programs
- Specifically working to prevent movement/establishment of AC/ANS in high aquatic resource areas

3b) If yes, what is the approximate cost of these efforts?

- Costs delineated in WRRDA report published June 2016; costs also found in previous WRRDA reports

4a) Does your State/agency have a current Asian carp (specifically, Silver Carp and Bighead Carp) Management Strategy Plan for the Mississippi River and its connected tributaries?

- Yes

4b) If yes, may we have a copy of the current management strategy plan?

- Available at: http://files.dnr.state.mn.us/natural_resources/invasives/state_invasive_species_plan.pdf

4c) What is the approximate cost of the efforts listed in the management strategy plan?

- Approximately $175,000 to maintain current level of annual actions
- Approximately $1,200,000 for identified projects, but many projects listed in plans currently have no associated cost; it may be estimated that the cost of these plans are in the millions

4d) Is your State/agency planning to update its current management strategy plan?

- Yes, in process

4e) If yes, when do you anticipate releasing the updated management strategy plan?

- No current set release date for update

5a) Does your State/Province have a current ANS prevention plan to address Asian carp or any other Mississippi River Basin ANS if they were to become established (i.e., successful reproducing population) within the Great Lakes and their connected tributaries within your State/Province?

- There is a general statewide ANS response plan to cover the GL and tributaries, though there is no specific AC response plan; more information can be found in the Asian Carp Action Plan (http://files.dnr.state.mn.us/natural_resources/invasives/carp-action-plan-draft.pdf)

5b) If yes, may we have a copy of the prevention plan? If we may not, can you describe the efforts listed in the prevention plan?

- General response plan can either be found on site or will be sent

5c) What is the approximate cost of the efforts listed within the prevention plan? If possible, please separate costs related to Asian carp and those associated with other Mississippi River Basin ANS.

- Unknown, but may be in the response plan

5d) Is your State/Province planning to update its current ANS prevention plan?

- Yes, the plan is periodically reviewed and updated

5e) If yes, when do you anticipate releasing the updated ANS prevention plan?

- Unknown when it is to next be reviewed and updated

Responses from: Bob Wakeman, Wisconsin Dept. of Natural Resources
Conference Call Date and Time: June 20, 2016 @ 2 PM
Attendees: Bob Wakeman (WIDNR), Andy Leichty (USACE-MVR), Kirsten Brown (USACE-MVR), Mark Grippo (Argonne), Johnna Potthoff (USACE-LRC), and Shawna King (USACE-LRC)

1a) Are there any specific efforts (e.g., public outreach and education, monitoring, barriers, behavioral deterrents, etc.) that your State/agency is currently undertaking to prevent the transfer of Asian carp (specifically, Silver Carp and Bighead Carp) from the Mississippi River and its connected tributaries to the Great Lakes and their connected tributaries?

- Wisconsin has a comprehensive plan that addresses aquatic nuisance species (ANS) holistically.
- All efforts (e.g., public education and outreach, monitoring, enforcement, control, etc.) listed in the plan are applicable for addressing various ANS, the efforts are not necessarily species-specific and there are currently no plans to create species-specific plans.
- Wisconsin does not have a plan that specifically addresses just Asian carp.

1b) If yes, what is the approximate cost of these efforts?

- The approximate annual budget for Wisconsin ANS efforts is $4.5M;
    - Approximately $4M given out as grants to partners of the state for control, research and education activities
    - Approximately $500,000 funding for program personnel, contracts, training, etc.
- The above does not include additional funds received through GLRI or Federal grants.

2a) Are there any specific efforts (e.g., public outreach and education, monitoring, barriers, behavioral deterrents, etc.) that your State/agency is currently undertaking to prevent the transfer of other ANS (e.g., *Apocorophium lacustre*, etc.) from the Mississippi River and its connected tributaries to the Great Lakes and their connected tributaries?

- Refer to response to question 1a.

2b) If yes, what is the approximate cost of these efforts?

- Refer to response to question 1b.

3a) Are there any specific efforts that your State/agency is currently undertaking to control/reduce the population of Asian carp (specifically, Silver Carp and Bighead Carp) in the Mississippi River and its connected tributaries where established (i.e., where a successful reproducing population occurs)?

- Refer to response to question 1a.

3b) If yes, what is the approximate cost of these efforts?

- Refer to response to question 1b.

4a) Does your State/agency have a current Asian carp (specifically, Silver Carp and Bighead Carp) Management Strategy Plan for the Mississippi River and its connected tributaries?

- Wisconsin has a Comprehensive ANS Management Plan that was published September 2003.
- The management plan does not specifically address Asian carp

4b) If yes, may we have a copy of the current management strategy plan?

- Available at: http://www.anstaskforce.gov/State%20Plans/Wisconsin_ans_plan.pdf

4c) What is the approximate cost of the efforts listed in the management strategy plan?

- Refer to response to question 1b.

4d) Is your State/agency planning to update its current management strategy plan?

- Refer to response to question 1b.

4e) If yes, when do you anticipate releasing the updated management strategy plan?

- Refer to response to question 1b.

5a) Does your State/agency have a current ANS prevention plan to address Asian carp or any other Mississippi River Basin ANS if they were to become established (i.e., successful reproducing population) within the Great Lakes and its connecting tributaries within your state?

- Wisconsin does have a Response Framework for Invasive Species that is based off of New York's Response Framework. Similar to the ANS Statewide Management Plan discussed in question 1, the Rapid Response Framework is not species-specific.
- There were approximately 15 rapid response activities undertaken by Wisconsin last year (2015); some of which will carry over to this year (2016).
- Wisconsin does conduct table top exercises and training for personnel in regards to rapid response activities.
- Fisheries managers plan to develop an Asian carp-specific response plan.
    - The Response Framework will provide a guide for fisheries managers on the interagency/interstate coordination to be undertaken and recreation considerations.
    - In regards to control activities, a couple of tributaries were identified within Wisconsin as potentially being conducive for Asian carp spawning.
    - Currently, no specific triggers have been identified that would elicit a response action by the State.
    - It is uncertain if Wisconsin would actively control Asian carp if they were to become established within the Great Lakes and their connecting tributaries.

5b) If yes, may we have a copy of the prevention plan? If no, can you describe the efforts listed in the prevention plan?

- Copy of the April 2016 Draft Response Framework for Invasive Species was provided via email June 20, 2016.

5c) What is the approximate cost of the efforts listed within the prevention plan? If possible, please separate costs related to Asian carp and those associated with other Mississippi River Basin ANS.

- Refer to response to question 1b.

5d) Is your State/agency planning to update its current ANS prevention plan?

- The Draft Response Framework was developed and released for public review in April 2016. Comments received during the review period are currently being incorporated into the report.

5e) If yes, when do you anticipate releasing the updated ANS prevention plan?

- The final Response Framework for Invasive Species will likely be released in June/July 2016, once comments received during the public review process have been incorporated.

Responses from: Eric Fischer, Indiana Dept. of Natural Resources
Conference Call Date and Time: June 21, 2016 @ 8 AM
Attendees: Eric Fischer (INDNR), Kirsten Brown (USACE-MVR), Mark Grippo (Argonne), Johnna Potthoff (USACE-LRC), and Shawna King (USACE-LRC)

1a) Are there any specific efforts (e.g., public outreach and education, monitoring, barriers, behavioral deterrents, etc.) that your State/agency is currently undertaking to prevent the transfer of Asian carp (specifically, Silver Carp and Bighead Carp) from the Mississippi River and its connected tributaries to the Great Lakes and their connected tributaries?

- Indiana has a comprehensive statewide ANS Program that is not species-specific; however, approximately 25% of the funding and associated activities are directed towards Asian carp.
- The program receives annually, approximately $100,000, which funds the AIS coordinator position and public education and outreach
    - Public education and outreach activities towards Asian carp include 'Stop the Invasion' type signs and pamphlets located at public access boat ramps (i.e., those owned by the state) primarily along the Upper Wabash River (a high risk transfer point for Asian carp).
    - Public education and outreach activities also include public displays and pamphlets for the State Fair, the Indiana Sport and Boat Show, and other venues.
    - Monitoring specifically for Asian carp has in the past included eDNA sampling and analysis. Currently, however, monitoring activities include fisheries assessments using traditional fish sampling methods (e.g., electrofishing, netting, etc.). Law enforcement activities are also a component of the monitoring program.
    - Research and development activities include a 3-year telemetry and spawning assessment study that was just recently completed. The total study cost over the 3-year period was approximately $330,000. These studies are anticipated to be used by other managers to forecast how/where Asian carp may invade their waterways.
    - Additional research and development activities include an 18-month study measuring pathogens within Asian carp which had a total study cost of approximately $113,000.
    - Control activities include the construction of the 1.7-mile (8 ft tall) earthen berm at Eagle Marsh (GLMRIS-Focus Area 2). The construction of the berm was completed last fall and maintenance (e.g., mowing, planting, etc.) activities are ongoing. The total project cost was approximately $4.4M.
        - Prior to the construction of the permanent earthen berm, a temporary fence barrier was constructed. The construction of the temporary fence barrier was approximately $185,000 and maintenance activities are approximately $150,000 total over the past 4-years.

1b) If yes, what is the approximate cost of these efforts?

- Refer to response in question 1a for approximate costs of listed efforts.

2a) Are there any specific efforts (e.g., public outreach and education, monitoring, barriers, behavioral deterrents, etc.) that your State/agency is currently undertaking to prevent the transfer of other ANS (e.g., *Apocorophium lacustre*, etc.) from the Mississippi River and its connected tributaries to the Great Lakes and their connected tributaries?

- Yes, as the comprehensive statewide ANS program is not species-specific. Approximately 75% of the funds received are spent towards efforts targeting species other than Asian carp.
    - Public education and outreach has additional programs such as 'Stop Aquatic Hitchhikers", etc. that have signs displayed at public access boat ramps statewide as well as pamphlets, watch cards, and various AIS education matterials available at events like the State Fair and the Indiana Boat Sport and Travel Show.
    - The State has a Big Rivers Program and Coordinator that focuses on conducting fisheries and habitat assessments aimed at assessing the fisheries of Indiana river systems and in part preventing the migration, and assessing the expansion of ANS within the major rivers of the State.
    - The State also has a Lake Enhancement Program that provides grants to lake associations to conduct species assessments, aquatic vegetation plantings, and chemical control of nonnative/invasive aquatic vegetation.
        - Approximately $500,000 annually is provided in grants under the Lake Enhancement Program.
        - Approximately $100,000 of the grant money is specifically towards monitoring nonnative/invasive aquatic vegetation.
    - Construction of the earthen berm at Eagle Marsh also addresses other ANS besides Asian carp (refer to 1a for additional details on the berm).
    - Control activities include preventing transfer of 3-4 nonnative aquatic plants.
        - Starry Stonewort(Nitellopsis obtusa) is established at a handful of lakes within Indiana
            - Approximately $150,000 is spent annually to prevent its spread
            - Approximately $50,000 is spent annually on research activities, including best herbicide application rates, new herbicides/control methods, etc.
        - *Hydrilla* is found in only one lake within Indiana
            - Over the past 10 years, $2.75M has been spent by the state on the species eradication from the lake.
            - Approximately $160,000 is spent annually on the eradication.
            - In the near future, the species will be considered eradicated, and activities will switch from control to monitoring for its presence.
        - *Egeria densa* (Brazilian waterweed) and *Myriophyllum aquaticum* (parrot feather) are two other nonnative species that have been eradicated from several lakes within the State.

2b) If yes, what is the approximate cost of these efforts?

- Refer to response in question 1a and 2a for approximate costs of listed efforts.

3a) Are there any specific efforts that your State/agency is currently undertaking to <u>control/reduce</u> the population of Asian carp (specifically, Silver Carp and Bighead Carp) in the Mississippi River and its connected tributaries where established (i.e., where a successful reproducing population occurs)?

- Yes, but primarily limited to coordination with State and Federal panels such as the Asian Carp Regional Coordinating Committee (ACRCC).

- Have undertaken efforts to increase the recreational harvest of Asian carp by relaxing harvest regulations within the State (e.g., no creel restrictions, longer hours for bow fishing, allowing crossbows to be used, etc.)
- Research and development activities, such as the telemetry and spawning assessment described in response to question 1a, help inform the State as well as other States as to where Asian carp may be found congregating within a river as well as where/and when they may be spawning.
    - These studies will help inform future response actions (if funding allows) that could potentially target and eradicate a large portion of the adult population.

3b) If yes, what is the approximate cost of these efforts?

- Funding is primarily through the State ANS Program described in response to questions 1a.

4a) Does your State/agency have a current Asian carp (specifically, Silver Carp and Bighead Carp) Management Strategy Plan for the Mississippi River and its connected tributaries?

- No, Indiana does not have an Asian carp Management Strategy Plan. The State has primarily been coordinating with the ACRCC and has been participating in the ACRCC's annual Action Plan as well as providing updates to the Action Plan.
- The creation of an Indiana Asian carp Management Strategy Plan is not within the State's current work plan.

4b) If yes, may we have a copy of the current management strategy plan?

- NA

4c) What is the approximate cost of the efforts listed in the management strategy plan?

- NA

4d) Is your State/agency planning to update its current management strategy plan?

- NA

4e) If yes, when do you anticipate releasing the updated management strategy plan?

- NA

5a) Does your State/agency have a current ANS prevention plan to address Asian carp or any other Mississippi River Basin ANS if they were to become established (i.e., successful reproducing population) within the Great Lakes and its connecting tributaries within your state?

- Indiana does not have an Asian Carp Prevention Plan.
- Indiana does have an ANS Task Force approved Management Plan that was approved in 2003.
- Indiana also has a Rapid Response Plan that generally explains how the State would respond to an ANS invasion (e.g., who to contact, who makes the decision on a response action, etc.).
- Indiana is also in the process of creating a Rapid Response Plan specific to nonnative aquatic plants.

5b) If yes, may we have a copy of the prevention plan? If no, can you describe the efforts listed in the prevention plan?

- A copy of the Rapid Response Plan can be provided for reference, but is not to be copied or reprinted.
- The ANS Management Plan is available on the State's website: http://www.in.gov/dnr/fishwild/4627.htm

5c) What is the approximate cost of the efforts listed within the prevention plan? If possible, please separate costs related to Asian carp and those associated with other Mississippi River Basin ANS.

- Implementation of the entire ANS Management Plan among all state agencies is approximately $4.1M.
- There is a prevention section in the ANS Management Plan with associated costs; however, these costs are likely underestimated.
    - Indiana probably spends $30-$40k annually on ANS prevention measures.

5d) Is your State/agency planning to update its current ANS prevention plan?

- The Indiana ANS Management Plan that was approved in 2003 is currently being updated. A draft of the updated Plan is expected around February 2017. The ANS Task Force will then review the draft Plan around summer 2017.
- The updated ANS Management Plan is expected to have more information on Asian carp prevention and response.

5e) If yes, when do you anticipate releasing the updated ANS prevention plan?

Responses from: James Grazio (Pennsylvania Department of Environmental Protection) and Robert Morgan (Pennsylvania Fish & Boat Commission)
Conference Call Date and Time: June 29, 2016 @ 2 PM (EST)
Attendees: James Grazio (PADEP), Robert Morgan (PAFBC), Andy Leichty (USACE-MVR), Mark Grippo (Argonne), Johnna Potthoff (USACE-LRC), Shawna King (USACE-LRC), and Amy Kryston (USACE)

1a) Are there any specific efforts (e.g., public outreach and education, monitoring, barriers, behavioral deterrents, etc.) that your State/agency is currently undertaking to prevent the transfer of Mississippi River Basin ANS (specifically, Silver Carp, Bighead Carp, and *Apocorophium lacustre*) to the Great Lakes and their connected tributaries?

- There are currently no specific efforts or programs for public outreach and education regarding ANS that have been initiated by the State of Pennsylvania
- The ANS-related outreach and education is conducted using a Pennsylvania Sea-Grant, though very little of this education is focused on Asian Carp
- The Pennsylvania DEP operates a small monitoring system for ANS using conventional methods such as electrofishing and netting; this monitoring is conducted using GLRI funding.
- There have been two reported instance where Asian Carp have been detected:
    - Southwestern Pennsylvania pay ("fee-to-fish") pond: two Asian Carp were detected after they were transported with mixed species stocking; action has been taken to work with owner to drain the pond and remove the fish.
    - Ohio River: Asian Carp were detected using eDNA, though no specimen were collected

1b) If yes, what is the approximate cost of these efforts?

- Pennsylvania does not currently have a budget to address ANS
- The aforementioned outreach and monitoring programs have been funded by a Pennsylvania Sea-Grant and GLRI, respectively

2a) Does your State/Province have a current ANS prevention plan to address **Asian carp** or any **other Mississippi River Basin ANS** if they were to become established (i.e., successful reproducing population) within the Great Lakes and their connected tributaries within your State/Province?

- The Pennsylvania Invasive Species Council (PlanAIS) published an Aquatic Invasive Species Management Plan in October, 2006
    - This Plan can be found here: http://anstaskforce.gov/State%20Plans/PA_AISMP.pdf
    - Specific mention of the Asian Carp is made on Page 19
    - This plan encompasses all ANS and does not address post-invasion management approaches at length
- There was a broad plan for measures to be taken again Asian Carp, published in June, 2011
    - This Plan can be found here: http://fishandboat.com/ais/ais-action-asian-carp.pdf

2b) If yes, may we have a copy of the prevention plan? If we may not, can you describe the efforts listed in the prevention plan?

- Please see links above

2c) What is the approximate cost of the efforts listed within the prevention plan? If possible, please separate costs related to Asian carp and those associated with other Mississippi River Basin ANS.

- There is currently no cost estimated or associated with the above Plans

2d) Is your State/Province planning to update its current ANS prevention plan?

- Pennsylvania updates its Invasive Species Management Plans every five years

2e) If yes, when do you anticipate releasing the updated ANS prevention plan?

- The release date of the updates ANS prevention plan is estimated to be in *<please fill in the blank>*.

Questions for Pennsylvania, New York, and Canada:

1a.) Are there any specific efforts (e.g., public outreach and education, monitoring, barriers, behavioral deterrents, etc.) that your State/Province is currently undertaking to prevent the transfer of Mississippi River Basin ANS (specifically, Silver Carp, Bighead Carp, and *Apocorophium lacustre*) to the Great Lakes and their connected tributaries?

Feasibility study for disconnecting Champlain Canal from Hudson River

Public outreach & education about AC (displays, watch cards, tip strips) remains an ongoing, routine activity by DEC Great Lakes fisheries staff assigned to expos, fairs, state-of-lake events. We often respond to public inquiries about AC.

eDNA monitoring for AC (bighead and silver) in GL's waters is implemented annually by USFWS, NYSDEC's role is site selection for this monitoring that remains focused in larger tributaries of the Lake Erie basin and upper Niagara River. (all negatives to-date)

No AC barriers or behavioral deterrents have been undertaken in NYS at this time, the bighead and silver carp population front remains far removed from NYS but NYSDEC otherwise remains informed of the efficacy of new barriers, deterrents, and other AC monitoring and control actions through ongoing participation in ACRCC and Great Lakes Fisheries Commission forums.

1b.) If yes, what is the approximate cost of these efforts?

Funds from Lake Champlain Basin Program -> Contact Meg Modley, Lake Champlain Basin Program, MModley@lcbp.org

2a.) Does your State/Province have a current ANS prevention plan to address **Asian carp** or any **other Mississippi River Basin ANS** if they were to become established (i.e., successful reproducing population) within the Great Lakes and their connected tributaries within your State/Province?

Draft Asian Carp Management Plan -> Outline:

1. Background and Problem, 2. Legislative Authority, 3. Potential Modes of Introduction and Distribution of Asian Carp, 4. Goal, 5. Objectives, Strategies, and Actions, and 6. Priorities for Action

The draft 1.0 of AC plan referenced above produced in Dec-2015.

2b.) If yes, may we have a copy of the prevention plan? If no, can you describe the efforts listed in the prevention plan?

No. The draft is unavailable until internal review is completed.

2c.) What is the approximate cost of the efforts listed within the prevention plan?

The draft AC plan did not calculate costs for proposed priority actions.

If possible, please separate costs related to Asian carp and those associated with other Mississippi River Basin ANS.

2d.) Is your State/Province planning to update its current ANS prevention plan? Updated version approved by ANS Task Force approved May 2016

2e.) If yes, when do you anticipate releasing the updated ANS prevention plan?
Released July 15, 2015 (see attached plan).

Responses from: Jeff Brinsmead (Ontario Ministry of Natural Resources and Forestry)
Conference Call Date and Time: June 30, 2016 @ 1 PM (CST)
Attendees: Jeff Brinsmead (Ontario MNRF), Mark Grippo (Argonne), Kirsten Brown (USACE-MVR), Shawna King (USACE-LRC), Johnna Potthoff (USACE-LRC), Dena Abou (USACE-LRC) and Amy Kryston (USACE-LRC)

1a) Are there any specific efforts (e.g., public outreach and education, monitoring, barriers, behavioral deterrents, etc.) that your State/agency is currently undertaking to prevent the transfer of Asian Carp (specifically, Silver Carp and Bighead Carp) from the Mississippi River and its connected tributaries to the Great Lakes and their connected tributaries?

- No ability to take direct interbasin action, as there are no direct connections between the MR and GL basins that are within Ontario jurisdiction
- There is AIS outreach, geared toward both the public and industries that is conducted in partnership with the Federation of Ontario Anglers and Hunters (FOAH). This outreach includes both terrestrial and aquatic invasion species. Approximately $300,000 annually is provided by the Ontario MNRF to the FOAH, primarily for the following purposes:
    - Events attended by staff
    - Development of outreach materials
    - Operation of hotline to track/report occurences of invasive species
    - Operation of the EDDMaps, a program developed by the University of Georgia; this program is utilized throughout many GL states, mainly for terrestrial species purposes, but Ontario has adapted this program for aquatic tracking
- Canada's Department of Fisheries and Oceans also provides funds for the FOAH for the purposes of managing Asian carp. The amount of funding is approximated to be $200,000 annually, and it is assumed that this budget has grown in recent years. The funding is directed toward staff and analysis costs. Ontario conducts monitoring for four species of Asian carp, in conjunction with the DFO, and monitoring techniques include electrofishing and netting. In addition, eDNA has been used for monitoring.
- There exists a governmental mutual aid agreement. For example, in 2009, staff members from Ontario were sent to assist with rotenone treatment in Lockport Pool. Such help can be provided as requested.

1b) If yes, what is the approximate cost of these efforts?

- Please see above answer.

2a) Does your State/Province have a current ANS prevention plan to address Asian carp or any other Mississippi River Basin ANS if they were to become established (i.e., successful reproducing population) within the Great Lakes and their connected tributaries within your State/Province?

- It should here be noted that if a successfully reproducing population of AIS were detected, a prevention plan would be rendered ineffective.
- There is a Surveillance and Communication Plan that dictate the monitoring of ANS/AIS; traditional monitoring, as well as eDNA, are utilized to track AIS
- There are two primary plans in effect:

- Ontario Framework for Surveillance and Communication: primarily outlines the measures to be taken internally (ie. Internal-external communication); essentially outlines the procedures and potential options in the event of AIS detection
- Asian Carp Response Plan: focuses on addressing early, small-scale detection of species; this plan does not include instruction for general management practices in the event that an Asian carp population is established
    - Plan operates under the general assumption/knowledge that Asian carp are not currently established in the GL basin or within the jurisdiction of Ontario
- Supporting research regarding Asian carp, such as historic sightings and diet

2b) If yes, may we have a copy of the prevention plan? If we may not, can you describe the efforts listed in the prevention plan?

- No general management plan

2c) What is the approximate cost of the efforts listed within the prevention plan? If possible, please separate costs related to Asian carp and those associated with other Mississippi River Basin ANS.

- Related to (1)

2d) Is your State/Province planning to update its current ANS prevention plan?

- Previously mentioned plans (Framework and Response Plan) are being revised, and will likely be combined into one comprehensive AIS monitoring and response plan

2e) If yes, when do you anticipate releasing the updated ANS prevention plan?

- Release date for winter 2016/2017; will be completed no later than March 31st, 2017 for use during 2017 field season

Attachment 10:

SUPPLEMENTAL FUTURE WITHOUT PROJECT COORDINATION REQUEST FOR INFORMATION REGARDING ONGOING MONITORING, CONTROL, AND MANAGEMENT BY ACRCC MEMBER AGENCIES

Proposed USACE Position of Brandon Road Future without Project Conditions (FWOP) –some key assumptions regarding ongoing monitoring, control and management by ACRCC member agencies

1. For the Great Lakes Mississippi Inter-basin Study at Brandon Road (GLMRIS-BR), USACE is trying to accurately forecast the Future without Project Conditions ("FWOP") conditions through year 2071 for Asian carp monitoring, control and management in the Upper Illinois Waterway and Chicago Area Waterway System by USACE and agencies participating in the ACRCC. USACE's analysis will consider the FWOP condition at Brandon Road as synonymous with the No-Action alternative to address the project goals and objectives. We will evaluate all alternatives, including the No-Action alternative and recommend the plan that best meets our study objectives. Therefore, your agency's input is important to our assessment.

2. In its FWOP condition projection, USACE assumes that the ACRCC will continue to produce an Asian Carp Action Plan through 2071, which is the end of the GLMRIS-BR planning horizon. The ACRCC Action Plan is currently updated annually and includes activities which extend beyond the one year plan. USACE is also projecting that our agency will continue to operate and maintain at least two Chicago Sanitary and Ship Canal Electric Barriers and complete field work in support of barrier defense through 2071. In addition, the USACE emergency response protocols will be implemented in response to identified emergency situations through the authority of the Assistant Secretary of the Army of Civil Works provided in WRRDA 14, Section 3061, and in coordination with the ACRCC Contingency Response Plan.

3. The FWOP forecast will indicate that Asian carp monitoring and control efforts are a shared responsibility and dependent on multiple agencies, including the Illinois Department of Natural Resources (IDNR), US Fish and Wildlife Service (USFWS), US Geological Survey (USGS) and US Environmental Protection Agency (USEPA). As for agencies other than USACE, and due to the uncertainty regarding this projection USACE anticipates providing two possible scenarios in the GLMRIS-BR Feasibility Report:

- Scenario 1: Future level of activities and funding are assumed to be current levels.

- Scenario 2: No supplemental GLRI funding is available after 2018; consequently, monitoring, control and management activities completed by other agencies would only be funded with agency base budget capability.

Based upon the current level of risk associated with Asian carps in the Upper Illinois Waterway, it does seem likely that control activities for Asian carp would extend beyond FY18, when available GLRI funding is set to expire. In both future scenarios, USACE will discuss that FWOP actions are dependent on both the need for the actions and the availability of funding. As such, the extent of management actions may change (increase or decrease) based upon future conditions and funding availability. USACE will project an expected future level of effort from other agencies in our FWOP forecasts. This forecast will be needed to assess the cost of the Nonstructural Alternative and nonstructural measures that form a part of each of the Technology Alternatives.

QUESTION 1: Does your Agency have comments on or concerns with the scenarios presented and general assumptions that will accompany the FWOP condition analysis? Can your Agency concur with the assumptions set forth in Scenario 1, i.e. that current levels of activities and funding are likely to

continue through year 2071? Would your Agency recommend Scenario 1 or Scenario 2 as the assumption for the FWOP condition?

QUESTION 2: Would your Agency's level of effort, pertaining to Asian carp monitoring, control and management in the upper Illinois River and the CAWS through 2071, change based on USACE's selected GLMRIS-BR plan?

- **a)** If USACE constructed a combination of structural measures at Brandon Road Lock and Dam to create a control point, how would this control point impact your agency's *recommended* level of effort in relationship to current levels through 2071?
- **b)** If no structural alternative was constructed, in other words if either the No-Action or Non-Structural Alternative was recommended at Brandon Road Lock and Dam, would your agency anticipate sustaining its current level of effort pertaining to Asian carp monitoring, control and management through 2071?

Future without Project Conditions Follow-up Distribution List
July 14, 2016

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GLMRIS-Brandon Road – Illinois Department of Natural Resources

GLMRIS-BR Team
July 13, 2016

US Army Corps of Engineers
BUILDING STRONG®

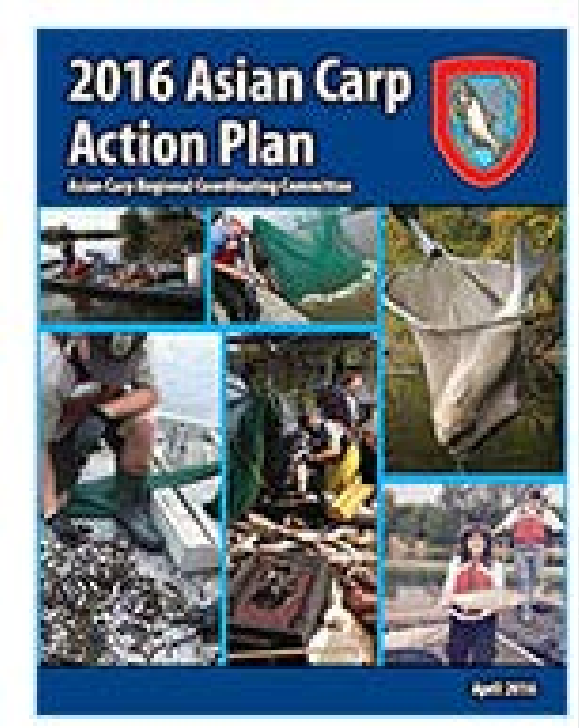
Agenda

- Future Without Project Condition/No Action Alternative
- Nonstructural Alternative

FWOP Conditions

Development of Assumptions

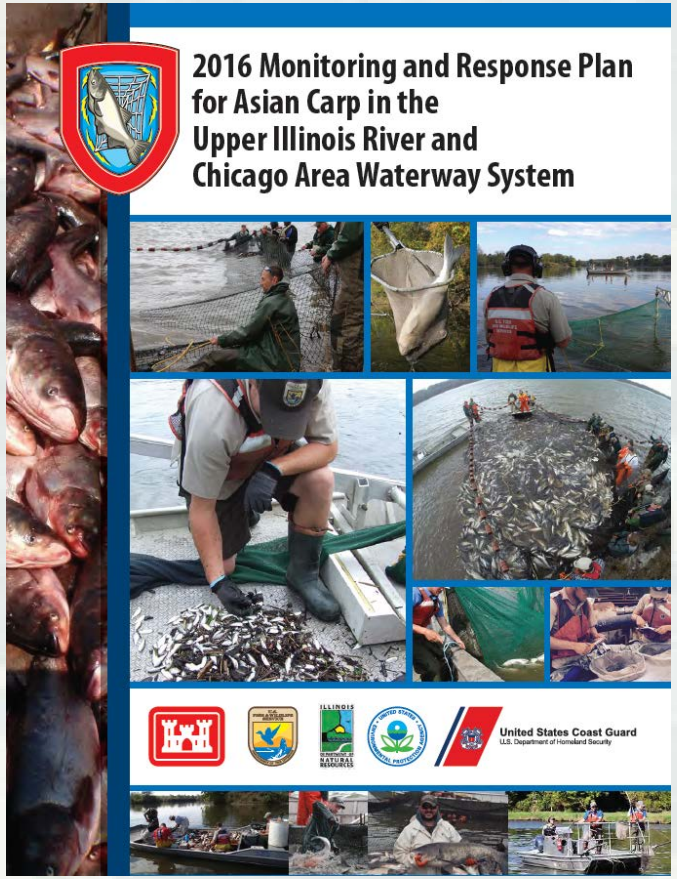
- Reviewed ACRCC 2016 Asian Carp Action Plan Identified projects relevant to GLMRIS-BR
  - ► Identified current (FY16) and projected (FY17) levels of funding (Base Budget and GLRI) for relevant projects
  - ► Responsible Agencies: USACE, USFWS, USGS, USEPA, NOAA, USCG, IDNR



FWOP Conditions

Development of Assumptions

- Upper Illinois Waterway Contingency Response Plan
- Logistics and Resource Assumptions
  - The MRWG may request ACRCC support to leverage additional resources needed to conduct appropriate contingency response actions.
  - Illinois as signatory to the Mutual Aid Agreement of the Conference of Great Lakes & St. Lawrence Governors and Premiers may request assistance if deemed necessary



FWOP Conditions

Development of Assumptions

- USACE will continue to operate at least 2 of the 3 CSSC Electric Barriers
- USACE will continue to conduct monitoring activities in support of barrier defense

FWOP Conditions

Development of Assumptions

- USACE P&G Criteria of Acceptability, Completeness, Effectiveness, and Efficiency

*"Evaluation of plan acceptability must consider both implementability and satisfaction. Implementability means that the alternative is feasible from technical, environmental, economic, **financial**, political, legal, institutional, and social perspectives. If it is not feasible due to any of these factors, then it can not be implemented, and therefore is not acceptable. An infeasible plan should not be carried forward for further consideration. The second dimension to acceptability is the satisfaction that a particular plan brings to government entities and the public."*

FWOP Conditions

PDT's Assumptions

- GLRI funding may no longer be available after FY18, as the authorization expires in FY16
  - ► Funds available in FY16 would be 2 year funds (FY16-FY18)
- Senate WRDA 2016 includes extension of GLRI through 2021, but no action has been taken
- In FY16 approximately **$10,520,128 Base Budget Funds** available for ANS Monitoring Activities
- In FY17 approximately **$8,931,088 Base Budget Funds** projected for ANS Monitoring Activities

FWOP Conditions

PDT's Assumptions

- High uncertainty in regards to availability of funding (above base budget) for ANS Monitoring Activities

- Assume **projected FY17 Base Budget Funding ($8,931,088) extends through FY71** for public education and outreach, monitoring, integrated pest management, piscicides, manual or mechanical removal, research and development and laws and regs

Assume **zero of projected FY17 GLRI Funding** totals **extend through FY71** as noted above

If deemed a higher priority, would federal agencies reprogram funds in base budgets to support IDNR activities?

FWOP Conditions

Risks of Assumptions

- Project costs of remaining alternative may be too conservative
  - ► Assumption that no GLRI funding may be too conservative
  - ► Assumption that no increase in Base Budget funding may be too conservative
- Additional or other MR Basin ANS could require efforts not accounted for in this plan
- Agencies' focus may shift to other geographic areas due to shifts in Asian carp population density
- Monitoring informs whether contingency response is necessary. Reduced monitoring hinders the success of the contingency response program.

Agenda

- Future Without Project Condition/No Action Alternative
- Nonstructural Alternative

Nonstructural Alternative

Development of Assumptions

- Reviewed ACRCC 2016 Asian Carp Action Plan
  - ▶Identified projects relevant to GLMRIS-BR
  - ▶Identified current (FY16) and projected (FY17) levels of funding (Base Budget and GLRI) for relevant projects
  - ▶Identified overarching categories that relevant project fit under

FY 2016 - 2017 GLRI Project Funding*

	#	Title	FY 2016	FY 2017* ($)	TOTAL Request (2016-2017)
USACE	1	Great Lakes Mississippi River Interbasin Study (GLMRIS) - Brandon Road	500,000	TBD	$500,000
	2	Lab Experimentation and Modeling to Quantify Response to CO2 in a Flowing Environment	$971,000	$300,000	$1,271,000
	3	Operation and Maintenance of Barriers	$0	$0	$0
	4	Barrier I Constudion	$0	$0	$0
	5	Telemetry - Barrier Efficacy Evaluation	$0	$0	$0
	7	Monitoring and Response Team Support	$200,000	$200,000	$400,000
	39	Ohio-Erie Canal Pathway Closure Assessment	$258,000	$1,050,000	$1,308,000
	44	Laboratory Analysis of Mitigation Measures to Address Barge Entrainment of Fish and Floating Species	$0	$0	$0
	45	Field Deployment of Barriers at Brandon Road Lock	$450,000	$380,800	$830,800
	46	Asian Carp Swim Speed Study	$200,000	$0	$200,000
	47	H & H Support for Eagle Marsh II	$15,000	$50,000	$65,000
		Subtotal	$2,594,000	$1,980,800	$4,574,800
USFWS	6	Great Lakes Asian Carp Monitoring Program	$350,000	$350,000	$700,000
	7	Monitoring and Response Team Support	$820,000	$820,000	$1,640,000
	8	Barge Entrainment and Interaction Study	$750,000	$750,000	$1,500,000
	9	Hydro-Acoustic Assessment of Lock Mediated Fish Passage in the Upper Illinois River	$160,000	$160,000	$320,000
	10	Characterizing Risk of Seasonal Changes on Electric Barrier Operating Parameters	$0	$0	$0
	11	Program Capacity for eDNA Sampling	$0	$0	$0
	12	Fisheries Capacity for eDNA Proeessing and Technology Refinement	$0	$0	$0
	13	Illegal Transport of Injurious Wildlife Enforcement	$0	$0	$0
	14	Asian Carp Website Operation and Maintenance	$50,000	$50,000	$100,000
	15	Use of Novel Gear: Video Outreach	$0	$0	$0
	16	Registration of Microparticle Technologies	$125,000	$225,000	$350,000
	17	Registration of Carbon Dioxide Technologies	$125,000	$125,000	$250,000
	43	Program Support for Asian Carp Activities	$0	$0	$0
	48	Black Carp eDNA Marker Development	$300,000	$0	$300,000
	49	Analysis of Grass Carp in the CAWS	$200,000	$200,000	$400,000
	50	Black Carp Assessment: CAWS and UMRB	$200,000	$200,000	$400,000
	51	Mass Removal and Monitoring of Juvenile Asian Carp	$100,000	$100,000	$200,000
	52	Barrier Defense Using Novel Gear	$80,000	$80,000	$160,000
		Subtotal	$3,260,000	$3,060,000	$6,320,000

Nonstructural Alternative

PDT Assumptions

- Continuous immigration of AC from lower pools into upper pools of the Illinois Waterway throughout a given year/although will vary
- Contracted fishing effort will be doubled (e.g., $3,000,000) from what it is currently through the Planning Period of Analysis
  - Supportable based on SIU results which determined current contracted fishing efforts exploited 55% of the AC population within a large backwater (e.g., Hanson Material Services)
- Every 3 years, contracted fishing effort will be tripled (e.g., $4,500,000) from what it is currently through the Planning Period of Analysis to account for high recruitment years
  - Supportable based on INHS data which shows 5 high recruitment years since 2000 and continued immigration from lower pools
- MR Basin ANS of Concern identified in 2014 GLMRIS Report as low risk currently, could become medium or high risk within the Planning Period of Analysis

Nonstructural Alternative

PDT Assumptions

- Assumes the Nonstructural Alternative will cover 100% of GLRI projected FY17 funding through the Planning Period of Analysis
  - ► Will not include funding for Laws and Regulations
  - ► Will include funding for Research & Development
    - Efforts to support O&M and adaptive management of Electric Barrier or GLMRIS-BR project
- Assumes an additional $50,000 for monitoring of *A. lacustre*
- Assumes an additional $3,500,000 (average annual cost over 50 years) for contracted fishing
  - ► Assumes $3,000,000 every year
  - ► Assumes $4,500,000 every 3 years

Nonstructural Alternative

Development of Assumptions

Looked at FY16 and FY17 Base Budget and GLRI Funding for overarching categories (combined agencies)

Category	FY16		FY17	
	Base Budget	GLRI	Base Budget	GLRI
Public Education & Outreach	$100,000	$350,000	$100,000	$350,000
Monitoring	$5,015,000	$3,020,000	$4,047,000	$3,620,000
Integrative Pest Management	$1,750,000	$1,000,000	$1,750,000	$850,000
Piscicides	$0	$0	$0	$0
Manual or Mechanical Removal	$0	$1,700,000	$0	$1,500,000
Research & Development	$3,655,128	$5,311,000	$3,034,000	$4,124,590
Laws & Regulations	$0	$0	$0	$0
Total	**$10,520,128**	**$11,381,000**	**$8,931,088**	**$10,444,590**

Nonstructural Alternative

PDT's Recommendation

Future Funding Recommendation for Planning Period of Analysis (FY21-FY71)

Category	No Action Alternative		Nonstructural Alternative
	FY21-FY71		FY21-FY71
	Base Budget	GLRI (or Alternative Funding Source)	Scenario
Public Education & Outreach	$100,000	$0	$350,000
Monitoring	$4,047,000	$0	$3,670,000
Integrative Pest Managment	$1,750,000	$0	$850,000
Piscicides	$0	$0	$0
Manual or Mechanical Removal	$0	$0	$3,500,000
Research & Development	$3,034,000	$0	$1,965,000
Laws & Regulations	$0	$0	$0
Total	**$8,931,088**	**$0**	**$10,335,000**

Nonstructural Alternative

Risks of Assumptions

- Project costs of remaining alternative may be overestimated
  - Assumption that no GLRI funding may be overestimated
  - Assumption that no increase in Base Budget funding may be overestimated
- Additional or other MR Basin ANS could require efforts not accounted for in this plan

BACKUP

GLMRIS - Brandon Road

Technology Alternative – Continuous Electric Barrier

Under Development

- Nonstructural Measures – 2021*
- BRLD Control Point
  - 2031*
  - Electric Barrier – continuous operation

NOTE: CSSC Electric Dispersal Barriers continue operation.

*Assumed authorized for construction in FY2021 and capability funding for planning, engineering design, and construction.

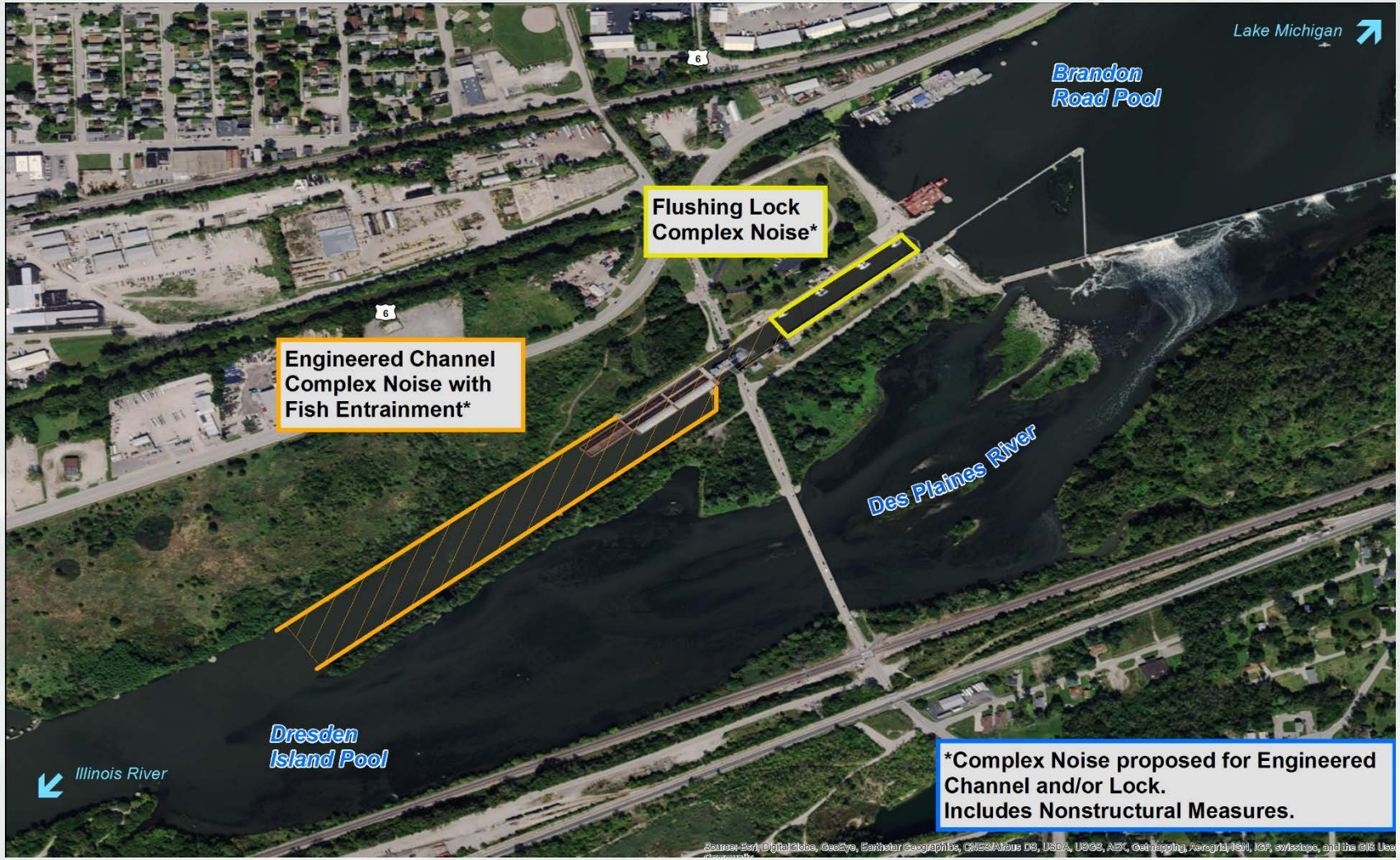
GLMRIS - Brandon Road

Technology Alternative - Complex Noise

Under Development

- Nonstructural Measures – 2021*
- BRLD Control Point
  - 2031*
  - Complex Noise – develop w/researchers

NOTE: CSSC Electric Dispersal Barriers continue operation.



U.S.ARMY

*Assumed authorized for construction in FY2021 and capability funding for planning, engineering design, and construction.

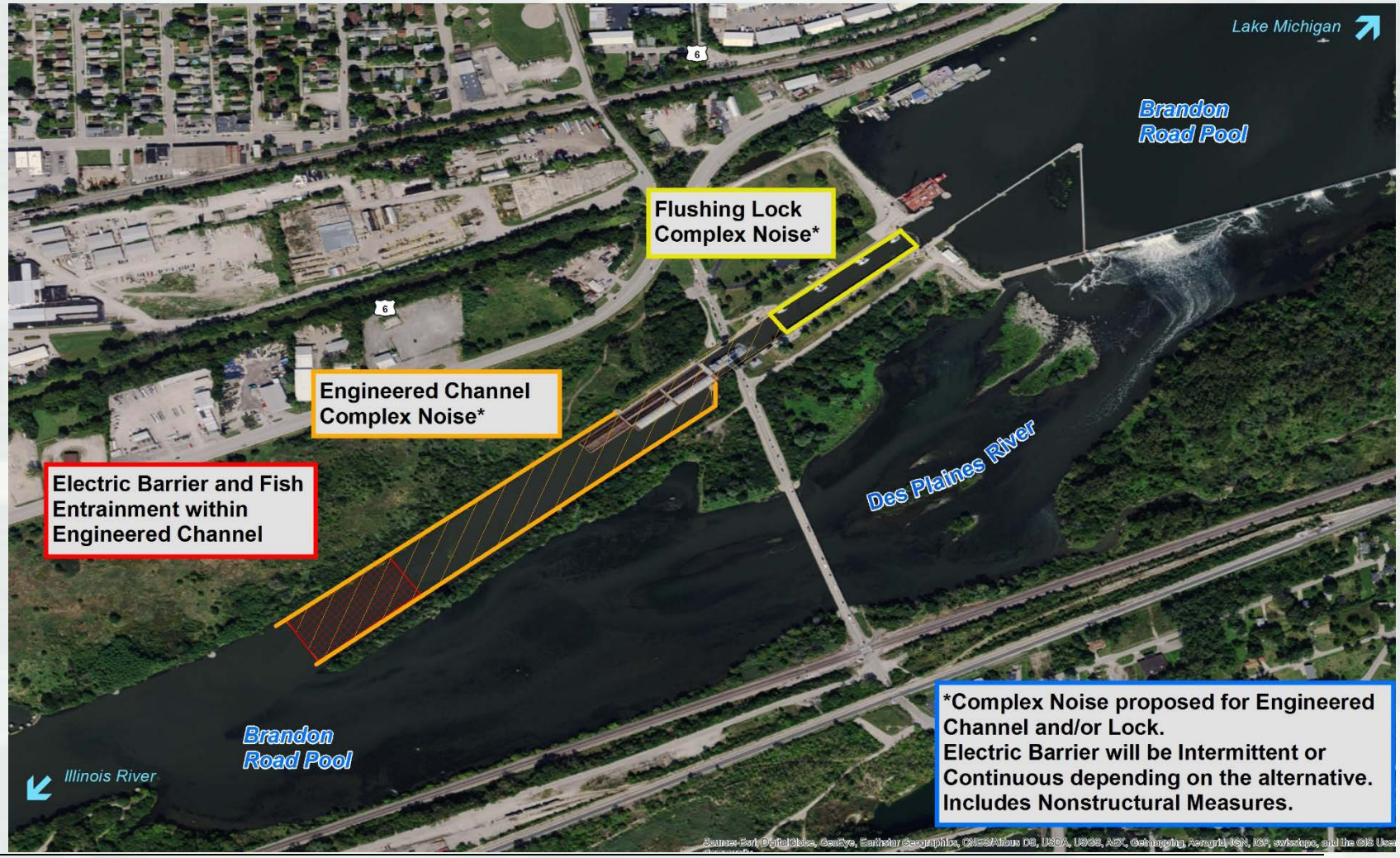
GLMRIS - Brandon Road

Technology Alternative - Complex Noise with Intermittent Electric Barrier

Under Development

- Nonstructural Measures – 2021*
- BRLD Control Point
  - 2031*
  - Electric Barrier – Operating when **NO** vessels in approach or lock
  - Complex Noise – Operating when vessels in approach or lock

NOTE: CSSC Electric Dispersal Barriers continue operation.



U.S.ARMY

*Assumed authorized for construction in FY2021 and capability funding for planning, engineering design, and construction.

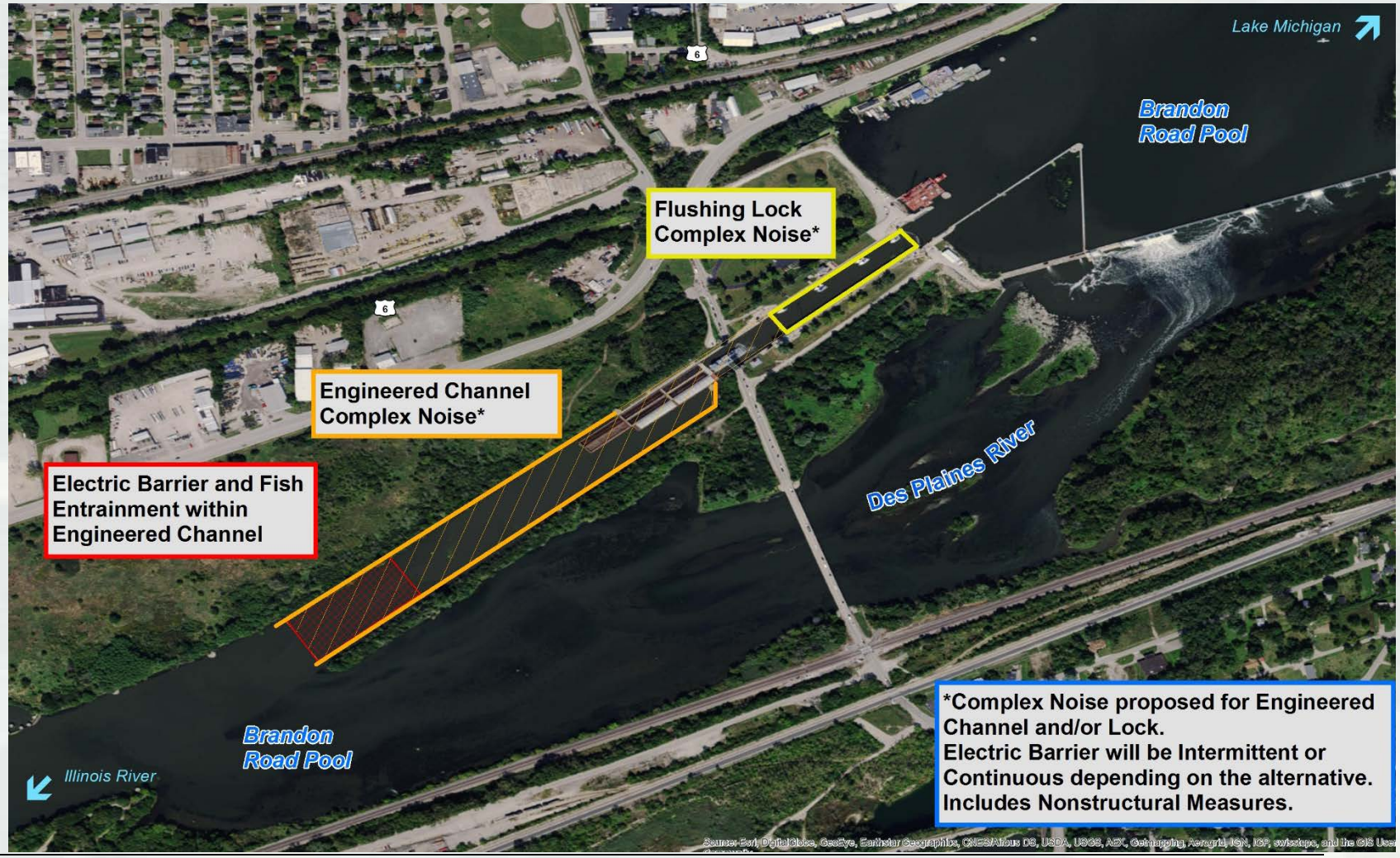
GLMRIS - Brandon Road

Technology Alternative- Complex Noise with Continuous Electric Barrier

Under Development

- Nonstructural Measures – 2021*
- BRLD Control Point
  - 2031*
  - Electric Barrier – Operating when vessels in approach or lock
  - Complex Noise – Operating when vessels in approach or lock

NOTE: CSSC Electric Dispersal Barriers continue operation.



*Assumed authorized for construction in FY2021 and capability funding for planning, engineering design, and construction.

GLMRIS - Brandon Road

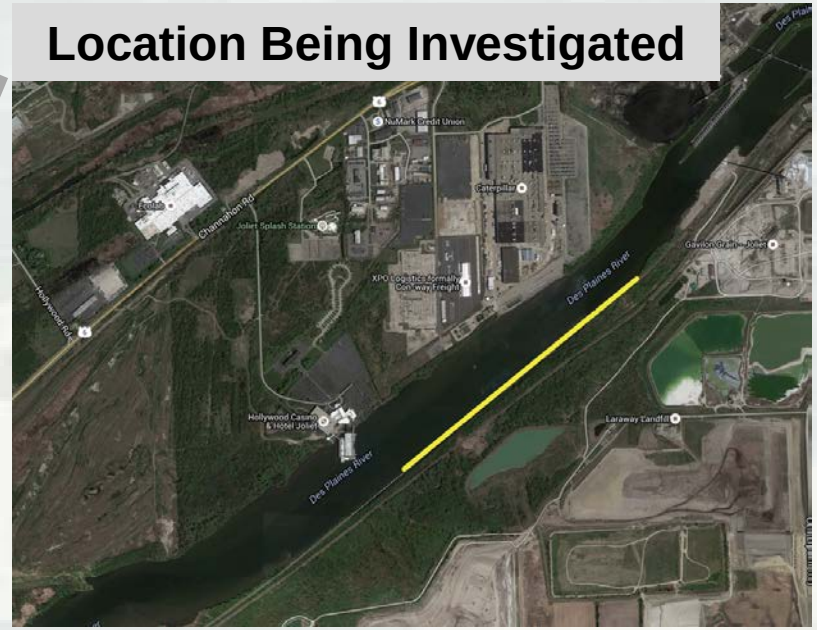
Technology Alternative

Under development

- New mooring location
- Minimize impacts to navigation due to electric barrier constraints

Current Location

Location Being Investigated



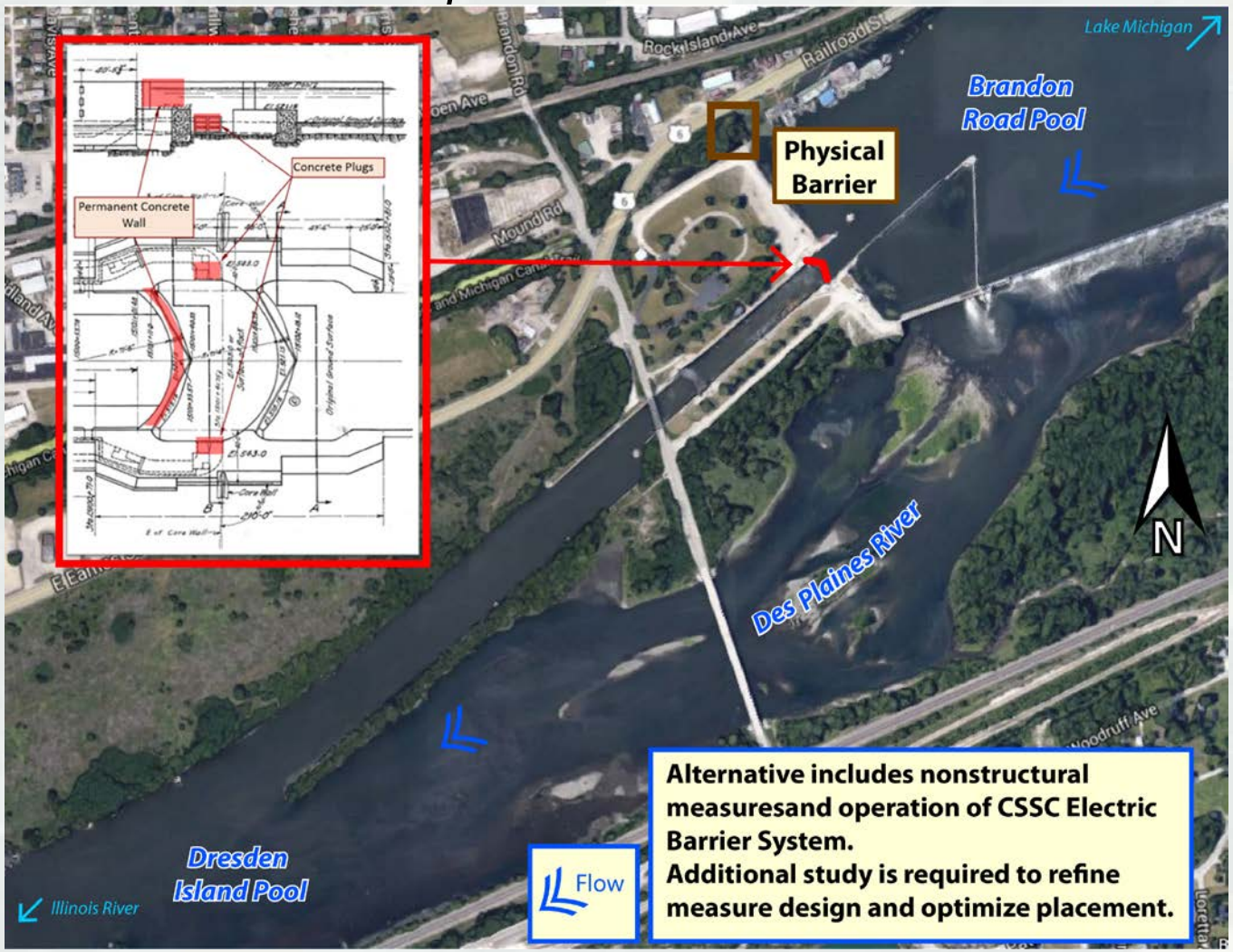
GLMRIS - Brandon Road

Lock Closure

Under Development

- Nonstructural Measures – 2021*
- BRLD Control Point
  - Lock Closed 2021*

NOTE: CSSC Electric Dispersal Barriers continue operation.



*Assumed authorized for construction in FY 2021 and capability funding for planning, engineering design, and construction.

- Decision-making Analysis

GLMRIS – Brandon Road Alternative Evaluation Criteria†

Objective: Prevent the upstream transfer of aquatic nuisance species (ANS) from the Mississippi River Basin to the Great Lakes Basin through the Chicago Area Waterways in the vicinity of the Brandon Road Lock and Dam

	Alternative	Probability of Establishment for Asian carp	Anticipated Implementation Date	System Wide Env Impacts	Project Area Env Impacts	Alternative Uncertainties	Implementation Cost	Rounded Avg. Annual cost (Construction + NS + O&M)	Total Annual Navigation Impacts	CE/ICA Results (Costs = Total Cost + Total Annual Nav Impact)	Adaptability
GLMRIS - Brandon Road Alternatives	Sustained Current Activities (No Action)										
	Nonstructural Alternative										
	Technology Alternative – Electric Barrier										
	Technology Alternative – Complex Noise										
	Technology Alternative – Complex Noise with Intermittent Electric Barrier										
	Technology Alternative – Complex with Continuous Electric Barrier										
	Lock Closure										

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET, SUITE 1500
CHICAGO IL 60604

June 30, 2016

Planning Branch

Mr. Wayne Rosenthal
Director, Illinois Department of
Natural Resources
One Natural Resources Way
Springfield, Illinois 62702

Dear Director Rosenthal:

Thank you for your letter regarding the Great Lakes and Mississippi River (GLMRIS)-Brandon Road effort (dated January 16, 2014). We are working to incorporate and address your concerns, especially on the recolonization of the upper Des Plaines River by native fish and freshwater mussel species in our environmental impact assessment. In addition, we are working to address your specific directives (pages 6-7) through coordination with the U.S. Fish and Wildlife Service (USFWS), pursuant to the USFWS Fish and Wildlife Coordination Act of 1934, as amended (FWCA - 16 U.S.C. 661-667e).

Under the FWCA, coordination and consultation with the USFWS and fish and wildlife agencies of States where the "waters of any stream or other body of water are proposed or authorized, permitted or licensed to be impounded, diverted [...] or otherwise controlled or modified' by any agency under a Federal permit or license, is to be undertaken for the purpose of "preventing loss of and damage to wildlife resources". As part of this coordination and consultation for the GLMRIS-Brandon Road Feasibility Study, the USFWS has already hosted two meetings with interested State fish and wildlife agencies (September 2015 and January 2016) and has provided two Planning Aid Letters (PALs) (March 2016) with State fish and wildlife agencies comments included, to the U.S. Army Corps of Engineers (USACE). A Draft FWCA Report is expected from the USFWS October 2016, with a Final FWCA Report expected January 2017.

As part of our planning process, and as required by the National Environmental Policy Act (NEPA), we continue to develop the Future-Without Project Condition for the GLMRIS-Brandon Road Study. The Future-Without Project Condition (FWOP), which is synonymous with the No-Action Alternative forms the basis for evaluation and comparison of

alternative plans developed to address the study goals and objectives. Each of our alternatives will be evaluated in light of the No-Action alternative as part of both the Planning process and the NEPA compliance evaluation. If an agency decision is made to recommend an action, it will be based upon a determination that the benefits associated with the alternative, above and beyond the No-Action Alternative justify a federal investment.

In letters released in August 2015, USACE solicited information from Federal, State, and Local agencies on their future efforts related to ANS controls (among other items) in the vicinity of Brandon Road. A response was provided by your agency on September 8, 2015. The letter contained the following two specific comments regarding the continuation of ANS activities within the Chicago region as well as future funding of these activities:

- "IDNR (Illinois Department of Natural Resources) is operating under significant fiscal constraints. Currently, the majority of funding for ANS (Aquatic Nuisance Species) research, controls, and monitoring is funded by federal funds, which originate within USFWS to support Illinois' Statewide ANS Comprehensive Management Plan. Additionally, USEPA (U.S. Environmental Protection Agency) funds for GLRI (Great Lakes Restoration Initiative) through the USFWS are necessary to support ACRCC (Asian Carp Regional Coordinating Committee) actions, including monitoring and response work. There are no current alternative funding strategies for Asian carp work near Chicago. However, prior to ACRCC formation and under near emergency conditions, the State of Illinois was able to facilitate a multi-million dollar response by coordinating with local, state, and federal partners."

- It is difficult to comment on future fiscal support or future plans as this is up to the support of legislation and a budget which is annually drafted and appropriated. [...] As evidence of our contributions to GLRI opportunities, IDNR will remain active in control and management of Asian carp as supported by GLRI or other funding mechanism."

Based upon current uncertainty regarding future GLRI funding, the GLMRIS future condition will include a discussion on the potential for decreases or increases in the ongoing level of effort associated with Asian carp monitoring, control and management activities identified in the future without project conditions. We feel this is a relevant consideration for the GLMRIS FWOP study, as we understand that GLRI funding is currently the primary funding source for IDNR ANS activities.

As we finalize our future conditions forecast, we need to confirm that IDNR's position on future conditions and have the following questions:

> If funded by another agency, would IDNR support with staff resources ongoing monitoring and control activities as well as potential future emergency response actions' (e.g., intensive netting events such as that in Lake Calumet and North Shore Channel in 2010, and rotenone applications such as that in the lower Lockport Pool in 2009 and Little Calumet River North Branch in 2010) through 2071, the GLMRIS Brandon Road period of analysis?
> Does IDNR envision that any or all of these actions would be funded directly through State of Illinois funds through the Brandon Road within the study's period of analysis?

We very much appreciate your response to these questions and any additional information that you can provide to support the development of the future conditions forecast for the GLMRIS Brandon Road Feasibility Study. We look forward to continued collaboration with the Illinois DNR. Please direct any questions or comments to me. I can be reached at 312-846-5580 or via email at susanne.j.davis@usace.army.mil.

Sincerely,

Susanne J. Davis, P.E.
Chief, Planning Branch

cc: Daniel Injerd, IDNR, Director OWR
Nathan Grider, IDNR

From: Bolen, Bill [mailto:Bolen.Bill@epa.gov]
Sent: Tuesday, July 19, 2016 2:21 PM
To: Davis, Susanne J LRC <Susanne.J.Davis@usace.army.mil>
Cc: Kirksey, Felicia Y LRC <Felicia.Y.Kirksey@usace.army.mil>
Subject: [EXTERNAL] FWOP

Sue –

Regarding USACE's request for a response from USEPA on the FWOP proposal, we would like you to note the following three items:

1) Forecasting GLRI funding beyond the current Fiscal Year does not meet our approval. While we do have a proposed Presbud for FY17, without a Congressionally – approved budget, please do not cite nor use the anticipated amount of $250 million currently proposed.

2) If USACE desires to use the Asian Carp Action Plan or any element thereof, USEPA would ask that USACE communicate this to OMB and solicit their consent to do so.

3) Please note the footnote in the Action Plan Funding Matrix that we were required to incorporate at the direction of OMB: "Note that this Action Plan is not a commitment to future funding and that all out-year actions are subject to the availability of future appropriations and allocation decisions".

Regards.

Bill

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
OFFICE OF OCEANIC AND ATMOSPHERIC RESEARCH
Great Lakes Environmental Research Laboratory
4840 South State Road
Ann Arbor, Michigan 48108-9719

July 27, 2016

Felicia Y. Kirksey, PMP
U.S. Army Corps of Engineers, Chicago District
231 South LaSalle Street
Suite 1500
Chicago, Illinois 60604

Dear Ms. Kirksey,

We are submitting to you the NOAA Great Lakes Environmental Research Laboratory (GLERL) response to the Proposed USACE Position of Brandon Road Future without Project Conditions (FWOP) – some key assumptions regarding monitoring, control and management by ACRCC member agencies.

Scenario 1: Future level of activities and funding are assumed to be at current levels.

Scenario 2: No supplemental GLRI funding is available after 2018: consequently, monitoring, control and management activities completed by other agencies would only be funded with agency base budget capability.

1. Does your agency have comments or concerns presented and general assumptions that will accompany the FWOP condition analysis?

   NOAA GLERL Response: Yes, NOAA GLERL has concerns. The base level of support from our agency does not adequately cover our modeling activities of potential effects of Asian carp on Great Lakes food webs. To date, our modeling activities have been supported through grants from GLRI to us and our university colleagues. If GLRI funding stops in 2018, we will be unable to maintain the level of modeling effort needed to inform the risk assessment of Asian carp invasion to the Great Lakes. This funding is essential because:

   We believe that bioeconomic assessments of Bighead and Silver carp effects on Great Lakes food webs are needed for other Great Lakes, not just for Lake Erie (see Zhang et al. 2016 and current effort in partnership with USACE). Currently we are funded by a non-profit agency (Great Lakes Fishery Trust) to complete a bioeconomic assessment of Asian carp effects on the Lake Michigan food web. We won't be able to rely on agency support for further modeling efforts, which are critical given the potential variation in Asian carp effect across diverse habitats, and the likely invasion by two other invasive carp species, the grass carp and black carp.

   The assumption that current levels of our agency's effort will continue through the year 2071 is unrealistic. Our base funding from NOAA has been level for several years, and only supplemented by external grants such as provided by the GLRI.

2. Would your Agency's level of effort, pertaining to Asian carp monitoring, control and management in the Upper Illinois River and CAWS through 2071, change based on USACE's selected GLMRIS-BR plan?
    a. If USACE constructed a combination of structural measures at Brandon Road Lock and Dam to create a control point, how would this control point impact your agency's recommended level of effort in relationship to current levels through 2071?

    b. If no structural alternative was constructed, in other words if either the No-Action or Non-Structural Alternative was recommended at Brandon Road Lock and Dam, would your agency anticipate sustaining its current level of effort pertaining to Asian carp monitoring, control and management through 2071?

NOAA GLERL Response: Our agency is not involved with monitoring, control and management in the Upper Illinois River and CAWS. Our involvement with the ACRCC is solely with modeling and forecasting of Asian carp effects on Great Lakes food webs. Therefore, if the USACE did construct a control point at Brandon Road, then we imagine less demand by other agencies for our modeling efforts. But, if no structural alternative is constructed, it is likely that other agencies would request assistance with forecasting Asian carp effects on Great Lakes Food webs. As before, this would involve support through external grants as our base level of support is expected to remain level in the near future.

Sincerely,

Deborah H. Lee, PE, PH, D.WRE
Director and Great Lakes Regional Team Lead

Proposed USACE Position of Brandon Road Future without Project Conditions (FWOP) –some key assumptions regarding ongoing monitoring, control and management by ACRCC member agencies
USGS Response

1. For the Great Lakes Mississippi Inter-basin Study at Brandon Road (GLMRIS-BR), USACE is trying to accurately forecast the Future without Project Conditions ("FWOP") conditions through year 2071 for Asian carp monitoring, control and management in the Upper Illinois Waterway and Chicago Area Waterway System by USACE and agencies participating in the ACRCC. USACE's analysis will consider the FWOP condition at Brandon Road as synonymous with the No-Action alternative to address the project goals and objectives. We will evaluate all alternatives, including the No-Action alternative and recommend the plan that best meets our study objectives. Therefore, your agency's input is important to our assessment.

2. In its FWOP condition projection, USACE assumes that the ACRCC will continue to produce an Asian Carp Action Plan through 2071, which is the end of the GLMRIS-BR planning horizon. The ACRCC Action Plan is currently updated annually and includes activities which extend beyond the one year plan. USACE is also projecting that our agency will continue to operate and maintain at least two Chicago Sanitary and Ship Canal Electric Barriers and complete field work in support of barrier defense through 2071. In addition, the USACE emergency response protocols will be implemented in response to identified emergency situations through the authority of the Assistant Secretary of the Army of Civil Works provided in WRRDA 14, Section 3061, and in coordination with the ACRCC Contingency Response Plan.

3. The FWOP forecast will indicate that Asian carp monitoring and control efforts are a shared responsibility and dependent on multiple agencies, including the Illinois Department of Natural Resources (IDNR), US Fish and Wildlife Service (USFWS), US Geological Survey (USGS) and US Environmental Protection Agency (USEPA). As for agencies other than USACE, and due to the uncertainty regarding this projection USACE anticipates providing two possible scenarios in the GLMRIS-BR Feasibility Report:

- Scenario 1: Future level of activities and funding are assumed to be current levels.

- Scenario 2: No supplemental GLRI funding is available after 2018; consequently, monitoring, control and management activities completed by other agencies would only be funded with agency base budget capability.

Based upon the current level of risk associated with Asian carps in the Upper Illinois Waterway, it does seem likely that control activities for Asian carp would extend beyond FY18, when available GLRI funding is set to expire. In both future scenarios, USACE will discuss that FWOP actions are dependent on both the need for the actions and the availability of funding. As such, the extent of management actions may change (increase or decrease) based upon future conditions and funding availability. USACE will project an expected future level of effort from other agencies in our FWOP forecasts. This forecast will be needed to assess the cost of the Nonstructural Alternative and nonstructural measures that form a part of each of the Technology Alternatives.

QUESTION 1: Does your Agency have comments on or concerns with the scenarios presented and general assumptions that will accompany the FWOP condition analysis? Can your Agency concur with the assumptions set forth in Scenario 1, i.e. that current levels of activities and funding are likely to continue through year 2071? Would your Agency recommend Scenario 1 or Scenario 2 as the assumption for the FWOP condition?

USGS Response

1) No, we do not have any comments or concerns on the two scenarios presented.

2) It is difficult to predict appropriated funding levels for Asian Carp due to the Federal budgeting process. USGS will continue this line of research into the future until partners indicate that their information needs are met or until they no longer threaten our riverine and lacustrine ecosystems. In addition, in recent years, USGS has received several increases to prevent the establishment of Asian carp in the Great Lakes. Those funds (totaling $5.5M in FY16), will continue to be invested toward this end until we receive indication that protecting the Great Lakes from the establishment of Asian carp is no longer a priority.

3) We understand the validity of presenting both scenarios but do not have any recommendations as to which are more appropriate.

QUESTION 2: Would your Agency's level of effort, pertaining to Asian carp monitoring, control and management in the upper Illinois River and the CAWS through 2071, change based on USACE's selected GLMRIS-BR plan?

- **a)** If USACE constructed a combination of structural measures at Brandon Road Lock and Dam to create a control point, how would this control point impact your agency's *recommended* level of effort in relationship to current levels through 2071?
- **b)** If no structural alternative was constructed, in other words if either the No-Action or Non-Structural Alternative was recommended at Brandon Road Lock and Dam, would your agency anticipate sustaining its current level of effort pertaining to Asian carp monitoring, control and management through 2071?

USGS Response

USGS scientists have been conducting monitoring and research on the distribution, habitat use, life history and ecology of Asian carps for over 20 years because key scientific knowledge gaps impede their effective control and management in the Mississippi River drainage. USGS will continue this line of research into the future until partners indicate that their information needs are met or until they no longer threaten our riverine and lacustrine ecosystems. In addition, in recent years, USGS has received several increases to prevent the establishment of Asian carp in the Great Lakes. Those funds (totaling $5.5M in FY16), will continue to be invested toward this end until we receive indication that protecting the Great Lakes from the establishment of Asian carp is no longer a priority.

U.S. Department of Homeland Security
United States Coast Guard

Commander
Ninth Coast Guard District

1240 E 9th St
Cleveland, OH 44199
Staff Symbol: (dpi)
Phone: (216) 902-6343
Fax: (216) 902-6050

16000

JUL 29 2016

Colonel Christopher T. Drew
United States Army Corps of Engineers
Chicago District Commander
231 South La Salle Street, Floor 15
Chicago, IL 60604

Dear Colonel Drew,

Thank you for the opportunity to comment on the Coast Guard's (CG) plans regarding the Aquatic Nuisance Species (ANS) controlled technologies near the Brandon Road Lock and Dam.

In response to your request for the Coast Guard's Future Without Project Conditions (FWOP) for the Great Lakes and Mississippi River Inter-basin Study (GLMRIS), we can only comment on the those aspects that the Coast Guard has jurisdiction as part of the Asian Carp Regional Coordinating Committee (ACRCC) and the GLMRIS:

- Safety and security of mariners, vessels, waterfront facilities, and the environment.
- Facilitation of maritime commerce.

As outlined in the Action Plan, the Coast Guard is to provide the following support for the identified Tasks:

- Task #40: The CG will continue to manage the waterways through its authorities when Asian Carp Control Measures are being tested, constructed, maintained or operated in accordance with the Monitoring and Response Plan (MRP). However, it must be understood that any long term closures would be extremely difficult to sustain and enforce due to adverse economic impact.

- Tasks #41, 42, and 63: The CG Research and Development Center (RDC) will inform the USACE normal evaluation of ANS control technologies by conducting risk modeling and analysis to identify maritime system risks and mitigation strategies. No CG appropriated funds are available now, nor are expected to be available in the future to perform these tasks. In the absence of continued funding, either through GLMRIS or direct appropriations, this work cannot be accomplished.

Attempting to project out the Coast Guard's fiscal needs for ACRCC and GLMRIS, participation for the identified MRP Tasks can be summed up as:

- Task #40: Not dependent upon external funding. Waterways management is a core Coast Guard mission and can be anticipated to continue to be supported if GLMRIS funding were to be abated or cease.

16000
August 27, 2015

- Tasks #41, 42, and 63: The CG RDC's contributions are wholly dependent upon specific funding.

Sincerely,

P. D. J. ARNETT
Captain, U.S. Coast Guard
Chief, Prevention Division
By direction

Copy: Commander, Coast Guard Sector Lake Michigan
Coast Guard Marine Safety Unit Chicago

ILLINOIS
NATURAL RESOURCES

Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Bruce Rauner, Governor
Wayne A. Rosenthal, Director

August 2, 2016

Susanne J. Davis, P.E
Chief Planning Branch
U.S Army Corps of Engineers -Chicago District 231
South La Salle Street Suite 1500
Chicago, IL 60604

Dear Ms. Davis:

The Illinois Department of Natural Resources (IDNR) has reviewed your letter dated June 30, 2016 and provides the following response to your questions regarding the Brandon Road Study. Specifically, you state:

As we finalize our future conditions forecast, we need to confirm IDNR's position on future conditions and have the following (2) questions (italicized below):

"If funded by another agency, would IDNR support with staff resources ongoing monitoring and control activities as well as potential future emergency response actions (e.g. intensive netting events such as the threat in Lake Calumet and North Shore Channel in 2010, and rotenone applications such as that in the lower Lockport Pool in 2009 and Little Calumet River North Branch in 2010) through 2071, the GLMRIS Brandon Road period of analysis?"

Question 1 Answer:

- Our letter dated September 8, 2015 expressed our intent to remain active in the control and management of Asian Carp, whether supported by Great Lakes Restoration Initiative funding or some other mechanism. Our response pointed out that the vast majority of our Asian Carp monitoring and control activities were supported by federal funds, primarily USFWS and USEPA, and that it is difficult to comment on future state funding.

- IDNR has led, and will continue leading, many of the ongoing efforts in conjunction with local and Federal partners. You will find that those efforts are much more intense and focused than the 2009 and 2010 efforts cited above. Current efforts are directed at areas most appropriate for management and control activities, as addressed in the 2016 Monitoring and Response Plan. A result of note is the observed 68% reduction in invasive carp below Brandon Road and the conceivable proportional decrease in threat to the Great Lakes.

- IDNR rotenone activities were previously funded by State, USFWS, and other federal collaborative efforts that predated GLRI efforts. It is reasonable to assume those funds would be available in the future. IDNR, as the authority for such a tool in Illinois, would alone evaluate the appropriateness of rotenone, or any other tool when implemented or applied under IDNR authorities.

<u>IDNR will continue to support monitoring and control activities that are appropriate to the specific conditions present, and which may include requesting State of Illinois funding in addition to Federal</u>

funding.

- On July 13, 2016 a meeting was convened with USACE personnel and IDNR staff members to discuss the Brandon Road study and the FWOP (Future without Project) alternative. We noted the expected support of GLRI in these future years and recognize the challenges of characterizing future authorizations and appropriations. With that, please take care to recognize the benefits and current ongoing work and make clear what is being considered as FWOP. In other GLMRIS planning discussions, such as expert elicitation the FWOP clearly is defined as No Action but sustained current activities. With this identified, please be consistent and clear when communicating FWOP.

"Does IDNR envision that any or all of these actions would be funded directly through State of Illinois funds through the (end of) *the Brandon Road's study period of analysis (2071)?"*

Question 2 Answer:

- The current IDNR-Aquatic Nuisance Species Program team could maintain like work under the direction of the Department in the absence of federal funding scenarios based upon Agency direction and with subsequent appropriation.

- We anticipate that future Federal funding will continue to be the driving support of our current efforts. Please note that the U.S. House of Representatives recently passed a bill to fund the Great Lakes Initiative at $300 million, which is consistent with recent and past funding levels. The GLRI, and the Asian carp effort enjoys wide and bi-partisan support throughout the Great Lakes region therefore we anticipate federal funding to continue.

- Illinois recognizes the difficulty in forecasting funding levels from future appropriations and authorizations. IDNR recommends that the USFWS be the appropriate agency for providing financial support and cooperative agreements on both current and future fish management initiatives.

- IDNR also receives other annual funding from USFWS for support of the Illinois State Comprehensive Management Plan for Aquatic Nuisance Species. These dollars support the States Comprehensive Plan and are currently assigned to other invasive species control and eradication, and for outreach needs in Illinois. This is consistent with the agency's overall Fisheries Strategic Plan. In addition, these funds if warranted and approved could assist the Asian carp work as necessary.
  - Three Goals of the State Comprehensive Management plan are as follows:

    - **Goal I:** Preventing new introductions of nuisance nonindigenous aquatic Species into the Great Lakes and the Mississippi Basin waters of Illinois.
    - **Goal II:** Limiting the spread of established populations of nuisance Non-indigenous aquatic species into un-infested waters of the state.
    - **Goal III:** Abating harmful ecological, economic, social and public health Impacts resulting from infestation of nuisance nonindigenous aquatic species.

- We ask that the USACE consider these costs and would further suggest if current GLRI actions transfer to other funding sources, care should be given in the transitioning and decision making process that will not impede ongoing efforts.

- The Department continues to emphasize that our ongoing efforts will be commensurate with both current and future conditions.

Thank you for the opportunity to provide comments on the proposed GLMRIS project at Brandon Road Lock and Dam. We look forward to continued collaboration with the USACE. Please contact Lawrence Patterson IDNR Federal Programs Coordinator with any future correspondence as he can be reached by email Lawrence.Patterson@illinois.gov, or 217-782-9211.

Sincerely,

Wayne A. Rosenthal
Director

CC: Brent Krebs, Bob Appleman, Lawrence Patterson, Dan Injerd, James Herkert, Todd Rettig, Connie Waggoner, Loren Wobig, Rick Gosh, Dan Stephenson, Kevin Irons, George Bellovics, Bob Smith

USFWS Response to Brandon Road FWOP

USFWS is committed to conducting Asian carp monitoring, surveillance, and other management activities approved for funding and implementation, and as specified in the ACRCC's: 1) FY2016 Action Plan, and 2) FY2016 Monitoring and Response Plan. USFWS conducts these projects in coordination with IL DNR and COE, given those agencies jurisdictional authorities in the Illinois Waterway (IWW) and Chicago area Waterways System (CAWS). Additionally, USFWS is committed to conducting Asian carp monitoring, surveillance, and other management activities approved for funding and implementation in the forthcoming FY17 ACRCC Action Plan, subject to final approval and availability of required funds.

Question 1 Response:

The FWS does not have any concerns with the scenarios in the FWOP condition analysis. It would be prudent to use scenario 2 as the preferred scenario for the FWOP condition.

Forecasting a specific level of effort and the commensurate funding needed to maintain a robust Asian carp surveillance program in the CAWS/IWW through the COE planning period of 2071 is challenging beyond the immediate outyears. Multiple factors provide uncertainty with respect to Asian carp population dynamics and species dispersal. Variability in reproduction, recruitment, dispersal, and mortality, occurs both within and across years in specific geographic locations, across different species, and between different watersheds; and is influenced by a variety of factors including hydrology and thermal regime. Monitoring and other management plans use an adaptive management approach that builds prospective management actions informed by past results and analyses. Analyses of the population characteristics and dispersal dynamics of Asian carp before, during, and after implementation of any project would be needed to determine subsequent degree of surveillance effort and type of actions warranted. Therefore, long-term, extended predictions of specific required effort are not prudent beyond immediate outyears.

Question 2 Response:

Although longer-term pre-planning, goal-setting, and discussion for general coordination purposes is appropriate, USFWS is unable to commit to the implementation of agency activities beyond those supported through the most recent President's budget.

Additionally, the ACRCC is a voluntary, non-statutorily binding partnership. As such, the operation of the ACRCC and development of its annual Action Plan through 2071 is subject to the ability and willingness of the agencies to participate, and availability of sufficient resources to support these actions. While USFWS strongly supports the mission and actions of the ACRCC, agencies are not mandated to participate by directives or authorities.

If the USACE selects a structural option, the FWS effort will stay the same initially in order to monitor the effectiveness of that option. If it is shown to be effective, the FWS effort could likely be reduced or refocused to address other potential pathways for Asian carp to enter the Great Lakes.

If no action is taken at Brandon Road, the FWS effort would likely remain the same as long as funding continues to support that effort, but predicting that funding through 2071 is impossible to do.

Lastly, FWS cannot commit to a re-programming of its base funding as the agency must balance additional high-priority Asian carp prevention and control actions for defense of other key watersheds of the United States. USFWS has received specific direction provided by Congress under the Water Resources Reform and Development Act of 2014, Section 1039, to coordinate efforts in the Upper Mississippi River and Ohio River basins, to include support to State and local governments to prevent the further expansion of Asian carp in those basins:

(1) MULTIAGENCY EFFORT TO SLOW THE SPREAD OF ASIAN CARP IN THE UPPER MISSISSIPPI AND OHIO RIVER BASINS AND TRIBUTARIES-

(A) IN GENERAL- The Director of the United States Fish and Wildlife Service, in coordination with the Secretary, the Director of the National Park Service, and the Director of the United States Geological Survey, shall lead a multiagency effort to slow the spread of Asian carp in the Upper Mississippi and Ohio River basins and tributaries by providing technical assistance, coordination, best practices, and support to State and local governments in carrying out activities designed to slow, and eventually eliminate, the threat posed by Asian carp.

From: Bolen, Bill [mailto:Bolen.Bill@epa.gov]
Sent: Tuesday, July 19, 2016 2:21 PM
To: Davis, Susanne J LRC <Susanne.J.Davis@usace.army.mil>
Cc: Kirksey, Felicia Y LRC <Felicia.Y.Kirksey@usace.army.mil>
Subject: [EXTERNAL] FWOP

Sue –

Regarding USACE's request for a response from USEPA on the FWOP proposal, we would like you to note the following three items:

1) Forecasting GLRI funding beyond the current Fiscal Year does not meet our approval. While we do have a proposed Presbud for FY17, without a Congressionally – approved budget, please do not cite nor use the anticipated amount of $250 million currently proposed.

2) If USACE desires to use the Asian Carp Action Plan or any element thereof, USEPA would ask that USACE communicate this to OMB and solicit their consent to do so.

3) Please note the footnote in the Action Plan Funding Matrix that we were required to incorporate at the direction of OMB: "Note that this Action Plan is not a commitment to future funding and that all out-year actions are subject to the availability of future appropriations and allocation decisions".

Regards.

Bill

ILLINOIS
NATURAL RESOURCES

Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Bruce Rauner, Governor
Wayne A. Rosenthal, Director

August 2, 2016

Susanne J. Davis, P.E
Chief Planning Branch
U.S Army Corps of Engineers -Chicago District 231
South La Salle Street Suite 1500
Chicago, IL 60604

Dear Ms. Davis:

The Illinois Department of Natural Resources (IDNR) has reviewed your letter dated June 30, 2016 and provides the following response to your questions regarding the Brandon Road Study. Specifically, you state:

As we finalize our future conditions forecast, we need to confirm IDNR's position on future conditions and have the following (2) questions (italicized below):

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Sincerely,

Wayne A. Rosenthal
Director

CC: Brent Krebs, Bob Appleman, Lawrence Patterson, Dan Injerd, James Herkert, Todd Rettig, Connie Waggoner, Loren Wobig, Rick Gosh, Dan Stephenson, Kevin Irons, George Bellovics, Bob Smith

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
OFFICE OF OCEANIC AND ATMOSPHERIC RESEARCH
Great Lakes Environmental Research Laboratory
4840 South State Road
Ann Arbor, Michigan 48108-9719

July 27, 2016

Felicia Y. Kirksey, PMP
U.S. Army Corps of Engineers, Chicago District
231 South LaSalle Street
Suite 1500
Chicago, Illinois 60604

Dear Ms. Kirksey,

We are submitting to you the NOAA Great Lakes Environmental Research Laboratory (GLERL) response to the Proposed USACE Position of Brandon Road Future without Project Conditions (FWOP) – some key assumptions regarding monitoring, control and management by ACRCC member agencies.

Scenario 1: Future level of activities and funding are assumed to be at current levels.

Scenario 2: No supplemental GLRI funding is available after 2018: consequently, monitoring, control and management activities completed by other agencies would only be funded with agency base budget capability.

1. Does your agency have comments or concerns presented and general assumptions that will accompany the FWOP condition analysis?

   NOAA GLERL Response: Yes, NOAA GLERL has concerns. The base level of support from our agency does not adequately cover our modeling activities of potential effects of Asian carp on Great Lakes food webs. To date, our modeling activities have been supported through grants from GLRI to us and our university colleagues. If GLRI funding stops in 2018, we will be unable to maintain the level of modeling effort needed to inform the risk assessment of Asian carp invasion to the Great Lakes. This funding is essential because:

   We believe that bioeconomic assessments of Bighead and Silver carp effects on Great Lakes food webs are needed for other Great Lakes, not just for Lake Erie (see Zhang et al. 2016 and current effort in partnership with USACE). Currently we are funded by a non-profit agency (Great Lakes Fishery Trust) to complete a bioeconomic assessment of Asian carp effects on the Lake Michigan food web. We won't be able to rely on agency support for further modeling efforts, which are critical given the potential variation in Asian carp effect across diverse habitats, and the likely invasion by two other invasive carp species, the grass carp and black carp.

   The assumption that current levels of our agency's effort will continue through the year 2071 is unrealistic. Our base funding from NOAA has been level for several years, and only supplemented by external grants such as provided by the GLRI.

2. Would your Agency's level of effort, pertaining to Asian carp monitoring, control and management in the Upper Illinois River and CAWS through 2071, change based on USACE's selected GLMRIS-BR plan?
    a. If USACE constructed a combination of structural measures at Brandon Road Lock and Dam to create a control point, how would this control point impact your agency's recommended level of effort in relationship to current levels through 2071?

    b. If no structural alternative was constructed, in other words if either the No-Action or Non-Structural Alternative was recommended at Brandon Road Lock and Dam, would your agency anticipate sustaining its current level of effort pertaining to Asian carp monitoring, control and management through 2071?

NOAA GLERL Response: Our agency is not involved with monitoring, control and management in the Upper Illinois River and CAWS. Our involvement with the ACRCC is solely with modeling and forecasting of Asian carp effects on Great Lakes food webs. Therefore, if the USACE did construct a control point at Brandon Road, then we imagine less demand by other agencies for our modeling efforts. But, if no structural alternative is constructed, it is likely that other agencies would request assistance with forecasting Asian carp effects on Great Lakes Food webs. As before, this would involve support through external grants as our base level of support is expected to remain level in the near future.

Sincerely,

Deborah H. Lee, PE, PH, D.WRE
Director and Great Lakes Regional Team Lead

U.S. Department of Homeland Security
United States Coast Guard

Commander
Ninth Coast Guard District

1240 E 9th St
Cleveland, OH 44199
Staff Symbol: (dpi)
Phone: (216) 902-6343
Fax: (216) 902-6050

16000

JUL 29 2016

Colonel Christopher T. Drew
United States Army Corps of Engineers
Chicago District Commander
231 South La Salle Street, Floor 15
Chicago, IL 60604

Dear Colonel Drew,

Thank you for the opportunity to comment on the Coast Guard's (CG) plans regarding the Aquatic Nuisance Species (ANS) controlled technologies near the Brandon Road Lock and Dam.

In response to your request for the Coast Guard's Future Without Project Conditions (FWOP) for the Great Lakes and Mississippi River Inter-basin Study (GLMRIS), we can only comment on the those aspects that the Coast Guard has jurisdiction as part of the Asian Carp Regional Coordinating Committee (ACRCC) and the GLMRIS:

- Safety and security of mariners, vessels, waterfront facilities, and the environment.
- Facilitation of maritime commerce.

As outlined in the Action Plan, the Coast Guard is to provide the following support for the identified Tasks:

- Task #40: The CG will continue to manage the waterways through its authorities when Asian Carp Control Measures are being tested, constructed, maintained or operated in accordance with the Monitoring and Response Plan (MRP). However, it must be understood that any long term closures would be extremely difficult to sustain and enforce due to adverse economic impact.

- Tasks #41, 42, and 63: The CG Research and Development Center (RDC) will inform the USACE normal evaluation of ANS control technologies by conducting risk modeling and analysis to identify maritime system risks and mitigation strategies. No CG appropriated funds are available now, nor are expected to be available in the future to perform these tasks. In the absence of continued funding, either through GLMRIS or direct appropriations, this work cannot be accomplished.

Attempting to project out the Coast Guard's fiscal needs for ACRCC and GLMRIS, participation for the identified MRP Tasks can be summed up as:

- Task #40: Not dependent upon external funding. Waterways management is a core Coast Guard mission and can be anticipated to continue to be supported if GLMRIS funding were to be abated or cease.

16000
August 27, 2015

- Tasks #41, 42, and 63: The CG RDC's contributions are wholly dependent upon specific funding.

Sincerely,

P. D. J. ARNETT
Captain, U.S. Coast Guard
Chief, Prevention Division
By direction

Copy: Commander, Coast Guard Sector Lake Michigan
Coast Guard Marine Safety Unit Chicago

From:	Potthoff, Johnna J LRC
To:	Herleth-king, Shawna S LRC
Subject:	FW: FWOP
Date:	Thursday, August 11, 2016 9:38:43 AM
Attachments:	2016 Asian Carp Action Plan.pdf

USEPA's response.
-----Original Message-----
From: Davis, Susanne J LRC
Sent: Tuesday, July 19, 2016 2:31 PM
To: Potthoff, Johnna J LRC <Johnna.J.Potthoff@usace.army.mil>
Subject: FW: FWOP

-----Original Message-----
From: Bolen, Bill [mailto:Bolen.Bill@epa.gov]
Sent: Tuesday, July 19, 2016 2:21 PM
To: Davis, Susanne J LRC <Susanne.J.Davis@usace.army.mil>
Cc: Kirksey, Felicia Y LRC <Felicia.Y.Kirksey@usace.army.mil>
Subject: [EXTERNAL] FWOP

Sue –

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2) If USACE desires to use the Asian Carp Action Plan or any element thereof, USEPA would ask that USACE communicate this to OMB and solicit their consent to do so.

3) Please note the footnote in the Action Plan Funding Matrix that we were required to incorporate at the direction of OMB: "Note that this Action Plan is not a commitment to future funding and that all out-year actions are subject to the availability

of future appropriations and allocation decisions".

Regards.

Bill

USFWS Response to Brandon Road FWOP

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Question 2 Response:

Although longer-term pre-planning, goal-setting, and discussion for general coordination purposes is appropriate, USFWS is unable to commit to the implementation of agency activities beyond those supported through the most recent President's budget.

Additionally, the ACRCC is a voluntary, non-statutorily binding partnership. As such, the operation of the ACRCC and development of its annual Action Plan through 2071 is subject to the ability and willingness of the agencies to participate, and availability of sufficient resources to support these actions. While USFWS strongly supports the mission and actions of the ACRCC, agencies are not mandated to participate by directives or authorities.

If the USACE selects a structural option, the FWS effort will stay the same initially in order to monitor the effectiveness of that option. If it is shown to be effective, the FWS effort could likely be reduced or refocused to address other potential pathways for Asian carp to enter the Great Lakes.

If no action is taken at Brandon Road, the FWS effort would likely remain the same as long as funding continues to support that effort, but predicting that funding through 2071 is impossible to do.

Lastly, FWS cannot commit to a re-programming of its base funding as the agency must balance additional high-priority Asian carp prevention and control actions for defense of other key watersheds of the United States. USFWS has received specific direction provided by Congress under the Water Resources Reform and Development Act of 2014, Section 1039, to coordinate efforts in the Upper Mississippi River and Ohio River basins, to include support to State and local governments to prevent the further expansion of Asian carp in those basins:

(1) MULTIAGENCY EFFORT TO SLOW THE SPREAD OF ASIAN CARP IN THE UPPER MISSISSIPPI AND OHIO RIVER BASINS AND TRIBUTARIES-

(A) IN GENERAL- The Director of the United States Fish and Wildlife Service, in coordination with the Secretary, the Director of the National Park Service, and the Director of the United States Geological Survey, shall lead a multiagency effort to slow the spread of Asian carp in the Upper Mississippi and Ohio River basins and tributaries by providing technical assistance, coordination, best practices, and support to State and local governments in carrying out activities designed to slow, and eventually eliminate, the threat posed by Asian carp.

Proposed USACE Position of Brandon Road Future without Project Conditions (FWOP) –some key assumptions regarding ongoing monitoring, control and management by ACRCC member agencies
USGS Response

1. For the Great Lakes Mississippi Inter-basin Study at Brandon Road (GLMRIS-BR), USACE is trying to accurately forecast the Future without Project Conditions ("FWOP") conditions through year 2071 for Asian carp monitoring, control and management in the Upper Illinois Waterway and Chicago Area Waterway System by USACE and agencies participating in the ACRCC. USACE's analysis will consider the FWOP condition at Brandon Road as synonymous with the No-Action alternative to address the project goals and objectives. We will evaluate all alternatives, including the No-Action alternative and recommend the plan that best meets our study objectives. Therefore, your agency's input is important to our assessment.

2. In its FWOP condition projection, USACE assumes that the ACRCC will continue to produce an Asian Carp Action Plan through 2071, which is the end of the GLMRIS-BR planning horizon. The ACRCC Action Plan is currently updated annually and includes activities which extend beyond the one year plan. USACE is also projecting that our agency will continue to operate and maintain at least two Chicago Sanitary and Ship Canal Electric Barriers and complete field work in support of barrier defense through 2071. In addition, the USACE emergency response protocols will be implemented in response to identified emergency situations through the authority of the Assistant Secretary of the Army of Civil Works provided in WRRDA 14, Section 3061, and in coordination with the ACRCC Contingency Response Plan.

3. The FWOP forecast will indicate that Asian carp monitoring and control efforts are a shared responsibility and dependent on multiple agencies, including the Illinois Department of Natural Resources (IDNR), US Fish and Wildlife Service (USFWS), US Geological Survey (USGS) and US Environmental Protection Agency (USEPA). As for agencies other than USACE, and due to the uncertainty regarding this projection USACE anticipates providing two possible scenarios in the GLMRIS-BR Feasibility Report:

- Scenario 1: Future level of activities and funding are assumed to be current levels.

- Scenario 2: No supplemental GLRI funding is available after 2018; consequently, monitoring, control and management activities completed by other agencies would only be funded with agency base budget capability.

Based upon the current level of risk associated with Asian carps in the Upper Illinois Waterway, it does seem likely that control activities for Asian carp would extend beyond FY18, when available GLRI funding is set to expire. In both future scenarios, USACE will discuss that FWOP actions are dependent on both the need for the actions and the availability of funding. As such, the extent of management actions may change (increase or decrease) based upon future conditions and funding availability. USACE will project an expected future level of effort from other agencies in our FWOP forecasts. This forecast will be needed to assess the cost of the Nonstructural Alternative and nonstructural measures that form a part of each of the Technology Alternatives.

QUESTION 1: Does your Agency have comments on or concerns with the scenarios presented and general assumptions that will accompany the FWOP condition analysis? Can your Agency concur with the assumptions set forth in Scenario 1, i.e. that current levels of activities and funding are likely to continue through year 2071? Would your Agency recommend Scenario 1 or Scenario 2 as the assumption for the FWOP condition?

USGS Response

1) No, we do not have any comments or concerns on the two scenarios presented.

2) It is difficult to predict appropriated funding levels for Asian Carp due to the Federal budgeting process. USGS will continue this line of research into the future until partners indicate that their information needs are met or until they no longer threaten our riverine and lacustrine ecosystems. In addition, in recent years, USGS has received several increases to prevent the establishment of Asian carp in the Great Lakes. Those funds (totaling $5.5M in FY16), will continue to be invested toward this end until we receive indication that protecting the Great Lakes from the establishment of Asian carp is no longer a priority.

3) We understand the validity of presenting both scenarios but do not have any recommendations as to which are more appropriate.

QUESTION 2: Would your Agency's level of effort, pertaining to Asian carp monitoring, control and management in the upper Illinois River and the CAWS through 2071, change based on USACE's selected GLMRIS-BR plan?

- **a)** If USACE constructed a combination of structural measures at Brandon Road Lock and Dam to create a control point, how would this control point impact your agency's *recommended* level of effort in relationship to current levels through 2071?
- **b)** If no structural alternative was constructed, in other words if either the No-Action or Non-Structural Alternative was recommended at Brandon Road Lock and Dam, would your agency anticipate sustaining its current level of effort pertaining to Asian carp monitoring, control and management through 2071?

USGS Response

USGS scientists have been conducting monitoring and research on the distribution, habitat use, life history and ecology of Asian carps for over 20 years because key scientific knowledge gaps impede their effective control and management in the Mississippi River drainage. USGS will continue this line of research into the future until partners indicate that their information needs are met or until they no longer threaten our riverine and lacustrine ecosystems. In addition, in recent years, USGS has received several increases to prevent the establishment of Asian carp in the Great Lakes. Those funds (totaling $5.5M in FY16), will continue to be invested toward this end until we receive indication that protecting the Great Lakes from the establishment of Asian carp is no longer a priority.

Attachment 11:

GLMRIS-BR NATIONAL ENVIRONMENTAL POLICY ACT COORDINATION FOR PROPOSED MOORING CELL LOCATION

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
PO BOX 2004 CLOCK TOWER BUILDING
ROCK ISLAND, ILLINOIS 61204-2004

REPLY TO
ATTENTION OF

August 29, 2016

Regional Planning and Environmental
Division North (RPEDN)

SEE DISTRIBUTION LIST

The U.S. Army Corps of Engineers (Corps) is currently preparing National Environmental Policy Act (NEPA) documentation for the Great Lakes and Mississippi River Interbasin Study (GLMRIS) at the Brandon Road Lock and Dam and the vicinity of the Illinois Waterway (IWW) near Joliet, Illinois. The GLMRIS–Brandon Road effort has been ongoing to assess feasible alternatives for the control aquatic nuisance species between the Mississippi River basin and the Great Lakes basin through the Chicago Area Waterway System (CAWS). The Corps is coordinating to evaluate a new proposed feature required for the electric barrier alternative, which involves the construction of mooring cells, dredging, and dredged material placement downstream of Brandon Road Lock and Dam.

The Corps has coordinated potential activities and alternatives for GLMRIS-Brandon Road Project Feasibility Study since 2014 (Enclosure 1). In addition to the features described in previous correspondence, the Corps has identified that mooring cells may be required to facilitate navigational traffic if an aquatic nuisance species electrical barrier is constructed in the channel below the lock chamber. The Brandon Road lock chamber is 600 feet in length, and navigation tows longer than the lock must split apart to pass through the lock. Currently, tows split along upper and lower guide walls adjacent to the lock chamber. If an electrical barrier is included as the selected plan, it is likely that upbound tows would be required to split farther downstream in a mooring area in order to comply with future U.S. Coast Guard safety standards.

The proposed mooring area consists of two mooring cells in the river approximately 600 feet apart for tow docking and staging located adjacent to the navigation channel between IWW River Miles (RM) 276-285. The two most likely locations are depicted on Enclosure 2 (IWW RM 278-279 or 283-284). These mooring areas would potentially need to be dredged to a depth of greater than 9 feet. Dredged material would be moved to a temporary placement site for dewatering on the right descending bank, downstream of the Brandon Road Lock and Dam between IWW RM 285.1-285.5 (Enclosure 3). After desiccation is complete, final placement will be at a landfill regulated to accept contaminated materials due to the potential for the material to contain pollutants.

An Investigation of the Submerged Historic Properties in the Upper Mississippi River and Illinois Waterway, dated October 1997 (Contract Number DACW25-93-D-0-012, Order No. 27) and *The Historic Properties Management Plan for the Illinois Waterway System*, Rock Island District, Corps of Engineers, Volumes I and II, dated February 1999 (Contract Number DACW25-93-D-0014, Order. No. 0021) are two reports that focus on historic properties potentially affected by this project. Final copies of these reports are on permanent file at the

Illinois Historic Preservation Agency (IHPA , Springfield, Illinois. No submerged historic properties were documented within either mooring area nor between the IWW RM 277.8-284.2 reach of the Des Plaines River. It is the opinion of the Corps that no know historic ship wrecks are located in the Des Plains River reach of the IWW. Until the construction of the IWW, the Des Plaines River was typically too shallow for commercial navigation.

The proposed temporary dredged material placement site has been previously coordinated as an access area required for GLMRIS construction activities. The tract of land was previously excavated and used as a commercially developed fly ash pit, as a byproduct of energy production. The IHPA concurred this tract of land had no potential for historic properties by letter stamped concur dated February 18, 2016 (IHPA Log# 002021015).

Interested and consulting parties (Enclosure 4) have been, and will continue to be, provided with notifications of any public meeting announcements, special releases, and notifications of the availability of report(s), as stipulated by 36 CFR Part 800.5(3) and Part 800.5(3)(b) of the NHPA. By comment dated February 17, 2016, the Advisory Council of Historic Places reserved the right to participate once the Corps makes a determination of effect.

The undersigned requests formal concurrence of "No Historic Properties" for the APE within main channel (between IWW RM 277.8-184.2 of the Des Plaines River) for the construction of mooring cells and dredging, to include the proposed temporary dredged material placement site. Please consider this letter an invitation to comment and provide additional information with respect to concerns, or anticipated effects, and any reports, studies, or other research concerning environmental resources in the project vicinity that may provide additional information or contribute to determining affects to the natural and built environment. Please provide your comments within 30 days of the date of this letter.

Should you have any questions or would like additional information, please contact Kat Herzog of our Environmental Branch, (309) 794-5231, email: Kathryn.Herzog@usace.army.mil, or by writing to our address, ATTN: Planning Division-Environmental Planning Section (Kat Herzog).

Sincerely,

Kenneth A. Barr
Chief, Environmental Planning Branch,
RPEDN

Enclosures (4)

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET, SUITE 1500
CHICAGO IL 60604

Planning Branch
Environmental Formulation Section

Illinois Dept. of Transportation
Diane O'Keefe
Region One Engineer
201 W. Center Ct.
Schaumburg, IL 60196

09 DEC 2014

Dear Ms. O'Keefe:

The Chicago District invites your comments on a proposed project near Brandon Road Lock and Dam. Consistent with the National Environmental Policy Act (NEPA), we will evaluate the impacts of the potential project, proposed as part of the Great Lakes and Mississippi River Interbasin Study (GLMRIS). The project area is located within the Chicago Area Waterway System near Joliet, Illinois. The project area is supported by the Chicago District of the Great Lakes & Ohio River Division, and the Rock Island District of the Mississippi Valley Division, of the U.S. Army Corps of Engineers.

In January 2014, the U.S. Army Corps of Engineers, Chicago District (USACE), released the GLMRIS Report, which evaluated the potential range of alternatives to control Aquatic Nuisance Species (ANS) transfer between the Great Lakes and the Mississippi River basins via the Chicago Area Waterway System. The GLMRIS Report identified eight alternatives, six of which were structural alternatives. Three structural alternatives envisioned an ANS control point near Brandon Road Lock and Dam. The GLMRIS Report identified the Brandon Road control point as a single location that could address upstream transfer of ANS from the Mississippi River through the Chicago Area Waterway System.

Based on evaluations presented in the GLMRIS Report, in response to stakeholder input, and in collaboration with local, state, federal and non-governmental entities, the USACE intends to proceed with a formal evaluation of potential ANS controls near the Brandon Road Lock and Dam. The GLMRIS–Brandon Road effort will evaluate the range of options or technologies available to prevent the transfer of Mississippi River ANS transfer through the Chicago Area Waterway System into the Great Lakes Basin to the maximum extent possible. The GLMRIS–Brandon Road effort will seek to minimize adverse impacts to waterway users or resources, and will build upon the analyses completed for the

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET, SUITE 1500
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GLMRIS Report. The GLMRIS Report and supporting documentation are available at http://www.glmris.anl.gov .
Participation is encouraged and comments are welcome. Please comment by letter or email to reach our office not later than January 16, 2015, marking your reply to the attention GLMRIS–Brandon Road Scoping, U.S. Army Corps of Engineers, Chicago District, 231 S. LaSalle Street, Suite 1500, Chicago, Illinois 60604. Questions may be directed to Mr. Bullock at 312/846-5587, or at peter.y.bullock@usace.army.mil, Your assistance is appreciated.

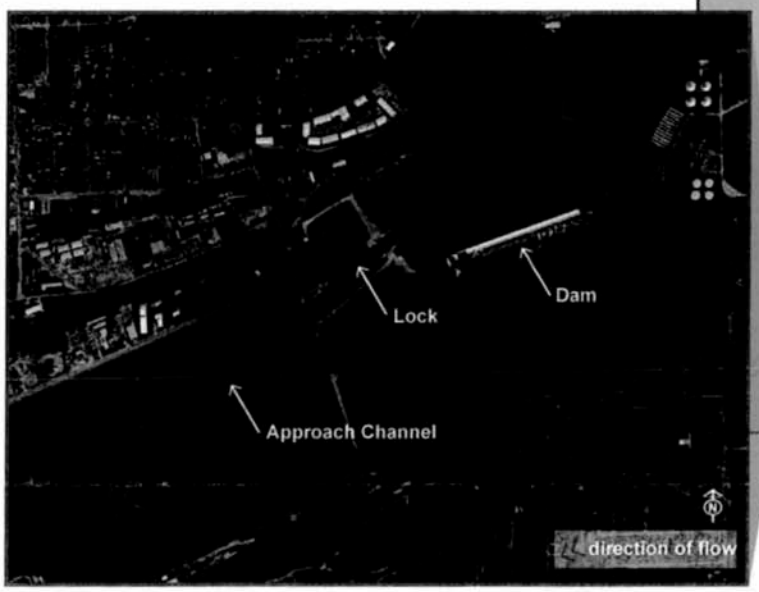
Sincerely,

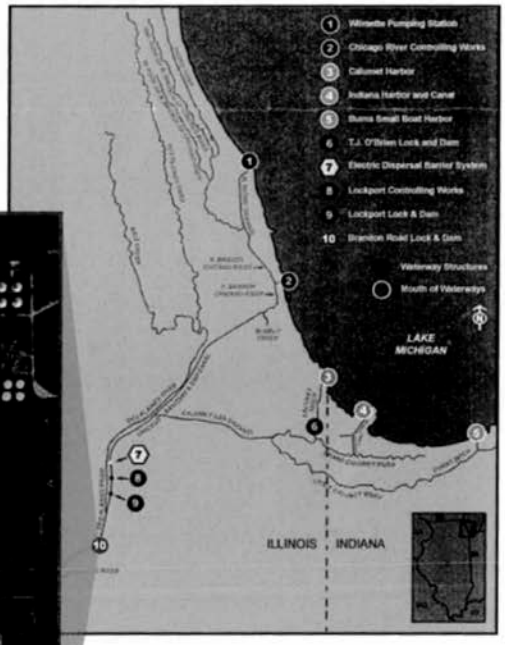
Susanne J. Davis, P. E.
Chief, Planning Branch

Enclosure

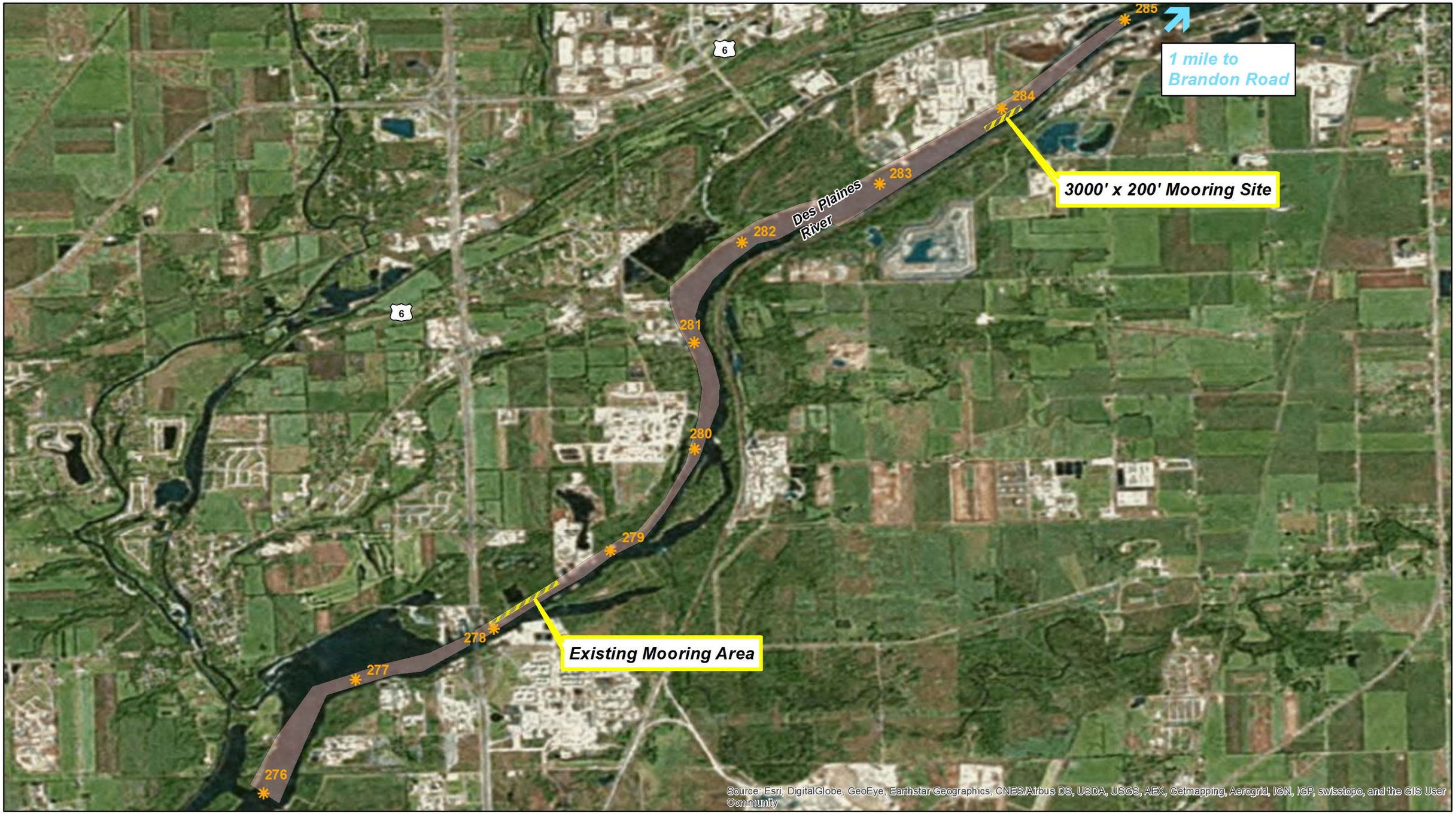
GLMRIS

Brandon Road





U.S. Army Corps of Engineers



U.S. Army Corps
Of Engineers ®
Chicago District

Legend

Potential Mooring Site locations

Area of potential mooring sites

*For planning purposes only

River Miles

0 1,900 3,800 7,600
Feet

1 inch = 3,972 feet

N W E S

GLMRIS
Brandon Road -
Mooring Areas 1 of 2

Chicago District, U.S. Army Corps of Engineers

For Official Use Only
August, 2016

G:\Projects_LRC\GLMRIS\MXD\Brandon Road\BRLD_Mooring area for NEPA.mxd HETS9LCV

U.S. Army Corps Of Engineers ®
Chicago District

Legend

Temporary Dredged Material Placement Site

Electric Barrier

*For planning purposes only

River Miles

0 250 500 1,000
Feet

1 inch = 497 feet

N W E S

GLMRIS
Brandon Road - Mooring Areas (2 of 2)

Chicago District, U.S. Army Corps of Engineers

For Official Use Only
August, 2016

G:\Projects_LRC\GLMRIS\MXD\Brandon Road\BRLD_Mooring area for NEPA 2.mxd HETS\LCV

GLMRIS BRANDON ROAD SCOPING

DISTRIBUTION LIST

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U. S. Section Office (Washington)
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Washington, DC 20440

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US Department of the Interior
1849 C Street NW
Washington, D.C. 20240
Attn: Jamie Reaser

US Coast Guard Headquarters
2100 2nd St. SW
Washington, DC 20593-0005

US Coast Guard
Executive Office, MSO-Chicago
215 W. 83rd St. Suite D
Burr Ridge IL 60521

US Coast Guard
Executive Office-MSO-Toledo
420 Madison Ave. Suite 700
Toledo OH 43604

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USDA, NRCS
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14507 Frontier Road
Omaha, NE 68138

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5959 Las Colinas Boulevard
Irving, TX 75039

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Elwood IL 60421

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Hatch Land Management, LLC
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US Department of Transportation Maritime
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Des Plaines IL 60018
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Attn: Dan Bell

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Attn: Marty Hettel

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Lemont IL 60439-3880
Attn: Todd Hudson

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Indianapolis IN 46204-2748
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Gladys Fox Museum
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Lockport IL 60441

Glencoe Historical Society
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Glencoe IL 60022

Goose Lake Prairie State Natural Area
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Morris IL 60450

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IL Canal Society
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Lockport IL 60441

Isle A La Cache Museum
501 E Romeo Rd
Romeoville IL 60411

Kenilworth Historical Society
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Kenilworth IL 60043

Hinsdale Historical Society
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Hinsdale IL 60522

Historical Society of Cicero
2423 S Austin Blvd
Cicero IL 60650

Lisle Heritage Society
923 School St
Lisle IL 60532

Bolingbrook Historical Society
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Bolingbrook IL 60440

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Cleveland, OH 44199

Chicago Academy of Science
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Chicago IL 60613

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La Grange IL 60525

Lansing Historical Museum
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Lansing IL 60438

Woodridge Area Historical Society
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Woodridge IL 60517

Beecher Community Historical Society
673 Penfield St
PO Box 1469
Beecher IL 60401

Blue Island Historical Society & Museum
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Blue Island IL 60406-2094

Calumet City Historical Society
760 Wentworth Ave PO Box 1917
Calumet City IL 60409

Des Plaines Valley Public Library
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Edgebrook Historical Society
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Chicago IL 60646

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Elmwood Park IL 60635-4506

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Chicago IL 60605-2496

Chicago Historical Society
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Chicago IL 60614

Westmont Historical Society
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Westmont IL 60559

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Darien IL 60561

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Northbrook IL 60062

Sand Ridge Nature Center
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South Holland IL 60473

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Deputy Chief, Charles Thurmond
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Attn: Rick Campbell, Environment

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Tama IA 52339-9629
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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SEP 26 2016

REPLY TO THE ATTENTION OF: E-19J

Kathryn Herzog
Planning Division – Environmental Planning Section
U.S. Army Corps of Engineers – Rock Island District
Clock Tower Building
P.O. Box 20024
Rock Island, Illinois 61024

RE: Scoping Request – Brandon Road Lock and Dam Electric Barrier, Joliet, Illinois

Dear Ms. Herzog:

The U.S. Environmental Protection Agency received the U.S. Army Corps of Engineers' (USACE) August 29, 2016 scoping request concerning a new proposed feature required for the electric barrier alternative, which involves the construction of mooring cells, dredging, and dredged material placement downstream of Brandon Road Lock and Dam. In addition to ongoing efforts to assess feasible alternatives to control aquatic nuisance species between the Mississippi River basin and the Great Lakes basin through the Chicago Area Waterway System, USACE has identified that mooring cells may be required to facilitate navigational traffic if an aquatic nuisance species electrical barrier is constructed in the channel below the lock chamber. Because the Branch Road lock chamber is 600 feet long, navigation tows longer than the lock must split apart to pass through the lock. Currently, tows split along upper and lower guide walls adjacent to the lock chamber. If an electrical barrier is included in the preferred alternative, it is likely that upriver tows would be required to split farther downstream in a mooring area in order to comply with future U.S. Coast Guard safety standards.

The mooring area proposed by USACE consists of two mooring cells in the Des Plaines River approximately 600 feet apart for docking and staging located adjacent to the navigation channel between River Miles 276-285. The most likely locations shown on Enclosure 2 provided with the scoping request depict mooring areas at River Mile 278-279 or 283-284. The mooring areas would need to be dredged to a depth of greater than 9 feet, with dredged material moved to a temporary placement site for dewatering on the right descending bank between River Miles 285.1 and 285.5. Scoping materials indicate the proposed temporary placement site has been deemed an access area required for Great Lakes Mississippi River Interbasin Study construction activities and has been previously excavated and used as a commercially-developed fly ash pit. Final placement following desiccation will be at a landfill regulated to accept contaminated materials due to the potential for the material to contain pollutants.

Pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean

Air Act, EPA provides the following scoping comments to assist USACE in preparing future NEPA documentation (e.g., Environmental Assessment (EA)).

PROJECT FEATURES

The scoping document indicates that barges longer than the 600-foot lock currently split along upper and lower guide walls adjacent to the lock chamber in order to pass through. The proposed mooring area consists of two mooring cells downstream of the lock and dam. EPA recommends the EA explain the sufficiency of mooring cell capacities upstream of the lock and dam for barges longer than 600 feet.

WATER QUALITY

The Des Plaines River is listed as impaired (i.e., not meeting water quality standards) on the Illinois Environmental Protection Agency's Clean Water Act Section 303(d) list of impaired waterbodies. The forthcoming EA should discuss existing water quality issues, the existing impairments, and how the proposed project may affect water quality in the Des Plaines River.

SEDIMENT TESTING/DREDGING

The scoping request indicates final dredged material placement will be at a landfill regulated to accept contaminated materials due to the potential for the material to contain pollutants. Due to the high cost of landfill and confined disposal facility construction, the scoping request is not clear whether sediment testing will be conducted by USACE. If sediment testing will be done, we recommend specific information pertaining to sediment testing locations and protocols be included in the EA. The forthcoming EA should include, at a minimum, the following information:

- A map/figure outlining the proposed dredging location(s);
- Narrative information on the type and quantity (cubic yards) of material proposed to be dredged, and a proposed dredging schedule;
- Specific information concerning the results of sediment testing (e.g., sediment, elutriate, biological, and bioaccumulation testing) completed in accordance with the Great Lakes Testing and Evaluation Manual (2008) and appropriate dredged material placement options (e.g., landfill, upland disposal, brownfield restoration, confined disposal facility, beneficial re-use, etc.);
- If dredged material requires landfilling, will sediment characterization core samples extend below the navigational dredging depth in order to characterize sediment that will become exposed following proposed dredging? A summary of the data collected and presented in an appendix to the EA would be informative if included as a table within the main body of the EA; and
- If dredged material requires landfilling, how the sediment will be dewatered (e.g., will a groundwater collection system be connected to sump pits or an on-site wastewater treatment system be constructed)?

CONSTRUCTION IMPACTS

EPA recommends the forthcoming EA include specific measures and best management practices that will be included in project design to minimize construction impacts to air quality, water resources, soil, and other regulated resources. The EA should also discuss proposed staging areas and their locations, access to the worksite (e.g., construction staging from the river or from upland locations), etc. If cofferdams or other temporary dewatering measures are proposed,

those measures, their impacts, and the lengths of time they will be installed, should be discussed. Lastly, proposed construction sequencing, including the proposed timeline for this project, should be detailed in the EA.

AIR QUALITY

The forthcoming EA should discuss if Will County is in non-attainment or maintenance for any of the National Ambient Air Quality Standards (NAAQS). Because of their impact on human health, EPA has emphasized the need to address PM2.5 (and diesel emissions) through the National Clean Diesel Campaign[1], along with regional initiatives.

The forthcoming EA should identify and discuss existing air quality and air quality impacts at the project location, and those potentially associated with future construction and operations at site of the proposed project. The impacts of all action alternatives on air quality should be assessed by evaluating each alternative's impacts on the NAAQS. Each alternative's potential emissions should be discussed, and should include both direct and indirect emissions that are reasonably foreseeable. Be aware that there may be state and local air quality requirements to consider. These requirements can include, but are not limited to, provisions such as State indirect source regulations and State air quality standards.

GENERAL CONFORMITY

This project may need to address the General Conformity Rule[2] requirements. Under the General Conformity Rule, Federal agencies must work with State, Tribal and local governments in a nonattainment or maintenance area to ensure that Federal actions conform to the clean air quality goals as contained in the State Implementation Plan. General Conformity is required for all National Ambient Air Quality Standard nonattainment and maintenance areas.

CONSTRUCTION EMISSIONS

Diesel emissions and fugitive dust from project construction may pose environmental and human health risks and should be minimized. In 2002, EPA classified diesel emissions as a likely human carcinogen, and in 2012 the International Agency for Research on Cancer concluded that diesel exhaust is carcinogenic to humans. Acute exposures can lead to other health problems, such as eye and nose irritation, headaches, nausea, asthma, and other respiratory system issues. Longer term exposure may worsen heart and lung disease.[3] We recommend that USACE consider the following protective measures and commit to applicable measures in the EA and FONSI.

Mobile and Stationary Source Diesel Controls

Purchase or solicit bids that require the use of vehicles that are equipped with zero-emission technologies or the most advanced emission control systems available. Commit to the best available emissions control technologies for project equipment in order to meet the following standards.

- On-Highway Vehicles: On-highway vehicles should meet, or exceed, the EPA exhaust emissions standards for model year 2010 and newer heavy-duty, on-highway compression-ignition engines (e.g., long-haul trucks, refuse haulers, shuttle buses, etc.).[4]

[1] http://epa.gov/diesel/
[2] 42 U.S.C. 7506(c), Section 176(c)
[3] https://www3.epa.gov/region1/eco/diesel/health_effects.html
[4] http://www.epa.gov/otaq/standards/heavy-duty/hdci-exhaust.htm

- Non-road Vehicles and Equipment: Non-road vehicles and equipment should meet, or exceed, the EPA Tier 4 exhaust emissions standards for heavy-duty, non-road compression-ignition engines (e.g., construction equipment, non-road trucks, etc.).[5]
- Marine Vessels: Marine vessels servicing infrastructure sites should meet, or exceed, the latest EPA exhaust emissions standards for marine compression-ignition engines (e.g., Tier 4 for Category 1 & 2 vessels, and Tier 3 for Category 3 vessels).[6]
- Low Emission Equipment Exemptions: The equipment specifications outlined above should be met unless: 1) a piece of specialized equipment is not available for purchase or lease within the United States; or 2) the relevant project contractor has been awarded funds to retrofit existing equipment, or purchase/lease new equipment, but the funds are not yet available.

Consider requiring the following best practices through the construction contracting or oversight process:

- Use onsite renewable electricity generation and/or grid-based electricity rather than diesel-powered generators or other equipment.
- Use ultra-low sulfur diesel fuel (15 ppm maximum) in construction vehicles and equipment.
- Use catalytic converters to reduce carbon monoxide, aldehydes, and hydrocarbons in diesel fumes. These devices must be used with low sulfur fuels.
- Use electric starting aids such as block heaters with older vehicles to warm the engine.
- Regularly maintain diesel engines to keep exhaust emissions low. Follow the manufacturer's recommended maintenance schedule and procedures. Smoke color can signal the need for maintenance (e.g., blue/black smoke indicates that an engine requires servicing or tuning).
- Retrofit engines with an exhaust filtration device to capture diesel particulate matter before it enters the construction site.
- Repower older vehicles and/or equipment with diesel- or alternatively-fueled engines certified to meet newer, more stringent emissions standards (e.g., plug-in hybrid-electric vehicles, battery-electric vehicles, fuel cell electric vehicles, advanced technology locomotives, etc.).
- Retire older vehicles, given the significant contribution of vehicle emissions to the poor air quality conditions. Implement programs to encourage the voluntary removal from use and the marketplace of pre-2010 model year on-highway vehicles (e.g., scrappage rebates) and replace them with newer vehicles that meet or exceed the latest EPA exhaust emissions standards.

Fugitive Dust Source Controls

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative, where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

[5] http://www.epa.gov/otaq/standards/nonroad/nonroadci.htm
[6] http://www.epa.gov/otaq/standards/nonroad/marineci.htm

Occupational Health

- Reduce exposure through work practices and training, such as turning off engines when vehicles are stopped for more than a few minutes, training diesel-equipment operators to perform routine inspection, and maintaining filtration devices.
- Position the exhaust pipe so that diesel fumes are directed away from the operator and nearby workers, reducing the fume concentration to which personnel are exposed.
- Use enclosed, climate-controlled cabs pressurized and equipped with high-efficiency particulate air (HEPA) filters to reduce the operators' exposure to diesel fumes. Pressurization ensures that air moves from inside to outside. HEPA filters ensure that any incoming air is filtered first.
- Use respirators, which are only an interim measure to control exposure to diesel emissions. In most cases, an N95 respirator is adequate. Workers must be trained and fit-tested before they wear respirators. Depending on the type of work being conducted, and if oil is present, concentrations of particulates present will determine the efficiency and type of mask and respirator. Personnel familiar with the selection, care, and use of respirators must perform the fit testing. Respirators must bear a NIOSH approval number.

FEDERALLY-LISTED SPECIES/CRITICAL HABITAT, MIGRATORY BIRDS, AND STATE-LISTED SPECIES

During 2015, U.S. Fish and Wildlife Service (USFWS) introduced a project planning tool known as IPAC – Information for Planning and Conservation[7] – which is designed to streamline the USFWS environmental review process. When designating a project location in IPAC, USFWS recommends considering not only the physical location of project activities where direct impacts are likely to occur, but also consider the surrounding area on the landscape where potential indirect effects to species may occur (e.g., consider direct and indirect effects such as noise or dust).[8]

EPA recommends USACE access this tool to request a trust resource report covering Federally-listed threatened or endangered species, Federally-proposed or candidate species, critical habitat for listed species, and migratory birds protected by the Migratory Bird Treaty Act that could be positively or negatively impacted by the proposed project. In the EA, USACE should include a decision regarding impact of the proposed project to USFWS trust resources and the rationale behind its decision. Coordination with USFWS regarding trust resources should be included in an appendix to the EA.

EPA also recommends USACE access Illinois Department of Natural Resources' (IDNR) Ecological Compliance Assessment Tool[9] (EcoCAT) to determine if any state-listed species are present within the proposed project area and if the proposed project could positively or negatively impact any listed species through direct or indirect impacts. Coordination with IDNR regarding state-listed species should be included in an appendix to the EA.

[7] https://ecos.fws.gov/ipac/

[8] For projects with a federal nexus that are required to consult with USFWS under Section 7 of the Endangered Species Act, definitions of Action and Action Area can be found at 50 CFR 402.02.

[9] http://dnr.state.il.us/orep/ee/brief.htm

Also, the Fish and Wildlife Coordination Act[10] (FWCA) requires that agencies consult with USFWS and state wildlife agencies concerning the conservation of wildlife resources where the water of any stream or other water body is proposed to be controlled or modified by a Federal agency or any public or private agency operating under a Federal permit. Coordination with USFWS pursuant to FWCA should be included in an appendix to the EA.

PERMITS/PLANS

The EA should also include a list of all Federal, state, and local permits that will be required to undertake the proposed actions. If construction plans for the action alternatives are available at the time, please include them with the EA; EPA understands that construction plans may be draft or at less than 100% design.

We appreciate the opportunity to provide comments concerning the proposed project. We are available to discuss our comments with you in further detail if requested. We look forward to reviewing the FONSI and the Final EA (EA/errata) when it is released. Please send one copy of future correspondence regarding this project to me at the above address. If you have any questions concerning these comments, please contact Kathleen Kowal of my staff at (312) 353-5206 or via email at kowal.kathleen@epa.gov.

Sincerely,

Kenneth A. Westlake, Chief
NEPA Implementation Section
Office of Enforcement and Compliance Assurance

cc (via email):
Susanne Davis, USACE – Chicago District
Louise Clemency, USFWS
Sara Schmuecker, USFWS
Nathan Grider, IDNR

[10] 16 U.S.C. §§661-666c; PL 85-624

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October 12, 2016

Mr. Kenneth A. Barr
Chief, Environmental Planning Branch
US Army Corp of Engineers
P O Box 2004
Rock Island, IL 61204-2004

RE: Brandon Road NEPA Study

Dear Mr. Barr:

Kindra Lake Towing is a member of the American Waterways Operators (AWO). We support and endorse the AWO's position regarding the Brandon Road NEPA Study.

Furthermore, Kindra Lake Towing is strongly against another electrical barrier on a navigable waterway, particularly at the approach channel of the Brandon Road lock. Electrical barriers are dangerous and extremely expensive to operate: millions of dollars each year for the electricity needed to electrify the underwater barriers plus the annual maintenance costs. In addition to these costs, there are those costs associated with stopping navigation while the maintenance is occurring. Towboats and barges have to wait either above or below the electrical barrier during these closures. These are real costs and must be included in any study being done at Brandon Road regarding electrical barriers.

A non-structural alternative does not mean this alternative is not good or is a "Do Nothing" alternative because something structural is not being built. Look at how successful the commercial fishing has been to keep the Asian Carp in check and caused a 68% reduction of the Asian Carp population in the Dresden pool. Instead of building a dangerous electrical barrier that is very costly to operate and maintain, more commercial fishing, more processing facilities, more liquid fertilizer production facilities utilizing the Asian Carp are alternatives that can achieve the same results: stopping the Asian Carp from getting into Lake Michigan.

Another alternative to electrical barriers that could be installed at the approach channel to Brandon Road lock is a carbon dioxide zone or curtain. Experiments at the University of Illinois with the US Geological Survey this year were very "proof positive" that this type of system can deter Asian Carp.

I do not support any USACE proposal that limits tow sizes to 550 feet long. Building a mooring area, or tow re-configuration area, to mitigate the requirement for smaller tows adds cost to each tow: 1) boat time to reconfigure 2) time to navigate back and forth to the lock for each cut to be locked 3) lost barge days by extending the time to reach destination and complete the trip so a new trip can start.

The USACE study has to account for these higher costs and the impact onto the shippers and receivers of the cargoes being delivered.

I worry about the safety of the boat crew out on the head of the barge tow guiding the captain into the lock. Currently at the electrical barrier in Romeoville, no crew can be on the barge tow as it passes through the electrified water. How does the USACE reconcile this? This is very important.

I am disappointed that the USACE's team assembled for the Brandon Road Study is so light with navigation personnel. It seems that the USACE is blindly speeding to a pre-determined alternative of an electrical barrier that is a poor alternative for safe, environmentally friendly water transportation.

My hope is that the USACE will realize the errors of pursing any alternative that includes the construction of another electrical barrier in a navigable channel.

Respectfully,

John R. Kindra

Jacqueline Kindra
23 N. Green Street
Chicago, IL 60607

October 18, 2016

Mr. Kenneth A. Barr
Chief, Environmental Planning Branch
U.S. Army Corp of Engineers
P. O. Box 2004
Rock Island, Illinois 61204-2004

Subject: Brandon Road NEPA Study

Dear Mr. Barr:

I am an owner of Kindra Lake Towing, operating in Chicago and northern Indiana. Kindra Lake Towing is a members of the American Waterways Operators (AWO), and we endorse the AWO's position regarding the Brandon Road NEPA Study.

I am against an electrical barrier at the approach channel of the Brandon Road Lock. I am in favor of growing the success of commercial fishing, supporting more processing facilities, and supporting more liquid fertilizer production facilities using Asian Carp. These non-structural alternatives have been effective, and are far less costly to construct and maintain.

I do not support any USACE proposal that limits tow sizes to 550 feet long. Such decisions made by the USACE group need to be examined with navigation personnel.

Sincerely,

Jacqueline Kindra

Jacqueline Kindra

KINDRA
LAKE
TOWING, L.P.

9864 S. AVENUE N, SUITE 100 CHICAGO, IL 60617 TELEPHONE: 773-721-1180

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October 18, 2016

Mr. Kenneth A. Barr
Chief, Environmental Planning Branch
US Army Corp of Engineers
P O Box 2004
Rock Island, IL 61204-2004

VIA Email: kenneth.a.barr@usace.army.mil

RE: Brandon Road NEPA Study

Dear Mr. Barr:

I work for Kindra Lake Towing, who is a member of the American Waterways Operators (AWO). I support and endorse the AWO's position regarding the Brandon Road NEPA Study.

I am strongly against another electrical barrier on a navigable waterway, particularly at the approach channel of the Brandon Road lock. Electrical barriers are dangerous for the boat crews and extremely expensive to operate. In addition to these costs, there are those costs associated with stopping navigation while the maintenance is occurring.

I support commercial fishing. It has been very successful keeping the Asian Carp in check. Greater use of the Asian Carp caught in pet food is another step to fishing the Asian Carp to a substantially reduced population.

A non-structural alternative is so much better than electrifying the waterway. Just because something structural is not being built does not mean this alternative is not good or is a "Do Nothing" alternative.

I support some of the new technologies being developed such as the strobe light and water sound cannon, the micro food pellets entrained with poison that only the Asian Carp can digest and a carbon dioxide "curtain". If the USACE "needs" to build something, then build the carbon dioxide curtain. The results of experiments done by the University of Illinois and the US Geological Survey this year were very encouraging.

I think that the costs associated with constructing a new electrical barrier is problematic for several reasons:

1) The need to reconfigure the tows at an unbuilt mooring area down river from the lock

2) The cost to construct such an efficient mooring area that allows the tows to reconfigure quickly with little delay.
3) The cost for Helper boats to help the tows be broken apart and re-wired back together
4) The safety of the boat crew out on the head of the barge tow guiding the captain into the lock.
5) Added time to transit the lock increasee costs of the transportation of the cargoes

My hope is that the USACE will not pursue any alternatives that includes the construction of another electrical barrier in a navigable channel. They are unsafe for the boat crews and expensive to operate. There are better alternatives.

Thank you for this opportunity to provide my comments.

Respectfully,

Donald Campbell

Donald Campbell

Mark Centracchio
18027 William Street
Lansing, IL 60438

October 18, 2016

Mr. Kenneth A. Barr
Chief, Environmental Planning Branch
US Army Corp of Engineers
P O Box 2004
Rock Island, IL 61204-2004

VIA Email: kenneth.a.barr@usace.army.mil

RE: Brandon Road NEPA Study

Dear Mr. Barr:

I work for Kindra Lake Towing, who is a member of the American Waterways Operators (AWO). I support and endorse the AWO's position regarding the Brandon Road NEPA Study.

I am strongly against another electrical barrier on a navigable waterway, particularly at the approach channel of the Brandon Road lock. Electrical barriers are dangerous for the boat crews and extremely expensive to operate. In addition to these costs, there are those costs associated with stopping navigation while the maintenance is occurring.

I support commercial fishing. It has been very successful keeping the Asian Carp in check and caused a 68% reduction of the Asian Carp population in the Dresden pool. Instead of building a dangerous electrical barrier that is very costly to operate and maintain, I support more commercial fishing of the Asian Carp to achieve the same results: stopping the Asian Carp from getting into Lake Michigan. Greater use of the Asian Carp caught for pet food is another step to fishing the Asian Carp to a substantially reduced population.

A non-structural alternative is so much better than electrifying the waterway. Just because something structural is not being built does not mean this alternative is not good or is a "Do Nothing" alternative.

I support some of the new technologies being developed such as the strobe light and water sound cannon, the micro food pellets entrained with poison that only the Asian Carp can digest and a carbon dioxide "curtain". If the USACE "needs" to build something, then build the carbon dioxide curtain. The results of experiments done by the University of Illinois and the US Geological Survey this year were very encouraging.

I think that the costs associated with constructing a new electrical barrier is problematic for several reasons:

1) The need to reconfigure the tows at a mooring area down river from the lock will add more time to the transit and thereby increase the cost of the transportation of the cargoes

2) The cost to construct an efficient mooring area that allows the tows to reconfigure quickly with little delay. The definition of an efficient mooring area needs a "deep dive" so that the users—the mariners—have a facility that will meet their needs
3) The cost for Helper boats to help the tows be broken apart and re-wired back together into the flotiila required to go through the lock if an electrical barrier was installed
4) The safety of the boat crew out on the head of the barge tow guiding the captain into the lock. Currently at the electrical barrier in Romeoville, no crew can be on the barge tow as it passes through the electrified water

My hope is that the USACE will not pursue any alternatives that includes the construction of another electrical barrier in a navigable channel. They are unsafe for the boat crews and expensive to operate.

Thank you for this opportunity to provide my comments.

Respectfully,

Mark Centracchio

Dwight Droba
36 N. Cedar Lane
Glenwood, IL 60425

October 18, 2016

Mr. Kenneth A. Barr
Chief, Environmental Planning Branch
US Army Corp of Engineers
P O Box 2004
Rock Island, IL 61204-2004

VIA Email: kenneth.a.barr@usace.army.mil

RE: Brandon Road NEPA Study

Dear Mr. Barr:

I work for Kindra Lake Towing, who is a member of the American Waterways Operators (AWO). I support and endorse the AWO's position regarding the Brandon Road NEPA Study.

Furthermore, I, like my company, am strongly against another electrical barrier on a navigable waterway, particularly at the approach channel of the Brandon Road lock. Electrical barriers are dangerous to the boat crews and extremely expensive to operate. In addition to these costs, there are those costs associated with stopping navigation while the maintenance is occurring. Towboats and barges have to wait either above or below the electrical barrier during these closures. These delays result in lost barge days—days that can never be made up—which extends the transit time and reduces the number of trips a barge can make each year. These delays increase the cost of water transportation.

I support commercial fishing. It has been very successful keeping the Asian Carp in check and caused a 68% reduction of the Asian Carp population in the Dresden pool. Instead of building a dangerous electrical barrier that is very costly to operate and maintain, I support more commercial fishing of the Asian Carp to achieve the same results: stopping the Asian Carp from getting into Lake Michigan. Greater use of the Asian Carp caught for pet food is another step to fishing the Asian Carp to a substantially reduced population—and hopefully extinction.

A non-structural alternative is so much better than electrifying the waterway. Just because something structural is not being built does not mean this alternative is not good or is a "Do Nothing" alternative.

I support some of the new technologies being developed such as the strobe light and water sound cannon, the micro food pellets entrained with poison that only the Asian Carp can digest and a carbon dioxide "curtain".

My hope is that the USACE will not pursue any alternatives that includes the construction of another electrical barrier in a navigable channel. They are unsafe for the boat crews and expensive to operate.

Thank you for this opportunity to provide my comments.

Respectfully,

Dwight Droba

Dwight Droba

Gregory Hayes
3825 W 105th Avenue
Crown Point, IN 46307

October 18, 2016

Mr. Kenneth A. Barr
Chief, Environmental Planning Branch
US Army Corp of Engineers
P O Box 2004
Rock Island, IL 61204-2004

VIA Email: kenneth.a.barr@usace.army.mil

RE: Brandon Road NEPA Study

Dear Mr. Barr:

I work for Kindra Lake Towing, who is a member of the American Waterways Operators (AWO). I support and endorse the AWO's position regarding the Brandon Road NEPA Study.

Furthermore, I, like my company, am strongly against another electrical barrier on a navigable waterway, particularly at the approach channel of the Brandon Road lock. Electrical barriers are dangerous for the boat crews. As a member of a boat crew, I have been on the head of tows guiding the boat captain onto the lock wall and into the lock. I have personal experience locking during all types of weather and in the winter as well as summer.

I am in favor of a non-structural installation at Brandon Road. I know that shipping by barge is slow when compared to trucks, but this mode of transportation is very safe and environmentally friendly. Barge transportation is an important part of our national transportation system and helps keep trucks off the road in Chicago and the suburbs. A lot of sand and gravel moves through Brandon Road lock to be delivered to downtown Chicago to the concrete ready mix plants. I would not want to see this tonnage diverted to the highway because of an electrical barrier system that has made it uneconomical to utilize barges to deliver cargoes into Chicago.

I support commercial fishing. It has been very successful keeping the Asian Carp in check. I like the fact that Asian Carp is being used for pet food. This is another step to fishing the Asian Carp to a substantially reduced population—and hopefully extinction.

A non-structural alternative is so much better than electrifying the waterway. A non-structural alternative is NOT a "Do Nothing" alternative.

I support some of the new technologies being developed such as the strobe light, water cannon, and a carbon dioxide "curtain".

My hope is that the USACE will not pursue any alternatives that includes the construction of another electrical barrier in a navigable channel. They are unsafe for the boat crews.

Thank you for this opportunity to provide my comments.

Respectfully,

Gregory Hayes

Gregory A. Hayes

MARTIN T. HETTEL
VICE PRESIDENT GOVERNMENT AFFAIRS

October 18, 2016

Mr. Kenneth A. Barr
Chief, Environmental Planning Branch
U.S. Army Corps of Island District
PO Box 2004, Clock Tower Building
Rock Island, IL 61204

RE: Corps' Proposed Mooring Area

Dear Mr. Barr,

On behalf of American Commercial Barge Line (ACBL), thank you for the opportunity to comment on the U.S. Army Corps of Engineers' proposed mooring area, downstream of the Brandon Road Lock and Dam, as part of the electric barrier alternatives for the control of aquatic nuisance species (ANS) between the Mississippi River and the Great Lakes basin.

ACBL is one of the largest Inland Waterways Transportation Companies in the United States, operating approximately 4,200 barges (dry cargo and liquid barges) and over 175 towboats within the Inland Waterway System. ACBL employs over 3,700 teammates throughout the United States, and transports over 71 million tons of commodities annually.

ACBL shipped 3,272,502 tons through Brandon Road Lock and Dam in 2015. This is approximately 26% of the total volume of tonnage through Brandon Road Lock and Dam (12,588,502) in 2014 (most recent tonnage available). Of the 11,721 barges that transited Brandon Road Lock and Dam, 2,989 were on ACBL vessels, or 25.5% of the total barges that transited Brandon Road Lock and Dam in 2014. Of the 2,989 barges that ACBL transited through Brandon Road Lock and Dam, 1,870 were loaded barges, or approximately 24.8% of the total loaded barges that transited Brandon Road Lock and Dam in 2014. ACBL also transited Brandon Road Lock and Dam with 1,119 empty barges, or approximately 26.4% of the total empty barges that transited through Brandon Road Lock and Dam in 2014.

As you can see, ACBL transits Brandon Road Lock and Dam with approximately 25% of the tonnage in approximately 25% of the barges that have transited Brandon Road Lock and Dam in 2014. With the volume of tonnage and barges that ACBL delivers through Brandon

Road Lock and Dam, any changes to the way we transit Brandon Road Lock and Dam today would have serious safety concerns to ACBL due to additional risk to our teammates.

ACBL has transited Brandon Road Lock and Dam with 354 tows in 2015. Of those 354 tows, 157 tows that transited Brandon Road Lock and Dam had over six barges within the tow. These 157 tows would add additional risks to our teammates by requiring our vessels to double and triple trip Brandon Road Lock and Dam by restricting our tows to a maximum of six barges 105' wide by 400' long. This Amounts to a 400% increased risk to our teammates simply by putting our crews out on tow 1,036 more times than the way we operate today, which is 259 times we put our teammates out on tow to transit Brandon Road Lock and Dam with the 157 transits that had more than six barges in tow.

This risk does not take into account the additional risk to our teammates by configuring the tow 105' wide by 400' long prior to approaching Brandon Road Lock and Dam, as tows would be transiting 70' wide by 600' long. Additional risks are presented by exposing our liquid barges more than the way we transit Brandon Road Lock and Dam today, as we strive to keep liquid barges covered up by dry cargo barges within our tows.

ACBL considers this additional risk to our employees as unacceptable and believe the USACE has very capable people working on this project and must come up with a way to allow industry to transit through Brandon Road Lock and Dam unrestricted as we do today.

Thank you again to have the opportunity to comment on the Brandon Road ANS project.

Sincerely,

Martin T. Hettel

Herzog, Kathryn MVP @ MVR

From: Barr, Kenneth A MVP @ MVR
Sent: Tuesday, October 18, 2016 5:36 PM
To: Terry Hoeckendorff
Cc: Cornish, Mark A MVP@MVR; Herzog, Kathryn MVP @ MVR
Subject: Re: [EXTERNAL] Mooring cell proposal

Thanks Mr. Hoeckeendorff

I will forward your comments to our Planning Team for their full consideration.

Ken Barr

Sent from my BlackBerry 10 smartphone.
From: Terry Hoeckendorff
Sent: Tuesday, October 18, 2016 4:04 PM
To: Barr, Kenneth A MVP @ MVR
Subject: [EXTERNAL] Mooring cell proposal

Kenneth,

I support the AWO position regarding this NEPA study and I'm against any more electrical barriers in a navigable waterway.

Terry Hoeckendorff

Calumet River Fleeting

Vice President of Operations

OFF. 773-721-1600

Cell. 773-617-8820

thoeckendorff@calriverfleeting.com

Herzog, Kathryn MVP @ MVR

From: Barr, Kenneth A MVP @ MVR
Sent: Tuesday, October 18, 2016 5:24 PM
To: Mike Blaske
Cc: Cornish, Mark A MVP@MVR; Herzog, Kathryn MVP @ MVR
Subject: Re: [EXTERNAL] NEPA

Thank you Mr Blaske

I will forward to our Planning team for their full consideration

Ken Barr
Sent from my BlackBerry 10 smartphone.
From: Mike Blaske
Sent: Tuesday, October 18, 2016 3:42 PM
To: Barr, Kenneth A MVP @ MVR
Subject: [EXTERNAL] NEPA

Mr. Barr,

After review of the plan for the mooring area and discussions with our mariners, we have come up with the following comments.

For the proposed waiting area at MM 284.

* The distance of the proposed mooring site to the lock is too great. 1, It potentially leaves red flag barges unattended for extended periods of time. Which is not permissible by the USCG and Homeland Security. 2, The amount of time for a tow to land, break tow and traverse to the lock would take a lot of time (3 hours before the first cut would be into the lock. then another 30+ minutes for the locking, 1 hr to return to the other half of the tow). This coupled with the 2nd cut of the tow, could exceed times of 7--8 hours per northbound tow.
* The proposed cells (2 - 600' apart) is not enough to accommodate 1 tow, let alone the amount of potential traffic build up. The 2nd half of a cut tow is only 3-400' long. This would not allow the tow to settle and could potentially break loose and be free floating.
* If traffic were to build in this area, the navigation in this area would be restricted due to the location of the Casino on the right descending side. Making it difficult for southbound traffic.
* After a high water event, the congestion in the Dresden Island pool would get to a point that would be unmanageable and delays to customers would be extreme.

The existing mooring area they have shown is actually IMT's fleet. So, that wouldn't work as a secondary option.

Hope this helps and if you have any questions feel free to give me a call!!

Best regards,

Mike

Mike Blaske
Marine Superintendent
Illinios Marine Towing, Inc.
379 River St
Lemont, IL 60439 US

Office: 630-410-0375 Cell:815-677-8620
Fax: 630-257-8968
Email: MBlaske@imtowing.com <mailto:MBlaske@imtowing.com>
Blockedwww.imtowing.com

Where People Make the Difference

DANIEL P. MECKLENBORG
SENIOR VICE PRESIDENT
CHIEF LEGAL OFFICER AND SECRETARY

INGRAM

ONE BELLE MEADE PLACE
4400 HARDING ROAD - P.O. BOX 23049
NASHVILLE, TENNESSEE 37205-2290
TEL: 615-298-8209 E-FAX 615-695-3209

October 18, 2016

Via email to Kenneth.A.Barr@usace.army.mil

Mr. Kenneth A. Barr
Chief, Environmental Planning Branch
U.S. Army Corps of Engineers, Rock Island District
PO Box 2004, Clock Tower Building
Rock Island, IL 61204

RE: Corps' Proposed Mooring Area

Dear Mr. Barr,

On behalf of Ingram Barge Company ("Ingram"), thank you for the opportunity to comment on the U.S. Army Corps of Engineers' ("Corps") proposed mooring area, downstream of the possible electric barrier alternative at Brandon Road Lock and Dam. Ingram operates over 150 towboats, nearly 5,000 hopper and tank barges, and in 2015 transported around 2.6 million tons of cargo. Much of the cargo that Ingram transports travels through Brandon Road Lock and Dam, the subject site of your letter dated August 29, 2016, attached hereto ("Letter"). As such, Ingram is committed to promoting navigation projects within the Chicago Area Waterway System ("CAWS") that are economically efficient, logistically sound, and safe for the mariners of this industry. For the below reasons, Ingram does not support the implementation of an electric barrier at Brandon Road Lock and Dam or the construction of only two downstream mooring cells, as described in your Letter.

Crew Safety

The Coast Guard requires in Rule 5 of the Navigation Rules of the Road that vessels "shall maintain a proper lookout by sight and hearings…to make a full appraisal of the situation and of the risk of collision." Industry best practice is for two crew member lookouts to be on the head of the tow during a variety of operations, including when a tow approaches a lock. In addition, the Coast Guard also implemented a Regulated Navigation Area ("RNA") for the electric barrier at Romeo, Illinois. During transit over the electrified area, crews are strongly encouraged to stay inside the cabin or as inboard as practicable, and making or breaking a tow is not permitted. A similar RNA would be expected over any other electrified body of water, such as at Brandon Road, making transit through the lock dangerous or even, perhaps, impossible. Based on the interpretation of the above two conflicting provisions, Ingram's crew members would be expected to be outside on the head of the tow to ensure the vessel's safe transit into the lock while simultaneously being expected to be inside the towboat to ensure the safety of the crew. Obviously, the

conflicting provisions make an electric barrier at a lock approach an untenable and unworkable solution. Tow reconfiguration and the locking process are already two of the most dangerous operations for crew members. With the addition of an electric barrier alternative, crews would face increased risk for falls overboard, slips, trips, snaps-back, and catching in the bight of the towing line.

Mooring Cells

The Corps' proposal of two mooring cells located 600 feet apart approximately one mile downstream of Brandon Road Lock and Dam will not sufficiently facilitate the efficient movement of tows in commercial navigation. This area would only hold a maximum of fifteen barges, or just one dry or mixed-cargo tow. Ingram believes this location would be too small to facilitate multiple tows that would accumulate in the area due to congestion. A minimum of five mooring cells for both northbound and southbound traffic would be necessary to mitigate congestion and other safety concerns. To ensure barges are secured and settled, the industry would need sufficient space to facilitate the most common barge dimensions. Ten cells are the minimum number of mooring cells needed to address a variety of logistical and safety issues.

Helper Boats

Ingram would experience increased operational costs by being required to hire helper boats to transit through the lock. The estimated cost to utilize a helper boat is roughly $300-$350 per hour. As the cost of the electric barrier alternative is evaluated, this cost to Ingram, as well as other carriers, must be recognized as an impact to the national economy. Furthermore, the industry would need *at least* four helper boats to process cuts through the lock in a timely manner. If helper boats are not readily available, Ingram, as well as other carriers, could experience substantial delays in transit time.

Tow Reconfiguration

Reconfiguring a two-wide by three-long tow to a three-wide by two-long tow to transit the lock will significantly increase travel time, costs, hazards to the environment, and crew safety. As we understand the Corps' proposal, this reconfiguration would allow a tow to move through the lock in one trip. The reconfiguration time along with the slower movement of a three-wide tow, especially with box barges, would increase the transit time from the mooring cell location through the Brandon Road Lock from roughly one hour to a minimum of two to three hours. In turn, this increased transit time would increase fuel usage and fuel emissions.

Reconfiguring a larger, fifteen-barge tow could increase the transit time by eight hours or more. The lockage delays would create a domino effect, increasing congestion, costs, and safety risks. Based on our understanding of all alternatives with an engineered channel and electric barriers, it is reasonable to expect backlogs and congestion from, at a minimum, the Channahon fleeting area operated by Illinois Marine Towing to Lockport Lock.

Societal Costs

Societal costs must also be carefully explored and described. First, the inefficient movement of products on the waterway due to the use of an electric barrier and only two mooring cells would increase fuel consumption and air pollutants. Second, the Brandon Road

Bridge openings would increase by a minimum of 50%, significantly slowing traffic in the area, increasing fuel consumption and air emissions, and creating a decrease in the quality of life for the residents and commuters in the area. Third, if products had to move from barge to road or rail (due to the delays and limits caused by logistical constraints), the fuel consumption and air emissions would further increase, traffic fatalities would likely increase, taxpayers would have to pay more for the ongoing road maintenance, and businesses that rely on the cost-effective mode of waterway transportation would be financially damaged, impacting the financial security of those individuals employed with such businesses.

In closing, Ingram does not support the implementation of an electric barrier at Brandon Road Lock & Dam for the various safety, economic, and societal reasons listed above. Ingram has vast experience transiting through Brandon Road Lock and is intimately familiar with the logistical and operational details of doing business in this area. The economic impact that an electric barrier – and only two mooring cells – could have on this industry, as well as the shippers that rely on such carriage, is astronomical.

Thank you again for the opportunity to comment on the Corps' mooring cell proposal near Brandon Road Lock and Dam. Ingram is committed to working with the Corps to find a solution that addresses the presence of aquatic nuisance species between the Mississippi River and the Great Lakes basin that maintains safe navigation and facilitates economic stability and growth. We would be happy to answer any questions or provide further information as needed.

Sincerely,

Daniel P. Mecklenborg

P.O. Box 308
Vicksburg, MS
39181 9901
601-638-5921
Fax 601-638-8475

Magnolia Marine Transport

October 18, 2016

Mr. Kenneth A. Barr
Chief, Environmental Planning Branch
US Army Corps of Engineers
P.O. Box 2004
Rock Island, IL 61204-2004

RE: Brandon Road NEPA Study

Dear Mr. Barr:

Magnolia Marine Transport Company is a member of the American Waterways Operators (AWO). We support and endorse the AWO's position regarding the Brandon Road NEPA Study.

Sincerely,

James K. Smith

James K. Smith
Director of Compliance
Magnolia Marine Transport

MIDDLE RIVER MARINE

MIDDLE RIVER MARINE, LLC.
19001 OLD LAGRANGE RD.
MOKENA, IL 60448-8013

18 October 2016

Mr. Kenneth A. Barr
Chief Environmental Planning Branch
U.S. Army Corps Of Engineers, Rock Island District
PO Box 2004, Clock Tower Building
Rock Island, Il 61204

Dear Mr. Barr,

Middle River Marine, LLC is a marine service provider on the Illinois Waterway, and the exclusive marine service provider for Ozinga Brothers moving approximately 2 million tons of cargo on the Chicago Area Waterway. We operate several facilities on the CAWS and Illinois Waterway from Peoria to Downtown Chicago. We have also hosted with the help of American Waterways Operators a towboat tour of Brandon Road Lock and the surrounding area for Corps Of Engineer personnel.

Middle River Marine, LLC has concerns regarding the proposed mooring area and new electronic barriers. First and foremost of these concerns is the safety for our crews. The Coast Guard implemented a Regulated Navigation Area (RNA) over and beyond the electric barriers. Crews are required to stay inside the vessel during transit over the electrified area. Regular operations are disrupted since meeting or passing other tows, or making and breaking a tow is not allowed. A similar RNA would have to be put in place at Brandon Road and this would make transiting the lock more difficult than it is today.

The second concern Middle River Marine, LLC has is tow reconfiguration. Reconfigure two wide by three long tows to a two long by three wide tow will increase the risk of safety to our crews as making and breaking tows is a hazardous procedure; adding significant time to transit the new lock, as well as adding congestion between Lockport Lock and Brandon Road. The reconfiguring of the tow will take approximately three hours; Middle River Marine LLC, has a tow going through this area every 24 hours and the addition of two to three hours of work over a year's time would add up quickly. The crew's safety would also be at risk as they will be required to do the "heavy lifting" to facilitate these procedures.

The third issue is that the proposed mooring area does not have enough capacity to facilitate industry needs. There would need to be at least five mooring cells for northbound and southbound traffic to ease safety and congestion concerns in this area.

Thank you for the opportunity to comment on the Corps' mooring cell proposal near the Brandon Road Lock and Dam. Middle River Marine, LLC welcomes the opportunity to answer any questions or provide any additional information as needed.

Sincerely,

James B. Long

John Bruno Flota
6671 Basswood Road
Ludington, MI 49431

October 18, 2016

Mr. Kenneth A. Barr
Chief, Environmental Planning Branch
US Army Corp of Engineers
P O Box 2004
Rock Island, IL 61204-2004

RE: Brandon Road NEPA Study

Dear Mr. Barr:

Kindra Lake Towing is a member of the American Waterways Operators (AWO). We support and endorse the AWO's position regarding the Brandon Road NEPA Study.

Furthermore, I, like my company, Kindra Lake Towing, am strongly against another electrical barrier on a navigable waterway, particularly at the approach channel of the Brandon Road lock. Electrical barriers are dangerous and extremely expensive to operate: millions of dollars each year for the electricity needed to electrify the underwater barriers plus the annual maintenance costs. In addition to these costs, there are those costs associated with stopping navigation while the maintenance is occurring. Towboats and barges have to wait either above or below the electrical barrier during these closures. These delays result in lost barge days—days that can never be made up—which extends the transit time and increases the cost of transportation.

A non-structural alternative does not mean this alternative is not good or is a "Do Nothing" alternative because something structural is not being built. Look at how successful the commercial fishing has been to keep the Asian Carp in check and caused a 68% reduction of the Asian Carp population in the Dresden pool. Instead of building a dangerous electrical barrier that is very costly to operate and maintain, I support more commercial fishing of the Asian Carp to achieve the same results: stopping the Asian Carp from getting into Lake Michigan.

The entire idea of building another electrified barrier at Brandon Road Lock causes me great concerned with:

Crew Safety
Sufficient number of Mooring Cells
Engineered Channel
Costs of Helper Boats
Tow Reconfigurations
Societal Costs

I recommend that the USACE's team assembled for the Brandon Road Study has a depth of navigation personnel. It seems that the USACE is blindly speeding to a pre-determined alternative of an electrical barrier that is a poor alternative for safe, environmentally friendly river transportation.

My hope is that the USACE will not pursue any alternatives that includes the construction of another electrical barrier in a navigable channel. Thank you for this opportunity to provide my comments.

Respectfully,

John Bruno Folta

The American Waterways Operators

1113 Mississippi Avenue
Suite 108
St. Louis, MO 63104

PHONE: (314) 446-6474
EMAIL: lmuench@americanwaterways.com

Lynn M. Muench
Senior Vice President – Regional Advocacy

October 18, 2016

Mr. Kenneth A. Barr
Chief, Environmental Planning Branch
U.S. Army Corps of Engineers, Rock Island District
P.O. Box 2004, Clock Tower Building
Rock Island, IL 61204

RE: Proposed Mooring Area

Dear Mr. Barr,

On behalf of the American Waterways Operators (AWO), 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' National Environmental Protection Act (NEPA) documentation of the proposed mooring area, downstream of the Brandon Road Lock and Dam, as part of the electric barrier alternatives for the control of aquatic nuisance species (ANS) between the Mississippi River and the Great Lakes basin.

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 nearly 5,500 tugboats and towboats, and more than 31,000 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, and environmentally friendly means of transportation for American's domestic commerce.

Over 20 AWO members utilize and rely upon the Illinois Waterway. All 350 member companies of AWO and their customers depend on the federal government's commitment to maintaining Congressionally-authorized waterways to support the short-and long-term transportation needs of the nation.

AWO and its members have a long history of working with federal and state government partners to ensure that 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 to control ANS populations and minimize the risk of their interbasin transfer, including the following:

The Tugboat, Towboat and Barge Industry Association

- 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 human 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 fish 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.
- AWO staff and members have participated in work to study and mitigate the potential transfer of Asian carp across the CSSC electric barriers if they become trapped between barges or if the barriers' electrical charge is adversely impacted by passing tows.

AWO members believe and are concerned that the Corps is proceeding with the Brandon Road Study without Congressional authority. We are further concerned that the installation of new electric barriers in a lock approach is dangerous and will create serious safety issues. The mooring cells that would be used to stage or reconfigure vessels would negatively impact the logistics and safety of towing operations from, at a minimum, Lockport Lock to the Channahon fleeting area operated by Illinois Marine Towing. Safety and logistics would be compromised by the size and structure of the fleeting area, impacting both northbound and southbound traffic. Costs would skyrocket with the delays caused by these reconfigurations, from increased locking time per tow in the pools above and below Brandon Road Lock, and from the need for four or more helper boats. Societal benefits would also significantly decrease with increased fuel consumption, increased air emissions, and from the traffic delays caused with the increased operation of the Brandon Road bridge. If barge cargoes should move to rail or truck transportation, there would be a further increase in fuel consumption and air emissions.

AWO is further concerned that the Corps' economic studies are insufficient and will severely underestimate the economic impact to the nation. An AWO letter to COL Christopher Drew on February 26 outlines the basis of the concerns, including the insufficient outreach to impacted shippers and carriers. In addition, no surveys were sent to companies that would be heavily impacted, but do not fit neatly into the shipper or carrier categories, such as shipyards, companies that shift vessels between the basins, construction companies, and ports. The economic study also makes an assumption that commodities could be readily moved to other modes of transportation, an assumption that is clearly not true in the Chicago region. The industry is also concerned that the Corps will not take into consideration that commercial traffic has been increasing steadily on the Chicago Area Waterway System (CAWS) over the last few years. The Illinois Department of Transportation estimates that the amount of freight passing through Illinois will increase from 1.26 billion tons to 1.7 billion tons by 2040.

We elaborate on each of these concerns below.

Congressional Directives

AWO does not believe that the Corps meets the Congressionally-authorized direction of the *Great Lakes and Mississippi River Interbasin Study (GLMRIS)*. GLMRIS was authorized in Section 3061(d) of the Water Resources Development Act of 2007. The legislation clearly states that the primary objective of the GLMRIS is to conduct "a feasibility study of the range of options and technologies available to prevent the spread of aquatic nuisance species **between** the Great Lakes and Mississippi River Basins." The underlying problem with proceeding on this project is that it only addresses one-way ANS control and, as such, does not accomplish the directive that was laid out by Congress.

Congress further addressed GLMRIS in the Moving Ahead for Progress in the 21st Century Act (MAP-21). Section 1538 of MAP-21 directed the Corps to **complete** the GLMRIS within 18 months from enactment, in January 2014. MAP-21 states that "If the Secretary determines that a project is justified in the completed report, proceed directly to project preconstruction engineering and design (PED)." Since the Corps' normal process of identifying a preferred Alternative, producing an EIS, a Record of Decision, and a Chief's Report, was not followed, no Alternative appears to be identified. Indeed, the proposed Brandon Road project was not one of the GLMRIS Alternatives. It was part of three different Alternatives. Further Congressional action is needed to authorize a project that is not a GLMRIS Alternative and only provides one-way protection from ANS movement between the basins.

Since the electric barriers in the Chicago Sanitary and Ship Canal may be the only Corps project that has been built by the Corps without a study, this may be the appropriate time to evaluate electric barriers as appropriate tools to control the movement of ANS. Since Congressional direction was to stop all ANS in both directions and the electric barriers only stops swimming ANS in one direction, this is clearly not the ideal control method. It is time to evaluate all the possible control options that could control, mitigate, or eliminate all types of ANS.

GLMRIS identified thirteen species in the Great Lakes that pose a medium to high risk to the Mississippi River Basin and only three species that pose a medium to high risk that could move from the Mississippi River Basin to the Great Lakes. Logically, the next step in the GLMRIS project should be to look for ways to address the medium to high risk species in the Great Lakes and identify controls that specifically target each species or look for effective two-way controls.

Stakeholder Outreach

The Corps' outreach to impacted stakeholders was and is insufficient. The announcement was never published in the *Federal Register* and no electronic announcement was sent to shippers, carriers, or municipalities in the area. The only outreach was via the U.S. mail to approximately 100 tribes and tribal associations from states as far away from the Brandon Road Lock as Oklahoma and Alabama, over 40 historical societies and museums, and at least three railroads. The notice was sent to only five shippers, carriers, or associations

representing them. Outreach to potentially impacted municipalities such as Joliet, Lockport, Romeoville, Channahon, and others, including communities in Indiana, was almost non-existent.

Crew Safety

The safety issues caused by the electric barriers in the CSSC are well known. Coast Guard-funded studies confirm a 50% fatality rate if an individual would accidently fall into the water.

The Coast Guard implemented a Regulated Navigation Area (RNA) over and beyond the electric barriers. Crews are required to stay inside the vessel during transit over the electrified area. The RNA also requires a helper boat for all red-flagged vessels. Regular operations are disrupted since meeting or passing a vessel, fleeting areas, and making or breaking a tow are not allowed. A similar RNA would be expected over any other electrified water. The Coast Guard requires in 45 CFR 15.850 that crews "shall maintain a proper lookout by sight and hearings….to make a full appraisal of the situation and of the risk of collision." Industry best practice is two lookouts on the head of the tow during a variety of operations including as tows approach a lock. Given the two conflicting regulations, the crew members would be required to be outside on the head of the tow to ensure the vessel's safe transit into the lock and inside the towboat to ensure the safety of the crew. Obviously, the conflicting regulations make an electric barrier at a lock approach an untenable and unworkable situation.

Tow reconfiguration and the locking process are two of the most dangerous operations for crew members. Both operations would significantly increase safety concerns with any of the electric barrier alternatives. Crews would face increased risk of fall overboards, slips, trips, falls, snap-back, and catching in the bight of the towing line.

Electricity has also moved onto land causing electric hazards including causing railroad crossing to malfunction. Indeed, the Corps has instituted strenuous procedures to ensure the safety of personnel operating and working at the CSSC electric barrier land-based site. Given the heavy industry in the area, the dangers to land-based businesses that rely on the towing industry and personnel at the locks must also be evaluated.

Mooring Cells

The Corps' proposal of two cells located 600 feet apart will not sufficiently facilitate the efficient movement of commercial navigation. The area would hold a maximum of fifteen barges, or just one dry- or mixed-cargo tow. AWO members believe the location would be too small to facilitate multiple tows that would accumulate in the area due to congestion.

To secure two dry- or mixed-cargo barges, the length between the cells must be 400 feet to allow the cut to settle, ensuring that the barges are not a breakaway risk. Liquid barges would need a location with 200 feet between the mooring cells to secure a single barge.

A minimum of five mooring cells for both northbound and southbound traffic would be necessary to mitigate congestion and other safety concerns. To ensure barges are secured and

settled, the industry would need dimensions to facilitate the most common barge dimensions. The Corps should not proceed with the establishment of mooring cells without further consultation with industry experts who can provide the necessary technical information to ensure that they are properly spaced and located.

Engineered Channel

The three electric barrier alternatives all include an engineered channel. According to the maps provided by the Corps, the end would be very close to a power plant intake. This area creates suction, causing captains and pilots to drive at the left descending point of the waterway. If an engineered channel is installed, the suction, wind, and driving point would decrease the ability of the captain or pilot to safely maneuver the vessel through the area. A hard landing could cause severe damage to the engineered wall and to the vessel. The suction is sometimes so strong that vessels are unable to break away from the area. If vessels were stopped at the end of the engineered channel, the system would face further delays and congestion.

Helper Boats

The industry would need at least four helper boats to process cuts through the lock in a timely manner. The estimated cost to utilize a helper boat is roughly $300-$350 per hour. AWO understands that the Corps would not incorporate this expense into its budget. As the cost of the electric barrier alternatives is evaluated, this cost must be recognized as an impact on the towing industry, its customers, and the national economy.

Tow Reconfiguration

If the industry is required to reconfigure all two-wide-by-three-long tows to a three-wide-by-two-long tow, the industry will face significantly increased travel time, costs, and risks to crew safety. As we understand the Corps' proposal, this reconfiguration would allow a tow to move through the lock in one trip. The reconfiguration time along with the slower movement of a three-wide-tow, especially with box barges, would increase the transit time from the mooring cell location through the Brandon Road Lock from roughly one hour to a minimum of two to three hours. The increased transit time would increase fuel usage, increasing air emissions. Costs for crewing vessels would go up, along with significant safety risks for the crews.

Reconfiguring a larger, fifteen-barge tow could increase the transit time for the entire tow to eight hours or more. The lockage delays would create a domino effect, increasing congestion, costs, and safety risks. Based on the industry's understanding of all alternatives with an engineered channel and electric barriers, it is reasonable to expect backlogs and congestion from, at a minimum, the Channahon fleeting area operated by Illinois Marine Towing to Lockport Lock.

Societal Costs

Societal costs must also be carefully explored and described. First, the inefficient movement of products on the waterway would increase fuel consumption and air pollutants. Second, the

Brandon Road Bridge openings would increase by a minimum of 50%, significantly slowing road traffic in the area, also increasing fuel consumption, air emissions, and decreasing the quality of life for the commuters in the area. Third, if products had to move to road or rail, the fuel consumption and air emissions would further increase, the quality of life for the region would decrease, traffic fatalities would increase, taxpayers would have to pay more for road maintenance, and businesses that rely on the cost-effective mode of waterway transportation would be harmed, impacting living-wage jobs.

Conclusion

In conclusion, as the Corps prepares NEPA documentation for the GLMRIS at the Brandon Road Lock and Dam near Joliet, Illinois, it must consider a wide range of economic, environmental, and societal costs. The Corps' stated purpose for the proposed mooring cell location is to mitigate possible reconfiguration delays for the towing industry. As proposed, the mooring cells would not facilitate the efficient flow of commercial traffic through the Brandon Road Lock. With only two cells available for reconfiguration, a bottleneck would be created for both northbound and southbound traffic, further increasing risks to safety. Mooring cells and the other changes to the area if electric barriers are installed would significantly increase safety risks to the crews, to the towing vessels, and to the Corps' infrastructure. Also, disrupting the flow of commerce on the Illinois waterways could have serious economic repercussions, as many communities in Illinois and throughout the country rely upon on-time delivery of commodities via the waterways.

Thank you again for the opportunity to comment on the Corps' mooring cell proposal near Brandon Road Lock and Dam. AWO stands ready to work with the Corps to find a solution that maintains safe navigation and facilitates economic growth. We would be happy to answer any questions or provide further information as needed.

Sincerely,

Lynn M. Muench

Lynn M. Muench
Senior Vice President – Regional Advocacy

From: Appel, Jason C CIV USARMY CEMVR (US)
To: Herleth-King, Shawna S CIV USARMY CELRC (US)
Subject: FW: Corps Brandon Road - Comments Attached
Date: Friday, February 24, 2017 2:28:05 PM
Attachments: Midwest_Generation_comments_to_2016-08-29_dated_CorpsGLMRIS_letter.docx

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-----Original Message-----
From: O'Day, Peter [mailto:Peter.ODay@nrg.com]
Sent: Friday, September 30, 2016 3:07 PM
To: Herzog, Kathryn MVP @ MVR <Kathryn.Herzog@usace.army.mil>
Cc: Shealey, Sharene <Sharene.Shealey@nrg.com>
Subject: [EXTERNAL] RE: Corps Brandon Road - Comments Attached

Kat
Thanks for the electronic copy.
Attached please find the collected comments/concerns from Midwest Generation, LLC, as regards our reading of the August 29th 2016 Corps letter's described scope of work.
If there is something we have misunderstood about that scope of work, or something additional the Corps would like to share with us, please respond by email to me and to Sharene Shealey, our Regional Environmental Manager.
Thank you.
Pete

Cc: Regional Environmental Manager, Midwest

Pete O'Day
Specialist
Environmental
Joliet Station Units 7/8
1800 Channahon Road
(Joliet Unit 6 -- 1601 S. Patterson Road)
Joliet, IL 60436
815-207-5489 desk, 815-671-2250 cell.

Comments / Concerns of ACOE proposal:

- Dredging of a waterway immediately upstream of Midwest Generation's Joliet Station intake channel may impact operation of the facility by altering water flow characteristics or cleanliness of the cooling water at the intake.
- Dredging of a waterway immediately upstream of Midwest Generation's Joliet Station intake channel may negatively impact NPDES Permit compliance at the facility.
- Dredging of a waterway immediately upstream of Midwest Generation's Joliet Station intake channel may impact thermal modelling at the facility that has been many years in the making, and which is required for 316a compliance at the facility, by altering the waterway either temporarily or permanently.
- Dredging of a waterway immediately upstream of Midwest Generation's Joliet Station intake channel may impact biological impingement and entrainment studies and required modelling for 316b compliance at the facility, by altering the waterway and/or the behavior of the waterway's ecosystem, either temporarily or permanently.
- Dredging of a waterway immediately upstream of Midwest Generation's Joliet Station intake channel may impact dissolved oxygen studies, ongoing for years at the facility, by altering the waterway and/or the behavior of the waterway's ecosystem, either temporarily or permanently.
- Placement of dredged, potentially-contaminated, material onto Midwest Generation's Joliet Station's property for the purpose of dewatering has numerous implications, including;
    - possible destructive disturbance of the vegetative cover on that property, thus exposing long buried coal ash deposits to wind or water erosion,
    - possible runoff of contaminants into the river and the station's intake channel,
    - potential SWPPP compliance implications at the facility,
    - additional negative impacts to the facility are possible when the dewatered and potentially-contaminated material is collected and loaded for transport from the Joliet Station's property.

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET, SUITE 1500
CHICAGO IL 60604

February 24, 2017

Mr. Pete O'Day
Specialist
Environmental
Joliet Station Units 7/8
1800 Channahon Road
(Joliet Unit 6 -- 1601 S. Patterson Road)
Joliet, IL 60436

Dear Mr. O'Day:

The U.S. Army Corps of Engineers, (Corps) would like to take this opportunity to further describe the proposed Brandon Road project, as well as to address the comments provided via email on September 30, 2016, which were in response to an August 29, 2016 coordination letter from the Corps describing potential activities downstream of the Brandon Road Lock and Dam. The purpose of the Brandon Road project is to evaluate structural and non-structural options and technologies near the Brandon Road Lock and Dam in order to prevent the upstream transfer of aquatic nuisance species from the Mississippi River Basin to the Great Lakes Basin to the maximum extent possible. A common feature for the technology options is the construction of a well-defined, concrete lined approach channel on the downstream approach to the Brandon Road Lock. Such a channel will facilitate the implementation of the aquatic species control technology, will aid in fish monitoring, and will provide a platform for the implementation of future control and monitoring technology. Constructing the lined approach channel requires that the Corps dredge within the channel, and possibly blast bedrock outcroppings. These improvements are necessary for the construction of the approach channel, which in turn is a critical piece of all of the technology alternatives considered in the study.

The Corps currently dredges within the Illinois Waterway to maintain safe navigation conditions and efficient waterway operations. Dredging (and blasting when needed) is an activity of which the Corps has a long history and a great deal of experience. In general, the Corps uses controls to comply with the Clean Water Act requirements for dredging, which limits the water quality impacts of the activity. Controls are variable depending on the dredging conditions and range from operational considerations (best management practices for dredging, water quality monitoring) to structural features ("closed" buckets, silt curtains). If there are sensitive receptors downstream of a dredging operation, the Corps can proactively implement controls to ensure that impacts would be limited.

In addition to the constructed approach channel, the project would require upland support features. Support features could include staging areas for construction, areas for sediment dewatering, and land for control buildings and for the project supporting features. The Corps is currently considering multiple options for locating these elements, but would like to discuss

alternatives associated with using the NRG property near Brandon Road. These discussions would be outside the scope of this letter, and the topic is not described in any detail here.

With respect to the specific comments provided by Midwest Generation, the Corps offers the responses below. Note that for the purpose of responding to comments, the formatting was changed and some comments have been combined when the topics are closely related.

Midwest Generation Comment: *Dredging of a waterway immediately upstream of Midwest Generation's Joliet Station intake channel may impact operation of the facility by altering water flow characteristics or cleanliness of the cooling water at the intake.*

Dredging of a waterway immediately upstream of Midwest Generation's Joliet Station intake channel may negatively impact NPDES Permit compliance at the facility.

Corps Response: The Corps appreciates the concern expressed here and wishes to assure Midwest Generation that appropriate controls will be taken during any dredging operation upstream of the intakes for the power plant. We believe that the main constituent of concern is suspended solids. There are a number of controls that can be taken, and during the approach channel design phase, the Corps would coordinate with Midwest Generation regarding the water quality requirements and how those could be met. The Corps would be willing to implement water quality monitoring and physical controls such as silt curtains if they are necessary. A more detailed description of Midwest Generation's water quality requirements would help the Corps address this issue more specifically.

Midwest Generation Comment: *Dredging of a waterway immediately upstream of Midwest Generation's Joliet Station intake channel may impact thermal modelling at the facility that has been many years in the making, and which is required for 316a compliance at the facility, by altering the waterway either temporarily or permanently.*

Corps Response: The Corps would appreciate additional information on this issue since we do not know the limits or conditions of the modeling, but believe it is unlikely that dredging in the channel will impact the thermal conditions at the facility. First, dredging does not impede the flow of the waterway. Second, dredging does not impart thermal energy to the waters. Third, as shown in the attached Figure 1 produced by the USGS, the flow regime in the river is heavily dominated by the Midwest Generation intake stream, to the extent that the flow in the area of the channel appears unimportant to the riverine conditions regardless of any dredging operation. For these reasons, the Corps believes that thermal impacts are not likely to be a consideration, but we would appreciate additional information on the concern.

Midwest Generation Comment: *Dredging of a waterway immediately upstream of Midwest Generation's Joliet Station intake channel may impact biological impingement and entrainment studies and required modelling for 316b compliance at the facility, by altering the waterway and/or the behavior of the waterway's ecosystem, either temporarily or permanently.*

Corps Response: As with the thermal impacts, the Corps would appreciate more information on the specific concern. Since dredging is a localized activity that would occur

physically away from the intake channel, it seems unlikely that the dredging would impact the entrainment of aquatic species in the intake.

Midwest Generation Comment: *Dredging of a waterway immediately upstream of Midwest Generation's Joliet Station intake channel may impact dissolved oxygen studies, ongoing for years at the facility, by altering the waterway and/or the behavior of the waterway's ecosystem, either temporarily or permanently.*

Corps Response: Dredging does not typically impact dissolved oxygen concentrations within a river system. Dredging does not close off the waterway or impede the flow; the dredging equipment operates on boats anchored within the channel and the water flows freely past. The dredging would occur in the approach channel area, which is a minor portion of the total river flow (see Figure 1). Although there could be temporary and localized impacts to the aquatic ecosystem at the dredging location, the overall river ecosystem would not be impacted. Dissolved oxygen within the larger river would not be impacted by dredging. As with other water quality concerns, the Corps could better address this if additional information on the specific dissolved oxygen requirements and issues is provided.

Midwest Generation Comment: *Placement of dredged, potentially-contaminated, material onto Midwest Generation's Joliet Station's property for the purpose of dewatering has numerous implications, including;*

- *possible destructive disturbance of the vegetative cover on that property, thus exposing long buried coal ash deposits to wind or water erosion,*
- *possible runoff of contaminants into the river and the station's intake channel,*
- *potential SWPPP compliance implications at the facility,*
- *additional negative impacts to the facility are possible when the dewatered and potentially-contaminated material is collected and loaded for transport from the Joliet Station's property.*

Corps Response: The Corps would like to further discuss the property adjacent to the downstream approach at Brandon Road as we believe that proposed dredging and material placement operations can be adjusted to address your concerns to eliminate and or minimize impacts to Midwest Generation property. A few of the concerns expressed above are issues that are readily addressed. If the Corps used any Midwest Generation land for sediment dewatering, the sediment dewatering area could be lined with clay or a synthetic liner so that the bottom of the facility is impervious, and no dredge water is released onto the site. Similarly, the water would be contained and would be treated prior to discharge or would be sent to a treatment facility, so that the release of contaminants to the river would not occur. The Corps complies with Sections 401, 402, and 404 of the Clean Water Act during dredging projects, to prevent impacts to waters of the United States and to maintain water quality. Controlling the releases from a sediment dewatering facility would protect water quality and would also have the effect of preventing erosion. Erosion control and National Pollutant Discharge Elimination System Program compliance for any Corps facilities would naturally be the responsibility of the Corps and would not impact Midwest Generation's stormwater pollution prevention compliance.

The Corps is committed to moving forward with the Brandon Road project, as it is a critical step in preventing the transfer of aquatic nuisance species and in protecting the significant national resource that the Great Lakes represent. We would welcome further discussions with Midwest Generation regarding the topics above and any other concerns or questions that you have about the project and the implementation of the tentatively selected plan. Thank you for providing comments on the project. We strongly believe that getting input from stakeholders such as Midwest Generation improves the project and strengthens the overall plan for aquatic nuisance species control, and we appreciate the input.

Sincerely,

Susanne J. Davis
Chief, Planning Branch
Chicago District
U.S. Army Corps of Engineers

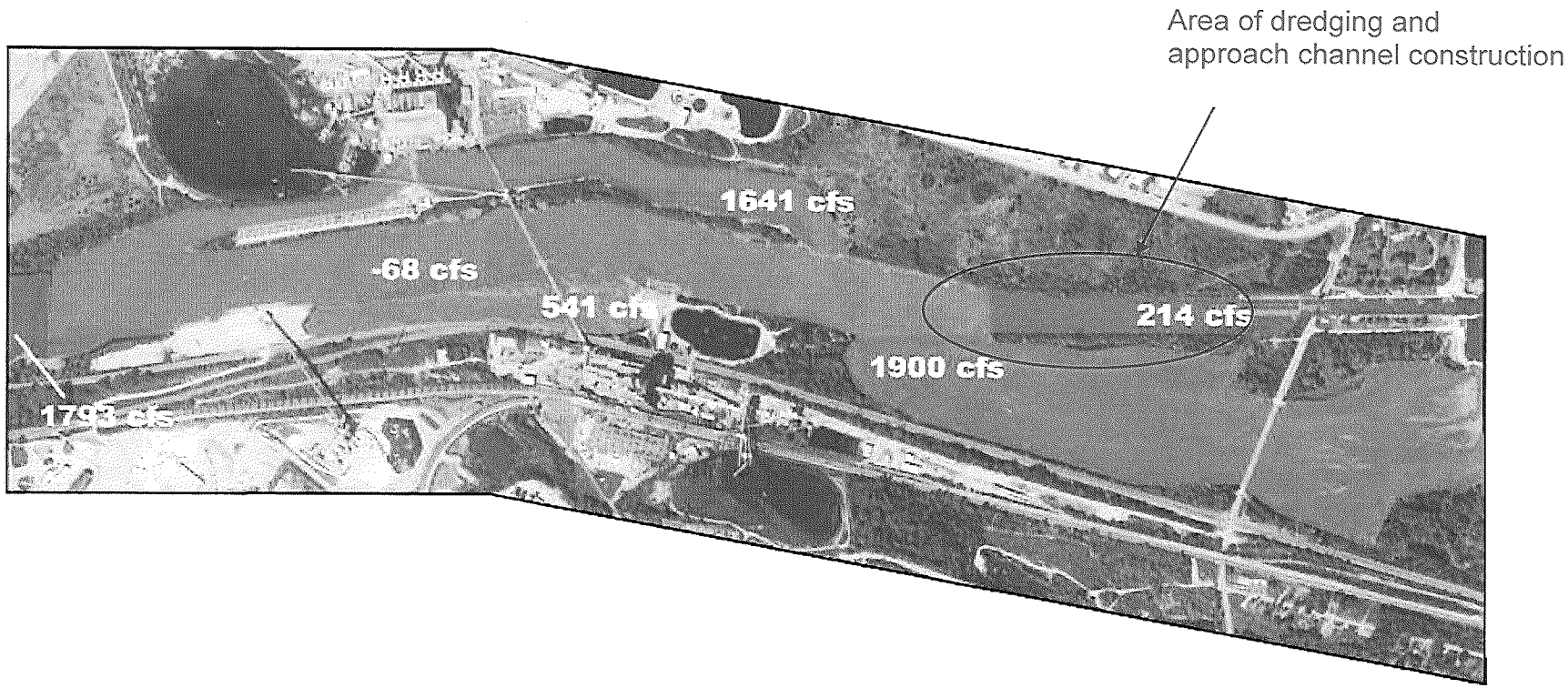

Figure 1: Flow regime in the Des Plaines River immediately downstream of Brandon Road Lock and Dam. In this figure, the lock, including all gates and valves, is closed, and the only flow through the lock (214 cfs) is "leakage". (Data collected by USGS, 2016)

Attachment 12:

SECTION 7 OF THE ENDANGERED SPECIES ACT – CONSULTATION WITH U.S. FISH AND WILDLIFE SERVICE

Department of the Army
CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
PO BOX 2004 CLOCK TOWER BUILDING
ROCK ISLAND, ILLINOIS 61204-2004

November 18, 2016

Regional Planning and Environmental
Division North (RPEDN)

US Fish and Wildlife Service
Ecological Services, Attn: Alisa Shull
5600 American Blvd W, Ste 990
Bloomington, MN 55437-1458

Dear Ms. Shull,

The United States Army Corps of Engineers (USACE) is preparing a Feasibility Study and Integrated Environmental Impact Statement (EIS) to evaluate the alternatives and impacts for a single control point at Brandon Road Lock and Dam (BRLD). This study is necessary to prevent the transfer of aquatic nuisance species (ANS) from the Mississippi River Basin (MRB) to the Great Lakes Basin (GLB). The Project Study Area is the Brandon Road Lock and Dam, the downstream approach channel, and adjacent upland parcels. All information and agency guidance acquired through this coordination letter will be incorporated into this document.

As part of Section 7 of the Endangered Species Act, Federal agencies are directed to ensure that the actions they take, including those they fund or authorize, do not jeopardize the existence of any listed species. This memorandum initiates the Section 7 consultation process for the Great Lakes and Mississippi River Interbasin Study (GLMRIS)-Brandon Road (BR) Project. The following official species list (proposed, candidate, threatened, and endangered species) was obtained from United States Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) website for the Project Study Area:

Species	Status	Critical Habitat
Plants		
Eastern Prairie Fringed Orchid (*Platanthaera leucophaea*)	Threatened	Moderate to high quality wetlands, sedge meadow, marsh, and mesic to wet prairie.
Lakeside Daisy (*Hymenopsis herbacea*)	Threatened	Found in dry rocky prairies.
Leafy-prairie Clover (*Dalea foliosa*)	Endangered	Prairie remnants on soil over limestone
Mead's Milkweed (*Asclepias meadii*)	Threatened	Late successional tallgrass prairie, tallgrass prairie converted to hay meadow, and glades or barrens with thin soil.
Reptiles & Amphibians		
Eastern Massassagua (*Sistrurus catenatus*)	Threatened	Graminoid dominated plant communities (fens, sedge meadows, peat lands, wet prairies, open woodlands, and shrublands).

Mammals		
Northern long-eared bat (*Myotis septentrionalis*)	Threatened	Hibernates in caves and mines – swarming in surrounding wooded areas in autumn. Roosts and forages in upland forests and woods.
Invertebrates		
Hine's Emerald Dragonfly (*Somatochlora hineana*)	Endangered	Spring fed wetlands, wet meadows, and marshes. Within Cook County, critical habitat has been designated along the DPR.
Rattlesnake-master Borer Moth (*Papaipema eryngii*)	Candidate	Undisturbed prairie and woodland openings that contain their single food source, rattlesnake master (*Eryngium yuccifolium*).
Sheepnose Mussel (*Plethobasus cyphyus*)	Endangered	Found in large rivers and streams where it is usually found in shallow areas with moderate to swift currents over coarse sand and gravel. Over course sand and gravel mixture. Host specific species with glochidia found only on Sauger (*Stizostedion canadense*) in the wild. In that lab, glochidia have successfully transformed on Fathead Minnow (*Pimephales promelas*), Creek Chub (*Semotilus atromaculatus*), Central Stoneroller (*Campostoma anomalum*), and Brook Stickleback (*Culaea inconstans*).

Correspondence received from USFWS in reference to a Request to Comment letter, dated February 18, 2015, stated there are no federally listed species at or near the BRLD location. Therefore, USFWS does not have specific concerns about the potential effects of control technologies on federally-listed species at or near BRLD (Enclosure 1). Additionally, the areas under consideration within the vicinity of BRLD are areas that have been previously degraded. For these reasons, USACE determines the GLMRIS-BR Project will have "No Effect" on listed species or proposed or designated critical habitat.

The District is requesting USFWS to provide concurrence with this determination in order to proceed with the project. Please provide any other comments, concerns, or questions you may have regarding this Project within 30 days of receipt of this letter. Address your responses to Mrs. Kat Herzog of our Environmental Planning Branch by telephone (309) 794-5231, in writing to our address above (ATTN: Environmental Planning Branch -Herzog), or email: Kathryn.herzog@usace.army.mil.

Enclosures (2)

Sincerely,

Kenneth A. Barr
Chief, Environmental Branch (RPEDN)

United States Department of the Interior

FISH AND WILDLIFE SERVICE

5600 American Boulevard West, Suite 990
Bloomington, Minnesota 55437-1458

IN REPLY REFER TO:

FWS/AF

FEB 18 2015

Ms. Susanne J. Davis, P.E.
Chief, Planning Branch
U.S. Army Corps of Engineers -Chicago District
231 South LaSalle Street, Suite 1500
Chicago, Illinois 60604

Dear Ms. Davis: Sue

The U.S. Fish and Wildlife Service (Service) appreciates the opportunity to provide comment to the U.S. Army Corps of Engineers (COE) within the formal evaluation of potential aquatic nuisance species control technologies in the vicinity of Brandon Road Lock and Dam (BRLD) under the Great Lakes Mississippi River Interbasin Study (GLMRIS). We respectfully submit the comments and recommendations provided below under the Fish and Wildlife Coordination Act (FWCA) (48 Stat. 401, as amended; 16 U.S.C. § 661 et seq.), Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. § 1531 et seq.), the Migratory Bird Treaty Act (MBTA) (49 Stat. 755, as amended; 16 U.S.C. § 702 et seq.), the Great Lakes Fish and Wildlife Restoration Act of 2006, and the Service's Native American Policy of 1994.

These comments are provided as combined input from the Service's Region 3 Fisheries and Ecological Services programs.

- *There are no federally listed species at or near the BRLD location. Therefore, the Service does not have specific concerns about the potential effects of electric and/or carbon dioxide barriers on federally-listed species at BRLD. Seismic water guns could impact nesting bald eagles, and possibly other migratory bird species, through noise disturbance. The Service can work with the COE to determine if there are any active or inactive eagle nests within approximately 0.5 miles of the BRLD. If so, we can recommend conservation measures to avoid take or work with the COE on a bald eagle non-purposeful take permit.*

- *Chemical controls may impact migratory birds, bald eagles, and possibly federally listed species, depending on the scope of application. We recommend COE work with the Service and the U.S. Geological Survey to determine the ecological risks of any chemical controls proposed in any alternative. The Service can also work with the COE to determine if any alternatives that include chemical control pose a risk to listed species.*

- *The COE should determine whether any potential alternatives would result in changes in water volume or hydrologic regimes. If an alternative results in changes in changes in*

- *water quantity or the natural flow regime, the COE should consider impacts to the federally endangered Hine's emerald dragonfly in the Des Plaines River and its floodplains. In addition, the COE should consider impacts to federally listed species that occur downstream in the Illinois River and its floodplains, including the sheepnose and scaleshell mussels, decurrent false aster, and eastern prairie fringed orchid. The Service can work with the COE to determine if any alternatives that include water withdrawal or hydrologic separation pose a risk to listed species.*

- *The Service recommends that selected alternatives and implemented control actions at the BRLD support obligations and legal requirements of the federal government to protect and support treaty fishing rights of federally recognized tribes in the Great Lakes.*

- *The Service recommends that the COE consider a potential revision of GLMRIS Species List to include the addition of high risk species and deletion of low risk species based on the most current information available on and population status and trends and risk of introduction for aquatic invasive species identified within the basins (e.g. the addition of black carp). Additionally, all life stages of each species should be addressed (egg, larval, juvenile, and adult) since they carry different modes of transport/invasion and therefore risk to any barrier. Subsequently, based on any revision to the GLMRIS Species List, a revision of related Risk Management Implications (i.e., controls) may be advisable. This additional information should be used to inform selection of a preferred alternative for implementation at BRLD.*

- *The Service recommends the following criteria for consideration for selection of the preferred alternative for implementation at BRLD:*
    - *Being effective (see next bullet), efficient (based on cost of construction and operations, and time to complete construction/implementation), and environmentally sound (causing no significant impact to trust resources)*
    - *Effectiveness of the preferred alternative should be considered acceptable if the alternative prevents/reduces risk of two-way invasive species exchange between the Great Lakes and Mississippi River basins.*

- *The Service looks forward to working with the COE to provide technical assistance during the process of selecting the preferred alternative and other options for consideration under the NEPA process (e.g., a formal risk analyses could be conducted, with assistance from the Service, to evaluate [invasive species exchange] risk reduction under various alternatives). Based on that analysis (of effectiveness), along with an analysis of efficiency (cost and time to complete construction/implementation), and environmental soundness (causing no significant impact to trust resources), a preferred alternative could be selected. Additionally, COE should consider use of Service capacity and expertise assist in evaluating effectiveness of the controls, after construction and implementation (dependent on availability of resources).*

- *We recommend the preferred alternative consider the use of an integrated combination of technologies such as:*
    - *Electrical barrier/s [substantial risk reduction of invasive species exchange between the two basins],*
    - *CO2 deterrent [protection of mainly upstream directional invasion], and*
    - *Either sound or sound-bubble deterrent system [depending on placement, and number of systems, could reduce risk of invasive species exchange]*

- *The Service recommends the COE continue and (where possible) expand, the current on-going efforts identified in the GLMRIS report under Alternative 1: Sustained Activities, to include:*
    - *Continue the extensive multi-agency monitoring efforts above and below the electrical dispersal barrier currently underway and those recommended by the ACRCC Monitoring and Response Work Group*
    - *Continue operation of the existing electrical dispersal barrier system locates in Romeoville, Illinois, including on-going efforts to increase the effectiveness of the barrier system,*
    - *Continue efforts to identify new effective control technologies,*
    - *Continue contracted commercial designed to further reduce Asian carp populations in Upper Illinois River, and*
    - *Continue on-going outreach and education efforts.*

- *The Service recommends the COE consider implementation of actions identified in the GLMRIS report under Alternative 2: Nonstructural Control Technologies (to reduce the risk of the priority species of concern transferring between the Great Lakes and Mississippi River basins in the CAWS, including Asian carp) in advance of the implementation of longer-term effective barriers. This could be accomplished through the development of monitoring, management and control plans and implementation of nonstructural controls including removal, chemical control, controlled waterway use, and education programs.*

We look forward to remaining engaged with the COE on this important project through the GLMRIS Executive Steering Committee and our authorities under the FWCA, or as requested by you and your staff, and are available to discuss at any point. Please contact Mike Weimer at mike_weimer@fws.gov (703-517-7624) if you have any questions or require additional information.

Sincerely,

Charlie Wooley

Charles M. Wooley
Acting Regional Director

DISTRIBUTION LIST

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IN REPLY REFER TO:

FWS/ES

NOV 23 2016

Mr. Kenneth Barr
Chief, Environmental Branch
U.S. Army Corps of Engineers
Rock Island District
PO Box 2004, Clock Tower Building
Rock Island, Illinois 61204-2004

Re: GLMRIS-Brandon Road Project Section 7 Consultation

Dear Mr. Barr:

This letter responds to your November 18, 2016 letter requesting concurrence that the Great Lakes and Mississippi River Interbasin Study (GLMRIS)-Brandon Road (BR) Project would have no effect on federally listed species. The U.S. Fish & Wildlife Service (Service) concurs that no federally listed species occur at or near the Brandon Road Lock and Dam project location. We acknowledge your no effect determinations; however, the implementing regulations under section 7(a)(2) of the Endangered Species Act do not authorize or require the Service to review or concur with a no effect determination.

We appreciate your efforts to prevent and control the upstream movement of aquatic invasive species into the Great Lakes, and we look forward to continuing to work with you on the GLMRIS-BR Project under the Fish and Wildlife Coordination Act.

Sincerely,

Alisa Shull

Alisa Shull
Chief, Division of Endangered Species
Ecological Services

cc: USFWS, Chicago Ecological Services Field Office
USFWS, Midwest Regional Office, Fisheries Program