

IEPA Log No.: **C-0068-20**
CoE appl. #: **USACE-MVS**

Public Notice Beginning Date: **August 6, 2020**
Public Notice Ending Date: **August 27, 2020**

Section 401 of the Federal Water Pollution Control Act
Amendments of 1972

Section 401 Water Quality Certification for Discharge of Dredged or Fill Material

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency
Bureau of Water
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-3362

Name and Address of Discharger: U.S. Army Corps of Engineers – 1222 Spruce Street, St. Louis, MO
63103

Discharge Location: Near Lockhaven in Sections 25, 26, 27, 34, 35, and 36, Range 11-West, Township 6-North in Jersey County and Section 31, Range 10-West, Township 6-North in Madison County

Name of Receiving Water: Mississippi River

Project Description: Proposed Mississippi River habitat restoration and enhancement project consisting of construction that will provide a river training structure that will increase velocity over existing conditions to improve sediment transport & geomorphic processes within Piasa Chute, increased connectivity between Piasa Island backwater and the Mississippi River, and increase the aerial extent of islands on the Mississippi River.

The Illinois Environmental Protection Agency (IEPA) has received an application for a Section 401 water quality certification to discharge dredged or fill material into the waters of the State associated with a Section 404 permit application received by the U.S. Army Corps of Engineers. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. The last day comments will be received will be on the Public Notice period ending date unless a commenter demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters shall provide their names and addresses along with comments on the certification application. Commenters may include a request for public hearing. The certification and notice number(s) must appear on each comment page.

The attached Fact Sheet provides a description of the project and the antidegradation assessment.

The application, Public Notice/Fact Sheet, comments received, and other documents are available for inspection and may be copied at the IEPA at the address shown above between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the certification application, the IEPA may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing. If a Section 401 water quality certification is issued, response to relevant comments will be provided at the time of the certification. For further information, please contact Darren Gove at email darren.gove@illinois.gov or phone no. 217/782-3362.

DRG:C-0068-20_401 PN and FS_12May20.docx

Fact Sheet for Antidegradation Assessment
For U.S. Army Corps of Engineers
IEPA Log No. C-0068-20
COE Log No. USACE-MVS
Contact: Angie Sutton 217/558-2012
Public Notice Start Date: August 6, 2020

U.S. Army Corps of Engineers ("Applicant") has applied for a 401 Water Quality Certification for impacts associated with Phase 1 Construction of Eagles Nest and Piasa Islands Habitat Rehabilitation and Enhancement Project (HREP). The project site is located in Sections 25, 26, 27, 34, 35 and 36, Range 11 West, Township 6 North in Jersey County and Section 31, Range 10 West, Township 6 North in Madison County. The HREP area is located between river miles (RM) 207.5 and 211.5, consisting of approximately 1,381 acres of island, side channel, and backwater habitats located on the left descending bank of the Mississippi River, upstream of Alton, Illinois. The project will construct a river training structure to increase velocity to improve sediment transport and geomorphic processes within Piasa Chute, increase connectivity between Piasa Island Backwater and the Mississippi River, and increase the aerial coverage of islands on the Mississippi River. Structures and improvements will be provided by placement of limestone rock, and dredged gravel, sand and silt/clay. The river training structure will be constructed with the placement of rock to create a rock dike using 54,540 cubic yards (CY) of 5000 lb top size stone. Stone sediment containment rings will be placed for each of the four islands to be constructed in Phase II of construction. The rings will increase dredge placement efficiency and maintain island integrity during high flow events. These containment rings will require 147,038 CY of 5000 lb top size stone. A total of 202,000 CY of commercial quarry stone will be obtained for use in the project area. Mechanical dredging and sediment placement of approximately 1000 CY of material will occur as material is moved for placement of the island base. The dredged sediment will be used as fill for the islands. This project will provide restoration of degraded island habitat and improve water cover for migratory and resident wildlife as part of the Upper Mississippi River Restoration Program and the Illinois Department of Natural Resources (IDNR) will manage the lands and waters as a national wildlife refuge to enhance fish and wildlife.

Information used in this review was obtained from the application documents dated June 10, 2020, May 12, 2020, and July 7, 2020.

Identification and Characterization of the Affected Water Body.

The Mississippi River has 21,330 cfs of flow during critical 7Q10 low-flow conditions and is classified as General Use Water. The Mississippi River is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System* nor is it given an integrity rating in that document. The Mississippi River, Waterbody Segment IL_J-05, is listed on the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for primary contact recreation with a potential cause given as fecal coliform, and fish consumption with potential causes given as mercury and polychlorinated biphenyls (PCBs). Aesthetic quality, aquatic life use and public and food processing water supplies use are fully supported.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

The pollutant load increases that would occur from this project include some possible increases in total suspended solids. These increases are a normal and unavoidable result of commercial dredging and stone placement. Increases are expected to be local and temporary and without significant amounts of material leaving the project area. Water quality monitoring may be performed during excavation to assure water quality standard compliance. Additionally, the large rip rap stone placement would be considered clean discharge.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in total suspended solids would be local and temporary with dredging activities. The construction of the proposed islands will result in permanent placement of stone and dredged material.

Dredged material would be used beneficially to construct the proposed project features. Rip rap stone placement will serve as a sediment curtain for placement of dredged sediments within the containment rings. Adverse impacts to water quality caused by dredge and fill activities are expected to be minimal and only mimic the water quality of the river during which high flow events cause similar resuspension. Dredged material would be used beneficially to construct the proposed project features and temporary placement of fill will be done so as to avoid and minimize impacts to natural features. In the event temporary material stockpiles are required, the staging areas will be created in manner that avoids wetland impacts. Stone used to construct the stone protection of the islands will be transported to the project site by barge which will also hold the heavy equipment necessary to place the stone to construct features. Stone placement will limit erosion and protect the integrity of the constructed island by keeping the dredged material in place. Rock for the island and notched rock structures have been sized to withstand floodwater force and are therefore expected to remain in place. Project features will be designed with stable slopes and positioned to minimize impacts to forest habitats. Aquatic and terrestrial vegetation impacts will be temporary in the project area with construction being scheduled in order to avoid threatened and endangered species. Best management practices (BMPs) will be observed to minimize impacts. Long term impacts of the project will consist of improvements to the depth and velocity within Piasa Chute, and increased depth and connectivity of Piasa Island Backwater and sandbars will provide long term benefits to fish and wildlife. Benthic habitats will permanently be removed however, these impacts will be outweighed by the benefits anticipated from improving aquatic habitat, reconnecting back water and creating island habitats. Rock used to construct project features are expected to be colonized by benthic organisms.

Purpose and Social & Economic Benefits of the Proposed Activity.

The proposed project will provide long-term benefits to aquatic habitat and wildlife. Fish and wildlife habitat would be enhanced and the overall ecosystem functionality of Piasa and Eagle's Nest Islands will be improved. The *Upper Mississippi River System Habitat Needs Assessment* (Theiling, et al., 2000) has identified in Pool 26, a need for restoring the declining side channel habitat and contiguous backwater ecosystems due to increased sedimentation and restoring island habitats from degradation due to lock and dam construction. The project will improve and diversify aquatic and island ecosystem resources within the area. The Upper Mississippi River Restoration Program was authorized the Water Resources Development Act (WRDA) of 1985 (P.L. 99-662), Section 1103, the Upper Mississippi River Plan.

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.

The Upper Mississippi River Restoration – Environmental Management Program was authorized by Congress in Section 1103 of the Water Resources Development Act of 1986 (Public Law 99-662), as amended. The proposed project would be funded and constructed under this authorization. The *Feasibility Report with Integrated Environmental Assessment, Upper Mississippi River Restoration Program, Piasa and Eagle's Nest Islands Habitat Rehabilitation and Enhancement Project, Jersey and Madison Counties, Illinois* assisted in analysis of alternatives for the project. The report, in association with the Section 404(b)(1) evaluation, resulted in a designated Recommend Plan which provides a large number of environmental benefits and best met project objectives. Alternatives were evaluated for completeness, effectiveness, efficiency and acceptability and the ones considered included more features than the Recommended Plan. No other practical alternatives, less damaging to the aquatic environment, have been identified that would meet the project goal and objectives better than the Recommended Plan.

Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities.

An EcoCAT endangered species consultation was submitted on July 7, 2020 to the Illinois Department of Natural Resources and is currently under review. Presence of endangered species is discussed in the Biological Assessment in the Feasibility Report. No adverse effects are expected as a result of this project.

Agency Conclusion.

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time this assessment was written. We tentatively find that the proposed activity would result in the attainment of water quality standards; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity would benefit the Mississippi River and associated area by providing a rock dike to increase velocity and improve sediment transport and geomorphic processes within Piasa Chute and provide rock placement for Phase 2 dredging spoils placement to increase the aerial coverage of islands. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.