

IEPA Log No.: **C-0217-14**
CoE appl. #: **CEMVR-OD-P-2014-639**

Public Notice Beginning Date: **June 10, 2016**
Public Notice Ending Date: **July 10, 2016**

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

Section 401 Water Quality Certification to Discharge into Waters of the State

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: Hager Slough Special Drainage District – 9612 Chandlerville Road,
Beardstown, Illinois 62618

Discharge Location: Near Beardstown in Section 29 of Township 19N, Range 11W of the 3rd P.M. in
Cass County.

Name of Receiving Water: Sangamon River

Project Description: Construction of a sand seepage berm at the landslide toe of Hager Slough Special
Drainage Levee along the Sangamon River

The Illinois Environmental Protection Agency (IEPA) has received an application for a Section 401 water quality certification to discharge 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 call Jenny Larsen at 217/782-0610.

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Fact Sheet for Antidegradation Assessment
For Hager Slough Special Drainage District Levee Repair
IEPA Log No. C-0217-14
COE Log No. CEMVR-OD-P-2014-639
Contact: Diane Shasteen (217) 558-2012
Public Notice Start Date: June 10, 2016

Hager Slough Special Drainage District, (HSSDD, “Applicant”) has applied for a 401 Water Quality Certification for impacts associated with the proposed sand seepage berm (111’ X 3,151’) covering 8.03 acres to be placed along the landside of Hager Slough levee. The non-federal levee was originally constructed in 1975 as authorized by Section 216 of the Flood Control Act of 1970. The U.S. Army Corps of Engineers (Corps) has authority under PL 84-99 to supplement local efforts to repair flood control projects damaged by flood events. The project area is located on the east side of the Sangamon River north of Beardstown in Township 19 North, Range 11 West, Section 29, Cass County. The purpose of the project is to alleviate seepage concerns and material loss due to damages incurred by recent flood events. Record and near record floods were recorded on the Illinois River at Beardstown in April 2013 and July 2015 and a flood of record was reported on the Sangamon River at Chandlerville in January 2016. These flood events have led to a portion of the Hager Slough levee experiencing severe boils, resulting in a loss of material. The proposed sand seepage berm was designed to provide flood risk management against the 5% chance exceedance flood. The levee protects approximately 8,030 acres of agricultural land and is hydraulically connected to the Clear Lake Special Drainage District (CLSDD) that protects nearly 15,000 additional acres. Approximately 77,530 CY of sand will be utilized to create the sand berm. The sand will either be trucked from the Beardstown Dredge Material Management Plan (DMMP) location or be obtained from a dredge cut in the adjacent Sangamon River. The dredge cut area would be in a previously dredged location, approximately 8.64 acres (3,763’ X 100’) and need to be 6’ deep to meet the quantity requirements. Depositional sand would be dredged either mechanically or hydraulically, placed in a pond and pump area and return water will be pumped back into the river upon settling of the sand. The project may require the placement of a turtle habitat mitigation berm in the event of mechanical or hydraulic dredging. The berm would include placement of approximately 12,604 CY of sand at a 6:1 slope along the bank of the Sangamon River. The proposed project will impact 8.03 acres of forested wetland and an additional 4.97 acres of forested wetland which had been previously cleared by the HSSDD for a total of 13 acres of impacts. Wetland impacts will be mitigated at a ratio of 3:1 for restoration of wetlands and 4.5:1 for enhancement of wetlands currently exhibiting all three wetland parameters. The mitigation site, located within the CLSDD, will include a total of 44 acres, 34.9 acres of forested wetland, 6.1 acres of emergent wetland, and a 3 acre buffer, unplanted area to allow for drainage ditch maintenance. The agricultural field site is currently enrolled in the Conservation Reserve Enhancement Program (CREP) until September 2016.

Information used in this review was obtained from the Applicant and the Corps in documents dated from May 2014 to February 2016.

Identification and Characterization of the Affected Water Body.

The Sangamon River (IL_E-25) is a General Use Water with an estimated 7Q10 flow of 248 cfs at this location. According to the draft 2016 Illinois Integrated Water Quality Report and Section

303(d) List, the Sangamon River has been assessed by Illinois EPA and is listed as not supporting Fish Consumption Use. Cause of impairment is listed as Polychlorinated biphenyls (PCBs). The Sangamon River, at this location, is listed as fully supporting Aquatic Life, Primary Contact Recreation, Secondary Contact, and Aesthetic Quality Uses. The Sangamon River, in the project area, 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 Sangamon River, at this location, is not designated as an enhanced water pursuant to the dissolved oxygen water quality standard.

Wetlands in the project area were delineated by the Corps in September 2013. All data points sampled (1-23) were within a wetland. The seepage berm project will impact approximately 8.03 acres of forested wetlands. An additional 4.97 acres of forested wetland had been previously cleared by the HSSDD and are included in the total of 13 acres of impact. A total of 44 acres of forested and emergent wetland will be restored and/or enhanced. Twenty-four acres of the mitigation will be constructed at an 80/20 cost share between the Corps and HSSDD. The remaining 20 acres will be the responsibility of HSSDD without the Corps assistance.

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, a normal and unavoidable result of dredging, may occur in the river at the point of dredge activity, during placement of the seepage berm, or during placement of the turtle mitigation berm. Placement of clean sand for the turtle mitigation berm will impact approximately 108 square feet of Sangamon River shoreline. The project will impact a total of 13 acres of forested wetlands due to the 8.03 acre seepage berm and a previously impact of 4.97 acres of forested wetland by HSSDD.

Aquatic life uses in the portion of the river that will be disturbed during dredging and/or placement of the sand berm may be negatively impacted, but in time, they will recover and support approximately the same community structure as is now found in the existing areas. Due to the size of the river, impacts to aquatic communities should be negligible.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in suspended solids will be local and temporary. Mechanically or hydraulically dredged material will be placed in a pond and pump area and return water will be pumped back into the river upon settling of the sand. Mitigation for loss of soft shell turtle habitat due to dredging may include the creation of a turtle mitigation berm. The berm will be created by placing approximately 12,604 CY of sand at a 6:1 slope adjacent to the dredged area.

Mitigation ratios ranging from 3:1 for restoration and 4.5:1 for enhancement of wetlands for impacts to 13 acres will be accomplished on 44 acres, 34.9 acres of forested wetland, 6.1 acres of emergent wetland, and a 3 acre buffer. A wetland mitigation plan has been developed for HSSDD by Klingner & Associates, P.C. including specific plans for returning and maintaining

site hydrology, site preparation and maintenance, plant types and planting schedule, long-term and adaptive management and monitoring plans.

Purpose and Social & Economic Benefits of the Proposed Activity.

The purpose of this project is to alleviate seepage concerns and material loss due to damages incurred by recent flood events on the Sangamon and Illinois River. These flood events have led to a portion of the Hager Slough levee experiencing severe boils, resulting in a loss of material. The proposed sand seepage berm was designed to provide flood risk management against the 5% chance exceedance flood. However, in its current condition the area may flood during a 50% chance exceedance flood event. The levee protects approximately 8,030 acres of agricultural land and is hydraulically connected to the Clear Lake Special Drainage District (CLSDD) that protects nearly 15,000 additional acres. Additionally, 14 residences are protected by the levee system. Flooding would prevent agricultural use of the land and severe economic hardship would result to the owners of these lands and dwellings.

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

Project alternatives considered by the Corps and HSSDD included the No-Action, Nonstructural Flood Recovery/Floodplain Management, and Structural Repair alternatives listed below.

No Action

- No emergency levee repairs under PL 84-99 authority or funding sources
- Levee protected area contains 8,030 acres of agricultural lands, 14 residences, and an additional 15,000 acres in the CLSDD
- Protected lands would not be suitable for continued agricultural purposes during a 50% chance exceedance flood event
- Severe economic hardship to owners of agricultural lands and dwellings
- If HSSDD would attempt repairs without federal assistance, the repairs may not be to Corps standards or completed in a timely manner

Nonstructural Flood Recovery/Floodplain Management

- Change in land use offered by other federal and state programs
- Acquisition, relocation, elevation, and flood proofing existing structures
- Rural land easements and acquisitions
- Restoration of wetland
- Not an acceptable alternative to land owners or the HSSDD

Structural Repair Alternatives

- Sheet pile, slurry cut-off wall, or relief wells
- Cost estimates were developed for these options along with wetland mitigation
- These alternatives were determined to be cost prohibitive, exceeding the cost for the recommended structural repair

Seepage Berm Structural Repair Alternative

- Placement of a sand seepage berm along the landside toe of the levee
- Restores levee condition to pre-flood event condition, a 5% chance exceedance design level of protection
- Repairs necessary to protect the drainage and levee district and its levee system from further damage
- Fully supported and desired by landowners and HSSDD

The placement of the sand seepage berm along the HSSDD levee and potential dredging of the Sangamon River will follow conditions set forth by the Agency and USACE. The least intrusive alternative would be to not construct the berm or dredge the channel. This is not an acceptable alternative given the need to protect approximately 23,000 acres of agricultural lands and 14 residential structures.

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

Comments have been received from IDNR and Office of Water Resources (OWR) for project number 1605878. Consultation resulted in the identification of the smooth softshell turtle (*Apolone mutica*), Illinois chorus frog (*Psuedacris illineonsis*), and decurrent false aster (*Boltonia decurrens*) as protected resources. An OWR permit submitted through EcoCAT for review is currently pending. Recommendations have been made by IDNR regarding these species including work restriction dates for the Illinois chorus frog, providing a sand beach area for the smooth softshell turtle, and translocation, seed collection, and surface soil conservation practices for the decurrent false aster. IDNR recommends no work be conducted on the proposed levee project and no ground disturbing work be conducted within the mitigation area from February 15 through June 30 to avoid impacts to the Illinois Chorus Frog. If dredging is the selected alternative, an additional 12,604 CY of sand may be placed at the riverside toe of the levee as beach nourishment to promote turtle habitat and nesting. An IDNR Incidental Take Authorization consultation is ongoing at this time. IDNR stated the following in a letter sent to IEPA on March 28, 2016, "Given the ongoing coordination on this project, the Department has no objections to the issuance of a 401 IEPA permit." Consultation for IDNR Project # 1605878 was therefore terminated on March 28, 2016.

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 will 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 will benefit HSSDD, local residents and agricultural producers, and the adjoining drainage district by protecting approximately 23,000 acres of

agricultural lands and 14 residential structures located in the river floodplain. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.