IEPA Log No.: **C-0702-11**
CoE appl. #: **CEMVR-OD-P-2011-1447**

Public Notice Beginning Date: **January 13, 2016**
Public Notice Ending Date: **February 3, 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: Hunt-Lima Drainage and Levee District – 705 LaFayette Street, Warsaw, IL 62379

Discharge Location: Mississippi River miles 341 to 359 and near cities of Warsaw and Meyer in Hancock and Adams County.

Name of Receiving Water: Unnamed wetlands and unnamed tributaries within Taylor Slough and the Lima Slough watersheds.

Project Description: Proposed hydraulic dredge disposal of Mississippi River sediment behind levee to create stockpiles of sand to be used to widen levee system.

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 Darren Gove at 217/782-3362.

DRG:C-0702-11_401 PN and FS_16Nov11.docx

Fact Sheet for Antidegradation Assessment
For Hunt-Lima Drainage and Levee District
IEPA Log No. C-0702-11
COE Log No. CEMVR-OD-P-2011-1447
Contact: Brian Koch (217) 785-4116
Public Notice Start Date: January 13, 2016

The Hunt-Lima Drainage and Levee District ("District") has applied for a 401 water quality certification for permanent wetland impacts associated with proposed widening of their levee system. The project purpose is to widen the levee system which will afford seepage rate reductions and allow materials to be available for potential future improvements to a level of protection capable of withstanding a 100-year flood event to meet FEMA Certification requirements. The project site encompasses a 20.5 mile stretch of river extending from Warsaw, Illinois (Station 111+50) downstream to southeast of Meyer, Illinois (Station 1198+50). Fill material would be composed of primarily course grained Mississippi River sediment obtained from stockpiles resulting from the planned dredging of approximately 790,000 cubic yards of material from 3 locations within the Mississippi River.

Completion of the project would permanently fill 7.25 acres of emergent wetlands and 0.76 acres of forested wetlands (8.01 total acres) at 14 different sites. The forested wetlands are composed of eastern cottonwood, birch, green ash, elm, red oak, silver maple, and sycamore trees. The emergent wetlands are predominated by reed canary grass with some emergent wetlands including chufa and horsetail. Any temporarily impacted wetlands would be restored to pre-existing conditions upon completion of project work. Compensatory mitigation would be provided for the permanent wetland impacts by restoring and enhancing a pre-existing wetland area located south of Meyer, Illinois, near the south end of Martin Lake. This site was disturbed during catastrophic flooding events and levee breaks in 1993 and 2008. A total of 10.07 acres of non-wetland area at this site would be restored to wetland area, 7.79 acres of which would be emergent wetlands, and the remaining 2.28 acres being forested wetlands. Trees to be planted include Pecan, Shellbark Hickory, Green Ash, Sycamore, Swamp White Oak, Pin Oak, and River Birch. Plantings would consist of bare root seedlings and species would be mixed to promote diversity throughout the wetland. The emergent wetland seed mix would be composed of a variety of grasses, sedges, and rush, which would establish wetlands of quality greater than those to be impacted. A buffer of native grasses would be planted between the mitigation area and any adjacent farmland. Establishment maintenance is expected to last three years and will rely on quarterly inspections to administer corrective actions to accomplish the mitigation plan's performance standards. If rainfall is not sufficient while the plantings are being established, the seeded areas would be irrigated. Following plant establishment, short term maintenance including weed control and replanting as needed based on bi-annual inspections will be conducted. Short term maintenance and annual monitoring will continue until performance standards are met and the applicant is released from further monitoring by the Corps. The mitigation site would be protected from development in perpetuity by means of a conservation easement.

Information used in this review was obtained from the document titled Engineering Report; Section 10 / 404 / 408 Submittal for Proposed Levee Width Modifications for Hunt-Lima Drainage & Levee District, in Adams & Hancock Counties, Illinois; March 2013; Revised: June 12, 2015, Comprehensive Wetland Mitigation Plan dated June 9, 2015, and Antidegradation Assessment Memorandum dated December 23, 2015.

Identification and Characterization of the Affected Water Body.

The unnamed wetlands along the project site have zero 7Q10 flow and are General Use waters. The waters have not been assessed under the Agency's 305(b)/303(d) program and have not been given an integrity rating or been listed as biologically significant in the 2008 Illinois Department of Natural

Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System*. The water bodies are not enhanced in regards to the dissolved oxygen water quality standard.

Decant water from the four sediment stockpile locations would flow into the headwaters of small drainage ditches, none of which have been assessed by the Agency due to their small sizes. Decant water from Stockpiles No. 1, No. 2, No. 3 and No. 4 would be received by an unnamed tributary of Long Pond, an unnamed tributary of Taylor Slough, an unnamed tributary to Lima Slough, and another unnamed tributary of Lima Slough, respectively. All of the unnamed tributaries are General Use water bodies with zero 7Q10 flow. Given that the watershed area for each tributary near the stockpile locations range from 0.07-0.2 miles^2, these tributaries are also recognized as possessing zero 7Q1.1 flow. The waters have not been assessed under the Agency's 305(b)/303(d) program and have not been given an integrity rating or been listed as biologically significant in the 2008 Illinois Department of Natural Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System*. The water bodies are not enhanced in regards to the dissolved oxygen water quality standard.

At the request of the Agency, the Applicant provided an additional characterization of these drainage ditches, which was provided in their Antidegradation Assessment Memorandum received on December 30, 2015. Given the small watershed sizes of the unnamed tributaries, a biological characterization was not required. However, the Applicant provided biological information from the Nutwood and Hartwell Drainage and Levee Districts, which are physically very similar to the Hunt-Lima District given the straightened, channelized nature of these drainage ditches. In order to physically characterize the drainage ditches in support of this project, six study reaches within the Hunt-Lima District were selected, three of which were located in the Taylor Slough watershed (downstream of Stockpile No. 1 and 2) and the remaining three being located in the Lima Slough watershed (downstream of Stockpile No. 3 and 4). Each study reach was characterized using the Rosgen Stream Classification technique and the results were provided in tabular form. The six study reaches were similar in that they all possessed extremely low sinuosity, slope, and entrenchment, all of which are characteristic of manmade engineered waterways built in floodplains. While a chemical analysis of the study reaches was not conducted, the Applicant has stated that, prior to dredging, grab samples would be collected upstream of the Hunt and Lima Lake pump stations for a variety of organics and metals, as well as basic parameters such as temperature, pH, and dissolved oxygen.

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

Construction activities would likely result in increases of suspended solids to the impacted wetland areas. Permanent fill activities would remove the aquatic life uses of filled wetland areas, but these impacts would be offset with wetland mitigation. Temporarily impacted wetland areas would be restored to pre-project conditions following construction and should support the same community structure currently found.

The proposed hydraulic dredging operation will likely result in increases of suspended solids discharged to unnamed waterbodies on the landward side of the levee. Particle size analysis of the proposed source material within the Mississippi River indicates that the material is predominantly sand. Four sediment basins will be constructed using in-situ materials as well as dredged materials. Each of the sedimentation basins will be equipped with a discharge flow control structure (weir) to maximize sedimentation. Monthly discharge monitoring reports will be required for each of the sedimentation basins in accordance with state water pollution control permits.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in suspended solids would be local and temporary. Erosion control measures would be utilized to minimize any increase in suspended solids and prevent further impact to the water bodies. Loss of aquatic life uses in the wetlands that will be permanently filled would be offset with wetland mitigation. Sedimentation treatment provided by the constructed sedimentation basins will minimize increases in suspended solids in hydraulic dredging return flows discharged to waters of the United States.

Purpose and Social & Economic Benefits of the Proposed Activity.

The project purpose is to widen the levee system to reduce seepage and to accumulate available material for potential future improvements of the levee system's level of protection . By not proceeding with the proposed activities, the social and economic impact of levee disrepair could be substantial.

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

All practicable steps have been taken to avoid and minimize impacts to wetlands while still meeting the project goals. The slope of the proposed levee modifications have been carefully designed to keep the toes of the levee out of wetland areas. Other than a "no action" alternative, the District's only other alternative that would minimize wetland impacts would be to utilize a different material to widen the levee. However, the cost to install a floodwall of concrete or aluminum sheet pile along the ~20 miles of levee would be $31 million and $14.5 million, respectively, which is economically unreasonable for the District and would also be impractical given that the amount of wetland impacts along this lengthy stretch of levee is minimal and the impacts would be mitigated for. A "no action" alternative is not viable given the levee failures the District has experienced in the past and the cost of these damages in regards to levee repair, as well as economic losses due to inundated cropland.

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

The applicant submitted a request for consultation under the IDNR EcoCAT system on May 29, 2015. The department evaluated this information and concluded that adverse effects are unlikely. Consultation terminatation was provided in a June 4, 2015 letter from IDNR.

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 the assessment was written. We tentatively find that the proposed activity would result in the attainment of water quality standards; that all existing uses of the wetlands would be maintained or mitigated; 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 provide social and economic benefits to the community at large by providing public safety from flooding events. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.