

**Illinois Environmental Protection Agency  
Bureau of Water, Permit Section  
(IEPA)**

1021 North Grand Avenue East, Post Office Box 19276, Springfield, Illinois 62794-9276, 217/782-3362

The IEPA has issued a Public Notice of a request for a Clean Water Act Section 401 water quality certification that would allow the issuance of a federal permit for the discharge of pollutants to waters of the State.

**Public Notice Beginning Date:**

Monday, September 25, 2023

**Public Notice Ending Date:**

Monday, October 16, 2023

**Agency Log No.: C-0144-21**

**Federal Permit Information:** Federal permit/license no. MVS-2014-422 is under the jurisdiction of St. Louis District, Regulatory Branch U.S. Army Corps of Engineers

**Name and Address of Discharger:** IDNR Region V Office, Southern Illinois, Ned Enrietto, Landscape Architect - Cache River approximately 1.8 miles southeast of Perks Illinois, Perks, IL 62923

**Discharge Location:** In Section 13 of Township 14-South and Range 1-East of the East 3rd Principal Meridian in Pulaski County. Additional project location information includes the following: Cache River approximately 1.8 miles southeast of Perks Illinois, Perks, IL 62923

**Name of Receiving Water:** Cache River

**Project Name/Description:** Cache River Dredging - proposed hydraulically dredging the lower Cache River between Long Reach Road Illinois and 1.25 miles west of Route 37. Dredged material will be placed into an existing sedimentation basin and return water released to the Cache River.

**Construction Schedule:** Undetermined

The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters must provide their name and address along with comments on the certification request. The IEPA Log number must appear on each comment page. Commenters may include a request for public hearing. Only hearing requests and comments that pertain to Clean Water Act Section 401 authority will be considered. This authority provides consideration of whether the permit or license would be consistent with Sections 301, 302, 303, 306, or 307 of the CWA, as well as "any other appropriate requirement of State [or tribal] law". Requests for additional comment period must provide a demonstration of need. The final day of comment acceptance will be on the Public Notice Ending date shown above, unless the IEPA grants an extended notice period. The attached Fact Sheet provides a detailed description of the project and the findings of the IEPA's antidegradation assessment.

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 see the contact information below.

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Post Document. No. C-0144-21-09252023-PublicNoticeAndFactSheet.pdf

Illinois Department of Natural Resources (“Applicant”) has applied for a 401 Water Quality Certification for impacts associated with hydraulic dredging in Township 14 South, Range 10 East, Sections 13 and 14, in Pulaski County, Illinois. The project site is located between Long Reach Road and approximately 1.25 miles west of Illinois Route 37 (River Mile (RM) 26.8 and RM 28.9) within the main channel of a 2.1-mile-long segment of the Lower Cache River and adjoining swamp areas. Dredging will restore deep water habitat and hydraulic continuity in the project area to a desired 60 foot wide and 6 feet deep segment within the project area.

This is a project renewal which has been previously approved 3/22/2000, 7/23/2009, 4/30/2014, and 2/23/2018. Hydraulic dredging of RM 26.8-27.55 was completed in 2005, however sedimentation has significantly filled those sections, requiring dredging again. IDNR will hydraulically dredge the part of the Lower Cache River, referred to as Long Reach and Short Reach. Use of a floating dredge will be required in the area which will result in minimal disturbance to adjacent natural communities. Spoils will be transported to an existing containment basin by pumping through 8-inch dredge pipe. The containment basin is just south of the river and adjacent to Buttonland Swamp on the Cypress Creek National Wildlife Refuge (USFWS property). Alignment and placement of the dredge outlet pipe may require removal of shrubby or small woody vegetation in order to reach the containment basin. Discharge of the supernatant will occur after sediment has settled and will be returned to the Cache River through Buttonland Swamp.

Deep water aquatic habitat associated with the main channel of the Cache River has been eliminated by sediment deposition instigated by excessive erosion resulting from land clearing and drainage activities that have occurred during the last 100 years. Removal of this excessive and unnatural sediment will restore areas of deep water to this segment of the river, providing benefits for all aquatic and wetland dependent species indigenous to the area. This project will dramatically improve habitat essential for the survival of many species identified within the Illinois Wildlife Action Plan as those in greatest need of conservation within the Cache River Conservation Opportunity Area – especially that part that lies within the Middle Cache Valley (from Cache Chapel Road – Karnak Levee/RM 24.503 – RM 35.631).

Information used in this review was obtained from the application documents dated April 12, 2019, May 20, 2021, June 16, 2021, March 27, 2023, and August 1, 2023.

### **Identification and Characterization of the Affected Water Body.**

The Cache River has 0 cfs of flow during critical 7Q10 low-flow conditions and is classified as General Use Water. The Cache 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 Cache River, Waterbody Segment IL\_IX-05, is listed on the 2020/2022 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for aquatic life use with a potential cause given as dissolved oxygen, and fish consumption use with potential causes given as aldrin, dieldrin, endrin, heptachlor, mirex, polychlorinated biphenyls (PCBs), and toxaphene. Aesthetic quality use is fully supported. The Cache River is not subject to enhanced dissolved oxygen standards.

Buttonland Swamp is an approximately 565-acre wetland in the Lower Cache River Land and Water Reserve owned by the Illinois Department of Natural Resources. It is the northern-most Bald Cypress-Tupelo swamp in the United States and contains forested wetland, emergent woody wetland, open water, and river channel habitats. Buttonland Swamp is within the Lower Cache River Illinois Natural Areas

Inventory site and is recognized for its high-quality swamp, pond, and wet floodplain forest communities. Twelve state-threatened or endangered species (four plants, two birds, two herptiles and four fish) have been recorded within the swamp.

### **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 hydraulic dredging. Dredged materials are to be placed into an existing sedimentation basin. After settlement, water from the sedimentation basin will be discharged back into Cache River through Buttonland Swamp.

### **Fate and Effect of Parameters Proposed for Increased Loading.**

The increase in total suspended solids would be local and temporary. Although the existing benthic habitat would be permanently removed by the dredging activities, it is anticipated to recover and improve over time due to the increase in pool and run habitat depths. These improvements to depth and velocity will also lead to improvements in dissolved oxygen levels.

Turbidity impacts will be minimized by pumping dredged sediment to containment basins located in upland areas adjacent to Buttonland Swamp. These basins will be constructed with dams that will allow supernatant to reenter the swamp once turbidity has decreased to IEPA-approved levels. All turbidity impacts are expected to be temporary and localized to the site active dredging or near the outfall of the containment basin.

### **Purpose and Social & Economic Benefits of the Proposed Activity.**

The proposed project will improve the depth, velocity and in turn dissolved oxygen within the stream. This would be beneficial to the stream by restoring habitat for aquatic plant and animal life that has been previously lost to excessive sedimentation. This project would help to enhance recreational activities with the improvement in water depth. The purpose of the Lower Cache River Land and Water Reserve is to preserve the existing aquatic natural communities. Dredged materials are to be placed into an existing sedimentation basin. After settlement, water from the sedimentation basin will be discharged back into Cache River.

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

The Applicant completed an alternatives analysis during the 2018 renewal process. The preferred action will remain to use a floating dredge to hydraulically remove sediment from the Cache River and deposit spoils into an existing sediment basin.

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

A Comprehensive Environmental Review Process (CERP #1802971) was performed by IDNR and approved on April 12, 2019.

1. The Department has the following requirements to ensure the protection of resources in the proposed work areas:
  - All equipment must be power washed off-site to remove invasive plant seeds or propagules

- an IDNR biologist must approve all routes of access to and from the channel by heavy equipment
  - the entirety of the project area contains imperiled species, listed trees and shrubs will be delineated to avoid damage by side-cast sediment (pertains to previous dredging)
  - and side-cast materials should not impact listed plants, animals or animal hibernacula (pertains to previous dredging)
2. The project was also reviewed for cultural resource impacts and was determined to be in compliance with the Illinois State Agency Historic Resources Preservation Act, with the condition that there be no staging of equipment on the indicated cultural site.

An EcoCAT endangered species consultation submitted on March 27, 2023, to the Illinois Department of Natural Resources resulted in a consultation termination stating the following:

“The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated. The project was also reviewed for cultural resource impacts and was determined to be in compliance with the Illinois State Agency Historic Resources Preservation Act with the condition that all requirements outlined in CERP #1802791 are followed.”

#### **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 Cache River and associated area by improving the dissolved oxygen, and in turn improving aquatic habitat in the channel as a result of increasing channel depth and velocity, and enhancing recreational use by boaters and anglers. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.

cc: Kent Johnson