

IEPA Log No.: **C-0245-08**  
CoE appl. #: **2010-63**

Public Notice Beginning Date: **May 6, 2011**  
Public Notice Ending Date: **June 6, 2011**

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

**Name and Address of Discharger:** Kinkaid-Reeds Creek Conservancy District 1763 Waterplant Road  
Murphysboro, IL 62966

**Discharge Location:** Sec.26 , T8S, R3W, 3<sup>rd</sup> P.M., Jackson County

**Name of Receiving Water:** Kinkaid Lake

**Project Description:** Construct two water and sediment control basins

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 Keith Runge at 217/782-3362.

KAR:PN.0245-10doc

Fact Sheet for Antidegradation Assessment

RE: Kinkaid-Reeds Creek Conservancy District

County: Jackson

IEPA Log No. C-0245-10

COE Log # MVS-2010-63

Contact: Mark T. Books at 217/558-2012

May 6, 2011

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Kinkaid-Reeds Creek Conservancy District (“Applicant”) has purposed the construction of two Water and Sediment Control Basins (WASCOB) to help reduce the amount of sedimentation entering into Lake Kincaid (“Lake”). Lake Kinkaid is a 2,350 surface acre reservoir located in Jackson County that serves as a public water supply for 30,000 people. The Applicant has stated that, “numerous studies, conducted in the past several years have documented that the lake is deteriorating due to various nonpoint sources of sedimentation and nutrient addition. The purpose of this project is to decrease the sediment load that is entering the lake”. The WASCOBs are designed to help increase water quality to Kincaid Lake by trapping nutrient rich sediments, specifically phosphorus from entering the lake. Both detention basins will hold water for a period no greater than twenty-four hours. Once the water is released, the sediment will be trapped upstream of the berms and will be removed on a periodic basis.

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

Lake Kinkaid is a General Use Waterbody. Lake Kinkaid Waterbody Segment IL\_RNC is listed in the Illinois Integrated Water Quality Report and Section 303(d) List-2010 as impaired for fish consumption. The potential cause of impairment for fish consumption is mercury. Lake Kinkaid also has two Total Maximum Daily Load (“TMDL”) limits. One TMDL is for pH and the other is for phosphorus. The drainage area of the Lake is about 38,500 acres. The proposed WASCOBs will be located along the southeastern most edge of Lake Kinkaid.

WASCOB # 1B is identified as one of the proposed basins. One ephemeral stream and one intermittent stream were identified within the proposed location of WASCOB #1B. The ephemeral stream (S2-T1) is a tributary to the intermittent stream (S2) and both flow northward into Lake Kincaid. Construction of this basin will result in the direct impacts to approximately 80 feet of S2. In addition, approximately 439 feet of S2 and 71 feet of S2-T1 will be indirectly impacted by tree clearing and sedimentation. The drainage area for WASCOB #1B is approximately 106 acres.

WASCOB #2 has two intermittent streams within its proposed location (identified as S3 and S4). Construction of this basin will result in direct impacts to approximately 0.015 acres of a wetland. In addition, approximately 369 feet of S3, 771 feet of S4, and 0.068 acres of a wetland will be indirectly impacted by tree clearing and sedimentation. The drainage area for WASCOB #2 is approximately 186 acres.

The Applicant has used the Illinois Stream Mitigation Method document to determine adverse impacts of this proposed project (6,008.13) and to determine riparian restoration credits

generated by the proposed mitigation plan (12,245.30). The mitigation plan includes riparian buffer establishment in three agricultural field streams that flow into the two WASCOBs. These agricultural streams currently have been identified as being moderately incised with extreme sedimentation. The sedimentation within the streams greatly decreases stream habitat. Stream #1 will have 150 feet of buffer added to both sides of the stream, 407 feet long. Stream #2 will have 75 feet of buffer creations on both sides of it and 75 feet of buffer protection on both sides, 720 feet long. Stream #3 will have 100 feet of buffer creation on both sides of it and 50 feet of buffer protection on both sides, 1000 feet long

The IDNR WIRT System list the Timber Rattlesnake as a threatened or endangered species residing in the project area.

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

No pollutant load increases would occur from this project other than some increases in suspended solids during the construction of the two WASCOBs. The existing habitat in the stream will be altered by this project with the construction of the sediment basins.

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

The increase in suspended solids will be local and temporary. Erosion control measures will need to be utilized to minimize any increase in suspended solids and prevent further impact to the lake. Any vegetation or tree clearing necessary to construct the basins or during maintenance work will be completed by mechanically cutting the trees and leaving the root wads. No grubbing or excavation of the wetland soils will occur during the construction of the basins. Construction for the proposed project will also occur during a period of low flow to further minimize any impact. The overall habitat improvement proposed by the mitigation plan will improve the water quality.

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

The detention basin berms were designed to help improve water quality flowing into Lake Kinkaid by trapping nutrient rich sediments, specifically phosphorus from entering the Lake. The WASCOBs are located in two of the watersheds nearest to the Kinkaid Water Treatment Plant the supplies water to the city of Murphysboro and surrounding areas. Applicant has stated that they estimate that both retention basins will prevent approximately 679 tons/year of sediment from flowing into the Lake.

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

The Applicant looked at two alternatives to this proposed project, doing nothing or constructing multiple smaller WASCOBs farther from the Lake, in upper parts of the watershed.

- Doing nothing will result in the continued deposit of approximately 679 tons of sediment into the Lake per year in the immediate vicinity of a drinking water intake structure with an estimated 393 pounds of Phosphorus and 785 pounds of Nitrogen. In addition the Applicant has stated the siltation in the upper portions of the Lake has significantly diminished the quality and availability of fish habitat and doing nothing will allow this problem to worsen.
- Constructing multiple smaller WASCOBs would involve considerable additional cost, time delays, and would result in less effective removal of sediment and nutrients.

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

In a letter from Tracy Evans dated January 18, 2011 the IDNR indicated that an initial report generated through their EcoCAT website indicated the presence of protected resources in the vicinity of the project location. Further review by the IDNR staff concludes that adverse impacts to the protected resources are unlikely; therefore, consultation was terminated with one request;

- The IDNR requested that a survey for snakes, especially Timber Rattlesnakes, be done each day before any earth moving work occurs.

The Applicant is aware of IDNR's request and has agreed to conduct the survey.

**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 will result in the attainment of water quality standards; that all existing uses of the receiving stream will be maintained; 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 the community at large by providing increased storage capacity for Lake Kinkaid, improve recreation and Lake habitat by reducing sedimentation buildup, pH, and Phosphorus levels within Lake. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.