

IEPA Log No.: **C-0434-10**  
CoE appl. #: **LRC-2010-409**

Public Notice Beginning Date: **March 3, 2011**  
Public Notice Ending Date: **April 1, 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  
Permit Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
217/782-3362

**Name and Address of Discharger:** Lake County Division of Transportation – 600 West Winchester  
Road, Libertyville, IL 60048

**Discharge Location:** Near Village of Round Lake in Section 32 of Township 45N, Range 10E of the 3rd  
P.M. in Lake County.

**Name of Receiving Water:** unnamed wetlands

**Project Description:** Proposed 1.74 mile extension of Cedar Lake Road

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.

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Fact Sheet for Antidegradation Assessment  
For Lake County Division of Transportation  
IEPA Log No. C-0434-10  
COE Log No. LRC-2010-409  
Contact: Mark Books; 217/785-6937  
Public Notice Start Date: March 3, 2011

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Lake County Department of Transportation (“Applicant”) has applied for Section 401 water quality certification for construction of 1.74 mile extension of Cedar Lake Road between Town Line Road and Illinois Route 120. The project is being proposed to alleviate traffic congestion in the area. The project is also part of Lake County’s long term transportation plan. Extending Cedar Lake Road at the proposed location will impact 2.25 acres of jurisdictional wetlands and 0.14 acres of Isolated Waters of Lake County (“IWLC”). The project is located in Section 32, Township 45 North, Range 10 East, near the Village of Round Lake.

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

The wetland is a General Use Water with a zero 7Q10 flow. The wetland has not been evaluated by the Illinois EPA Surface Water Monitoring Unit. The wetland is not an enhanced water body pursuant to the dissolved oxygen water quality standard. Using the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, the wetland is not listed as a biologically significant stream nor has it received an integrity rating. The wetlands are the headwaters of an unnamed tributary to Squaw Creek. Squaw Creek is tributary to the Fox River. Impacts are proposed to two jurisdictional wetland areas, Wetland 1 (0.01 acres) and Wetland 4 (2.24 acres) and to three IWLC wetland areas totaling 0.14 acres in size (Wetlands 2, 5B and 5D).

Wetland 1 is part of Lake County ADID Wetland 76 (Round Lake Marsh). Round Lake Marsh is listed as being High Quality Aquatic Resource (“HQAR”) due to the presence of state listed threatened or endangered birds and for its hydrologic and water quality functions. The portion of Wetland 1 proposed to be impacted is characterized by Siberian Elm, Narrow Leaved Cattail, Reed Canary Grass, Tall Goldenrod, Riddel’s Goldenrod, Field Nut Sedge, Buckthorn, and Monkey Flower. The native FQI is 6.7 and the Mean C Value is 3.0, indicating degraded floristic quality.

Wetland 4 is characterized by Broad Leaved Cattail, Reed Canary Grass, Buckthorn, Rough-leaved Dogwood, Tall Goldenrod, Black Willow, Brown Fox Sedge, Yellow Star Grass and an unidentified sedge species. Wetland 4 is not listed in the Lake County ADID study. The native FQI is 7.6 and the Mean C Value is 2.9. For reference the Chicago ACOE considers a wetland to be an HQAR if the FQI is greater than 20 or the Mean C is greater than 3.5, neither of which is met in this wetland.

IWLC wetlands (Wetlands 2, 5B and 5D) are characterized by Reed Canary Grass, Cattails and Ground Cherry. The average FQI for these three wetlands is 4.9 and the average Mean C is 2.0.

The IDNR WIRT System list Yellow-headed Blackbird, Common Moorhen and Least Bittern as threatened or endangered species residing in the project area.

**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 suspended solids in surrounding wetlands during the construction of the project.

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

The increase in suspended solids will be confined to the immediate vicinity of the construction. Erosion control measures will be utilized to minimize any increase in suspended solids during construction. The Applicant intends to implement applicable Best Management Practices (BMP's) in accordance with their Soil Erosion and Sediment Control Plan and the Illinois Urban Manual. To offset the 2.39 acres of total impacted wetlands the Applicant has purchased 3.59 acres of wetland credit from the Squaw Creek Wetland Mitigation Bank (2.39 acres x 1.5 = 3.59 acres - a 1.5:1 ratio).

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

The Applicant has stated that, "this area of Lake County is experiencing tremendous growth and development. The proposed extension of Cedar Lake Road will help ease projected high volumes of north-south traffic between Il 60 and Illinois Route 134. This extension will also serve to increase motor safety along adjacent roadways of Bacon Road and Il 120 in the Village of Round Lake... This will reduce the number of accidents and allow for traffic to flow with greater ease throughout the region."

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

The construction of the proposed project will follow conditions set forth by the Agency and USACE. Erosion control measures will need to be implemented to prevent additional impacts to the wetlands. The Applicant looked at several alternatives to this proposed project including the No-Build option and Alternative Alignment option. The No-Build Alternative does not address the purpose and need for this project. The Alternative Alignment cannot be done because of the need to connect to the existing portion of Cedar Lake Road at the intersections of Il 120 and Towline Road. Applicant has also stated that the proposed road extension cannot be shifted east because of Madrona Ridge residential development and the project could not be shifted west due to impacts to Nippersink Woods Forest Preserve. Applicant has stated the following:

"Once the preferred alignment was outlined, the following measures to further minimize wetland impacts were reviewed; the construction of land bridge, the use of retaining walls, and the steepening of side slopes. The use of a land bridge to avoid impacts to wetland Site 4 would reduce wetland impacts by 1.08 acres; however, costs to construct a land bridge at this location would total 6.6 million dollars; therefore, construction of a land bridge was removed from further consideration... The side slopes along the roadway through the wetland area were studied to minimize wetland impacts. The side slopes adjacent to wetlands have been changed from a standard 4:1 slope to a 3:1 slope to minimize impacts while limiting the use of guardrail... The use of retaining walls at three locations was studied to minimize impacts to wetlands... A 270-foot retaining wall will be installed at the north end of wetland Site 4 to minimize impacts to open water. This will reduce wetland impacts by 0.10 acre and cost an additional \$460,000. In summary, Cedar Lake Road will be constructed with a 270-foot retaining wall along the west side of the roadway adjacent to Site 4 and steepened side slopes will be utilized along both sides of the roadway adjacent to Site 4. The measures to minimize harm will reduce impacts by 0.25 acre and will cost an additional \$460,000."

Concerning reducing the impact of road salt in the area the Applicant has stated the following:

“The Lake County Division of Transportation (LCDOT) has put into place measures to minimize the usage of salt on roadways. Global positioning systems (GPS) on snow plows and other LCDOT vehicles are providing real-time tracking information that is being used to better coordinate services, saving on salt and gas... Additionally, LCDOT has been a leader in blending beet juice with the salt. The result has been a 25 percent reduction of salt, per treatment... A 270-foot retaining wall will be constructed along the west side of Cedar Lake Road to the northern portion of West Site 4. This wall will serve as a barrier between the roadway and the northern portion of West Site 4, thus preventing salt spray and runoff from roadway surfaces from entering this portion of the wetland, which amount to an estimated 85 percent of the West Site 4 wetland... In summary, the specific chloride loading from salt spray was not calculated; however, approximately 49 percent of the high quality area of the wetland will be protected by the retaining wall, the wetland is up gradient position relative to salt spray’s dominant direction, and the anti-icing practices of the ICDOT reduce chloride application.”

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

In a letter from Steve Hamer dated July 20, 2009 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 is terminated.

**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 antidegradation review summary 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 waters 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 the providing a better and safer traffic flow in the area. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.