

IEPA Log No.: **C-0551-10**
CoE appl. #: **2010-443**

Public Notice Beginning Date: **June 27, 2011**
Public Notice Ending Date: **July 18, 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: Illinois Department of Transportation, Division of Highways Region V, District 9, PO Box 100, Carbondale, IL 62903

Discharge Location: Sections 7, 8, 9, 10, 11, 12, T9S, R1&2E of the 3rd P.M. in Williamson County from Carterville to Marion

Name of Receiving Water: Pigeon Creek, Westernairre Creek, Unnamed Stream and Unnamed Wetlands

Project Description: Reconstruction of Illinois Route 13 from Division Street in Carterville to Halfway Road in Marion.

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 Thaddeus Faught at 217/782-3362.

Fact Sheet for Antidegradation Assessment

Illinois Department of Transportation – Pigeon Creek, Westernairre Creek, Unnamed Creek and Unnamed Wetlands – Williamson County

IEPA Log #C-0551-10

COE Log #2010-443

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

June 27, 2011

The Illinois Department of Transportation (“Applicant”) has applied for Section 401 water quality certification for proposed reconstruction of Illinois Route 13 to provide a six-lane roadway section separated by a grassy median from Division Street in Carterville to Halfway Road in Marion. Frontage roads with a separated bicycle path are also proposed throughout the corridor. Route 13 is currently a four lane expressway providing the primary east-west transportation corridor in Southern Illinois that connects the cities of Murphysboro, Carbondale, Carterville, Herrin, Marion and Harrisburg. This project also includes a new railroad overpass for the Burlington Northern/Santa Fe railroad crossing just east of Skyline Drive in Marion. All surface drainage is located within the Big Muddy River Watershed. The following stream crossings will occur because of this project:

- Existing 4x4 box culvert over Pigeon Creek will be extended 8 feet to the north and 18 feet to the south. In addition, 10 tons of class A4 riprap will be installed on the north end of the extension. This will result in total stream impact at this location of 38 feet.
- The new Pigeon Creek crossing on the proposed frontage road will be a 55 feet by 25 feet box culvert. In addition, 100 tons of class A4 riprap will be used on the south end of the structure resulting in total Pigeon Creek impact for this structure being 90 feet.
- Existing 10x5 box culvert over Westernairre Creek will be extended 21 feet on the north end and 15 feet on the south end. In addition, 20 tons of class A4 riprap will be placed 12 feet into the creek on both ends. The total stream impact at this location will be 60 feet.
- Existing 10 by 6 box culvert over the unnamed creek will be extended 37 feet to the north and 52 feet to the south. In addition, 160 tons of class A4 riprap will be placed 15 feet on both ends of the extensions. The total stream impact at this location will be 119 feet.

Normal low flows will be maintained during construction by placing culverts under the causeways or by other applicable and appropriate water re-routing methods. The streams channels will be cleaned and protected with riprap upon completion of the project.

Identification and Characterization of the Affected Water Body.

Pigeon Creek, Westernairre Creek and the unnamed creek are tributaries to the Big Muddy River. The creeks and the wetlands are a General Use Water with a zero 7Q10 flow. The streams and wetlands have not been evaluated by the Illinois EPA Surface Water Monitoring Unit. The streams and wetlands are 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 streams and wetlands are not listed as a biologically significant stream nor has they received an integrity rating. Pigeon Creek and the unnamed creek have a drainage area of less than 0.06 square miles in the project area. Westernairre Creek has a drainage area of 0.74 square miles in the project area. Biological characterizations of streams have not been required because the project will not permanently alter the existing streams habitat conditions.

According to the IDNR WIRT System the Bewick's Wren and the Upland Sandpiper were identified as threatened or endangered species residing in the project area.

There are nine wetlands within the project study corridor. The seven wetlands which will be impacted by this project are described below:

Wetland ID#	Wetland Description	Wetland Quality-FQI #	Impact Acres	Dominant Vegetation	Off-Site Mitigation Ratio	Required Mitigation Acres
1A	Wet Meadow	Fair-11.2	0.025	Reed Grass, English Bluegrass, Sedge	2.0:1	0.05
8	Wet Meadow	Fair-11.1	0.05	Spikerush, Giant Smartweed	2.0:1	0.10
9	Floodplain Forest	Good-25.3	0.77	Green Ash, American Elm, Virginia wild rye, Jewelweed, Panicked Aster	5.5:1	4.24
28	Floodplain Forest	Good-20.1	0.10	Pin Oak, American Elm, Fowl Manna Grass, Japanese Honeysuckle	5.5:1	0.55
35	Wet Meadow	Fair-15.4	0.008	Rush, Inland Rush	2.0:1	0.016
37	Wet Shrubland	Fair-12.6	0.02	Black Willow, Reed Grass	2.0:1	0.04
43	Pond	Fair-17.1	0.5	Spatterdock, Duckweed	2.0:1	1.0
Total			1.473			5.996

Rounding the above numbers, there will be 1.47 acres impacted by this project and the Applicant will purchase 6.0 acres (4.8 acres of floodplain forest and 1.2 acres of wet meadow) from IDOT's Sugar Camp Creek Mitigation Bank, which is in the same Big Muddy River Basin.

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 during the construction of the project. Erosion control measures will be utilized to minimize any increase in suspended solids. Aquatic life uses in the portion of the streams that will be disturbed during construction may be negatively impacted, but in time, they will recover and support approximately the same community structure as is now found in the existing channel.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in suspended solids will be local and temporary. Erosion control measures will be utilized to minimize any increase in suspended solids ("SS") and prevent further impact to the stream. Construction for the proposed project will occur during a period of low flow to further minimize any impact. Applicant has stated the following in regards controlling SS discharges from this project:

“To help reduce the release of total suspended solids into the project area streams during construction, the IDOT Joint Design/Construction Procedure Memorandum on Erosion and Sediment Control will be implemented. Compliance with Section 280 of the IDOT *Standard Specification for Road and Bridge Construction*, adopted January 1, 2007, shall be met.”

The Applicant will also follow a Storm Water Pollution Prevention Plan (“SWPCC”) and a Storm Water Management plan to control storm water discharges from the project area. These plans will include the use of storm water detention/ retention structures, flow attenuation by use of open vegetated swales and natural depressions and velocity dissipation devices.

Purpose and Social & Economic Benefits of the Proposed Activity.

The Applicant has stated the following concerning the purpose and need for this project:

“In conjunction with the regional development and population growth, increased traffic volumes have negatively affected the potential for further economic expansion by creating congestion and delays. A need exists to provide an adequate transportation facility to provide for the effective transfer of goods and services and enhance the potential for continued economic growth...The purpose of the proposed project is to provide for safety and improved traffic mobility and efficiency that are driven by the recent economic growth in the corridor...Continued economic growth is expected resulting in increased traffic volumes, congestion and traffic crashes”.

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 stream. The least intrusive alternative would be to not widen the roadway. This is not an acceptable alternative due to the traffic congestion in the area. The Applicant also looked at three other build alternatives; Build Alternative #1-add lanes with open median, Build Alternative #2-modified add lanes with open median, Build Alternative #3-add lanes with barrier median. In reviewing the three other build alternatives the Applicant determined that these alternatives will not alleviate the persistent traffic congestion and close intersection spacing and will also not address traffic mobility or improve safety. Therefore, these options were dropped from further consideration because they, “will not meet the Purpose and Need” for the project.

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

In a letter from Steve Hamer, IDNR, dated June 15, 2011 he states 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.”

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 providing a safer Illinois Route 13 roadway within the project area. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.