IEPA Log No.: **C-0731-13**
CoE appl. #: **2013-1077**

Public Notice Beginning Date: **July 25, 2014**
Public Notice Ending Date: **August 15, 2014**

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
Division of Water Pollution Control
Permit Section
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, PO Box 100, Carbondale, IL 62903

Discharge Location: Sections 2, 10, 11, 15, 19, 22-25, 35 and 36, T7S and T8S, R7 and 8E of the 3rd P.M. in Saline County between Eldorado and Texas City

Name of Receiving Water: Brush Creek, Unnamed Tributary to White Oak Creek and Unnamed Wetlands

Project Description: Reconstruction of U.S. Route 45 from Eldorado to Texas City.

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.

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Fact Sheet for Antidegradation Assessment
Illinois Department of Transportation – Brush Creek, Unnamed Tributary to White Oak Creek and Unnamed Wetlands – Saline County
IEPA Log #C-0731-13
COE Log #2013-1077 (Louisville District)
Contact: Eric Runkel (217) 558-2012
July 25, 2014

The Illinois Department of Transportation (IDOT), Region V, District 9 ("Applicant") is applying for a 401 water quality certification for impacts associated with a reconstruction project of US Route 45, between Eldorado and Texas City in Saline County. The applicant proposes to expand approximately 6 miles of roadway to provide a four-lane facility that would start as State Route 142 in Eldorado to Texas City Road, near the community of Texas City. The applicant proposes to discharge approximately 88,000 cubic yards of fill material into 2.66 acres of forested wetlands to construct crossings along the US Route 45.

Identification and Characterization of the Affected Water Body.

The proposed reconstruction of US Route 45 would include 25 stream crossings of Waters of the United States (WOUS). A total of 23 of these crossings, which would impact a total of 890 linear feet of streams and 1.11 acres of emergent wetlands, were deemed eligible by Army Corps of Engineers (ACOE) for the 2012 Nationwide Permit (NWP) 14 for Linear Transportation Projects which authorizes certain activities that have minimal individual and cumulative adverse effects on the aquatic environment and generally comply with the related laws cited in 33 CFR 320.3. The Agency issued Section 401 water quality certification for NWP14 on April 2, 2012.

One tributary impact not covered under NWP 14 is Brush Creek (Segment Code IL_ATFD-01) which is a General Use water with zero 7Q10 flow. The segment is listed in the Illinois Integrated Water Quality Report and Section 303(d) List 2014 as impaired for Aquatic Life use; alteration of stream-side or littoral vegetation cover (non-pollutant), loss of instream cover (non-pollutant) and dissolved oxygen are given as the causes of this impairment and Aesthetic Quality use; bottom deposits is listed as the cause of this impairment. Fish Consumption, Primary Contact Recreation and Secondary Contact have not been evaluated. The segment is not 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 segment is not listed as biologically significant stream nor has it received an integrity rating

The other unnamed tributary (no Segment Code) of White Oak Creek (IL_ATHI) not covered under NWP 14 is a General Use water with zero 7Q10 flow. The segment is not listed in the Illinois Integrated Water Quality Report or 303(d) List 2014. The segment in 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 Biological Stream Rating System, the segment is not listed as biologically significant stream nor has it received an integrity rating.

The wetlands not covered by the NWP 14 are considered wetland floodplain forest and are a General Use waters with 0 cfs 7Q10 flows. They are rated as "fairly good" quality. Site ID# 38 has a FQI of 12.3 and a mean C value of 2.8. Site ID# 39 has a FQI of 23.4 and a mean C value of 3.3. Neither of these sites is listed on the National Wetlands Inventory (NWI).

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 portions 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. The project will eliminate the current habitat from the permanently impacted wetlands.

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 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.

New culvert construction will replace all existing culverts, widening the current stream conveyance to include the proposed additional roadway. All culvert widening will be conducted from the right of way, limiting the impact. No significant channel relocation will occur with the proposed project.

Mitigation is proposed to occur within the project ACOE watershed through replacement of wetlands. Table 1 was proposed to determine the breakdown of impacts within the US Route 45 project area.

Table 1 – Identification of impacted wetlands as part of the US Route 45 Reconstruction Project*.

ID	Wetland Type	Size (Acres)	Proposed Mitigation (Acres)
38	Forested	2.06	6.18
39	Forested	0.6	3.3
Total	--	2.66	9.48

*While additional wetlands are located throughout the project footprint, this list only includes those not covered under ACOE NWP-14 that will be either permanently or temporarily impacted. NWPs are a type of general permit designed to authorize certain activities that have minimal individual and cumulative adverse effects on the aquatic environment and generally comply with the related laws cited in 33 CFR 320.3. Information reproduced from ACOE Public Notice (dated April 2, 2014).

The applicant proposed to mitigate impacts to wetlands by creating 12.4 acres of forested wetlands and 0.4 acre of emergent wetlands at a location adjacent to US Route 45, approximately 0.75 mile south of Texas City.

Purpose and Social & Economic Benefits of the Proposed Activity.

Upgrading roads within Southern Illinois region may encourage business growth and job creation. Additionally, the proposed highway project will provide connectivity with multi-modal transportation systems in the region. Such connectivity will improve the flow of goods efficiently and economically.

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

No-Build Alternative

Under the "No-Build Alternative", the proposed improvement will not be constructed. The "No-Build Alternative" denotes that only minor improvements, such as safety improvements and normal maintenance, would be made to the existing road and intersection areas. This alternative will not improve regional connectivity, nor will it promote economic development. The "No-Build Alternative" does not satisfy the project's purpose and need. Therefore, this alternative is not considered an adequate solution to meet the existing and anticipated transportation needs of the corridor.

Build Alternatives

Five "Build Alternatives" were developed for the project:

Add Lanes East of Existing Alignment with Barrier Median

This alternative is primarily a four-lane roadway that utilizes the existing two-lane roadway to carry southbound traffic, with two new lanes constructed on the east side of the existing pavement to carry northbound traffic. By increasing the number of through lanes, this alternative meets the project's purpose and need, because the additional lanes improve regional connectivity and economic development in the region. However, a concrete barrier median is much costlier (by approximately 5 million dollars) to construct than an open grass median. In addition, a concrete barrier would not be an aesthetic fit in this rural setting. It was determined that this alternative would meet the purpose and need for the project, but was eliminated due to increased costs associated with a concrete barrier median.

Add Lanes West of Existing Alignment with Barrier Median

This alternative is primarily a four-lane roadway that will utilize the existing two-lane roadway to carry northbound traffic, with two new lanes constructed on the west side of the existing pavement to carry southbound traffic. By increasing the number of through lanes, this alternative meets the project's purpose and need, because the additional lanes improve regional connectivity and economic development in the region. However, a concrete barrier median is much costlier (by approximately 5 million dollars) to construct than an open grass median. In addition, a concrete barrier would not be an aesthetic fit in this rural setting. It was determined that this alternative would meet the purpose and need for the project, but was eliminated due to increased costs associated with a concrete barrier median.

Add Separated Lanes West of Existing Alignment

This alternative is primarily a four-lane roadway that will utilize the existing two-lane roadway to carry northbound traffic, with two new lanes constructed in a former railroad right-of-way to the west of existing pavement to carry southbound traffic. By increasing the number of through lanes, this alternative meets the project's purpose and need, because the additional lanes improve regional connectivity and economic development in the region. However, this alternative would result in privately owned land being located between the northbound and southbound lanes, causing a land-locked condition. Therefore, this land would also be required for acquisition. As the existing railroad right-of-way was not wide enough, additional right-of-way would need to be purchased for the roadway as well as the future bike trial. It was determined that this alternative would meet the

purposed and need for the project, but was eliminated from further consideration due to higher land acquisition requirements and associated costs.

Add Lanes East of Existing Alignment with Open Median

This alternative is primarily a four-lane roadway that will utilize the existing two-lane roadway to carry southbound traffic, with two new lanes constructed on the east side of the existing pavement to carry northbound traffic. By increasing the number of through lanes, this alternative does meet the project's purpose and need, because the additional lanes improve regional connectivity and economic development in the region. However, this alternative results in the highest amount of land conversion and requires the highest number of residential displacements. This alternative was eliminated due to the high number of land conversion and
residential displacements.

Add Lanes West of Existing Alignment with Open Median

This alternative is primarily a four-lane roadway that will utilize the existing two-lane roadway to carry northbound traffic, with two new lanes constructed on the west side of the existing pavement to carry southbound traffic. By increasing the number of through lanes, this alternative does meet the project's purpose and need, because the additional lanes improve regional connectivity and economic development in the region. Due to this alternative's lower cost, need for fewer acres of additional right-of-way, fewer displacements, and overall minimized impacts, this alternative was selected as the preferred alternative.

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

The United States Fish and Wildlife Service concluded in a July 9, 2014 correspondence that the project is not likely to adversely affect local federally listed threatened or endangered species and the proposed mitigation plan is adequate to address potential impacts. Illinois Department of Natural Resources (IDNR) stated in a July 2, 2014 electronic mail memorandum that IDOT has addressed all concerns, concurs with the project and ended consultation.

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 area at large by providing improved transportation between the communities of Eldorado and Texas City. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.