

**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:

Friday, January 5, 2024

Public Notice Ending Date:

Thursday, January 25, 2024

Agency Log No.: C-0092-23

Federal Permit Information: This civil works project is under the jurisdiction of Louisville District, Regulatory Branch U.S. Army Corps of Engineers

Name and Address of Discharger: Illinois Department of Transportation - 2801 West Murphysboro Road, Carbondale, IL 62901

Discharge Location: In Section 5 of Township 7-South and Range 8-East of the East 3rd Principal Meridian in White County. Additional project location information includes the following: US 45 1.1 miles N of Gossett Road to 600 ft S of IL 141, Norris City, IL 62869

Name of Receiving Water: Bear Creek, tributary to Cane Creek

Project Name/Description: US 45 safety project TR 400N to S of IL 141 - proposed impacts to wetlands caused by safety improvements including shoulder widening and sideslope flattening along approximately 2 miles of Highway 45

Construction Schedule: Immediate (Planned project duration is approximately 518 days)

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.

Name: Webert Deslien

Email: webert.deslien@illinois.gov

Phone: 217/782-3362

Post Document. No. C-0092-23-01052024-PublicNoticeAndFactSheet.pdf

The Illinois Department of Transportation (IDOT) has applied for a 401 Water Quality Certification for impacts associated with safety improvements of 2.12 miles of the existing US 45 roadway from TR 400N to south of IL 141. The proposed project will occur in Township 7 South, Range 8 East, Sections 8, 17, and 18 near Norris City, in White and Gallatin counties. The proposed improvements to this section of US 45 include the addition of rumble strips to both shoulders, removal of hazards within the clear zone, extensions, replacements of culverts to match the flattening of the ditch slopes, and widening of both shoulders with a 5' paved and 3' aggregate shoulder, which will also accommodate bicyclists. Improvements to the roadside ditches will correct drainage deficiencies. A large number of accidents along US 45 will be mitigated with the proposed improvements.

Approximately 8650 cubic yards (CY) of earth embankment will be placed within 2.51 acres (Ac) of wetlands. The 11.95 Ac impacts to wetlands are primarily by fill resulting from the extension and stabilization of side slopes and excavation to improve drainage. Four unnamed tributaries of Bear Creek totaling 0.022 Ac will also be impacted as a result of this project. Wetland mitigation will occur at the William Garner site along US 45 south of the project limits at an undetermined mitigation bank within the Saline River basin.

Information used in this review was obtained from the application documents July 2, 2020, November 13, 2020, August 27, 2021, July 26, 2023, November 7, 2023.

Identification and Characterization of the Affected Water Body.

OSW1, OSW2, OSW3, OSW4 and OSW5 are all unnamed tributaries to Bear Creek. The unnamed tributaries to Bear Creek have 0 cfs of flow during critical 7Q10 low-flow conditions. The unnamed tributaries to Bear Creek are classified as General Use Water. The unnamed tributaries to Bear Creek are not listed as biologically significant streams 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 unnamed tributaries of Bear Creek, tributaries to Waterbody Segment IL_ATFJC-01, are not listed on the 2018 Illinois Integrated Water Quality Report and Section 303(d) List as they have not been assessed. These segments of the unnamed tributaries to Bear Creek are not subject to enhanced dissolved oxygen standards.

Two wetland surveys have been conducted for this project. On June 9-10, 2020, the INHS/IDOT Wetland Science Program conducted a wetland delineation for a previous project (IDOT Sequence No. 22832) that includes replacement of the US 45 bridge over TR 381. These wetlands are identified as Site 1 and Site 5 and portions of them are impacted in the current project.

On July 19-20 and August 23, 2021, the INHS/IDOT Wetland Science Program conducted a wetland delineation (IDOT Sequence No. 23576) for the project area and identified nine wetlands within the survey area. Five of those identified wetlands are expected to be impacted by the project.

On September 8, 2023, USACE amended the approved jurisdictional determination (AJD). Impacts from the two IDOT sequences numbers were combined to denote the wetland sites as Sites 1-8 as outlined below:

Site	Wetland Type	FQI	Mean C	Size in Project Area (Ac.)	Area Impacted (Ac.)
1*	Wet Meadow/Wet Floodplain Forest	19.2/24.5	3.0/3.4	3.33	1.66
2**	Wet Meadow/Wet Floodplain Forest	12.9/11.5	3.1/2.5	2.60	0.7
3	Wet Meadow/Wet Floodplain Forest	18.9	3.5	0.17	0.05
4	Wetland Pond	18.1	3.3	N/A	N/A
5	Forested Wetland	11.5	2.5	0.04	0.03
6	Forested Wetland	12.4	3.0	0.06	N/A
7	Forested Wetland	15.7	2.9	0.09	N/A
8	Emergent Wetland	10.1	2.4	0.11	0.07
Total				6.4	2.51

*Site 1 is a combination of both Site 1 areas from Sequences 22832 and 23576

**Site 2 is a combination of Site 2 from Sequence 23576 and Site 5 from Sequence 22832

-The remaining Sites are from Sequence 23576

IDOT Sequence 22832

Site 1 is a wet meadow east of US 45 and assigned NWI codes PEM1F and PFO1A. The wetland delineation notes that although the boundary of a PFO1A (temporarily flooded, broad-leaved deciduous, forested, palustrine wetland) entered the project corridor at the northeast, the plant community inside the project corridor was still a wet meadow consistent with the rest of Site 1. Dominant species consists of panicled aster (*Aster lanceolatus*), reed canary grass (*Phalaris arundinacea*), and lizard's tail (*Saururus cernuus*). Site 1 from IDOT Sequence 22832 is not the same as Site 1 from IDOT Sequence 23576 described below.

Site 5 is a wet shrubland 30 feet west of US 45 and assigned an NWI code U (Upland). Dominant species consists of common hop sedge (*Carex lupulina*), buttonbush (*Cephalanthus occidentalis*), scarlet smartweed (*Persicaria coccinea*), reed canary grass, and black willow (*Salix nigra*).

IDOT Sequence 23576

Site 1 is a wet floodplain forest that extends 35 feet west and 64 feet east of US 45. It is assigned NWI codes U and PEM1F. This site is notable for having a high FQI (>20.0). Dominant species consists of red maple (*Acer rubrum*), panicled aster, and marsh elder (*Iva annua*)

Site 2 is a marsh/wetland pond that extends 10 feet west and 13 feet east of US 45. It is assigned NWI codes PEM1F and U. This site is notable for having a high FQI (>20.0). Dominant species consists of common hop sedge, buttonbush, fowl manna grass (*Glyceria striata*), rice cut grass (*Leersia oryzoides*), pond lily (*Nuphar advena*), reed canary grass, common reed (*Phragmites australis*), and lizard's tail.

Site 3 is a wet meadow that extends 36 feet east of US 45. It is assigned NWI code U. This site is notable for having a high mean C (≥ 3.5). Dominant vegetation consists of tall fescue (*Festuca arundinacea*), inland rush (*Juncus interior*), and common water horehound (*Lycopus americanus*).

Site 5 is a wetland pond that lies approximately 135 feet east of US 45. It is assigned NWI code PUBGh. Dominant vegetation consists of common beggar's ticks (*Bidens frondosa*), needle spike rush (*Eleocharis acicularis*), rice cut grass, creeping primrose willow (*Ludwigia peploides* var. *glabrescens*), and black willow.

Site 8 is a wet meadow that extends 72 feet south of Hwy 141 (White/Gallatin county line). It is assigned NWI code U. Dominant species consists of red top (*Agrostis gigantea*), dogbane (*Apocynum cannabinum*), tall fescue, green ash, and common reed.

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

There will be a total of 1164.04 sq. ft. (0.0267 acres) of stream impacts, however, this doesn't meet the 0.03-acre threshold to be considered an impact that requires notification. The subject AJD includes a finding that one stream (OSW3) that is not a relative permanent, standing, or continuously flowing water and contains flow for only a short duration in direct response to precipitation. The subject AJD includes a finding that four streams (OSW1, 2, 4, and 5) that have flowing or standing water year around or continuously during certain times of the year.

There will be in stream work and a total of 35 trees removed.

Wetland impacts are expected to be permanent as a result of placement of fill to complete the proposed project. Permanent impacts are expected in 2.51 Ac of wetlands, requiring 13.28 Ac of mitigation.

Fate and Effect of Parameters Proposed for Increased Loading.

To minimize the surface water impacts during construction appropriate erosion and sediment control Best Management Practices will be implemented in accordance with local, state, and federal regulations. With proper implementation of Best Management Practices and compliance with the National Pollution Discharge Elimination System construction permit, short-term construction-related water quality impacts will be avoided or minimized. A uniform perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area will be established on all unpaved areas and areas not covered by permanent structure. All temporary materials used for construction will be removed from the site upon completion of the project.

IDOT implements the following Winter Operations Best Management Practices:

- Annual training for plow operators to improve the efficiency of de-icing application and to reduce loss of de-icing chemicals.
- IDOT utilizes calibrated spreaders equipped with ground sensors that can accurately control the rate of spreading.
- Prewetting solid deicing chemicals/mixtures for better adhesion to the pavement surface and for melting of the ice/snow.
- Adjusting the application rates of de-icing chemicals according to pavement temperature and weather conditions.

Wetland impacts have been minimized as a result of using a 4:1 slope to the clear zone and then steepening the slope beyond that to a 3:1 slope. Safety has been improved with rumble strips rather than road realignment.

IDOT anticipates a total of 2.51 Ac of permanent wetland impacts, which will be mitigated at a 5.5:1 ratio for the high-quality wetland, and the rest at a 2:1 ratio. The wetland mitigation site has not yet been determined, however, the 2.51 Ac of impacts will require 13.28 mitigation acres.

Site	Community Type	Impact Area (Ac.)	Mitigation Ratio	Mitigation Credits Required
1*	Wet Meadow/Wet Floodplain Forest	1.66	5.5:1	9.13
2**	Wet Meadow/Wet Floodplain Forest	0.7	5.5:1	3.85
3	Wet Meadow/Wet Floodplain Forest	0.05	2:1	0.1
4	Wetland Pond	0	N/A	N/A
5	Forested Wetland	0.03	2:1	0.06
6	Forested Wetland	0	N/A	N/A
7	Forested Wetland	0	N/A	N/A
8	Emergent Wetland	0.07	2:1	0.14
Totals		2.51		13.28

*Site 1 is a combination of both Site 1 areas from Sequences 22832 and 23576

**Site 2 is a combination of Site 2 from Sequence 23576 and Site 5 from Sequence 22832

-The remaining Sites are from Sequence 23576

Sites 3 and 6 were determined to be non-jurisdictional waters, however, impacts will be mitigated in accordance with the Interagency Wetlands Policy Act (IWPA). Wetland mitigation will be permittee responsible and will occur at the William Garner site along US 45 south of the project limits. The above mitigation rate is an estimate based on USACE and the IWPA.

Purpose and Social & Economic Benefits of the Proposed Activity.

The purpose of this project is to improve the safety of a 2.12 mile stretch of US 45 from TR 400N to south of IL 141 in White and Gallatin counties. This section of roadway is a high safety tier location with predominant crash type being overturned and fixed object accidents. Analysis of all accident reports show that 10 of the 13 accidents could have been mitigated with minor safety improvements, both in the roadway and at the T-intersections. The proposed improvements to this section of US 45 include the addition of rumble strips to both shoulders, the widening of both shoulders with a 5' paved and 3' aggregate shoulder, which will also accommodate bicyclists, and flattening the ditch slopes to potentially prevent further failure-to-stop accidents at intersections along the route.

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

The Applicant analyzed the following alternatives:

Alternative 1: No Action Alternative-

This section of US 45 has had a significant amount of safety complaints due to the number of accidents along the highway, as well as at the intersections of IL 141/US 45 and Gossett Rd./US 45. According to local officials, this area of White County has had recent growth and subsequently increased traffic. The no action alternative would not help ease the number of accidents that could have been potentially avoided had there been minor safety additions to the roadway. Continued accidents off the shoulder of the roadway to avoid animals or oncoming cars, and crashes at the two intersections with US 45 would continue to be a problem due to steep slopes and narrow shoulders.

The no action alternative was not further considered because it does not meet the purpose and need of improving safety of this section of US 45.

Alternative 2: Safety Improvements (Preferred Alternative)-

The safety complaints made by the public prompted a traffic safety investigation on this section of US 45. The investigation found that the addition of minor safety improvements to the roadways, such as rumble strips along both shoulders, widening the shoulders and flattening the ditch slopes, could have potentially prevented a majority of the accidents. The proposed improvement would include an addition for a 5' paved and 3' aggregate shoulder to accommodate bicyclists, and also give the traveling public more room to correct a driving error and regain control of the vehicle.

This alternative was chosen as the preferred alternative as it meets the purpose and need of safety for this section of US 45.

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

An IDNR/IDOT coordinated natural resource review was completed on November 7, 2023 findings are as described below:

Review for Illinois Endangered Species Protection and Illinois Natural Areas Preservation – Part 1075:

“The Illinois Natural Heritage Database contains no records for state and federally threatened or endangered species, Illinois Nature Preserves, Illinois Natural Area Inventory Sites, or registered Land and Water Reserves in the vicinity of the project location. Therefore, consultation under Part 1075 is terminated.”

Review for Endangered Species Act - Section 7:

“The proposed improvement was reviewed in fulfillment of our obligation under Section 7(a)2 of the Endangered Species Act. Our review included use of the US Fish and Wildlife Service’s (USFWS) Information for Planning and Conservation (IPaC) web-based review tool. Through IPaC, an official species list was received and is saved to the project folder. The list contains the endangered, threatened, proposed and candidate species and proposed and designated critical habitat that may be present within or in the vicinity of the proposed improvement. The following species are listed: Tri-colored bat, Indiana bat (Ibat), Northern long-eared bat (NLEB), Fanshell mussel, Fat pocketbook mussel, and Rabbitsfoot mussel. There is no designated

critical habitat in White County. Under 50 CFR 402.12(e), the accuracy of the species list is limited to 90 days.

Within IPaC there is a Determination Key for the NLEB and Ibat. We used the key to determine applicability of the project with the USFWS revised Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana and Northern Long-eared Bats and to assess what effect the project would have on NLEB or Ibat.

Although not part of the programmatic biological opinion, given the species life cycle and habitat requirements, this office has determined that the following species determinations and conservation measures are also applicable to the Tricolored bat which is proposed for listing as federally endangered. We completed an IPaC qualification interview and determined that the project is within the scope of the programmatic biological opinion and is not likely to adversely affect either bat species provided the following conservation measure is implemented:

Trees three (3) inches or greater in diameter at breast height shall not be cleared from April 1st through September 30th of any given year.

This determination is based in part on the results of the bat bridge assessment which showed no bats or signs of bats utilizing the bridge. Please note that all bat bridge assessments are valid for two years and that expired assessments shall be updated prior to construction.

We cross-referenced the preferred habitat of each of the remaining listed species; the Fanshell mussel, Fat pocketbook mussel, and Rabbitsfoot mussel, with our knowledge of the project area and determined that the project will have no effect on those species.

Should the proposed improvement be modified, or new information indicates listed or proposed species may be affected, consultation or additional coordination should be initiated.”

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 area by providing much needed safety improvements due to the large number of accidents in the U.S. 45 corridor. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.