

IEPA Log No.: **C-0040-15**
CoE appl. #: **CEMVR-OD-P-2014-1578**

Public Notice Beginning Date: **March 23, 2016**
Public Notice Ending Date: **April 22, 2016**

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: Grundy County Highway Department – 245 N. IL Route 47, Morris, IL 60450

Discharge Location: Near Minooka in NE 1/4 Section 12 of Township 34N, Range 7E of the 3rd P.M. in Grundy County.

Name of Receiving Water: Walley Run

Project Description: Proposed relocation of approximately 0.13 miles of Walley Run Creek to accomodate widening of Brisbin 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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Grundy County Highway Department (“Applicant”) has applied for Section 401 water quality certification for impacts due to the realignment/relocation of approximately 675 feet of Walley Run Creek. The proposed project, located near Minooka in Section 12, Township 34 North, Range 7 East, includes widening and reconstructing of Brisbin Road (CH V27) from just north of the Collins Run Bridge to Sherrill Road for approximately 2.5 miles. The existing roadway transitions from a 78’ wide 4 lane roadway near the nearly constructed I-80 interchange to an 18’ wide two lane roadway. The purpose of this project is to widen the existing roadway to provide an improved transportation facility in the new I-80 interchange project area and address safety, operational, and capacity deficiencies of the roadway. The new interchange has increased the projected traffic by approximately 38,500 vehicles per day. The project would improve safety on Brisbin Road and create several construction jobs for local residents. In addition to the realignment/relocation of 675’ of Walley Run Creek, the project will replace the existing double box culvert with a double 12’ X 7’ reinforced concrete box culvert. Impacts to the 0.13 mile reach of Walley Run Creek will be mitigated on site through the addition of riffles and up to 50’ riparian buffer utilizing the draft Illinois Stream Mitigation Methodology.

Information used in this review was obtained from the applicant in a document entitled; Joint Application Form for Illinois dated February 2015 and updated November 2015.

Identification and Characterization of the Affected Water Body.

Walley Run Creek (IL_DWC), a direct tributary to Aux Sable Creek (IL_DW-01), is a General Use Water with an estimated zero cfs 7Q10 flow at this location. According to the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List, Walley Run Creek has not been assessed by Illinois EPA. Walley Run Creek is not listed as a biologically significant stream 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. Walley Run Creek is not designated as an enhanced water pursuant to the dissolved oxygen water quality standard.

The Illinois Natural History Survey (INHS) conducted wetland (May 2014), stream habitat, water quality, macroinvertebrate, mussel (August 2015) and fish (July 2015) surveys on Walley Run and Collins Run along Brisbin Road. No wetlands were delineated within the project boundaries. Ten fish species (149 individuals) were collected in Walley Run; no state threatened or endangered species were collected and tolerant species such as Bluntnose Minnow (*Pimephales notatus*), Creek Chub (*Semotilus atromaculatus*), White Sucker (*Catostomus commersonii*), and Green Sunfish (*Lepomis cyanellus*) were common in the fish community. No live freshwater mussels and no evidence of shell were found in Walley Run. Habitat metrics ranked Walley Run as “Fair” and benthic assemblage condition metrics scored “Good.” The macroinvertebrate community was dominated by filter feeding caddisflies in the genera *Cheumatopsyche* and *Hydropsyche*. No state threatened or endangered macroinvertebrate

species were collected nor was suitable habitat for these species observed. Water samples collected in March 2015 and August 2015 resulted in chloride levels of 16.0 and 20.2 mg/L, respectively.

Approximately 675' of Walley Run will be realigned/relocated to allow for the widening of Brisbin Road. Stream mitigation utilized the Illinois Stream Mitigation Methodology to determine the requirements for creating the new stream segment which will include the addition of riffles and up to 50' riparian buffer along the newly aligned channel. The proposed project will not impact Collins Run as the project is slated to start north of the Collins Run bridge structure.

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

The pollutant load increases that would occur during this project include possible increases in suspended solids during construction and possible increases in chloride loading due to the increase in road surface following the expansion from a 2 lane highway to 4 lanes.

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 these disturbances and prevent further impacts to the stream segment near the newly constructed roadway. IDOT's Standard Specifications for Road & Bridge Construction will be followed during the construction of the project. Erosion and sediment control measures including erosion control blankets, perimeter erosion barriers, seeding, mulching, ditch checks, and riprap will be utilized to minimize disturbances within the project area.

Chloride loading could increase to Walley Run due to the additional 2.7 lane miles of highway to be added to the watershed area as a result of the roadway widening. According to the Applicant, Grundy County applies approximately 9 tons of salt per lane mile during an average winter. The additional road surface would result in an increase, on average, of 24.3 tons of salt, equivalent to 14.8 tons of chloride, being applied to the new lanes and represents the increase in chloride expected in the receiving stream. With the additional chloride loading, chloride levels in Walley Run should remain below the 500 mg/L chloride Water Quality Standard. The Applicant will implement BMPs such as mixing sugar beet molasses with calcium chloride and optimizing salt application rates through monitoring of pavement temperatures and weather scenarios to help reduce chloride use. BMPs including vegetated swales and underdrains will be employed throughout the project to aid in containment and treatment of chloride, suspended solids, and other pollutants that are present in roadway runoff.

Purpose and Social & Economic Benefits of the Proposed Activity.

The proposed roadway project will provide an improved transportation facility to the new I-80 interchange which was added in 2012 by expanding Brisbin Road from 2 lanes to 4 lanes. This important north-south arterial roadway crosses US Highway 6 just south of the I-80 interchange

and US Highway 52 six miles north of the interchange. Current development growth is occurring along US Highway 6 near Morris and along Channahon and Minooka Road near Minooka. These developments are projected to bring approximately 540 dwelling units, over 4 million square feet each of retail and office space, and 11.4 million square feet of industrial space along Brisbin Road. This roadway expansion will accommodate the increased traffic volume estimated at 39,000 vehicles per day by 2040 in addition to addressing safety and operational deficiencies of the existing roadway.

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

The Applicant assessed several different alternatives to the project. There would be no increase in pollution loading if a no-build alternative was chosen; however, this option is not appropriate due to the forecasted population, business, and traffic growth in the region. The construction alternatives assessed included the following:

No Build

- Forecasted traffic growth is expected to increase to approximately 39,000 vehicles per day by 2040
- Current two lane roadway could not handle these large increases in traffic
- Would not address the issues of operations and safety
- No impacts to Walley Run

Widening Existing Roadway to the West- 6 lanes or 4 lanes

- Option will result in improvements in capacity, traffic safety, and mobility
- Would have little effect on Walley Run
- Would require the forced removal of two residences
- Six lanes of roadway cost prohibitive

Widening Existing Roadway to the West to I-80 Interchange - 6 lanes

- Option will result in improvements in capacity, traffic safety, and mobility
- Would require the relocation of 0.13 miles of Walley Run
- Would require upgrade to Collins Run Bridge
- Six lanes of roadway and upgrade to Collins Run Bridge cost prohibitive

Proposed Build Option-Widen Existing Roadway to the East – 4 lanes

- Widen Brisbin Road from 2 lanes to 4 lanes north of Collins Run Bridge to Sherrill Road
- Realign/relocate 0.13 miles (675') of Walley Run Creek to accommodate road expansion
- Replace/improve the existing double box culvert with a double 12' X 7' reinforced concrete box culvert
- Drainage improvements including vegetated swales and underdrains throughout the project area will aid in containment and treatment of roadway runoff contaminants
- Option will result in decreased congestion and improvements in capacity, traffic safety, and mobility to accommodate the foreseen residential and commercial growth

Conclusion:

The construction of the proposed project will follow conditions set forth by the Agency and USACE. The completion of the roadway widening of Brisbin Road from north of Collins Run Bridge to Sherrill Road is the most cost effective, viable means for improving roadway capacity, traffic safety, and mobility. Erosion and sediment control plans will be implemented prior to and through construction activities to reduce the pollution load. The realignment of Walley Run will be mitigated through the addition of riffles to the relocated stream and the addition of up to a 50' riparian buffer in accordance with the draft Illinois Stream Mitigation Method.

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

The Biological Resource Review Memorandum (dated January 26, 2016) indicated that the Aux Sable Creek INAI site was located in the vicinity of the proposed project. The INIA site contains high mussel species diversity and the state listed greater redhorse (*Moxostoma valenciennesi*). USFWS determined that there may be suitable habitat present for the federally listed Indian bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*). IDNR and USFWS requested the following commitments from the Applicant:

- Limit instream work as much as possible
- Avoid instream work during the fish spawning season of April 1 through June 30
- Strict adherence to erosion and sedimentation Best Management Practices
- Tree clearing only from October 1 through March 31
- Conduct final bat bridge inspection within one year of construction commencement
- If the Collins Run bridge work cannot be started until after April 1, place netting or other obstructions prior to April 1 to prevent birds from nesting under that bridge

The proposed project was conditionally cleared for construction and the consultation was terminated effective March 11, 2016.

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 will 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 will benefit the community at large by improving the transportation facility to the newly constructed I-80 Interchange and addressing safety, operational, and capacity deficiencies of Brisbin Road. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.