Illinois Environmental Protection Agency
Bureau of Water, Permit Section
(IEPA)

2520 West Iles, 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:	**Public Notice Ending Date:**
Thursday, June 12, 2025	Friday, July 11, 2025

Agency Log No.: C-0026-25

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

Name and Address of Discharger: City of Marion, Brent Cain - 350 Tower Square Plaza, Marion, IL 62959

Discharge Location: In Section 30 of Township 9-South and Range 2-East of the West 3rd & East 3rd Principal Meridian in Williamson County. Additional project location information includes the following: City of Marion, Marion, IL 62959

Name of Receiving Water: Crab Orchard Lake

Project Name/Description: Refuge Water Distribution System Improvements - proposed crossing Crab Orchard Lake with a 12-inch fused HDPE watermain by excavating a trench on the bottom of the lake, installing the watermain in the trench and backfilling the excavated material

Construction Schedule: Beginning Apr 2025 and ending Oct 2025

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-0026-25-06122025-PublicNoticeAndFactSheet.pdf

401 Water Quality Certification Fact Sheet for City of Marion Refuge Water Distribution System Improvements

IEPA Log No. C-0026-25

Contact: Angie Sutton 217-782-9864

The City of Marion has applied for a 401 Water Quality Certification for impacts associated with the replacement of the existing potable watermain with a 12-inch fused high-density polyethylene (HDPE) watermain. The project is located in Township 9 South, Range 2 East, Section 30 in Williamson County, Marion, Illinois. The new watermain will cross 3400 linear feet (LF) of Crab Orchard Lake by trenching and backfilling over the newly placed pipe. The proposed project will require placement of approximately 2500 cubic yards (CY) of existing clay soil causing 0.5 acres (AC) of temporary impacts. The proposed work will involve excavation of a trench with heavy equipment from a floating barge. Once the watermain is installed, the excavated material will be placed back over the pipe.

Identification and Characterization of the Affected Water Body.

Crab Orchard Lake has 0 cfs of flow upstream of the project location during critical 7Q10 low-flow conditions. Crab Orchard Lake is classified as a General Use Water. Crab Orchard Lake 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. Crab Orchard Lake, Waterbody Segment, IL_RNA, is listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption with potential causes given as mercury and polychlorinated biphenyls (PCBs), and aesthetic quality use with potential causes given as total phosphorus and total suspended solids (TSS). Aquatic life use is fully supported. Crab Orchard Lake is not subject to enhanced dissolved oxygen standards.

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 total suspended solids. These increases are a normal and unavoidable result of trenching and covering for watermain installation that may occur in the lake. The existing benthic habitat of the wetland would be temporarily disturbed by installation activities. The proposed installation activities include the discharge of 2500 CY of existing clay soil that will have been excavated and then replaced over the watermain in the dug trench.

Fate and Effect of Parameters Proposed for Increased Loading.

No mitigation is proposed for this project as impacts are considered temporary. Work will be done from floating barges and in order to reduce the amount of suspended sediment, the trench will be excavated slowly, after which the excavated material will be carefully placed beside the trench on the lake bottom. Once the watermain is installed and anchored, it will be covered by slowly backfilling the trench to cover the pipe with the previously excavated material. Aquatic life will recover and reclaim the disturbed site once work is completed.

Purpose and Social & Economic Benefits of the Proposed Activity.

The purpose of this project is to replace the existing potable watermain with a 12-inch fused HDPE watermain to serve the Crab Orchard Refuge and existing water service connections. The installation consists of crossing Crab Orchard Lake with 3400 LF of 12-inch fused HDPE watermain.

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

The Applicant has provided the following placement alternatives:

Alternative 1 – Trenching (Preferred Alternative):

This option involves installation of the watermain into an excavated trench and backfilling with the excavated material. Equipment used will include 2 barges, a tugboat lashed to the barges, and 1 track hoe which will work from the barges. Discharge will consist of approximately 2500 CY of existing clay soil. This option will have the largest footprint of disturbed environment but the lowest cost. Because of these reasons, this was chosen as the preferred alternative.

Alternative 2 - Dredging:

This option involves installation of the watermain into a dredged trench and backfilling with the excavated material. The dredging would require excavation to install the watermain. Suctioned material would be placed next to the trench behind a barrier, and then raked over the watermain once installed in the trench. Equipment used would include suction and cutter heads for the excavator, a pump and discharge pipeline, excavator, 2 barges, and one tugboat lashed to the barges. Discharge will consist of approximately 2500 CY of existing clay soil and would be the most balanced between cost and environmental disturbance.

Alternative 3 Boring:

This option involves installation of the watermain into a bored trench and removing the excavated material off site. The boring would require removal of clay soil and rock to install the watermain and remove it off site. Equipment used would include a Horizontal Directional Drill with the capability to drill five feet under the lake bottom for 3400 LF. The bore would be at an angle that the pipe could withstand without overbending. Excavated material would be removed to a location off site. After the proposed watermain is laid in the trench and anchored, the initial bore would be filled in to avoid collapse. Discharge would consist of approximately 2500 CY of existing clay soil and would have the lowest amount of environmental disturbance but the highest cost.

Alternative 4- No Action:

Action must be taken due to the nature of the water system; therefore, a no action alternative was not considered.

No alternate locations were considered as the proposed path shows the shortest path of disturbance to the lake.

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

An EcoCAT endangered species consultation was submitted on May 21, 2025, Project #2513428. The Illinois Natural Heritage Database showed the following protected resources may be in the vicinity of the project location:

- Dull Meadow Beauty *(Rhexia mariana)*
- Eryngo *(Eryngium prostratum)*
- Indiana Bat *(Myotis sodalis)*
- Spring Ladies' Tresses *(Spiranthes vernalis)*
- Yellow-Crowned Night-Heron *(Nyctanassa violacea)*

A letter dated May 29, 2025 states that the Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 and 1090 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 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 community by continuing to serve the Crab Orchard Refuge and existing water service connections. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.