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:	Public Notice Ending Date:
Wednesday, October 25, 2023	Tuesday, November 14, 2023
Agency Log No.: C-0055-23	
Federal Permit Information: Federal permit/license no. LRC-2023-00198 is under the jurisdiction of Chicago District, Regulatory Branch U.S. Army Corps of Engineers	
Name and Address of Discharger: Peter Westmeyer - 1345 Lake Road, Lake Forest, IL 60045	
Discharge Location: In Section 27 of Township 44-North and Range 12-East of the East 3rd Principal Meridian in Lake County. Additional project location information includes the following: lakefront at 1345 lake road, Lake Forest, IL 60045	
Name of Receiving Water: Lake Michigan	
Project Name/Description: Maintenance to Existing Shore Protection Structures - Maintenance to the existing quarrystone breakwater system. The structures will be rebuilt where necessary to bring them back to the original specification or fill void spaces where the structures are in good condition but settled.	
Construction Schedule: Immediate (Approximate project duration is 30 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-0055-23-10252023-PublicNoticeAndFactSheet.pdf

401 Water Quality Certification Fact Sheet for Maintenance to Existing Shore Protection IEPA Log No. C-0055-23 Lake County Contact: Angie Sutton 217-782-9864

Peter Westermeyer ("Applicant") has applied for a 401 Water Quality Certification for impacts associated with maintenance to an existing quarrystone breakwater system and sandfill in Lake Michigan in Section 27, Range 12 East of Township 44 North, Lake County, Illinois. The project site is located at 1345 Lake Road in Lake Forest. The proposed project would allow for the structures to be rebuilt where necessary to bring them back to the original specification or fill void spaces where the structures are in good condition but settled. The breakwater crest elevations will be built back to the original specification of 586'. Approximately 100 cubic yards of clean quartzite will be placed below the Visual Ordinary High Water Mark (OHWM). Additionally, a 10-year sand placement permit is requested to nourish the beach for up to 1,500 cubic yards (CY) of clean quartied sand. The proposed project is not expected to result in any negative impacts to the littoral system or flora and fauna in the aquatic and terrestrial areas. Habitat will be increased with the breakwater stone and beach.

Work will be completed via marine access using a barge to deliver machinery and materials to the site. A backhoe will work from the beach or sand-covered lakebed to place the stone in accordance with the drawings. Based on the site conditions, it is unlikely that the water is too shallow for a barge to access the site. However, in that event, sand will be sidecast downdrift. The bucket will remain under the water surface. No clay will be excavated for access. Sand will be clean and from an inland quarry.

Information used in this review was obtained from the application documents dated March 21, 2023, March 28, 2023, June 2, 2023, August 22, 2023, and August 31, 2023.

Identification and Characterization of the Affected Water Body.

Lake Michigan has 0 cfs of flow during critical 7Q10 low-flow conditions. Lake Michigan is classified as a Lake Michigan Basin Use Water. Lake Michigan 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. Lake Bluff Sunrise Beach, Waterbody Segment IL_QI-06, is listed on the 2020/2022 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential causes given as mercury and polychlorinated biphenyls (PCBs) and for primary contact use with potential cause given as E-coli.

A Total Maximum Daily Load (TMDL) Report has been prepared and approved by the USEPA for 51 beaches along Illinois' Lake Michigan shoreline to address Primary Contact Use Recreation impairments due to excess bacteria. The proposed activity occurs within an area identified by the May 15, 2013 report "Shoreline Segments in Suburban Cook County, Illinois" as a Beach Protection Area and is therefore subject to this TMDL.

A qualitative assessment of the habitat near the project area determined that the substrate composition of the lakebed is a thin veneer of native lake sand over cohesive glacial clay till. There is no visible aquatic vegetation and terrestrial vegetation has been reduced as a result of beach erosion. There is a ravine outlet located at the south property line.

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 the placement of beach nourishment and breakwater repairs/maintenance. Fill material will consist of 100 CY of clean quarried stone and up to 1500 CY of clean quarried sand that will be placed using a barge or backhoe on the beach. There are no additional increases in pollutant loadings or new surface area coverage expected.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in total suspended solids would be local and temporary, and existing aquatic life use in the shallow, nearshore zone will temporarily be disturbed, but will recover over time. The proposed project will provide stabilization to the site in the form of sand retention, shoreline protection for the bluff and lakebed, and improve accessibility at this site. Proposed breakwater beach protection system modifications are expected to provide more diverse habitat for small fish and benthic invertebrates. The project will enhance the coastal environment simply by the installation. Quarrystone in the water as well as the sandy beach provide better habitat than the existing condition. Work will be completed using a barge or backhoe for land work to place materials.

This work will not negatively impact the terrestrial or aquatic flora and fauna in the area, nor will the project impact littoral flow. There is no new coverage below the visual OHWM as this project is maintenance to an existing breakwater system. Sand will be brought into the site which will be a benefit to the littoral drift system as there is little sand moving around in this area. No additional mitigation is proposed as the project will increase habitat with the breakwater stone and beach.

Purpose and Social & Economic Benefits of the Proposed Activity.

The purpose of the project is to provide maintenance to an existing breakwater beach protection system that has deflated and provide beach nourishment as part of a 10-year sand placement permit requested for this project. The activity will bring the 22-year-old system back to its original specifications.

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

The Applicant has provided the following alternatives:

<u>No Action</u>: Doing nothing will allow the breakwaters to continue to deflate therefore reducing the functionality of the structures for retaining sand cover in the bay. Additionally, this will increase the deflation of the revetment and erosion of the bluff toe by allowing larger waves within the bay.

<u>Dismantling/Rebuilding</u>: Dismantling and rebuilding the system while increasing the length of the south breakwater to help retain more sand in the bay was considered but not chosen as a viable alternative.

<u>Proposed Option</u>: The proposed option of simply doing maintenance to the structures that were constructed 22 years ago was chosen as the preferred option.

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

On August 22, 2023, the IDNR EcoCAT review (Project # 2403439) was initiated for the project area. The review identified the following protected resources that may be in the vicinity of the project:

- Lake Bluff Woods INAI Site
- False Bugbane (Actaea racemosa)
- Purple-flowering Raspberry (*Rubus odoratus*)
- Snowberry (Symphoricarpos albus var. albus)

A consultation termination is pending for this project.

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 property by retaining mitigational sand fill and preventing further lakebed erosion from stormwave activity. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.