IEPA Log No.: **C-0019-18**
CoE appl. #: **LRC-2007-133**

Public Notice Beginning Date: **October 25. 2018**
Public Notice Ending Date: **November 23, 2018**

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: Wilmette Harbor Association, 20 Harbor Dr., Wilmette, IL 60091

Discharge Location: Wilmette Harbor, east of Sheridan Rd.

Name of Receiving Water: Lake Michigan

Project Description: 10-year annual maintenance dredging

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 Wei Han at 217/782-3362.

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Fact Sheet for Antidegradation Assessment
Wilmette Harbor Association – Wilmette Harbor, east of Sheridan Rd. – Cook County
Log# C-0019-18
COE# LRC-2007-133
Contact: Abby Brokaw 217/782-3362
September 26, 2018

Wilmette Harbor Association ("Applicant") has applied for 401 Water Quality Certification to reauthorize maintenance dredging over the next 10-year period at Wilmette Harbor on Lake Michigan. The project site is in Cook County, Illinois, near Wilmette (NE ¼ of S35, T42N, R13E of the 3rd PM). The Applicant has been performing this work annually throughout the last permit term.

Wilmette Harbor was originally built (1908-1910) by the North Shore Sanitary District as an entrance inlet to the North Shore Channel (a branch of the Chicago River system). This channel was designed to carry stormwater and sewage away from the lake and Wilmette Harbor was intended to act as a 5-acre settling basin to prevent Lake Michigan sand from being carried into the canal. Currently, the harbor also functions as a safe refuge for boats.

At the site, stormwaves and associated currents transport sand from the north. As the waves are broken by the harbor's entrance breakwaters, sand drops out of the littoral drift system and deposits as harbor entrance sandbars. Stormwaves also come from the south and push sand farther into the entrance channel causing the harbor to fill with sand. To keep the harbor usable and accessible for recreational boats as well, as the U.S. Coast Guard rescue boats, the harbor entrance should be dredged at least once annually and periodically more often. Approximately 15,000 cubic yards of sand would be dredged annually and placed close to shore to maintain the natural littoral movement. All dredged material has met acceptable pollutant levels for over 10 years and has been placed back into the natural littoral system.

The purpose of the proposed work is to maintain navigable depths and remove boating hazards in Lake Michigan at Wilmette Harbor. Information used in this review was obtained from the permit application dated January 8, 2018, and subsequent materials.

Identification and Characterization of the Affected Water Body

Lake Michigan is classified as a Lake Michigan Basin Use Water and has zero cfs of flow during critical 7Q10 low-flow conditions. Lake Michigan, Waterbody Segment IL_QLM-01, is listed on the draft 2016 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 and aesthetic quality use with a potential cause given as phosphorus. Aquatic life, public and food processing water supply, primary recreational contact, and secondary contact uses are fully supported. 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* or given an integrity rating in that document. A Total Maximum Daily Load (TMDL) Report, "Shoreline Segments in Suburban Cook County, Illinois" dated May 15, 2013, 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 in the report as a Beach Protection Area subject to that TMDL.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses

Total suspended solids pollutant load increases are likely to occur. These increases, a normal and unavoidable result of dredging and placement of dredged materials, may occur in the lake at the point of activity. All dredge material met acceptable pollutant levels for over 10 years. The project does not include structures or fill materials, so an E.Coli impact analysis was not provided. Benthic habitat would be disturbed but impacts to aquatic life uses of this area are not anticipated.

Fate and Effect of Parameters Proposed for Increased Loading

The increase in suspended solids would be local and temporary. Increased depths in navigable areas may reduce sediment agitation from boating traffic and reduce the volume of resuspended solids. Although the benthic habitat would be disturbed by the construction activities, it is anticipated to recover and improve over time.

Purpose and Social & Economic Benefits of the Proposed Activity

This project is necessary to improve navigation, boat access, and reduce resuspension of sediment due to boat traffic. Lake Michigan is very popular for recreational use and is important for the economic success of the area. Not completing the maintenance dredging would have a negative impact on boat access, navigability, local tourism, and recreational use.

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

The Applicant assessed two alternatives to complete the project: mechanical dredging and hydraulic dredging. Mechanical dredging is a more efficient process, the more cost-effective option and reduces the potential for plumes in a project area that only requires intermittent dredging (10-year authorization) and the relocation of a smaller amount of sand. Mechanical dredging would be completed from a barge using a crane or backhoe to side cast the sand south of the breakwater. The dredged sand would be placed back into the littoral system directly south of the harbor breakwater in accordance with the previously authorized permit from USACE. This work would require 2 to 4 weeks to complete. The least intrusive alternative would be to not allow dredging; however, this is not an acceptable alternative given that the project would maintain navigational and recreational uses of the harbor. The project would follow guidelines set forth by the USACE and the Agency.

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

On August 21, 2018, an IDNR EcoCAT consultation, Project #1901808, was initiated and indicated that the Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location. The consultation concluded that adverse effect is unlikely and was terminated, per a letter dated August 21, 2018.

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; 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 the activity will benefit the community at large by maintaining navigational and recreational uses of the harbor system. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.