

IEPA Log No.: **C-0221-19**
CoE appl. #: **LRC-2019-818**

Public Notice Beginning Date: **March 31, 2020**
Public Notice Ending Date: **April 21, 2020**

Section 401 of the Federal Water Pollution Control Act
Amendments of 1972

Section 401 Water Quality Certification for Discharge of Dredged or Fill Material

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: Winnetka Park District – 540 Hibbard Road, Winnetka, IL 60093

Discharge Location: Near Winnetka in Section 16 of Township 42-North, Range 13-East of the 3rd P.M. in Cook County.

Name of Receiving Water: Lake Michigan

Project Description: Construction of a new breakwater protected system and beach nourishment at the Lloyd Park Beach and Boat Launch Facility.

The Illinois Environmental Protection Agency (IEPA) has received an application for a Section 401 water quality certification to discharge dredged or fill material 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 contact Francisco J. Herrera at email francisco.herrera@illinois.gov or phone no. 217/782-3362.

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Winnetka Park District (“Applicant”) has applied for a 401 Water Quality Certification for impacts associated with the construction of a new breakwater protected system and beach nourishment in Lake Michigan at Lloyd Park Beach and Boat Launch Facility in Winnetka, Cook County, Illinois. The site can be found in Section 16, Range 13E of Township 42N. The proposed project would allow for construction of three quarystone breakwaters approximately 206 feet east of the bluff toe and quarry sand nourishment. The northernmost breakwater would extend 45 feet south from the existing boat launch ramp parking lot. Approximately 160 feet south of the north breakwater would be a 104-foot-long breakwater island extending southward to the southernmost breakwater. This structure would extend from the shore and curve toward the breakwater island for 162 feet with a 162-foot gap between the two. All fill materials will be clean fill from quarries and include 22,468 cubic yards (CY) of sand and 5220 CY of stone to be placed over approximately 0.5 acres. Approximately 2000 tons of sand will be placed for beach nourishment either yearly or on an as-needed basis as required by IDNR. Currently, the project site has an eroding beach with an exposed bluff toe that has destabilized the south bluff. This instability has caused the existing access road to fail. A bath house at the center of the beach is being undermined and storm waves are impacting the seawall on the front face of the building. Sand erosion at the north end of the beach has caused exposure of the boardwalk and the boat storage racks. The proposed project is designed to help improve these issues as well as provide a sustainable shoreline for the community. Shoreline modifications include stone fill that create diverse habitats for fish. The USACE will make a determination as to whether compensatory mitigation is required in accordance with 2008 federal mitigation rules.

Information used in this review was obtained from the application documents dated September 30, 2019, January 31, 2020 and other associated application documents.

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. Winnetka Lloyd Beach, Waterbody Segment IL_QK-07, 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 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 Lake County, Illinois” as a Beach Protection Area and is therefore subject to this TMDL.

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 3 quarystone breakwaters and quarry sand beach fill. The fill material will consist of clean quarried stone and sand that will be placed using a combination of marine and land-based access and is expected to fill 0.5 acres.

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 be temporarily be disturbed, but will recover over time. The proposed project will provide shoreline protection for the bluff and lakebed, as well as improve the boating facilities and accessibility at this site. Proposed shoreline modifications are expected to provide more diverse habitat for small fish and benthic invertebrates, and therefore existing uses are protected. The USACE will make a determination as to whether compensatory mitigation is required in accordance with 2008 federal mitigation rules. In the event mitigation is required, the Agency will require monitoring of mitigation activity or a report on the final outcome of such mitigation activity. The construction of the breakwaters will be done by both marine and land-based access pending lake level and conditions at the time of construction.

Purpose and Social & Economic Benefits of the Proposed Activity.

The purpose of this project is to provide an improved shoreline protection system that will decrease erosion and protect the bluff and lakebed. The system would protect the areas of the beach that have exposed boardwalk and boat storage areas and the beach house. These areas have all suffered sand erosion which the proposed project is designed to improve. The beach and boat launch areas are in need of infrastructure updates in order to be a safer and a more sustainable, user-friendly public amenity.

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

The Applicant has provided the following alternatives:

Option 1 – Do Nothing:

This option would result in leaving the currently eroding beach in its existing state. The public beach amenities have outlived their design lives and the high lake level is causing not only damage to infrastructure but causing severe erosion. Because this is a public beach, residents do not have environment to launch watercraft. This option does not allow for shoreline protection, removes boat storage, reduces access and does not improve boat launching abilities. This option does not meet the purpose of the project and was therefore not the chosen option.

Option 2 – Beach Nourishment:

This option would require regular placement of approximately 19,300 CY of sand to protect the shoreline. This option would lead to intermittent and unpredictable shoreline protection, boat storage and access because of pending lake levels and boat launching would remain unchanged. Due to the requirement of annual maintenance and the high ongoing costs, this option was not chosen.

Option 3 – Master Plan Concept:

This option was the starting point for improving Lloyd Park Beach. This plan included a south breakwater arm that extended 400 feet into the lake from the bluff toe, an improved boat launch using a steel seawall and a commercial boat lift, a 150-foot lakeward breakwater extension for the boat launch entrance and a larger boat launch facility parking lot. The lake impacts for this option would be 1.35 acres. Shoreline protection would be improved with one large breakwater bay system and expanded boat basin. This option also provides for improved boat storage with the installation of the steel seawall and boat launching will be improved with expansion to include more dock space and a protected basin. Access with this option would also be improved. This option was not chosen as the preferred option.

Option 4 – Single Bay Beach System:

This option was a refined plan which creates a smaller more functional bay beach system that impacts 1.15 acres of lakebed. The boat launch facility and boat storage would have a much-reduced enhancement plan. Shoreline protection with this plan would be improved with the smaller single breakwater system and expanded boat basin. The steel seawall would improve boat storage and access would be improved with the installation of additional stairs ramps and ADA access. Boat launching would also be improved and expanded to include more dock space and a protected basin. This option was not chosen as the preferred option.

Option 5 – Two Bay Beach System (Originally Proposed Option):

This option was originally the preferred option with plans to create a 2-bay system that would separate powered watercraft from non-powered watercraft users. The breakwater system would include 2 breakwaters connected at the shore and an island in the center of the bay. The boat launch ramp will consist of extending the pier by 120 feet to the south and adding a quarystone revetment from it, lakeward. This plan includes installation of a steel seawall at the west end of the beach in order to provide lakebed, beach and bluff protection. This option will help to reduce wave energy in the area and in turn, stabilize the sand on adjacent beaches. The lakebed impacts would total 0.8 acres. Shoreline protection, boat storage, access and boat launching would see improvements with this option. This option was ultimately broken up into two phases, with the phase one portion becoming the selected system.

Option 6 – Modified First Phase of Option 5 (Preferred Option):

This option is for the beach breakwater system only. Option 5 was broken into two phases with this being phase one with construction of the three quarystone breakwaters and sandfill only. The boat launch parking lot marks the northernmost breakwater shore connection where it extends south for approximately 45 feet. Approximately 160 feet south of the northernmost breakwater is a 104-foot breakwater island that protects the existing beach house. A 260-foot

shore-connected breakwater is the southernmost structure, located 162 feet south of the breakwater island and connected to the toe of the bluff. Crests of the breakwaters will be 585 feet with the south spur breakwater tapering up to 589 feet at the bluff toe. Crests will also be 3 stones to keep wave overtopping to a minimum. Pedestrian access over the south breakwater will be introduced by implementation of stairs into the structure. Sandfill will be in accordance with IDNR regulations. Lakebed impacts would total 0.5 acres. Shoreline protection, boat storage and access would be improved with this option, with no change to boat launching. Phase 2 of this option is not included in this permit application.

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

On March 10, 2020, the IDNR EcoCAT review was initiated for the project area. The review has not yet been finalized; however, an initial review identified the following protected resources that may be in the vicinity of the project:

- Hubbard Woods Site INAI Site
- Banded Killifish (*fundulus diaphanous*)
- Marram Grass (*Ammophila breviligulata*)
- Sea Rocket (*Cakile edentula*)
- Seaside Spurge (*Chamaesyce polygonifolia*)

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 Lloyd Park by providing shoreline stabilization and protection of the bluff toe. This would provide an improved public boat launch and beach facility. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.