

**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:

Thursday, May 29, 2025

Public Notice Ending Date:

Wednesday, June 18, 2025

Agency Log No.: C-0074-25

Federal Permit Information: Federal permit/license no. LRC-2022-694 is under the jurisdiction of Chicago District, Regulatory Branch U.S. Army Corps of Engineers

Name and Address of Discharger: Michael Fitzgerald - Lakefront at 1055 Sheridan Road, Winnetka, IL 60093

Discharge Location: In Section 17 of Township 42-North and Range 13-East of the East 3rd Principal Meridian in Cook County. Additional project location information includes the following: Lakefront at 1055 Sheridan Road, Winnetka, IL 60093

Name of Receiving Water: Lake Michigan

Project Name/Description: Groin with Quarystone Headland - proposed installation of a steel sheetpile groin extending 90 ft lakeward from the existing concrete seawall and quarystone revetment, with an additional 30 ft angling southeast

Construction Schedule: Immediate (Planned project duration is approximately 42 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: Oyetunde Tinuoye

Email: Oyetunde.Tinuoye@illinois.gov

Phone: 217/782-3362

Post Document. No. C-0074-25-05292025-PublicNoticeAndFactSheet.pdf

401 Water Quality Certification Fact Sheet for Steel Groin with Quarystone Headland

IEPA Log No. C-0074-25

Contact: Angie Sutton 217-782-9864

This application was previously submitted and given IEPA Log No. C-0043-24. The project was not done at the time as the applicant had decided not to do the work then. The project is being resubmitted under a new log number. The proposed work has not changed.

Michael Fitzgerald "Applicant" has applied for a 401 Water Quality Certification for impacts associated with the construction of a steel groin with a small headland of stone at the lakeward end, and required sand nourishment in Lake Michigan at 1055 Sheridan Road, in Winnetka, Cook County, Illinois. The project site can be found in Township 42 North, Range 13 East, Section 17. The proposed project would allow for construction to install a steel sheetpile groin, quarystone headland, stone revetment, and stairs, as well as clean mitigational sandfill. This section of coastline has lost sand due to lakebed downcutting, especially during prolonged periods of low lake levels. As the nearshore lakebed continues to erode, waves have impacted the bluff toe along the remaining limestone revetment. The property has a newly maintained revetment at the toe of the bluff that encapsulates an old concrete seawall. The beach at the project site has narrowed in the last 10 years or so, and no beach was present lakeward of the revetment during 2019 high-water levels.

The project purpose is to provide a higher level of shoreline protection and reduce the impact from the adjacent municipal stormwater outfall pipe on the beach. This would be accomplished through the construction of a shoreline protection system that is intended to reduce lakebed downcutting and increase protection from waves eroding the shoreline.

A steel sheetpile groin will be installed extending 90 feet lakeward from the existing seawall and revetment, with an additional 30 feet angling to the southeast. A quarystone headland will be constructed around the angled extension with the toe stone 60 feet southeast from the shore parallel steel groin. The quarystone headland would have a lakeward crest elevation of 585 feet with a crest width of 10 feet and slopes of 1:1.5. The proposed revetment will be constructed on the south side of the steel groin matching the elevation of the steel with a slope of 1:1. Steel and stone stairs will be constructed over the steel groin for beach walkers to cross the structure.

Clean mitigational sandfill will be placed north and south of the groin. 675 cubic yards (CY) of clean quarried sand would be placed and 370 CY of stone will cover 0.06 Acre (Ac) of the lakebed. The amount of sand placed will be equal to the amount that the structure would be expected to trap plus an additional 20% overfill. Additionally, the new pre- and post-construction monitoring will be performed and submitted to the IDNR to verify the impacts to the system.

This project will be completed using a barge to deliver materials and equipment to the site. Work will be done using a backhoe that will work from the beach to place materials unless the lake level prohibits this method of construction.

This project is expected to improve the lakebed and water quality with the quarystone breakwaters creating fish habitat. Because of this, no additional mitigation is proposed for the project. Additionally, the project will consist of pre-mitigational sand filling and therefore not negatively impact the littoral drift system. The proposed system will fulfill the design requirements of a 20-year stormwave erosion protection.

Information used in this review was obtained from the application documents dated March 4, 2024, and March 22, 2024.

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 Michigan, Waterbody Segment IL_QLM-01, is listed on the 2020/2022 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for aesthetic quality with a potential cause given as total phosphorus, and fish consumption use with potential causes given as aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls and toxaphene. Aquatic life use, primary contact use, and public and food processing water supply uses are fully supported.

Winnetka Tower Beach, Waterbody Segment IL_QK-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 recreation use with a 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 the 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. Breakwater construction includes 370 CY (675 tons) of stone and sand fill includes 675 CY (1020 tons) for placement. Lakebed coverage of 0.06 acre is expected below the OHWM.

The downdrift section of coastline is protected by quarystone revetments and steel groins with beaches that get wider further south due to the Tower Road Water Plant facilities lakeward projection. There should be no negative impact on the downdrift properties. Local terrestrial wildlife will not be impacted by the project nor will public access.

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 disturbed but will recover over time. The proposed project will consist of building structures designed to address the shoreline erosion and stabilize the shoreline by protecting critical infrastructure and habitat for aquatic species. The quantity of sand is intended to fill the beach area up to the capacity that could be held by the structures plus an additional 20% overfill. The overfill is intended to reduce the potential that sand flowing along the shoreline from north to south would be captured within the enclosed beach area. The proposed fill will improve the quality of the lakebed and water with the quarystone breakwaters creating habitat for fish. This system will be monitored at the 1- and 5-year intervals as well as require pre- and post-construction surveys per IDNR regulations. This requirement will help assure that a sand equilibrium is met and that the new project is gaining and losing sand at a similar rate to neighboring properties.

This project will not negatively impact the local terrestrial and aquatic flora and fauna. The breakwater and beach will improve habitat and will not negatively impact the littoral drift stream. This project will help reduce colloidal fines in Lake Michigan water by reducing lakebed downcutting which is a reduction in pollutant load. Sandy beaches provide good transitional environments for flora and fauna, better than what seawalls and revetments can provide. Sandy beach systems are filters for non-point source runoff, support endangered sea rocket, marram grass, and seaside spurge, and protect the lakebed from erosion that causes larger stormwaves to impact the shore. Beaches make better wildlife habitat than eroding bluffs or seawalls, and stone headlands provide better fish habitat than eroding lakebed clay. In addition, beaches are more visually appealing than steel or concrete seawalls and are safer for swimmers and boaters. Based on this information, no additional mitigation is proposed.

The Corps has not verified the adequacy of this mitigation proposal at this time and will make the final determination on whether the proposed mitigation is appropriate and practicable in accordance with 33 CFR Part 332.

Purpose and Social & Economic Benefits of the Proposed Activity.

The purpose of the proposed activity is to provide a higher level of shore protection for the bluff and lakebed by breaking waves further offshore and retaining more lakebed sand cover within the system. The homeowner/applicant wants to provide a higher level of shore protection for the property as well as reduce the erosional impact from the adjacent municipal stormwater outfall pipe on the beach. Increased stream flow due to climate change causes periodic washout of the municipal street end as well as the adjacent beach including deposition of debris, leaves, garbage, etc. at high flow events.

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

The project site has been inspected and shore protection options were determined using desktop coastal engineering, site conditions from the current 2023 bathymetric survey, studying local prototypes, and several years of observations of the deteriorating shoreline conditions at this site. Because of the amount of sand lost over the last several years (and including during extreme high lake levels) and the uncertainty of future lake levels, systems that will anticipate greater lakebed downcutting, increased beach erosion and more extreme storm events, should be designed.

No Action Option – This option results in leaving the beach and bluff in its existing state. Lakebed erosion will continue and allow larger stormwaves to impact the coastline further lowering the lakebed and eventually causing destabilization of the revetment. The existing newly maintained revetment is still functional to help reduce wave overtopping during low to average lake levels but not high lake levels when the sand erodes from the site (2019 high water levels). The site will also continue to have washout from the adjacent stormwater outlet.

The proposed plan, a steel groin with a quarystone headland, will help maintain sand cover and as a result, reduce lakebed erosion, wave energy on the property, and impacts from the municipal stormwater outfall. The Village of Winnetka has reviewed and preliminarily approved the proposed design.

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

On March 22, 2024, the IDNR EcoCAT review was initiated for the project area (Project #2411420 [C20240006]). The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated. The project was also reviewed for cultural resource impacts and was determined to be in compliance with the Illinois State Agency Historic Resources Preservation Act.

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 Lake Michigan and the nearshore area of the project location by providing shoreline stabilization and sand nourishment to eroding beach areas as well as establish habitat for fish species. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.