

Fact Sheet for Antidegradation Assessment
For Oksana Malysheva
IEPA Log No. C-0397-11
COE Log No. LRC-2011-352
Contact: Mark Books; 217/785-6937
Public Notice Start Date: November 9, 2011

Dr. Oksana Malysheva (“Applicant”) has applied for 401 water quality certification for work associated with constructing a 100 foot long by 35 feet wide quarrystone breakwater beginning at the existing revetment in the center of her property extending north. The beach at this location is at the down drift end of the Wilmette Harbor sand deposit and is not stable. A curved quarrystone breakwater will be built extending from the existing revetment in the center of the property to the north property line to provide shore and bluff protection, help retain the sandy beach, reduce wave energy impacting the revetment which will also help reduce lakebed down cutting. The project is located in Cook County, Section 35, Township 42 North, Range 12 East. The address is 15 Linden Avenue, Wilmette. Approximately 1,953 tons of clean quarried stone will be used in the project. As part of the proposed project the Applicant will also place 950 tons of clean sand onto the existing beach, as beach nourishment, as required by IDNR.

Identification and Characterization of the Affected Water Body.

Lake Michigan is a large oligatrophic lake subject to the Lake Michigan Basin water quality standards of 35 Ill. Adm. Code 302 Subpart E. The open waters are listed in the Illinois Integrated Water Quality Report and Section 303(d) List – 2010 as impaired for fish consumption with a cause given as PCBs and mercury.

The IDNR WIRT System does not list any threatened or endangered species residing within the project area.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

The construction activities will cause a temporary increase in suspended solids. Habitat will be disturbed in the vicinity of the construction area. All sand placed onto the beach will be clean and from inland quarries.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in suspended solids will be local and temporary. The benthic habitat disturbed by the construction activities is anticipated to recover to pre-construction conditions over time.

Purpose and Social & Economic Benefits of the Proposed Activity.

Applicant has stated that:

“The north end of the revetment is deflating at a faster rate than at the south portion of the property. The goal is to stabilize the near shore geometry to provide long term storm wave and bluff toe protection for the northwest section.”

The Applicant further states that:

“With the stone breakwater, revetment and sand fill installed, the lakebed erosion will be reduced.”

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

The construction of the proposed project will follow guidelines set forth by the Agency and USACE. Erosion control measures need to be implemented to prevent additional impacts. All of the proposed work will be completed using a backhoe that will work on the land to place the materials. It is anticipated that the materials and machinery will be delivered to the site via road access with trucks.

The least intrusive alternative would be to not complete the project, the “Do Nothing” option. This option does not repair the existing revetment nor protect the beach from erosive wave actions.

The Applicant also considered constructing a large (over 200 feet in length) breakwater. The Applicant has stated while this option would provide the highest level of shore protection, the excessive cost made this option prohibitive.

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

In a report generated through the IDNR’s EcoCAT system dated August 25, 2011, the Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species in the vicinity of the project location; therefore, consultation 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 the assessment was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving stream will be maintained; 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 will benefit the community at large by providing a stabilized shoreline along Lake Michigan and reducing suspended solids discharges into the lake. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.