# Illinois Department of Natural Resources, Office of Water Resources Permitting on Lake Michigan

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#### Illinois' Lake Michigan Shoreline

- 63 miles long.
- Chicago's lakefront is 22 miles long.
  - Consists of mainly parks and beaches.
- Illinois Beach State Park's lakefront including North Point Marina is 9 miles long.
  - Only near natural shoreline in Illinois.
- Illinois' Lake Michigan shoreline is probably the most urbanized/engineered shoreline in the Great Lakes.
  - Approximately 85% has some form of shore protection.

# Chicago Office Permitting Boundaries

- The IDNR/OWR Chicago Office reviews applications for permit in the following areas.
  - Lake Michigan.
  - Chicago River Main Branch.
  - Chicago River North Branch Canal.
  - Chicago River North Branch south of North Avenue.
  - Chicago River South Branch north of Cermak Road.
  - Calumet River lakeward of the O'Brien Lock and Dam.

#### Authorities

 Authorization pursuant to the RIVERS LAKES AND STREAM ACT OF 1911 [615 ILCS 5] and,

 IDNR/OWR Part 3704 "Regulation of Public Water" Rules.

#### **Public Trust**

- Lake Michigan is a public body of water.
- The bed of Lake Michigan is held in trust for the people by the State of Illinois.

#### Jurisdiction

- On Lake Michigan the IDNR/OWR regulates up to and including the toe of the bluff or the Ordinary High Water Mark, whichever is more restrictive.
- The current Ordinary High Water Mark on Lake Michigan is 581.5 ft. International Great Lakes Datum 1985 Adjusted (581.5 ft. IGLD-85).
- On Lake Michigan the IDNR/OWR issues a joint permit with the Illinois Environmental Protection Agency (IEPA).

#### **IDNR/OWR Review**

- The IDNR/OWR makes its evaluation, based on the type and magnitude of the activity and on the existing conditions of the body of water in the locality of the activity, of the potential of the activity to result in:
  - 1. An obstruction to, or interference with, the navigability of any public body of water;
  - 2. An encroachment on any public body of water;
  - 3. An impairment of any rights, interests or uses of the public in any public body of water or in the natural resources of; or
  - 4. Shoreline instability on other properties.

### Allowable Projects

- Shore or bluff protection
- Beach nourishment
- Establishing a uniform shoreline
- Projects authorized by the General Assembly, to fill the bed of Lake Michigan (only provided to public agencies to serve public purposes).
- Dredging and open water disposal of dredge material.
- Construction of Harbors (only by public agencies and with the blessing of the General Assembly)
- Boat Ramps and Permeable Piers.

## Types of Authorizations

- Permit Not Required.
- General Permit 1-LM
- Individual Permit

### Permit Not Required

- Projects entirely above the toe of the bluff and the Ordinary High Water Mark of 581.5 IGLD-85.
- Maintenance of an existing permitted structure.
- This determination is made by the IDNR/OWR after reviewing a completed application form.
- No fee is required.

#### General Permit No. 1-LM

- Issued for minor shore protection projects that are parallel to shore.
- Can't exceed 300 ft. in length.
- Examples, include stone revetments or steel sheet pile bulkheads built at the toe of a bluff.
- Does not require a public notice.
- Does require IEPA sign off.
- A \$500 fee is required.

# Quarrystone Revetment Winnetka, Illinois



#### Steel Bulkhead, Evanston, Illinois



#### Bulkhead w/Stone Revetment Glencoe, IL



#### Individual Permit

- All projects located at or below the toe of the bluff or the Ordinary High Water Mark 581.5 IGLD - 85, whichever is more restrictive and not covered by GP-1LM.
- Requires a 30 day public notice.
- IEPA sign off.
- Fees are either \$3,130 or \$5,000 depending on the proposed project.

## Groin Field, Highland Park, IL



#### Stone Groin, Wilmette, IL



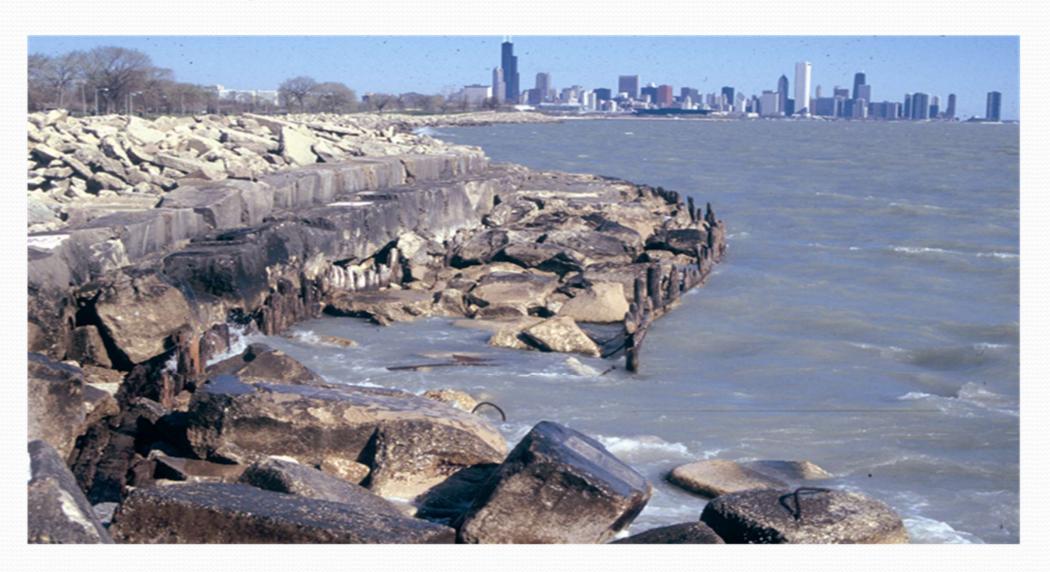
## Stone Spur on the end of an existing steel sheet pile groin, Lake Forest, IL



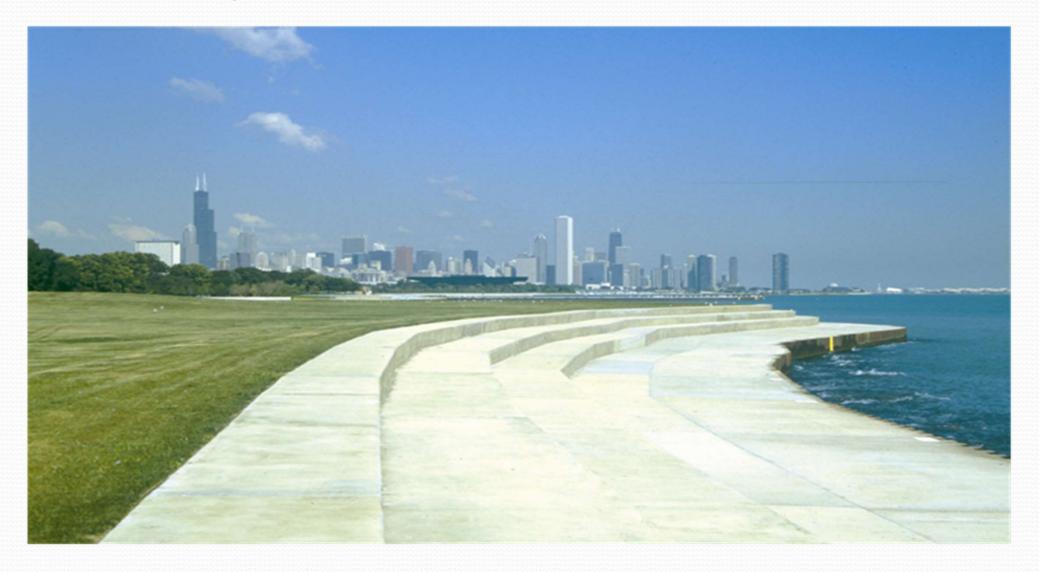
## Breakwater/Beach System, w/Boat Ramp Winnetka, IL



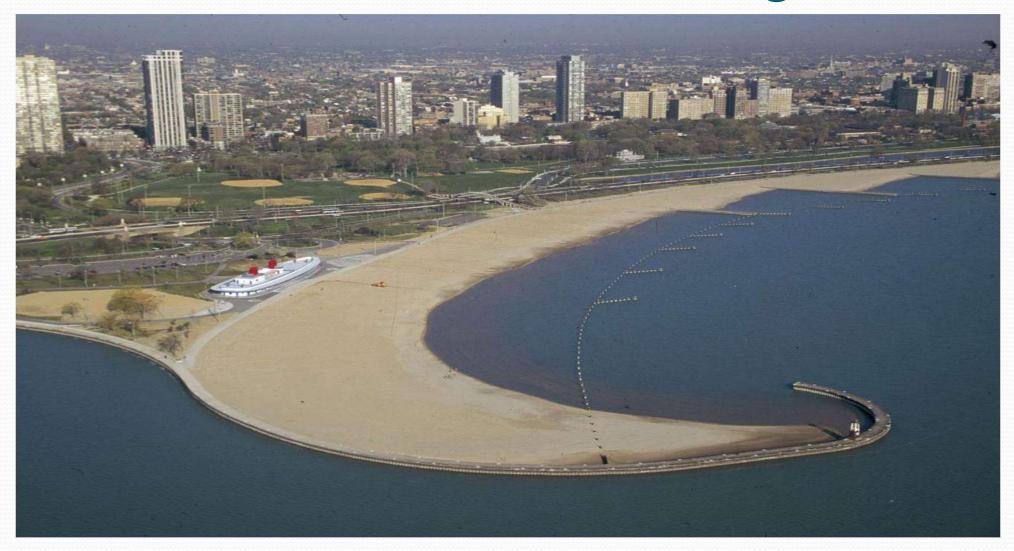
## Chicago Lakefront 1990



## Chicago Lakefront 2000



## North Ave. Beach, Chicago, IL



#### Revetment, Breakwater, Underwater Reef North Point Marina, Winthrop Harbor, IL



## Application

- The application form "Protecting Illinois Waters" can be found at
   www.dpr.illinois.gov/\/\datarResources/Pages/PermitA
  - www.dnr.illinois.gov/WaterResources/Pages/PermitApplicationandInstructions.aspx.
- Joint application form used by the IDNR, U.S. Army Corps of Engineers and the IEPA.
- The application needs to be sent separately to each of the permitting agencies.

## IDNR/OWR'S Guidelines for Shore Protection Projects

- Developed in 2008 by the IDNR/OWR, to help applicant's apply for shore protection projects.
- Guidelines not rules.
- Available at <u>www.dnr.illinois.gov/WaterResources/Documents/La</u> ke%20Michigan%20Permit%20Guidelines.pdf

### Application

- Applicant's should send two copies of their application for permit to the IDNR/OWR's Chicago Office.
- Item 7. of the application Adjacent Property Owners should include; 10 neighbors south of the proposed project and 3 neighbors north.

#### **Plans**

- Full size plans are fine but one copy of 11" x 17" or smaller will be required.
- Plans should be to scale, cross-sections should show vertical and horizontal scale.
- Plans should clearly show the Ordinary High Water Mark (581.5 ft. IGLD-85) and reference the datum used (preferably IGLD-85).
- Plans should show existing and proposed conditions, adjacent property lines and a north arrow.
- A detailed location map, plan view and cross-sectional views will be required.

#### **Additional Data**

- A detailed explanation of the purpose and need for the project.
- An evaluation of the projects potential impacts in the area on:
  - Public uses, boating, swimming, wading and fishing.
  - Natural resources in the nearshore including fisheries, waterfowl, wildlife, and vegetation.
  - Adjacent property's shorelines.
  - The project's components that will minimize or mitigate any project-induced negative impacts.
- Approval in writing from adjacent property owners for any work proposed on or in front of their property.

## Shore Parallel Revetments and Bulkheads

- Located at the toe of the bluff.
- As large as needed to protect the bluff.
- Clean material, quarrystone, steel, wood, etc.

## Shore Perpendicular or Offshore Structures

- Should be the minimum size needed to provide adequate shore protection.
- The lakeward end of the structure should extend into Lake Michigan no further than 125 ft. measured from the toe of the bluff.
- All structures should provide pedestrian access over and across them at the landward side.

## Pre-Mitigational Fill

- All structures with the potential to trap sand from the littoral drift must be pre-filled to 120% of their potential capacity with clean sand.
- The sand must be of the same grain size or larger.
- The sand must placed immediately after the construction of the structures.
- Volume calculations and a plan view showing the location and volumes of sand placement, should be submitted with the application.

### Monitoring

- All structures with the ability to trap littoral sediments will require monitoring to show they are performing as designed.
- Monitoring will consist of the following.
  - A pre-construction survey
  - A post construction survey, done within one month after construction.
  - A survey done one year after the post construction survey.
  - A Survey done five years after the original post construction survey.
  - Additional monitoring may be required.

#### **Public Notice**

- Issued for all Individual Permit reviews.
- 30-day comment period.
- Sent to federal, local and state governments.
- Sent to adjacent property owners, 10 south and 3 north and the Department's list of interested parties.
- Any objections received need to be responded to in writing by the applicant or their agent.
- The public notice period may be extended if warranted.

### Permit Special Conditions

- The State of Illinois does not convey title to the permittee or recognize title of the permittee to any submerged lands of Lake Michigan.
- The permittee and the permittee's successors shall make no claim whatsoever to any interest in any accretions caused by the activity.

## Closing

- A pre-application meeting is always a good idea.
- Make sure you apply to all three agencies.

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