

Shoreline Regulations

Inland Lakes and Streams and Great Lakes

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Water Resources Division

Cadillac District Office



Shoreline Regulations

- Part 301, Inland Lakes and Streams
- Part 325, Great Lakes Submerged Lands
- Part 303, Wetlands Protection
- Part 353, Sand Dunes Protection and Management

Part 301

Lake: Natural or man-made, permanent body of water 5-acres or more in size.

Stream: Any body of water that has definite banks, a bed, and visible evidence of a continued flow or continued occurrence of water. This may include those waterbodies commonly referred to as drains.

Ordinary High Water Mark

Well defined OHWM
Water is at OHWM



OHWM not as obvious
OHWM is above the water's edge



Regulated Activities under Part 301

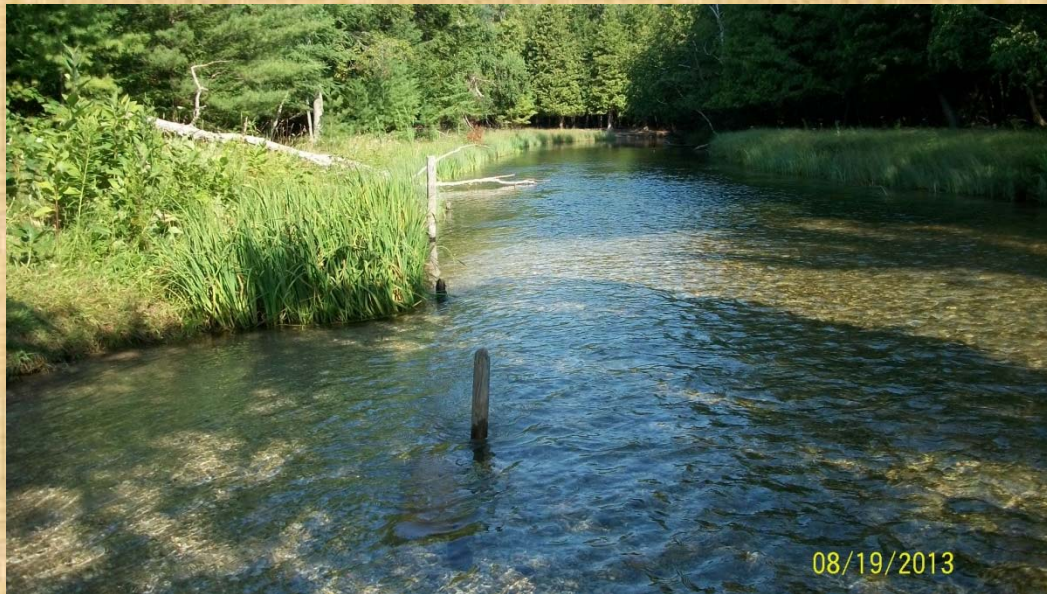
- Dredging
- Filling
- Marinas
- Impacting water flow
- Construction at or lakeward of OHWM



**Our statutes are subject to change, contact
DEQ Water Resource program staff.**

Part 301 Review Criteria

- Project will not adversely affect the Public Trust or Riparian Rights
- Project will not unlawfully impair or destroy any of the waters or other natural resources of the state



Shoreline Protection



- Natural Vegetation
- Bioengineering
- Riprap
- Seawall with toe stone

The proposed structure fulfills an identifiable need for erosion protection, bank stabilization, or the protection of uplands.

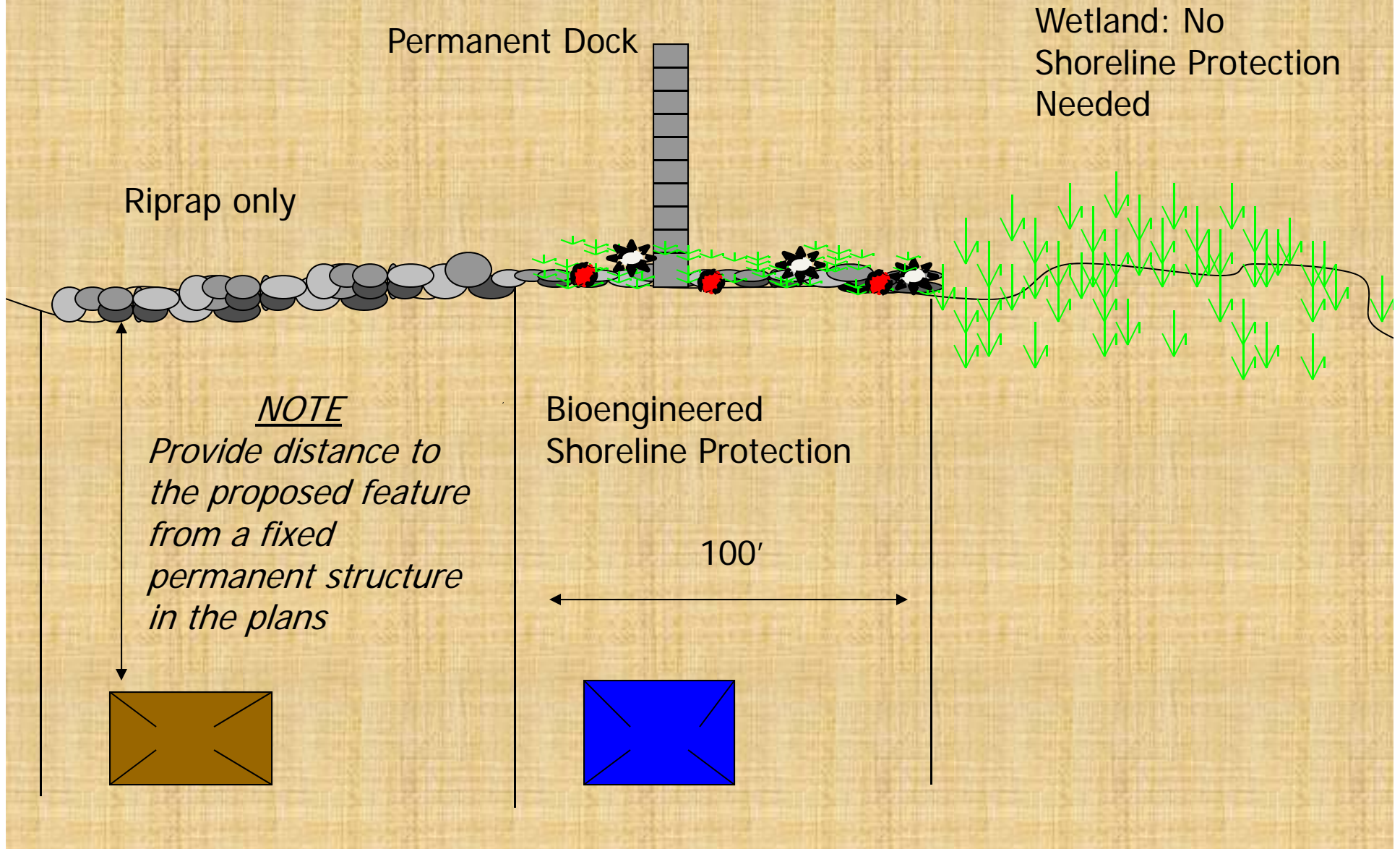
Shoreline Protection Projects

- Shoreline protection can be effective at stopping erosion and preventing further erosion.
- Shoreline vegetation protects property naturally, effectively and inexpensively.
- Bioengineering methods can effectively protect highly vulnerable shorelines.
- Riprap and seawalls provide shoreline protection, but reduce the natural shallow water habitat.

Shoreline Protection Projects

- The DEQ will evaluate the site conditions to determine appropriate shoreline protection.
- Review will include
 - Existing on-site natural resources, i.e. wetlands, fish and wildlife habitat, woody debris, and natural cobble in nearshore areas
 - Extent of erosion and need for shoreline protection
 - Use of Wisconsin Erosion calculator

Shoreline Protection



Bioengineered Shoreline Protection



- Creates long-term shoreline protection
- Attractive native plants can be used as part of the structure
- Bioengineered structures may incorporate some riprap and fill
- May be permissible along some wetland shorelines

Riprap Shoreline Protection



- Riprap dissipates wave energy
- Retains shallow water habitat values found in natural shorelines.
- Riprap provides habitat for aquatic insects, fish and wildlife.
- Provides loafing and basking areas for frogs and turtles.

PLANNING CONSIDERATION:

Riprap provides a feasible and prudent alternative to seawalls.

Seawalls

- Types: Vinyl, steel, wood, stacked rock
- New seawall applications are not considered a Minor Project
- Applications for new seawalls require a \$500 application fee and Public Notice processing
- Only replacement seawalls are covered under the Minor Project category no. 33



PLANNING CONSIDERATION:
Riprap provides a feasible and prudent alternative to seawalls.

Natural Resource Impacts From Seawall Construction



- Loss of shallow water habitat values
- Loss of natural shoreline habitat
- Increase erosion on neighboring properties.



The Great Lakes

Largest freshwater lakes in the world



Why are the Great Lakes water levels so low?

Long-term weather patterns!

Below average snowfall = reduced spring run-off

Limited ice coverage during winter = increased evaporation

**Warmer than average water temperatures =
increased evaporation**

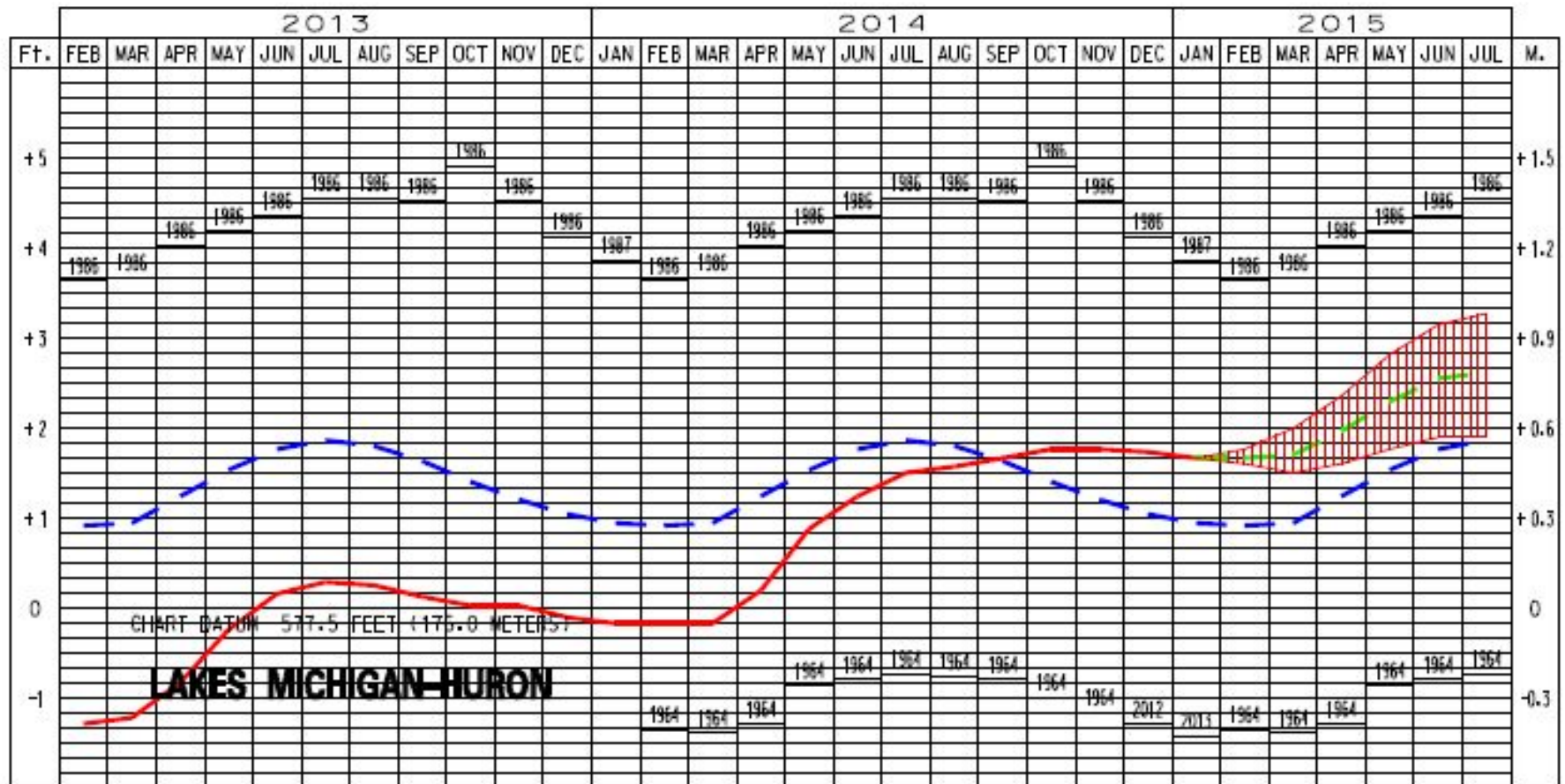


**US Army Corps
of Engineers**
Detroit District



February 2015

MONTHLY BULLETIN OF LAKE LEVELS FOR THE GREAT LAKES



Why are the Great Lakes water levels so low?

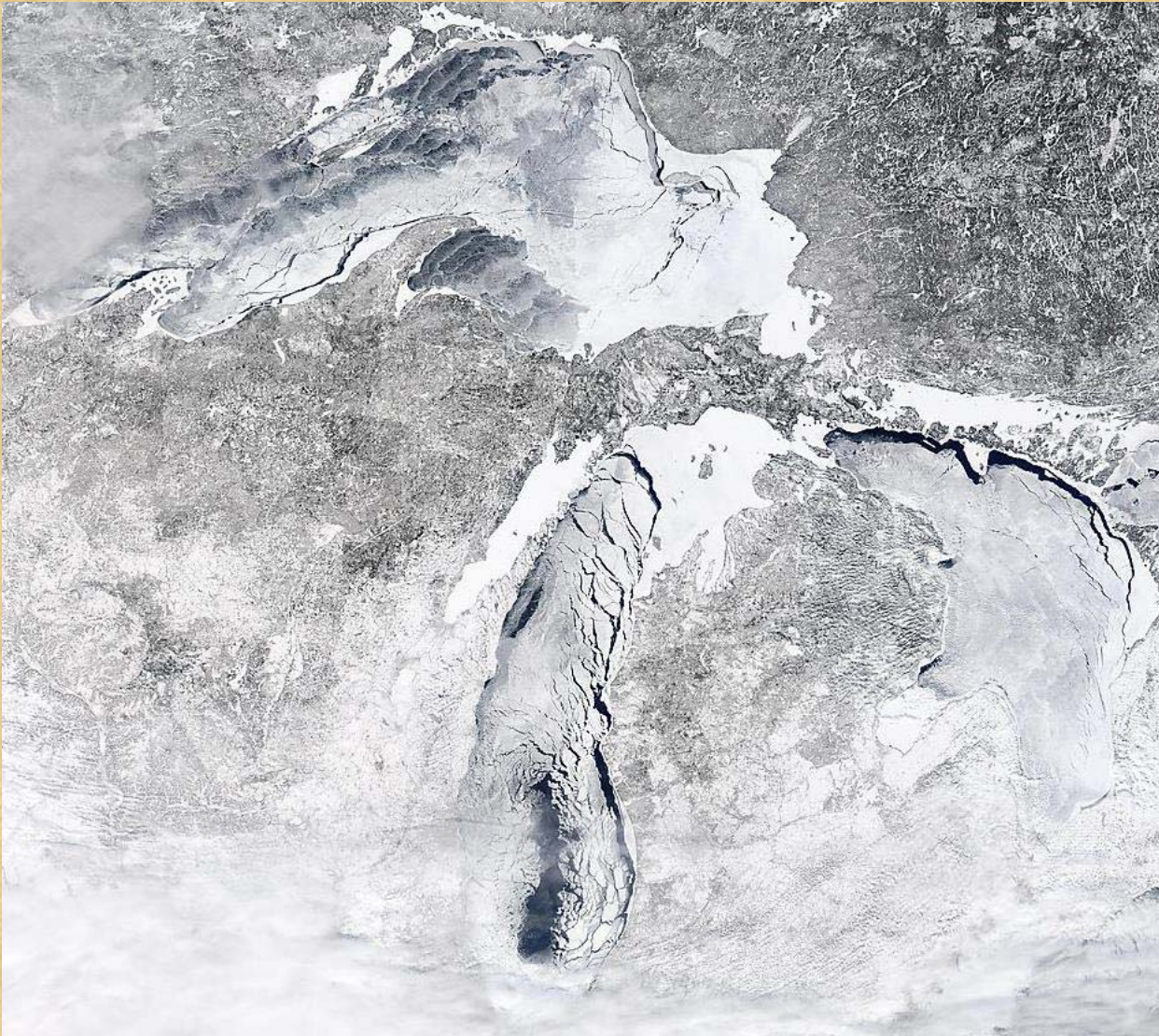
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Western Great Lakes Maximum Ice Cover Reached in Early March



March 5, 2014

Maximum ice cover on Lake Superior was reached on March 5th with 95.74 percent ice cover.

Maximum ice cover on Lake Michigan was reached on March 8th with 93.29 percent ice cover.

Maximum ice cover on Lake Huron was reached on March 6th with 96.30 percent ice cover.



Part 325 – Great Lakes Submerged Lands

- Dredging
- Filling
- Construction at or lakeward of OHWM



The DEQ and USACE have joint jurisdiction on the Great Lakes.

A permit is required from both the DEQ and USACE for regulated projects.

Jurisdictional boundary begins at the Ordinary High Water Mark (OHWM)

DEQ: Set elevation of 580.5 IGLD85 for Lake Michigan

USACE: A line defining the physical characteristics of the shoreline, closely associated with the elevation of 581.5 IGLD 1985.

Part 325 - Shoreline Protection



- Dealing with higher wave energies and high erosion rates.
- Under Minor Project category No. 37- riprap on the Great Lakes can be larger sized rock.
- New seawalls require Public Notice processing.

Part 325, Great Lakes Submerged Lands and Part 303, Wetlands Protection, of NREPA

- Amendments signed into law on July 2, 2012.
- Provides exemptions for some shoreline management activities at/below the OHWM and water's edge.
- A permit is still required from the US Army Corps of Engineers (USACE)

Shoreline Management exemptions

In areas of unconsolidated material *predominately* composed of sand, rock or pebbles, that is, an area where under normal circumstances, *vegetation is non-existent, very sparse, or consists predominantly of plant species not typically adapted to wetland conditions...*

Shoreline Management exemptions

- Leveling of sand – ON-SITE SAND ONLY!
 - Beach sanding on the bottomlands is regulated
- Removal of vegetation
 - Hand-pulling and shallow tilling of very sparsely vegetated areas
- Grooming of sand or pebbles
 - Removal of rocks from the bottomlands is a regulated activity

Shoreline Management exemptions

- Mowing of vegetation that does not disturb soil or plant roots and only extends to waters edge.
- This exemption applies to all Great Lakes Shoreline properties, except Critical Dune Areas.
- Mowing of untreated Phragmites is not recommended. An effective treatment program must include herbicide application.

What exemptions apply to this Great Lakes shoreline?



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What exemptions apply to this shoreline?





**"Um, Can you repeat
the part of the stuff
where you said all
about the things?"**

Please call with any
questions or
Visit our website
www.mi.gov/wrd