# Sheboygan County Shoreland Mitigation Handbook



Adopted November 6, 2012

http://www.sheboygancounty.com/home/showdocument?id=4349

Mitigation Menu

	When is mitigation required?	How much mitigation is required?
Situation A	Increasing lot coverage between 15% and 30%	2 points for every 5% of increased impervious surface
		Examples: 15.01% to 20%=2 points 15.01% to 25%=4 points 15.01% to 30%=6 points
Situation B	Lot coverage is over 30% and proposed project will change the footprint of existing impervious surfaces	2 points for every 5% over 30% lot coverage with a maximum of 8 points  Examples: Existing lot coverage is 40% and proposed project will keep it at 40%=4 points  Existing lot coverage is 80% and proposed project will bring it to 78%= 8
Situation C	Vertical expansion of a non-conforming structure	points 4 points
Situation D	Relocation of a non-conforming structure that does not meet the required setback (cannot be closer than existing structure)	5 points

Mitigation Type	Number of Points Situation A, B, C or D
Rain Garden	3 points
Stormwater Infiltration System	3 points
Rain Gutter Collection System	4 points
Replacement of Septic System or Connection to Public Sewer	2 points
Existing Natural Buffer (OHWM extended 35' landward) (Includes Removal of Invasive Species)	3 points
Planting of a Primary Buffer	1 point per 7' of buffer
(OHWM extended 35' landward)	(maximum of 5 points)
Installation of (or existing) Sideyard Buffer >35'-75' from OHWM	1 point per 7' of width (maximum of 2 points per side and 4 points per lot)
Decreased Access and Viewing Corridor	1 point per 5% decrease from 30% (maximum of 3 points)
Management or Creation of Near-Shore Aquatic Habitat	1 point
Seawall Removal	2 points
Seawall Modification	1 point
Increasing Setback	1 point per 5' of increased setback beyond required (maximum of 3 points)
Using Earth-Tone Materials or Colors	1 point
Removal of a Legal Non-Conforming structure	2 point for accessory or 3 points for principal
Removal of Shore Lighting or Installation of Downcast Shore Lighting within 75' of OHWM	1 point
Conservation Easement	Based on proposal
Method Approved by Planning and Conservation Department Staff	Based on proposal

### Rain Garden - 3 points

 A shallow depression planted with suitable native vegetation designed to absorb stormwater.

Mitigation Intent: Improve/preserve water quality by offsetting the impacts of surface runoff associated with a developed shoreland property. Design should be consistent with the scale of the proposed project and conform to property constraints.

Standards: The desired design should hold surface runoff for 24 to 48 hours after a rainfall event. Rain Garden is not a recommended mitigation option on the bluff of Lake Michigan.

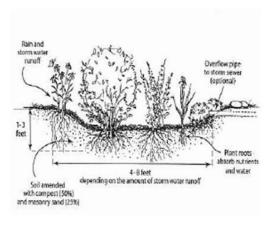


Figure: Cornell University

#### References:

Rain Gardens - UW Extension
Rain Gardens A how-to for homeowners - WDNR
Gardens - Applied Ecological Services Inc.
Build Your Own Rain Garden - WDNR Magazine

Restoration of a Primary Buffer - 1 point per 7' of buffer (maximum of 5 points)

-Restore a primary vegetative buffer of 35 feet from the OHWM of the water resource (seven foot increments are as measured from the OHWM landward)

Mitigation Intent: Protection of the water resource through the reestablishment of native vegetation in the primary buffer, screening of development from the waterway, and provide near shore wildlife habitat.

Standards: Development of a restoration plan using native plantings suitable to the site. The near shore habitat should be designed with native plantings that offer protection and improvement of the water resource. A management plan identifying the establishment of native plantings, invasive species control, and site specific remedies to control erosion on the site during and after the project is needed for this mitigation strategy. Viewing corridor from the developed portion of the site to the waters edge can be maintained for the benefit of the property. Plan restores three tiers of native vegetation within the buffer area—canopy, shrubs, and ground layer of grasses, sedges, rushes, ferns, and wildflowers.



Image: The Wisconsin Lakes Partnership

Image: www.wisconsinlakes.org

#### References:

Protecting and Restoring Shorelands - WDNR/UWEX
A Fresh Look at Shoreland Restoration - WDNR/UWEX
Protecting our Living Shores - WDNR/UWEX
Wisconsin Native Plant Sources and Restoration Consultants - DNR/UWEX
Shoreland Habitat Conservation Practice Standard - NRCS
WI Biology Technical Note - NRCS

Re-Vegetation Fact Sheet - Waushara Co.

## POINTS TO CONSIDER WHEN ADOPTING MITIGATION LANGUAGE

- 1. Establish mitigation practices in a stand-alone document (i.e. mitigation handbook) and adopt it by reference in the ordinance. As mitigation evolves, guidebook can be revised to reflect changes without full County Board action (eliminate lost time due to hearings, etc.).
- Don't include specific standards in the guidebook because they may change over time; include a general overview of the standard/practice with links to outside sources.
- 3. Review guidebook from time to time to ensure web-links/sources are current.
- 4. Keep it simple (implementation and administration).

## Shoreland/Floodplain Survey Submittal Checklist

The following checklist outlines the mapping components required as part of your Shoreland/Floodplain Zoning Permit Application. The Survey must be completed by a WI Registered Land Surveyor. A signed/sealed original of the survey is required to be submitted with your application packet.

The following items should be shown on the map:

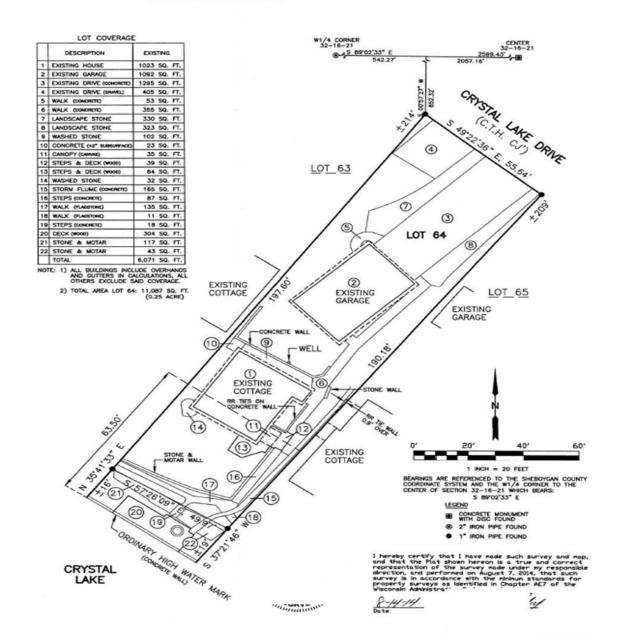
The lot boundaries of the subject parcel.
The water's edge on the day of the survey.
The Ordinary High Water Mark (OHWM) and the OHWM setback line (consult with Department staff).
The average setback (determined by Department staff; for inland water bodies only).
Bluff height determination for Lake Michigan properties north of the City of Sheboygan [see Section 72.15(1)(b)3. of the Shoreland Ordinance].
That part of the lot that is within 300 feet of the OHWM (indicate the area of this part of the property in square feet).
The area (in square feet) of all developed surfaces within the area that is within 300 feet of the OHWM (this would include buildings measured to the edge of the roof overhang, eave, eave trough/rain gutter, decks, patios, driveways and parking areas no matter what the surface, walkways, sidewalks, porches, etc.).
All proposed development including but not limited to filling, grading, excavating, soil stockpiles, buildings (include eaves, overhangs, eave troughs/gutters), decks, patios, driveways, parking areas, walkways, stairways, porches, etc.
The height of all structures that are located within 75 feet of the OHWM measured from the lowest point of any exposed wall and its intersect with the ground, to the highest point of a structure, not including antennas or chimneys.
Location of existing or proposed septic systems or soil borings.
Applicable floodplain elevations and floor elevation of existing or proposed structures(consult with Department staff for this information).
Existing or proposed wells.
Existing and proposed topographic information or slope determination if applicable.
A permanent benchmark referenced to National Geodetic Vertical Datum-1929 (NGVD 29).

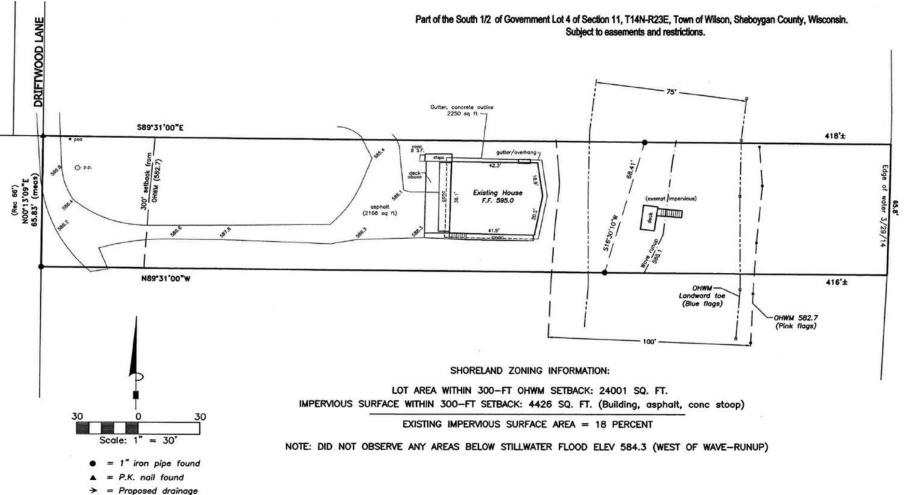
#### PLAT OF SURVEY

FOR:



LOT 64, BLOCK 3, RESUBDIVISION OF CRYSTAL LAKE PARK, TOWN OF RHINE, SHEBOYGAN COUNTY, WISCONSIN.





= Existing grade elevation

STATE HIGHWAY 32