



TODAY'S WEATHER:

www.wunderground.com/us/mi/kewadin

STORM CENTRAL

www.gtlakes.com/storm-central/

RESTORE OUR WATER INTERNATIONAL

www.restoreourwater.org/

INTRODUCTION TO ROWI

Water Level Extremes on the Great Lakes are “the New Normal.” The Great Lakes have been adversely affected by man-made changes to the system that have amplified the impacts of extreme water levels throughout the system. Record setting extremes, including high and low water levels have become the norm.

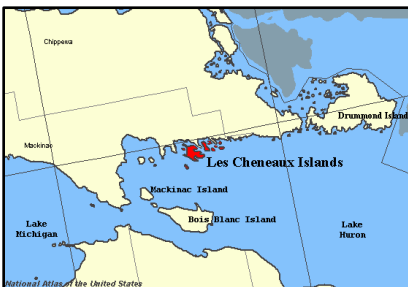
Human modifications to the Great Lakes system since 1865 have included diversions into and out of the lakes, channel modifications between the lakes and outflow regulation from lakes Superior and Ontario. All of these human changes conspired to amplify the environmental and economic damages caused from extreme water levels.

Read More www.restoreourwater.org/

TNN is a Member of ROWI



Les Cheneaux Islands Water Level Change



SUSTAINED HIGH WATERS COULD DAMAGE COASTAL WETLANDS

High levels threaten coastal wetlands and the wildlife and people who rely on their benefits.

<https://www.ducks.org/conservation/glar/michigan/sustained-high-waters-could-damage-coastal-wetlands>



Photo Above - Ottawa National Wildlife Refuge is an example of coastal wetlands on Lake Erie.

Great Lakes water levels reached record highs the summer of 2020, covering new ground and encroaching on property owners from Wisconsin to New York.

And while water levels historically follow high-low cycles, sustained high levels threaten coastal wetlands and the wildlife and people who rely on their benefits.

The Great Lakes are a series of freshwater seas, with more than 11,000 miles of shoreline surrounding drinking water used by 34 million people. For thousands of years, coastal wetlands have served as the transition area between deep waters offshore and the grasslands and forests inland. Those coastal wetlands serve numerous roles for life in the Great Lakes basin, including wildlife habitat, flood prevention, and water quality control.

Prior to human development, the location of these coastal wetlands shifted with lake levels, providing a constantly moving buffer. But as water rose in the summer 2020 and overtook many marshes, the new levels often met roads, houses, and farms.

Existing coastal wetlands will remain healthy if waters follow historical patterns and recede. But if climate change sets a new normal for Great Lakes levels, human development may prevent new coastal wetlands from taking shape in many areas.

“Everything would change if the landscape changes,” said Kali Rush, Ducks Unlimited biologist in Michigan.



Manistee Marsh on coast of Lake Michigan

Higher lake levels with no room for coastal wetlands have several compounding impacts, Rush said. Coastal wetlands are nature’s sponges, soaking up water and slowly releasing it. “Having more of these wetlands helps subdue flood surge,” she said. “Fewer wetlands mean more intense flooding and erosion of the shoreline.”

The hundreds of species of plants and animals that live in coastal wetlands would be homeless. Dabbling ducks that need shallow water would lose cover and their food source. Shorebirds that rely on mud flats would be forced to move on to new territories.

And while Great Lakes water volume would increase, the quality of that water would face greater pressure. Wetlands filter runoff from human development, including vehicle pollutants and algae bloom-causing fertilizers. Take away those filters and contaminants would have a direct path to the Great Lakes.

Additional invasive species could fill the void left behind without wetlands. Invasive plants need less hospitable conditions to take root, especially in areas not conducive for traditional wetland complexes. (Cont’d on page 2)

HYPOTHERMIA – IT’S NOT JUST FOR WINTER IN THE GREAT LAKES!

BY: Steve Stewart, [MSU Extension](#) – Sep.25, 2013
https://www.canr.msu.edu/news/hypothermia_its_not_just_for_winter_in_the_great_lakes

Can someone become hypothermic in August in less than one hour? Read on!

In August (2013), [Michigan State University Extension](#) staff working as instructors aboard a [Summer Discovery Cruise](#) were participants in a water rescue on the Great Lakes where the Detroit River enters Lake Erie.

One of the victims was exhibiting symptoms of hypothermia after having been in 71 degree water for 45 minutes. Hypothermia in August?



Cold water can conduct heat away from your body 25 times faster than air of the same temperature. Within minutes, your body’s core temperature—brain, heart, lungs, and other vital organs—begins to cool, and your body responds by trying to keep as much heat as possible in the core. The flow of blood to the arms and legs is reduced, and your body tries to generate heat by shivering.

How fast does all of this occur? The answer depends on many factors: water temperature, your age and physical condition, how you behave while in the water, the amount of insulation by your clothing and your mental attitude. Under the worst circumstances, you may lapse unconscious in 30 minutes or less and you could be dead in less than 1 hour.

See Chart on the MSU Extension Website

Take steps to extend your survival time and increase your chances of being rescued. Many of these steps will help your body to conserve energy and retain heat in core area.

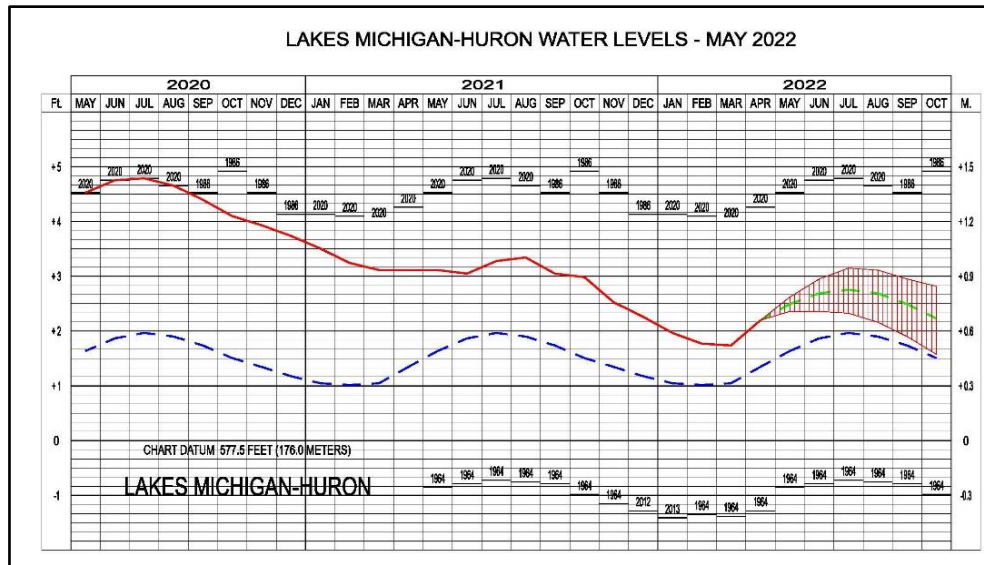
- ❖ Wear some means of flotation - PFD - so you don't have to use energy to keep yourself afloat.
- ❖ Keep as much of your body out of the water as possible, especially head and neck.

Great Lakes are usually cold enough, year around, to cause hypothermia if immersion is prolonged. [Michigan Sea Grant](#) was among the early national leaders in hypothermia and cold water near-drowning research; MSU Sea Grant Extension educated the public and first responders. [Minnesota Sea Grant website Hypothermia Prevention - Survival in Cold Water](#)



GREAT LAKES MONTHLY WATER LEVEL FORECASTS

From US Army Corps of Engineers



Forecasted water levels for May 6 are below last year’s levels on all lakes, except on Lake Erie, which is near its level from a year ago and Lake Ontario, which is 19 inches above levels from a year ago.

As the lakes continue their seasonal rise, the water levels on Superior, Lakes Michigan-Huron, St. Clair, Erie, and Ontario, are 4 to 7 inches above water levels from a month ago. Lake Superior is near its long-term average for May. All the other lakes continue to be above their long-term average May levels.

In the next month, water levels on all lakes are forecast to rise except Lake Ontario which will be near its current level. (Levels for all lakes can be seen at www.restoreourwater.org/)

SUSTAINED HIGH WATERS COULD DAMAGE COASTAL WETLANDS – Cont’d from page 1

The U.S. Army Corps of Engineers announced in early September 2020 that based on preliminary August data, Lake Superior tied its record high for the month while Lake St. Clair and Lake Erie established new record high monthly mean water levels in August. Water levels on Lake Michigan-Huron and Lake Ontario were slightly below record highs, but still very high compared to average.



“We don’t know how long lake levels will take to rebound because we simply don’t know what the future climate will be,” Rush said. “But what’s important is protecting the pristine coastal areas we already have to not make the situation worse.” (Editor’s Note: Lake Michigan Huron has declined about 30 inches since July 2020.)

About 60 percent of historic wetlands have been lost in the Great Lakes area to human development, and continued loss is estimated at one percent annually.

Ducks Unlimited combats these losses through its Great Lakes Initiative, and the results are impressive. Since 2012, more than 40,000 acres of wetlands and associated uplands have been protected, restored, or enhanced. Learn more about the Ducks Unlimited [Great Lakes Initiative](#).

Shared from THEBALANCE.COM:

Deed restrictions limit what you can do with a property, or what it can be used for. Learn how to find out if there are deed restrictions on a property you want to buy.

Disclaimer: This article is shared for general information only. It does not constitute legal advice. Also refer to the general disclaimer for Township Neighbors Network in the footer on this page.

WHAT ARE DEED RESTRICTIONS?

BY: REBECCA LAKE Published January 21, 2022
REVIEWED BY: DORETHA CLEMON

EXCERPT - PLEASE READ ENTIRE ARTICLE

www.thebalance.com/what-are-deed-restrictions-5216598

Learn how to determine whether a property has deed restrictions, and how buying a deed-restricted property could lead to issues if you don't understand the limitations.

TNN VP Scott H. Finch (Ret: State Bar of MI) notes, "The article is solid, but does not state that the landowner is bound by the stricter of legally binding deed restrictions & local law. The article refers to removing a fence in violation. Removal also applies to building violations. A HOA or neighbor can enforce."

Deed restrictions limit how a property can be used. A deed is a legal document that defines who owns a particular property. When you buy a home, for example, your name is added to the deed signifying that you own it.

Homeowners associations (HOAs) can use deed restrictions to set certain standards for behavior and property use. Deed restrictions can also preserve nature or wildlife areas.

How Deed Restrictions Work

Deed restrictions work by specifying rules of a property, namely which activities and uses are allowed and which are not. They essentially impose rules on a specific property, and property owners must adhere to them.

Special Considerations for Homebuyers

Buying a deed-restricted property could create problems if you're not aware of what is or is not allowed before signing paperwork. e.g, you don't want to find out after spending \$5,000 on a new fence you were not allowed to put it up.

To avoid situations like this when buying a home. The first step is researching the property you're interested in to determine whether there are deed restrictions in place.

This can be as easy as searching property address in public land records through the register of deeds. You or your Agent can also ask the HOA if there are restrictions.

Key Takeaways: Deed restrictions limit the way that a piece of property can be used. Deed restrictions apply to the property, regardless of who owns it. HOA can enforce deed restrictions to preserve property values.

DNR TIPS TO KEEP BLACK BEARS OUT OF YOUR MICHIGAN YARD THIS SPRING

By [Emily Bingham Ebigham@mlive.com](mailto:Emily.Bingham@mlive.com)



Keep black bears away from your bird feeders and garbage cans. For tips on keeping springtime snack seekers away from your property, visit www.Michigan.gov/Wildlife

Photo courtesy Michigan DNR MI Dept. of Natural Resources

Published: Mar. 10, 2022, 12:02 p.m.

www.mlive.com/news/2022/03/dnr-tips-to-keep-black-bears-out-of-your-michigan-yard-this-spring.html

The Michigan Department of Natural Resources is reminding Michiganders that spring means black bears soon will leave their dens and become active, creating opportunities for potential conflict as they forage for food.

While black bears primarily forage on green vegetation, they will also browse bird feeders, pet foods left outdoors, and garbage cans if available, the DNR said.

Simple steps to keep bears safely at a distance and prevent conflicts this spring and summer include:

Remove bird feeders or replace feeders with bird baths. Bird feeders can lead to bear problems if you live in the Upper Peninsula or northern Lower Peninsula, where black bears are more prevalent. The DNR recommends swapping out calorie-rich bird seed for a bird bath, nest box or bird perch, or native plants that will attract birds year after year. [Michigan Audubon offers this list of native plants that benefit birds.](#)

Bring pet food indoors, keep outdoor grills and patio furniture clean. Bears are great at sniffing out potential food sources, which is why outdoor grills, patio furniture and pet foods can lure them closer to your home. Don't keep pet food outside and be sure to keep your outdoor grilling area clean.

Wait for garbage pickup day. Rather than leaving garbage cans outside overnight before collection day, store garbage in a garage, basement, or freezer until the morning when garbage is collected, so as not to tempt bears and other wildlife into perusing your trash.

More wildlife tips can be found Michigan.gov/Wildlife.

PLEASE DONATE TO TNN, A 501(c)(3) Charity

Dear Neighbor,

TNN operates virtually – no physical facility - no staff – all volunteers. TNN hires support partners for projects within the limits of your donations.

TNN News is curated to your interests. Deductible donation finance projects to address challenges to lifestyle & environment. Current Priority: Upgrade website.

We appreciate your renewed commitment.

[Keith Termaat](#), TNN President

Mail check to: Township Neighbors Network - P.O. Box 887, Elk Rapids, MI 49629
For checks use attached form. PAY PAL on website.