GREAT LAKES COALITION
Michigan/Lake Michigan Chapter
For Shoreline Preservation
P.O. Box 429
Saugatuck, Michigan 49453
TEL (269) 857-8945 * FAX (269) 857-8945
www.iglc.org
E-mail: info@iglc.org

Newsletter – Summer 2017

TURN OFF THE FAUCET!

Lake levels continue to rise and eat up our shoreline. Due to above average precipitation this spring, the water level could rise to more than 1-1/2 feet above the long-term average in June. An article in the June 18, 2017 Chicago Tribune states, "...an unexpected deluge this spring, when Chicago saw 43 percent more precipitation than usual." Also, even though there was little ice cover over Lake Michigan, less evaporation occurred due to a not so cold winter. Quoting again from the Tribune article, "...It's often a battle between how much water is coming in versus how much is leaving."

In that respect, the Coalition has been in contact with the Lake Superior Board of Control. The Board is responsible for regulating the outflow from Lake Superior (into Lake Michigan-Huron) and for managing the control works on the St. Marys River. Monthly reports of outflow data are available on their website and the Coalition continues to monitor the data. The Board of Control is an agency of the International Joint Commission (IJC). They meet twice per year before appearing before the IJC. They hold a yearly teleconference/webinar, usually in June, that is open to public comments. They also sponsor an Engineers' Day at the end of June during the Soo Locks open house. This year's Engineers' Day is June 30 and the public is welcome.

http://ijc.org/en_/ilsbc/International_Lake_Superior_Board_of_Control

You can view the monthly Lake Levels Bulletin online at:
http://www.lre.usace.army.mil/Missions/Great-Lakes-Information/Great-Lakes-Water-Levels/Water-Level-Forecast/Monthly-Bulletin-of-Great-Lakes-Water-Levels/
or have the bulletin mailed to you each month. Write to Dept. of the Army, Detroit District Corps of Engineers, ATTN: CELRE-HH-W, 477 Michigan Ave., Detroit, MI 48226-2550.

AND GIVE US OUR SAND!

New Buffalo has been particularly hard hit with loss of sand supply. The New Buffalo harbor was built in 1975 as a "harbor of refuge." It was designed to have sand flow around the harbor but that didn't work. Therefore, a nourishment project was in force from 1979 through 1995 but was then stopped due to lack of federal funding. This year the harbor will be dredged and should be completed by the end of May. The dredging is being paid for by local interests with no government funding. Some of the dredged material is not suitable for beach replenishment. The amount of sand removed from the periodic harbor channel dredging is a small fraction of the sand that is being blocked by the harbor so the dredged sand placed south of the harbor helps with preventing erosion but is not enough sand to correct the problem.

Holland harbor is scheduled to be dredged in June. Saugatuck harbor was scheduled to be dredged this summer but no funding was released.

In Brevard County, Florida, a lawsuit filed by 300 property owners vs. the U.S. Army Corps of Engineers for damages (loss of sand) caused by the construction of the Port Canaveral harbor, was won by the plaintiffs. The county is now receiving $10 million per year for the next 50 years from the government for sand replenishment.

Why is small harbor dredging important to the Great Lakes Coalition? As the Coalition strives to keep the lake at moderate levels, it is important that all harbors stay open. When lake levels are lower than average, many shoreline owners benefit from additional beach. However, it is equally important to keep the small harbors open. The dredged material can be used to support the littoral drift amounts that are reduced by harbor breakwaters and to put sand back into the littoral system.

ANNUAL MEMBERSHIP MEETING

The Great Lakes Coalition will hold its Annual Membership Meeting on Saturday, August 12, 2017, once again at the Haworth Inn and Conference Center on the campus of Hope College in Holland, Michigan. The meeting will begin at 10:00 a.m. In addition to our regular business meeting, we have invited Ed Oldis, a member of the New Buffalo Shoreline Alliance (NBSA) to describe the erosion impact of the New Buffalo harbor. This presentation is an excellent example of the impact of man-made structures on Lake Michigan shoreline erosion and provides insights and recommendations on remedial measures to lessen the damaging impacts of these structures. We feel Ed's presentation will give our membership a first-hand report on what is happening in the New Buffalo area and what measures the property owners are taking. This information can be applied up and down our shoreline. Please plan on attending this important meeting.

SUMMER INTERN

The Coalition has just hired a part-time summer intern to join our staff. Nicole Hahn is a recent graduate of Grand Valley State University with a degree in Natural Resources and Biology. She is currently employed as a research assistant at the Annis Water Resources Institute in Muskegon under the direction of Dr. Alan Steinman, Director. Nicole has been involved in lake monitoring at Lake Macatawa and Lake Muskegon. Nicole will devote her time with the Coalition to setting up a Facebook page, updating our website, and expanding our membership base. We are delighted to have Nicole join us. And, check us out on Facebook.

SHORELINE DEFINITIONS

Depth of closure, or point of no return, is the lake depth at which the maximum wave height likely to occur on Lake Michigan is capable of reaching down to the lake bed and moving sand toward the shore. The depth is thought to be about 20 feet (or 6.1 meters) on Lake Michigan.

Fetch is the approximate distance from a certain direction over open water from which a wave can build up as a result of sustained winds. Fetch on Lake Michigan from the north is considered to be about 300 miles and from the west is about 55 miles as measured from St. Joseph harbor.

Cohesive refers to the compaction of fine sand, silt and clay into a layer of material which is resistant to littoral transport along the shore due to its compressed condition. The compacted or compressed state is the result of the glacial weight pressing down. A mile high ice glacier would have a downward force of over 300,000 pounds per square foot or over 2,000 pounds per square inch. If there is enough sand it protects the cohesive layer from fracture and erosion.

Littoral Drift is the movement of sand by waves along shore between the depth of closure and the still-water-line. In Southeastern Lake Michigan the littoral drift is about 110,000 cubic yards per year southbound. The magnitude of net littoral drift varies with fetch.

Lateral Support is to the shore as subjacent lakebed holding up of the dry or fast land above the lake. South of St. Joseph the lakebed is missing about 1,300 cu/ft due to removal of sand by the piers by trapping or diverting beyond the depth of closure.

Slope is the incline of the lakebed usually expressed as the vertical one-foot rise for every horizontal distance, which varies. Historic lakebed slope for eastern Lake Michigan was 1:80 but has steepened to 1:20 (approx.).

USEFUL CONTACT INFORMATION

Now is the time to contact your U.S. Members of Congress, state and local senators and representatives, the International Joint Commission and others who should be aware of our rising water levels and shoreline conditions. You can write, or in many cases you can send an e-mail.

U.S. Senators and Representatives:
www.senate.gov
www.house.gov (Search by district)
State Senators and Representatives:
www.senate.michigan.gov (Search by district)
www.house.michigan.gov (Search by district)

Permit Application for Shoreline Protection:
The permit application is available online at www.mi.gov/jointpermit or at https://miwaters.deq.state.mi.us. Cost for a general permit is $50, $100 for minor projects, and from $500 to $2,000 for individual projects. The permit is processed at the local MDEQ district office.

International Joint Commission:
If you would care to send a letter to the IJC describing your current property conditions, send to:
Chair, U.S. Section, International Joint Commission, 2000 "L" Street, N.W., Suite 615, Washington, D.C. 20440.
You can also view their many reports and activities at: http://www.ijc.org.

Great Lakes Environmental Research Laboratory:
The NOAA website covering our Great Lakes and providing lake level data.
http://www.glerl.noaa.gov/data/wlevels/

- -

If you have not already done so, time to renew your membership for 2017, or join us if not already a member:

Michigan/Lake Michigan Chapter-Great Lakes Coalition
P. O. Box 429
Saugatuck, MI 49453
(269) 857-8945

We are a 501(C) (3) tax-exempt organization
Contributions are deductible to the full extent of the law

NAME____

MAILING ADDRESS____

____

LAKE PROPERTY ADDRESS IF DIFFERENT:
____

E-MAIL ADDRESS____

SUGGESTED MEMBERSHIP CONTRIBUTION: _____$35 _____$50 _____ $100 _____Other

6/17

GREAT LAKES
COALITION

Michigan/Lake Michigan Chapter
For Shoreline Preservation

P.O. Box 429
Saugatuck, Michigan 49453
TEL (269) 857-8945 * FAX (269) 857-8945
www.iglc.org

RETURN SERVICE REQUESTED

MISSION STATEMENT

The Great Lakes Coalition (GLC) concentrates on water levels; natural sand supply to beaches, dunes, and bluffs; and coastal management. The objective is to promote environmentally sound management of the coastal zone. Natural conditions have been changed by sometimes flawed government intervention and judgment. The GLC is a respected advocate for shoreline property owners that challenges inappropriate regulations and encourages beneficial government decisions.