

TODAY'S WEATHER:

www.wunderground.com/us/mi/kewadin



PLEASE DONATE TO TNN

Together we can advance local watershed prosperity; cleaner water and beaches, more natural GT Bay water levels, better roads, property values.

TNN Leadership Has Broadened

Iconic leader of community & farm, Norm Veliquette; Distinguished U.S. Army veteran, served in Afghanistan/Iraq, LTC (Ret) Ross Snare, PhD.

Kids Need Joy of Play Alongshore

Quagga Mussels, which destroy kids' adventure of life alongshore, must be eradicated. TNN is tracking Zequanox open water try-outs to kill mussels.

Don't Land Dispose Human Waste.

TNN drives an end to land disposal in our water-rich townships. Studies show waste solids in well maintained septic tanks are secure. Target 'leakers'.

Real Estate Values/Property Taxes

TNN Tri-Township Fiscal Comparison analyzes townships' taxes/spending. Expenses appear to have peaked.

Higher Water Shore Erosion

Dredged sand should be placed on eroded beaches not land filled. TNN seeks better answers for shore owners

TNN Donations are tax deductible

\$50, \$75, \$100 or \$200 really help.

Any amount is welcome!

Please use the attached form

LAKE MICHIGAN WATER LEVEL FINALLY DROPS – ALL OF 3 INCHES

But water levels remain 6 inches higher than last year, 18 inches above average and 18 in. below the all-time 1986 High. And that is without wind. Grand Traverse Bay sees water pileup mostly on the east shore by high winds (called seiches). Protective sand bars have not yet formed after the low water years which ended in 2013, so the shore remains vulnerable until ice reefs form. Please see the chart on the next page.

REWARDS OF WINTER PRUNING – PREVENT SPREAD OF OAK WILT

BY: David L. Roberts, Ph.D., Sr. Academic Specialist, MSU. 'The Tree Doctor'.

Oak Wilt is significant in Michigan because of the pruning connection.

Dormant pruning enables us to correct disease problems which would be more risky during the summer season. Open wounds during the warm season attract insects which carry the deadly fungal spores. The red oaks and members of like family are often killed within a month or two after coming in contact with the oak wilt fungus while members of the white oak family may succumb in several years.

Oak Wilt Management Through Winter Pruning:

Pruning during the summer months can actually promote disease transmission and the development of disease epicenters which can then devastate stands of oaks. The mechanism of disease transmission is that insect vectors (primarily sap beetles, including picnic beetles) are attracted to wound sites, and they carry fungal spores from infected trees or dead logs to recently pruned trees.

What is the Best Time for Pruning Oaks?

The safest and most appropriate time to prune oaks is while dormant, from late October to early March. During freezing or near freezing conditions, transmission of oak wilt is almost impossible. Unusually warm climatic periods during dormancy may be conducive for oak wilt spread.



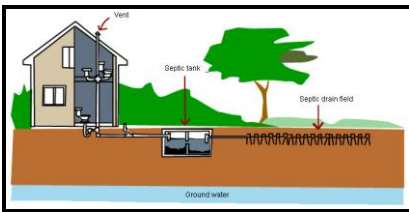
This is a brief excerpt of a more complete discussion and recommendation. The full article may be read at: <https://treedoctor.msu.edu/pruning>

SEA WALLS PROTECT ABOUT 7% OF THE ANTRIM EAST BAY SHORE



Shore hardening is expensive but works if done right. This 1986 sea wall in Torch Lake Township protects a critical dune from erosion by high water. Some say - build further back. But thousands of homes built decades ago met all setback rules and support local schools and public service.

**HOME-OWNER CARE
OF SEPTIC SYSTEMS**



By: Mike Moyer

Identifying root cause of current septic system problems yields better solutions

Key Facts:

- A.** 99.4% of northwest MI septic systems function properly to hold & treat human waste (POS inspection).
- B.** Land disposed pumped human waste pollutes surface water – DEQ.
- C.** Transfer of human waste to an approved treatment facility does not pollute surface water.

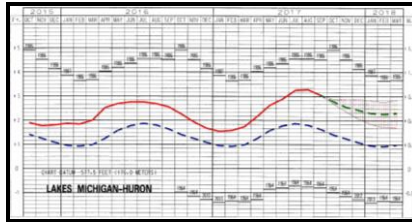
Wrong way: Follow study committee proposal to: expand 49 pages of rules, add inspections, mandate frequent pump-outs statewide. No attention paid to land disposing pumped human waste without treatment.

Right Way - One neighborhood shows the way! Home-owners solve their own problems, reduce costly pump-outs and system replacement. It takes clear info, reminders and a little coaching.

Results: After 2 years, 60% of 51 septic system owners on Joe Marks Trail (Milton Twp) practiced good maintenance with good results. 10% known to not follow best practices have had severe problems including replacing septic tanks/drain fields - even after Point-of-Sale inspection

ABC's of good maintenance practice at home and requiring pumper to transfer waste to an approved treatment facility. Saves money with fewer pump-outs, prevents land disposal and protects real world water quality now.

LAKE MICHIGAN WATER LEVEL FINALLY DROPS – ALL OF 3 INCHES



Great Lake	Population in Watershed	Miles of Shore	Surface sq. miles
Michigan	12 Million	1640	22,300
Huron	3 Million	3830	23,000
Total M - H	15 Million	5470	45,300
Superior	607,000	2980	31,700

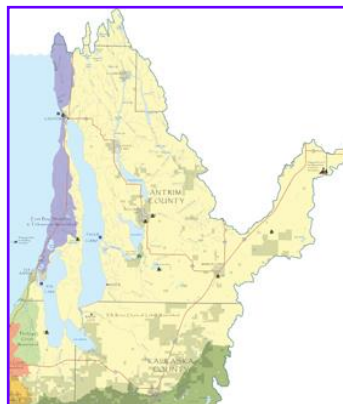
OUTFLOW OF WATER FROM L SUPERIOR IS PRIMARY INFLUENCED BY ELECTRIC POWER GENERATION AND SHIPPING INTERESTS.



“International Lake Superior Board of Control, has set the Lake Superior outflow to 3,130 cubic metres per second for the month of October” - About 3 inches monthly for Lake Michigan-Huron.

Lake Michigan-Huron shore-line erosion is not a major concern of the Lake Superior Board of Control despite a population 25 times that of the L. Superior watershed. Sandbag the beach!

EAST ARM SHORELINE OF TRAVERSE - E.A.S.T Watershed



Key:
E.A.S.T
in purple.
ERCOL*
in yellow

*** ERCOL IN RELATION TO E.A.S.T.**
E.A.S.T watershed is a sister to Elk River Chain of Lakes – ERCOL Watershed
E.A.S.T & ERCOL share a common boundary at the land ridge along US 31 from Elk Rapids to Norwood. .
Waters flowing towards Grand Traverse Bay are in E.A.S.T.
Waters flowing towards the Chain of Lakes are in ERCOL.

Source: GT Bay Watershed Protection Plan and Townships Master Plans.

E.A.S.T - 4% of Grand Traverse Bay water inflows.

E.A.S.T - 24 streams enter into the Bay – from Elk Rapids to Norwood.

E.A.S.T. has forested residential living along East Bay beaches, inland living in dune settings, rural homes, villages, farms and businesses.

E.A.S.T upland farms feature orchards, vineyards, row crops, and confined or pastured cows. Uplands drain through 3 creeks; Mitchell Creek incl. Mud Lake in its 12 sq. mile basin, Paradine-McGuire Creek and Creswell Creek.

NOTE: An E.A.S.T Draft Plan will be submitted to the Watershed Center – GT Bay which is responsible for the overall MDEQ and EPA sanctioned GT Bay Watershed Protection Plan. TNN is monitoring development of the ERCOL Watershed Protection Plan being prepared by a Tip of the Mitt Watershed Council team.