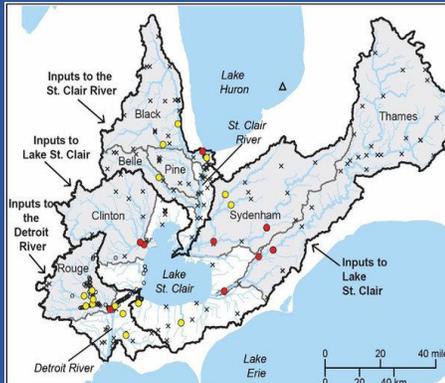


OUR GREAT LAKE ERIE



LAKE HURON SENDING MORE PHOSPHORUS TO ERIE

New research shows more phosphorous – about twice as much - as originally estimated. Means more phosphorus reductions needed for Erie

WALLEYE BONANZA 2021

The walleye run began in the Maumee River this March. The walleye will move east through the season. Great catches are forecast – one of if not the best year ever!!

ERIE MARSH

Lies just a little north of the outfall of the Toledo Ottawa River. Erie Marsh is on the shores of Maumee Bay in Michigan and is an incredible marsh that many are seeking to preserve

SANDUSKY TAKES ACTION TO PROTECT LAKE ERIE WATER QUALITY (Lake Erie Executive Order)

Sandusky Register 3/29/2021 Andy Oriol

Sandusky officials took action to protect Ohio's greatest natural resource.

During a recent public meeting, city commissioners signed an executive order to push for a reduction of toxic algal blooms in Lake Erie, which includes Sandusky Bay. But how can signing a piece of paper and taking a vote, on land no less, enhance water quality? Dennis Murray Jr., the city commissioner sponsoring this legislation, explained:

- The reasoning: "It is part of a broader, multi-state, multi-county and multi-city effort, spearheaded by the (nonprofit advocacy organization) Lake Erie Waterkeeper, to persuade the Biden administration to take a leading role in addressing algal blooms."
- The partnerships: "These are not state issues or local issues, and therefore, ultimately, require the leadership of the federal government to collaboratively lead the region to a solution."
- The assistance: "Acting on our own, Ohio has been unsuccessful in making a significant difference. This is a complex chemistry problem that involves many contributors, with a range of different solutions, but we ultimately need federal leadership so that we are rolling in the same direction."
- The desired result: "Whether that means additional standards or the investment of federal dollars to address the many sources of nutrients - wastewater treatment plants, regular farming, concentrated animal feeding operations or solutions designed to absorb the nutrients - the answers will be both more refined and effective as a result of greater federal leadership."
- The importance: "The health of Lake Erie is of critical importance to our local economy and plays a direct role in both the city's revenues and our expenses. As the pandemic has painfully highlighted, we are dependent, I would say overdependent, on lodging and admissions taxes. If people do not come to our area because the lake is polluted, we lose those revenues. In addition, the algal blooms increase our water treatment expenses both in terms of equipment to detect the blooms and additional chemicals to treat them. And, at the wastewater treatment plant, as ratepayers, we pay a significant price to contribute to the reduction in nutrients discharged into Lake Erie which spawn the blooms."

What is a harmful algal bloom? Harmful algal blooms result from the rapid growth, or bloom, of algae that can cause harm to animals, people or the local environment. They can look like foam, scum or mats on the surface of water and can be different colors. Harmful algal blooms can occur in warm fresh, marine or brackish waters with abundant nutrients. There are many organisms that produce harmful algal blooms. A harmful algal bloom can cause harm by:

- Producing toxins that can poison humans, fish, seabirds, aquatic animals, livestock, wildlife and household pets, such as dogs, that are near the water, drink the water or swim in the water

A VIEW OF THE 2021 LAKE ERIE SEASON*by Sandy Bihn, Lake Erie Waterkeeper*

Walleye fishing in 2021 predicted to be among the best ever. Yellow perch numbers in the western basin are good while down in the Central Basin.

Water levels down from 2020 but rising another 2" in April and 2" more in May(Army Corps) Dam removals and cleanup projects continue. The clean ups remove/treat or control toxic in the sediments from old industrial operations. There are large projects in the Detroit River/Rouge area. Here in Lake Erie, Otter Creek, a tributary to Maumee Bay will remove oily sediments and put them in a confined disposal area. – thanks to former Lake Erie Waterkeeper President Frank Reynolds who told officials about the oily sediments. re down.

Lake Erie Waterkeeper continues to work on protecting Erie Marsh and assessing sturgeon reintroduction in the Cuyahoga. Other collaborations continue.

Lake Erie Waterkeeper is helping with local government resolutions requesting the Lake Erie Executive Order that asks for federal government management to reduce phosphorus(algae). Hopefully the summer of 2021 will have fewer COVID worries and little green in West Erie and a small dead zone in the Central Basin. Algae this summer will depend on spring and early summer rains that result in manure & commercial phosphorus runoff. The more phosphorus – the more algae which start earlier with warm water, and then wind determines where it goes. . .

BOAT DEALERS AND MARINAS DID WELL IN COVID 2020 OTHER NOT SO WELL

Boat dealers saw at least a 50% increases in sales last year, said Michelle Burke, executive director of the Lake Erie Marine Trades Association. Nationwide, new boat sales in May 2020 were the highest they've been in a decade with upticks across all segments. Boat shipments in July were double what they were in July 2019. Kayaks, canoes and gear were in short supply this summer. After July 1 most dealers had no new wave runners. These were the 2020 winners. Charterboats were among the losers with the COVID shut down, fewer fishermen allowed on boats, and an anxious COVID public. Restaurants and hotels also saw declines. Forecast for boat sales in 2021 are very good.

WORKING ON PRESERVING THE GREAT LAKE ERIE MARSH

Huge but tucked away just over the Ohio line in Michigan between I 75 and Lake Erie lies the Erie Marsh – a little known Lake Erie treasure. Portions of the marsh are owned by Nature's Conservancy, State of Michigan, US Fish and Wildlife and Consumers Energy (that has sold part of its property. But the marsh is threatened from an eroding protective peninsula, Woodtick Peninsula. Through a series of waterkeeper led meetings on protecting the marsh, the Army Corps is looking into the feasibility of fortifying Woodtick including reusing dredge materials. Erie Marsh could easily become one of the best birding areas in the Lake Erie watershed.

THE ICONIC STURGEON IN THE MAUMEE – IS THE CUYAHOGA RIVER NEXT??

US Fish and Wildlife along with the Ohio Department is working on reintroducing the dinosaur like sturgeon. First in the Maumee and next possibly the Cuyahoga. The sturgeon are native and bottom eating and do not compete for food with sport fish. More on this as studies come in.

Great Lakes - Lake Erie Brief Updates

Deep waters of Lake Michigan warming - NOAA research is showing that the water hundreds of feet below the surface of Lake Michigan is warming, especially in winter. The warming could change the seasonal patterns of the lake — and alter a way of life for ecosystems and industry alike. It's been known that Lake Michigan surface temperatures are increasing and ice cover is lessening as human activity spurs climate change. The overall warming, ice loss and shrinking winters could lead to long-term shifts, altering the lake's food web and sending fisheries toward uncharted territory.

Ohio Joins Louisiana Opposing Line 5 Buried in the Straits of Mackinaw- Ohio Attorney General David Yost is asking a federal judge in Grand Rapids to block Michigan Gov. Gretchen Whitmer's effort to shut down the Enbridge Line 5 pipeline, arguing on behalf of Ohio refineries and the state of Louisiana that closing the submerged oil line would have economic impact beyond Michigan. Yost argues that closing the pipeline segment under the Straits of Mackinac would cause economic hardship for businesses supplied by the pipeline. In November, Whitmer announced termination of the 1953 easement that allows the pipeline to cross the lakebed where lakes Michigan and Huron connect. She gave Enbridge until May 12 to stop the oil flow, a deadline the company says it won't comply with absent a court order.

Too Many Female Walleye at two Wisconsin Hatcheries- The Wisconsin Department of Natural Resources is conducting research at two fish hatcheries which in 2019 and 2020 had many more females than males – normally there is an about equal number of males and females. Stay tuned for research results in late 2021 – 2022.

New York Studying Wind Turbines in Lake Erie and Ontario – The New York Public Service Commission ordered the New York State Energy Research and Development Authority to conduct a study that will be released in early 2022 on whether wind power in the lakes should be part of New York's Green Energy portfolio. New York has already awarded contracts for five wind turbine farms in the Atlantic Ocean off Long Island. Wind power in Lakes Erie and Ontario involves different challenges not see in the ocean, including winter ice, much shallower water and sloping lake beds. New York is determining the feasibility of fixed and floating foundations. The study will also look at connection issues.

In any location of wind turbines in the lakes, large cables would need to run through communities to connect to the grid. New York is looking at underground cables in both the lake and onshore. New York will consider "Viewsheds" as part of the study which look at impacts on views and homeowners. A California company, Diamond Offshore Wind Development has already expressed interest. There is widespread support and opposition to wind turbines in the lakes.

Dredging Otter Creek to remove oily sediments

Locating near the mouth of Maumee Bay at the Maumee River outflow, is the fourteen-mile-long Otter Creek which begins in Northwood at the Waste Management Landfill and flows through Pilkington, Toledo Refinery, CSX rail yards and the BP refinery after which the creek outfalls into Maumee Bay. Near the outfall of Otter Creek are oily sediments that fish and other habitat refrain from. The sediments are being cleaned up through agreements with some of the companies'. The project includes pumping the contaminated sediments through a pipe submerged in the water from Otter Creek the to Facility Three confined disposal facility.

Murder Hornets



Though not in the Midwest yet, researchers say these invasives are coming from Asia and are in the State of Washington. The hornets dig a shallow hole into the ground. They stay underground for three to four months during the period of time where it's too cold for most organisms to be active. Someone digging the dirt with at this stage invisible hornets could use the dirt for potting soil.

LAKE ERIE EXECUTIVE ORDER – LOCAL GOVERNMENT RESOLUTIONS

It's been seven years since the Toledo drinking water crisis and nine years since the updated Great Lakes Water Quality Agreement was signed that requires a 40% reduction in phosphorus(harmful algae) in the western and central basins of Lake Erie. There is little to no progress in achieving these reductions. But during these years public water systems are collectively paying millions to monitor, test and treat for the algal toxin along with installing expensive equipment to prevent the toxin from getting in drinking water. The users pay for these ongoing increasing costs.

In 2009 Chesapeake found itself in the same little-to-no-progress position and asked then newly elected President Obama for an executive order for the federal government to get needed reductions and to report progress. Many say it was the pivotal turning point for getting the reductions which have brought back the crab and oysters.

Therefore, to help Lake Erie get the needed phosphorus reductions local governments in the Lake Erie watershed are asking newly elected President Biden for a similar order, hopefully to get the reductions Lake Erie needs to reduce harmful algae.

ACTION - Local resolutions are being passed in April. If you know a local elected official that could sponsor the resolution please email sandylakeerie@aol.com

OH NO!! OHIO PERMITTING MORE LARGE CONFINED ANIMALS IN MAUMEE

So far in 2021, the Ohio Department of Agriculture is permitting 1,820 more dairy cows (in addition to 2000 previously permitted), 2,450 more hogs (in addition to 4,900 hogs already permitted) and 6000 more hogs at a new site. This means that the amount of sewage generated by 50,000 humans will be land applied in the Maumee watershed. **H2O Ohio** is using taxpayer money paying \$60 an acre to haul manure to soils with 50 ppm or less while permitting the additional manure to apply 150 ppm soil phosphorus. And, at least for the dairy cows, the land already has over 100 ppm soil phosphorus near the barns where additional manure will be applied. This is far more phosphorus than crops need to grow.

ACTION – Ask your state representatives to have permits for Confined Animal Feeding Operations that limit soil phosphorus to 50 ppm – what H2O Ohio is paying for!

ALGAL TOXIN MICROCYSTIN MONITORING

There is a new NOAA funded portable testing system funded that will sample 12 different Lake Erie sites for microcystin and cylindrospermopsin. It only takes 15 minutes to get results. Lake Erie Waterkeeper is looking into the cost of the units and getting a grant to test in the Maumee where there is visible algae.

LAKE ERIE WATERKEEPER (LEW)

Advocates for fishable, swimmable, & drinkable water through advocacy, education, litigation and technology. LEW, founded in 2004 is licensed by the International Waterkeeper Alliance. LEW is helping the entire Lake Erie watershed. For more information go to lakeeriewaterkeeper.org.

LAKE ERIE WATERKEEPER UPDATES

- Board member, Paul Pacholski, is offering waterkeepers boat tours of Erie Marsh, for info email: captpaul@accesstoledo.com
- BGSU Intern, John O'Brian, is mapping Saginaw Bay CAFO to estimate the number of Great Lakes permitted & permitted animals.
- Email sandylakeerie@aol.com interesting Erie photos
- Join us on Zoom at 7 pm on 2nd Thursday of each month – connection information on web site
- The appeal of 9600 more hogs in Van Wert in the Auglaize/Maumee/Lake Erie watershed continues
- Having a regatta? Ask for Lake Erie information handouts to inform about Lake Erie water quality
- Take your boat this summer around the Toledo Lighthouse to see the first & second floor windows & shutters. Or come to the festival Sept. 11 & 12 at Maumee Bay and take a boat ride..
- Lake Erie Waterkeeper is doing an organization upgrade.