

Wake Surfing Talking Points 1/11/2025

Invasives-- Wake Surf proponents have made claims that ballasted wake surf boats retain only “approximately two quarts” of lake water. But the boat manufacturers’ owners’ manuals contradict this. They instruct adding large amounts of antifreeze to the ballast tanks in winterizing the boats. A MasterCraft manual states that two gallons of antifreeze must be added to each ballast tank. Surf boats have three to seven such tanks. The ballast tanks cannot be inspected. They cannot be fully emptied. Unlike the cooling water in stern drive engines (which heats and kills invasives), the ballast tanks are a perfect environment for keeping invasives alive for weeks. With other towns prohibiting wake surfing, increasing numbers of visiting ballasted boats will use the local lakes... and transfer to them invasives from the last lake they visited.

Studies show that wake surfing should occur at least 500’ - 700’ from shore to protect the shore, docks, swimmers and children from massive waves. Many studies show that to be equivalent to a ski boat at 100’ from shore, a wake surf boat must be at least 500’ from shore. Here are two relatively recent studies:

- Lake Waramaug Study (Nov. 15, 2024, Terra Vigilis)
https://www.warrenct.gov/sites/g/files/vyhlif3991/f/uploads/lake_waramaug_final_report.pdf
- University of Minnesota, (Spring 2022, St Anthony Falls Hydrology Lab)
<https://conservancy.umn.edu/items/bd2d2968-21c4-4726-8a61-53e7daafcb56>

Respected Environmental Groups recommend that wake boats operate at least 500’ from shore (unfortunately, the Wisconsin DNR has not conducted any study)

- Michigan DNR Report <https://mymlsa.org/wp-content/uploads/2023/07/Fisheries-Report-37-Wake-Boat-Study-Official-Version-Released-on-7.28.2023.pdf>
 - At p 2, the executive summary states: “Boats operating in wake-surfing mode or wake-boarding mode, during which boat speed, wave shapers, and/or ballast are used to increase wave height, are recommended to operate at least 500 feet from docks or the shoreline, regardless of water depth. “
- Wisconsin Green Fire (a group founded by retired DNR personnel) — Their 2024 report on all scientific literature recommends that wake surfing should be done at least 600’ from shore. See the report at: https://wlgreenfire.org/2019/wp-content/uploads/2024/05/WakeBoatsLakeEcosystemHealth_WGF-May2024_Final.pdf
 - At p 2 of the report, they conclude “Wake boats can produce wakes that are 2–3 times larger than motorized non wake boats and transfer up to 12 times more power to shorelines, requiring more than 600 ft to dissipate “

The Wake Sports’ Industry’s own data shows that surf boats make waves far too high for other boats on crowded lakes. The industry conducted and published a single study of a wake surf boat on a real lake. This is the “2015 Goudey Study.”

https://www.wsia.net/wp-content/uploads/2020/03/WSIA_draft_report_Rev_II.pdf

The study shows that a 2015 vintage wake surf boat makes a wave 20” high at 100’ from the boat, and still 13” high a full 300’ from the boat. This is the industry’s own data. Where do other boats on the lake go when the wake surf boats operate? Answer, they must either return to the dock or find an area where no surf boat can approach within about 600’. See page iv of the executive summary of the study, which states: “*Wake surfing in deep water is the exception and it takes 300 feet for the wave height to drop by half of its original 26” height.*” Even a 13” wave is a tsunami to skiers, moderate fishing boats and smaller craft. The Minong Flowage is one of the busiest lakes in Northwest Wisconsin.

How can the Wake Sport’s Industry studies claim a wake surf boat at 200’ from shore is like other boats at 100’? -- The data relied on in those studies was highly cherry picked. For example, most data on the surf boat had it operating in 8 to 10 feet of water. It is well known that surf boats in such shallow water make smaller waves. Conversely, the “fishing boat” was a 4100 lb “Thunder Jet Alexis” fishing boat with 6 adults in the boat, operated at plowing speed. In effect, they compare a surf boat operated to make the smallest wave possible, against an exceptionally large fishing boat operated to make the largest wave possible. This is not an appropriate comparison.

Wake surfing disturbs the lake bottom 26’ deep and more-- Two newly released studies show bottom damage and phosphorus increase from wake surfing in water 26’ deep. These studies – one in Connecticut and one in Canada-- show that sediment was disturbed by the prop wash of a wake surf boat at site 26’ deep. In one of the studies, measurements of the phosphorus content of the water showed the phosphorus more than doubled from startup of the surf boat. A ski boat passing the same location had no impact. Other measurements of a surf boat passing over locations 25’ deep showed that two passes of the surf boat increased the phosphorus load in the water between 17% and 25%. Consider the consequence if lots of surf boats continue to use our lakes, year after year. See, Lake Waramaug, Conn. Study (Nov. 15, 2024, Terra Vigilis Environmental Group)
https://www.warrenct.gov/sites/g/files/vyhlf3991/f/uploads/lake_waramaug_final_report.pdf

See also, “Lake Windermere Recreational Impact and Sediment Quality Assessment” (Ecoscape Environmental Consultants, Ltd. August 22, 2024)
<https://www.lakeambassadors.ca/lwawp/wp-content/uploads/2024/08/Lake-Windermere-Recreational-Carrying-Capacity-Study-Public-Release-Version.pdf>

Other studies reach the same conclusion— That surf boats cause significant sediment disturbance and phosphorus increases even in deep water. The Minong Flowage has experienced algae blooms and floating black algae globules post observations of Wake Boats activity for several days. This past year was one of the worst algae blooms on the Minong Flowage observed in most residents memory.

More Surf Boats will Come--The experience of other Wisconsin towns is clear. It is easy to assume that the number of surf boats on the town lakes will remain fixed. But unless the town acts, surf boat numbers will increase each year. And as more come, the lakes will be increasingly damaged, and other boaters will be increasingly displaced. And increasing numbers of visiting boats will come, from nearby towns that have acted to protect their lakes and citizens.

Enforcement—a wake ordinance cannot be enforced, because the DNR and county will not enforce a town ordinance. This is not unique to boating ordinances – the county and DNR typically will not enforce any town ordinance. Yet, towns across Wisconsin continue to pass ordinances. Why? Because almost all citizens respect laws. This is particularly true of wake surfing ordinances— since any violation is highly public and obvious. The reality is that 35 Wisconsin towns have enacted wake surfing ordinances, and with virtually no exceptions, when the ordinance is enacted, wake surfing stops. As required by Wisconsin law, any ordinance will be signposted at each public landing. Pass the ordinance and wake surfing will stop and no new boats will come. No visiting boats will come.

Threat of Litigation— Sadly, threats of litigation are made every time any town considers a wake surfing ordinance. Yet, though 35 Wisconsin towns have enacted such ordinances since 2009, not a single suit has been filed. Why?

- **Town Authority**-- It is quite clear that town boards have the right to exercise its judgment to enact boating laws “in the interest of public health, safety or welfare, including... protecting the state’s natural resources...” (See Wis. Stats. 30.77(3)(a))
- **Public Trust Doctrine** (“PTD”)—The PTD is often suggested as a bar to an ordinance. This is wrong. The Wisconsin Legislative Council (the state agency responsible for advising the Wisconsin Legislature on points of law) issued a legal opinion on Dec 3, 2023 (copy attached) advising that if anyone challenged a town ordinance under the PTD, it is very unlikely that they would win.

Can an exception be made for current boats? No. The DNR states that under the Public Trust Doctrine no exceptions or carveouts can be made for current boats, or for boats of town property owners. If wake surfing is permitted to anyone, it must be permitted to all on the same terms. See “A Guideline for Creating Local Boating Ordinances...” Wisconsin DNR, Aug 2019, p 6, stating, “*All citizens have public rights to navigable waters. Ordinances cannot be adopted to restrict non-residents of the local jurisdiction...*”

“Wait for the State” -- Two years ago, towns were told the same thing... and no legislation even made it out of committee. It is very likely the 2025/26 legislative session will not yield any state law. There is a huge gap between the position of the industry (which will again sponsor legislation) and the many environmental groups that will sponsor a competing bill. Local towns should proceed to enact its own ordinance. If the state later enacts new law, great! But if not (far more likely) local towns/townships will have used local control to protect its own lakes and its own people. In 2024, 19 Wisconsin towns enacted ordinances

– because they did not have confidence the State would act. At least 40 towns are now considering ordinances.

Check out the Surf Boat Manufacturer Websites and Videos-- If you doubt the size of wake surf waves or the fact that they operate in a strongly bow up orientation, check out videos posted by the manufacturers themselves on their own sites and on YouTube (Malibu, MasterCraft, Axis, Nautique). Watch a few videos. Decide for yourself from the manufacturers' own videos if these boats are suitable the Wascott or Minong lakes. While you are watching videos, check out the one at www.lakesatstake.org showing the underwater damage of wake surfing and the one at www.youtube.com/watch?v=DPhdLGrWX0Y showing an enhanced wake hitting a shore of Lake Keesus, Wisconsin.