Below is an article that was published in the Wisconsin State Journal on April 21, 2025, written by Dr. William Banholzer (<a href="https://directory.engr.wisc.edu/che/Faculty/Banholzer\_William/">https://directory.engr.wisc.edu/che/Faculty/Banholzer\_William/</a>). A link is also provided to link to the article (which requires subscription)

<a href="https://madison.com/opinion/column/article\_7e22b28d">https://madison.com/opinion/column/article\_7e22b28d</a>

## Don't Ban Wake Surfing—Base Policy on Science, Not Speculation

By William Banholzer, Professor of Practice, Chemical and Biological Engineering, University of Wisconsin -Madison.

Wake surfing has made Wisconsin's lakes accessible to more people than ever before, but it now faces a surge of misinformation and false accusations.

Some local groups and municipalities are advocating for extreme restrictions and outright bans that would prohibit wake surfing on 97% of Wisconsin's lakes. If enacted, these measures would make our state the most restrictive in the nation. The problem? These proposals lack a foundation in sound science and stem from fear and an unwillingness to equitably share public waters.

Wake surfing is a family-friendly and inclusive sport. It operates at slow speeds and doesn't require bindings, making it one of the safest and most accessible water sports, particularly for seniors and individuals with physical limitations who cannot water ski or wakeboard.

So, why the criticism? Detractors claim wake boats erode shorelines, disturb sediment, and spread invasive species. However, these allegations collapse under scrutiny.

Consider wave height, the primary argument used to support the 500- to 700-foot setbacks. Some assert that all wake boats generate waves taller than 16 inches at a distance of 200 feet, while ski boats only produce 5-inch waves. This 16" wave is only one data point; others are as low as 8 inches, and they overlook the fact that the wake boat operates at slower speeds (10–11 mph) compared to the ski boat, which travels at 30 mph or more. Comparing boats operating at different speeds is misleading.

If you slow that same ski boat down to the speeds typically used for tubing with children- about 10 mph—it generates a **larger** wave: 17 inches at 100 feet and 14 inches at 200 feet. So, if 5-inch waves are the standard, why aren't we applying that benchmark to *all* boats, including those towing kids on tubes or cruising at low speeds?

The answer is simple: the numbers are cherry-picked to unfairly single out wake boats.

Wisconsin currently requires boats that create a wake to remain 100 feet from shore—a sensible baseline. A comprehensive review of the literature supports extending this distance to 200 feet as a fair compromise. At that range, six independent studies indicate that wake boat waves average just 10-12 inches, similar to waves generated by a 20 mph wind or a fishing boat towing a tube at 100 feet.

Other arguments against wake boats don't hold water, either. A study published in the Proceedings of the Indiana Academy of Science shows that **all** boats can stir up sediment in shallow water (3–5 feet). However, once depths exceed 10–15 feet, **none** of them—including wake boats—disturb the lakebed.

Despite this, some towns have hastily banned wake surfing entirely, even as neighboring towns with similar lake conditions have taken no action. The result is an inconsistent and unfair patchwork of ordinances driven more by local politics than by environmental necessity.

Ironically, wake boats may pose a lower risk of spreading aquatic invasive species than more common watercraft, such as fishing boats or runabouts, which travel more frequently between lakes. Wake boats usually remain on one lake, and modern ballast systems retain only a few quarts of water, less than many sterndrives.

If we're truly committed to protecting Wisconsin's lakes, we must rely on credible, science-based regulation, not fear, speculation, or skewed comparisons. The current 100-foot rule has served us well. A 200-foot setback, informed by research, offers a fair and effective balance between environmental stewardship and recreational access.

Let's protect our lakes with facts, not fiction. Wake boats aren't the villains; faulty data and exaggeration are the real culprits.