

# Regulation of Wakesports is Urgently Needed to Protect Our Lakes



## What is wake surfing?

Wake surfing is surfing on a 3- to 5-foot-high wake, close behind a boat without using a rope. Wake boats use a technology very different from a ski boat. Note that the type of boat used to make these waves is very different from other boats. Thousands of pounds of ballast water along with wake-enhancing fins are used to create wakes 6 – 12 times more powerful than those created by ski boats. Plowing the water at around 10 mph brings the bow up and the stern down, unlike waterskiing boats which ride on a plane to avoid big wakes.

## How can wake surfing be harmful?

While it is possible to engage in responsible wake surfing, this activity is known to cause serious harm to the environment when powerful wakes are created within 500 ft of shorelines or in shallow water. High intensity waves hitting lake shorelines erode banks, damaging property and releasing phosphorus and nitrogen that degrade water quality. When lake sediments are churned up by the powerful propeller wash of wake boats, phosphorus is released from the lake bottom, fueling toxic cyanobacteria blooms and promoting excessive algal growth which can lead to low oxygen levels. **These environmental impacts work against the efforts of the state of New Hampshire to protect lakes.** In 2008, the state implemented the Shoreland Protection Act, with the intention of minimizing erosion and runoff into lakes by placing limits on property development. In 2023 and 2024, the legislature has focused on controlling cyanobacteria blooms in our lakes. The stirring of lake bottoms makes this challenge ever more difficult. In addition to churning up sediment, propeller wash from wake boats can damage or uproot vegetation, reducing cover for fish and other wildlife. This can make it difficult for many species, including loons, to locate their food sources. Loons can also be negatively impacted by large wakes because their nests and eggs are only inches above the water and can be washed away by large wakes. This video link demonstrates the damage to lake bottoms that can occur from irresponsible wakesports. <https://www.youtube.com/watch?v=2OEHn0Htj8A>

## **What is the position of the wake boat industry?**

The Wake Sports Industry Association (WSIA) has taken the position that if wake sports are restricted to distances of at least 200' from shore and to bodies of water as small as 50 acres, the impacts will be minor. The WSIA does not believe that minimum depths are necessary.

## **Is the WSIA position based on science?**

***The WSIA position is not based on sound science.*** The WSIA paid for a study which they say supports its recommendations. The study was conducted entirely as a computer simulation and includes no actual field data. It has been widely dismissed by the scientific community as poorly designed and reaching conclusions not supported by the science. Two of the three authors of the study are employed by Mercury Marine, a major supplier of engines to the boating industry. The study was rejected by Vermont and Michigan regulators in reaching conclusions regarding regulation of wake sports. For information on the critiques of the WSIA study, see

<https://dec.vermont.gov/sites/dec/files/wsm/lakes/docs/Critiques%20of%20NMMA%20CFD%20Study%2020220419.pdf>

## **Have the WSIA recommendations been adopted by other states?**

The WSIA has had mixed success in having legislatures enact their "model legislation". Alabama, Tennessee, Georgia, and South Carolina have enacted the WSIA model bill. Vermont, Indiana, Michigan, Wisconsin and Minnesota have all rejected the model bill. The states who have enacted the bill are dissimilar to New Hampshire. Lakes in these states are generally manmade to support the power industry or flood control, rather than natural glacial lakes crucial to local economies. These states are not generally considered to have the same regard for environmental protection as New Hampshire. SB 431, currently under consideration in the NH Senate, is nearly identical to the model wake sports bill drafted and promoted by the WSIA.

## **What limits are necessary to mitigate the potential public safety and environmental impacts from wake sports?**

Numerous scientific studies have examined the force of waves created by wake sports, as well as the impact on lake bottoms. Most notable is a peer-reviewed 2022 study from the University of Minnesota which used actual field data to find that the energy from a wake surfing 600' from shore is 5-7 times that of a cruising non-wake boat operating 200' from shore. The wake created 600 feet from shore still has twice the energy when it reaches 200' from shore. While some studies suggest a need for setbacks of over 1000 feet, no study, except those funded by the boating industry recommends any setback less than 500'. The University of Minnesota is expecting to release this spring the results of a second phase of the study, focusing on lake bottom effects. Early indications are that the study may show that even at depths exceeding 20', there is the potential for significant impacts on lake bottoms. HB 1390, currently under consideration in the NH House of Representatives, is aligned with the science and supports limits that allow for responsible wake sports, recommending setbacks of 500 ft., and depth limits of 20 ft.

## **Have neighboring states implemented significant restrictions on wake sports?**

Yes. The Vermont Department of Natural Resources (DNR) just issued a Final Rule which establishes minimums of 500' standoff distances, 20' depth and 50 acre minimum size for Vermont wake sports. The DNR also implemented a one-lake rule which requires full drainage and inspection before a wake boat can be moved between lakes to prevent transfer of invasive species. In Wisconsin, there are currently no statewide regulations for wakesports; however, numerous local communities and counties have implemented minimum setbacks of 700' and in several cases, have banned the creation of enhanced wakes.