# N.H. Lakes Management Advisory Committee

N.H. Lakes Management and Protection Program
29 Hazen Drive; PO Box 95; Concord, NH 03302-0095; Tel: 603-271-8811
https://www.lmac.des.nh.gov/

January 30, 2024

The Honorable Denise Ricciardi, Chair
Senate Transportation Committee
Legislative Office Building, Room 101
Concord, NH 03301

**RE: SB 431 - AN ACT relative to wakesurfing.**

Dear Chair Ricciardi and Members of the Committee:

The Lakes Management Advisory Committee (LMAC) is writing to express its **opposition to Senate Bill 431**, which would limit wake surfing to areas more than 200' from shorelines, docks, piers, boathouses, and other boats. The LMAC instead supports the 500' buffer proposed in HB 1390 as a more scientifically appropriate regulation of wake surfing.

While a 200' setback is better than the current lack of regulation on wake surfing in New Hampshire, the best available science suggests that it takes 500' for the wakes from wake surfing to attenuate to levels where their impact is comparable to wakes generated by other boating activities, much more than the 200' proposed in this bill. Education efforts promoting a 200' setback have not been sufficient to protect shorelines and private property from the wakes generated during wake surfing, even when wake surfers observe that buffer. When done in the right place, wake surfing can be a wonderful way to enjoy New Hampshire's lakes. When done in the wrong places, the wakes generated during wake surfing can put at risk fellow lake users, shoreline properties, aquatic life, and infrastructure such as docks or the boats moored to them. The LMAC recognizes the value of allowing wake surfing in New Hampshire, but supports using a scientifically defensible buffer distance, which would suggest a 400' – 500' buffer and not the 200' proposed in this bill.

**Additional Details:**

A growing body of evidence supports the 500' buffer proposed in this bill as scientifically appropriate for preventing an increase in shoreline damage. Vermont is in the process of finalizing a 500' buffer requirement for wake surfing. That state's legislature affirmed the VT Agency of Natural Resource's finding that the distance was both scientifically supported and the "least restrictive approach practicable that adequately addresses the conflicts" (Vermont Agency of Natural Resources 2024). A literature review from the Michigan Department of Natural Resources found that the majority of studies report distances between 400 and 1,023 feet for wave energy from wake surfing to dissipate to levels comparable to the wakes from other boating activities at 100 – 200 feet (Francis et al. 2023).

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Two studies that are often used to support a 200' buffer have serious methodological flaws. Among other problems, the models used in Fay et al. (2022) are not valid beyond 100', making it inappropriate to use its results to discuss wave behavior at 200' and beyond. The Fay et al. study also did not include any field validation of its findings and did not base its policy recommendations on its scientific findings. The other study used to support the 200' buffer also has methodological issues, including that it looked only at wave height, and not wave energy or power (Goudey and Girod 2015). Wave energy and power are the variables that most directly determine a wave's potential to impact shorelines, not height.

There are numerous benefits to having an adequate buffer around boats engaged in wake surfing. A buffer that reduces wake surfing waves to the size of waves produced by other boating activities supports the quiet enjoyment of lakes, such as by people swimming, fishing, paddleboarding, kayaking, or observing wildlife. These activities are unsafe or difficult when exposed to high energy waves. A 500' buffer around wake surfing protects loon nests that are at high risk of being swamped by larger wakes, including by wake surfing at 200'. Protecting shorelines themselves from high impact waves reduces the risks of pollution, harm to aquatic life, or ice damage to the shoreline or docks. It also prevents the loss of private property to erosion. A 200' buffer is not sufficient to protect these public interests. In sum, we believe the disadvantages of this bill outweigh the advantages. Instead, we support the 500' buffer proposed in HB 1390.

The LMAC is a legislatively created body charged to work with the New Hampshire Department of Environmental Services (NHDES) to administer RSA 483-A, the Lakes Management and Protection Program. The Governor and Council appointed Committee is comprised of 19 members representing academia, business, conservation organizations, lake associations, tourism, fish and game commission, marine trades, realtors, municipal government as well as several state agencies.

**In conclusion, the LMAC opposes SB 431 and instead supports HB 1390.** Thank you for the opportunity to comment. Should you have questions, please feel free to contact me at (603) 569-3114 or stevewingate@roadrunner.com.

Respectfully,

Steve Wingate, LMAC Legislation Subcommittee

ec: Senator Lang
LMAC Representatives
Robert R. Scott, Commissioner, NHDES

**Citations:**

Fay, E. M., A. Gunderson, A. Anderson. 2022. "Numerical study of the impact of wake-surfing on inland bodies of water." *Journal of Water Resource and Protection* 14:238-272. https://www.researchgate.net/publication/359422712_Numerical_Study_of_the_Impact_of_Wake_Surfing_on_Inland_Bodies_of_Water

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Habitats." Michigan Department of Natural Resources FR37.
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