State of Wisconsin
2023 - 2024 LEGISLATURE

LRB-5693/1
JAM:skw

2023 SENATE BILL 1077

March 6, 2024 - Introduced by Senators FELZKOWSKI, COWLES, FEYEN and SPREITZER, cosponsored by Representatives SWEARINGEN, BEHNKE, BODDEN, CALLAHAN, GREEN, MICHALSKI, MURSAU, SINICKI, SNODGRASS, SORTWELL, TITTL and EDMING. Referred to Committee on Financial Institutions and Sporting Heritage.

AN ACT **relating to:** a wakeboat study at the University of Wisconsin System.

Analysis by the Legislative Reference Bureau

This bill requires the University of Wisconsin System, in submitting information to the governor for the purposes of the 2025-27 biennial budget, to submit a plan for conducting a wakeboat study and request funding for conducting the wakeboat study in the 2025-27 fiscal biennium. The bill requires the study to be planned to measure wave energy from representative wakeboats engaged in wake surfing and wake boarding activities in typical wake-enhanced mode and at various distances, study the impact of enhanced wakes on lake bottoms, fish nesting, aquatic vegetation, and sediment disruption, and assess the wave energy of waves generated by winds and storms compared to the energy of waves generated by enhanced wakes.

The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:

SECTION 1. Nonstatutory provisions.

(1) FUNDING REQUEST FOR WAKEBOAT STUDY.

(a) Notwithstanding s. 16.42 (1) (e), in submitting information under s. 16.42 for purposes of the 2025-27 biennial budget bill, the University of Wisconsin System

shall submit a plan for conducting a wakeboat study and request funding for conducting the wakeboat study in the 2025–27 fiscal biennium.

(b) The study under par. (a) shall be planned to do all of the following:

1. Be conducted with the boats described in subd. 4. on representative inland lake bodies of water in this state.

2. Be conducted with the best available technology, including sensors, underwater cameras, and overhead video shot with drones.

3. Study and measure wave energy from representative wakeboats engaged in wake surfing and wake boarding activities in typical wake enhanced mode, both with maximum ballast and wake shaping equipment and without ballast. The study and measure of wave energy under this subdivision shall incorporate a test of at least two different 2023–year or later wakeboat models, one of which shall be a typical boat with engines with, at minimum, 400 horsepower and a total boat weight of 10,000 pounds or more, including the weight owing to ballast, and one of which shall be a boat with engines with, at minimum, 600 horsepower and that represents the maximum size wakeboat sold for use on inland waters in this state as measured by the boat's total weight, including the weight owing to full ballast.

4. Study wave energy of the enhanced wake from wakeboats measured against other non–wake–enhanced boats commonly used on inland lakes in this state, including in the study a representative ski boat, a representative pontoon boat, a 20–foot or longer representative fishing boat with minimum 200 horsepower outboard motor, and if available, a cabin boat with inboard engine and length of 27 feet or longer. The goal of the study shall be comparing wave size and energy from wake–enhanced boats to similar sized boats on lakes and rivers in this state that are

used for recreation, fishing and pleasure boating. The study of wave energy under this paragraph shall also do all of the following:

a. Measure the energy and height of waves generated by the boats described this subdivision at distances of 100, 200, 500, 700 and 1,000 feet from shorelines. The study shall determine at what distances a wake–enhanced boat must be from shore for both the energy and wave height to equal the same energy and wave height as non–wake–enhanced boats at 200 foot distances from shore.

b. Include an analysis of the impact of wake–enhanced waves at distances of 100, 200, and 500 feet from other boaters, kayakers, paddleboarders, fishing boats, sailboats, and other water users, with the goal of understanding whether wake–enhanced waves present additional safety challenges to lake users compared to other non–wake–enhanced boats.

5. Study the impact of enhanced wakes on lake bottoms, fish nesting, aquatic vegetation, and sediment disruption, and measure energy and video comparisons of wake–enhanced versus non–wake–enhanced boats in water depths of 10, 15, and 20 feet. The study of lake bottoms shall include all of the following:

a. Measure of downward prop wash created by a boat in wake surf mode compared to other boats.

b. Measure of divergent wave impact on lake bottom.

c. Analysis of the impacts, if any, to lake littoral zones resulting from wave energy as wake–enhanced waves reach the shoreline.

d. Determination of the amount of energy a typical lake bottom in this state absorbs as waves move from deep to shallow waters over distances of 500 and 700 feet.

e. An element regarding sediment resuspension, including an inquiry into whether bottom sediment disruption by enhanced wakes include resuspension of toxic elements like Polychlorinated biphenyls and arsenic, and an inquiry into whether any sediment resuspension settles on the leaves of aquatic vegetation and inhibits the aquatic vegetation's growth.

f. An assessment of wave energy and its impacts on both steep and gradual lake bottom drop–offs to the shoreline, and whether steep lake bottoms demonstrate a significantly higher shoreline impact compared to gradual lake bottoms.

6. Assess the wave energy of waves generated by winds and storms compared to the energy of waves generated by enhanced wakes, considering the impacts of fetch analysis of wind correlation on small lakes compared to large lakes. In order to provide context, this assessment shall include a review of historical sustained wind measurements on lakes in this state.

7. Assess the potential impact of wake enhanced wave energy on shorelines as that impact relates to shoreline erosion.

(END)