

Testimony for hearing on SB 1589 before Senate Committee on Energy and Environment

Wednesday February 9, 2022

Dear Committee Members:

Our family has operated a farm near Newberg for over 60 years. The farm's southern boundary is the Willamette River (Newberg Pool). We have observed boating activity on the river for most of that time. We see first hand the damaging forces of boat wakes. I am writing to urge to you support SB 1589, which limits boat size for those engaged in towed water sports in the Newberg Pool to 5,000 pounds and prohibits wake surfing for this particular area, which is considered a congested zone.

This bill will complete legislation that was active in the last regular session. But for a last minute minority report maneuver, the bill would have passed and become state law. Passing the current bill in this session will complete intended legislation and provide the environmental benefits of reduced bank erosion and siltation in this congested section of the Willamette River. This law will give practical support to HB 2351, a law this legislature overwhelmingly passed in 2019 which mandated limitation of damage from boat activity to the Willamette River Greenway.

Aside from the wake damage many of us personally observe on the river, confirming scientific studies have been done on wakes, including one by the University of Minnesota which was released just this month. They support beyond a doubt why wake surfing is not appropriate on a busy, congested narrow river with steep soft banks that are easily eroded. The UM study stated in summary that "wake surf boats required distances of greater than 500 feet attenuate [dispersion of energy with distance] wake wave characteristics (height, energy power) to levels of of non-wakesurf operating under typical planing conditions". See screenshot below of a graphic from the UM study which shows wave energy dissipation of non-wake surf boats versus wake surf boats over water distance:

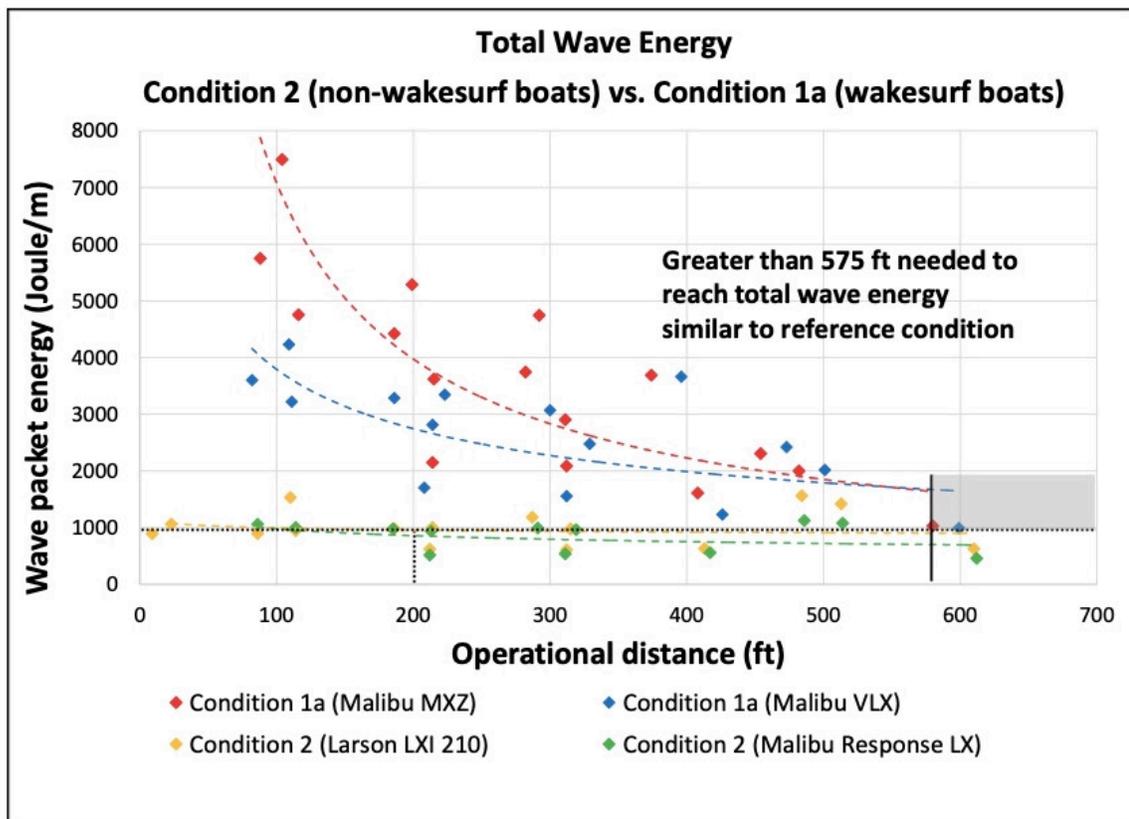


Figure 46. Illustration of a potential method for estimating the operational distance needed to reduce the total wave energy of the wakesurf boat to reference levels associated with Condition 2 (planing) of the non-wakesurf boats (black horizontal dashed line).

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For reference, the width of the Willamette River at our farm is about 600 feet. Clearly the Willamette is not wide enough to allow even partial dissipation of surfing wakes. Then consider that wake boats are often passing in opposite directions or trying to pass each other during busy times. The reality is the wake boats are 200 feet from the riverbank. We personally observe boats 150 feet from our area. The wave impacts are significant.

Some terminology from the studies. “Planing” occurs when boats go fast enough where hydrodynamic forces cause lift and water displacement from the hull is greatly reduced. For example, when a boat is pulling a water skier, it is on a plane. The whole idea of wake surfing is to go slow and have as much weight as possible to cause maximum hull displacement for the biggest “ride”. Currently the enormous waves from wake surfing boats pound the banks of the Willamette in the Newberg Pool, causing erosion, water turbidity and resulting injury to aquatic life, in particular fisheries. See photos and video below this text of the riverbank at our farm.

In another recent study (“Boat Wake Analysis- Lake Rabun and Lake Burton, Georgia, released January 20, 2021 by Water Environment Consultants) the consultants, with respect to industry standards for “moderate tranquility” in a marina setting, commented that “wake surfing and wakeboarding wave heights do not meet the moderate criterion even if the vessels pass 500 feet from shore” (page x).

The wake surfers are not being shut out of their sport. There are other more appropriate places around Oregon. Sections of the lower Willamette near Portland and the Columbia are available, as are numerous lakes and reservoirs. Other types of recreational boating are not impacted. Indeed, without contending with the extreme wakes from surfing boats, other river users, including other boaters, will enjoy improved recreation experiences. The weight limit only pertains to boats while conducting towed watersports. Otherwise any boat weight would be permitted. 5,000 pounds is a generous weight limit for a towed watersport boat. A typical ski boat is often well below 4,000 pounds. Also for reference, Lake Oswego prohibits boats exceeding 3500 pounds as a means of reducing wake impacts. That rule allowed for reasonable wake sports to take while protecting residents' property and the lake shore.





The photos above show the erosion and undercutting of banks near our farm. The second to last photo shows waves from a medium sized wake boat hitting our shore. The causation of the wakes to the bank damage is indisputable. The wake boat industry and other surfing interests try to argue bank erosion is caused by landowners. Clearly not this kind of erosion. Please view this youtube /link showing surfing wakes hitting our banks:

<https://youtube.com/watch?v=cHBNYbh6jwk>

The last photo shows the water siltation and turbidity of the river after a wake boat wake hit our shoreline. The cumulative soil loss and impact on water quality is a direct result of the large wake waves hitting the riverbanks. SB 1589 will help reduce damage to the Willamette River in the Newberg Pool.

Thank you for your consideration.

Maria Hall, Willamette Farms, Newberg