

## **Testimony in Support of SB 1589 for House Committee on Environment and Natural Resources**

**February 21, 2022**

Dear Committee Members:

This testimony supplements testimony given February 9, 2022 before the Senate Committee.

Our family has operated a farm near Newberg for over 60 years. The farm's southern boundary is the Willamette River within the 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. Wake boat size and activity has increased steadily over the past decade. The issues with large wakes are not new, but the situation has become critical in recent years. I am writing to ask for your support of 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 specific area of the Willamette River, which is considered a congested zone and is particularly susceptible to bank erosion.

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 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 wakes to the river's shoreline within the Willamette River Greenway. Clearly your peers in the Senate could see the importance of SB 1589, having passed it 22-1 just last Friday.

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 wake surf boats (condition 1) versus non-wake surf boats (condition 2) over water distance:

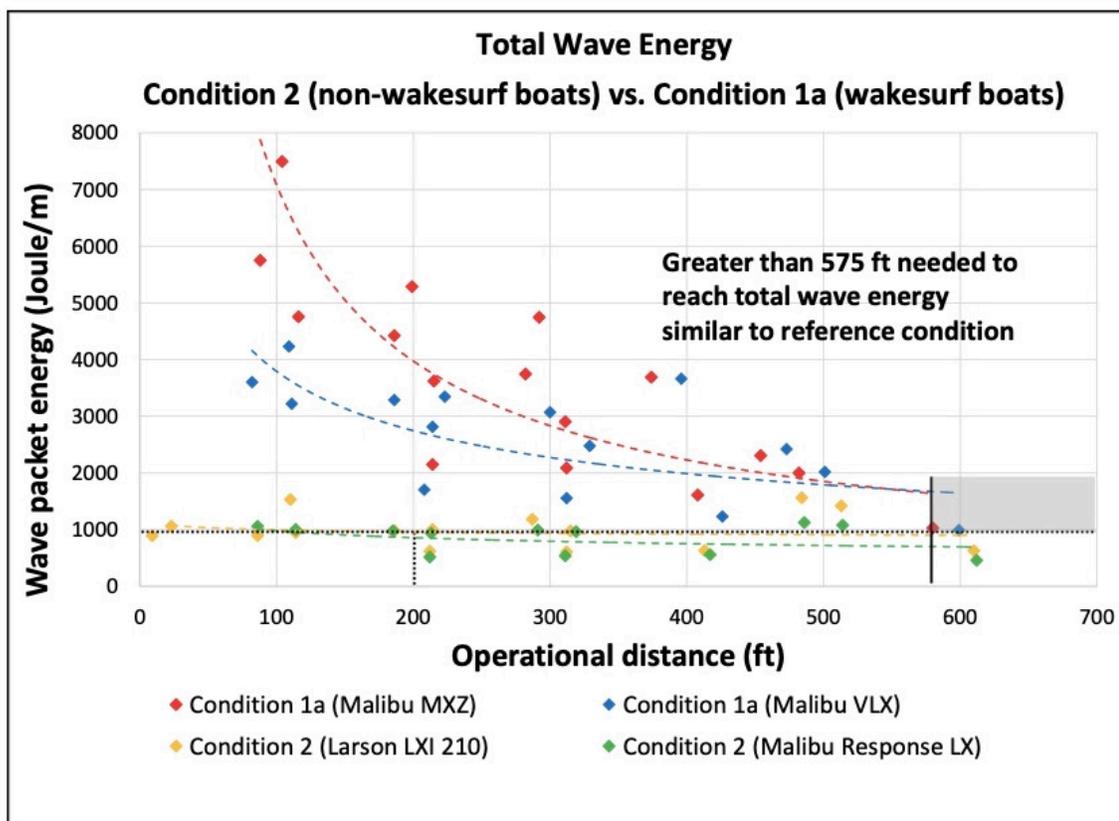


Figure 46. Illustration of a potential method for estimating the operational distance needed to reduce the total wave energy of the wakesurf boat to reference levels associated with Condition 2 (planing) of the non-wakesurf boats (black horizontal dashed line).

89

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.

“Planing” as referenced in the studies, 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).

Contrary to bill opponents’ contentions, wake surfers are not being shut out of their sport and boaters are not being banned from the river. Any boat can still travel the river, including the Newberg Pool. Only the most destructive activity, wake surfing, would be limited. This section of the Willamette doesn’t work with this activity. 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. Those areas are wider or have solid rock or man made embankments which reduces erosion. 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 of 5,000 pounds 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 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. 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>

Please also view the following YouTube of a video I took from our dock last September. Observe the power of the wake hitting the dock and shoreline and see the connection between the wakes and bank erosion.

<https://youtu.be/fNTstiyDQrg>

There is a reason why dozens of states are considering or have implemented laws and regulations concerning wakes. This is a national problem and it keeps getting worse with the ever increasing size of these boats. SB 1589 will help reduce damage to the Willamette River in the Newberg Pool. This will refine the legislative intent of HB 2351 (Willamette River Greenway shoreline protection) passed by you in 2019.

Thank you for your consideration.

Maria Hall, Willamette Farms, Newberg