Date: March 10, 2021
To: Chairman Witt and Members of the House Committee On Agriculture And Natural Resources
From: Stan Halle, Oregon resident and living on or near the Newberg Pool for 20 years
Re: Written Testimony in Support of HB 2555/HB 2725

As I stated in my oral testimony on these two House Bills yesterday (3/9/21), I believe that: *"A lie told once, ten times, or hundreds of times, is still a lie."* The WSIA and boat owners have been promoting unproven myths for years. Here is a more complete list:

Background
There is a lot of confusion about the impact that wake-surf boats can/may cause. Too many unsupported statements are being made that further 'muddy the water' – both figuratively & literally. The issues that are being discussed are not just local, nor State-wide, nor even national; they are international. There have been many scientific & research studies that address various aspects of high-energy wakes. *NOTE: The House Committee On Agriculture And Natural Resources heard extensive scientific testimony last week – which I will only reference where relevant.*

Important Note
Many local Boat Retailers have provided public testimony quoting a WSIA-commissioned study on the wake produced by wake-surfing boats. The quote most often cited is: *"According to a WSIA commissioned study conducted by Clifford Goudey of MIT, wake-energy produced by wake-surfing boats dissipates within 150 feet of the boat or when the river depth is 15 feet or less."*

This study was conducted by Clifford Goudey, Principal at C. A. Goudey Associates based in Newburyport, MA. His degrees from MIT are: MS Naval Architecture & Marine Engineering, and MA, Mechanical Engineering. He also has a BA in Mathematics from Univ. of Maine. He specializes in: Commercial fishing techniques, offshore aquaculture systems, underwater instrumentation, ocean-based renewable energy, autonomous and robotic technologies for ocean resource utilization. He is primarily a consultant in ocean renewable power, fisheries, offshore aquaculture, and other marine systems, focusing on offshore renewable energy technologies and the development of robotic systems to reduce the cost of working offshore. The only client he lists that has anything to do with rivers or water sports is WSIA.

All this is to help the reader see that while Goudey has substantial credentials, these have very little, if any, relevance to rivers and wake-energy. In fact, this WSIA-funded study was conducted on a lake and is not relevant to a narrow waterway (aka river).

Bottom Line
Of all the States, Countries, etc. who have focused on the high-energy wake problem, NOT ONE SINGLE study has concluded that these wakes dissipate their energy within 150ft. Quite the contrary.

This Summary
My objective in providing this Summary is to: (i) identify & dispel several myths that have been used repeatedly as 'fact'; and (ii) inform the Legislature, Working Groups, Advisory Groups, the Marine Board and Staff of a growing body of research regarding high-energy related issues and impact.

Myth #1: Wake energy dissipates rapidly and less than 150 feet from the boat.

- OSMB 2018-01-10 Staff Report Item E-pg2 (6): *"The WSIA commissioned their own research on the wave energy of boats carrying out towed water sports. This research appears to have led to the recommendations outlined in their 'Wake Responsibly' campaign, which advises wake boat operators to stay at least 150ft from the shoreline, docks, or other structures while taking part in wake sports. In addition to the 150ft recommendation the executive summary states that "the maximum wake/wave height associated with wakeboarding and wakesurfing drops 27-56% in the first 100-150ft of its travel from the boat path". The executive summary goes on to state that "wakeboard and wakesurf wakes/waves dissipate more slowly in deep water (greater than 15ft) and operating at least 250ft from shore can reduce the effects of deep water wakes". The full research report was not made available to OSMB preventing a comparison of the methodology and results of the Australian and WSIA trials."*

Fact #1: Wake energy does <u>not</u> dissipate until it hits fixed or floating objects, shallow depth and/or sensitive shoreline.

- June 2014 Study by the University of Quebec Montreal. Principal Results:
    - Of all boat passages, wakeboats induce a significant increase in energy contained in the waves reaching the shore, on average by a factor of 4.
    - The impact of wakeboat passages is directly and inversely related to the distance between the passage and the shore.
    - Of the three different types of waves generated by a wakeboat, wakesurf waves cause the greatest impact on their arrival to the shore (1.7 times higher than the waves of a vessel moving normally).
    - Wakesurf has a greater impact on the shore with a pronounced slope than those with a gentle slope.
    - Our data demonstrate that the energy produced by wakeboats dissipates completely before reaching the shore (and therefore have no significant effect) when the wakeboats are 300 meters or more from shore.
    - *That translates to 984 feet. To avoid erosion of sensitive shoreline, a wake boat with its ballasts full (or equivalent hull technology deployed), must have a minimum of a 600 meter (1,986 feet) channel if the boat goes down the middle of the channel. The Upper Willamette River (aka Newberg Pool) has a width of between 400-650feet, far short of proposed 1,986 feet.*

Myth #2: Wakes do not cause erosion – wind waves, seasonal river height & river currents do.

- Multiple Boat Retailers and wake-surf boat users testimony at the OSMB, State Legislature Committee Hearings, Wilsonville City Council, etc.

Fact #2: Depending on the location – protected vs. open, narrow vs. wide waterway, shoreline composition, waterway usage – are all factors.

- In the low-wind protected channel of the Upper Willamette River, wind waves are a minor factor.
- River current moves tangentially to the Shoreline and has for 100's of thousands of years.
- Seasonal river height changes have little impact unless accompanied by high-energy wakes.

Myth #3: Restricting or banning wake-surfing from the Newberg Pool will cause great economic harm to the industry and to tourism.

- WSIA likes to provide enormous national wake-surf boat sales numbers – over $1billion. They claim that any ban or restrictions will cause great economic harm in terms of job loss, reduced tourism, etc.
- They also claim that riverfront property will decrease in value if wake enhancing devices (or other restrictions) remain in place or are increased.

Fact #3: The WSIA ignores the impact on sales of other craft (motorized or non-motorized). There has been no adverse impact on tourism or real estate values.

Myth #4: Wake-surfing can be safely conducted throughout the Newberg pool (est RM48 – RM30) with no impact on other river users.

Fact #4: Wake-surfing, especially in recent years as boats have doubled & tripled in displacement, has already driven many river users away.

- Fishermen, non-motorized boat users, swimmers, and even those who wish to sit quietly on their docks, feel that the Upper Willamette River has become increasingly unsafe.
- User-conflict is also growing.
- Too many river users have been driven away by wake boats that have tripled in weight.
- River users surveyed (circa 2018) said:
    - 70% find the River less enjoyable due to large wakes
    - 27% no longer use the River
    - 76% have experienced safety incidents or user conflict

Myth #5: Wake-surfing boat violations of current restrictions are not enforceable, therefore should be removed.

Fact #5: We agree that enforcement of past WED (wake-enhancing device) has been difficult or in many cases absent, however with some changes in the regulations and funding, this problem can be corrected.

Myth #6: The Oregon State Marine Board has no jurisdiction (or responsibility to regulate) impact on shoreline erosion. They point to other State Agencies.

Fact #6: There are unclear responsibilities …

- Legislation passed in 2019 now requires the OSMB to take into account the Willamette Greenway Rule 15

Myth #7: High energy wakes do not cause damage to shoreline or property.

Fact #7: Repairing damaged property has cost over $442k. Add to this Champoeg's shoreline restoration brings the total to over $700k. If we were to be permitted to add rip-rap along both sides of the Newberg Pool (which is currently prohibited), the cost would be in excess of $100 million.

- The WSIA says *"Boat owners are responsible for any damage caused by their operation".* I want to know, **where do we send our bill?**