

Williams College-Mystic Seaport Maritime Studies Program's Marine and Coastal Policy Research Group

Wakesurfing in the Newberg Pool on Oregon's Willamette River: Recreation, Preservation, and Regulation

EXECUTIVE SUMMARY

The 20-mile Newberg Pool section of Oregon's Willamette River is caught in conflict between several groups who have different visions as to what role the river should play in the community. (Fig. 1 & 2) Interested parties are focused on watersports in the river, specifically wakesurfing, and have proposed bans and various compromises in the past three years.¹ Rules passed in 2019 have led to a passionate debate between those for and against them however stakeholders agree that they are not an ideal compromise.² Although the surface issue is about wakesurfing, it truly is a much deeper question of access and what is meant by the "public trust" for America's waterways. Attempts to regulate wakesurfing raise questions about what kinds of recreation should be allowed and where so that the Willamette is maintained in the best interest of the public.³

The Newberg Pool is shaded from strong winds which makes it ideal for towed watersports, non-motorized and motorized recreational boating, recreational fishing, nature-watchers, and homeowners who wish to relax on their floating docks.⁴ There is little commercial traffic through the area and most uses are recreational. The Newberg Pool is a valued resource for a wide variety of stakeholder groups who hope to maintain the river and their ability to utilize it in the ways they wish. In 2019, the Newberg Pool was regulated for the first time under a zone system that divided the river up into different sections: red, which meant no wake surfing, and yellow, which meant wake surfing was permissible 300 feet from shore.⁵ (Fig. 3) Concerns with the current system include financial impact on boat dealers, crowding, unsafe conditions, impact on juvenile fish, erosion, non-motorized boat-

WILLIAMS-MYSTIC
RESEARCHER

Kathlyn Gehl
Middlebury College

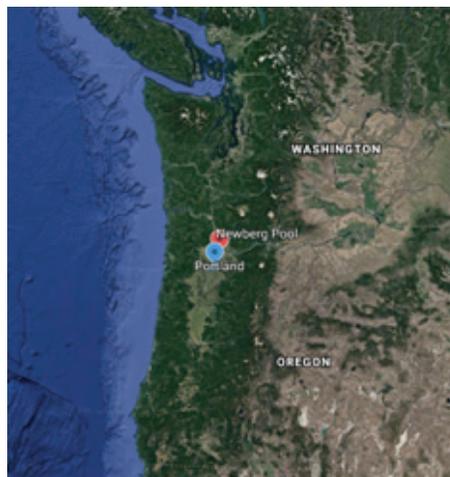


Figure One: The Newberg Pool in relation to Oregon State and Washington State.⁹⁴

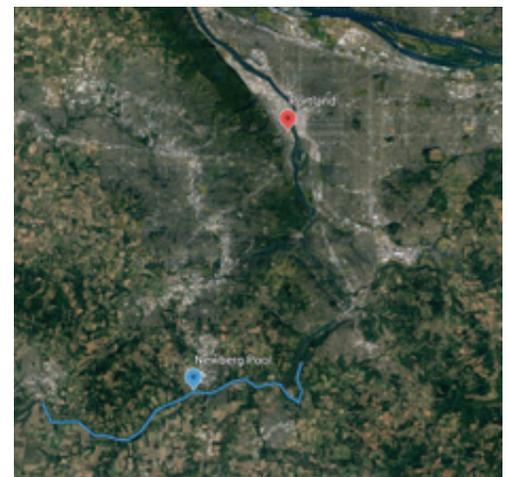


Figure Two: The Newberg Pool in relation to Portland, Oregon.⁹⁵

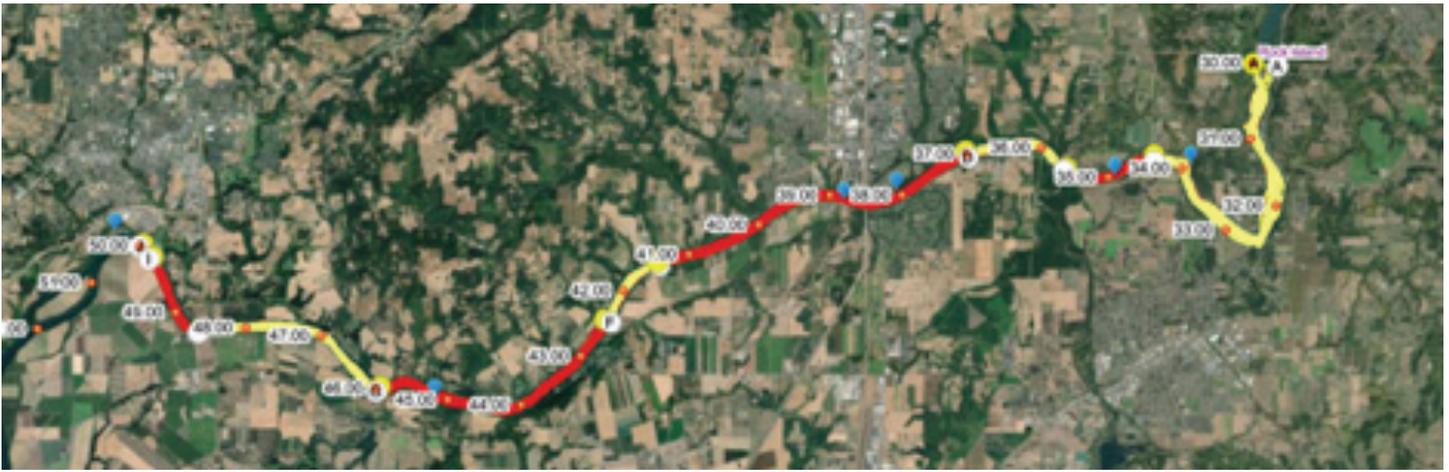


Figure Three: The 2019 wakesurfing zones on the Newberg Pool. ⁹⁶

er's safety, a lack of law and community enforcement, and excessive noise.⁶ Tweaks to the zone system have been proposed for 2020, but many of the same fundamental problems remain.⁷

In order to make the river a safer site for all, I am proposing five ways to improve regulations on the Newberg Pool: requiring a more thorough environmental assessment, limiting the hours for towed watercraft, and making boat registration numbers larger, eliminating the zone system, and requiring yearly education for all towed watersports drivers in the Newberg Pool. These recommendations are proposed with the goal of making the river safer and more accessible for all, reducing animosity between user groups, and creating environmentally sustainable regulations.

BACKGROUND INFORMATION

In 2019, the Newberg Pool section of Oregon's Willamette River allowed wake-enhancing devices for the first time, opening this part of the river up to wakesurfers.⁸ Since then, there has been conflict between wakesurfers who need an artificially large and slow wake to surf and others who see the large wake as damaging to the shoreline, ecosystem, and dangerous to other boaters.⁹ The Oregon State Marine Board (OSMB), which is in charge of regulating the river, opened up this section to wakesurfers because they want to encourage all types of recreation while maintaining safety and accessibility for all.¹⁰ However, the current state of management cannot support everyone without conflict.

Who is Being Regulated Where?

The Newberg Pool is a 20 mile stretch of the Willamette about a half-hour south of Portland.¹¹ For the most part, it is protected from the wind making it a popular site

for waterskiers, fishermen, and beginning paddlers who enjoy calmer water.¹² Because of the varied groups who wish to access this section of the river, it has become the location for an argument over the role of rivers in rapidly urbanizing areas. Boat dealers and wakesurfers, some of whom are riparian homeowners, worry about impacts on business, and unsafe conditions.¹³ Environmentalists, some non-motorized boaters, and some riparian homeowners worry about the danger of large waves along with the environmental and financial impacts of erosion.¹⁴ Some non-motorized boaters also worry about their safety riding out large waves in small watercraft.¹⁵ Excessive noise is also a concern of riparian homeowners.¹⁶

Wakesurfing vs. Wakeboarding in the Newberg Pool

Wakesurfing and wakeboarding are towed watersports that use specially weighted and shaped boats to create a large wake.¹⁷ (Fig. 4) Wakesurfers normally surf this wave unconnected to the boat while wakeboarders are towed by a rope and use the wake for tricks.¹⁸ The main difference between these sports in terms of regulation is speed as wakesurfers travel around ten miles an hour while wakeboarders travel around twenty.¹⁹ This translates to a difference in wave height as at 100 feet wakesurfers make a maximum 18" wave while wakeboarders make a 14" one.²⁰ This correlates to energy as wakeboarding waves have less than half of the energy of wakesurfing waves at 100 feet.²¹

Wakeboarders are not restricted with wakesurfers in the Newberg Pool zone system, they are regulated like tubers and required to stay 200 feet away from the shoreline.²² They are, however, also required to take the towed watersports education class for 2020.²³ Although wakeboarding is not as controversial on the Willamette as wakesurfing, bans on wake enhancing devices would effectively ban

wakeboarders from performing tricks which is, for some, an essential part of the sport.²⁴

History of Wakesurfing on the Willamette

Boats with wake-enhancement devices have been a point of controversy on the Willamette since the early 2000s.²⁵ In 2009, the OSMB banned wake-enhancement devices effectively outlawing wakesurfing.²⁶ After years of lobbying by boat dealers and wakesurfers, the OSMB voted in 2019 to allow wake-enhancement devices for the summer season but to create an experimental zone system that was meant to be tweaked and updated in 2020.²⁷

In 2019, the Newberg Pool was divided into sections, “red” zones where wakesurfing was banned and “yellow” zones where wakesurfing was allowed 300 feet from shore.²⁸ (Fig. 3) In October 2019, the Willamette Riverkeeper (WRK), a group of environmentalists, submitted a proposal to ban boats over 3,500lbs, which would have effectively banned the sport once again.²⁹ Although the WRK proposal was denied, the National Marine Fisheries Service (NMFS), which is part of the National Oceanic and Atmospheric Administration (NOAA), warned the OSMB in January 2020 that they may be in violation of the Endangered Species Act (ESA) by not banning wakesurfing if it affects the river’s endangered salmon and steelhead fish.³⁰

At the same time, two new Oregon laws came into effect on the river. HB 2352 requires wakesurfers and wakeboarders to take a towed watersports education program in order to boat in the Newberg Pool and HB 2351 requires legislators to further protect public property along the shores of the river.³¹ On January 22nd, 2020, lawmakers agreed on a proposed update to the 2019 regulations that would reduce the five wake surfing zones to two while making them exclusively for wakesurfing.³² Wakesurfers believe that this will worsen congestion causing dangerous conditions in the open areas.³³ The

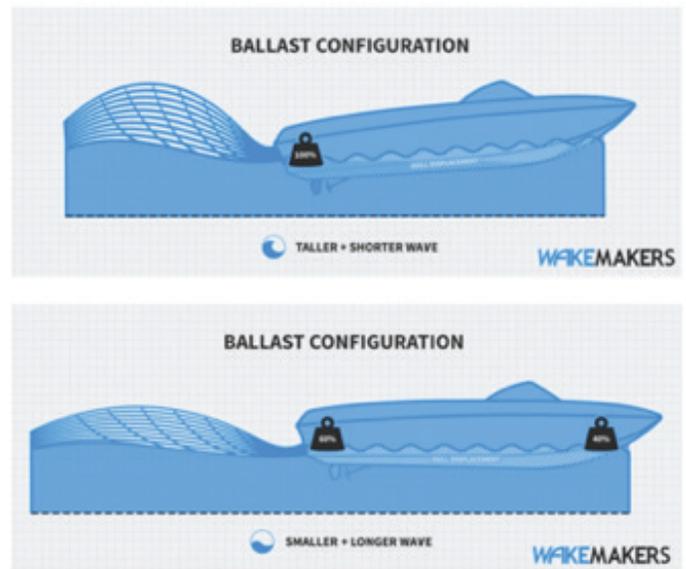


Figure Four: Different ballast configurations on a wake-surfing boat and their effect on the wake produced.⁹⁷

WRK argues that these regulations do not do enough to protect the environment.³⁴ They have filed an intent to sue and plan to do so by June 2020 if they are not met with a response.³⁵

ESA Protected Fish and Wakesurfing

Chinook Salmon and Steelhead are classified as Endangered under the ESA and have designated critical habitat in the Newberg Pool.³⁶ “Endangered” means that these populations are currently believed to be on the brink of extinction.³⁷ (Fig. 5) Studies have shown that turbidity negatively impacts fish and that juvenile fish can be stranded on shore by large waves.³⁸ However, none of the studies specifically examined wake sports in the Newberg Pool.³⁹ In addition to harming fish directly, turbidity has negative effects on near shore insects and vegetation which they rely on for food and shelter.⁴⁰ Based on their expertise, the NMFS indicated that they believe wake boats have an adverse effect on the fish in the river.⁴¹

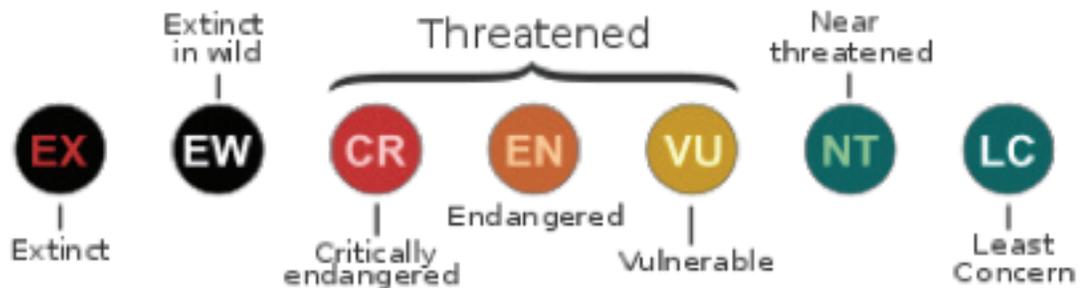


Figure Five: A graph showing where “endangered “ stands in relation to other conservation categories.⁹⁸

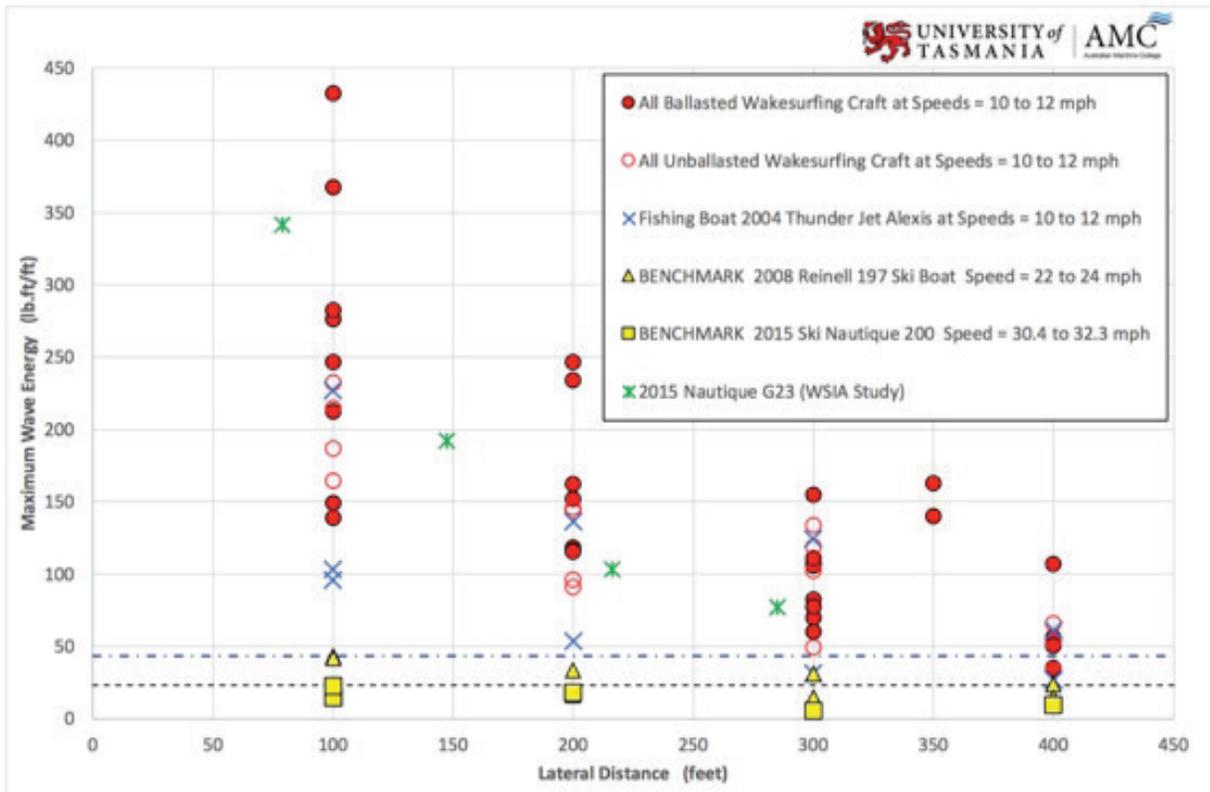


Figure 11 Maximum wave energy as a function of lateral distance: Wakesurfing

Figure Six: Graph of maximum wave energy from Wave Wake Study: HB4099 Motorboat Working Group.⁹⁹

Erosion and Wakesurfing

Erosion is also a defining issue surrounding wakesurfing boats. Some believe that increased erosion on the Willamette is the result of wakeboats while others point to it as a normal consequence of spring high water.⁴² In 2008, the level of water flowing over a downriver dam was adjusted which raised summer water levels in the Newberg Pool.⁴³ This was combined with an increase in shoreline residential development which included the introduction of more piers and the destruction of natural vegetation that had previously helped stabilize the shoreline.⁴⁴ A presentation to the Oregon Legislative Assembly by Doctor Lomonaco and Professor Yim from Oregon State University concluded that the intensity of the erosion from boat wakes is very small but that over the long-term significant erosion due to boat wakes could occur.⁴⁵ To defend their differing views on wave strength and erosion, many stakeholders reference a 2018 study done on the Willamette that shows that wakesurfing waves have as much energy 300 feet from the shore as a fishing boat at 100 feet.⁴⁶ (Fig. 6)

Implications of Wakesurfing Regulations

As rivers continue to be popular recreational locations and as climate change continues to affect their ecosystems, it becomes harder to find a balance between preservation and public access. The conflict over wakesurfing becomes an argument over what was meant in *Shively v. Bowlby* when it was written that navigable waters are held “for the benefit of the whole people.”⁴⁷ In this way, decisions on wakesurfing in the Willamette set an example for what public trust should mean on rivers in the 21st century.

How Does the OSMB Decide on New Regulations?

The OSMB’s goal is to expand access and education while maintaining boater safety throughout the state of Oregon.⁴⁸ For the Willamette wakesurfing regulations, they work with an eight person rule advisory committee (RAC) representing different groups of stakeholders.⁴⁹ To inform decisions related to the environment and land use, they rely on other state and federal agencies, including NOAA, to share their expertise.⁵⁰ After hearing testimony, the five-person marine board votes on proposed regulations.⁵¹

WHAT ARE THE CURRENT (2019) REGULATION'S ISSUES?

Difficult to Enforce

Sergeant Nate Thompson of Clackamas County pointed out that with all proposals on the river enforceability should be considered.⁵² The police do not have enough staff to catch every violation in the Newberg Pool and it would be easier to enforce statewide regulations.⁵³ Additionally, Kaspar Murer, the Wasabi Paddling Club President, writes that when unsafe events occur, it is hard to identify the offending driver because the registration numbers on boats are hard to see from a distance which impairs community enforcement.⁵⁴ (Fig. 7)

Unsafe Conditions for Boaters

Kasper Murer writes that wakesurfing waves have capsized dragon paddling boats and throw users into the water.⁵⁵ (Fig. 8) In the WRK's petition to ban boat's over 3,500lbs, they also cite accounts of wakesurfing boats coming close to shore, swamping boats and throwing boaters around.⁵⁶ The WRK also believes that wakes can also cause floating piers to become unstable or unsafe endangering people and pets.⁵⁷ They also cite property damage and accounts of docks being damaged from the

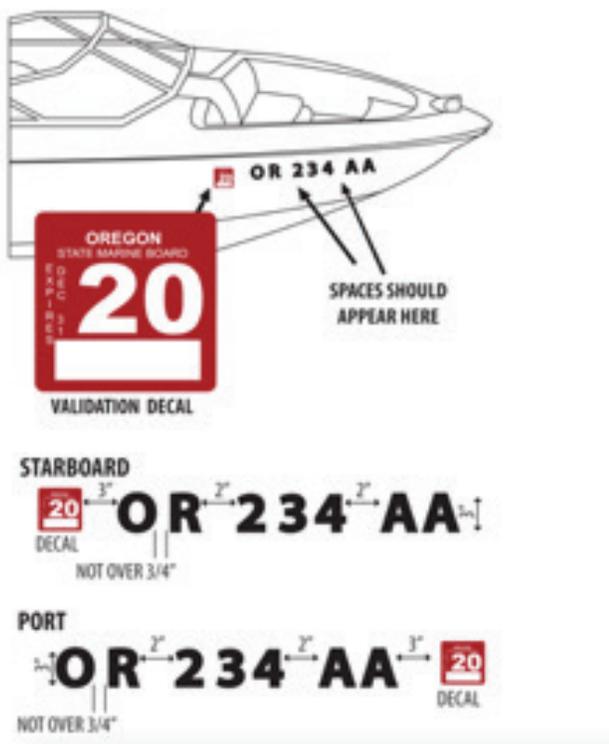


Figure Seven: The current layout of boat registration numbers in Oregon.¹⁰⁰



Figure Eight: Skull capsized by wakesurfing wake on the lower Willamette in Portland. Photograph by Ingrid Olson.¹⁰¹

waves as, in their experience, many boats do not stay the 300 feet away from the shore needed for wake dissipation.⁵⁸ Jake Janovetz, a riverfront home and boat owner in West Linn, a city slightly below the Newberg Pool, supports banning wake enhancing devices because he has seen wakeboats too close to shore causing docks and boats to rock wildly.⁵⁹

Within last summer's wakesurfing zones, several wakesurfers including Paige Stoyer, a community organizer for Willamette River Community Coalition, had issues with tubers crowding in the yellow wakesurfing zones which caused dangerous conditions as they drive closer to shore and more erratically than wakesurfers.⁶⁰

Lack of Boater Education

Paige Stoyer believes that better education for all motorized and non-motorized boaters along with some form of required education for renters, who are currently not required to be educated, would reduce conflict and increase safety while maintaining the river as an accessible place of enjoyable recreation for all.⁶¹ Matt Radich, president of the boat dealership Active Water Sports and a member of the Newberg Pool RAC, is a proponent of increased education.⁶² He also believes that if the regulations stay in place for longer it will be easier for boaters understand the zone system and that this will increase compliance.⁶³

Impact on Fish

The WRK is concerned with the turbidity caused by wake induced erosion and its effect on the endangered Salmon and Steelhead that reproduce in the river.⁶⁴ (Fig. 9) Travis Williams is the Executive Director of the WRK and serves on the Newberg Pool RAC.⁶⁵ He is concerned with the repeated effects of wakesurfing wake on the river.⁶⁶ Although other boats, like cabin cruisers, can also create



Figure Nine: Turbidity on the Willamette River. The WRK believes this was caused by wakesurfing boats.¹⁰²

large wakes he believes the repeated element of wakesurfing is what makes it dangerous.⁶⁷ He supports wakesurfing in the lower eleven miles of the Willamette where there are naturally much larger waves and the ecosystem can support the wave energy.⁶⁸ The WRK is also concerned about fish being stranded from large waves which is also a concern of Kate Wells who works as a Natural Resource Management Specialist for the NMFS's Willamette branch.⁶⁹ She says all studies indicate that turbidity in the fish's critical habitat could possibly have a negative impact although she does not know the effects beyond habitat disturbance.⁷⁰ Her concern is mostly for the fish's habitat and the effects of turbidity plumes on native vegetation.⁷¹

Homeowner Impact

In their petition, the WRK also cited accounts of property damage, including erosion, that riparian homeowners believe is due to the wave action.⁷² These costs have ranged from \$2,000 to \$47,000 for property owners in various areas of the Willamette River. These costs were associated with dock repairs and projects to stabilize land due to bank erosion.⁷³

Another concern for riparian homeowners is excessive noise from both music and engines which they mostly identify as coming from wakeboard or wakesurfing

boats.⁷⁴ For homeowners, noise is especially a concern early in the mornings and late at night.⁷⁵

Financial Impact on Boat Dealers

Matt Radich points out that the uncertainty over regulations impacts boat dealers as potential buyers do not know what the regulations are going to look like in the future which prevents them from making a purchase until they know if a lower weight limit is going to come into effect.⁷⁶ This affects Active Water Sports and the around 30 people that it employs along with the other boat dealers in the area.⁷⁷

Obstacles to Resolution

Paige Stoyer and Matt Radich feel that the main block to resolution is that, although wakesurfers are willing to make safety and science-based compromises, those who are against wakesurfing are unwilling to meet them halfway.⁷⁸ On the other side, Travis Williams and Mike Houck, founder of the Urban Greenspaces Institute and a conservationist who lobbied legislation to make Ross Island in the lower Willamette slow-no-wake, say that one barrier to resolution is that because the OSMB is funded by boater registration it is more likely to support boater's rights.⁷⁹

POLICY RECOMMENDATION

One of the main takeaways from the Newberg Pool RAC is that new regulation should be easy to understand and easy to follow because otherwise compliance will suffer when the police aren't out.⁸⁰ This ties in with increased education as without education, there will be more issues of non-compliance because of ignorance and confusion. I have come up with a range of ideas, regulations, and rule changes that could be implemented separately or together to diminish conflict between stakeholder groups and advance a Newberg Pool that is safer and more accessible for all.

In my opinion, the first step to regulating the Newberg Pool should be through assessment of if allowing wake sports violates the ESA or HB 2351, which grants the OSMB the power to make special regulations regarding boats on the Willamette to protect shoreline, vegetation, and fish habitat.⁸¹ This should include collaboration with the NMFS who best understands fish's role in the river ecosystem. As part of the environmental assessment, I recommend a study of wake boats impact on ESA protected fish in the Willamette so that the OSMB can make decisions for the Willamette and other rivers in the state.⁸² If this does not yield further restrictions of activity on the Willamette, more time and effort can and should be spent establishing better regulation, but more time and money should not be spent until the environmental impact is determined.

Secondly, in order to reduce interpersonal conflict, lifestyle differences in the river should be lightly regulated. The WRK petition cites wakesurf boats being noisy and out for all hours over the summer.⁸³ Currently, towed watersports are allowed between sunrise and sunset without limitation.⁸⁴ A ban on towed watersports between 8pm or sunset and 9am or sunrise would reduce noise at times when many riparian homeowners might be sleeping or relaxing. This would give paddlers time in the mornings and evenings without any towed sports without implementing severe restrictions on the accessibility of wakesurfing.

Thirdly, boat registration numbers should be larger so that when dangerous situations happen, they are easier to report.⁸⁵ (Fig. 8) Because the police cannot patrol the river at all times, unfortunately, reporting dangerous

situations often depends on those affected. This will allow better enforcement especially in instances where there is photographic and video evidence. Registration numbers are under the jurisdiction of the U.S. Coast Guard so this would have to be implemented as a change for the entirety of the United States.⁸⁶

Fourth and in the control of the Oregon Legislative Assembly, towed watersports education in the Newberg Pool should include all drivers of towed watersports.⁸⁷ Hopefully, expanding education to all and stressing respect and co-habitation of the river will cut down on safety issues. The towed watersports education program should include education on actions that although not prohibited are considered disrespectful such as driving side by side while towing, playing loud music, and not reducing wake or moving farther away from non-motorized boaters, swimmers, and people on floating docks.⁸⁸ This education should be expanded to renters as well so that all boaters on the Newberg Pool are subject to the same standards.⁸⁹ Money from this expanded program should be used to provide better law enforcement on the Newberg Pool.

Fifth, although this would require discarding the current zone restrictions, in my opinion, the safest option would be to open the river up to all towed watersports in areas that have not traditionally been slow-no-wake. This would remove the direct crowding that the zones caused and reduce interference from tubers and jet skiers who enter wakesurfing zones.⁹⁰ Additionally, it would space out boats' wakes minimizing repetitive wave action which may cause erosion or annoy homeowners over time.⁹¹ This would also minimize confusion associated with the zone system and increase enforceability.⁹² It would also have the benefit of reducing conflict in other areas of the river, as with the zone system in the Newberg Pool, increased traffic has been seen up and downriver.⁹³

Although these solutions may not eliminate all the problems and concerns in the river and as with most solutions, they may come with their own issues, I believe that these are manageable steps towards creating a regulation system on the Newberg Pool that is environmentally conscious, safe, and promotes accessibility for all.

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