

Why SB857-1 is necessary?

Follow up to 2019 legislation

Preserve the Willamette River Greenway

Protects:

Critical shoreline habitat
State Land and Property

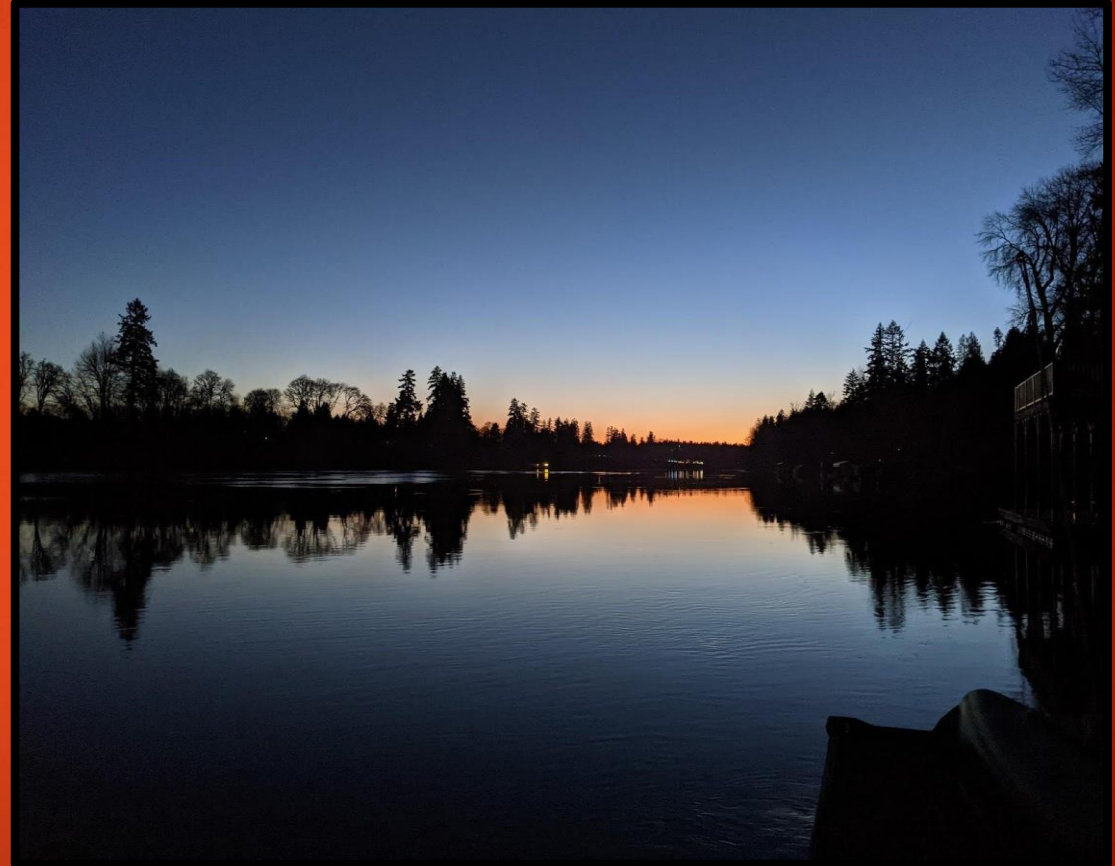
Complies with:

Endangered Species Act
Clean Water Act

Keeps boating and river recreation safe

Opens pathways for tourism dollars

**Ensures boating is sustainable now and
for future generations**



Supporters of SB857



HOTLIST



Oregon League of Conservation Voters

Oregon Conservation Network

The Native Fish Society

Urban Green Spaces

Conservation Angler

Oregon River Safety and Preservation Alliance

Friends of Historic Butteville

Trout Unlimited

Willamette Riverkeeper

Water Watch

Willamette Greenway Alliance

Human Access Project

”Because control of the river flow on the Willamette significantly reduces the velocity of the river, changes caused by nature are very minor.”

*Dr. Pedro Lomonaco, Director,
O.H. Hinsdale Wave Laboratory
Oregon State University*



The riverbed is clear to the steep vertical drop in depth.

"This shoreline is the life blood of the river."

Dr. Stan Gregory, Ph.D.,
Emeritus Professor Fish



07/26/2019 06:39:22 pm



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"Wakes generated by boats have been **recognized** as a **contributing factor of streambank erosion by many investigators."**

*Dr. Desiree Tullos, Ph.D., Oregon State University
Professor Biological & Ecological Engineering
Presentation to policymakers 7/19/19*

Camera 3

“When the waves slam into the shoreline, they scour the river bottom and the river’s edge, sending a muddy plume of sediment into the water column.”

Executive Director, Willamette Riverkeeper



“Sediments suspended during summer months settle on plants and block the sun, also blocking nutrients, and oxygen”.

Dr. Stan Gregory, Emeritus Professor, Department of Fisheries and Wildlife, Oregon State University



Turbidity levels regularly exceed state and federal guidelines of the Clean Water Act

TYPICAL TURBIDITY

BOATING BEGINS IN MARCH REMAINS
CONGESTED MAY THROUGH OCTOBER





“THE WILLAMETTE RIVER IS DEEP, WHICH MEANS THE WAVES GENERATED BY THESE BOATS ARE TOTALLY UNAFFECTED BY THE RIVERBED.”

Dr. Gregor MacFarlane, Australian Maritime College, University of Tasmania



“Changes caused by nature are very minor in comparison to the effect of many waves in a single day, that is a very significant component.”

Dr. Pedro Lomonaco, Ph.D., Oregon State University Director O.H. Hinsdale Wave Institute

**SUMMER UNDERCUTTING
is causing embankments to collapse**

RECENT SLIDES

“Changes to the river margins are not produced by flooding, they are produced by boats that create instability in the sediment, which change the shoreline by removing that sediment”

*Dr. Pedro Lomonaco, PH.D.
OH Hinsdale Wave Institute,
Oregon State University*



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If a shoreline has light winds or is narrow in the direction of prevailing winds, it probably is a good place to consider having a no wake zone.

Clifford Goudy on Watersports Industry Association Study

NO WAKE ZONE

WAKE ZONE

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“We do NOT typically see erosion in a pool.”

Dr. Desiree Tullos, Ph.D., P.E. D.WRE, M.ASCE,
Assoc. Professor Biological & Ecological Engineering, OSU
Professor - River Morphology and Restoration



Wakes cause unnecessary harm to fish protected and listed as threatened under the Endangered Species Act



▶ NOAA to OSMB:

“At your request, I'm sending the results of a literature search I performed on wake sports.”

“I found a total of 27 articles, primarily from peer reviewed scientific journals...”

National Oceanic Atmospheric Administration (**NOAA**) and National Marine Fisheries Services (**NMFS**) **provided** over 600 pages of **peer reviewed studies and documentation** to the Oregon State Marine Board.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
1201 NE Lloyd Boulevard, Suite 1100
PORTLAND, OREGON 97232-1274

January 16, 2020

Chairwoman Val Early
Oregon State Marine Board
435 Commercial Street Northeast, Suite 400
Salem, Oregon 97301

SENT VIA U.S. MAIL AND ELECTRONIC MAIL TO marine.board@oregon.gov

Re: Effects of Wake Boat Activity on ESA-Protected Fish and Designated Critical Habitat

Dear Chairwoman Early:

National Marine Fisheries Service (NMFS) recently became aware that the draft agenda for the January 22, 2020 meeting of the Oregon State Marine Board (OSMB) will include an update from the Newberg Rule Advisory Committee (RAC) regarding the OSMB's options to regulate wakeboard or wake surfing in the Newberg Pool, and that a second RAC is examining this issue in the Lower Willamette River.

Moreover, we understand that work to date by the OSMB and the RACs on the justification for wake sport regulation has focused on impacts to boating congestion and private property damage, but has paid little attention to the impacts that wake sports have on aquatic life, including salmon and steelhead species designated as threatened under the Endangered Species Act (ESA), and their critical habitats. NMFS encourages OSMB and the RACs to add consideration of ESA protected resources to their list of concerns regarding wake sports, and offer the following comments in support of that approach.

Two ESA-listed species and their critical habitat occur in the mainstem of the Willamette River above Willamette Falls, including the Newberg Pool: Upper Willamette River (UWR) Chinook salmon and UWR steelhead. Three additional ESA-listed species from the Lower Columbia River (LCR) region and their critical habitat also occur in the Willamette River below Willamette Falls: LCR Chinook salmon, LCR coho, and LCR steelhead. All five species are listed as "threatened" under the ESA. Individual fish from each of these species use critical habitat within the affected reaches to complete essential life history functions related to freshwater migration and rearing, and their ability to do so depends on the presence and quality of specific physical and biological features (PBFs) that include, but are not limited to, freedom from obstructions (which may include artificial noise or excessive sediment), floodplain connectivity, forage (adequate food quantity and quality), natural cover, and water quality.

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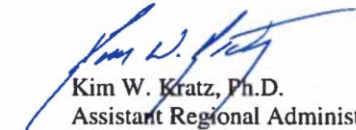
In NMFS' experience, noise and wave actions are frequently a threat to juvenile salmon and steelhead. Therefore, we expect that wake sports are likely to have a significant adverse impact on those listed species and their critical habitats by injuring and killing individual fish when, for example, the surge and wakes caused by artificial waves from passing boat and wake sport participants wash juvenile fish onto the shore, or otherwise modify or degrade PBFs in ways that injure or kill fish by significantly impairing their essential behavior patterns (see Williams and Holmes 2019, and literature cited therein, and additional citations below).

NMFS has a responsibility under the ESA to protect and recover threatened and endangered species, and we have a long history of working with state and local agencies in Oregon to restore salmon and steelhead populations and their habitat. We also have a responsibility to enforce the prohibitions of the ESA, which makes it unlawful for any person to harm threatened salmon and steelhead, through activities which injure or kill protected fish or interfere with the function of their habitat. Through the ESA, Congress has made the public at large responsible for avoiding harm to these species, and NMFS is offering to work proactively with the Board to minimize

Before the OSMB approves rules that authorize wake sports in the Willamette River that are likely to affect ESA-listed species or their critical habitats, it should ensure that it or the applicant will comply with the ESA either by avoiding the kinds of harm described above, or by showing that any harm that will occur is subject to an exception or exemption under the ESA.

I hope this letter gives the OSMB the information it needs to clearly understand NMFS' views on the wake sports in the Willamette River. My staff and I stand ready to work with the OSMB in any way necessary to comply with the ESA.

Sincerely,



Kim W. Kratz, Ph.D.
Assistant Regional Administrator
Oregon Washington Coastal Area Office

cc: Jason Miner (Oregon Governor's Natural Resources Office)
Larry Warren (Oregon State Marine Board)
Jennifer Wigal (Oregon Department of Environmental Quality)
Bruce McIntosh (Oregon Department of Fish and Wildlife)
Vicki Walker (Oregon Division of State Lands)
Travis Williams (Willamette Riverkeeper)

“Shoreline changes are **very minor due to nature**”.

“**Shoreline changes are not produced by flooding**”.

“Same size and location of **multiple waves is significant**”.

“Changes in the river margins is significant when we are talking about several meters of erosion”.

“**Rapid change is human**, otherwise it would have reached equilibrium over the last hundred years”.

“**Any changes you can see are not caused by nature, changes by nature take a long time, like over 15,000 years**”

“**Boat wakes results in banks eroded cross sectionally**”.

“Because **control** of the river flow on the Willamette **significantly reduces the velocity** of the river, *changes caused by nature are very minor* in comparison to the effect of *many waves in a single day, that is a very significant component*”.

“*Changes to the river margins are not produced by flooding, they are produced by boats that create instability in the sediment, which changes the shoreline by removing that sediment*”.

DR GREGOR MACFARLANE – Australian Maritime College, University of Tasmania

“The Willamette River is deep, which means *the waves that are generated by these boats are totally unaffected by the bathymetry of the river bed*”.

Surfing - Lateral distance of 400’ is necessary for wake energy to be comparable to the benchmark case (water skiing).

Wake boarding - Lateral distance of 300’ is necessary for wake energy to be comparable to the benchmark case (water skiing)

DR. STAN GREGORY – Oregon State University, Department of Fisheries and Wildlife, Oregon State University “Sediments suspended during summer months settle on plants and block the sun, also blocking nutrients, and oxygen”. “There is a huge difference between the effects of erosion in the summer”.

“Juvenile salmon and salmonids move along the edges of the Willamette River every month of the year”.

“They prefer shallow water within 6’ of the bank, in water which is 2 -3’ deep.

“**Erosion of the habitat affects many species**”.

EXISTING SCIENCE

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University of Australia Maritime College, University of Tasmania

Dr. Gregor MacFarlane, 2018

Dr. McFarlane concluded the **maximum force** of waves **recommended** for the Newberg Pool is **25 lb.ft/foot**.

At **10,000** pounds, the resulting **force is 100 lb.ft/foot**.

At **4,000** pounds, the resulting **force is 50 lb.ft/foot**.

Recommended distance requirements from structures and shoreline; 300ft for wake boarding, 400ft for wake surfing.

Western Colorado University study for Big Payette Lake

Alex Ray, 2020

This study determined a ***no wake zone of 500' from the shore and structures***.

University of Quebec

Sara Mercier-Yves, Blais and Prairie, June 2014

“Our data demonstrate that the **energy** produced by the wake boat **dissipates** completely before reaching the shore (and therefore has no significant effect) when the passages wake boats are ***984 ft or more from shore***.”

Water Sports Industry Association Commissioned Study*

Clifford Goudy 2015

“in waves that travel over **deep water**, there is often **very little energy loss until the waves reached the shore**”.

“If a **shoreline** has light winds or is **narrow in the direction of prevailing winds**, it probably is a **good place to consider having a no wake zone**.” *The WSIA and NMMA are represented by Oxley & Associates and Pac/West, as are the out of state wake boat manufacturers

Boat Wake Impact Analysis 1/20/2021

Prepared for Lake Rabun Association & Lake Burton Civic Association Water Environmental Consultants – Mt. Pleasant, SC

"waves generated by **wakeboarding and wakesurfing** have longer periods than those from cruising/waterskiing and **have more energy and power**. Even a **225-ft buffer** for wakeboarding and a **950-foot buffer** for wakesurfing conditions will **still** allow waves to **impact other vessels, structures, or the shoreline with more power than** those from **cruising/waterskiing at a 100-ft buffer distance**."



► The May 1, 2021, **closure of nearly 4 miles** of the **Lower Willamette** to ALL towed watersports pushes more users to the Newberg Pool which,

- Is **less than half the width** (580' vs 1500')
- Has **vertical soft silt embankments** (vs. the Lower Rivers's gradual rocky shoreline)
- Is not tidal (all **wakes hit the same spot, all season long**)
- Has **no space** for wakes to **dissipate**
- **Is suffering serious erosion**

Boats designed specifically to make high energy wakes are not appropriate in the narrow Newberg Pool. It does not have ample width to allow for the dissipation of the wake's massive amount of energy before impacting the shoreline.



Manufacturers compete to design boats to create the largest wakes

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Their tag lines:

We bring the ocean to you!

“It’s no secret the key to a bigger wake is more weight”

“massive surf waves”

“The key ingredient to creating a better wake is additional weight”

“The new Malibu brings big wakes and more”

	NAUTIQUE G23	MALIBU 23 LSV
WAVE LENGTH	24 FT	29 FT
WAVE HEIGHT	3.5 FT	4.3 FT
POCKET SIZE	63 FT ²	94 FT ²
FACE QUALITY	6/10	10/10
OUTCOME	2 ND PLACE	1 ST PLACE

MANY STATES ARE FIGHTING INDUSTRY IN
ATTEMPTS TO PROTECT THEIR WATERWAYS

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It's tough for citizens to challenge a \$47 BILLION dollar industry's lobby.

**the Water Sports Industry Association (WSIA) and the National Marine Manufacturers Association (NMMA)*

<https://www.cnbc.com/2021/03/19/boat-sales-took-off-during-pandemic-dealers-cant-keep-up-with-demand.html>

OREGON

WASHINGTON

ARIZONA

COLORADO

NEW MEXICO

NEW HAMPSHIRE

MINNESOTA

MICHIGAN

FLORIDA

CALIFORNIA

IDAHO

INDIANA

TEXAS

WISCONSIN

NORTH CAROLINA

MAINE

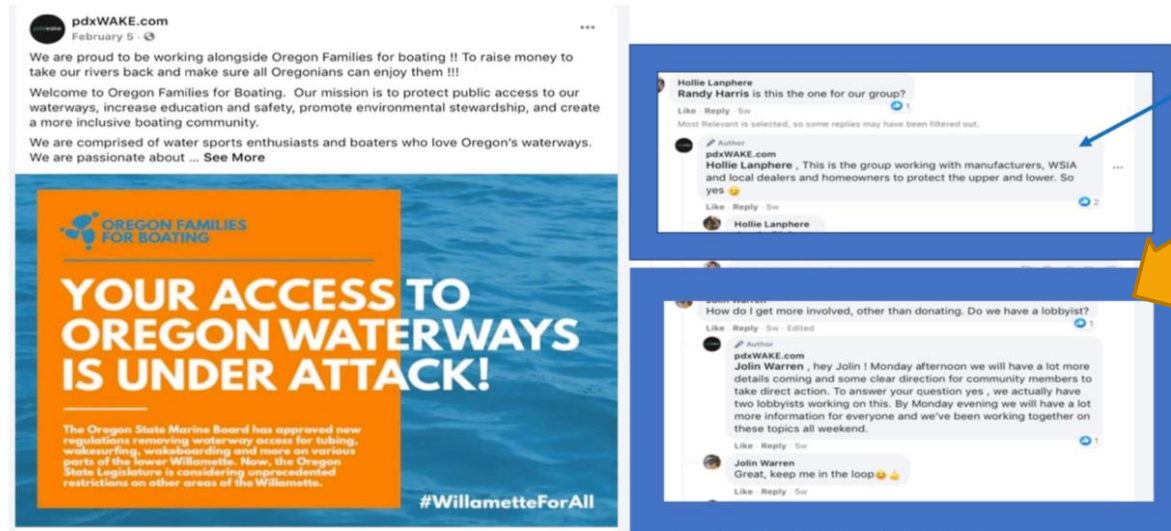
MARYLAND

VERMONT

VIRGINIA

WHO IS BEHIND OREGON FAMILIES FOR BOATING

Who boaters say is behind this campaign of misinformation IN THEIR WORDS



Protect the environment from irreversible harm by simply asking larger boats go to an area that works with the energy their boats create.

IT IS A SMALL SACRIFICE FOR THE 1% of the most damaging boats to drive a little further. The Willamette belongs to all Oregonians. The 99.9% of Oregon families, **your constituents**, are bullied off the river by large wakes, no longer using the river, docks, boats, and kayaks. Many face hundreds of thousands of dollars to **protect the river and prevent further damages**, including damages to the beds and banks **belonging to the State**.

**“THIS IS THE
GROUP WORKING
WITH INDUSTRY
LOBBYISTS, WSIA,
BOAT
MANUFACTURERS,
and BOAT
DEALERS”**

PDX wake Facebook post 2/5/21

BOATING IS NOT BEING BANNED ON THE WILLAMETTE RIVER

JUST OVER 400 boats IN OREGON got certificates to participate in Towed Watersports in the Newberg Pool. (OSMB house testimony 3/4/21)

JUST 34 OF THOSE BOATS OVER 4,000 POUNDS ARE MOORED IN THE NEWBERG POOL!

IN THE CAMPAIGN OF MISINFORMATION...

“TUBING SEASON CANCELLED!”

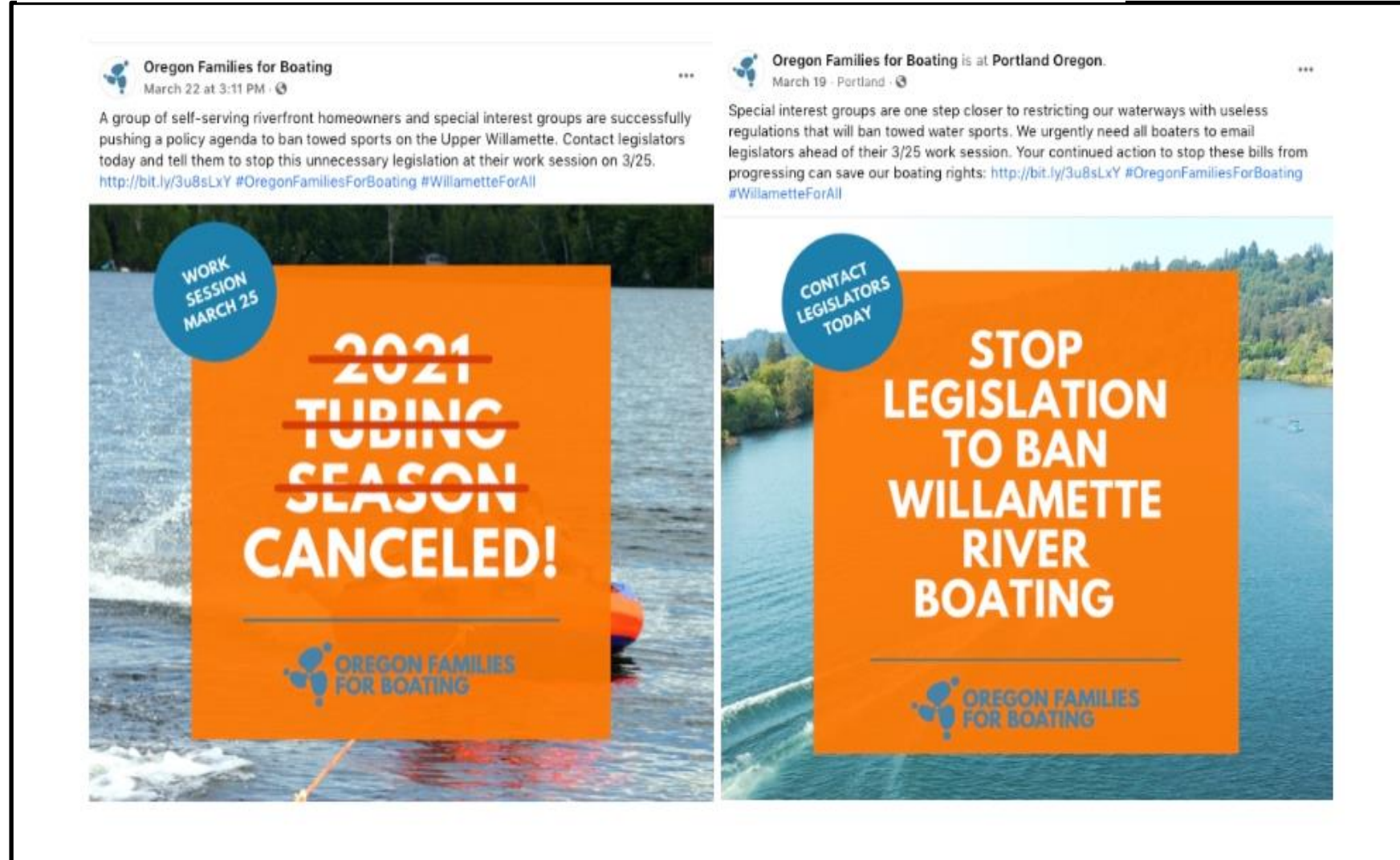
“Self serving homeowners special interest groups, pushing policy to BAN TOWED WATERSPORTS”

“useless regulations that will BAN TOWED WATERSPORTS”

“Stop legislation to BAN WILLAMETTE RIVER BOATING”

“Special interest restricting waterways” groups

“THERE IS NO EMPIRICAL EVIDENCE?”





“ALL THOSE PEOPLE
AREN'T GOING TO
SELL THEIR BOATS OR
STOP BOATING.

THEY'RE GOING TO
HAVE TO GO
SOMEWHERE ELSE”

Matt Radich, President, Active Watersports

WHY SB857-1 is urgent and necessary TODAY!

An unprecedented number of slides have occurred due to severe undercutting by large wakes

Previously, there were few **major** slides in the Newberg Pool

These slides are all within 1/2 of a mile

