Testimony of Ken Bierly Salem, Oregon:

Have canoed the Willamette for each year for nearly 40 years.

I retired from the Oregon Watershed Enhancement Board where I led the Willamette Special Investment Partnership. This effort by OWEB, Meyer Memorial Trust and Bonneville Environmental Foundation invested more than \$22.5 million between 2008 and 2018 and leveraged another nearly \$30 million of Bonneville Power Administration funds. The approach and partnership focused on nearshore habitat enhancement recognizing that the Willamette has been historically simplified to the point that both Spring Chinook and Winter Steelhead are federally listed. The progress made and the creative connection between private philanthropy and public funding using science and community involvement to improve river conditions at scale was recognized by the award of the Thiess International Riverprize, an international award that recognizes organizations who have achieved remarkable outcomes for rivers, river basins and their communities.

It is in that context that I comment on SB 1589.

The shared use of the Willamette River is important but shared use without degradation is an important consideration. One of the primary concerns about wave creating vessels is the effect on streambanks and how it might or might not affect juvenile salmonids. I think it is important to know that juvenile salmon dominantly use the river's edge while migrating downstream. They are sight feeders which means that increased turbidity has a detrimental effect on their ability to feed while migrating downstream. The Newberg Pool is relatively slack water which requires greater effort to swim downstream. Additional stress from both wave avoidance and failure to adequately forage only adds stress to organisms already stressed. Additionally, recent research has documented the presence of juvenile fish in the mainstem of the river throughout the year. Any additional turbidity through more significant wave production has the ability to further stress the migrating fish as well as creating the potential to strand them ashore during a wave event.

I have looked at the work from other areas of the world where boat waves have been examined. There is significant evidence that wave producing vessels have an outsized impact and the latest work indicates that a distance of at least 500 feet is necessary to attenuate waves created to background levels. This contrasts sharply with the current Marine Board regulations of allowing wake board surfing within 300 feet of docks.

I have been forced to take evasive action to avoid swamping when canoeing and vessels with large wakes pass by. It has become sufficiently concerning that my wife will no longer consider canoeing in the Willamette. While this is a personal issue, it goes to the greater issue of how to allow a multiplicity of users to use a public resource. Oregon's navigable waters are held in trust for all Oregonians. Uses that damage future resources or uses are and should be prohibited. Just as instream gravel removal has been mostly curtailed because of the impacts created, limiting wave boats is reasonable until locations where it can be demonstrated that impacts are unlikely.

Thank you for the opportunity to provide my support for SB 1589