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Prepared by: Mount Hood Environmental

Good afternoon. Chair Marsh, Members of the Committee, thank you for having us today. My name is Ian Courter and this is my colleague Tara Blackman. We are both fisheries scientists with Mount Hood Environmental. Our company specializes in salmon, steelhead and water quality research in the Pacific Northwest. The bulk of our work is original research that includes the design and implementation of applied science projects. Our comments today are specific to the impacts of wakes on ESA-listed salmon and steelhead.

Oregon Families for Boating contacted us and asked us to review the relevant scientific literature and provide our perspective about the empirical basis for boating restrictions in the Newberg Pool section of the Willamette River. This wasn't an issue we had encountered previously in our work, in part because recreational boating hasn't been emphasized as a primary threat to species viability within regional recovery planning documents. That's not to say that fisheries regulatory agencies wouldn't be interested or concerned about recreational boating impacts, but it simply has not received much attention relative to other factors known to influence fish survival and productivity. I believe this committee is well aware that there has not been a direct study of wakesurfing impacts on salmon and steelhead survival in the Newberg Pool, nor are we aware of a study proposal with this intent.

Tara Blackman is going to briefly summarize what we found in the available scientific literature.

Good afternoon Chair Marsh and Members of the Committee:

Having reviewed the available peer-reviewed scientific literature, I believe potential impacts of recreational power boating on fish can be generalized into two categories: First, immediate impact – this would include physically removing fish from the space they currently occupy and second, indirect impacts that affect long term survival, for example impacting their rearing habitat or affecting their ability to find food.

Studies that directly assess wake impacts to fish are scant. However, those that have looked at fish impacts from wakes find that the size and swimming ability of fish are critical determinants in whether a fish is dislocated by wakes. And, the long-term impacts of wakes on survival of fish is unknown. It is important to note that all studies highlight the importance of how local conditions affect the interaction between boat wakes and fish.

In the context of the Newberg Pool, the potential for wake impacts to ESA-listed salmon and steelhead will depend on if fish are present, how big they are, and what habitats they are using. While this reach is most definitely a part of the migratory corridor for juvenile fish, data collected at Willamette Falls indicates that the majority of juvenile fish are migrating through in winter and spring months. Therefore, it is unclear if the most vulnerable small fish overlap with watersport activity. Furthermore, summer temperatures in the Willamette mainstem are not ideal for salmonids; and their use of habitat in the Newberg Pool reach during summer is probably limited, though no studies have fully described this.

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In conclusion, we regard available previous work as useful for crafting hypotheses about fish impacts in Newberg Pool, but whether these findings apply to ESA-listed salmonids remains unknown. The primary take-away here, is that you don't know what the impacts are because the necessary data for arriving at that conclusion are unavailable.

In our opinion, a direct study of fish survival in the Newberg Pool is needed to validate concerns about fish impacts. This type of study would be beneficial locally, to inform the policy decisions before you today, and regionally to ensure that recreational boating regulations have a strong empirical basis if the intent is to benefit Oregon's fisheries.

Thank you.