

According to the Oregon State Marine Board (OSMB): “Boats specifically designed to produce large wakes for wakesurfing and wakeboarding are already present in significant numbers... Given industry research that wakesurfing is continuing to grow in popularity, the number of new boats with integrated wake enhancing devices will continue to grow in the future”

According to the OSMB: "Hydrologists estimate that a wake 5 inches high produces limited damage to the shoreline, but a 10-inch wake is 5 times more destructive, a 25-inch wake is 30 times more destructive, and so on”



**Modern Wake Boats are capable of producing wake/waves >4' in height**

“The literature review indicates an unequivocal connection between boat wake energy and shoreline erosion, sediment resuspension and nearshore turbidity” - (STAC Publication 17-002):

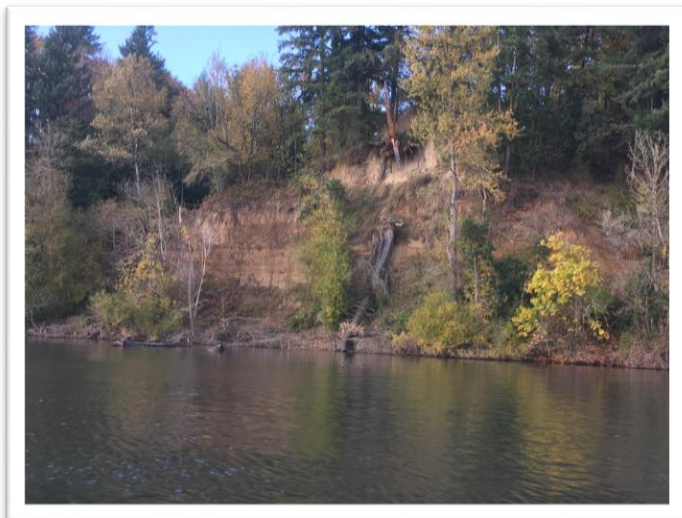
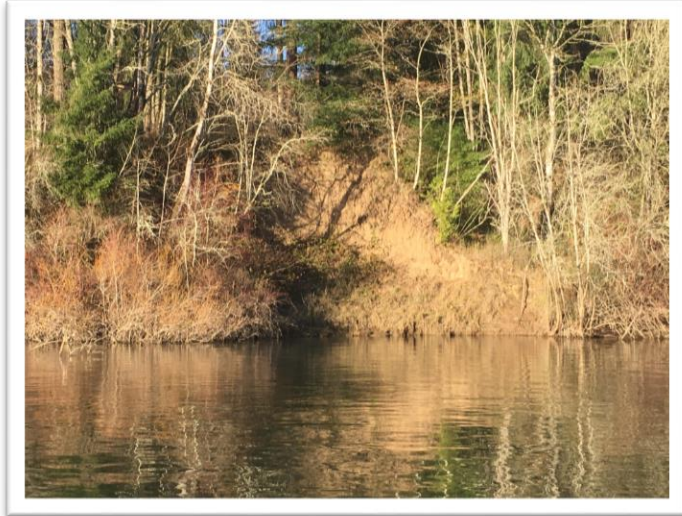
- Recreational vessels within 500' of the shoreline can produce waves large enough to result in significant erosion
- Steep banks are the most susceptible – waves undercut the bank foundation which leads to the loss of shoreline



**Banks Undercut from Wake/Wave Action – Upper Willamette Greenway**

According to a Water Sports Industry Association Study (WSIA): “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”

- From River Mile 30 to River Mile 50, the Willamette has steep, soft-sediment banks, is 400-600' wide and averages greater than 15' deep



Shoreline Loss – Upper Willamette Greenway

While natural erosion (flooding, wind, river regulation, etc) is certainly to be expected, **Wake-Induced erosion is controllable.** According to Stoel Rives LLC: “With only minor exceptions, the environmental impacts of recreation activities are mostly unregulated” within the Willamette Greenway

**Oregon needs improved inter-agency collaboration to protect shoreline within the Greenway - HB 4138 does this**