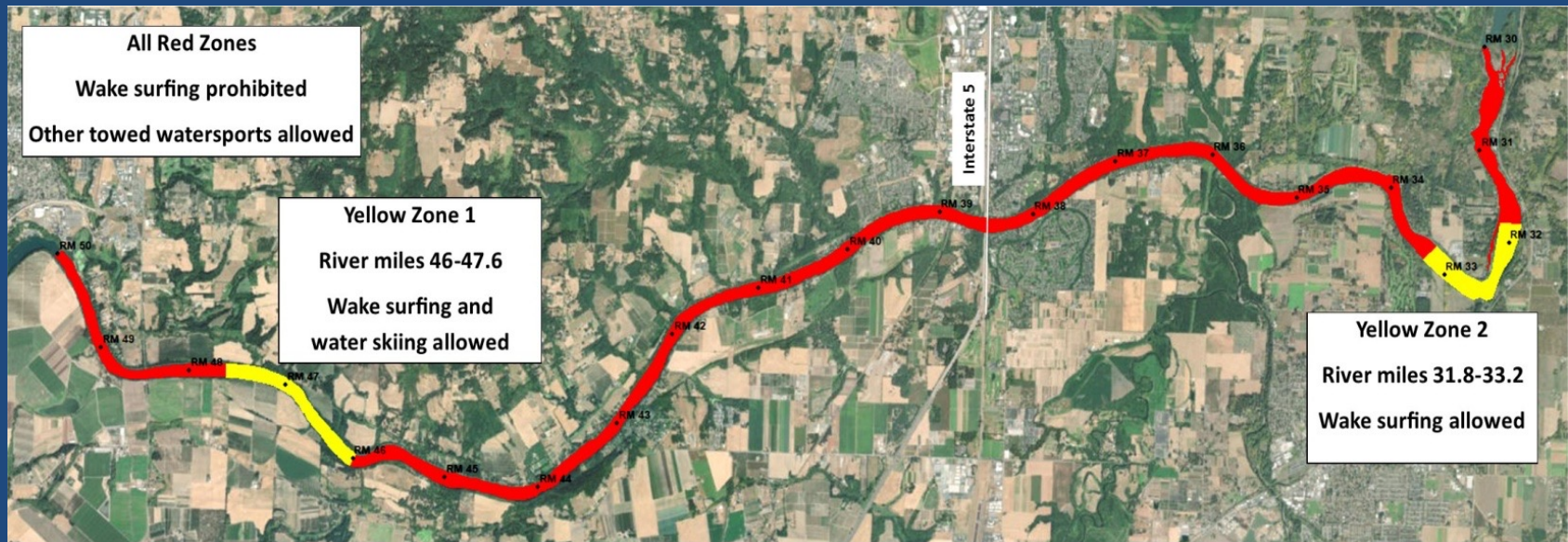


**Willamette River Newberg Pool
Towed Water Sport Zone and
Wake Surfing and Water Skiing Zone
River Bank Erosion Documentation and Evaluation**

Prepared for:

Oregon Recreational Boaters United

Oregon Marine Board Towed Water Sport Regulated Zones Within the Willamette River Newberg Pool



River Bank Study Approach

- August 2021 Tour of Entire Newberg Pool
- Photo and Georeference Documentation of 33 Locations: Eroding and Stable Banks
- Mapping of All Sites Visited
- Analysis of Potential Causes of Erosion
- Preparation of Report

Newberg Pool Erosion

- 21 Instances of Erosion and Bank Failure Documented and Mapped
- Upper Wake Surfing Zone
 - 3 Minor & 0 Major
- Lower Wake Surfing Zone
 - 5 Minor & 2 Major
- Outside of Wake Surfing Zone
 - 7 Minor & 9 Major

Outside of Wake Surfing Zone

Massive Bank Failure



Neighboring Property



Outside of Wake Surfing Zone

Utility & Drainage Caused Failure

Water Caused Bank Failure



Inside Upper Wake Surfing Zone

Champoeg State Park



Agricultural Landuse



Inside Lower Wake Surf Zone

Residential Construction



Agricultural Landuse



Conclusion

- No Evidence Boat Wakes Are Causing Erosion and Bank Failure Within the Newberg Pool
- Human Landuse Activity is the Primary Cause
- SB 1589 Provisions Are Not Supported By The Evidence
- SB Will Not Reduce Willamette River Bank Erosion and Failure Within the Newberg Pool

Bank Erosion & Failure Causes

- Adding fill material riverward to expand or restore lot dimensions or to decrease lot slope
- Clearing vegetation from the riparian zone
- Allowing non-native and invasive vegetation to cover the river bank
- Planting ornamental vegetation within the riparian zone
- Dumping yard debris over the bank thereby decreasing native plant cover
- Construction of docks and associated structures
- Discharging stormwater runoff to the top of the river bank slope
- Over irrigating landscaping near the top of the river bank slope
- Failure to maintain leaking irrigation lines near the top of the river bank slope