Appendix F: Maps for Grays Bay

Maps presented in this Appendix were created for Workshop 2. The maps include a 'present-day' sea level and flooding scenario, and an 'anticipated future' flooding scenario, for each of the five focus areas where issues identified by participants during Workshop 1 are clustered. Additional map features included infrastructure (buildings and roads), flow barriers (culverts and tidegates), and the Workshop 1 identified issues.

'Present-day' sea level is represented by the NOAA mean high high water (MHHW) extent. 'Present-day' flooding data represented by the FEMA 100-year (1% annual exceedance probability) flood extent is not available for Wahkiakum County, and thus is not shown.. We chose a sea level rise value of 6' above current MHHW as our future flooding extent. This represents a scenario that combines a predicted 20-year extreme flood event (~5' above current MHHW) plus projected relative SLR (~1' above current MHHW) that are likely to occur at the end of the century (~2100), based on current climate model estimates (Miller et al. 2018). These values are consistent with what is published in the Pacific County 2023 Sea Level Rise Risk Assessment (DCG/Watershed, 2023). Table 1 in that document indicates a 50% likelihood of 1' 2" of SLR and 4' 7" of additional extreme flood inundation on top of SLR, for a combined increase of 5' 9" for the year 2100.

For focus areas 4 and 5, a map of predicted future flooding is not included because the predicted flood extent did not extend this far upstream. Focus area 5 is upstream of present-day tidal influence, thus MHHW extent is not shown on this map.

Appendix F References

DCG/Watershed Inc. 2023. Sea Level Rise Risk Assessment. Prepared for Pacific County Department of Community Development.

Miller, I.M., Morgan, H., Mauger, G., Newton, T., Weldon, R., Schmidt, D., Welch, M., Grossman, E. 2018. *Projected Sea Level Rise for Washington State – A 2018 Assessment. A collaboration of Washington Sea Grant, University of Washington Climate Impacts Group, University of Oregon, University of Washington, and US Geological Survey. Prepared for the Washington Coastal Resilience Project.* updated 07/2019

1) Focus Area 1: Middle Deep River

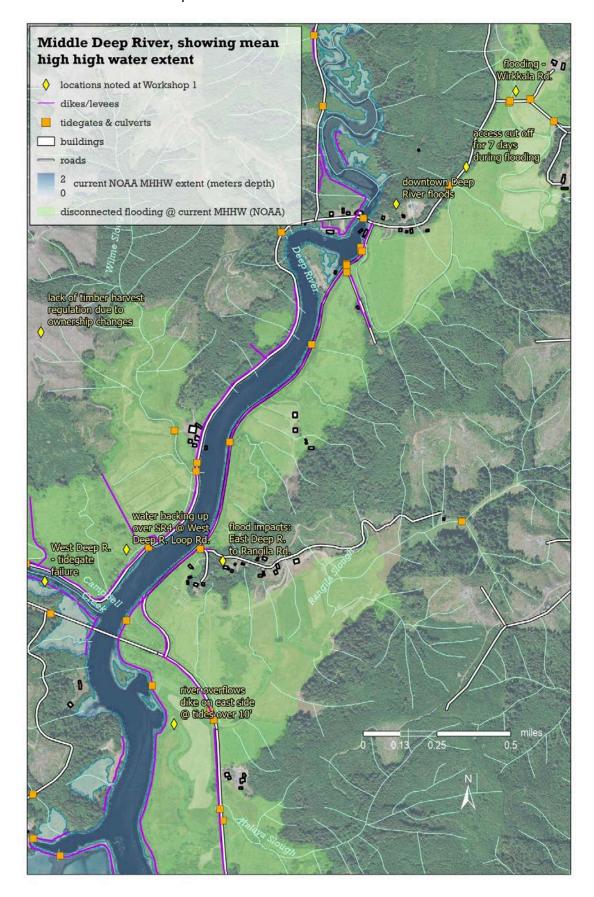


Figure F.1a. Middle Deep River - present-day flood extent.

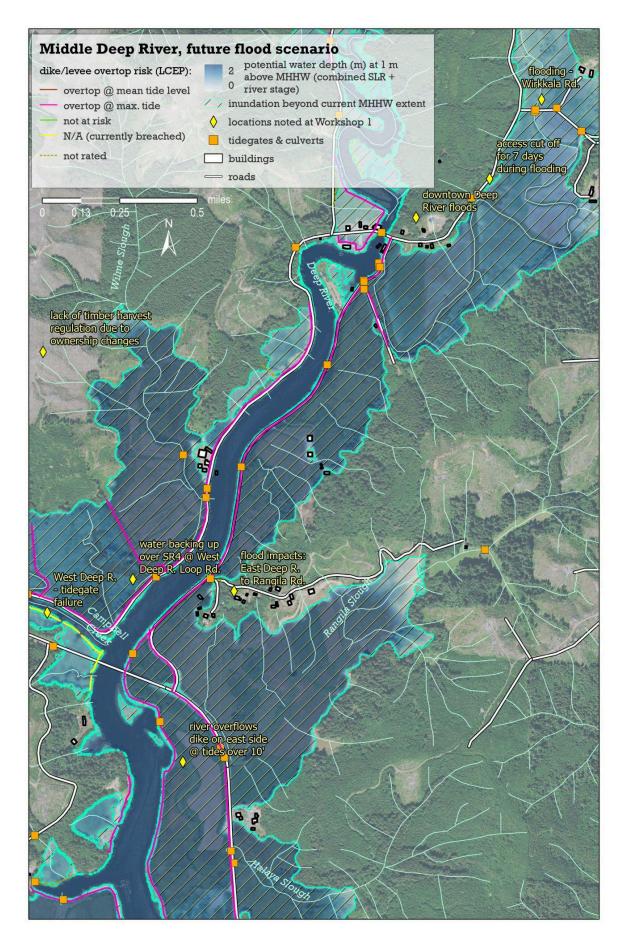


Figure F.1b. Middle Deep River - estimated future flooding scenario.

2) Focus Area 2: Seal Creek at State Route 4

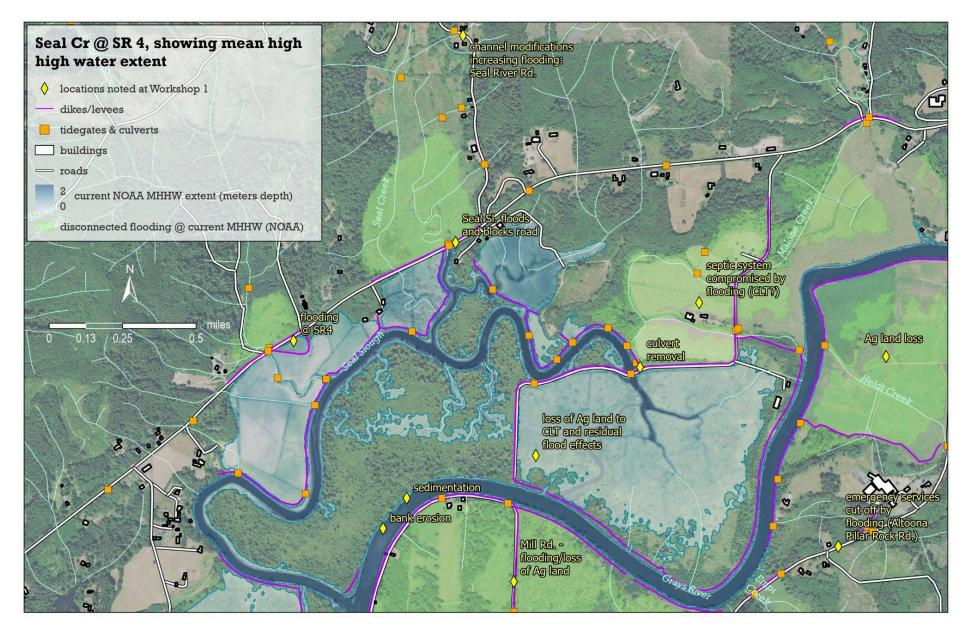


Figure F.2a. Seal Creek at State Route 4 - present-day flood extent.

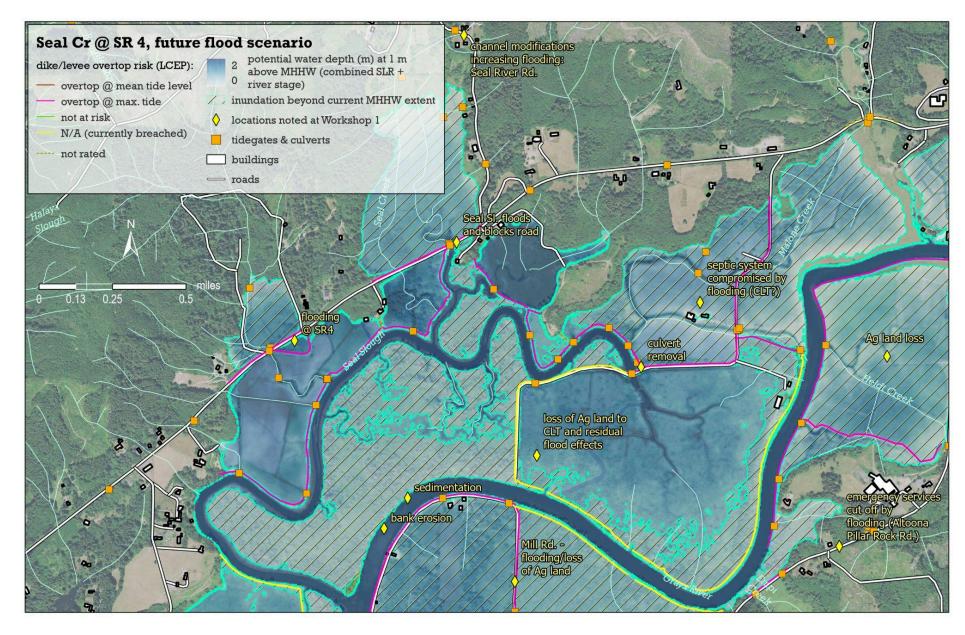


Figure F.2b. Seal Creek at State Route 4 - estimated future flooding scenario.

3) Focus Area 3: Grays River at Altoona-Pillar Rock Road

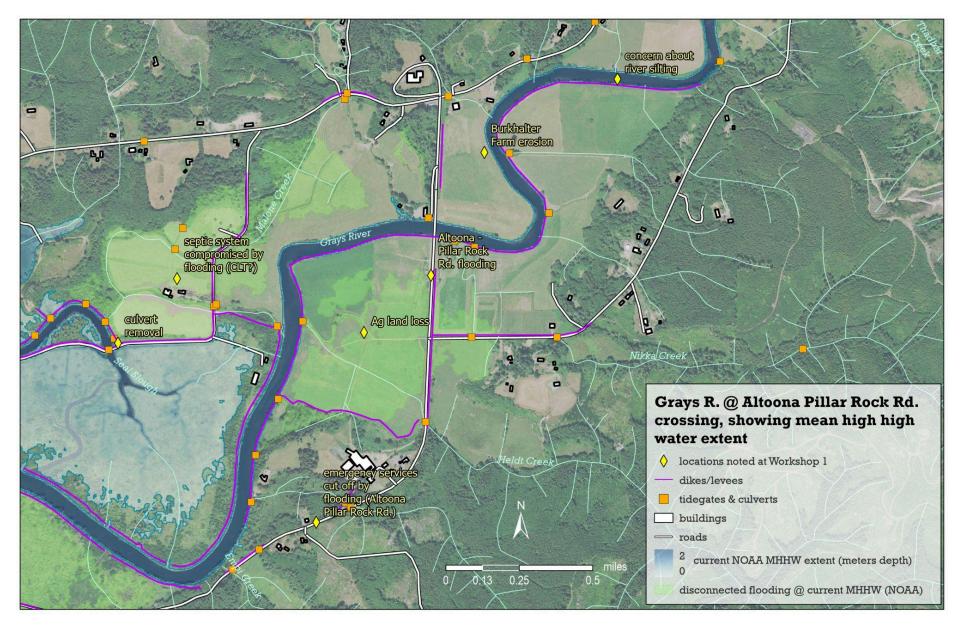


Figure F.3a. Grays River at Altoona-Pillar Rock Road - present-day flood extent.

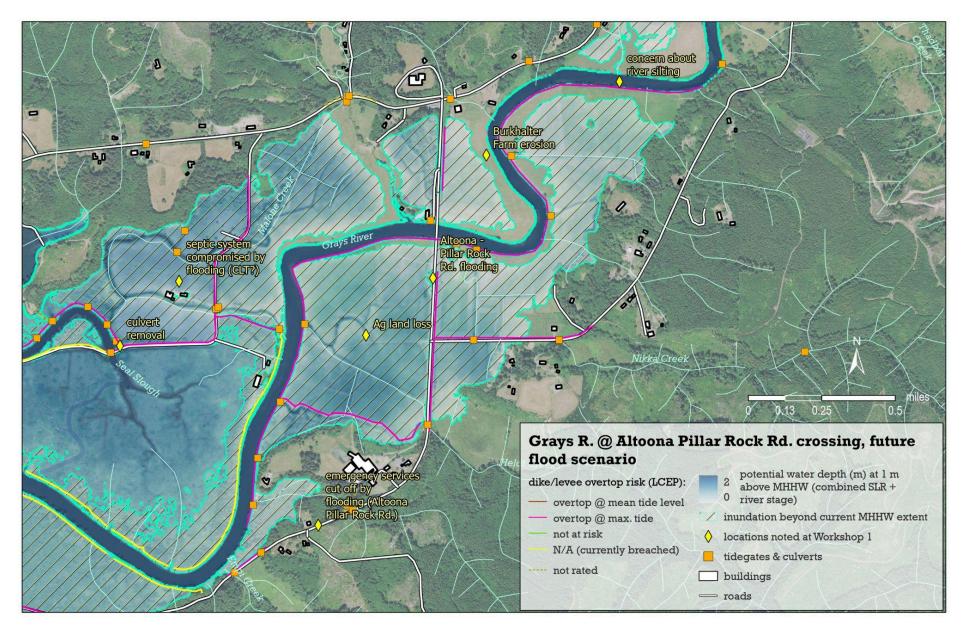


Figure F.3b. Grays River at Altoona-Pillar Rock Road - estimated future flooding scenario.

4) Focus Area 4: Grays River at Loop Road/Hull Creek

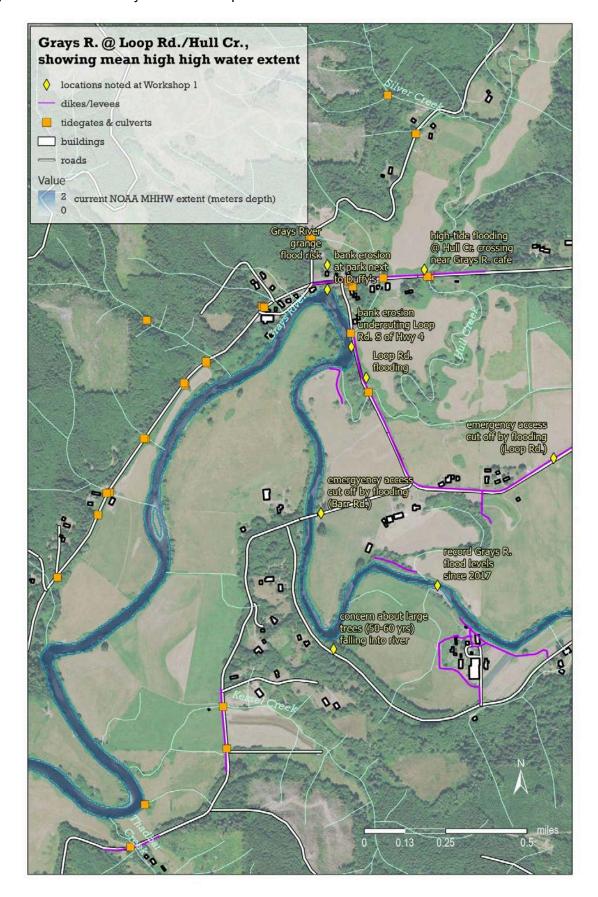


Figure F.4. Grays River at Loop Road/Hull Creek - present-day flood extent.

5) Focus Area 5: Grays River Covered Bridge to Fossil Creek

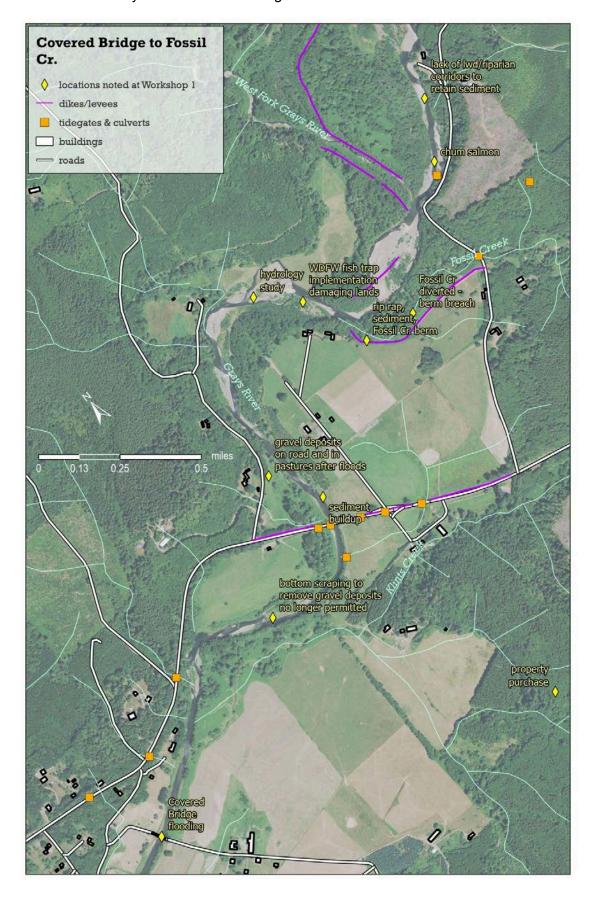


Figure F.5. Grays River Covered Bridge to Fossil Creek. Location is upstream of tidal influence.