

Point No Point Estuary Restoration King Tide Events

February 9, 2023

Overview

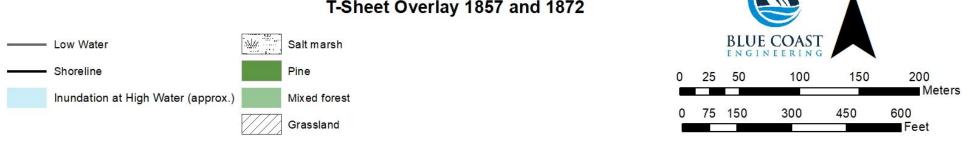
- ➤ Historic Condition (T-sheet)
- Beach Dynamics
- ➤ Beach changes on November 5
- ➤ December 27 events
- ➤ December 27 events if project had already been implemented



Historic Condition

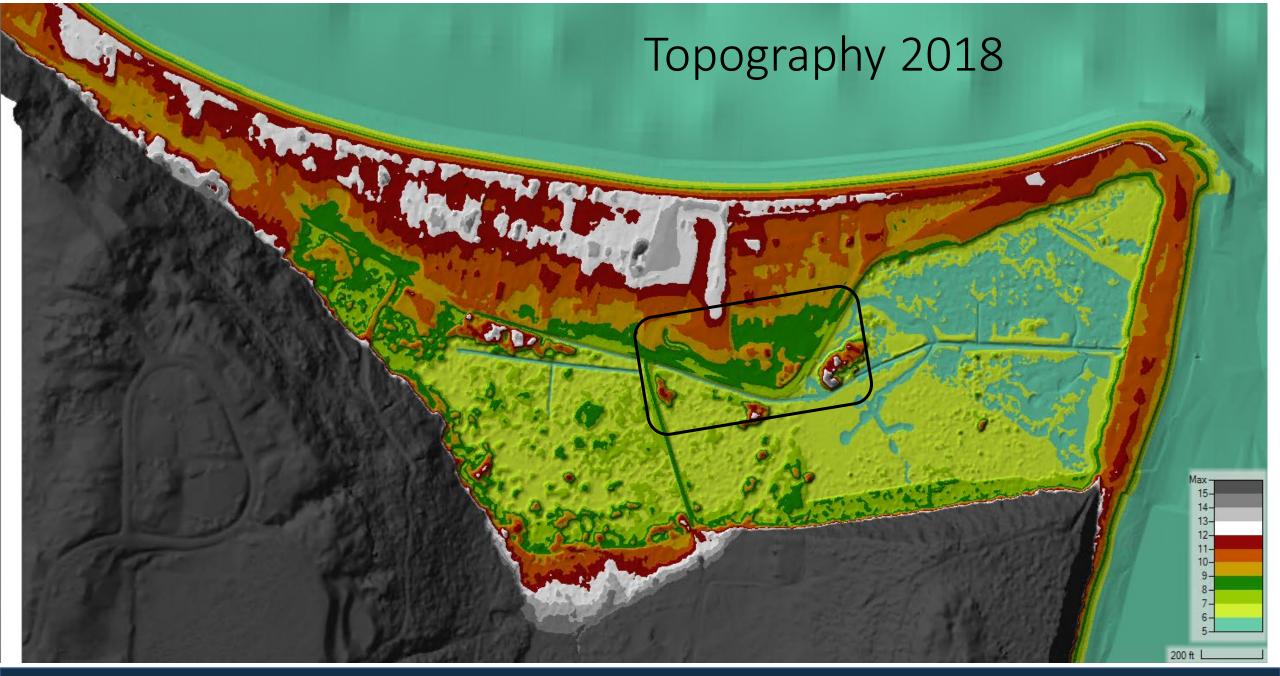


Imagery from 2018 T-Sheet Overlay 1857 and 1872



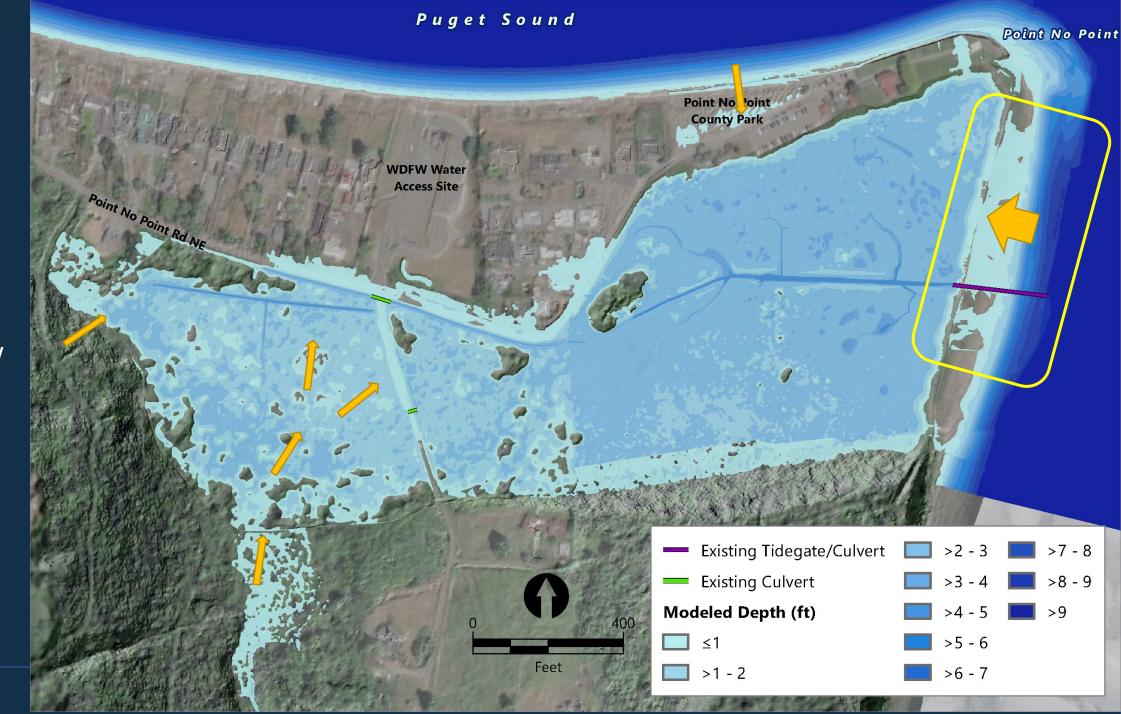






January 6, 2022 King Tide Event Resulted in minimal flooding of road

Yellow arrow show water flowing into the site





November 5, 2022 Erosion

Wind speed: 26 knots (30 mph)
Wind Direction: Northwest @ Point
No Point

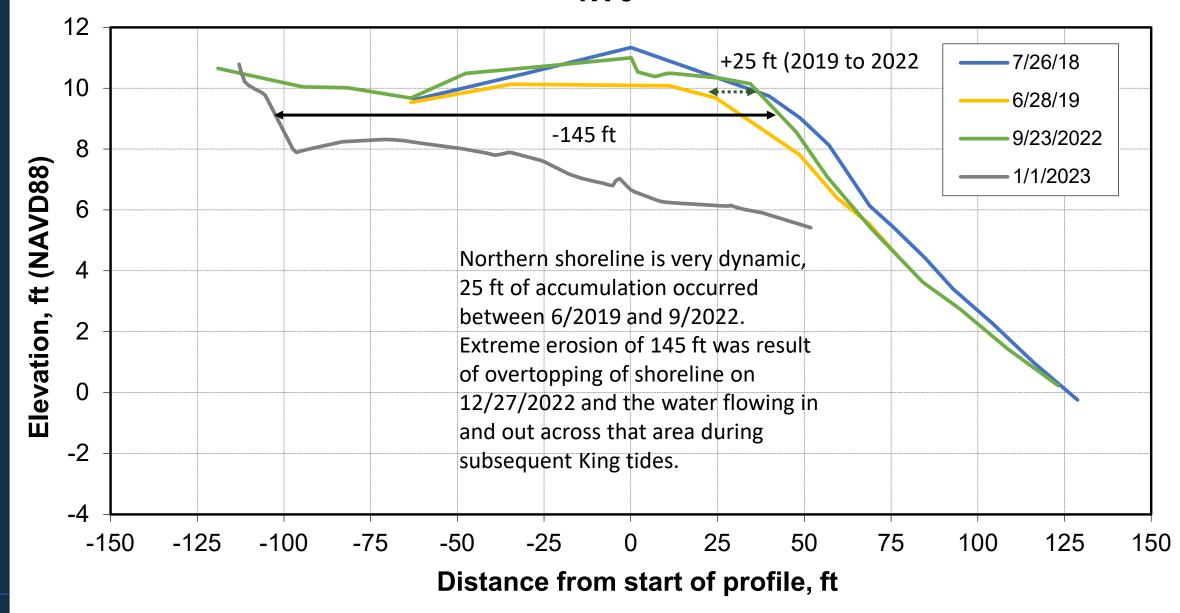
Estimated Wave Height = 3 feet Wave Period = 4.1 seconds



Cross Shore Beach Profile Change Analysis Western Boundary of the Park 14 7/26/2018 12 9/23/2022 10 **-** 1/1/2023 Elevation, ft (NAVD88) 8 6 25 ft of erosion occurred between 9/2022 and 1/2023, some of this erosion occurred in 11/2022 weakening the shoreline on the north 0 side of the Park -2 -75 -50 -25 25 175 225 50 100 125 150 200 250 275 300

Distance from start of profile, ft

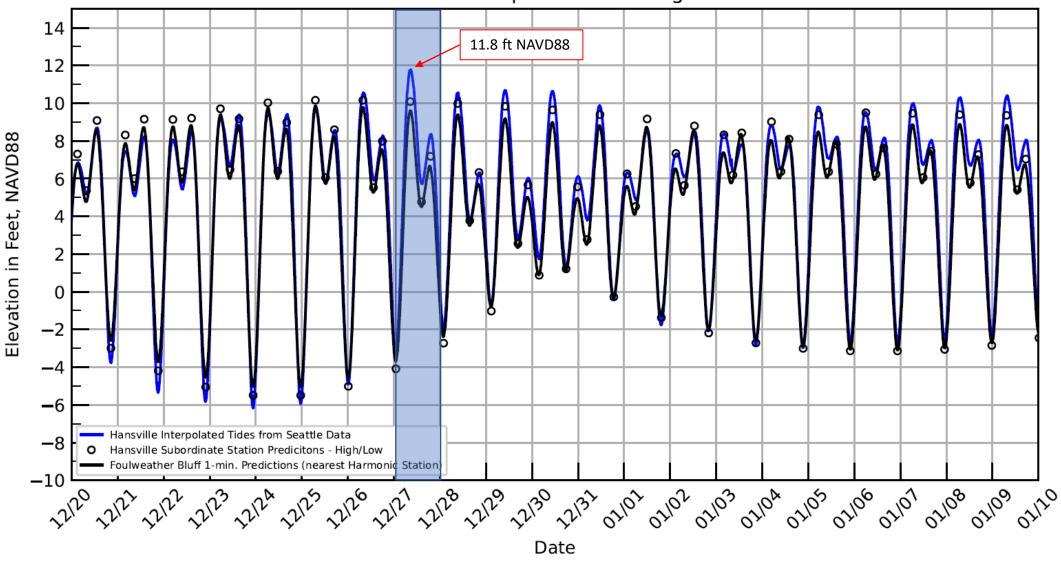
Cross Shore Beach Profile Change Analysis TX 3 Middle of Northern Beach



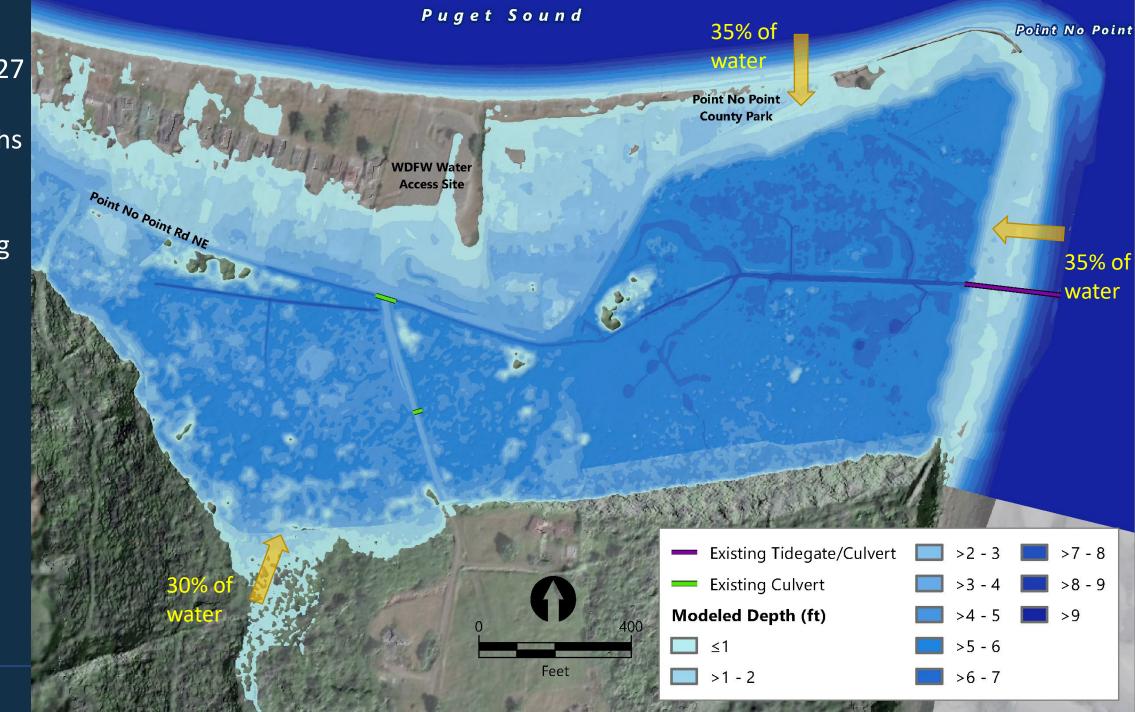


December 27, 2022 King Tides

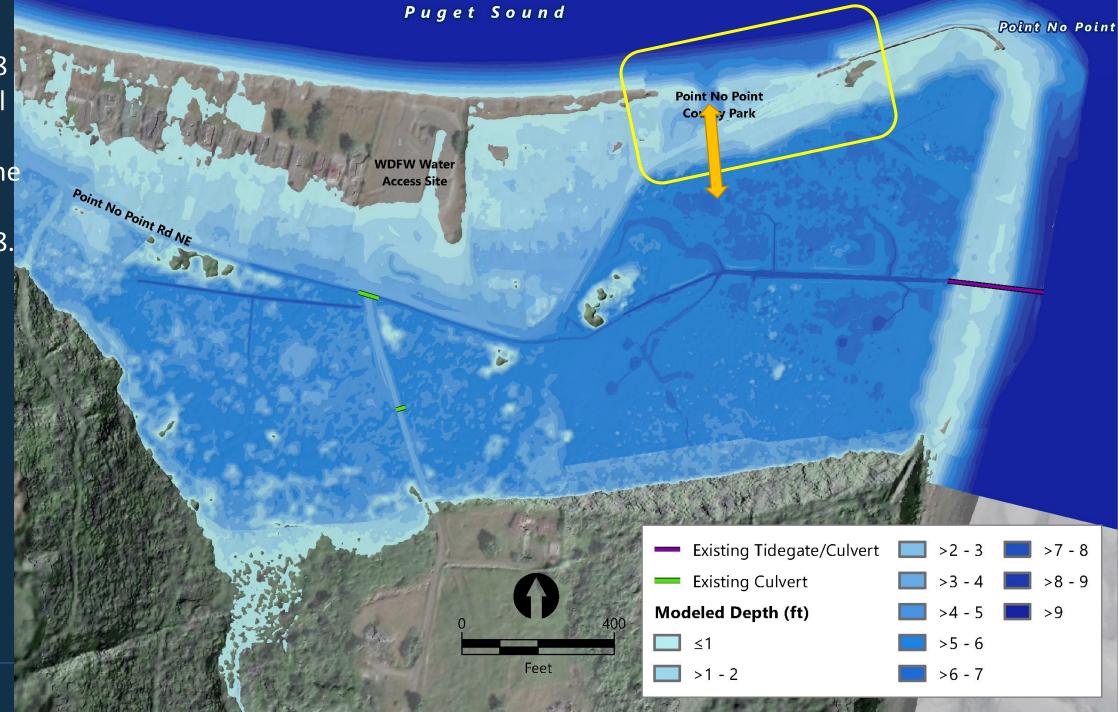
Hansville NOAA Station - Interpolated Tidal Signal From Seattle Data



December 27 maximum water depths in the area during overtopping event from king tide.



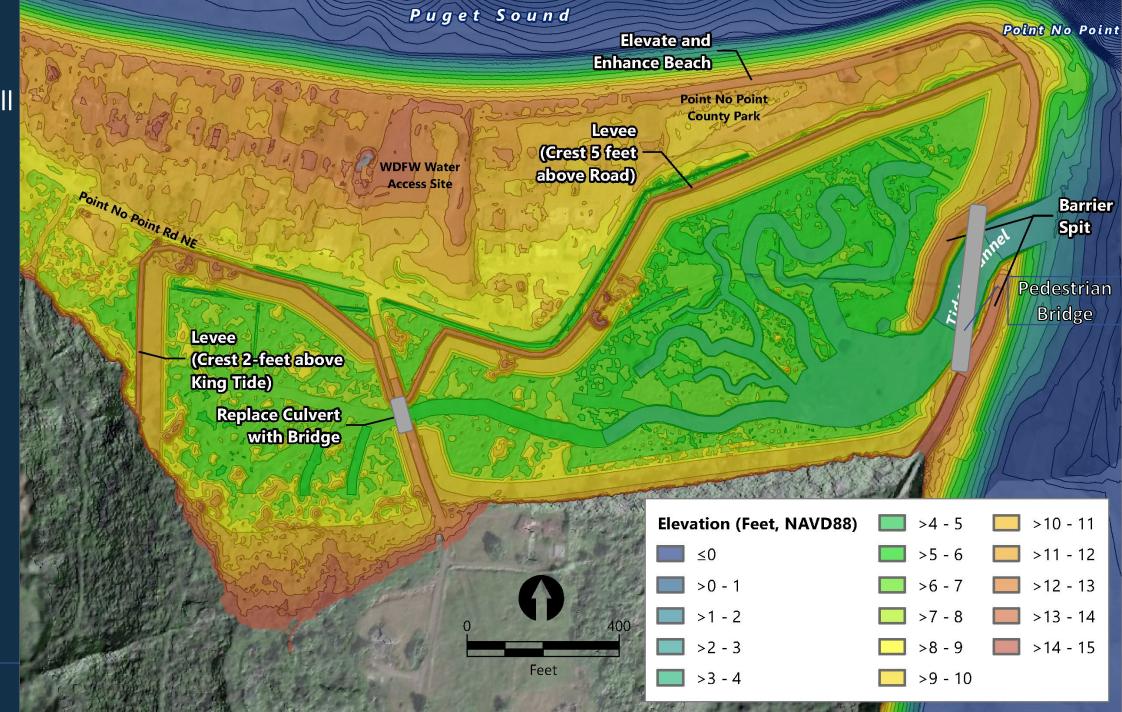
December 28 after channel formed and king tide came in again on December 28.





Predicted Project Response to King Tides

Preliminary
Proposed Full
Restoration
Scenario



Water Depths on December 28 King Tide Event If Full Restoration Scenario were implemented

