ACTIVITY | SEA LEVEL RISE

Are the projections shown similar to what you would expect? Are there areas that are currently inundated further during extreme flood events than the mapping projections? If so, please mark those areas on the map.

DEPARTMENT OF ECOLOGY State of Washington

KITSAP COUNTY

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BLUE COAST ENGINEERING

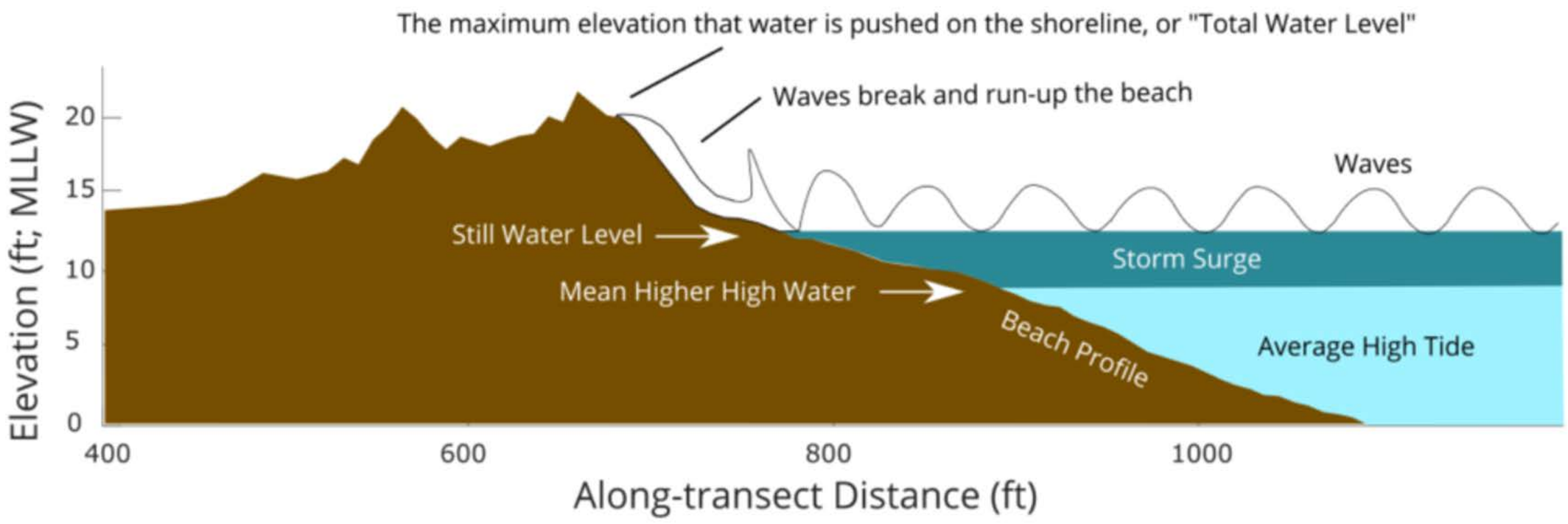
FACET

KEY TERMS AND RESOURCES

Storm surge happens when winds blow across the water and the water piles up along the shoreline.

Still water levels are the level of the predicted tide. It does include storm surge but does not include wind-wave run-up.

Total water levels are extreme water levels plus wave run-up. As waves hit the shoreline, they run-up and create a higher water level than just the height of the wind-wave. This additional excursion as the wave hits the beach is called wave run-up.

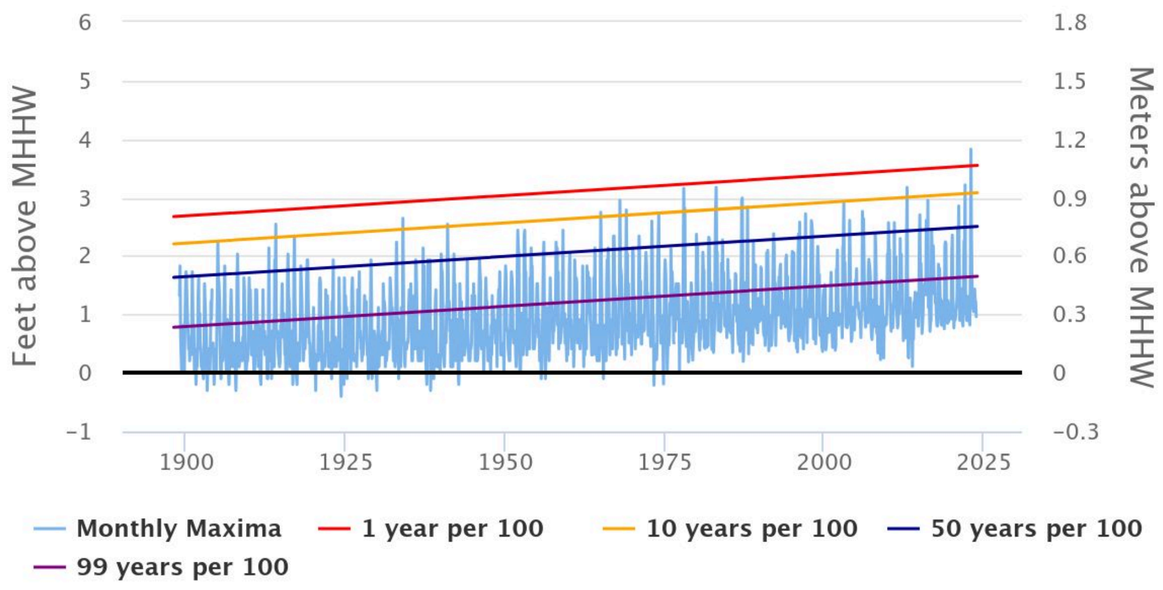


Source: Miller et al. 2019. Extreme Coastal Water Level in Washington State: Guidelines to Support Sea Level Rise Planning. https://cig.uw.edu/publications/extreme-coastal-water-level-in-washington-state-guidelines-to-support-sea-level-rise-planning/

Extreme high water levels from NOAA are based on long term data and described by return period intervals such as 1-year, 50-year or 100-year include fluctuations due to predictable astronomical tides, including king tides, which are caused by the alignment of the sun, moon and earth.

King Tides are the highest tides of the year. They occur during the spring when the Earth, moon, and sun are aligned and the moon is particularly close to Earth. Winter king tides occur when the sun is also particularly close to Earth. Winter king tides often happen, due to the time of the year, during winter storms when atmospheric pressures are low and sea levels are high, storm winds cause water piling up into storm surge and increased rain fall results in more water on the land surface.

9447130 Seattle, WA



NOAA/NOS/Center for Operational Oceanographic Projects and Services

Source: https://tidesandcurrents.noaa.gov/est/est_station.shtml?stnid=9447130

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KITSAP COUNTY WASHINGTON
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SEA LEVEL RISE VULNERABILITY AND RISK ASSESSMENT
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