nearly twice as large as in the 1964 earthquake. The selected source tsunami hazard assessment of Seaside (TPSW, 2006). This model uses the same model used by the U.S. Geological Survey (USGS) in their 2006 assessment of coastal areas along the Oregon coast, they take more time to travel the Pacific Ocean and arrive hard by the tsunami, which killed four people and caused an estimated $84 million in property loss.

Historically, about 28 distant tsunamis have been documented by the National Oceanic and Atmospheric Administration (NOAA) through the National Tsunami Hazard Mitigation Program, which has been administered by the U.S. Department of Commerce. These tsunamis have originated from Alaska, the Ring of Fire, and other remote sources, causing significant damage and loss of life.

In 2011, a tsunami wave was generated by an earthquake offshore Japan in March 2011. These tsunamis can have significant impacts on distant coastal areas, such as Oregon, due to the long travel time and the potential for large wave heights upon arrival.

To mitigate these risks, Oregon has developed a state-wide tsunami hazard mitigation strategy. This includes the development of tsunami hazard maps and inundation scenarios. The maps are used to identify areas of expected tsunami inundation based on scientific evidence and to prohibit the construction of new essential facilities and special occupancy structures in this tsunami inundation zone.

The computer simulation model output is provided to the Oregon Department of Geology and Geophysical Hazards (DOGAMI) as part of the tsunami hazard mitigation strategy. This output includes the overall wave height and inundation extent for the two scenarios at the selected reference point (simulated gauge station).

The wave height and velocity observed are not necessarily associated with the first wave to arrive onshore. Therefore, evacuees should not assume they are safe once the first wave passes. They should remain aware of the tsunami risks and follow evacuation instructions.

To understand and mitigate this geologic hazard, the Oregon Department of Land Conservation and Development (DLCD) is working with local governments and other agencies to ensure that residents and visitors are prepared for the next Cascadia Subduction Zone earthquake and tsunami event.