Ocean, resulting in an increase of the tsunami inundation onshore. The effect of this splay fault moving during a full-rupture CSZ event would be significant. Various profiles show that there may be a steep splay fault running nearly perpendicular to the Cascadia Subduction Zone (CSZ) and that this fault could amplify the amount of seawater that enters the coast during a tsunami event. The amount and geometry of the slip occurring over the next 30 years is uncertain. However, such earthquakes would be of a magnitude comparable to the 1700 earthquake, which had an estimated magnitude of 8.9. The United States Geological Survey (USGS) released the results of a study in 2008, which estimated that since 1700, there have been 19 full-rupture CSZ events, likely caused by an earthquake that moves the Juan de Fuca Plate away from the North American Plate. One of these events occurred approximately 300 years ago on January 26, 1700 (Figure 3). All 19 of these full-rupture CSZ events were likely caused by earthquakes of magnitude 8.9 or greater. The largest earthquake in the study area occurred in 1700, and since then, there has been a significant increase in slip on the CSZ. The average rate of slip on the CSZ is approximately 1.5 inches per year, but the movement is not consistent. Over the next 30 years, the rate of slip on the CSZ is expected to be faster than the average rate. DOGAMI, the Oregon Department of Geology and Mineral Industries, has been working since 2008 to predict the potential tsunami inundation using computer models. DOGAMI has managed the Oregon coast since 1994, and since then, DOGAMI has managed tsunami inundation maps to help residents and visitors along the coast. DOGAMI's work is designed to protect the Coast from potential tsunami damage. DOGAMI's work is also related to Senate Bill 379, which was passed in 1995. Senate Bill 379 instructed DOGAMI to conduct research and provide evidence to prohibit the construction of new developments in areas at risk of tsunami damage. This tsunami inundation map displays the output of computer models that predict the potential tsunami inundation. The map legend depicts the respective size of the buildings that would be inundated. The map also includes a chart that shows the tsunami wave heights for the selected reference point (simulated gauge station). It shows the change in wave heights for each tsunami event. The sizes of the earthquake and its resultant tsunami waves are depicted in Figure 4. Figure 5 depicts the tsunami waves as they arrive at a school, police station, and fire station. The greatest wave height and velocity observed are not necessarily the maximum slip on the CSZ. The tsunami models used to create this chart came from research that examined the many uncertainties in the models. The data used to create this chart came from research that examined the many uncertainties in the models. The data used to create this chart came from research that examined the many uncertainties in the models. The data used to create this chart came from research that examined the many uncertainties in the models.