The Oregon Department of Geology and Mineral Industries (DOGAMI) is using federal funding awarded by NOAA to develop a new computer simulation model for predicting tsunami inundation. The model is based on the Cascadia Subduction Zone (CSZ) earthquake and tsunami. The CSZ is the tectonic plate boundary between the North American Plate and the Juan de Fuca Plate, and it is located off the coast of Oregon. The CSZ is characterized by a series of large earthquakes over the past 10,000 years, with the most recent event occurring in 2004.

The model output is provided to DOGAMI as cumulative number of buildings inundated within the map area. This information helps to understand the potential consequences of a CSZ earthquake and tsunami. The inundation maps are used to inform local emergency management officials and residents about the potential impact of a tsunami in the area.

The inundation maps are created using information from the U.S. Geological Survey, the Cascadia Subduction Zone Earthquake and Tsunami Program, and the Uniform California Earthquake Evaluation Project. The maps are also used to train emergency management officials and residents in tsunami preparedness and response.

The maps are available for download from the DOGAMI website and are also displayed in the local government offices and community centers. The maps are updated regularly to reflect the latest scientific information and to ensure the accuracy of the data.

In summary, the computer simulation model output is a valuable tool for understanding the potential impact of a CSZ earthquake and tsunami. The inundation maps are used to inform and educate the public about the potential consequences of a tsunami in the area, and they are used to train emergency management officials in response strategies.