**METHOD OF PREPARATION**

Initial tsunami modeling activities were performed by the University of Southern California (USC) Tsunami Modeling Program in support of the National Tsunami Hazard Mitigation Program. The tsunami modeling program modeled several potential tsunami source events using different models, including the MOST model developed at the National Oceanic and Atmospheric Administration Center for Tsunami Research and the 1D Earthquake and Tsunami Program (DETP) developed at the California Emergency Management Agency. The tsunami modeling results were used to prepare the inundation mapping (Titov and Gonzalez, 1997; Titov and Synolakis, 1998).

The accuracy of the inundation line shown on these maps is subject to limitations in the accuracy and completeness of available terrain and tsunami source information, and the accuracy of the models. Thus, although an attempt has been made to identify a credible upper bound on the accuracy of this inundation product, there is no way to adequately characterize the accuracy of the tsunami source information available for this region or to adequately characterize the uncertainty in the models. The inundation line represents the maximum considered tsunami runup for a given source event. The inundation line is shown for each source event at a resolution consistent with the accuracy of the topographic data used for each region.

**MAP EXPLANATION**

The California Emergency Management Agency (CalEMA) map is prepared to assist cities and counties in identifying areas that could be inundated by a tsunami. The map is intended for planning uses only. This map, and the information presented herein, is not a legal statement of the probability of any tsunami affecting any area within a specific time period.

**PURPOSE OF THIS MAP**

This tsunami inundation map was prepared to address the need for emergency planning, and/or intended uses. The inundation line represents the maximum considered tsunami runup for a given source event. The inundation line is shown for each source event at a resolution consistent with the accuracy of the topographic data used for each region. The accuracy of the inundation line shown on these maps is subject to limitations in the accuracy and completeness of available terrain and tsunami source information, and the accuracy of the models. Thus, although an attempt has been made to identify a credible upper bound on the accuracy of this inundation product, there is no way to adequately characterize the accuracy of the tsunami source information available for this region or to adequately characterize the uncertainty in the models. The inundation line represents the maximum considered tsunami runup for a given source event. The inundation line is shown for each source event at a resolution consistent with the accuracy of the topographic data used for each region.

**TSUNAMI INUNDATION MAP FOR EMERGENCY PLANNING**

State of California - County of Orange

DANA POINT QUADRANGLE
SAN JUAN CAPISTRANO QUADRANGLE

March 15, 2009

**REFERENCES**

National Oceanic and Atmospheric Administration (NOAA), 2004, GeoSAR, National Geophysical Data Center Key to Geophysical Record Documentation No. 29, NOAA, NESDIS, NGDC, 242 p.


University of California at San Diego, 1998, Submarine Landslide #1 and #2, Table 1.

University of Southern California, 2005, Submarine Landslide #1 and #2, Table 1.

National Oceanic and Atmospheric Administration (NOAA), 2004, National Geophysical Data Center Key to Geophysical Record Documentation No. 29, NOAA, NESDIS, NGDC, 242 p.


Geological Survey, 1993; Intermap, 2003; NOAA, 2004). The location of the enhanced resolution) that better defines the location of the maximum inundation line (U.S.

**DISCLAIMER**

This tsunami inundation map was not prepared to assist in making legal or insurance claims to any user or any third party on any claim by any user or any third party on account of or arising from any inaccuracies in this tsunami inundation map nor for any other regulatory purpose.

Please see the following websites for additional information on the construction and development of the tsunami inundation maps:

- State of California Tsunami Information:

- University of Southern California - Tsunami Research Center:
  - http://www2.usc.edu/dept/tsunamis/2005/index.php

- National Oceanic and Atmospheric Agency Center for Tsunami Research (MOST model):

- State of California Emergency Management Agency, Earthquake and Tsunami Program:

- National Geophysical Data Center Key to Geophysical Record Documentation No. 29, NOAA, NESDIS, NGDC, 242 p.

**MAP BASE**

This map shows the locations of various areas and cities relevant to the tsunami inundation map. The map includes information about the probability of any tsunami affecting any area within a specific time period.

**DATA SOURCES**

- California Emergency Management Agency (CalEMA) by the National Tsunami Hazard Mitigation Program. The tsunami modeling results were used to prepare the inundation mapping (Titov and Gonzalez, 1997; Titov and Synolakis, 1998).

- The California Emergency Management Agency (CalEMA) map is prepared to assist cities and counties in identifying areas that could be inundated by a tsunami. The map is intended for planning uses only. This map, and the information presented herein, is not a legal statement of the probability of any tsunami affecting any area within a specific time period.