WSSPC Awards in Excellence 2009

Innovations

Redwood Coast Tsunami Work Group

Humboldt State University — Earthquake Education Center

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Background. The Redwood Coast Tsunami Work Group (RCTWG) is an organization of local, state and federal agencies, relief agencies, tribes, coastal land managers, academia, and the private sector from Del Norte, Humboldt and Mendocino Counties. The group was formed in July 1996 to define the needs of local jurisdictions to mitigate the North Coast earthquake and tsunami hazard, and to promote a coordinated, consistent mitigation program for all coastal areas.

The RCTWG and its member agencies have sponsored a variety of projects in four areas — hazard assessment, response planning, education/outreach, and institutionalizing tsunami mitigation programs. Since its inception the RCTWG has become an effective tool for initiating, promoting and coordinating regional tsunami mitigation efforts.

The group received recognition by the Coastal Region, Governor's Office of Emergency Services in May 1997, as a part of on-going state hazard reduction efforts. In April 2002, the Humboldt County Board of Supervisors declared their support of ". . . the Redwood Coast Tsunami Work Group and its member organizations to mitigate the effects of future great earthquakes."

Projects. Recognition of the local, regional and distant source tsunami hazards on the North Coast has led to a number of planning, outreach and mitigation projects. The RCTWG has developed brochures in English and Spanish, and other materials to educate North Coast residents about earthquakes and tsunami hazards. Of particular significance in the group's education and mitigation efforts have been the relative tsunami hazard maps of the Humboldt County coastline developed and refined from 2003 to the present. The maps were developed with input of RCTWG members, and have become an important educational tool, and are being used in the County Tsunami Contingency Plan and evacuation route planning.

In 2006 RCTWG team members from CalTrans District 1, the Eureka National Weather Service office, Humboldt State University, and Humboldt County Office of Emergency Services began planning to identify areas that needed tsunami hazard and evacuation route signs and sign locations. The group also identified sign cost specifics, regulatory issues and funding alternatives for 475 general sign locations on State and Humboldt County roadways. That effort proceeded in parallel with other RCTWG team efforts for tsunami sirens, evacuation planning and exercises, hazard area mapping, TsunamiReady planning efforts and other educational opportunities.

In 2007 RCTWG team members helped prepare for and conduct the first full-scale tsunami evacuation drill in California at the town of Samoa, which is particularly exposed to the

tsunami hazard. The RCTWG team designed evacuation routes, participated in the extensive community outreach prior to the drill, and conducted the drill to evaluate the town's evacuation plan and to provide an opportunity for community members to practice the skills needed to survive a real tsunami. Some 90% of the households participated, and were able to reach with evacuation site within 10 minutes at a normal walking pace.

RCTWG agencies have partnered with the National Weather Service in Humboldt County to encourage and assist local communities to apply for TsunamiReady designation. The approach has been to identify jurisdictions in the highest hazard zones and to work with the unique mix of cultural, political and economic entities within the community to develop partners and a constituency for tsunami hazard mitigation so that the Samoa and Orick communities were recognized as the 49th and 50th US TsunamiReady communities in July, 2007.

The RCTWG has sponsored an Earthquake/Tsunami Education Room at the Humboldt County Fair since 1999, and also at the Del Norte County Fair since 2005. Each year the rooms' themes change, and they exemplify RCTWG's commitment to promote a coordinated, consistent earthquake and tsunami mitigation program for Northwest California. The rooms are staffed by knowledgeable professionals from RCTWG constituent agencies, educational institutions (including students), and businesses, who interpret current and breaking-edge information about our earthquake and tsunami hazards, natural and official warnings, and what to do before, during and after an earthquake or tsunami to mitigate hazards, reduce injuries and save lives. Hands-on exhibits have included a shake trailer, tsunami wave tank, seismograph, real-time earthquake monitor, fault sand box, liquefaction tank, posters and displays, as well as an earthquake/tsunami theater and preparedness materials.