



### Tsunami Preparedness & the Community Rating System 2018

*A tsunami is one of nature’s most powerful and destructive forces. It can produce dangerous currents, rapidly flood land, and devastate coastal communities. Large tsunamis do not happen often, but they pose a significant threat. Even small, more frequent tsunamis can cause loss of life, injury, and considerable damage.*

Given changes to our built and natural environments, coastal communities face an increased risk from floods and a continuing increase in flood insurance costs. The Community Rating System (CRS) of the National Flood Insurance Program (NFIP) can help alleviate these increases, and so can recognizing tsunamis as part of a community’s flood threat.

The CRS is a voluntary program that rewards a community-centered approach to reducing local flood hazards and recognizes tsunamis as part of a community’s flood threat. Under a system of credit points based on the effectiveness of various flood loss reduction techniques and life safety measures, a CRS-participating community obtains a CRS Class “rating.” This rating entitles residents to a reduction in their NFIP flood insurance policy premiums.

#### Tsunami: A Special Flood-related Hazard

Tsunamis are one of the “special flood-related hazards” recognized by the CRS. Through support from the National Tsunami Hazard Mitigation Program and the National Oceanic and Atmospheric Administration’s (NOAA) TsunamiReady® program, many coastal communities are aware of the threat and are increasingly engaged in reducing tsunami impacts. These efforts are a largely untapped source of CRS credit.



#### Creditable Tsunami Activities

Activities conducted by communities to reduce their tsunami risk can help lower insurance premiums. The CRS offers tsunami-related credit in four categories as briefly described here.



#### More about the CRS

The Community Rating System rewards communities that undertake flood hazard reduction activities that exceed the minimum floodplain management requirements of the NFIP. The CRS encourages a community-centered approach to all local hazards, including tsunamis.

The CRS uses a rating system that is similar to fire insurance rating to determine discounts on flood insurance premiums for residents. The CRS rates communities from 9 to 1, based on points that they earn for conducting their choice of a range of creditable activities.

Class 9 communities receive a 5% discount for their residents in Special Flood Hazard Areas (SFHAs). As a community engages in additional mitigation activities, it earns more credit and a higher CRS Class rating. Each CRS Class improvement yields an additional 5% discount on flood insurance premiums for properties in the SFHA, up to 45% for a Class 1 community.

The CRS began in 1990. Today there are nearly 1,500 CRS communities, with 70% of the NFIP policy base.

CRS credit may also be available in these categories for state, regional, or other activities that further the goals of the CRS.

#### Public Information

*This CRS category credits activities to advise people about the hazard, flood insurance, and protection measures.*

**Map Information Service** credit is available for providing inquirers with information about the local tsunami hazard.

**Outreach Projects** credit is available for providing the public with information to increase tsunami hazard awareness and to motivate actions to minimize impacts before, during, and after an event.

**Hazard Disclosure** credit is available for disclosing the tsunami hazard to prospective property buyers

before the mortgage lender notifies them of the need for flood insurance.

**Flood Protection Information** credit is available for maintaining detailed information about tsunami protection in the local library or website.

### **Mapping and Regulations**

*This CRS category credits mapping and regulating hazard areas to protect new development.*

**Flood Hazard Mapping** credit is available for mapping tsunami areas for regulatory or management purposes (i.e., warning and response).

**Open Space Preservation** credit is available for preserving open space in areas subject to tsunamis.

**Higher Regulatory Standards** credit is available for regulating existing and future development beyond the minimum NFIP criteria. This includes regulating development in tsunami hazard areas (e.g., structure placement, elevation, construction, and land use).

### **Flood Damage Reduction**

*This CRS category credits efforts to reduce damage to existing development.*

**Floodplain Management Planning** credit is available for including tsunamis in a comprehensive floodplain management plan.

**Acquisition and Relocation** credit is available for acquiring, relocating, or otherwise clearing existing buildings out of defined flood hazard areas, which may include areas subject to tsunami risk.

**Flood Protection** credit is available for retrofitting and small flood control projects that protect buildings in defined flood hazard areas from tsunamis.

Since the beginning of the 19th century, tsunamis have caused more than 700 deaths and almost \$2 billion in damage to U.S. coastal states and territories.

For example, a magnitude 9.2 earthquake off Alaska in 1964 generated tsunamis that caused \$1 billion in damage in Alaska, the U.S. west coast, and Hawaii. About 124 deaths resulted. In 2011, the Honshu Island, Japan, tsunami caused about \$91 million in damage in California and Hawaii.

A tsunami can strike any U.S. coast, but the hazard level varies. Where large numbers of people live, work, and play on the coast, even where the hazard level is low, the consequences are high. For more, see <http://tsunami.gov/?page=tsunamiFAQ>.

## **Warning and Response**

*This CRS category credits coordinating emergency management with floodplain management.*

**Flood Warning and Response** credit is available for communities recognized by NOAA as TsunamiReady.



The main goal of the voluntary TsunamiReady program is to improve public safety before, during, and after tsunamis through risk assessment, planning, education, and warning communication.

The National Tsunami Hazard Mitigation Program (NTHMP) works to protect lives and reduce economic losses from tsunamis at the community level. The NTHMP includes NOAA, FEMA, the U.S. Geological Survey and 28 U.S. states/territories. Through collaboration, coordination, and support to partner states and territories, the NTHMP aims to ensure consistency among federal and state tsunami programs and integration with broader multi-hazard programs. It focuses on three key functions: hazard assessment, warning guidance, and mitigation.

## **Moving Forward**

The CRS recognizes the role emergency managers play in a comprehensive floodplain management program. Today, most tsunami activities are handled by emergency managers outside of community floodplain management programs, and potential CRS credit is going unaccounted for. By working together on tsunamis, floodplain and emergency managers can better incorporate the hazard into floodplain regulations, planning, and public information activities to improve a community's CRS rating.

The end result? Communities better prepared for tsunamis and perhaps a greater insurance discount for their residents.

## **To Find Out More**

The *CRS Coordinator's Manual* and other CRS resources: <https://www.CRSresources.org>

TsunamiReady Program: <https://www.weather.gov/tsunamiready/>

National Tsunami Hazard Mitigation Program: <https://nws.weather.gov/nthmp/>

For specific questions about tsunami credit, contact your ISO/CRS Specialist: <https://www.CRSresources.org/100-2/>.