

OTHER RECOMMENDED EFFORTS TO INCREASE COMMUNITY TSUNAMI RESILIENCE

These additional recommendations supplement TsunamiReady efforts and can be considered for adoption to enhance community resilience. These recommendations are completely optional.

MITIGATION RECOMMENDATIONS

- Tsunami-related elements in nationally-recognized programs and planning efforts, such as:
 - o FEMA's National Flood Insurance Program, including the Community Rating System
 - No Adverse Impact coastal floodplain management as outlined by the Association of State Floodplain Managers
 - o Multi-objective management/special area management plans in accordance with the Coastal Zone Management Act
- Incorporation of tsunamis into key local plans (e.g., comprehensive, capital improvement, transportation, economic development) and planning efforts, such as:
 - Seismic standards and building codes
 - o Tsunami-resistant design and construction regulations or guidelines
 - Local zoning ordinances to minimize or steer development away from tsunami hazard zones
 - Critical-facility ordinance to limit critical facilities in tsunami hazard zones
 - O Tsunami hazard disclosure for permit applications and real estate transactions
 - Open space (e.g., parks, greenways, natural areas) in tsunami hazard zones
 - o Plans that establish and/or preserve coastal buffers to slow shoreline erosion
 - o Incentives (e.g., density bonuses, fee waivers, set asides) to encourage mitigation
- Tsunami-related mitigation projects, such as
 - Relocation of buildings, hazardous materials, and critical facilities out of the tsunami hazard zone
 - Protection of structures using National Flood Insurance Program coastal floodresistant design and construction requirements and the FEMA Coastal Construction Manual if relocation is not feasible
 - o Port- and harbor-related efforts, such as tying down refueling-tanks, automatic shutoff valves, caps on pier moorings, minimal long-term storage of material that would become potential debris (e.g., empty shipping containers, logs and lumber)
 - o Automatic shut off valves on major supply gas lines
 - o Store important documents where they will not be damaged or lost, such as in remote archives

PREPAREDNESS RECOMMENDATIONS

- School-based training, such as:
 - o Tsunami education program, including science and safety in primary and secondary schools
 - o Tsunami awareness presentations by subject matter experts
- Evacuation plans for facilities with access and functional need individuals (e.g., assisted living facilities, child-day-care centers)
- Training for community leaders, such as:
 - o The COMET Program tsunami modules
 - o "TsunamiReady Champions" to spearhead tsunami hazard education and awareness
 - o "Map Your Neighborhood," Citizens Corp, or Community Emergency Response Team
 - o FEMA's "Are You Ready?" workshop or others from Emergency Management Institute
 - o State emergency services training
 - o American Red Cross sheltering training
- Business-based preparedness training, such as:
 - o Education materials distributed to guests (e.g. evacuation plans)
 - o Appropriate tsunami evacuation signage placed at business site
 - o Employees trained in the site's procedures for a tsunami emergency
 - o Tsunami response policies and procedures, including MOUs/MOAs, plan annexes
- Participation in national emergency-management programs, such as:
 - o Emergency Management Accreditation Program (EMAP)
 - o Certified Emergency Manager® or Associate Emergency Manager® through the International Association of Emergency Managers
 - o Certified Floodplain Manager® through the Association of State Floodplain Managers
- Preparedness projects
 - Designated harbor and marine vessel-evacuation areas in offshore deep-water areas
 - o Interpretative tsunami hazard zone signs along beach/shore access points
 - Participation in annual end-to-end communications test, including EAS activation, use of real event code (TSW) or EAS test message (e.g., RMT), evacuation drills/exercises, siren systems, and telephone mass notification system
 - o Surveys to assess the success of community tsunami awareness programs

RESPONSE RECOMMENDATIONS

- Additional elements in an EOP:
 - o Response plan for businesses to notify and evacuate visitors and employees
 - o Exercises with businesses (e.g. seminar, table-top, meeting, etc.)
 - Transportation plans for contra flow and traffic maintenance for distant tsunami incidents
 - Notification plan for marinas and harbormasters to expedite relocating vessels
 - o MOUs with private land owners to allow evacuees access through gates and across land
 - o Procedures for keeping evacuees and other impacted individuals informed throughout the incident

- o Procedures for opening assembly areas and evacuation shelters
- Emergency Management Assistance Compact (EMAC) for tsunami response/recovery
- o Ensuring critical facilities have the tsunami hazard addressed in their EOPs.

RECOVERY RECOMMENDATIONS

- Identification of a long-term recovery manager (local expert) in accordance with the National Disaster Recovery Framework
- Plan for conducting a post-tsunami incident interagency after action review. Goals would include identifying lessons learned and best practices, and evolving the EOP, as necessary.