Emergency Preparation - Reality Check RC-1a: Alert Meanings

The media and the Jefferson County Department of Emergency Management have a suite of terms that are used in **Alerts** that sound vague but actually have fairly concrete meanings in terms of emergency preparation. They are:

Weather Alerts¹

High Wind Advisory – Events that are not life threatening, but may cause limited power outages or other inconvenience. Sustained wind of 30 to 39 mph or gusts of 45 to 57.

High Wind Watch – Conditions are favorable for the HIGH WINDS in the next 48 hours but are not yet certain.

High Wind Warning - A potentially life-threatening HIGH WIND event is occurring or is about to happen. Winds will be at the warning level or above.

If you do not have a weather bug app on your computer or smart phone, you can get alerts from: National Weather Service Forecast Office – Seattle: http://www.wrh.noaa.gov/sew/

Tsunami Alerts²

TSUNAMI INFORMATION STATEMENT: A Tsunami Information Statement is issued to inform emergency management officials and the public that an earthquake has occurred...or that a tsunami warning...watch or advisory has been issued for another section of the ocean. In most cases information statements are issued to indicate there is no threat of a destructive tsunami and to prevent unnecessary evacuations because the earthquake may have been felt in coastal areas. An information statement may...in appropriate situations... caution about the possibility of destructive local tsunamis. Information statements may be reissued with additional information...though normally these messages are not updated. However...a Watch...Advisory or Warning may be issued for the area...if necessary...after analysis and/or updated information becomes available.

TSUNAMI WATCH: A Tsunami Watch is issued to alert emergency management officials and the public of an event that may later impact the watch area. The watch area may be upgraded to a warning or advisory - or canceled - based on updated information and analysis. Therefore emergency management officials and the public should prepare to take action. Watches are normally issued based on seismic information without confirmation that a destructive tsunami is underway.

- Tsunami Watch should be treated as an early "heads-up".
- Watches are usually for events large enough to produce a tsunami but impact on the watch area has not been calculated.
- ETA is often more than 8 hours.

¹ EOG 3.1.01, "Damaging Winds", Part 3: Emergency Operations Guide, Jefferson County – City of Port Townsend Comprehensive Emergency Management Plan, June 15, 2010

² Tsunami Response Strategy, Tab 21, Quick Response Guide, Jefferson County Department of Emergency Management, April 4, 2011

TSUNAMI ADVISORY: A Tsunami Advisory is issued for the threat of a potential tsunami that may produce strong currents or waves dangerous to those in or near the water. Coastal regions historically prone to damage due to strong currents induced by tsunamis are at the greatest risk. The threat may continue for several hours after the arrival of the initial wave...but significant widespread inundation is not expected for areas under an advisory. Appropriate actions to be taken by local officials may include closing beaches...evacuating harbors and marinas...and repositioning ships to deep waters when there is time to safely do so. Advisories are normally updated to continue the advisory...expand/contract affected areas... upgrade to a warning... or cancel the advisory.

- No inundation (inland flooding) expected above the *high water line*.
- Strong currents and abnormal tidal action.
- Damage expected to docks, piers, and moored boats.
- Multiple waves; can last up to 12 hours or more.
- Subsequent waves may be higher than the first.
- Travel time of a wave from Neah Bay to Port Townsend is about 90 minutes.

TSUNAMI WARNING: A Tsunami Warning is issued when a potential tsunami with significant widespread inundation is imminent or expected. Warnings alert the public that widespread...dangerous coastal flooding accompanied by powerful currents is possible and may continue for several hours after arrival of the initial wave. Warnings also alert emergency management officials to take action for the entire tsunami hazard zone. Appropriate actions to be taken by local officials may include the evacuation of low-lying coastal areas and repositioning ships to deep waters when there is time to safely do so. Warnings may be updated...adjusted geographically...downgraded...or canceled. To provide the earliest possible alert...initial warnings are normally based only on seismic information.

- Tsunami WARNING means that a tsunami will occur.
- Travel time of a wave from Neah Bay to Port Townsend is about 90 minutes.
- Tsunamis generated within Puget Sound will probably not have a warning.
- Will exceed the high water line.
- Safety limit is a minimum of 50 feet above sea level.
- Will arrive in several waves perhaps hours apart.
- Preceded by rapidly receding tide.
- Boats at sea need to be in at least 1200 feet of water depth to be safe from waves.

Additional information, including worldwide tsunami alerts in effect, can be found at: West Coast / Alaska Tsunami Warning Center.