

MARINE CORPS BASES HAWAII COMMUNITY BRIEFING ON TSUNAMIS 28 FEB 2018



JACQUELINE FREELAND

INSTALLATION PROTECTION



Purpose

- Provide you with information and understanding to be prepared for a Tsunami hitting the State of Hawaii.



How will we do this?

- **Understand the Elements of a Tsunami**
 - Different Types of Tsunamis
- **Know what to do during a Tsunami**
- **How to be prepared**
- **No Question or Answer period out of courtesy of other's time**



Understand the Elements of an Tsunami Before it Happens

- A Tsunami or tidal wave, is a **series** of waves caused by the displacement of a large volume of water, generally in an ocean.
- Earthquakes, volcanic eruptions, other underwater explosions, landslides, glacier calving, or meteorite impacts above or below water, all have the potential to generate a Tsunami.





Understand the Elements of an Tsunami Before it Happens

- A Tsunami can happen at any time.
- A Tsunami can reach a height of 100 feet (30 meters).
- A Tsunami can travel up to 500 mph.
- Multiple waves will impact the coastline
- Could take hours from when first wave arrives to “all clear”



Understand the Elements of an Tsunami Before it Happens

■ Different Types of Tsunami

■ Tsunami:

- Past tsunamis
- Distance – Local travel time
- Size of wave and size of earthquake.





Understand the Elements of an Tsunami Before it Happens

■ Different Types of Tsunamis

- Extreme Tsunami: **Worst case** –
- New data gathered by experts that a tsunami similar to the Japan Tsunami could happen in Hawaii.
- 1-1000 years
- Aleutian Islands
- 9.2 Earthquake
- 4-6 hrs arrival time



Japan's Worse Case



The 330 ton Kyotokumaru was swept by the towering tsunami from the city's dock for about 750 meters into a residential district of Kesenuma.



A tsunami wave crashes over a seawall in the city of Miyako, Japan





Understand the Elements of an Tsunami Before it Happens

- Possible effects to MCB Kaneohe Bay:
 - Loss of Life
 - Loss of Living Quarters
 - Loss of Government assets
 - Loss of Utilities (Electricity and Water)
 - Loss of shipping capability to Hawaii
- Possible effects to Camp Smith and Manana Housing
 - Loss of communications & Utilities
 - Loss of Shipping capability to Hawaii
- Other areas
 - Same as the above



Know What to do During a Tsunami

- Tsunami:
 - Evacuation to safe haven
 - All beaches/ocean front areas.
 - Zones 1, 2B and 12.
 - Everyone else is in a safe location.

Tsunami Evacuation

Beach Cottages
Everything on this side of flightline

ZONE 12

ZONE 2B

Kalua-puni

McDonalds/PX

**Baseball Field
Playground Gym**

ZONE 1

**Pa-Honua
Backgate KAILUABAY
Motor T**

Hangars-Marina

Frontgate

Backgate

--- For most Tsunami Warnings, evacuate out of the red zone; in the unlikely case of an "Extreme Tsunami Warning", evacuate out of the red and yellow zones.

--- Remain at least 100 feet away from inland waterways and marinas connected to the ocean due to wave surges and possible flooding.

Inundation

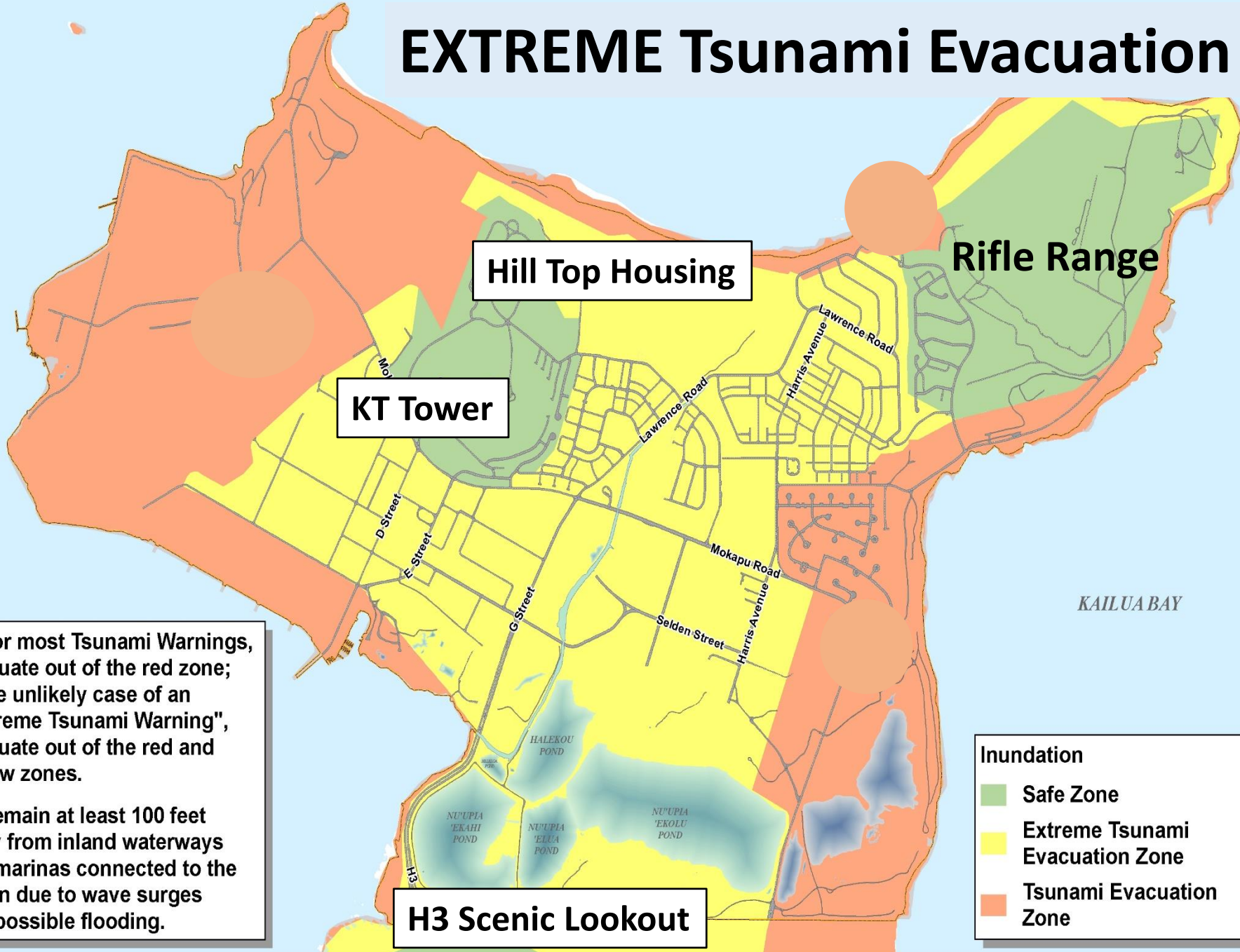
- Safe Zone
- Extreme Tsunami Evacuation Zone
- Tsunami Evacuation Zone



Know What to do During a Tsunami

- Extreme Tsunami:
 - Evacuation of entire Base
 - Ul'upau Rifle Range
 - Kansas Tower Hilltop area by O'Club
 - H3 to the scenic lookout.

EXTREME Tsunami Evacuation





Know What to do During a Tsunami

- Pu'uloa and Marine Corps Training Area Bellows
- All other communities
 - Move inland immediately
 - Go to:
 - <http://www.honolulu.gov/dem.html>
 - <http://ptwc.weather.gov/>



Know What You Should do During a Tsunami

- MCBH will shutdown the gates 1/2 hr prior to wave arrival, gates are in the inundation zones.
- Gates closed for up to 4+- hrs because of the continuation of waves.
- MCBH will make every effort to open up “facilities” if after hours so personnel can use for comfort.



How to Be Prepared

- **Preparedness**: a set of actions that are taken as precautionary measures in the face of potential disasters.
- Tonight's focus is on **individual preparedness**
 - Alerts
 - Stay Connected
 - Prepare a "GO KIT"



■ Alerts

- Pacific Tsunami Warning Center here in Hawaii sends out the alert
 - Watch – Pacific Warning Center is still investigating.
 - Warning – Confirmed Tsunami
- During a warning, the State will activate the Emergency Alert System (Sirens, Radio and TV and cell phones) .
 - The Siren aboard MCBH is activated by the State
- MCBH will augment the State's Alert System and activate the EOC
 - Speaker System (Meant for those that are outside)
 - Social Media
 - ATHOC (Text, phone calls, emails)
 - Patrols



■ Stay Alert

- If you **FEEL THE EARTH SHAKE**
- If the ocean water recedes
- If you hear a roaring sound off shore
- If Immediately **RUN** away from the beach and up to higher ground.
- If you hear the sirens
- Stay connected on Social Media
- Turn to your radio or television for information.



AtHoc



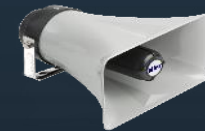
Social
Media



Telephone



Smartphone



Giant
Voice



PLMR



Take Actions Now to Ensure You Are Ready

- Prepare a “**Go Kit**” that will help you to survive for a few days
 - Food, water, diapers and formula for infant
 - Prescription medicine
 - Can opener/pocket knife
 - Important Documents
- Have a pet plan to include food
- Get connected on MCBH’s Social Media sites and sign-up for ATHOC.





What MCBH is doing to better prepare

- **Constant planning with Tenant Commands and Interagency Partners**
 - **State, City and County, FEMA, Military on Island**
- **Base has a 24/7 duty officer and Provost Marshal's Office to monitor and take action 24/7.**
- **Information in Lobby:**
 - **Tsunami evacuation Maps**
 - **Information on how to sign-up for; social media, ATHOC and how to get to our webpage**
 - **Information on what types of supplies you might need**
- **Jacqueline.freeland@usmc.mil, 257.8845**
- **<http://www.mcbhawaii.marines.mil>**



Closing Comments



A tsunami-tossed boat tossed by giant waves lies atop a building in the city of Otsuchi in northern Japan

Sorted: Recent

Filtered: 2.0+ mag

Nearby Places

Oahu, Hawaii has had: (M1.5 or greater)

0 earthquakes in the past 24 hours

4 earthquakes in the past 365 days

The largest earthquake in Oahu, Hawaii:

this year: 3.7 in Marine Corps Base Hawaii - MCBH, Hawaii, United States

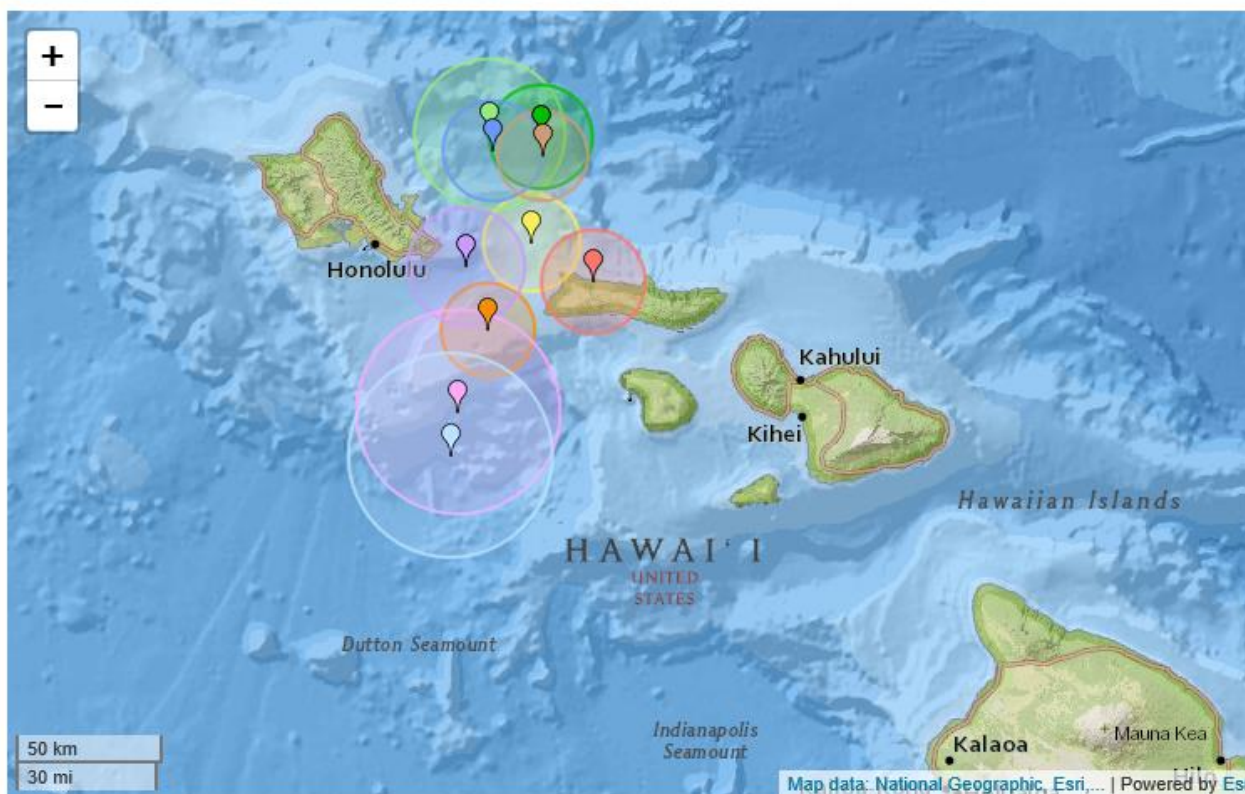
Earthquake Alerts via Twitter:

Follow @QuakesToday

Sorted: Recent

Filtered: 2.0+ mag

Nearby Places



- 4 months ago 2.4 magnitude, 2 km depth
Waimānalo Beach, Hawaii, United States
- 5 months ago 2.5 magnitude, 13 km depth
Waimānalo Beach, Hawaii, United States
- 5 months ago 3.7 magnitude, 10 km depth
Marine Corps Base Hawaii - MCBH, Hawaii, United States
- 5 months ago 2.8 magnitude, 8 km depth
Marine Corps Base Hawaii - MCBH, Hawaii, United States
- about a year ago 2.7 magnitude, 15 km depth
Marine Corps Base Hawaii - MCBH, Hawaii, United States
- 2 years ago 3.2 magnitude, 14 km depth
Waimānalo Beach, Hawaii, United States
- 4 years ago 4.2 magnitude, 6 km depth
Waimānalo Beach, Hawaii, United States
- 4 years ago 4.2 magnitude, 16 km depth
Lānaʻi City, Hawaii, United States
- 4 years ago 2.0 magnitude, 17 km depth
Marine Corps Base Hawaii - MCBH, Hawaii, United States
- 4 years ago 2.8 magnitude, 0 km depth
Kualapuʻu, Hawaii, United States



JAPAN

