# INFORMATION FOR US EAST COAST, PUERTO RICO, AND US VIRGIN ISLANDS EMERGENCY MANAGERS ON RECENT CUMBRE VIEJA VOLCANIC ACTIVITY

November 02, 2021

### What is the Cumbre Vieja volcano (CVV) and what is occurring there now?

- Cumbre Vieja (Spanish: *Old Summit*) is an active volcano on the Island of La Palma in the Canary Islands, Spain.
- Since Sept 19<sup>th</sup> 2021, the CVV has been erupting, causing lava flows, moderate seismic activity, and explosions. This eruption is expected to last for some weeks and is being closely monitored.

## What is the likelihood of Cumbre Vieja failure causing a tsunami on the US East Coast, Puerto Rico, and US Virgin Islands?

- Volcanism can be a source of tsunamis, particularly if flanks of the volcano collapse into the ocean.
- The potential for a full failure and total collapse of Cumbre Vieja volcano (CVV) and subsequent creation of a large, damaging tsunami along the US East Coast, Puerto Rico, and the US Virgin Islands is remote now and in the future.

### What if a tsunami were to occur? How would it impact the US East Coast, Puerto Rico, and US Virgin Islands?

- In the unlikely event a large failure of the CVV flank were to occur, a worst-case scenario could create a tsunami resulting in flooding impacts similar in scale to that of a storm surge from a landfalling hurricane.
- In addition to flooding, tsunamis are accompanied by more dangerous and dynamic currents than storm surge. These powerful currents pose a hazard to coastal infrastructure and may last for hours or days after tsunami alerts have ended.
- The <u>NOAA/NWS Tsunami Warning Centers</u> continue to monitor the Atlantic Basin for any event which can create a tsunami and are prepared to issue tsunami products if a tsunami is detected.

### What can Emergency Managers do to prepare for a tsunami?

- If a tsunami is detected, Emergency Managers would be notified by NOAA's Tsunami Warning Centers. They would likely have several hours of advanced notice.
- Although the probability of a Cumbre Vieja volcano-related tsunami impacting the US East Coast, Puerto Rico, and US Virgin Islands is extremely low, now is a good time to review the history and facts about <u>tsunamis</u> from other sources and their potential to affect the Atlantic basin.
- Consider emphasizing efforts to achieve and maintain <u>TsunamiReady</u> recognition for at-risk communities
- Determine if your jurisdiction is vulnerable to tsunamis and consider adding tsunamis to your operational and hazard mitigation plans, if you have not already done so.

#### Sources for additional information on tsunamis

- U.S. Tsunami Warning System
- TsunamiReady
- NOAA Coastal Hazards Mapper (US East Coast Tsunami Inundation)
- <u>Tsunami Safety</u>
- International Tsunami Information Center Caribbean Office
- National Tsunami Hazard Mitigation Program
- NOAA Tsunamis
- Draft Inundation Maps and Reports for Parts of the U. S. East Coast
- Tsunami Evacuation Maps for Puerto Rico
- Additional scientific information