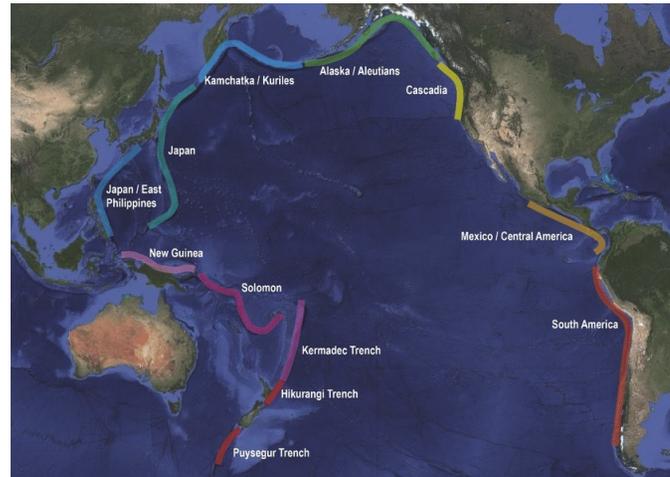


Tsunami FSM

Tsunami Hazard in the FSM

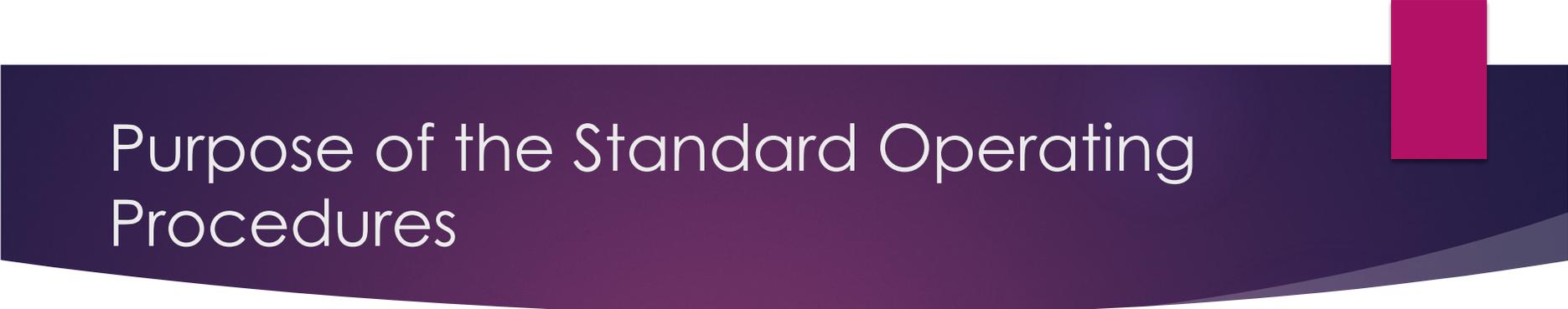
The FSM is made up of over 600 islands and atolls in the western Pacific and faces an abundance of natural hazards. Its location within the Pacific Ocean "Ring of Fire" makes it a likely target of tsunamis generated by tectonic activity. The dispersed nature of FSM's islands and the complex seabed topography mean that tsunami impacts can vary significantly between islands.



SOP Framework

- ▶ Group membership
- ▶ Mode of activation
- ▶ Operational checklist

| Phase 1 | Preparedness |
|---------|--------------------------------|
| Phase 2 | Warnings (Watch, alert, onset) |
| Phase 3 | Impact |
| Phase 4 | Response |
| Phase 5 | Recovery |



Purpose of the Standard Operating Procedures

- ▶ Establishes national and state institutional arrangements for responding to emergency events within the country
- ▶ Provides a uniform approach for disaster preparedness
- ▶ Increases coordination between government and non-government partners by clearly stating specific roles and responsibilities
- ▶ During any natural disaster, including tsunamis, the Disaster Coordination Offices and the Department of Public Safety serve as the Governor's contact points.

Scope of the SOP

- ▶ The SOP outlines operational procedures for state-level actors, including the Governor, Governor's Disaster Committee, State Disaster Coordinating Officer, and State Disaster Coordination Team
- ▶ While all three levels of government—National, State, and Municipal—play significant roles in natural disaster response, the State level is particularly crucial for initiating operational procedures and orchestrating overall response efforts.
- ▶ The DCO must be kept up to date with all developments and communications from state to national level.



Maintenance of the SOP

- ▶ Maintaining and updating the SOP is the primary responsibility of the DCO with the assistance of the State Disaster Coordination Team
- ▶ Contact list will be updated every six months
- ▶ Tabletop exercises and simulations should be conducted regularly to test for infractions and make improvements

Objectives

- ▶ Combine protocols
- ▶ Ensure issuance and dissemination of warnings to threatened communities are on time
- ▶ Ensure the community and response teams are prepared to respond effectively to a tsunami event
- ▶ Minimize impact on the life and property of state communities
- ▶ Ensure safe and prompt recovery after a tsunami

Alert Criteria

▶ Alert Level Criteria Based on Earthquake Magnitude

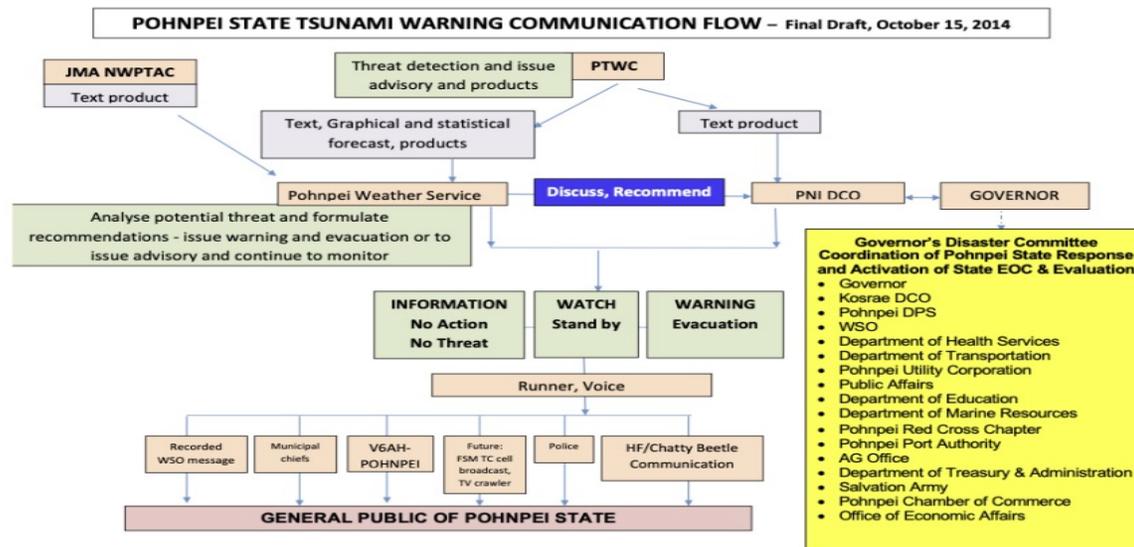
| PTWC Product Type | Earthquake Parameters | Potential Tsunami Type | Possible Hazardous Tsunami Waves | Threatened Coast | Time left to Initial Wave Arrival (ETA) | Alert Level | OBSERVER on Duty | DCO OFFICE | ACTION Required |
|--------------------------------------|--|------------------------|----------------------------------|--|---|-------------|--|-------------------------------------|---------------------------------------|
| Tsunami Information Statement | Magnitude of 6.5-7.0, or on land, or ≥ 100 km (60 miles) depth | None or Very Minor | No | None | Not applicable | INFORMATION | Send INFO ONLY | NO Public Statements | No action required |
| Tsunami Threat Message | Magnitude of 7.6-7.8, undersea or very near the sea, and < 100 km (60 miles) depth | Regional Tsunami | Yes | < 1000 km (600 miles) from earthquake | < 3 hours | WARNING | CONTACT DCO & DECEM Prepare Statement (Within 15min) | WARNING AND EVAC. STATEMENTS | Evacuate threatened coast |
| | | | No | ≥ 1000 km (600 miles) from earthquake | Not given | INFORMATION | Send INFO ONLY | NO Public Statements | Monitor subsequent messages |
| | Magnitude of 7.9 and greater, undersea or very near the sea, and < 100 km (60 miles) depth | Basin-wide Tsunami | Yes | Potential for a basin-wide tsunami | < 3 hours | WARNING | CONTACT DCO & DECEM Prepare Statement (Within 15min) | WARNING AND EVAC. STATEMENTS | Evacuate coast within 3 hours of ETA |
| | | | | | | No | 3 to 6 hours | WATCH | CONTACT DCO & DECEM Prepare Statement |
| | | | No | | > 6 hours | INFORMATION | Send INFO ONLY | INFO. ONLY Statements CAN be issued | Monitor subsequent messages |
| | | | | | | | | | |

Alert Criteria

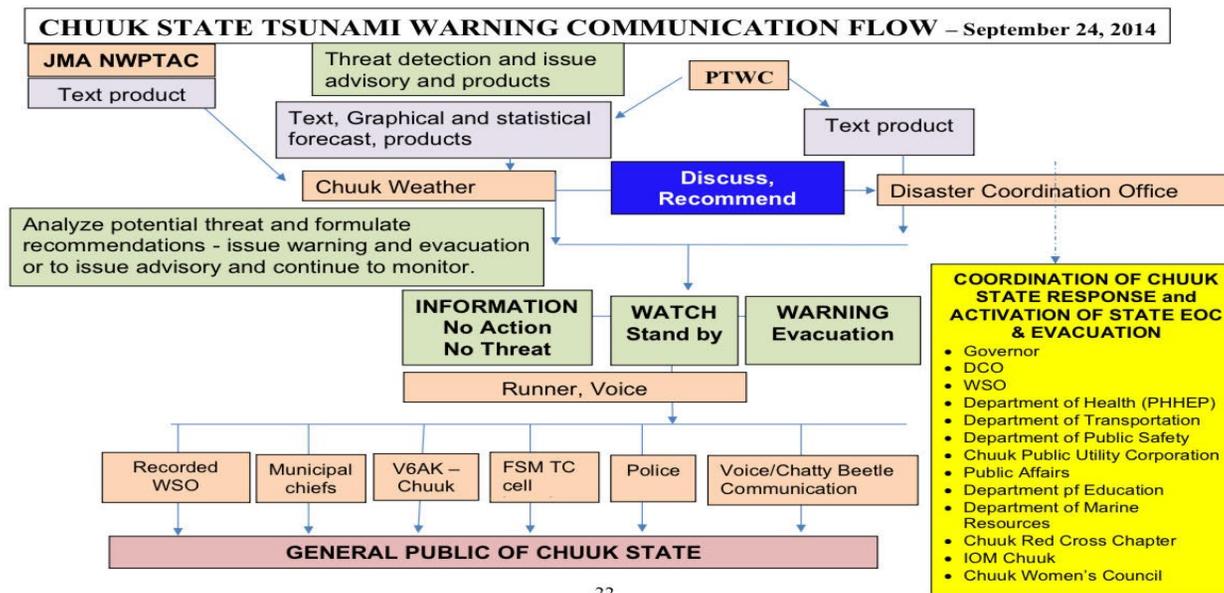
▶ Alert Level Criteria Based on Maximum Tsunami Wave Amplitude

| PTWC Product Type | Earthquake Parameters | Maximum Tsunami Wave Amplitude Indicated for Your Country or Area | Threatened Coast | Time left to Initial Wave Arrival | NTWC Alert Level for Threatened Coast | Emergency Response Action |
|-------------------------------|---|---|---|-----------------------------------|---------------------------------------|----------------------------------|
| Tsunami Threat Message | Magnitude of 7.1 or greater, undersea or very near the sea, and < 100 km (60 miles) depth | ≥ 1 m (3 feet) | Sections of coast with forecast amplitudes ≥ 1 m (3 feet) | < 3 hrs | WARNING | Evacuate threatened coast |
| | | | | 3 to 6 hrs | WATCH | Prepare to evacuate |
| | | | | > 6 hrs | INFORMATION | Monitor for subsequent forecasts |
| | | < 1 m (3 feet) | None | INFORMATION | Monitor for subsequent forecasts | |

Tsunami Warning Communications Flowchart (Pohnpei State)



Tsunami Warning Communications Flowchart (Chuuk State)



Kalahngan and Kinisou Chapur!

