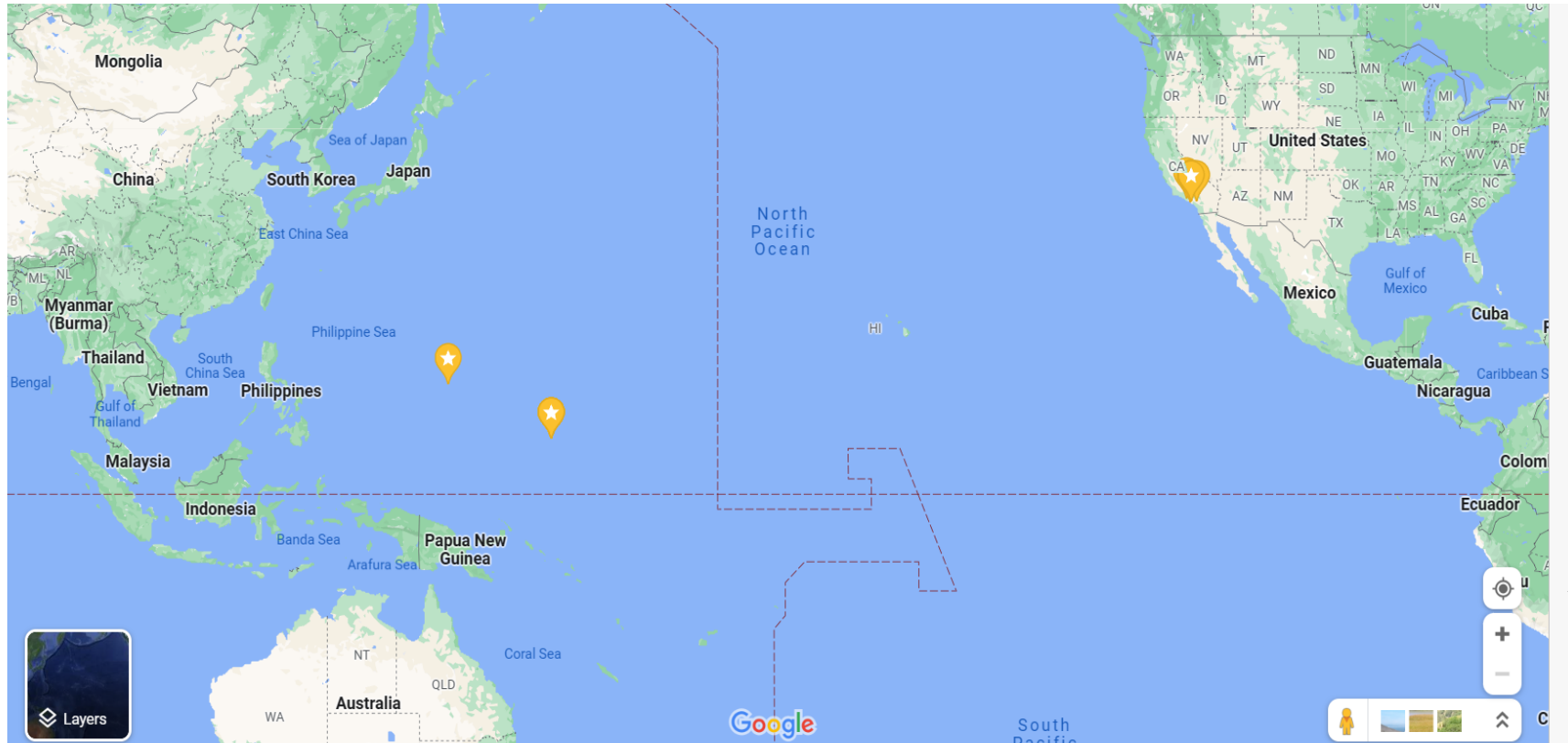




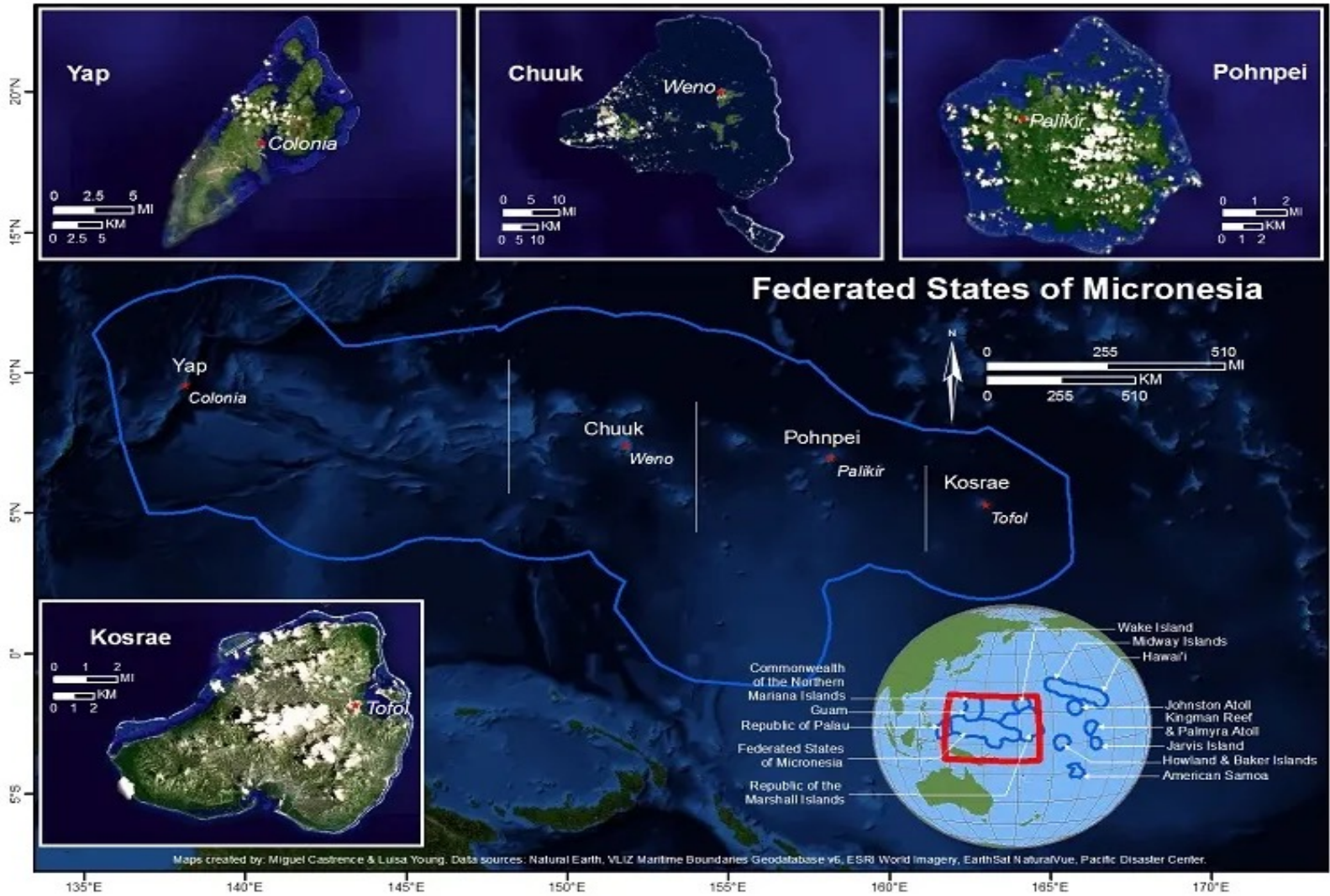
Federated States of Micronesia

TSUNAMI MITIGATION AND STANDARD OPERATING PROCEDURES.

Johnny Musrasrik / Rick Robon



The Federated States of Micronesia (FSM) is a grouping of 607 small islands in the Western Pacific about 1022 miles southeast of Guam and 2,500 miles southwest of Hawaii, lying just above the Equator. Generally speaking, the FSM comprises what is known as the Western and Eastern Caroline Islands.



KEY STATISTICS

Population
105,987

Population growth
+0.22%

GDP per capita (USD)
3,830

The Federated States of Micronesia (FSM) are an autonomously governed island nation (with autonomous governance by individual island communities) in the Western Pacific, and are a part of the US Compact of Free Association. The FSM consists of 4 States: **Yap, Chuuk, Pohnpei and Kosrae.**

Historic Earthquake Generated Tsunami That Ever Affected Micronesia Following NCEI Global Historical Tsunami Database, there were 34 different events that affected Micronesia and 31 of them were earthquake or earthquake and slide generated. The biggest measured runup – 30 cm from the 5/22/1960 Chile Tsunami Event.

Very low probability of earthquakes and or local Tsunamis

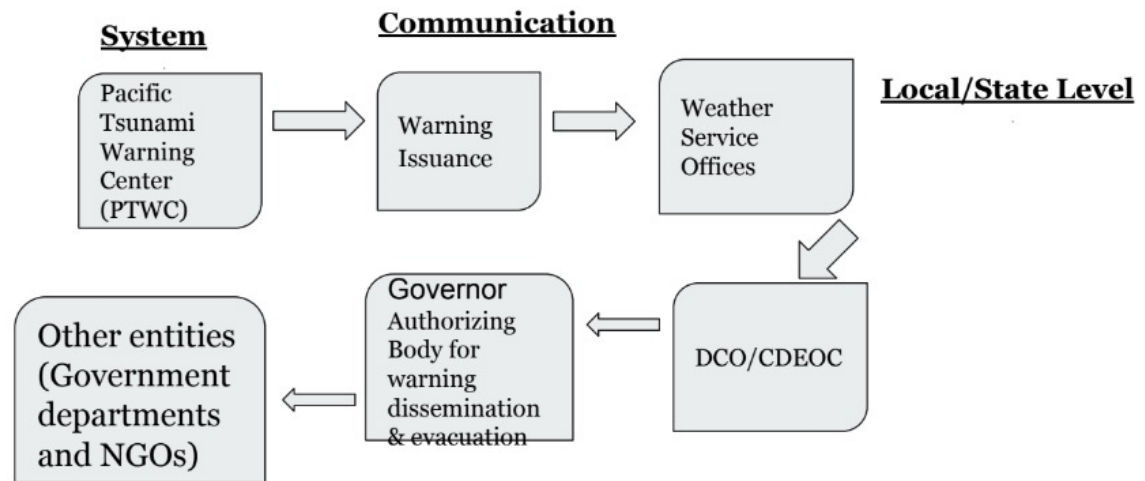


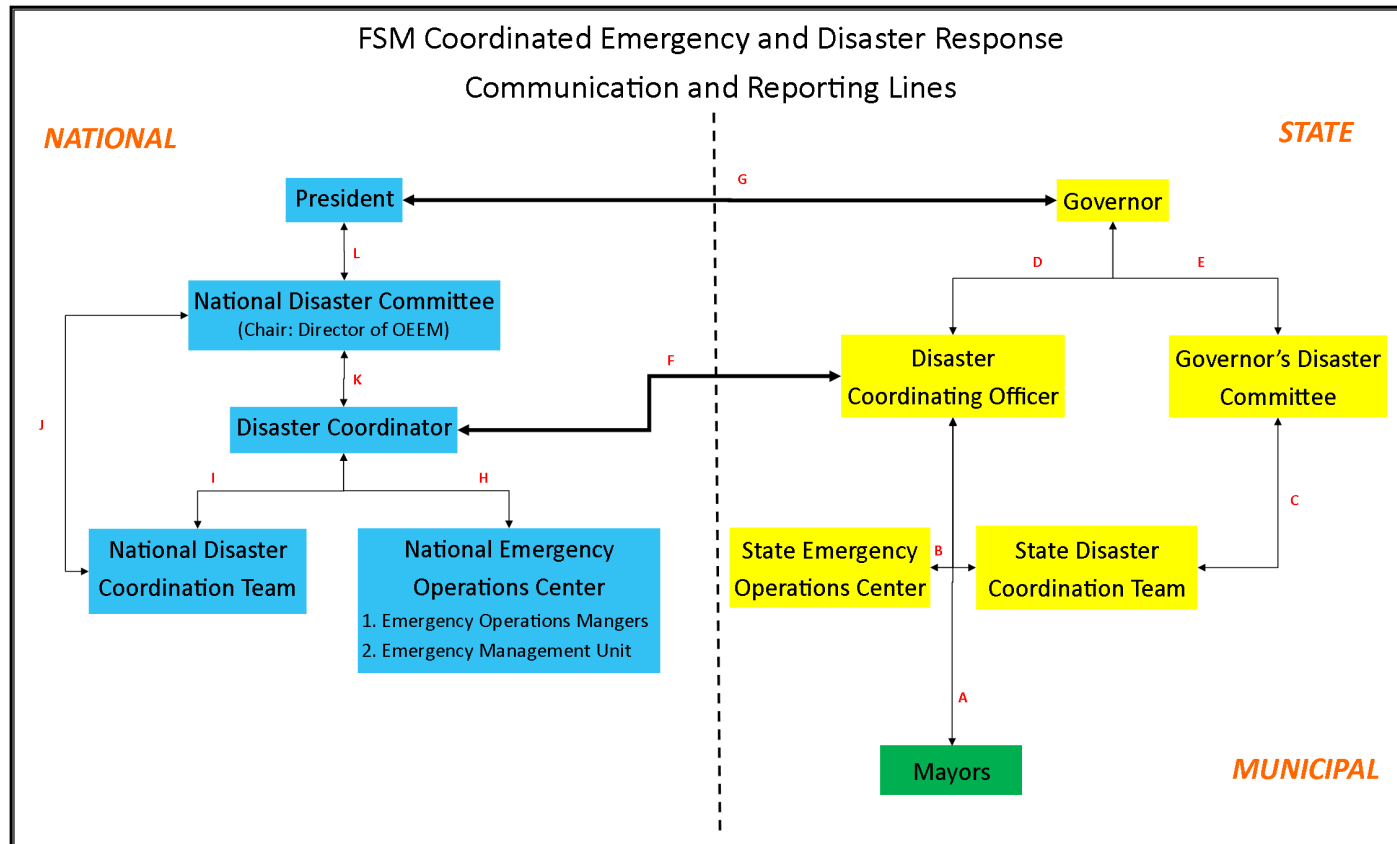
Pohnpei WSO is the designated authority to receive PTWC tsunami warning products because of its 24/7 operational capabilities.

Threat products are passed along the chain according to set criterias, timeline and guidelines.

- Informational
- Watch
- Warning
- 7.5 Threshold

Tsunami Information Flow Chart







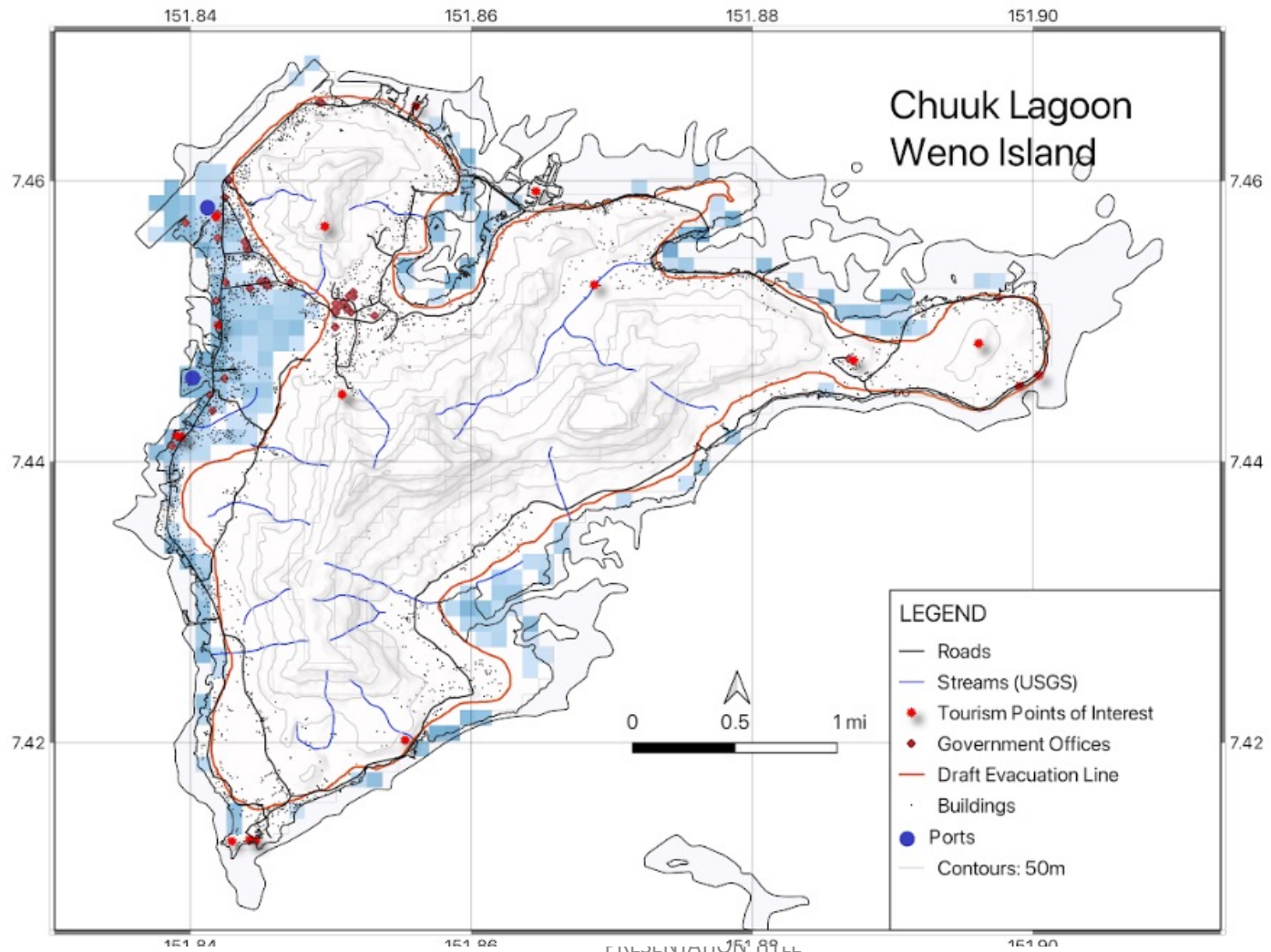
Tsunami Mitigation Efforts: Tsunami standard operating procedures & plans for Tsunami Ready

Chuuk Weather Service Office



Chuuk State

- Comprised of a collection of volcanic islands within the Chuuk lagoon
 - 11 major islands
 - A large coral atoll
 - 4 protective reef 14 mi around area of 820 sq mi
 - Land area of 35.93 sq mile
- 24 outer islands atolls (total of 290 islands)
- Most populous state of the Federated States of Micronesia
 - Population of 48,686
- Land area of 49 sq miles
- Most of the population live close to the coast
 - Including critical infrastructures

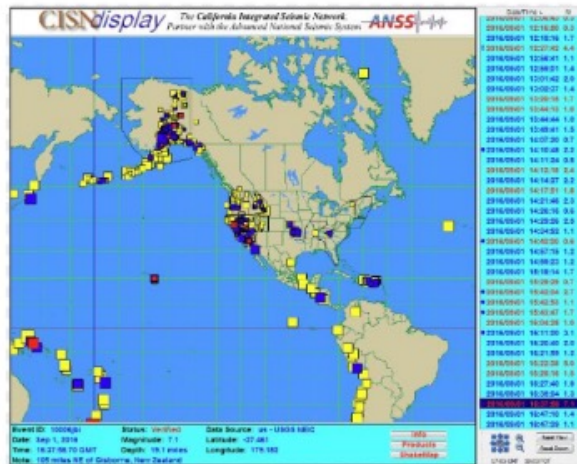




Early Warning Systems

- Pacific Tsunami Warning Center delivers tsunamis information statement to FSM
 - Through emails and phone calls.
 - Tsunami warnings
- California Integrated Seismic Network
 - Distributes notification of earthquakes electronically through a web.
 - Real time earthquakes monitoring network
 - Provides reliable and continuous reporting of all significant earthquakes.
- Guam Weather Forecast Office communicates to each states (Weather Service Offices)

-follow-up phone calls to all WSO stations



PTWC TSUNAMI INFORMATION STATEMENT

ptwc via _NWS PR Tsunami WSO Chuuk -prtsunami.wso.chuuk@noaa.gov
 to prtsunami.wso.chuuk
 TSUNAMI INFORMATION STATEMENT NUMBER 1
 NWS PACIFIC TSUNAMI WARNING CENTER HONOLULU HI
 1251 UTC WED JUL 26 2023

...PTWC TSUNAMI INFORMATION STATEMENT...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS STATEMENT IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC PACIFIC TSUNAMI WARNING AND MITIGATION SYSTEM AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

PRELIMINARY EARTHQUAKE PARAMETERS

Chuuk Tsunami Mitigation Efforts

Preparations or efforts indicators for tsunami ready

Tsunami ready timeline for actions to be done.

PREPAREDNESS (PREP)	30 Oct 2023		30 Oct 2023		30 Oct 2023	
	CHUUK STATE		POHNPEI STATE		YAP STATE	
Indicators & Actions	Target Completion Date	ACTION	Target Completion Date	ACTION	Target Completion Date	ACTION
PREP-1. Easily understood tsunami evacuation maps are approved.	30 Oct 2023		30 Oct 2023		15 Oct 2023	
Data layers: Infrastructures, roads, etc.	1 May 2023	From Atlas of Micronesia	1 May 2023	From Atlas of Micronesia	1 May 2023	From Atlas of Micronesia
Design and create Evacuation Map	31 Aug 2023	Develop map (draft to be provided)	31 Aug 2023	Develop map (draft to be provided)	15 Aug 2023	Develop map (draft provided)
Evacuation Map text (Backside)	31 Aug 2023	Examples provided	31 Aug 2023	Examples provided	15 Aug 2023	Examples provided
Community validation	15 Sep 2023	Engage communities: assembly areas, evacuation	15 Sep 2023	Engage communities: assembly areas, evacuation	1 Sep 2023	Engage communities: assembly areas, evacuation
Approval of Evacuation Map (official)	1 Oct 2023		1 Oct 2023		15 Sep 2023	
Printing of Tsunami Evacuation Map	1 Oct 2023	Submit GPO order	1 Oct 2023	Submit GPO order	1 Oct 2023	Submit GPO order
Distribution of Tsunami Evacuation Map	30 Oct 2023		30 Oct 2023		15 Oct 2023	
PREP-2. Tsunami information including signage is publicly displayed.	30 Oct 2023		30 Oct 2023		30 Oct 2023	
Decide Type and artwork for Tsunami Signage / Public Displays	1 May 2023	to Guam across the FSM States.	1 May 2023	to Guam across the FSM States.	1 May 2023	to Guam across the FSM States.
Signage / Public Displays Site Plan	31 Aug 2023	Template for type /location/ quantity shared on G Drive	31 Aug 2023	Template for type /location/ quantity shared on G Drive	1 Aug 2023	Template for type /location/ quantity shared on G Drive
Identification of Supplier and Quotes for Signage / Public Displays	15 Aug 2023	Identify vendor alternates to provide signage to all States	15 Aug 2023	Identify vendor alternates to provide signage to all States	15 Aug 2023	Identify vendor alternates to provide signage to all States
Procurement of Signage / Public Displays	30 Aug 2023		30 Aug 2023		30 Aug 2023	
Installation of Signage / Public Displays	TBD		TBD		TBD	

Signage



**FEEL A VERY STRONG OR
LONG EARTHQUAKE**

**SEE A VERY SUDDEN RISE OR
FALL OF THE SEA**

**HEAR A STRANGE OR LOUD
NOISE FROM THE SEA**

**RUN TO HIGH GROUND OR
INLAND IMMEDIATELY**



+CIFRC



USAID
FROM THE AMERICAN PEOPLE



PREPARATION TIME

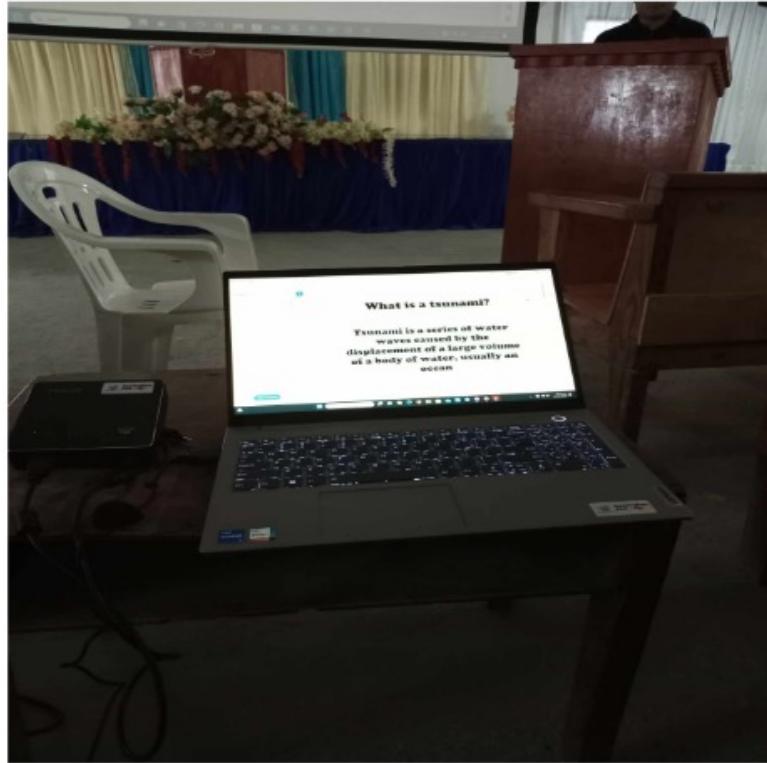
16



Community

OUTREACH









Kinisou Chapur! Mahalo! Thank you very much

