



TSUNAMI WARNING TRAINING PRESENTATION for TUVALU

MOTUFOUA SECONDARY SCHOOL

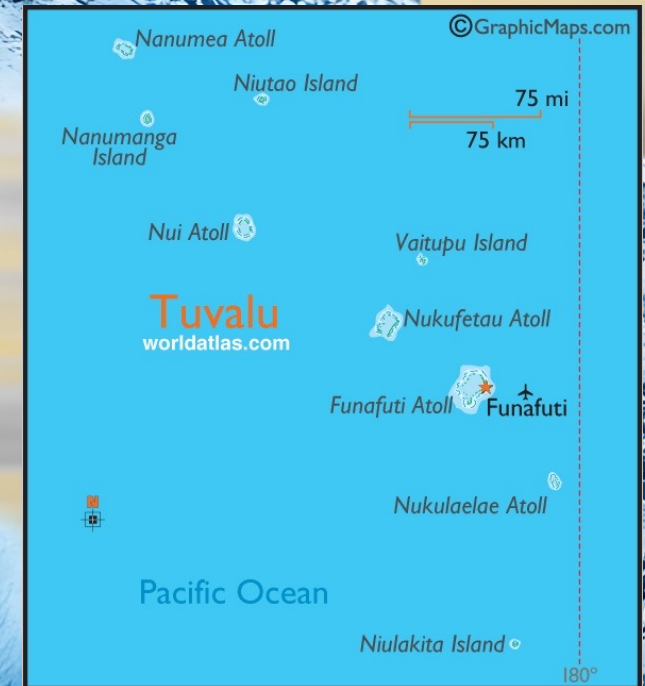


Ministry of Public Works,
Infrastructure,
Development and Water.



BACKGROUND

- In Tuvalu there is no high ground

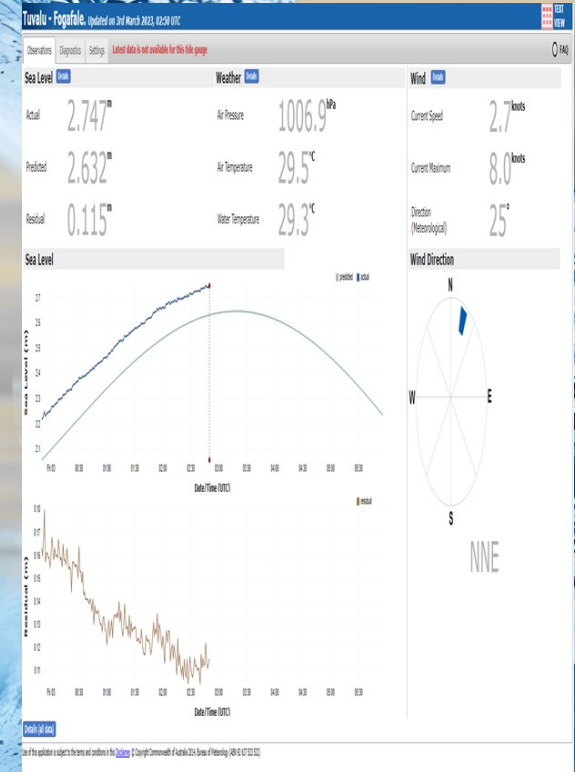
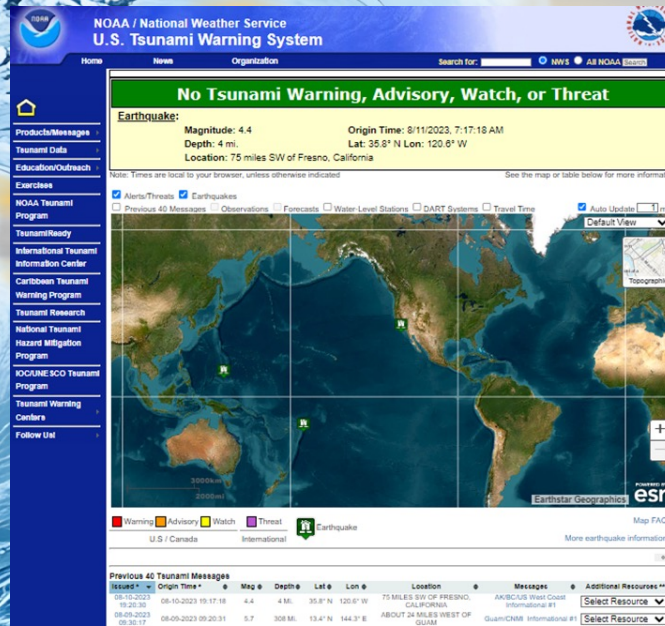
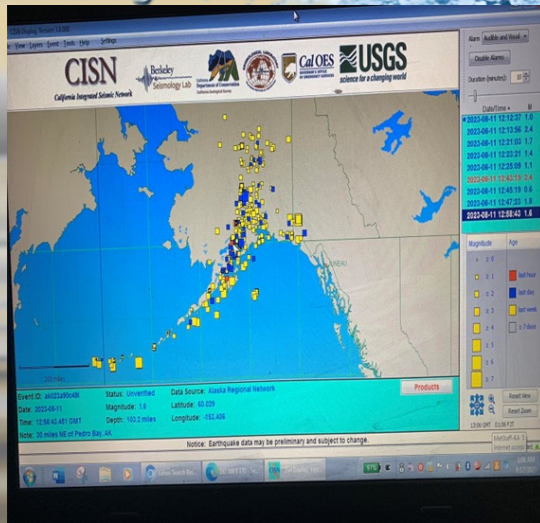


Population
TUVALU 9,853

- Tuvalu is a small island country located in the South Pacific Ocean, roughly halfway between Hawaii and Australia.
- It lies just south of the Equator, in Oceania. It consists of nine small islands, including both atolls and reef islands.
- The capital is Funafuti, which is also the most populous atoll. It's situated about 1,000 km (620 mi) north of Fiji, 2,500 km (1,550 mi) northeast of Australia. Tuvalu is one of the smallest and lowest-lying countries in the world, both in terms of land area and elevation.



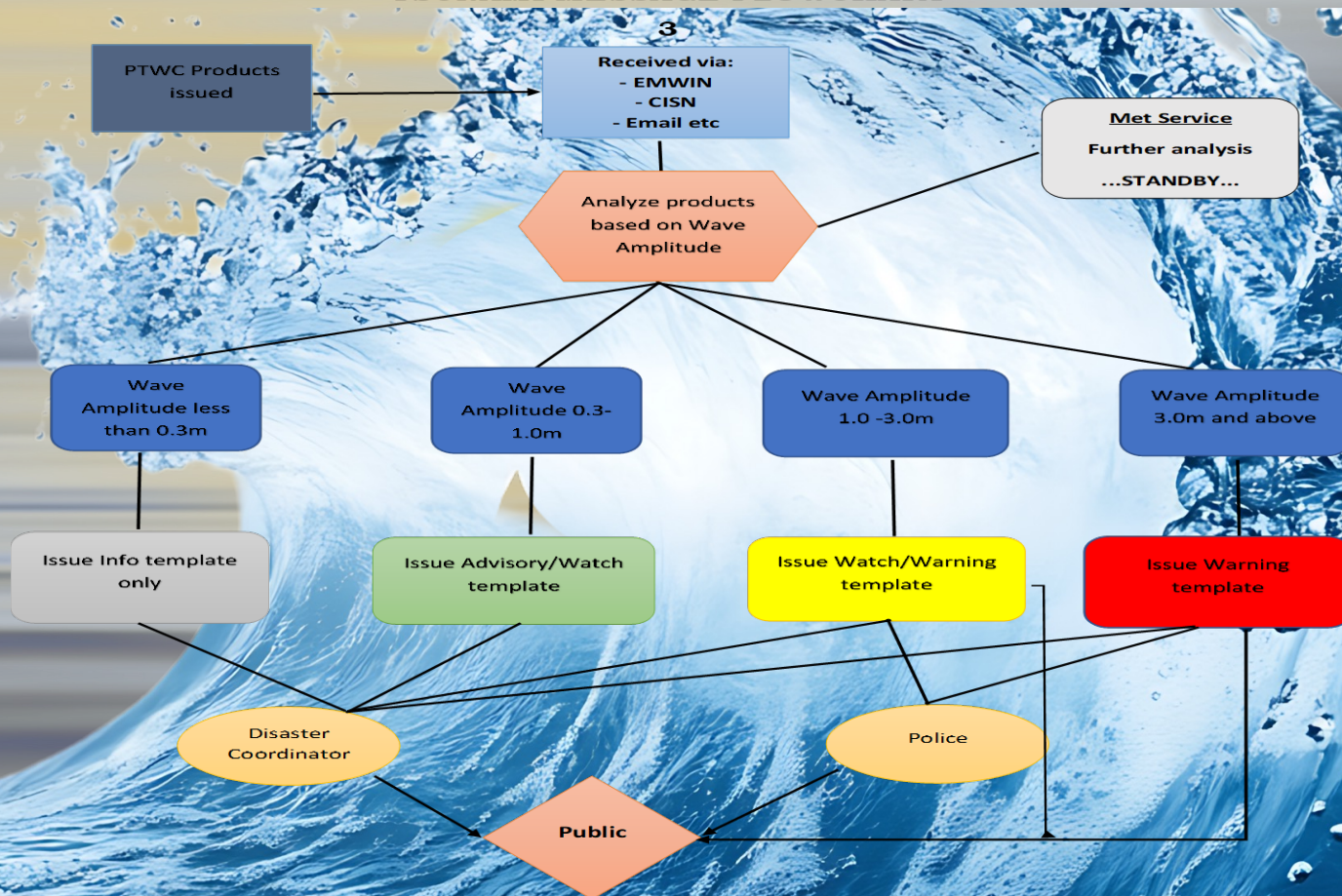
AVAILABLE TOOLS





STANDARD OPERATING PROCEDURES (SOPs)

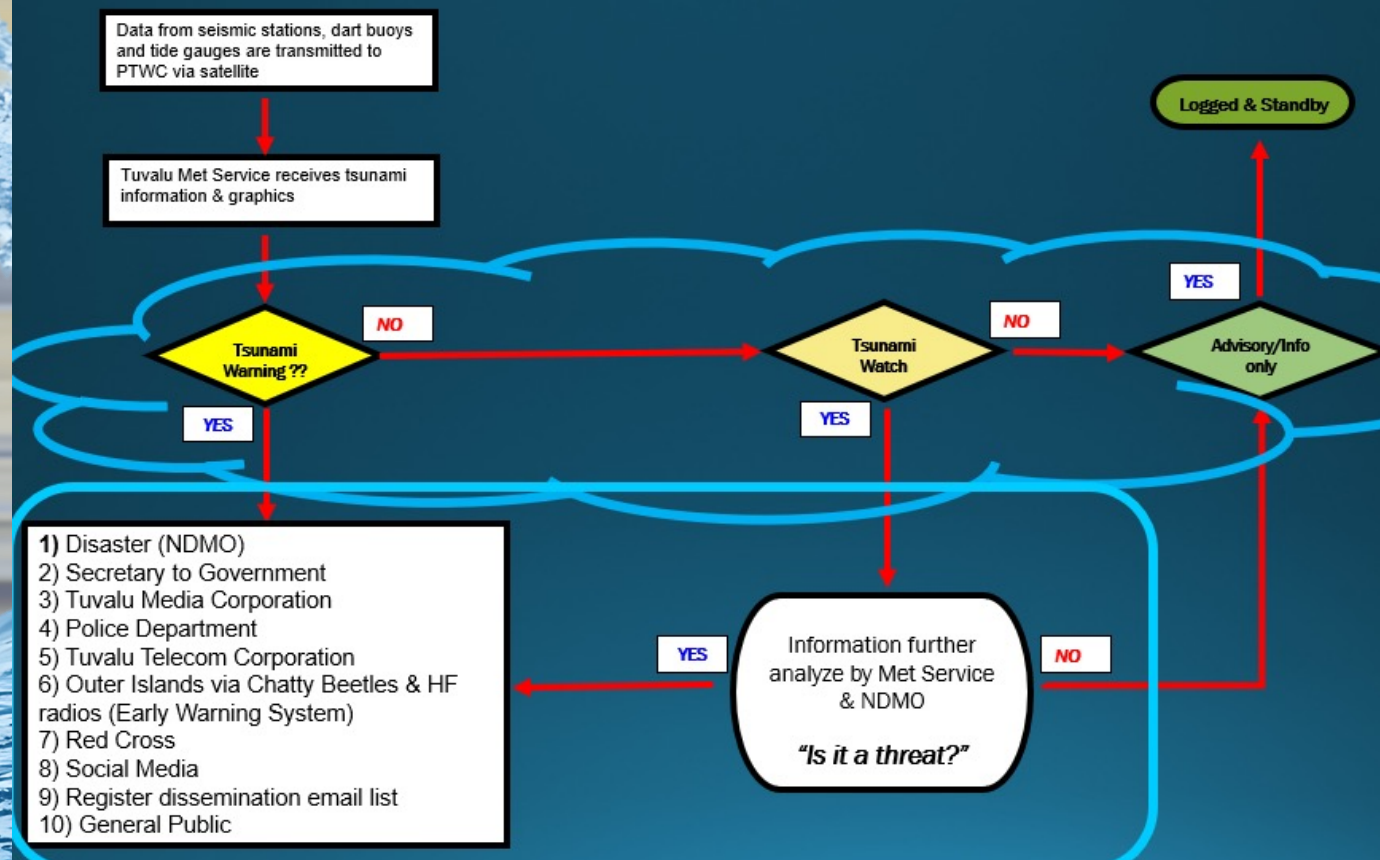
TUVALU METEOROLOGICAL SERVICE STANDARD OPERATING PROCEDURES TSUNAMI MESSAGE FLOWCHART





FLOW CHART - DISSEMINATION TSUNAMI WARNING

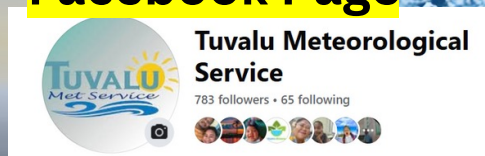
Flow chart – Tsunami Warning SOPs





Communication Methods

Facebook Page



- Tuvalu Radio stations
- Satellite phone
- Sirens
- Email
- Sms mobile subscribers



HF Radio



Chatty beetles





Tsunami Time-Driven SOP

TUVALU TIMELINE-DRIVEN SOPs

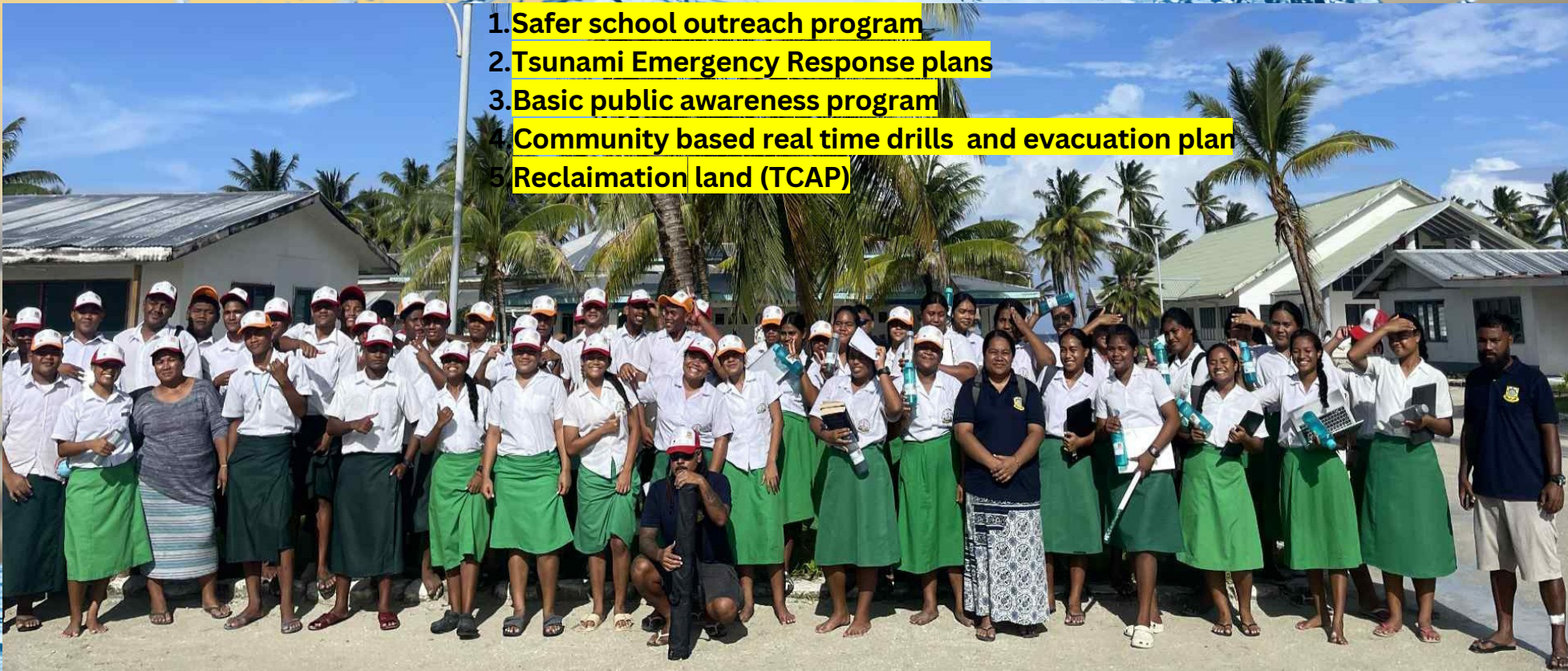
TSUNAMI ACTION TIME LINE	TIME min after EQ	OBSERVATION	ACTION PTWC	ACTION TMS	ACTION NDMO/SecGov	Media	Police	Telecom	Other
	0	Earthquake occur							
	1-5	Seismic Alarm triggers		Receives info EMWIN/CISN and emails					
	5-10	Tsunami threat might observe	PTWC Msg 1	Analysis EQ & text Msg 1					
	10-30	More EQ data collected & being analysed	PTWC Msg 2 Forecast	Analysis EQ & text Msg 2....	Make a decision.... Issue tsunami watch or warning				
	30-60	Tsunami threat confirmed	PTWC Msg 3 Sea Level (SL) observation	Confirm threat areas and update NDC & IDC Issue decision - activate sirens	-Receive decision Call up NDC all meet in NCC	Live broadcast warnings – NDMO & TMS	Set fire truck siren alarming the public	Send out txt msg to all subscribers	Red Cross relay warning via Sat phones to all RC reps....
	1-3+ hrs		PTWC Msg 4+ SL obs	Monitor and report tsunami updates to NDC	NDC decision making on threat zones and evacuation plan/sites	Live broadcast updates – NDMO & TMS	Assist on evacuation	Send out txt updates to all subscribers	PWD assist threat zones with evacuation
	3-8+ hrs		PTWC Msg 5+ Last Message	Analyze Msg receive till warning cancellation	Planning, reporting & updates casualty	Live broadcast updates – NDMO & TMS	Assist on evacuation	Send out updates to all subscribers	PWD assist threat zones with evacuation
	8+ hrs	Safe to Return		Cancel the warning	Give the All-Clear msg	Live broadcast warning cancellation & all clear from NDMO	Stand- down	Send out updates to all subscribers	Stand-down

NB: This timeline-driven is for tsunami graphics when received prediction of wave amplitude reach Tuvalu shores at 1 – 3 meters with time travel of arrival of first wave from source in less than 2 hours... decision to issue a Tsunami Watch or Warning



CURRENT TSUNAMI MITIGATION EFFORT

1. Safer school outreach program
2. Tsunami Emergency Response plans
3. Basic public awareness program
4. Community based real time drills and evacuation plan
5. Reclamation land (TCAP)





Tsunami readiness efforts

1. Safer school drills program
2. Creating and testing their current Schools Tsunami Sop's and evacuation plans
3. Evacuations Zone





Strengthening partnership with island disaster committee (IDC)



Risk Mapping for safer Tuvalu





MAHALO!!



PLEASE NO QUESTION