



Solomon Islands Tsunami Warning Arrangements



Linda R Tonowane
Forecasting Section
Meteorological Division

Ministry of Environment, Climate Change, Disaster Risk Management and Meteorology
P.O BOX 21, Honiara, Solomon Islands

Email: forecast@met.gov.sb

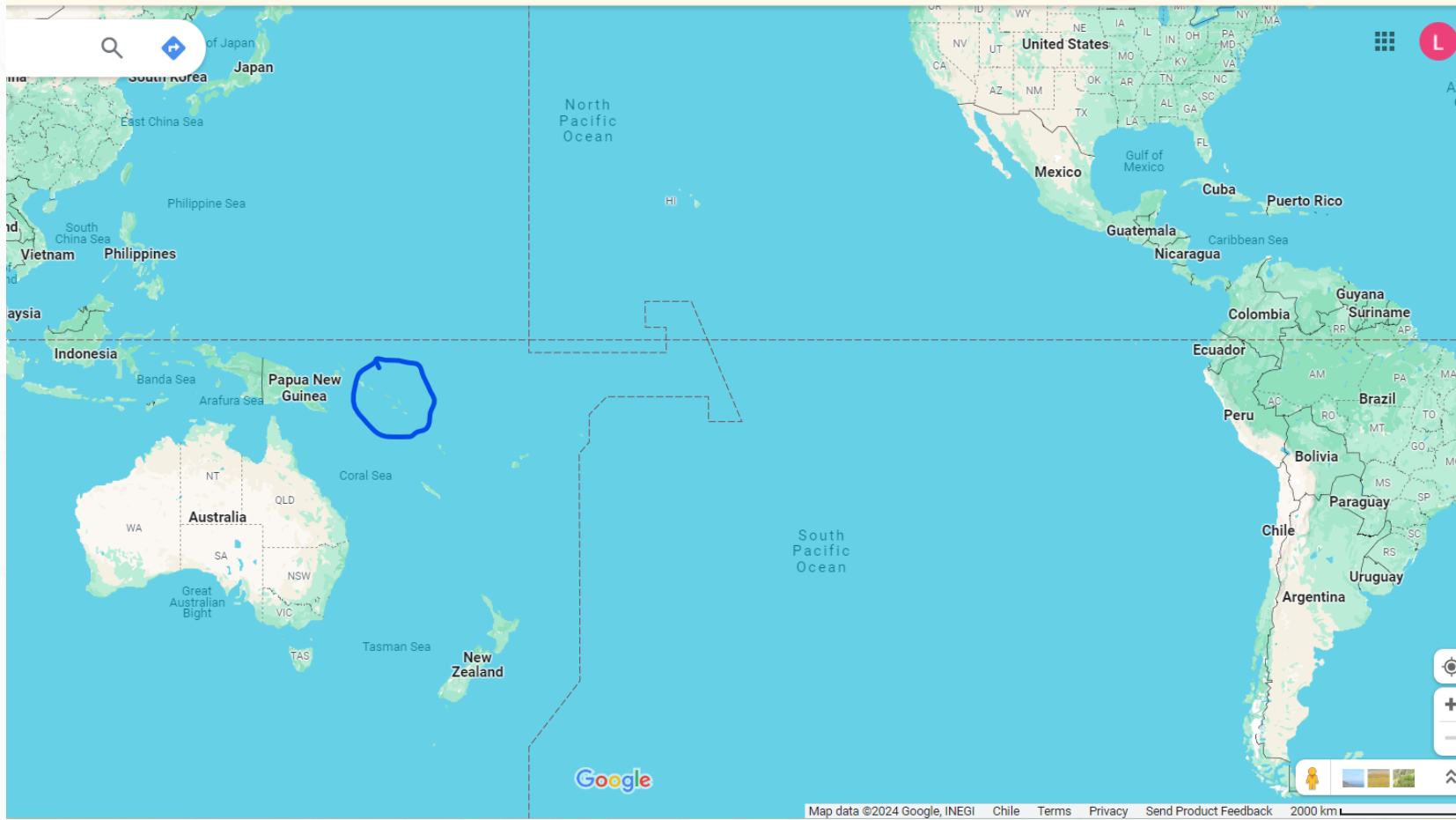
www.met.gov.sb



SOLOMON ISLANDS
GOVERNMENT



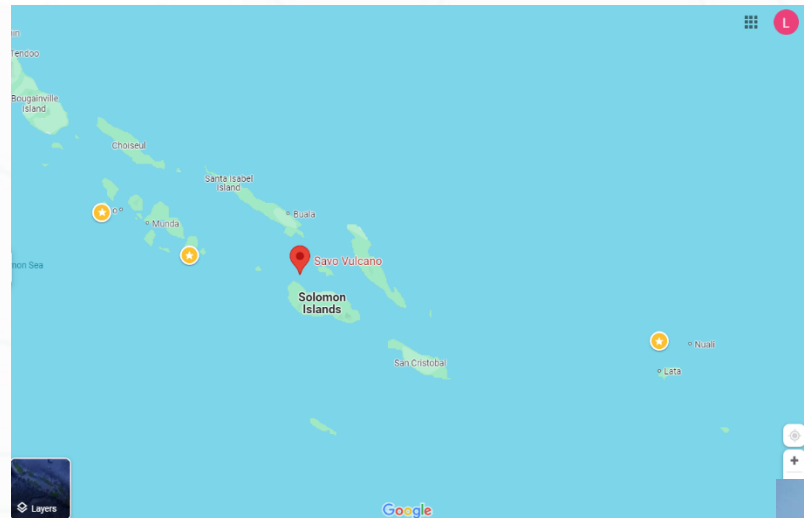
Solomon Islands on the Map



Source: Google maps



Solomon Islands in brief



- ❑ Population: Approx. 734000
- ❑ Total of 9 provinces
- ❑ Highest Mt; 2,335 m
- ❑ 3 Volcanoes + 1 submarine
Namely Tinakula, Savo, Simbo
and Kavachi



Tinakula Eruption





SOLOMON ISLANDS
GOVERNMENT



Brief Content

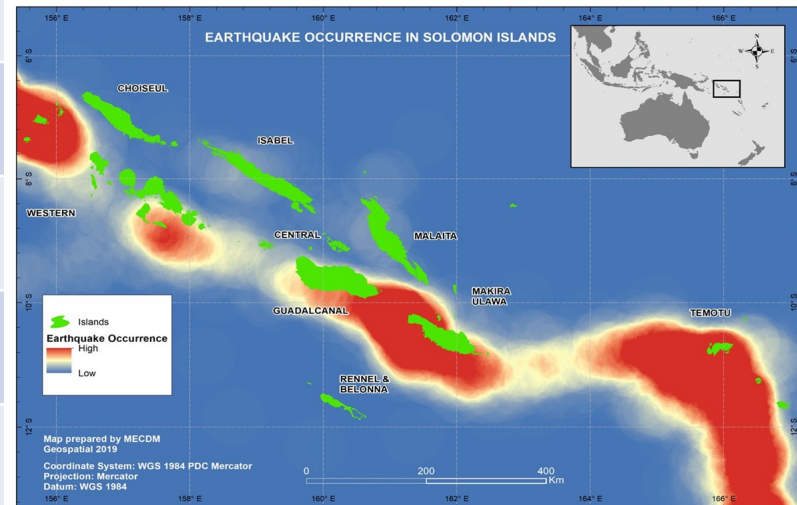
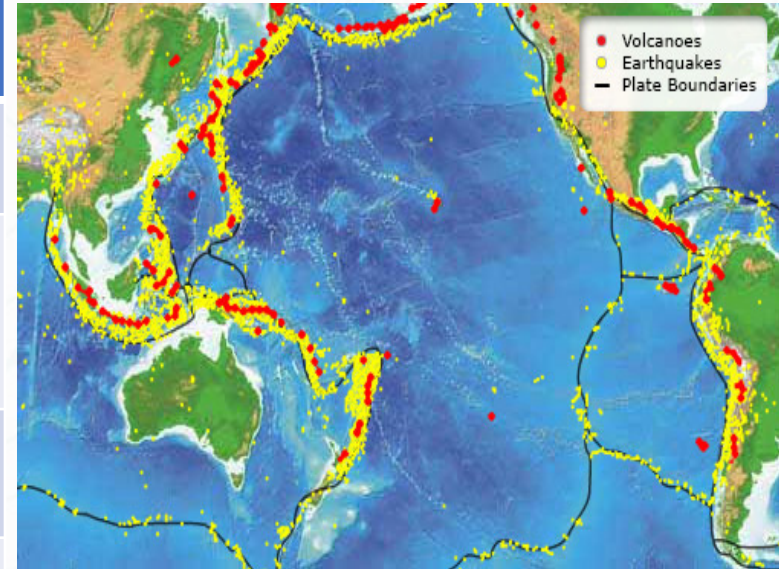
1. COMMON HAZARDS AND THEIR RISK LEVEL IN SI
2. TSUNAMI WARNING SUB-PLAN
3. OVERVIEW OF TSUNAMI WARNINGS
4. THREAT ASSESSMENT
5. EDUCATION AND AWARENESS
6. CHALLENGES



Common hazards and their risk levels for Solomon Islands

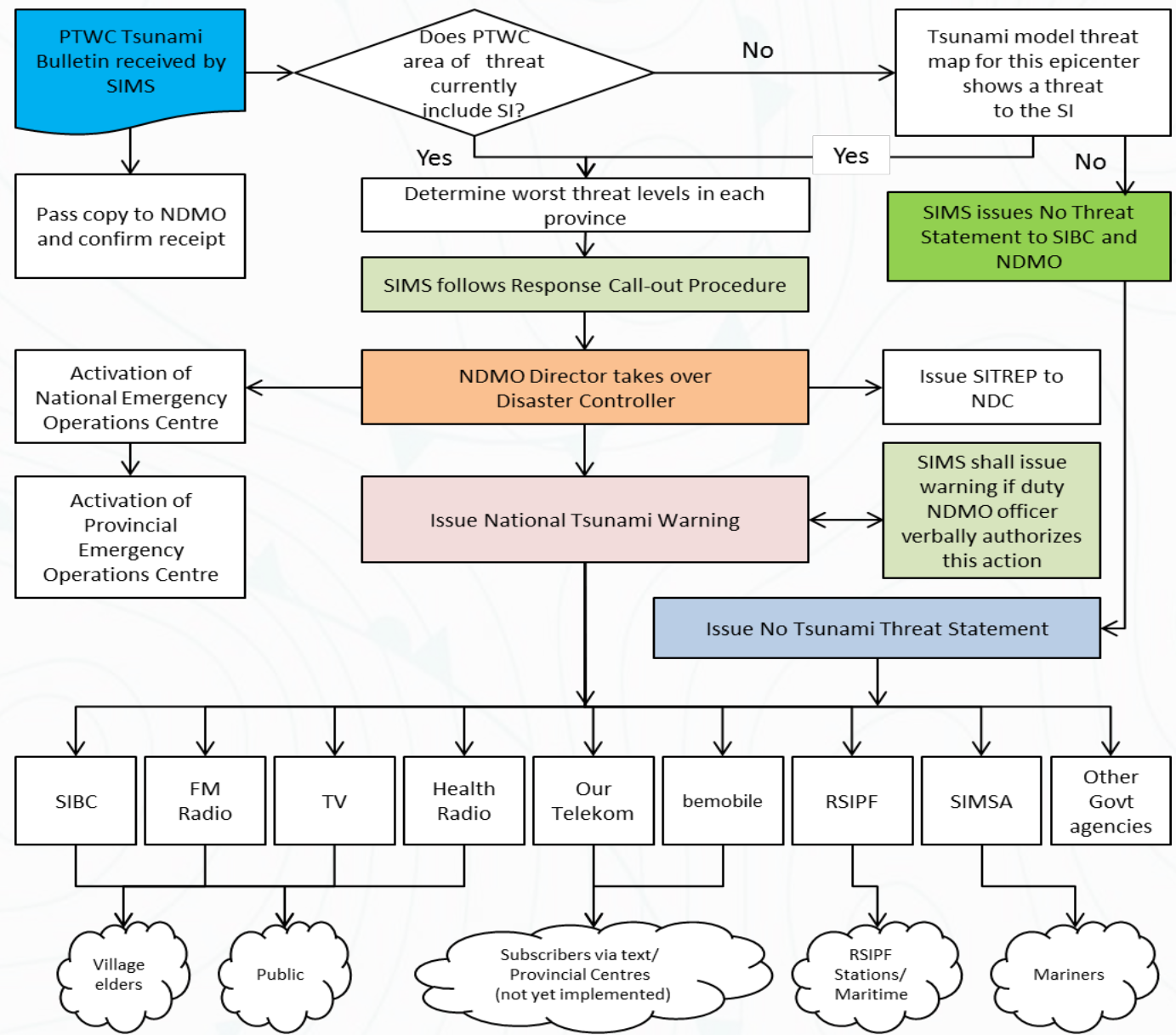
50

Hazards	Risk Level	Remarks
Cyclone	High	Season: Nov to April. At least 2/year
Rising sea level/Coastal surge	High	Affect low lying atoll islands 99% of Coastal Villages
River Flooding	High	
Tsunami	High	80 year history - SI experienced 19 events, highest mag 8.1
Earthquake	High	Situated on the Seismic belt
Landslides	High	Communities have been relocated
Drought	Low	1986/7 Experienced the worst drought
Volcanic Eruption	High	Savo, Simbo, Tinakula, Kavachi





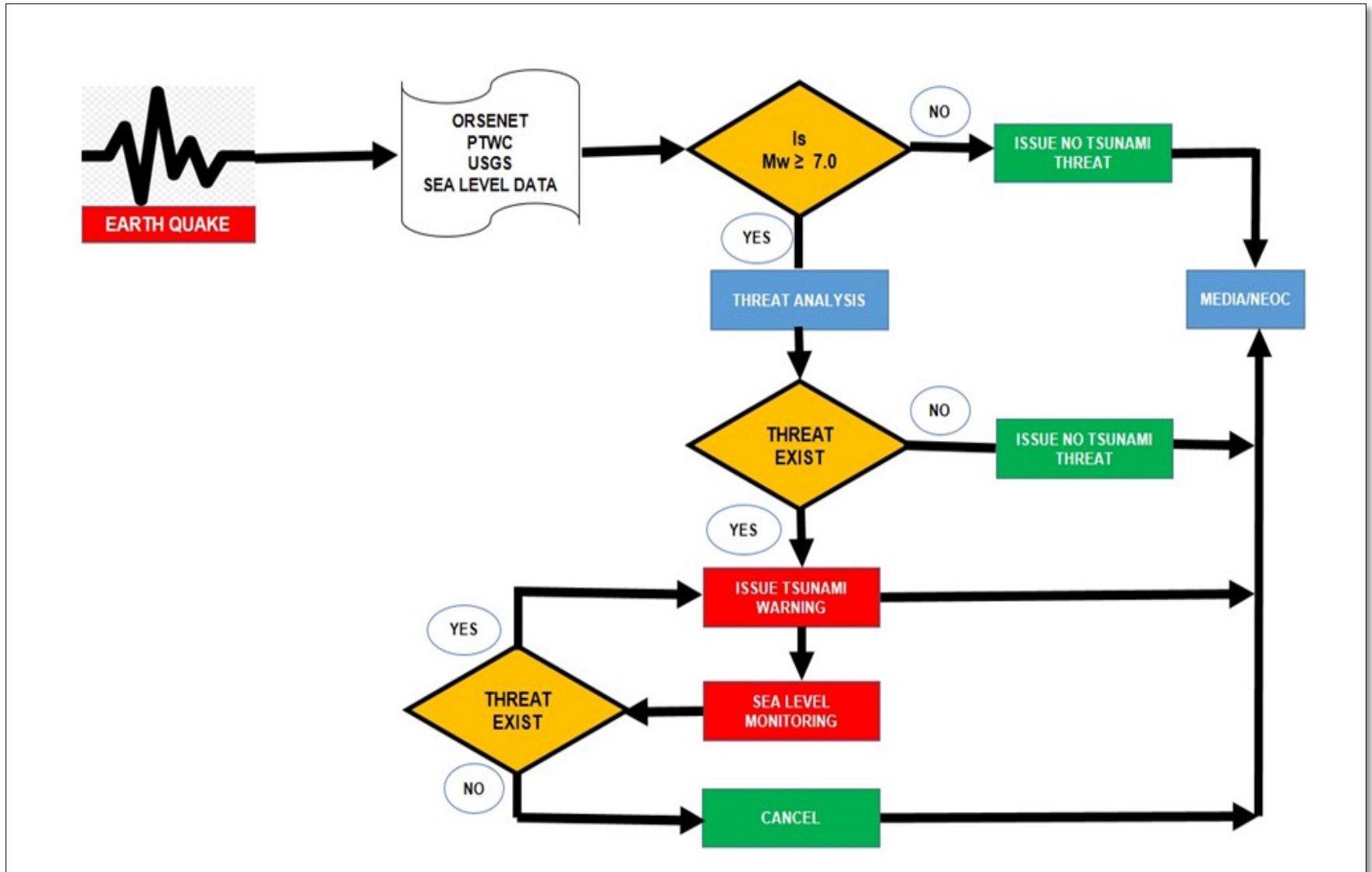
Tsunami Warning Sub-plan



SOLOMON ISLANDS GOVERNMENT

SOLOMON ISLANDS METEOROLOGICAL SERVICE

FLOW CHART FOR TSUNAMI WARNINGS:



Overview of Tsunami Warnings

Type of Message	Hazard Potential (Impacts)	Public Action Statement
No Threat statement Scenario 1	No threat or very distant event for which hazard has not been determined	No action
Tsunami Watch Scenario 2	Tsunami Possible Alert level may change once more information is known	Be prepared to act Stay tuned to local radio/TV
Tsunami Advisory Scenario 3	Marine threat - Strong currents and waves dangerous to those in or very near coastal waters	Stay out of the water and away from the shore
Tsunami Warning Scenario 4	Marine & Land threat - Dangerous coastal flooding and powerful currents	Move to high ground or inland immediately
Cancellation	Threat passed	
All Clear	Issued by NDMO	

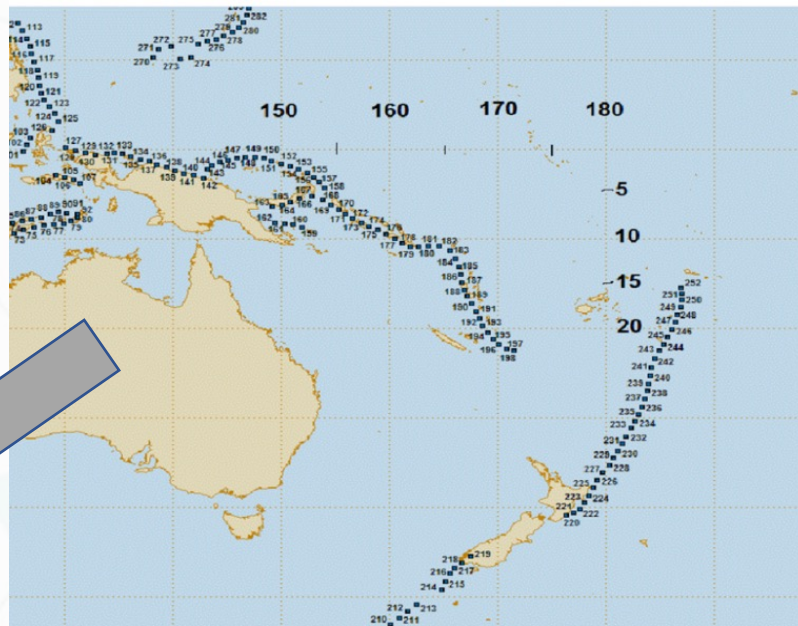
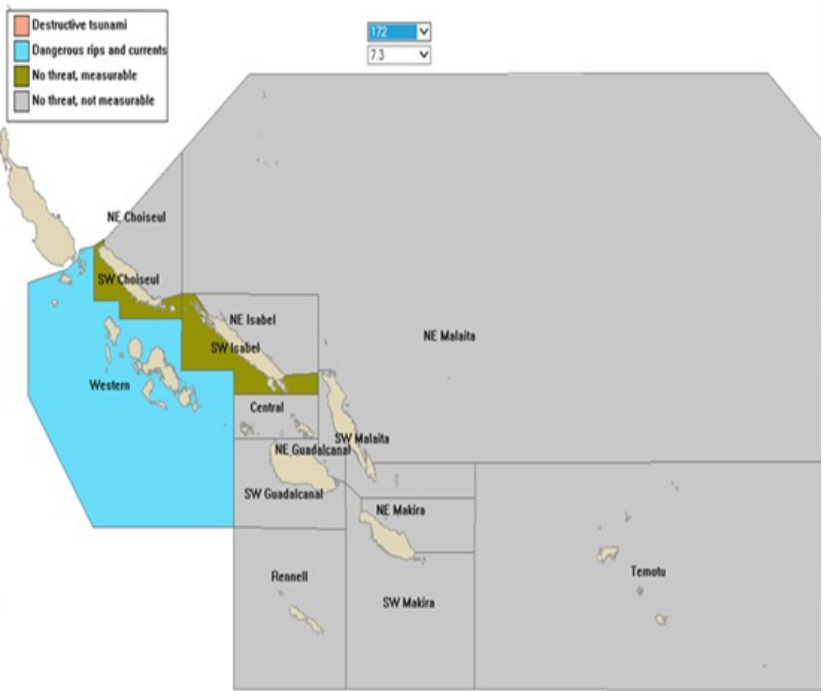
Threat Analysis - Example Scenario 3

Using Tsunami Assessment Tool (MOST & TsuCAT)

SOLOMON ISLANDS
GOVERNMENT



MOST T2 Scenario = 172 magnitude = 7.3



Geological Survey Division
Solomon Islands Government

Solomon Islands
Meteorological Services

National Disaster Management Office
National Disaster Council

TSUNAMI ADVISORY

MEDIA: PLEASE BROADCAST THIS INFORMATION IMMEDIATELY

TSUNAMI ADVISORY STATEMENT

Issued by the Solomon Islands Meteorological Service at _____

Orange Alert for coast of Western

A Tsunami Advisory is issued for Coast of Western Province and south of Choiseul...

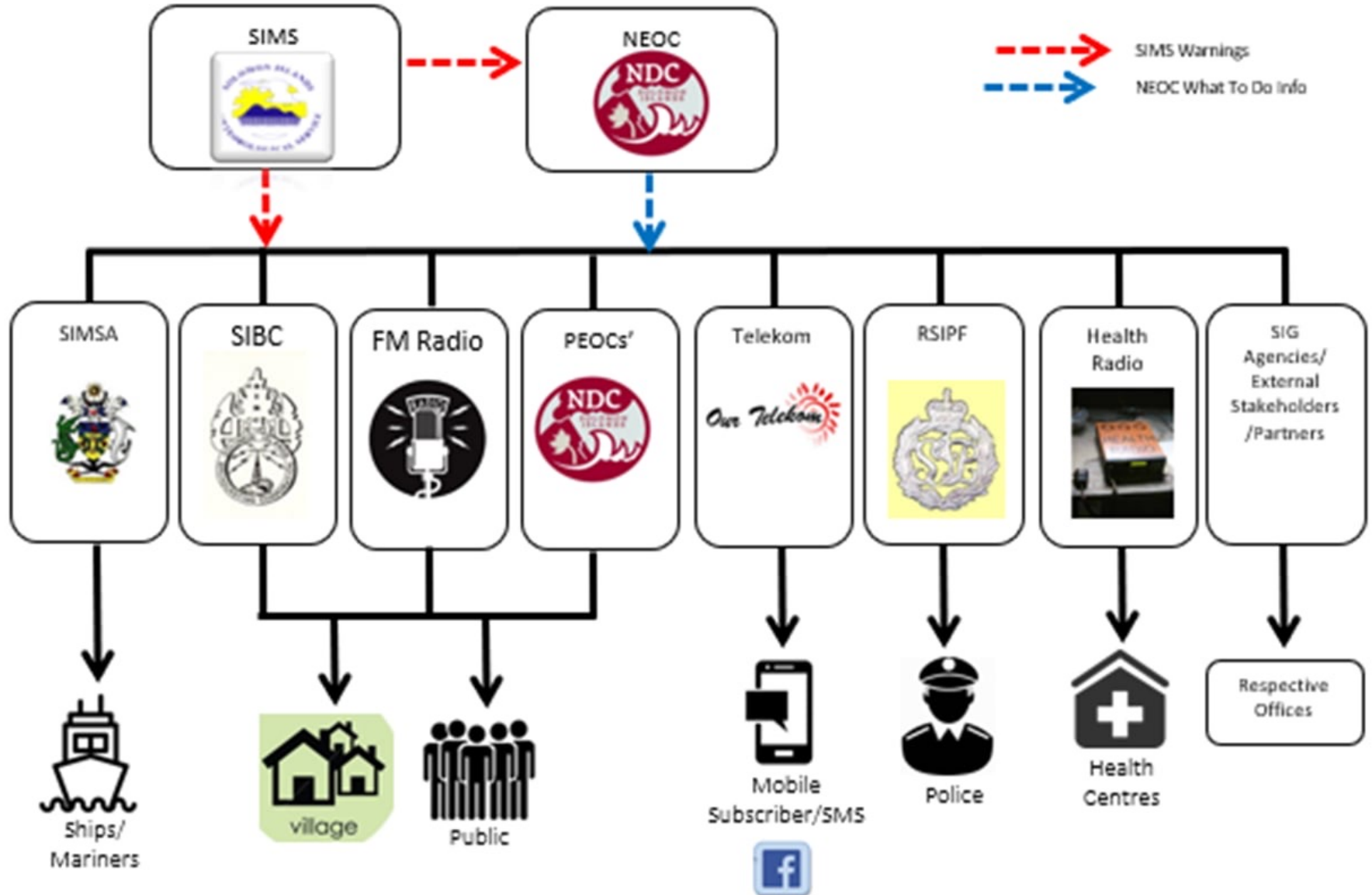
STAY OUT OF THE WATER AND AWAY FROM THE SHORE.

Dangerous sea currents and waves will be experienced along the coast of Western Province and south of Choiseul.

An undersea earthquake of magnitude _____ occurred at _____ near _____ (Latitude _____ Longitude _____) This is approximately 87 km west of Honiara.



DISSEMINATIONS





Education and Awareness



SOLOMON ISLANDS
GOVERNMENT

- Pre-school, primary, Secondary school and tertiary students awareness programs
- Help schools established their disaster plans and conducting drills and exercise
- Conducting awareness and disaster plans(preparedness and response) in rural communities with other NGOs(Save the children, World Vision, Red Cross etc)



Students grouped in their own class as they arrived at the safe area to allow head count to be conducted out easily by the class teachers



Students arrived at the safe area and briefed by the head teacher.



With Save the Children team to Isabel province, March 2024

Education and Awareness



Image above: World met Day 2024



Students participating during World tsunami awareness day 2023



awareness at the National University with the nursing students




During our school visitation programs in one of the boarding schools

Education and Awareness

- Natural Warnings- Response to local tsunami

WHAT TO DO?

SENSING A TSUNAMI



TSUNAMI

Tsunamis can be detected using our human senses. Recognize a tsunami's natural warning signs.

FEEL

- Big local earthquakes may cause tsunamis.
- **FEEL** the ground shaking severely, or for a long time?

SEE


- Tsunami may be preceded by a rapid fall in sea level as the ocean recedes, exposing reefs, rocks, and fishes on the sea bottom.
- Tsunami often come ashore as a wall of water, and quickly flood inland.
- **SEE** an unusual disappearance of water, or oncoming wall of water?

HEAR


- Abnormal ocean activity, a wall of water, and approaching tsunami create a loud "roaring" sound similar to that of a train or jet aircraft.
- **HEAR** the roar?

RUN


- Don't wait for official evacuation orders.
- Immediately leave low-lying coastal areas.
- Move inland to higher ground.
- **RUN** if you see a tsunami coming!




United Nations
Educational, Scientific and
Cultural Organization




International
Tsunami Information
Center



National Oceanic
and Atmospheric
Administration



Service Philippines /
Lungsod ng Manila /
Manila, Luzon



International Tsunami
Center

International Tsunami Information Center
A UNESCO/IOC - NOAA Partnership
E-mail: iti@tsunami.noaa.gov
Web: <http://www.tsunamiaware.org>

© ITC 2013



SOLOMON ISLANDS
GOVERNMENT

Tsunami Ready Program



- Assessment stage
- Workshop conducted last month

Challenges /Limitations

- Delay of seismic data especially locally felt earthquake – (15- 20 minutes varies with magnitude) .
- Limited observation network- seismic and sea level stations.
- Limited communication coverage and No SMS –
Need to established focal contacts.



SOLOMON ISLANDS
GOVERNMENT



Thank you

Muchas Gracias

