

MAKING THE PACIFIC READY FOR TSUNAMI THREAT 20th – 21st April 2015

WARNING, THE LAST MILE

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THE SOLOMON ISLANDS

SOLOMON ISLANDS MAP





THE SOLOMON ISLANDS

GEOGRAPHY

South West Pacific

(Longitude 175 degrees East and 178 degrees West and latitude 15 degrees and 22 degrees South). **Approx. 1,900 Km (1,200 Miles) NE of Australia**

- **992 Islands**
Including the main large Islands of:
 1. Guadalcanal
 2. Makira/Ulawa
 3. Malaita
 4. Santa Isabel
 5. New Georgia
 6. Choisuel
- **Total land mass**
725,197 sq. kilometers (280,000 sq. miles)
- **1.32 million Sq km of Ocean – Small islands, big ocean**

2007 Earthquake

South
Pacific
Ocean

1974
1959
1974

Choiseul

Santa Isabel

2005

Yandina

Malaita

1991

HONIARA

Guadalcanal

1991

1950

1939

1977

Aola

1998

1931

San
Cristobal

1960
(Chile)

Santa
Cruz
Islands

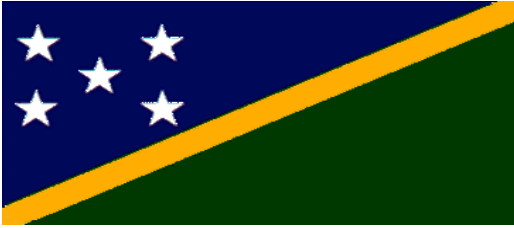
1966

1966

1966

1926

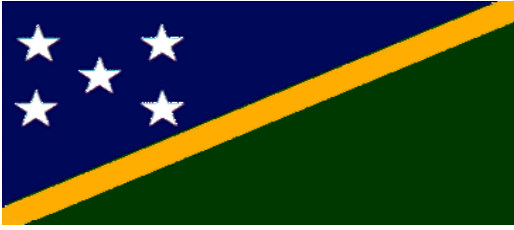




SUMMARY OF MAJOR TSUNAMI & THEIR IMPACTS

- 1931 – MAKIRA ISLAND GROUP
 - 20 villages destroyed between Cape Survilla and Cape Sydney
 - 50 people killed, 38 of these were found in the tree tops
 - One girl's body was found on an ivory palm more than 6 meters above the ground
- 1939 – WEST GUADALCANAL
 - A number of people drowned – est. 20 people died
 - A broken wave washed into a channel on the Russell Islands, swept the hospital away and left the ground covered in dead fish
 - Severe damage to properties.
- 2007 – CHOISEUL & WESTERN PROVINCE
 - 52 people lost their lives
 - Rehabilitation cost - \$SBD800 million – 80% 2007 Govt Budget.
- 2013 – Santa Cruz Tsunami – 9 people lost their lives

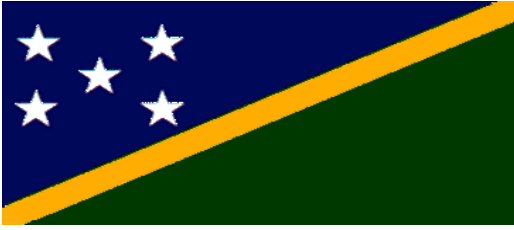




Solomon Islands Tsunami History

- 20 events in total, from 1926 to 2013 (about 1 every 4.3 years)
- At least 3 events had waves of 6 m
- At least 2 events had waves of 3 to 5 m
- Almost all the tsunamis were caused by earthquakes in, or close to, the Solomon Is.
- Only 2 far field tsunami – 1960, 2011
- At least 4 caused loss of life, and at least 5 caused significant damage to structures

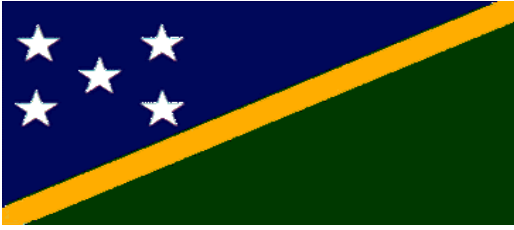




Some Facts

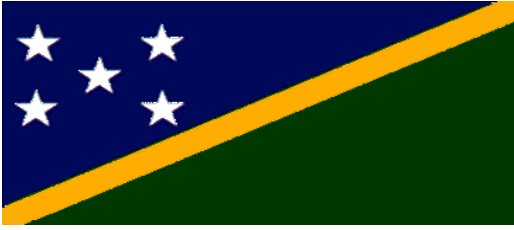
- SI location within the seismic belt thus prone to regular earthquakes.
- 99% of communities are coastal thus has very high population concentration along the coasts.
- Historical data showed in the last 86 years, SI experienced 21 tsunami events of various magnitudes – 4 event were catastrophic.
- Warning arrangements still to be developed
- Tyranny of distances
- Communication challenges





SO WITH THESE
CHALLENGES WHAT HAVE
WE GOT?



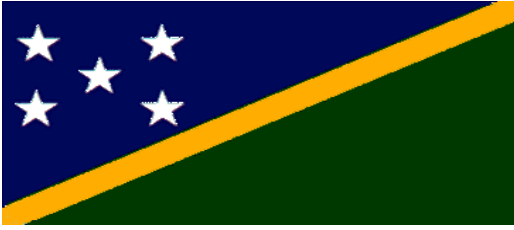


EARLY WARNING ARRANGEMENTS

- Where do we get our warnings from?
 - PTWC
 - JMA
 - Bureau of Meteorology – Australia
 - EMWIN

24/7 capability – RSIP & SI Met Services

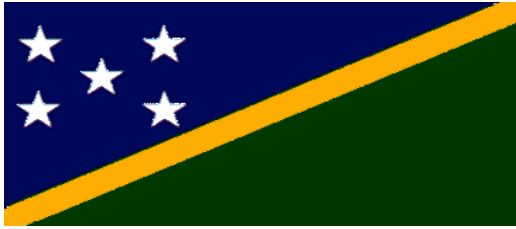




Who receives the early warning messages?

- SI Meteorological Services
- NDMO
- Seismology Dept
- Police
- Media
- Telecommunication Company

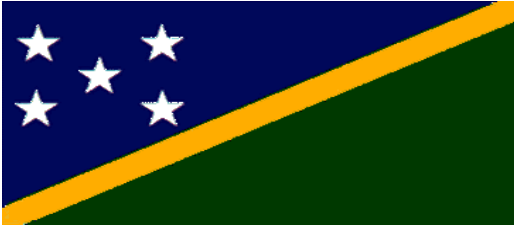




Dissemination of warnings to the public

- SIBC – The National Broadcaster – nationwide coverage – AM/SW
- HF radio network – Police, Health, Private networks etc
- Telephone/Fax/Internet – to urban centers only – about 10% of the population has access to phone/fax etc
- SMS – at this stage very limited however with telecommunication development, huge potential

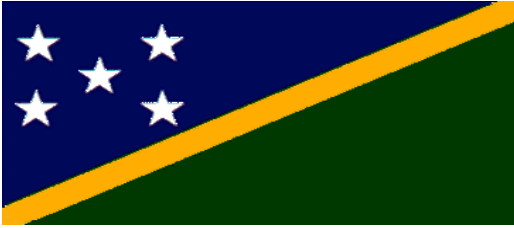




Going Forward

- DRM plan and SI MET Service Act to be reviewed .
- Tsunami contingency plan being developed regularly tested – “Island Wave” annual exercises.
- Improved radio broadcast network coverage of the National Broadcaster through support of the Japanese Govt.
- Aggressive awareness programmes – schools, general public, through radio, newspaper adverts, calendars and posters.
- Community and Impact Based Preparedness Programmes
- Current development in the telecommunication sector will enhance our early warning capabilities – Use of SMS.
- Stand alone communication system – HF radio network linking National/Provincial and communities – To be rolled out shortly with the support of World Bank.





Thank you

