



*Training/Workshop on  
Tsunami Evacuation Maps, Plans, and Procedures and  
the UNESCO-IOC Tsunami Ready Recognition Programme for the Indian Ocean Member States  
Hyderabad - India, 15-23 April 2025*

# **Tsunami Evacuation Maps, Plans, and Procedures**

## ***TEMPP 09: Principles in Finalizing Tsunami Evacuation Maps***

**Mehdi Masoodi**

UNESCO-IOC UNESCO Consultant  
University of Hozmogan - Iran



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# Evacuation Maps

- are **key elements** to prepare for tsunamis
- provide all **information the public must know** to properly evacuate
- reflect the evacuation zone and strategy as well as the procedures which have been defined
- need to be **validated for their practical applicability and easy understandability by the local communities.** This includes field visits to verify evacuation routes and procedures
- to be made **available via appropriate print and/or digital media**
- are of vital importance and hence should be **officially approved**



# Tsunami Evacuation Map

- Printed maps,
- Digital maps,
- Interactive and web-based maps

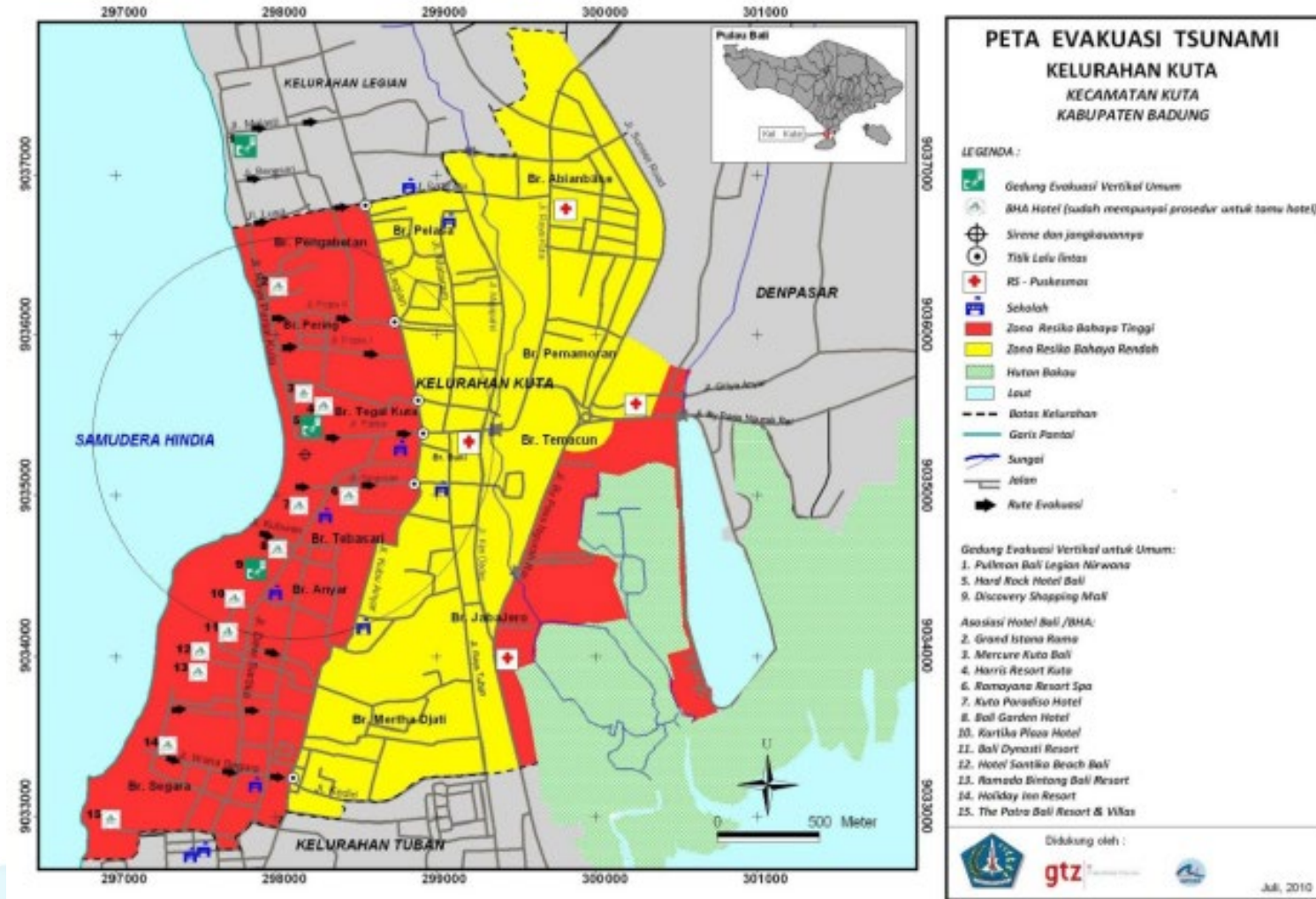
**Present routes, save areas, evacuation place, critical facilities, assembly areas.**

**Provide information to public for their action in emergency situation**

**Facilitate emergency management planning and emergency response**

# Tsunami Evacuation Map

Example: Evacuation Map for Kuta Village – Bali (Scale 1:5,000)

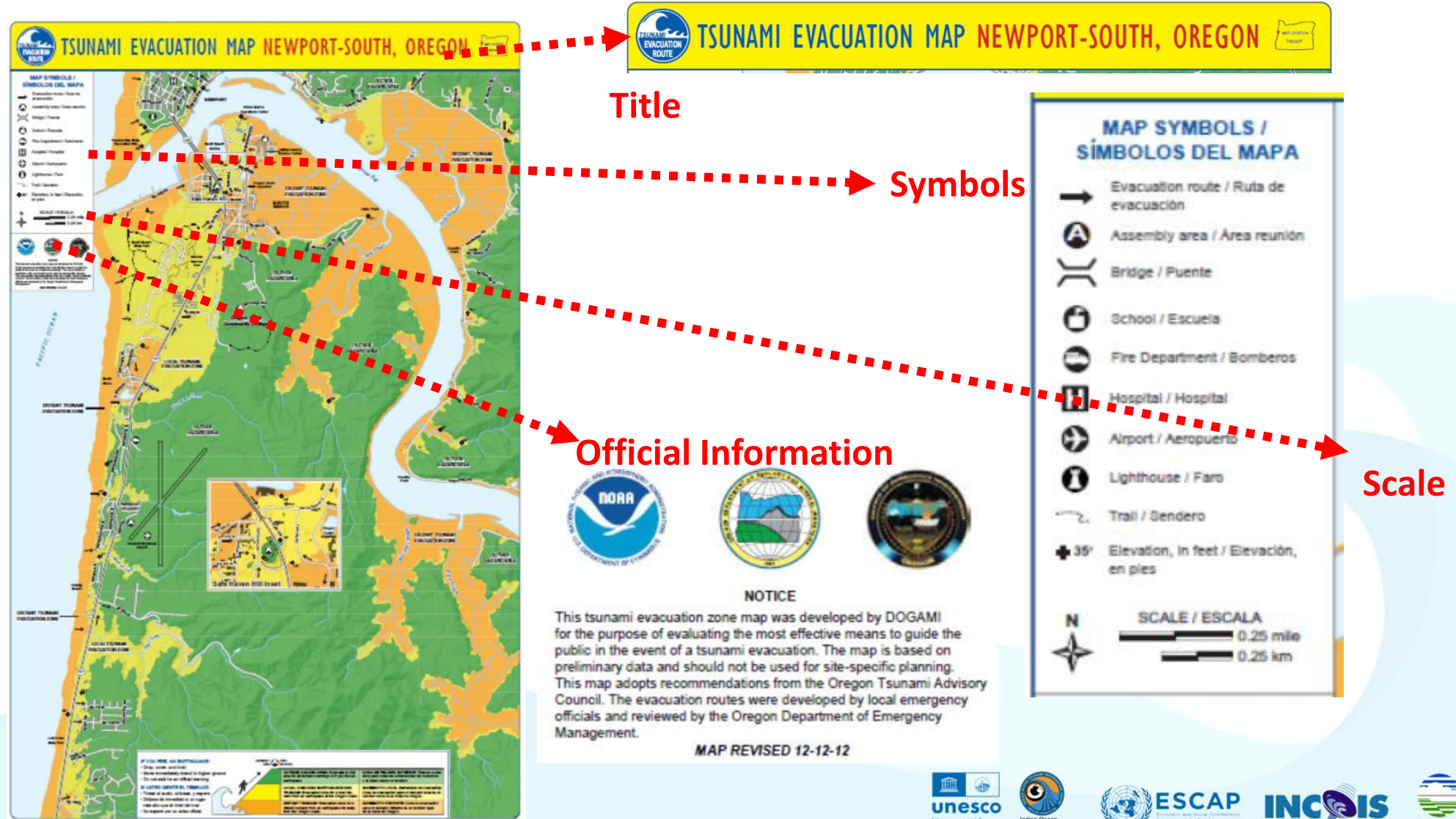


Courtesy: GTZ and Government of Kuta Village



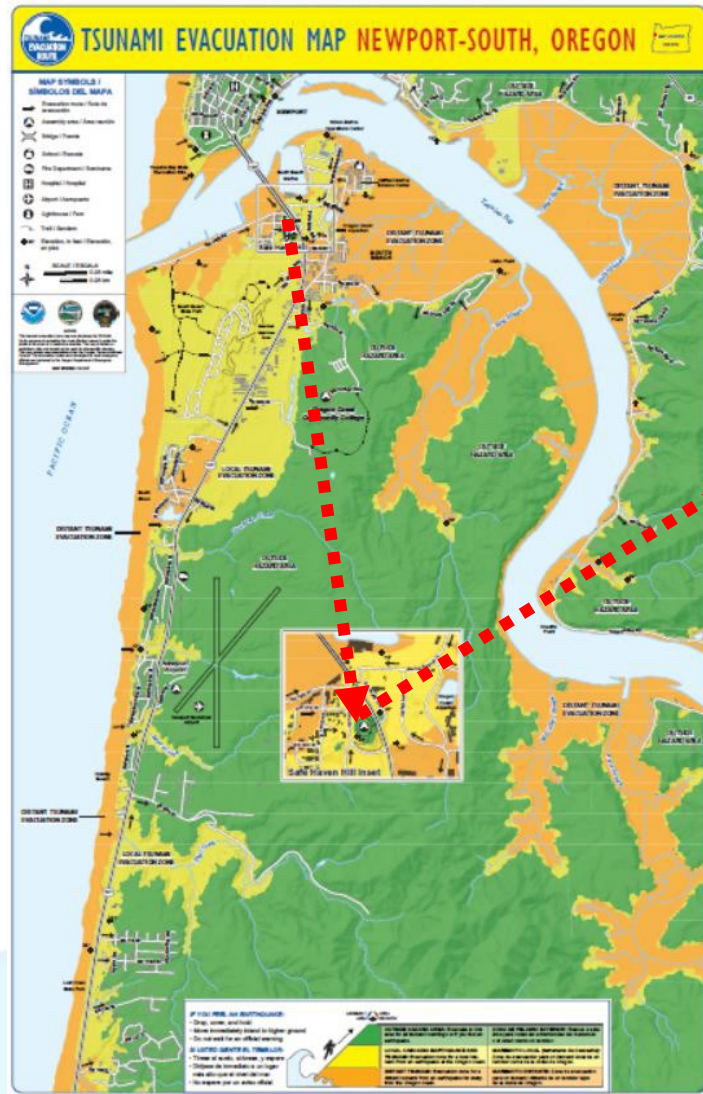
# Tsunami Evacuation Map Guidelines

Tsunami inundation map should have:

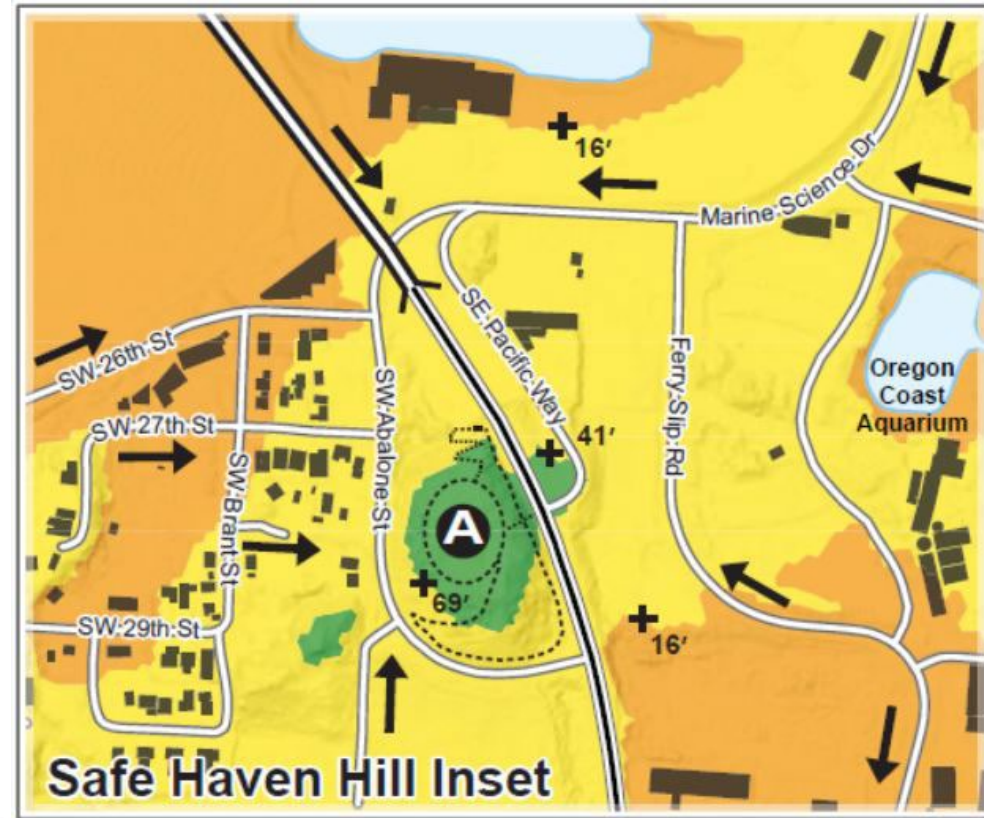


# Tsunami Evacuation Map Guidelines

Tsunami inundation map could include:

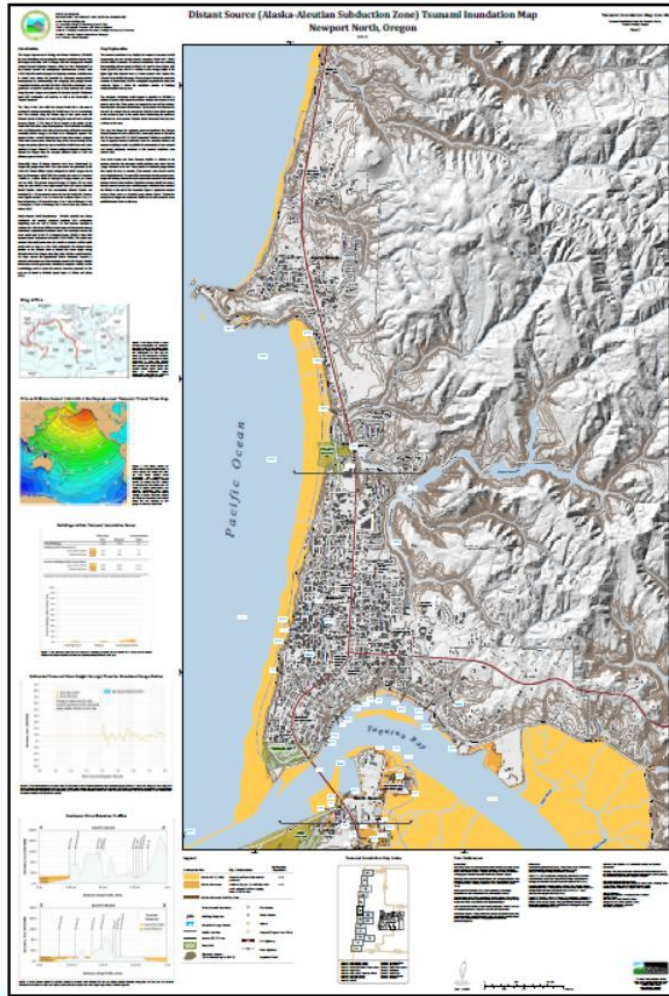


Specific area need to in highlighted





# Tsunami Evacuation Map Guidelines



- Refers to technical documentation on how the map was made and its intended use.
- Use detailed tsunami inundation assessment (i.e., inundation map), if available, the evacuation zone should encompass all areas the assessment indicates will be inundated.
- Communities should consult with the producers of inundation maps when developing evacuation plans so that the intended accuracy and limitations of the tsunami inundation maps are considered.

# Tsunami Evacuation Map Guidelines

- Indicate zones that should be evacuated in the event of a tsunami.
- Multiple evacuation zones can be used, depending on local hazard (for instance, local and distant source tsunamis)
- Include brief instructions on what to do in event of a tsunami
- Available for all users, bilingual text where possible (local, national and English language), and for people with color vision disabilities

**IF YOU FEEL AN EARTHQUAKE:**

- Drop, cover, and hold
- Move immediately inland to higher ground
- Do not wait for an official warning

**SI USTED SIENTE EL TEMBLOR:**

- Tírese al suelo, cúbrase, y espere
- Diríjase de inmediato a un lugar más alto que el nivel del mar
- No espere por un aviso oficial

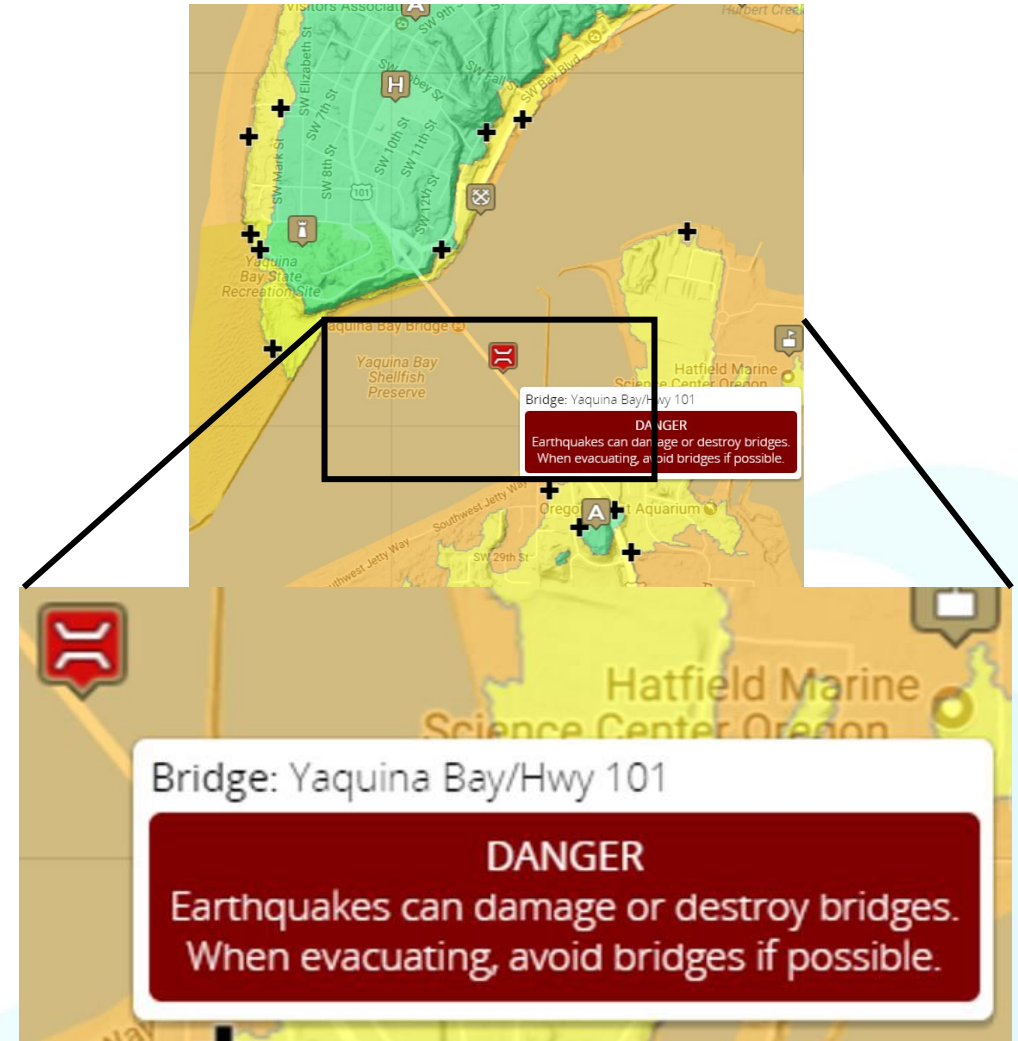
<b>OUTSIDE HAZARD AREA:</b> Evacuate to this area for all tsunami warnings or if you feel an earthquake.
<b>LOCAL CASCADIA EARTHQUAKE AND TSUNAMI:</b> Evacuation zone for a local tsunami from an earthquake at the Oregon coast.
<b>DISTANT TSUNAMI:</b> Evacuation zone for a distant tsunami from an earthquake far away from the Oregon coast.





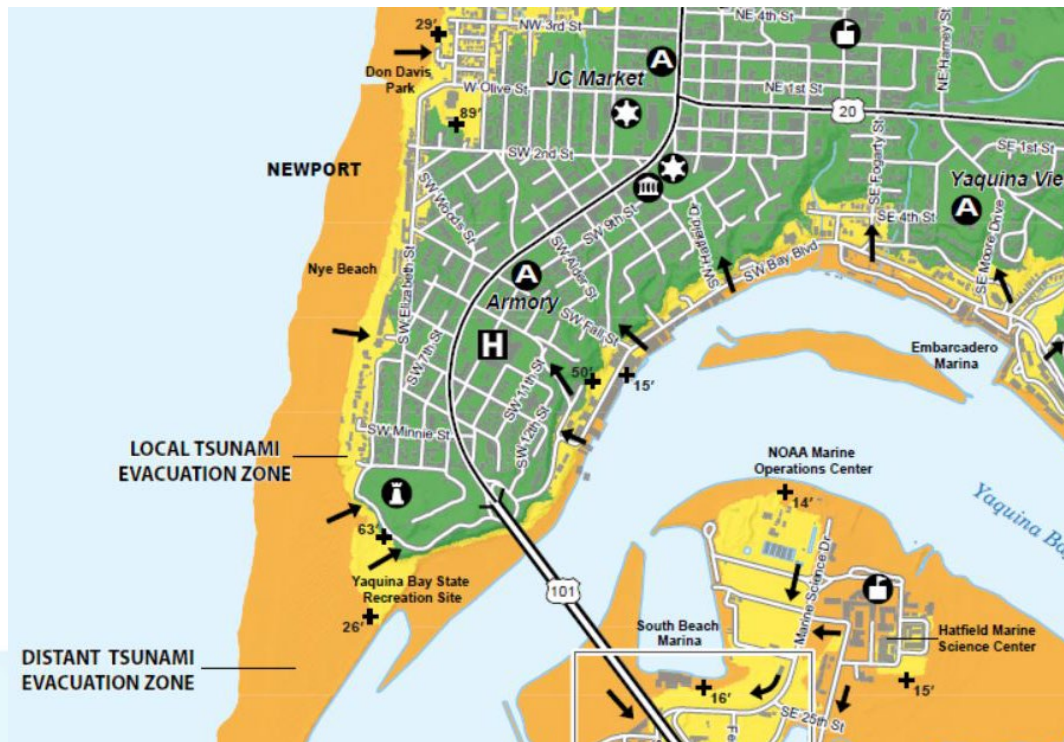
# Tsunami Evacuation Map Guidelines

- Identify features that may impede evacuation during or after an event such as terrain obstacles, areas of unstable land, or other earthquake-related ground or structure failures.
- These areas should be identified by professional geologists with the purpose to inform the public of unstable areas.



# Tsunami Evacuation Map Guidelines

- Include streets, bridges, escape direction arrows, assembly areas, and well-known landmarks to help people identify the avenues of egress and safe locations
- Indicate designated evacuation routes with bolded streets and directional arrows leading away from the coast.














- Wherever possible, identify all appropriate modes of evacuation (e.g., via foot, vehicle, vertical, and marine evacuation).
- Indicate the evacuation zone using the color yellow (ensure contrasting colors are used for the surrounding landscape).



# Tsunami Evacuation Map Guidelines








## Standardized mapping symbols for evacuation mapping

	Assembly Point		Airport
	City Hall		Helipad
	Evacuation Center		Port
	Hospital		Water Tower
	Fire Station		Siren
	Law Enforcement		School
	Day Use Park		

- Symbols should be black. If they are against a dark background, a line of white should separate the symbol from the background image.
- Symbols should be easily perceived in terms of size and scalable according to the size of the final map product.
- Symbols should have precise meaning without a need for explanation on the map other than in the legend.

# Tsunami Evacuation Map Guidelines

## Standardized colors for evacuation mapping

		RGB Values	CMYK Values	Hexidecimal
Yellow		255 242 0	0 0 100 0	#FFF200
Orange		251 169 25	0 38 100 0	#FBA920
Red		230 6 15	3 100 100 1	#E6060F
Blue		12 7 248	88 78 0 0	#0C07F8
Cyan		0 174 239	100 0 0 0	#00AEEF
Dark Green		74 140 3	75 23 100 8	#4A8C03
Light Green		161 187 132	40 13 60 0	#A1BB84

- Every effort should be made to ensure that the map is readable by the color blind.
- In the event that a color palate other than that suggested is chosen (avoid putting the color red next to the dark green color).
- Ensure the map is reproducible in black and white.



# Map Re-Evaluation

## **Tsunami evacuation maps should be re-evaluated when:**

- A tsunami occurs that has implications to the evacuation route and area.
- Every ~ 5 years or when there are significant developments in the area or significant development in modeling technology occurs that changes the tsunami hazard and inundation map.
- New procedures, new system, new technology, new development in tsunami mitigation plan and tsunami early warning system
- A new credible and potentially significant information is available, i.e. updated inundation map, more details maps (in term of scale) etc.

# Thank you



***IOC/UNESCO Indian Ocean Tsunami Information Centre  
IOTIC-BMKG Programme Office***

***Disaster Risk Reduction and Tsunami Information Unit  
UNESCO Jakarta Office***

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