



Elements of a TEP

Routes, Procedures, Map and Signage

Session 3.2

*North-West Indian Ocean Regional Workshops on
Tsunami Inundation Mapping and Evacuation Planning
Muscat, 21-25 April 2024*

Evacuation Routes

Ignacio Aguirre / ICAN



North-West Indian Ocean Regional Workshops on Tsunami Inundation Mapping and Evacuation Planning, 21-25 April 2024



Evacuation Routes

TSUNAMI EVACUATION PLAN AND MAP

- ✓ Preparation activities for TEP
- ✓ Identifying areas that need to be evacuated
- ✓ Analyze exposure and vulnerability
- ✓ Define overall evacuation strategy and procedures
- ✓ Designating assembly areas for first response
- ✓ Establishing the most appropriate routes to get out the evacuation zone and reach the assembly areas
- ✓ Design useful evacuation maps
- ✓ Signage
- ✓ Engage community
- ✓ Get endorsement/approval by authorities

*Surviving a tsunami is a matter of **getting out of the reach** of the waves and floodwaters in **time**.*

(Harald Spahn & Ardito M. Kodijat)



Source: UNESCO-IOC IOTIC

Features of Evacuation Routes

- Main roads, smaller streets and pathways that lead evacuees **quick** and **safely** out of the evacuation zone and to designated assembly points or shelter buildings
- **Wide** enough / best possible conditions and lead **straight out of the hazard** zone
- Avoid **bridges** that could be weakened or destroyed by a preceding earthquake, areas that are **prone to other hazards**: e.g., floods, landslides or collapse of tall and weak buildings, roads with powerline located overhead or located near to rivers.

Definition of Evacuation Routes

Different levels of complexities according to different contexts and available resources



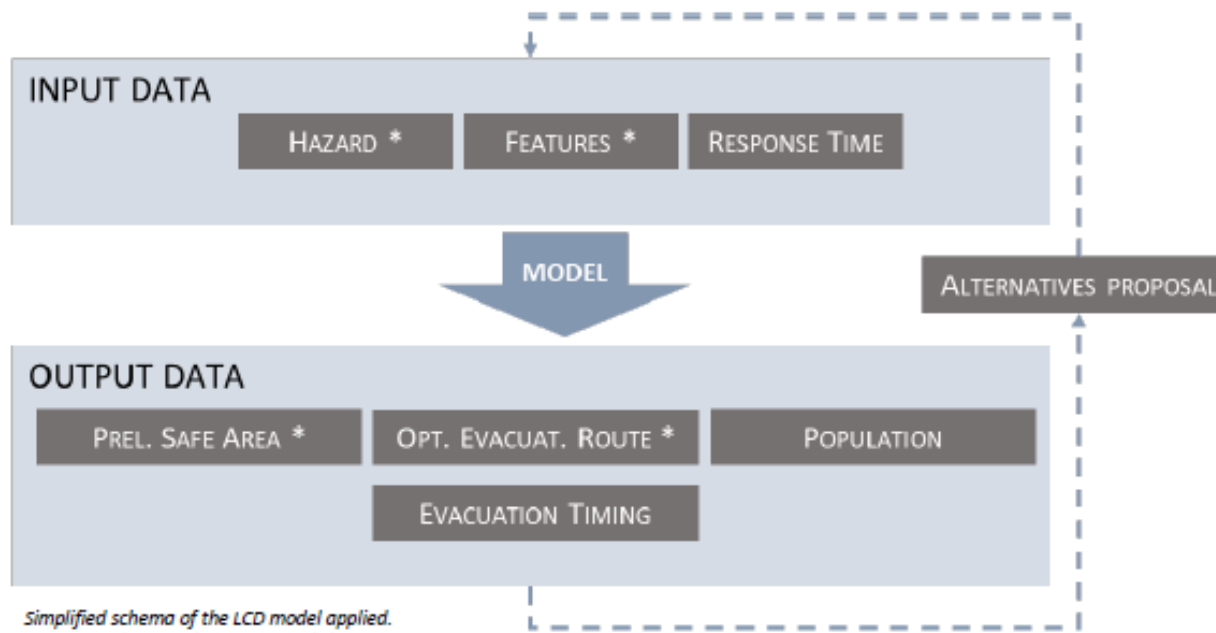
Definition of Evacuation Routes

- Identify suitable routes by **analysing the road network on your base map**. Online tools (e.g. OpenStreetMap) or satellite images (e.g. Google Earth) usually provide up-to-date information
- You may also use GIS based **modelling tools** that help to identify optimal options
- **Involve local people from the community** who are knowledgeable of the area and to get their perspective (local particularities, habits...)

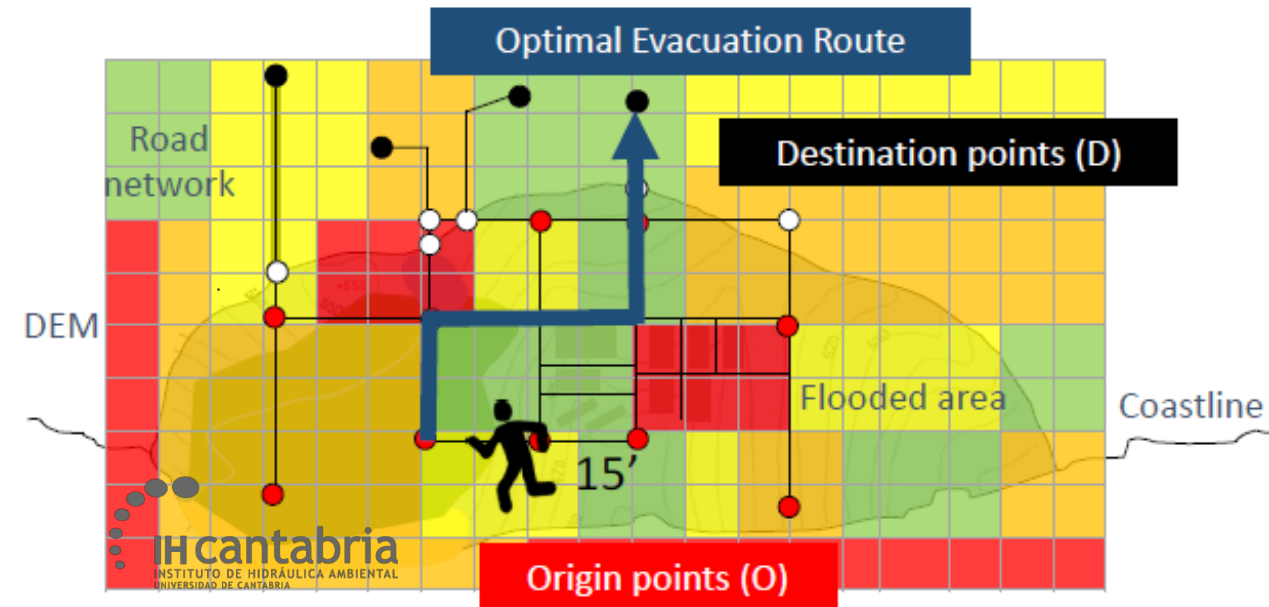
Least Cost Distance Model

A GIS based tool

The model helps to identify the **optimal evacuation routes** in terms of least cost in time



Simplified schema of the LCD model applied.
Source: Aguirre Ayerbe, I., IHCantabria.



As applied by IHCantabria in Larnaca, Cyprus

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Assessment of Evacuation Routes

- **Involve local residents** to get their perspective and learn about short-cuts that can serve as evacuation routes
- **Field visits** in areas in question to get a better understanding of feasible options
- **Walk evacuation routes** to get a feeling of the time it takes to reach safe areas. As a thumb rules you might assume that people can evacuate at a speed of 1m/second
- You may recommend alternative **structural measures** to make routes more passable or constructing additional routes if existing ones are not sufficient





THANK YOU

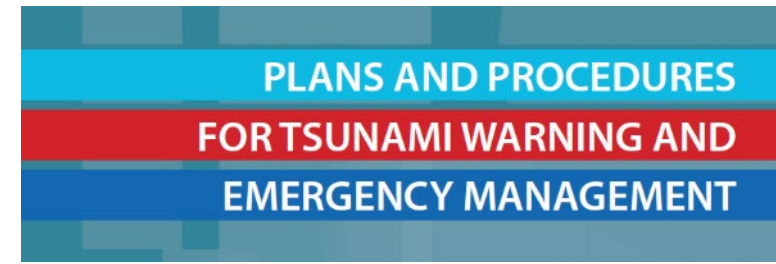
Evacuation Procedures

Ardito Kodijat / IOTIC



Tsunami Evacuation Procedure	Tsunami Evacuation Map for Benoa Peta Evakuasi Tsunami di Kelurahan Benoa	Prosedur Evakuasi Tsunami
<p>1. If you feel an earthquake - protect yourself</p> <ul style="list-style-type: none"> • Don't panic! • Drop, cover and hold! <p>2. After an earthquake, be aware that a tsunami may follow</p> <ul style="list-style-type: none"> • Move away from the beach immediately as a precaution measure! • Look for more information through TV and Radio! <p>3. After a strong and prolonged earthquake, evacuate immediately!</p> <ul style="list-style-type: none"> • Don't wait for an official warning, leave the RED ZONE immediately if possible or look for shelter in higher buildings • If you are around Pratama Street, look for shelter in one of the hotels with higher floors • As a visitor in a hotel, please follow the instructions of hotel staff <p>4. The sound of the siren is the official call for evacuation</p> <ul style="list-style-type: none"> • If the siren sounds, follow the evacuation procedure as indicated above (No. 3) <p>Be aware that the siren may not be heard in all areas.</p> <p>After the first tsunami wave, more waves are likely to come!</p> <p>Wait for an official "All Clear" message before leaving shelter</p> <p><small>*Please note that BTDC has its own procedure</small></p>	<p>The map shows the coastline of Benoa with various evacuation routes marked with arrows and numbers. It includes a legend with symbols for evacuation routes, evacuation points, and other landmarks. The map also shows the location of Pratama Street and the Red Zone.</p>	<p>1. Jika merasakan gempa bumi - lindungi diri anda</p> <ul style="list-style-type: none"> • Jangan panik • Merunduk, berlindung dan berpegangan <p>2. Setelah gempa bumi, sadari bahwa tsunami mungkin terjadi</p> <ul style="list-style-type: none"> • Segera tinggalkan daerah pantai sebagai langkah pencegahan awal • Carilah informasi lebih lanjut melalui TV dan Radio <p>3. Setelah gempa bumi yang kuat dan lama, Segera Evakuasi!</p> <ul style="list-style-type: none"> • Jangan menunggu peringatan resmi, segera tinggalkan ZONA MERAH jika memungkinkan atau mencari tempat berlindung yang lebih tinggi • Jika anda berada di sekitar Jln. Pratama, segera berlindung di bangunan bertingkat 3/lebih • Jika anda pengunjung, ikuti arahan dari karyawan hotel <p>4. Bunyi sirene adalah panggilan resmi evakuasi</p> <ul style="list-style-type: none"> • Jika sirene berbunyi, ikuti prosedur evakuasi seperti diatas (No. 3) <p>Sadari bahwa mungkin bunyi sirene tidak terdengar di semua area.</p> <p>Setelah gelombang pertama datang, gelombang yang lain mungkin akan menyusul.</p> <p>Tunggu pemberitahuan resmi "Tsunami telah berakhir" sebelum meninggalkan tempat perlindungan</p> <p><small>*Catatan: Ada prosedur khusus di area BTDC</small></p>

Evacuation Procedures – Types



IOC Manuals and Guide 76

- **Emergency Management Procedures** provide guidance to emergency services at the local level
These are strongly linked to tsunami warning processes and local contingency or emergency operation planning
- **Public procedures** provide actionable information to the public on how to respond and evacuate in the event of an impending tsunami emergency



Source: California ShakeOut plus
Tsunami Evacuation-WalkOut drill

Emergency Management Procedures

- Evacuation procedures should include guidance to emergency services at the local level; thereby, **ensuring evacuation zones are closed off and secured** until the tsunami warning is cancelled and the threat of a tsunami no longer exists.
- Once areas have been evacuated, roadblocks, barricades, and/or a system of patrols should be set in place to **keep the public from returning to evacuation zones and to keep people with malicious intent out.**
- The **decision to allow re-entry** (e.g. all-clear) will be made by Emergency Management officials.

Public Procedures may include

- How to **protect during an earthquake**
- Raise **awareness on a resulting tsunami threat** after experiencing an earthquake
- Encourage for **self-evacuation**
- Explain which **areas to evacuate and where to go**
- Inform about **official calls for evacuation**, especially on **siren sounds** if applicable
- Inform on **duration** of evacuation and when it is **safe to go back**

- ✓ *Short and concise*
- ✓ *Key messages*
- ✓ *Non-technical language*
- ✓ *Procedures complement the evacuation map*
- ✓ *Adapted to local conditions*
- ✓ *Language in accordance with target group*

Tsunami Evacuation Procedure

- If you feel an earthquake - protect yourself**
 - Don't panic!
 - Drop, cover and hold!
- After an earthquake, be aware that a tsunami may follow**
 - Move away from the beach immediately as a precaution measure!
 - Look for more information through TV and Radio!
- After a strong and prolonged earthquake, evacuate immediately!**
 - Don't wait for an official warning, leave the **RED ZONE** immediately if possible or look for shelter in higher buildings
 - If you are around Pratama Street, look for shelter in one of the hotels with higher floors
 - As a visitor in a hotel, please follow the instructions of hotel staff
- The sound of the siren is the official call for evacuation**
 - If the siren sounds, follow the evacuation procedure as indicated above (No. 3)!

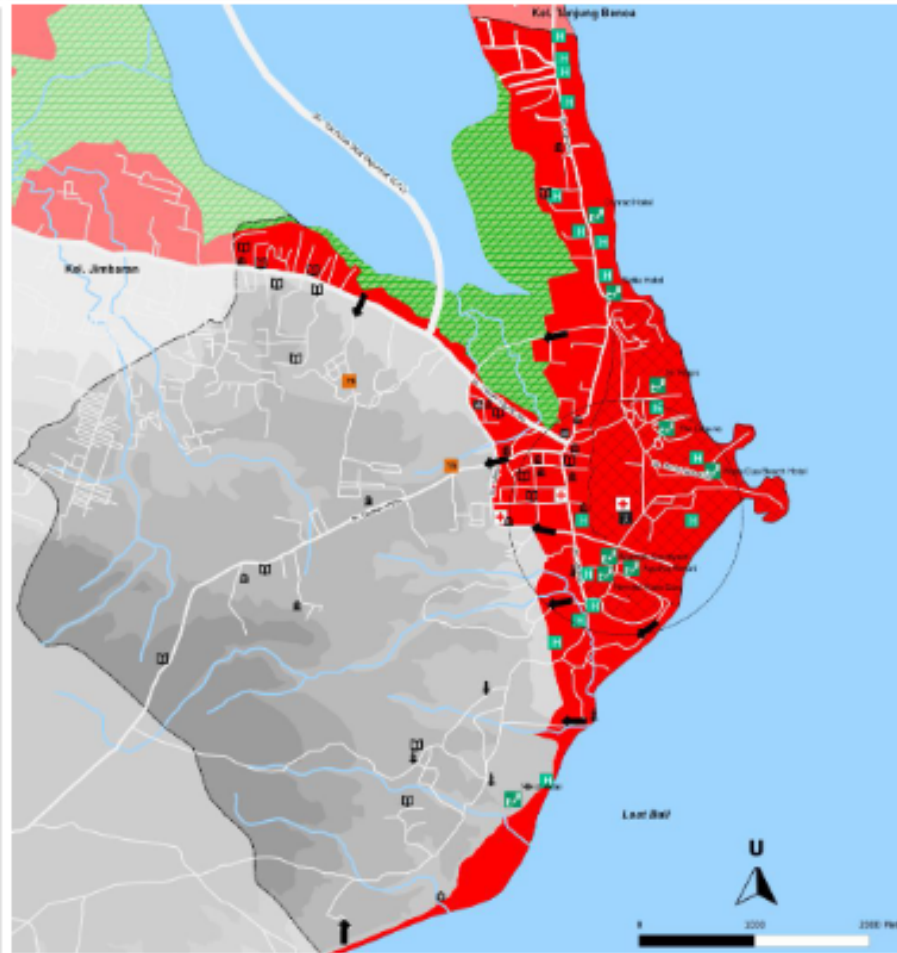
Be aware that the siren may not be heard in all areas.

After the first tsunami wave, more waves are likely to come!

Wait for an official "All Clear" message before leaving shelter

*Please note that BTDC has its own procedure

Tsunami Evacuation Map for Benoa Peta Evakuasi Tsunami di Kelurahan Benoa



Legend/Legend		
Tsunami Risk Zone / Zona Bahaya Tsunami	Safe Zone / Zona Aman	BTDC Area / Kawasan BTDC
Height of 25 m / Ketinggian 25 m	Height of 50 m / Ketinggian 50 m	Height of 70 m / Ketinggian 70 m
Height of 90 m / Ketinggian 90 m	Height of 100 m / Ketinggian 100 m	Height of >100 m / Ketinggian >100 m
Sewer / Saluran	Photo Vertical Evacuation Building / Bangunan Evakuasi Vertikal Umum	Community Hall / Balai Banjar
Water with 3 Floors (or more) / Air di 3 Lantai (atau) lebih	Hospital / RS Puskesmas	Hindu Temple / Pura
School / Sekolah	Village Office / Kantor Kelurahan	Traditional Market / Pasar
School / Sekolah	Administrative Border / Batas Administrasi	Street Network / Jaringan Jalan
Village Office / Kantor Kelurahan	Mangrove / Hutan Bakau	River/Sea / Sungai/Laut

December / Desember 2012

Further Information / Informasi lebih lanjut:
 DPDD Kabupaten Gading
 Jln Raya Raya Gempid, Mangut
 Tel. 0361-7011166

Logos: PMI, gliz, PROTECTS, and other supporting organizations.

Prosedur Evakuasi Tsunami

- Jika merasakan gempa bumi - lindungi diri anda**
 - Jangan panik
 - Merunduk, berlindung dan berpegangan
- Setelah gempa bumi, sadari bahwa tsunami mungkin terjadi**
 - Segera tinggalkan daerah pantai sebagai langkah pencegahan awal
 - Carilah informasi lebih lanjut melalui TV dan Radio
- Setelah gempa bumi yang kuat dan lama, Segera Evakuasi!**
 - Jangan menunggu peringatan resmi, segera tinggalkan **ZONA MERAH** jika memungkinkan atau mencari tempat berlindung yang lebih tinggi
 - Jika anda berada di sekitar Jln. Pratama, segera berlindung di bangunan bertingkat 3/lebih
 - Jika anda pengunjung, ikuti arahan dari karyawan hotel
- Bunyi sirene adalah panggilan resmi evakuasi**
 - Jika sirene berbunyi, ikuti prosedur evakuasi seperti diatas (No. 3)!

Sadari bahwa mungkin bunyi sirene tidak terdengar di semua area.

Setelah gelombang pertama datang, gelombang yang lain mungkin akan menyusul.

Tunggu pemberitahuan resmi "Tsunami telah berakhir" sebelum meninggalkan tempat perlindungan

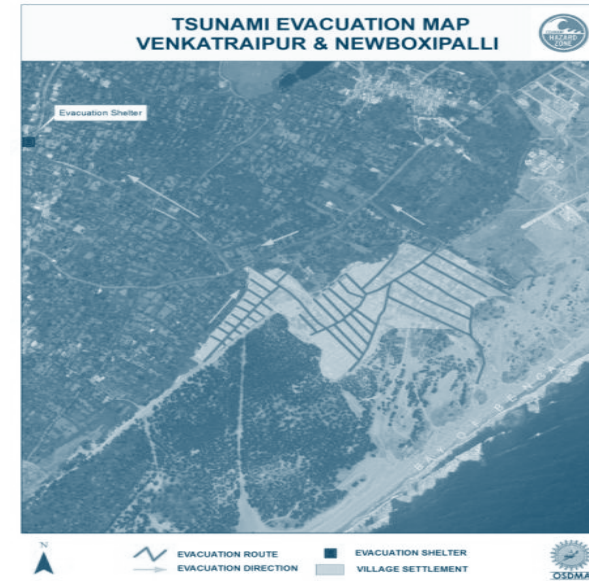
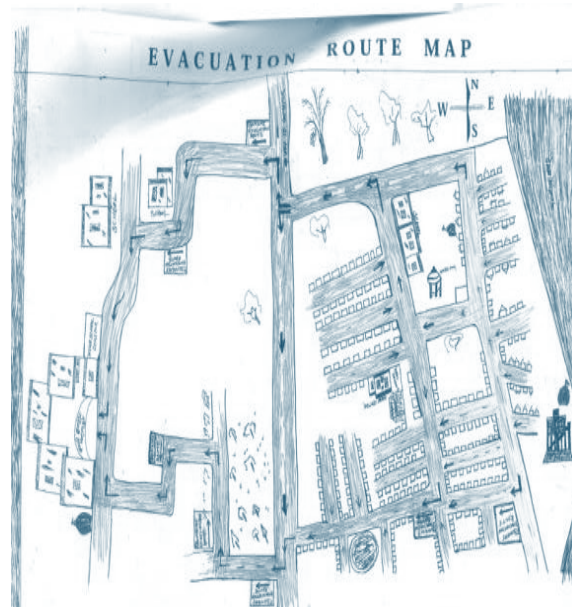
*Catatan: Ada prosedur khusus di area BTDC



THANK YOU

Evacuation Maps

Rick Bailey / UNESCO

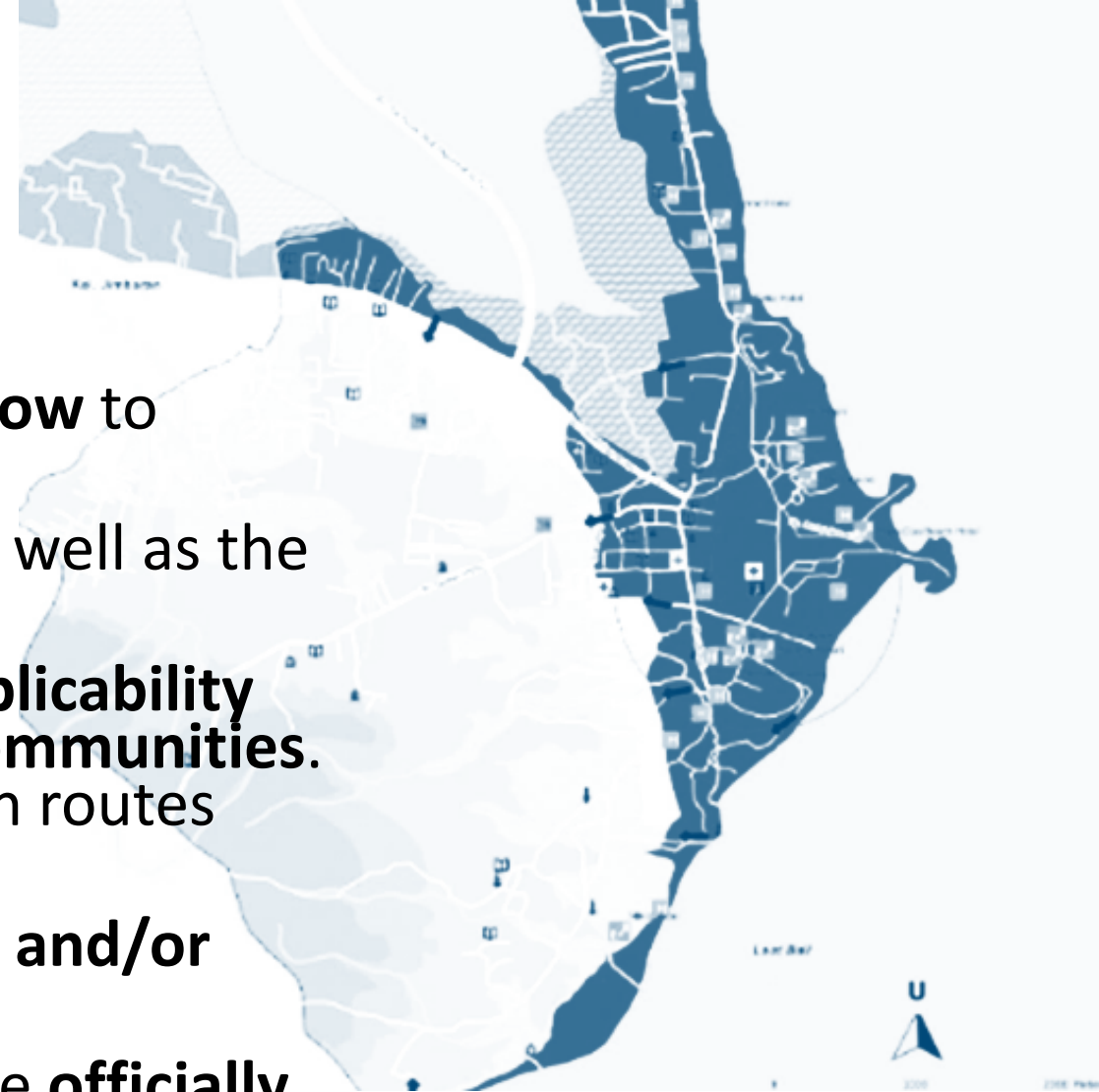


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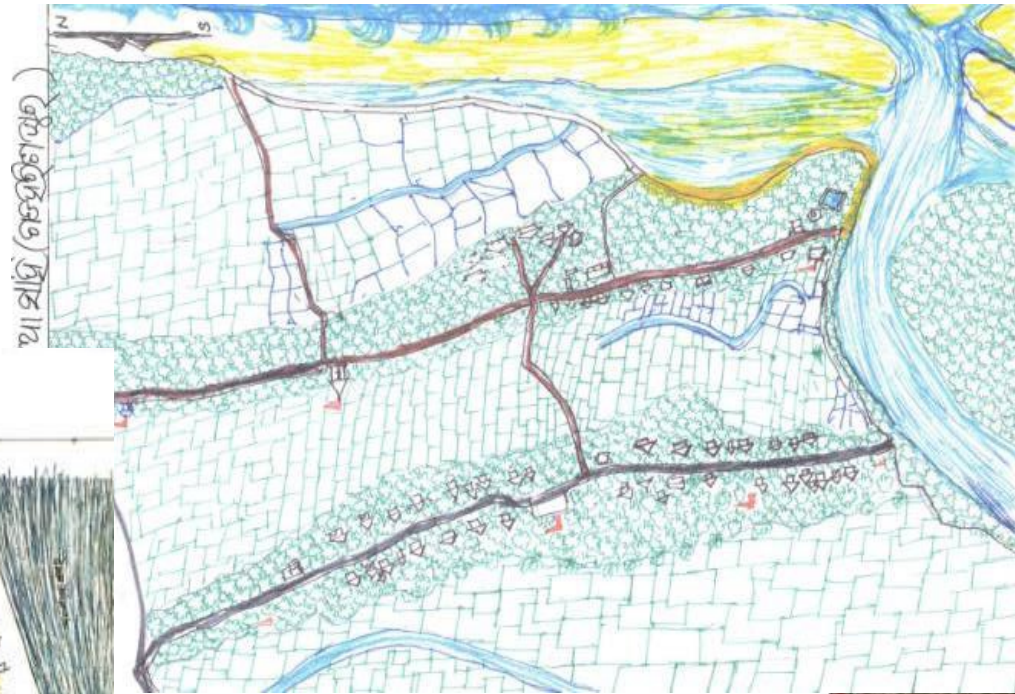
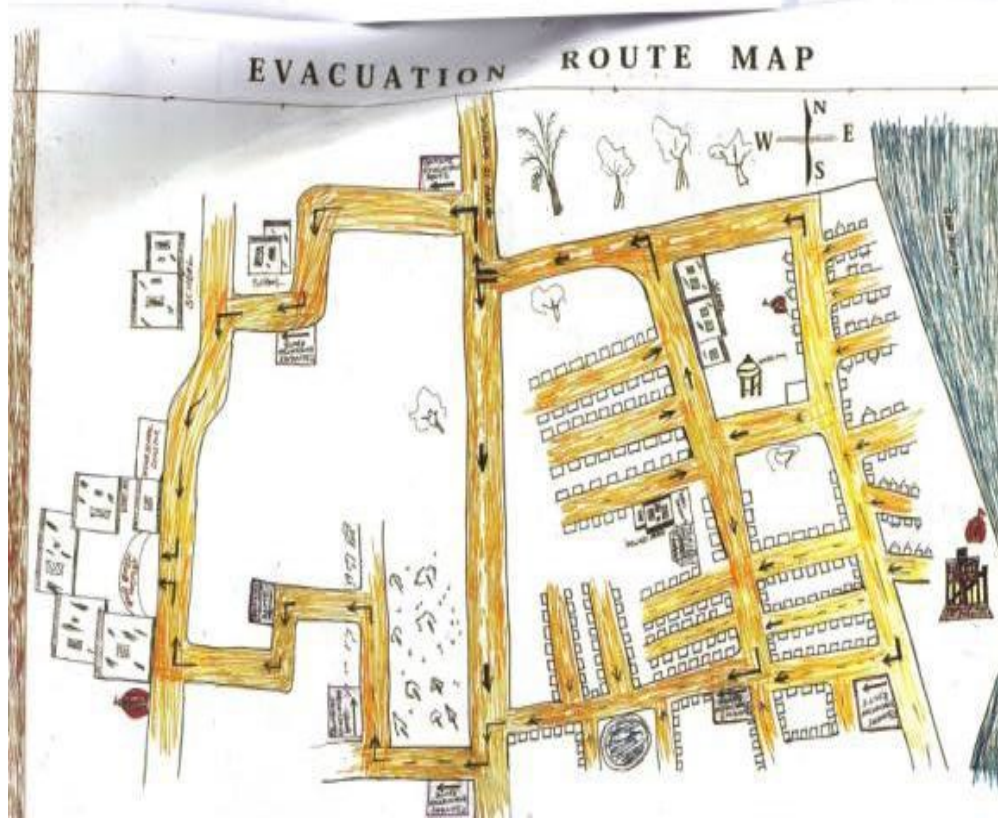


Evacuation Maps

- 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**



Examples



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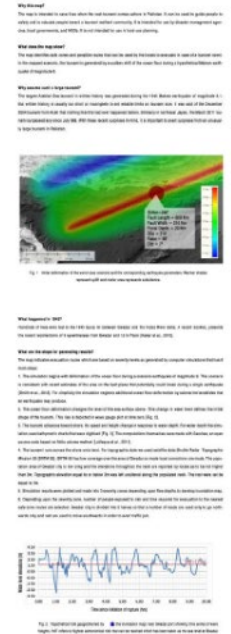
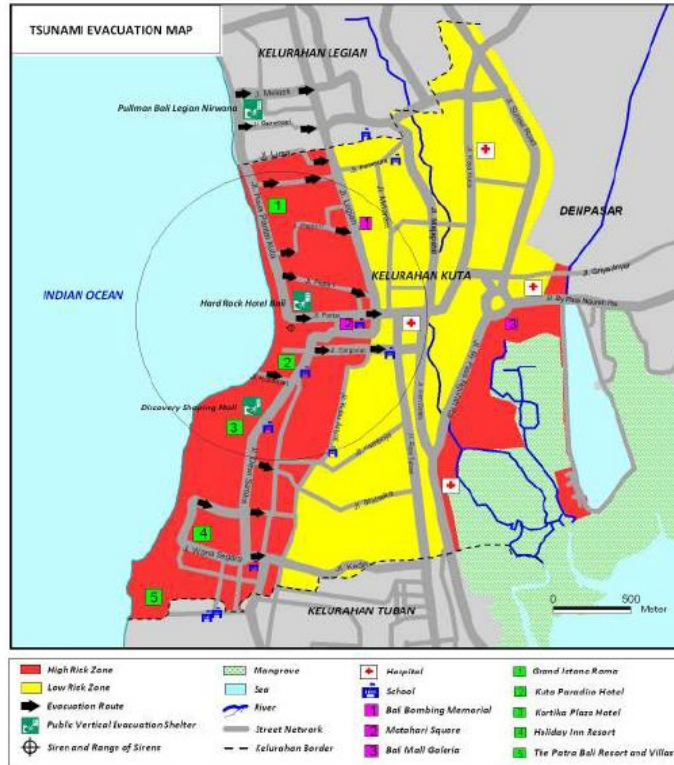


Examples

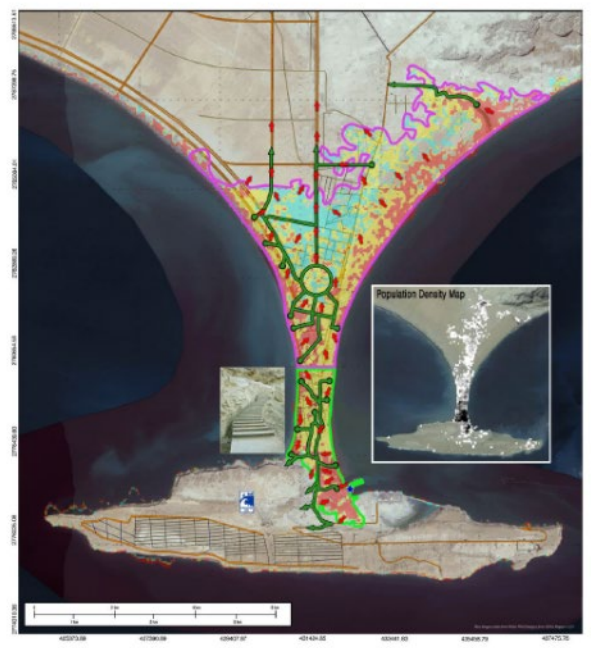
1. Get prepared, long before anything happens
 - Study the evacuation map and get familiar with the evacuation procedures
 - Discuss procedures within your family and neighbourhood
 - Participate in drills and information events
 - If you are a visitor to Bali, please check with your hotel for procedures
2. If you feel an earthquake, protect yourself
 - Don't panic!
 - Drop, cover and hold!
3. After an earthquake, be aware that a tsunami may follow
 - Move away from the beach immediately as a precautionary measure!
 - After strong and prolonged ground shaking, don't wait for an official warning. Leave the **RED ZONE** immediately!
 - Listen to announcements from the local authorities and the radio for further information. Pay attention to the siren!
4. The sound of the siren is the official call for evacuation
 - When the siren sounds, evacuate the **RED ZONE** immediately, or look for shelter in higher buildings!
 - If you are in the **YELLOW ZONE**, seek shelter on higher floors
 - If you are a visitor in a hotel, follow the instructions of hotel staff

After the first tsunami wave, more waves are likely to come!

Wait for an official "All Clear" message before leaving shelter



Evacuation map of Gwadar for a hypothetical tsunami from extreme rupture along the Makran Subduction Zone



What is a tsunami?
A tsunami is a series of waves that are caused by the displacement of a large volume of water, such as by an earthquake, volcanic eruption, or landslide.

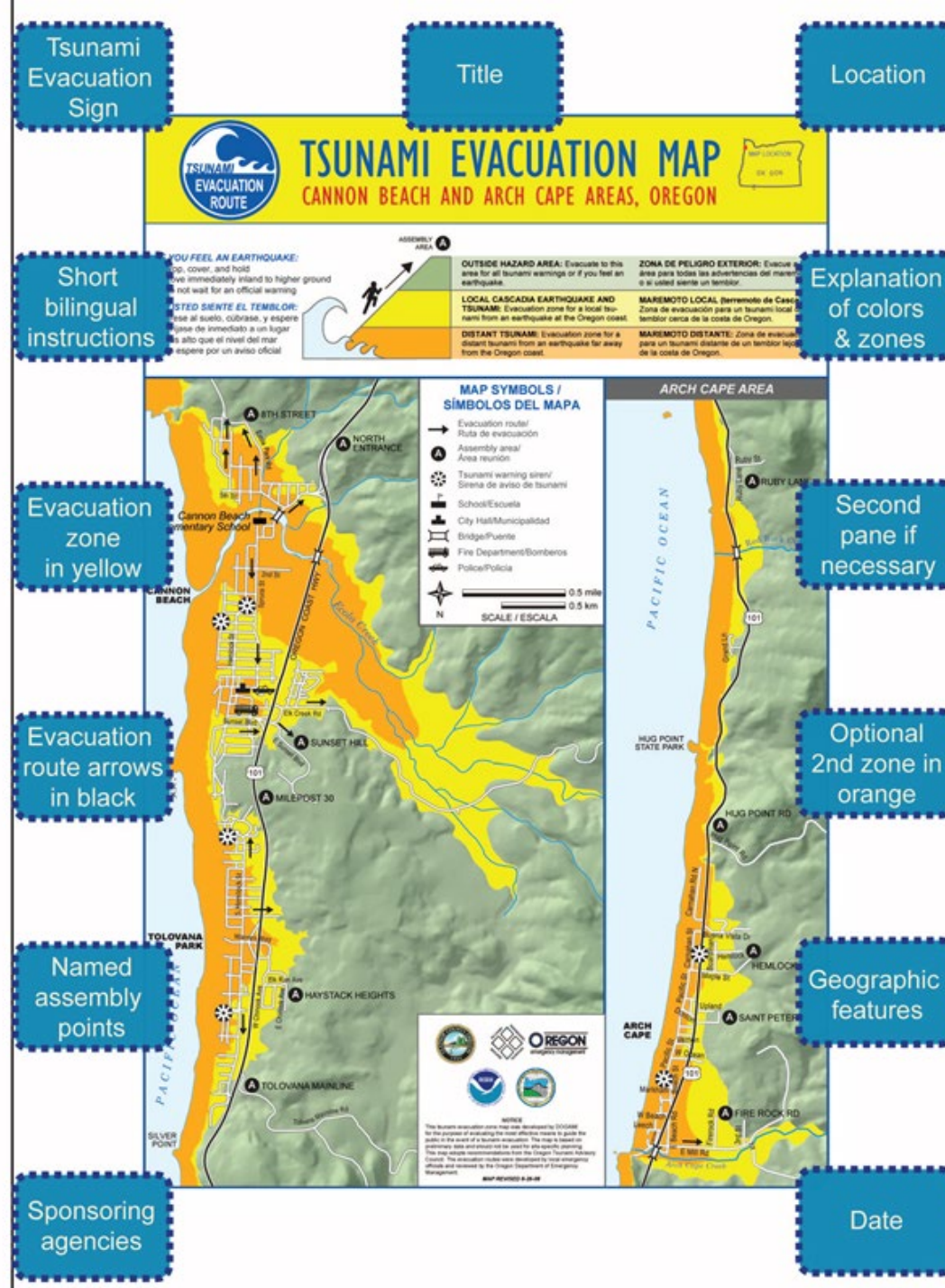
What is a tsunami hazard?
A tsunami hazard is the potential for a tsunami to cause damage and loss of life.

What is a tsunami risk?
A tsunami risk is the potential for a tsunami to cause damage and loss of life, taking into account the vulnerability of the population and the built environment.

What is a tsunami evacuation map?
A tsunami evacuation map is a map that shows the evacuation routes and shelters for a coastal area.

What is a tsunami risk assessment?
A tsunami risk assessment is a process of identifying and evaluating the potential for a tsunami to cause damage and loss of life.

Content of an Evacuation Map



Design of Evacuation Maps


- Defining **minimum requirements and standards** is considered good practice to develop consistent and reliable tsunami evacuation maps, thereby avoiding public confusion and misconceptions about tsunami evacuation maps
- Standards might also refer to **symbols, colour codes, base maps** to be used, **scale, legends, logos** and the **overall layout** of an evacuation map
- It is strongly recommended that **Makran region countries** consider developing their **own standards for evacuation maps**. These standards should be consistent with evacuation map standards already developed for other hazards (e.g. floods) if possible.
- Discuss whether a **regional standardization** might make sense

Design of Evacuation Maps


- Standards might also refer to **symbols, colour codes, base maps to be used, scale, legends, logos** and the **overall layout** of an evacuation map

6. Simbol dan Warna



a. Arah Evakuasi

	<p>Arah evakuasi menggunakan tanda anak panah tegak lurus garis pantai dengan warna hitam di atas jalan. Tidak ada anak panah yang menunjuk ke arah pantai walaupun ada tempat evakuasi vertikal di pinggir pantai. Arah evakuasi harus menjelaskan kepada pembaca peta untuk meninggalkan zona bahaya menuju zona aman. Contoh simbol seperti tampak pada gambar di samping dengan ukuran disesuaikan dengan layout yang digunakan. Simbol ini juga dapat dibuat sendiri.</p>
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b. Pasar

	<p>Pasar merupakan salah satu fasilitas rentan. Apabila lokasinya berada pada area bahaya tsunami, maka pasar perlu dimunculkan dalam rencana evakuasi. Hal ini bertujuan agar masyarakat dapat mengidentifikasi zona aman terdekat sekaligus mengingatkan bahwa fasilitas rentan perlu memiliki prosedurnya sendiri. Simbol pasar menggunakan gambar keranjang seperti tampak pada gambar di samping. Ukuran simbol disesuaikan dengan ukuran layout peta.</p>
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

c. Sirine dan Jangkauannya

	<p>Sirine yang dimaksud adalah sirine dari BMKG maupun sirine yang dikembangkan secara lokal di masing-masing wilayah sebagai salah satu alat dalam sistem peringatan dini tsunami. Simbol sirene terlihat seperti gambar di samping dengan ukuran menyesuaikan.</p>
	<p>Jangkauan sirine di peta menggunakan garis hitam tipis sesuai dengan jangkauan masing-masing sirine yang ada. Menggunakan border style: Dash Line dengan ketebalan 0,3 milimeter.</p>

g. Kantor Pemerintah

	<p>Kantor milik pemerintah baik di tingkat kabupaten, kecamatan, desa/kelurahan menggunakan simbol yang sama, dengan keterangan tulisan nama pada simbol tersebut. Ukuran simbol menyesuaikan dengan ukuran layout dengan contoh simbol seperti tampak pada gambar di samping.</p>
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h. Titik Berkumpul Sementara

 <p>R = 228 G = 108 B = 10</p>	<p>Titik berkumpul merupakan lokasi-lokasi tertentu sebagai titik berkumpul sementara yang dituju oleh masyarakat setelah keluar dari zona bahaya tsunami. Ini dapat berupa bangunan maupun lapangan. Pada titik berkumpul masyarakat dapat memperoleh pertolongan pertama, minimal air minum dan informasi kejadian bencana. Yang perlu diperhatikan ketika memilih titik berkumpul adalah kemudahannya dijangkau dan dipastikan bahwa pada titik ini paling tidak terdapat akses informasi apakah tsunami terjadi dan kapan masyarakat dapat kembali ke rumahnya masing-masing. Digunakan warna orange dengan tulisan TB (titik berkumpul) di tengah.</p>
	<p>Evakuasi Vertikal Umum Untuk evakuasi vertikal, perlu terdapat satu/beberapa bangunan bertingkat/berlantai 3 atau lebih yang ditunjuk sebagai tempat evakuasi. Sebelum memasang tanda ini perlu dipastikan pengaturan dan kesepakatan dengan pengelola bangunan tersebut. Titik evakuasi vertikal pada peta evakuasi tsunami menggunakan simbol seperti di samping. Simbol ini dapat di-download di http://www.sciencedirect.com/science/article/pii/S1474706511003494.</p>

Example from Indonesia, 2013



THANK YOU

Evacuation Signage

Suci Anugrah / BMKG



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Tsunami Signage

Suci Anugrah / BMKG



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Tsunami Signage Types

- Signage is an effective mechanism for **public education** on the **tsunamis risk** and the **evacuation** response to a tsunami threat
- Stakeholders, including the public, should examine **signage locations and types** during the planning process
- Four basic categories of **tsunami sign types** are:
 1. Evacuation zone
 2. Evacuation route
 3. Evacuation safe-location/assembly areas
 4. Information board



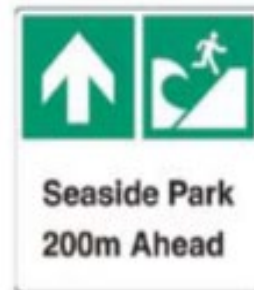
Design of Evacuation Signage

- Many different tsunami signs are available around the world, though three basic signs (hazard / evacuation zone, horizontal safe point, and vertical shelter) were agreed upon and adopted by the International Organization for Standardization (ISO 20712).
- Signage must be in sync with local community education, preparedness, and mitigation programs



International Standards ISO 20712

		
<p>Warning: Tsunami hazard zone To warn of a hazard from tsunami waves</p>	<p>Tsunami Evacuation Area To Indicate the location of a safe place/uphill area for evacuation in the event of a tsunami</p>	<p>Tsunami Evacuation Building To indicate the location of a safe building for evacuation in the event of a tsunami</p>



Evacuation route to tsunami evacuation area



Evacuation route to tsunami evacuation Building

Other Examples USA, Puerto Rico, New Zealand and Indonesia



Source. ITIC Website

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Tsunami Evacuation Procedure

1. Get prepared - long before anything happens
 - Study the evacuation map and get familiar with the evacuation procedures
 - Discuss procedures with your family and neighborhood
 - As a visitor to Bali, please check with your hotel for procedures
2. If you feel an earthquake - protect yourself
 - Don't panic!
 - Drop, cover and hold!
3. After an earthquake, be aware that a tsunami may follow
 - Move away from the beach immediately as a measure of protection!
 - After strong and longer lasting ground shaking (don't wait for an official warning) Leave the **RED ZONE** immediately!
 - Listen to announcements from local authorities and the radio for further information. Pay attention to the siren!
4. The sound of the siren is the official call for evacuation
 - When the siren sounds, evacuate the **RED ZONE** immediately or look for shelter in higher buildings!
 - If you are in the **YELLOW ZONE**, go for shelter in higher floors
 - Please note that in southern Sanur you won't be able to hear the siren. As one of the local radio stations RPKD Radio 91.45 MHz will broadcast calls for evacuation.
 - As a visitor to a hotel follow the instructions of hotel staff!

After the first tsunami wave, more waves are likely to come!

Wait for an official "All Clear" message before leaving shelter

Tsunami Evacuation Map for Sanur
Peta Evakuasi Tsunami di Sanur

Prosedur Evakuasi Tsunami

1. Beres-bereslah sejak jauh hari sebelum sesuatu terjadi
 - Pelajari peta evakuasi dan kenal dengan baik prosedur evakuasi
 - Diskusikan prosedur dengan teman-teman dengan keluarga dan tetangga
 - Untuk para wisatawan di Bali, agar mendapat info prosedur tsunامي, hubungi hotel anda
2. Jika merasakan gempa bumi, lindungi diri anda
 - Jangan panik!
 - Menahan, berlutung dan bertepatan
3. Setelah gempa bumi, sadar bahwa tsunami mungkin bisa terjadi
 - Segera berpindah dari pantai serta segera meninggalkan zona merah
 - Setelah berpindah jangan yang kuat dan segera berpindah ke zona kuning
 - Dengarkan pengumuman dari media massa dan stasiun radio untuk informasi selanjutnya. Perhatikan siren!
4. Bunyi sirene adalah panggilan resmi untuk evakuasi
 - Jika anda berada di zona merah, segera evakuasi dari **ZONA MERAH** atau mencari tempat berlindung sementara di gedung yang lebih tinggi
 - Jika anda berada di **ZONA KUNING**, berpindah ke zona hijau
 - Untuk evakuasi: bagi anda yang berada di bagian Sanur bagian Selatan yang tidak mendengar sirene, dapat menggunakan media RPKD di panggilan untuk evakuasi
 - Jika anda berada hotel ikuti petunjuk staff hotel

Setelah gelombang pertama datang, gelombang yang lain mungkin akan menyusul!

Tunggu pesan resmi "Tsunami telah berakhir" sebelum meninggalkan tempat perlindungan

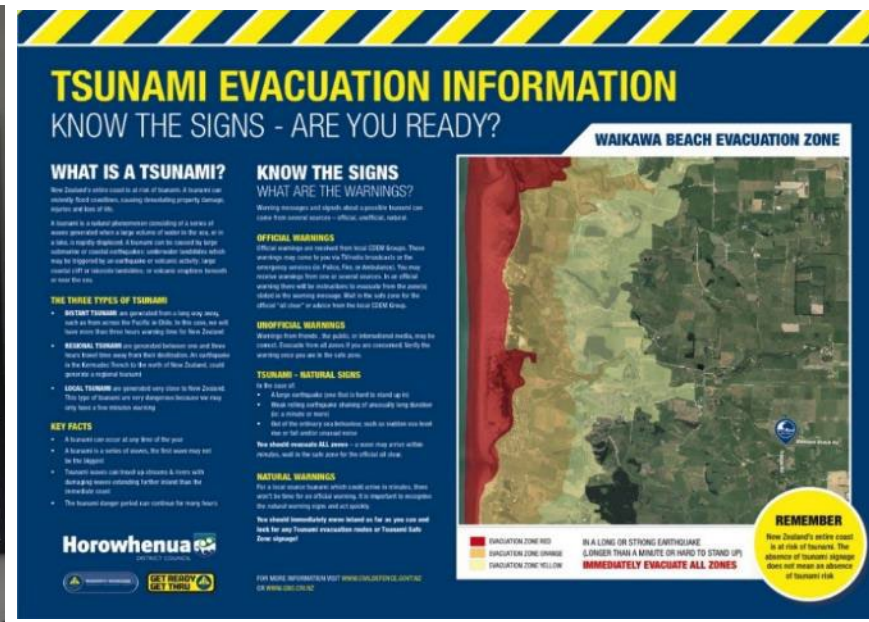
To provide information on tsunami hazard and safety measures and help building community's awareness and preparedness

Tsunami Information Board
in Bali / Indonesia

Contents of Tsunami Information Boards



Panggarangan, Banten, Indonesia



Tsunami Evacuation Information in New Zealand



Tsunami Evacuation

- Evacuation Map and Procedures
- Explanations of Signage Symbols
- Tsunami Warning Procedures

Tsunami Hazard

- Tsunami Hazard Zone
- Type of tsunamis
- Key Facts about tsunami
- Historical tsunamis

Understanding the warnings

- Official Warning
- Un-Official Warning
- Natural warning signs

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Languages

Information can be provided in 2 or more languages



Assembly Area and Evacuation Route Signs in Manggarai Barat-NTT, Indonesia use 5 languages (Indonesian, English, French, Mandarin, Japanese, and Arabian)

Tsunami Evacuation Map Sign Board in Tanjung Benoa-Bali, Indonesia Use 2 languages (Indonesian and English)

3 LANGKAH TANGGAP TSUNAMI 3 STEPS FOR TSUNAMI READINESS

TANGGAP GEMPA EARTHQUAKE READY

- Waspada!ah, gempa bumi yang kuat atau yang berlangsung lama dapat memicu tsunami dalam waktu singkat.
Be alert, a strong or long earthquake may trigger a tsunami in short time.
- Jauhi pantai dan tepi sungai, serta cari informasi apa yang terjadi.
Move away from beaches and river banks, and seek information on what has happened.

TANGGAP PERINGATAN TSUNAMI WARNING READY

- Dapatkan informasi peringatan dari BMKG melalui TV Nasional, Radio Daerah atau pengumuman di sekitar Anda.
Seek warning information from BMKG on National TV, Local Radio, or Public Announcement in your area.
- Jika mendengar bunyi sirine, kentongan, atau peralatan lain yang sudah disepakati, segera evakuasi.
If there is a sound of siren or other warning dissemination devices, evacuate immediately.

TANGGAP EVAKUASI EVACUATION READY

- Setelah gempa bumi atau menerima peringatan tsunami, segera evakuasi ke lokasi yang aman.
Upon feeling the earthquake or receiving tsunami warning, evacuate immediately to designated safe locations.
- Ikuti Jalur dan rambu evakuasi, jika ada.
Follow the evacuation route and signage, if available.
- Jika lokasi aman tidak diketahui, lariilah sejauh mungkin dari pantai, naiklah ke tempat yang tinggi.
If you don't know the location of the safe zone, run as far as possible from the coast.

North-West Indian Ocean Regional Workshops on Tsunami Inundation Mapping and Evacuation Planning, 21-25 April 2024



Community Participation

Communities can work together with various parties to produce educational and awareness materials about the tsunami hazard in their area



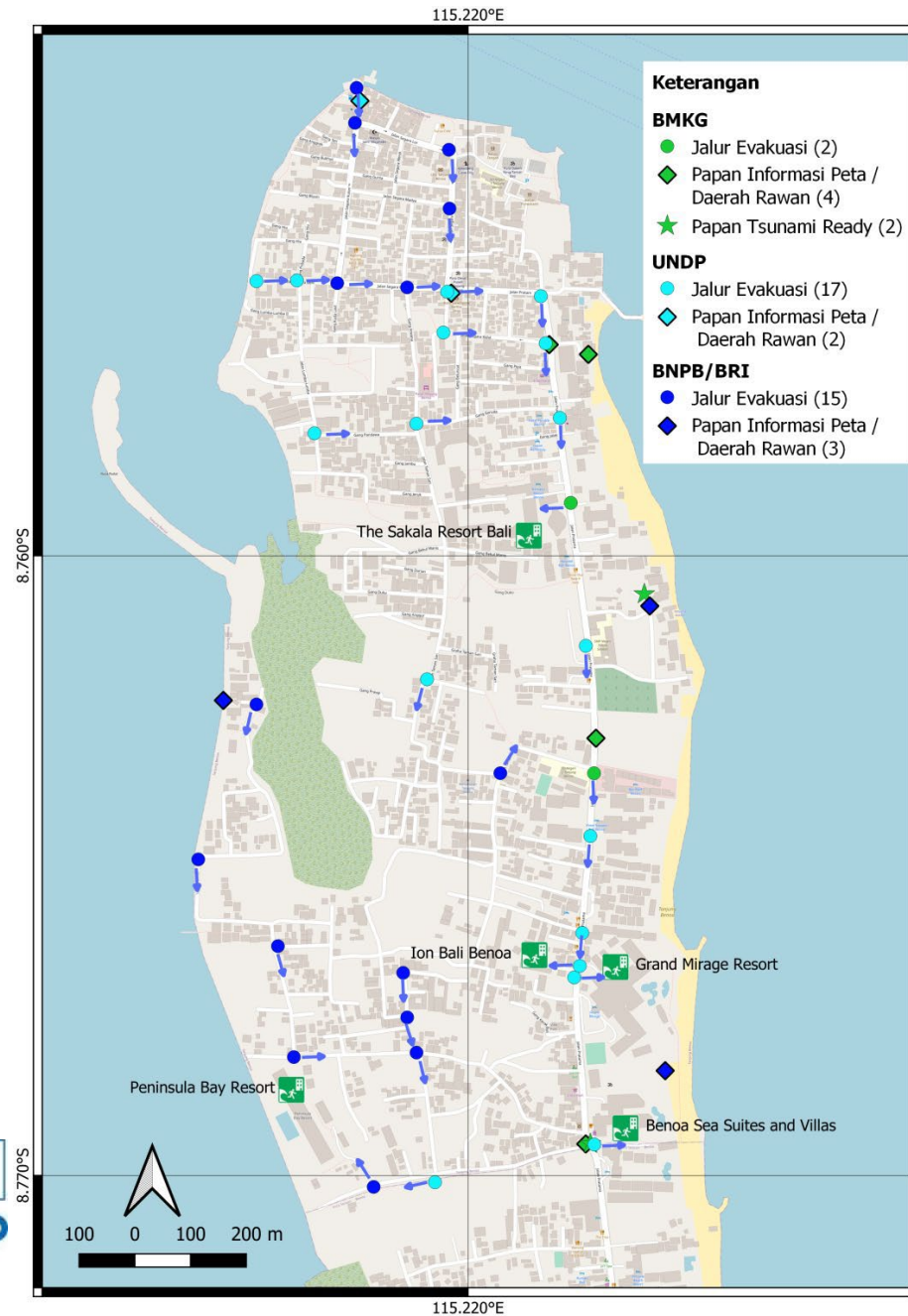
Tsunami Hazard Zone Sign in Kemadang, Yogyakarta, Indonesia

Location of the Signage

The number and location of tsunami signs must be adapted to tsunami-prone areas

Map of Installation of Tsunami Evacuation Signs in Tanjung Benoa Village 1 June 2022

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THANK YOU