

# TSUNAMI EVACUATION MAPS

EXAMPLES:

BRGY. CONCORDIA, BOLINAO

BRGYS IN CALATAGAN, BATANGAS

CTAS COMMUNITIES



# How to develop a tsunami-prepared community?

## Tsunami evacuation planning

**3.1 Tsunami evacuation map** – shows areas identified as **safe** and areas that are within the **hazard zone**

**Essential information provided in this map:**

- 1) Areas threatened by tsunami **inundation**
- 2) Location of **designated safe areas** where people should gather in case of tsunami
- 3) Recommended **routes** to the safe area for people to follow which are normally indicated as arrows
- 4) Other significant information such as **landmarks** for people to identify location

# *How to develop a tsunami-prepared community?*

## **Designing a tsunami evacuation map**

- Acquire a **tsunami hazard map**
  - Acquire **detailed community map**
    - update the community map (road systems, elements-at-risk)
    - determine the population to evacuate

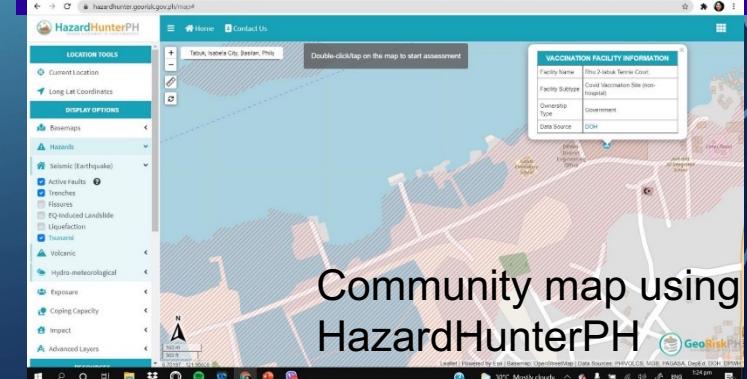
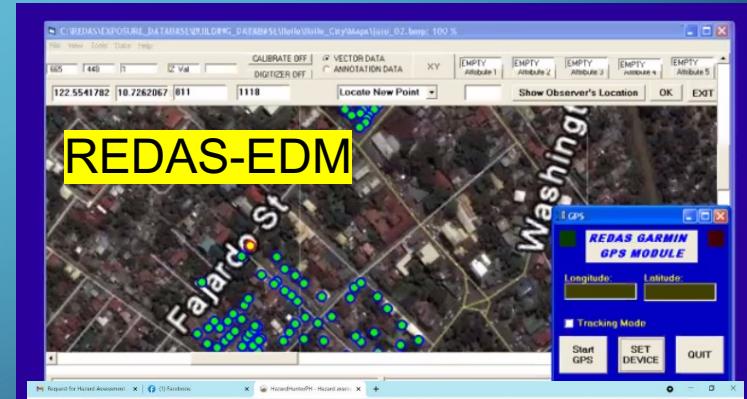
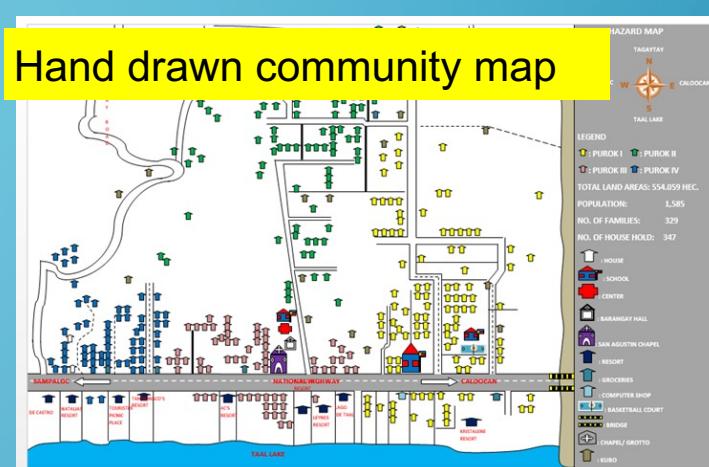
*Discussion on assignment*

From Bautista, 2021

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Community map using  
HazardHunterPH

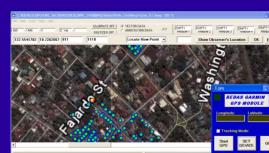
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[Collecting Exposure Database through Actual Building Survey: Using the REDAS Exposure Data Mapper \(EDM\) using GeoMapperPH](#)



### Using Portable Android Devices

- With built-in GPS
- Built-in Camera (3MP)
- 3G / WiFi (Access Google Map)
- SQLITE Database



From Bautista, 2021

REDAS-TsuSim and its Exposure Database Module - GeoMapperPH

# How to develop a tsunami-prepared community?

## Designing a tsunami evacuation map

### Identify **safe evacuation areas**

- site is **outside** identified tsunami hazard zone
- site can be **reached by foot** within the shortest possible time
- **total area** of the site can hold the community to be evacuated
- site can be **easily identified**



# How to develop a tsunami-prepared community?

## Designing a tsunami evacuation map

### Recommend **evacuation routes**

- safest, shortest/fastest
- wide streets
- if possible, no bridges
- away from other hazards
- limited overhead power lines and similar hazards
- “walk along routes” to check ground condition

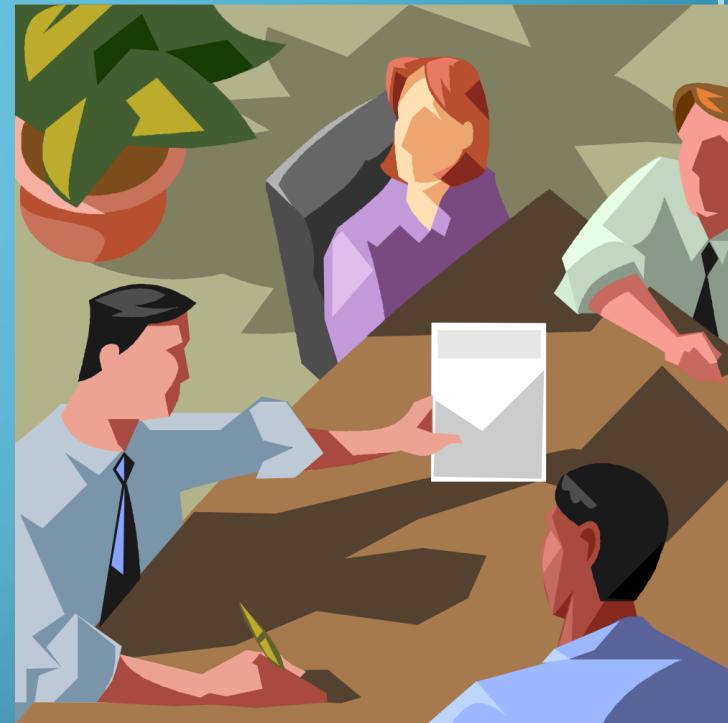


# How to develop a tsunami-prepared community?

## Designing a tsunami evacuation map

Hold **small workshop** for community leaders to finalize maps

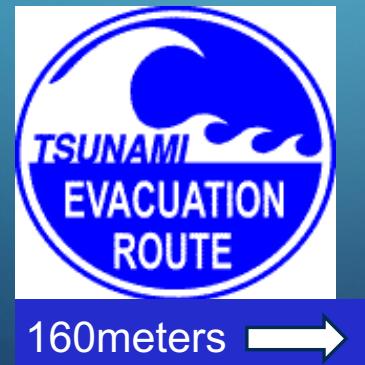
- create working map with the tsunami inundation zone, identified evacuation areas and routes



# How to develop a tsunami-prepared community?

Develop **complete version** of the map

- finalize map out of **inputs from the group workshop**
- should be **simple and easy to read**
  - tsunami hazard zone
  - safe evacuation areas
  - recommended evacuation routes
  - local landmarks



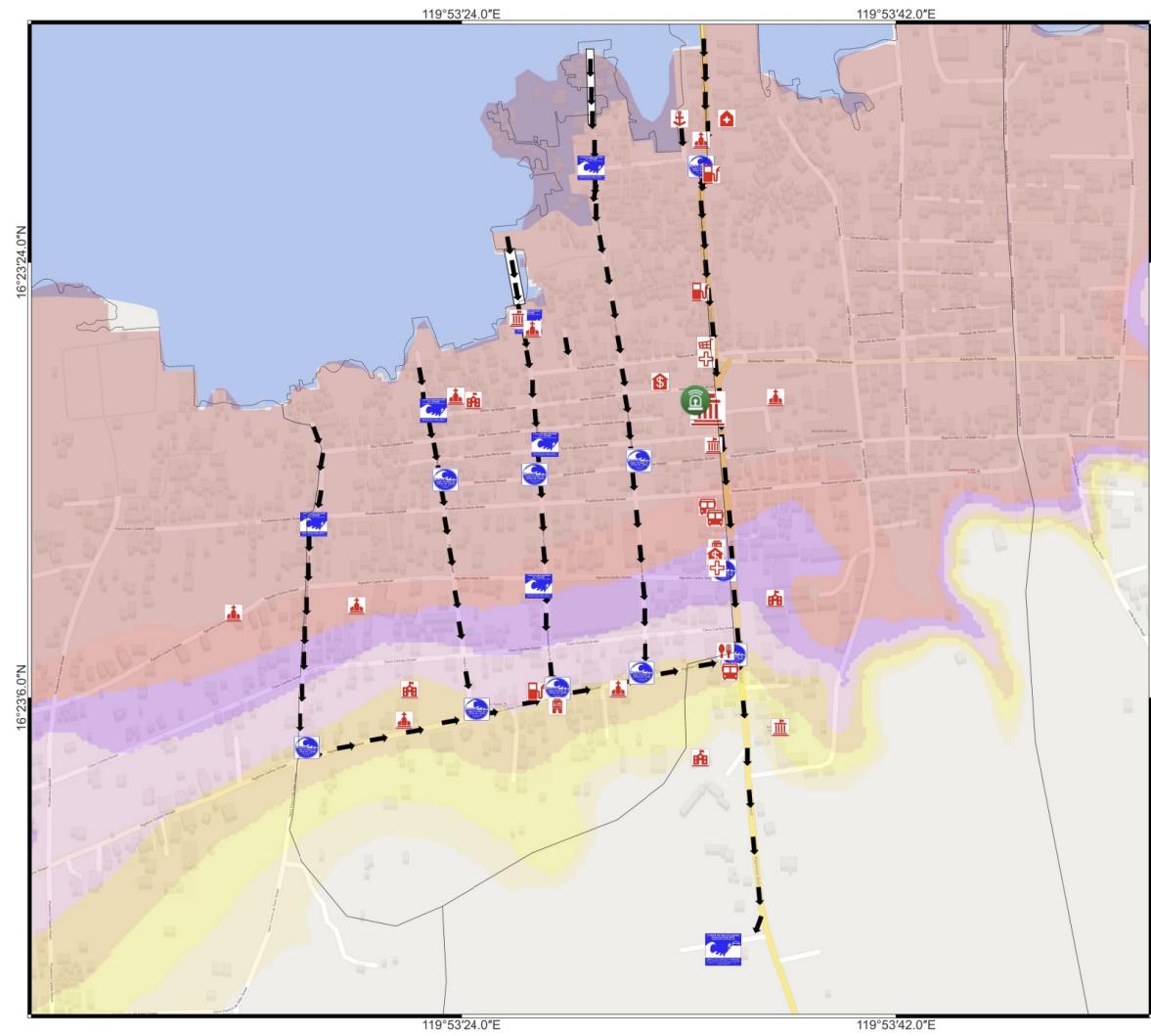
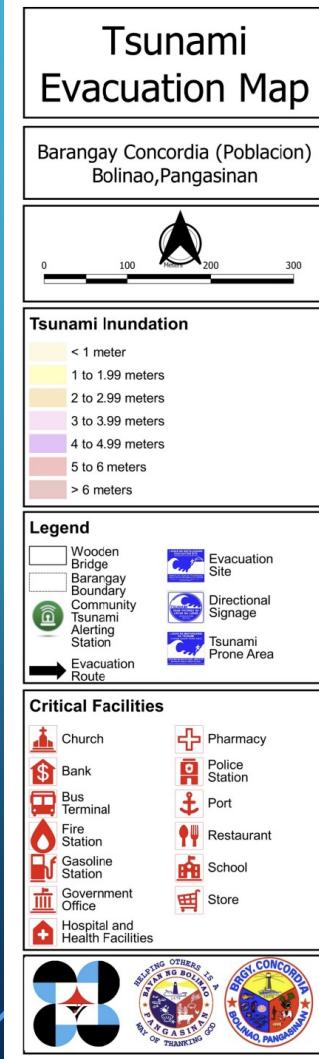
Tsunami prone

Directional

Evacuation area

Tagalog  
Surigaonon  
Boholanon  
Waray

# Tsunami evacuation map – shows areas identified as safe and areas that are within the hazard zone





# 3R Tsunami Ready Community

## Risk Reduction and Resilience

Brgy. Concordia, Bolinao, Pangasinan



# Consultations, Lectures, IECs, Workshops



Lecture about TeWS



TeWS visualization



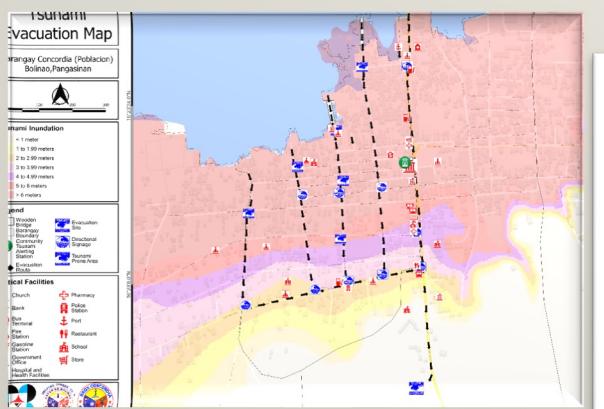
Workshop



# Evacuation Map



# Tsunami Exercise/Drill





# Information Campaign

# 3R Tsunami Ready Community

## Risk Reduction and Resilience

Calatagan, Batangas



# Coordination Meeting for the 3R Campaign project – Tsunami Ready Community

**OCD IV-A**



**PSTO Batangas**



**DOST IV-A**



**PDRRMO Batangas**



**MDRRMO Calatagan**



# 3R Campaign Project conducted a community-level survey in all coastal barangays of Calatagan, Batangas



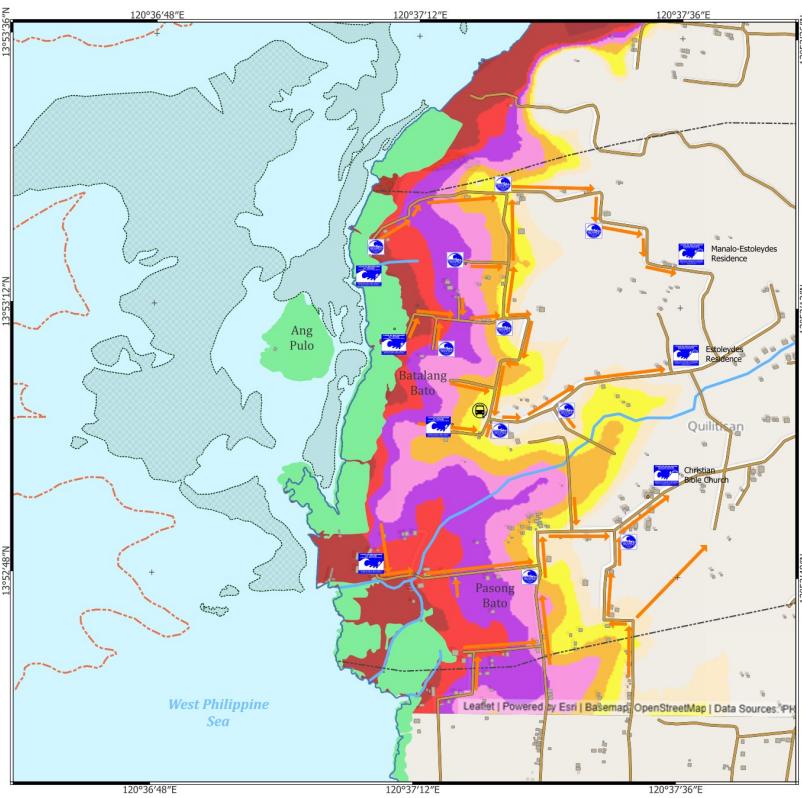
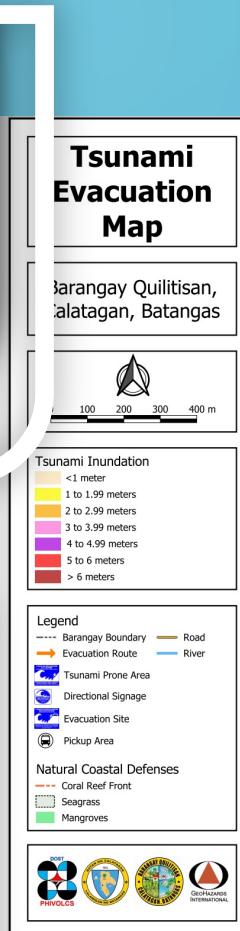
# Workshops: Evacuation Planning



# Validation of evacuation maps and signage locations



# Brgy Quilitisan



# Workshop

## Challenges

Evacuation Area

## Possible solutions

Routes