



UNESCO/IOC – NOAA ITIC Training Program in Hawaii (ITP-Hawaii)  
TSUNAMI EARLY WARNING SYSTEMS  
AND THE PACIFIC TSUNAMI WARNING CENTER (PTWC) ENHANCED PRODUCTS  
TSUNAMI EVACUATION PLANNING AND UNESCO IOC TSUNAMI READY PROGRAMME  
7-18 August 2023, Honolulu, Hawaii USA

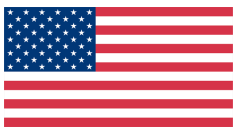
# 10.1 Week 2 activities

## Using QGIS to create Evacuation Map

---

Carolina Hincapie-Cardenas      Desiree Bayouth-Garcia

UNESCO/IOC – NOAA International Tsunami Information Center

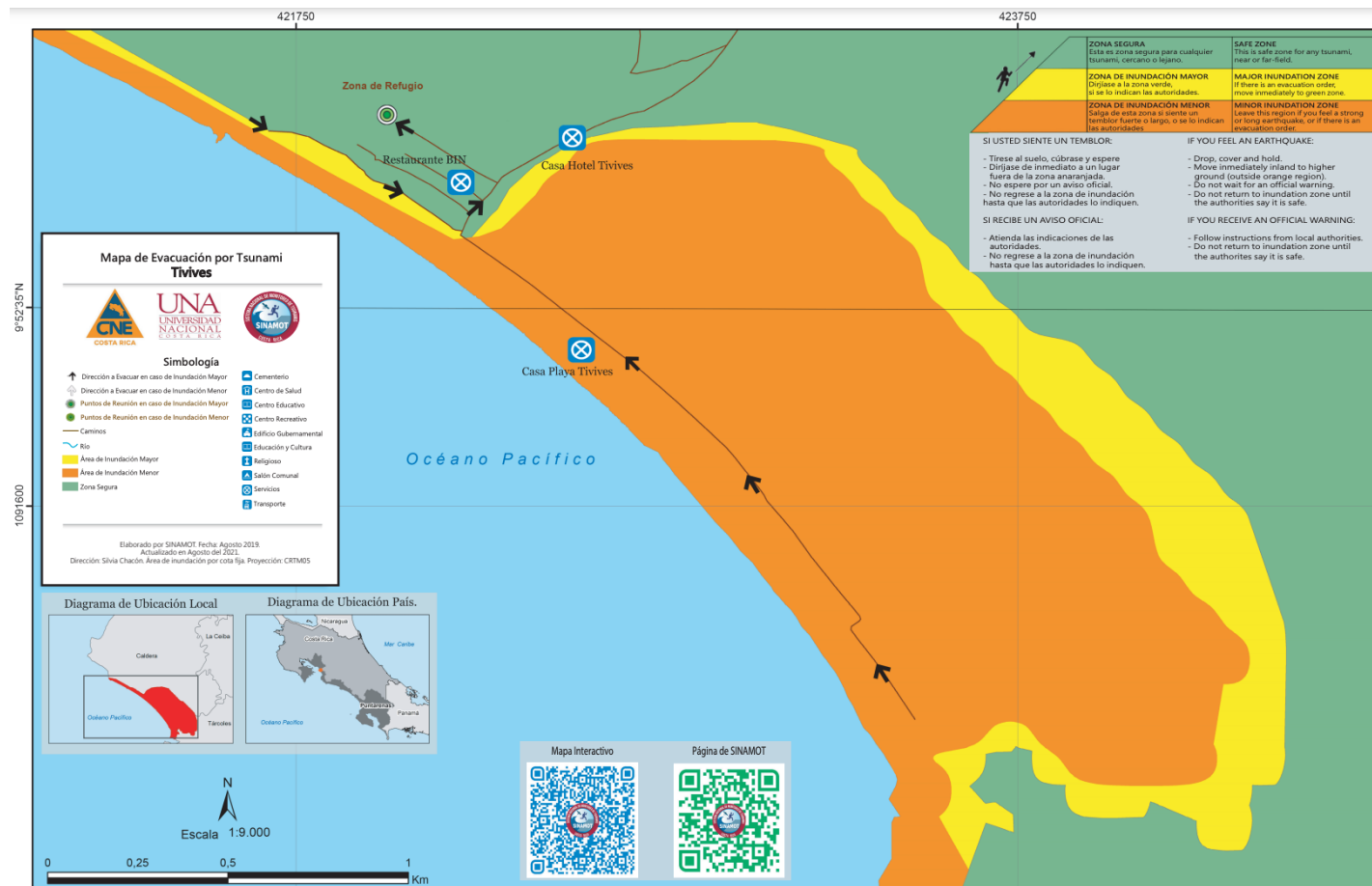


# END-TO-END TSUNAMI WARNING CHAIN

- Once a tsunami forecast is known and a warning issued, communities must know what to do and where to go when a tsunami is imminent.
- The **‘what to do’** will be to evacuate to a safer place, and the **‘where to go’** is answered using a tsunami evacuation map.
- The tsunami inundation map is used as a base to produce the tsunami evacuation map.



Final product with all information and features needed!



---

# Steps for Evacuation Mapping



## What to Learn and Understand

- (1) How to use a tsunami inundation map to create an evacuation map
- (2) The information to be included on a tsunami evacuation map
- (3) Understand and use best practices to determine evacuation zones, sites or assembly areas, routes, and signage
- (4) Understand how to engage the local community to develop a community-owned tsunami evacuation map and response procedures, and enhance tsunami awareness.

# QGIS

---

- ❑ **QGIS = Quantum Geographical Information System**
- ❑ **Open Source – download from Internet**
- ❑ **Viewing, analysis and management of GIS data.**
- ❑ **Design maps**
- ❑ **Print in different formats.**

# System Hardware Requirements

---

	<b>Minimum</b>	<b>Recommended</b>
Processor - CPU	Core i3 2.7Ghz	Core i7 3.5Ghz
Memory RAM	2Gb	8Gb or more
Hard Disk	500 Gb SATA	SSD de 128Gb or 500Gb SATA
Graphic card	1Gb RAM	2Gb RAM (NVIDIA Geforce)
Operating System	Windows 7-10 Mac Linux (Various) Android	Windows 7-10 Mac Linux (Various) Android

# To Start!

---



[pollEv.com/carolinahincapie719](https://www.pollEv.com/carolinahincapie719)

# For the 'paper and pencil' Activity

---

- If you are able to meet with your activity partners, walk around the Ala Moana area to be aware of your surrounds (also to enjoy new company and expand your networking).
- Check the following links to be familiar with the info provided:
  - <https://tsunami.coast.noaa.gov/>
  - <https://www.honolulu.gov/site-dem-sitearticles/48178-tsunami-sign-project.html>
  - <https://youtu.be/0Ho0BzF2eCY>



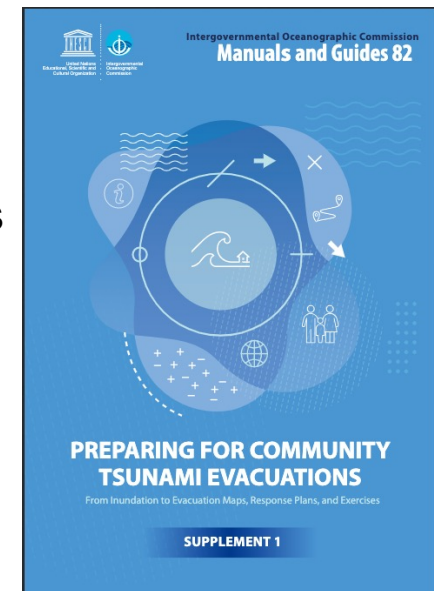
# For the 'paper and pencil' Activity

- Have on hand the MG 82, Supplement 1 and mark the pages as follow:

Module 2:  
Developing  
Tsunami  
Evacuation  
Maps  
(Pag 25)



Module 2:  
Developing  
Tsunami  
Evacuation Maps  
(Pag 37)  
TIP: specific info  
for Honolulu  
(Page 39 - 2.2.1)



- Supplement 2 will be provided on Monday afternoon.

# Area of interest – ‘paper and pencil Activity’

---



# Area of interest – ‘paper and pencil Activity’



# QGIS Installation

www.qgis.org

The screenshot shows the QGIS website homepage. The browser address bar displays 'qgis.org/en/site/'. The navigation menu includes 'DISCOVER QGIS', 'FOR USERS', 'GET INVOLVED', and 'DOCUMENTATION'. A search bar is present. The main heading reads 'QGIS A Free and Open Source Geographic Information System'. A large banner features a green-tinted map background with the text 'QGIS 3.32 Lima has been released!'. Below the banner, it states 'New release: 3.32!' and provides links for 'installer or packages' and 'changelog'. At the bottom, there are two buttons: 'Download Now' (highlighted with a red border) and 'Support QGIS'. A small table in the top right corner shows release schedules.

Time until freeze	2023-09-15 12:00:00 UTC	35d 15h 1m
Time until packaging	2023-10-27 12:00:00 UTC	77d 15h 1m
Time until next point release	2023-08-18 12:00:00 UTC	7d 15h 1m

# QGIS Installation

## Download QGIS for your platform

Binary packages (installers) are available from this page.

The current version is QGIS 3.32.1 'Lima' and was released on 21.07.2023.

The long-term repositories currently offer QGIS 3.28.9 'Firenze'.

QGIS is available on Windows, macOS, Linux, Android and iOS.

INSTALLATION DOWNLOADS

ALL RELEASES

SOURCES

### Download for Windows



Download QGIS 3.32

[Looking for the most stable version? Get QGIS 3.28 LTR](#)



OSGeo4W Network Installer

The OSGeo4W installer is recommended for regular users or organization deployments. *It allows to have several QGIS versions in one place, and to keep each component up-to-date individually without having to download*

Since QGIS 3.20 we only ship 64-bit Windows executables.

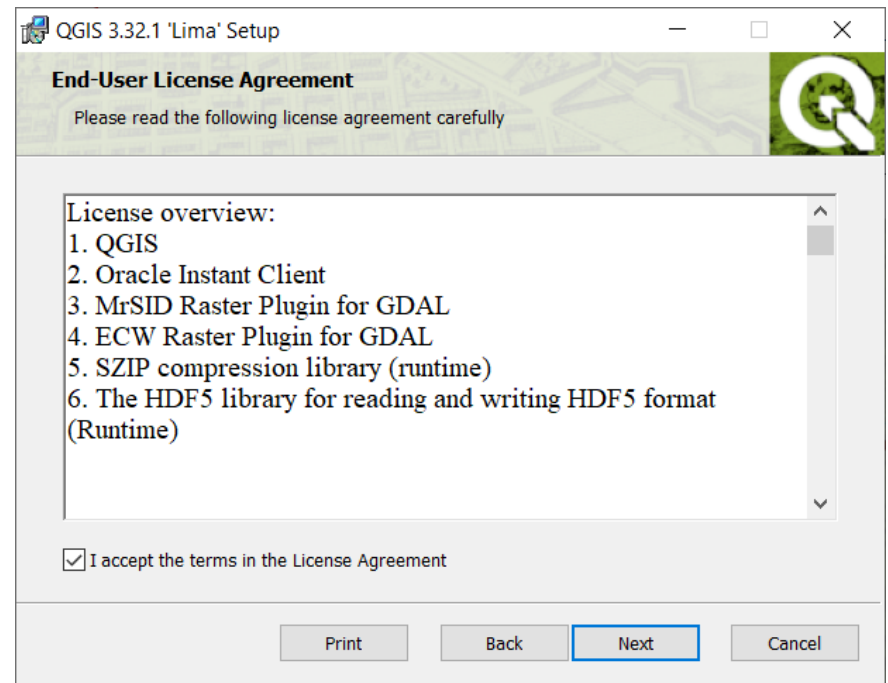
### Recent Downloads



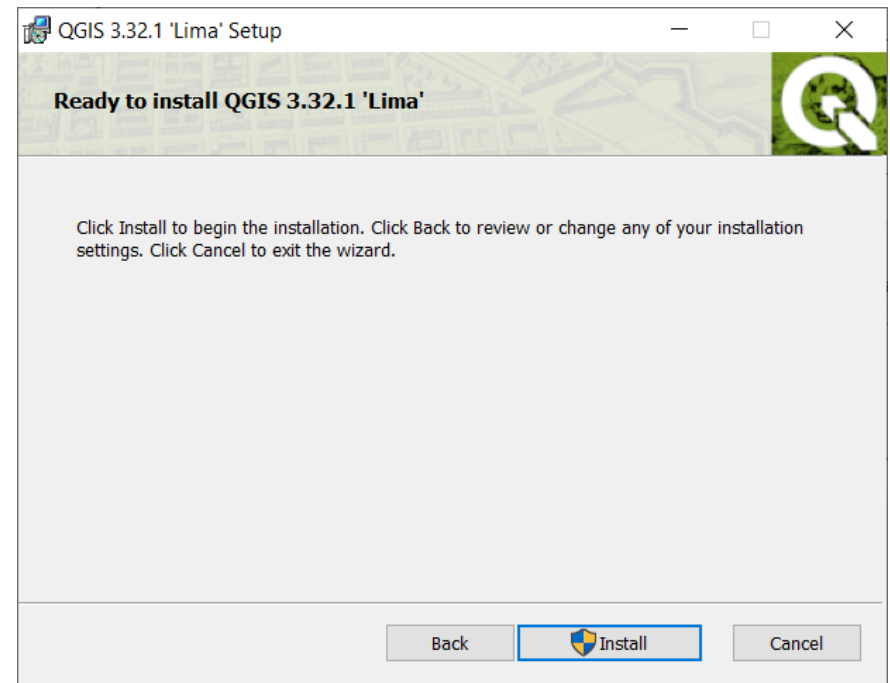
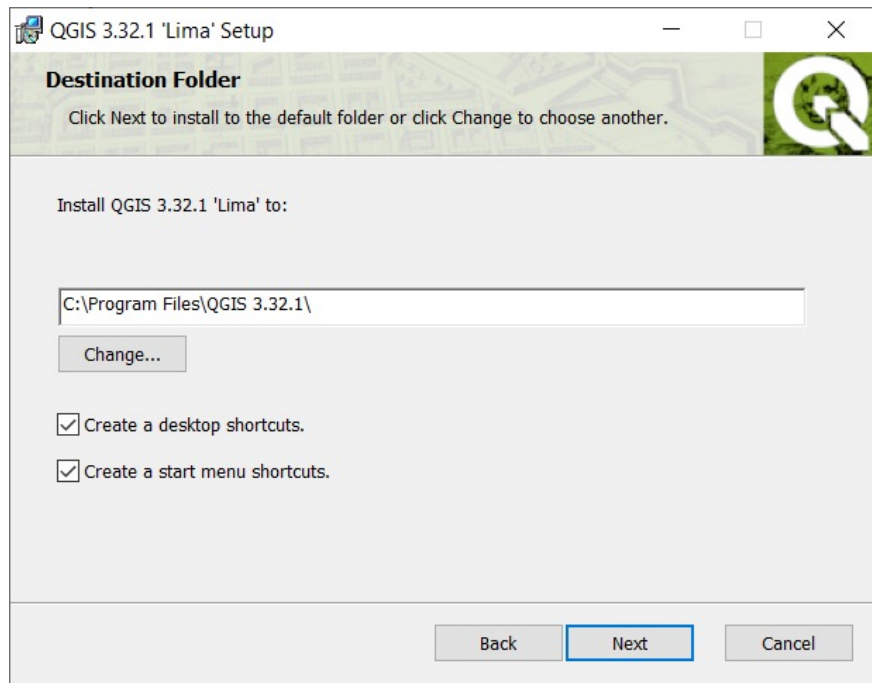
QGIS-OSGeo4W-3.32.1-1.msi

↓ 0.0/1.1 GB • 27 minutes left

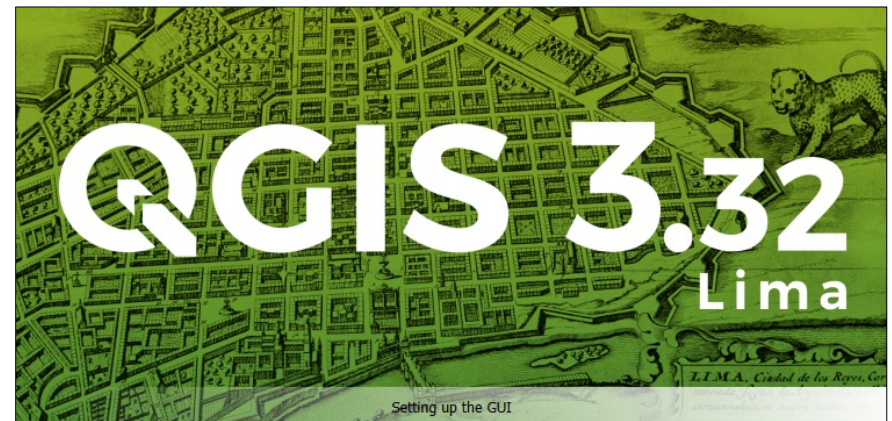
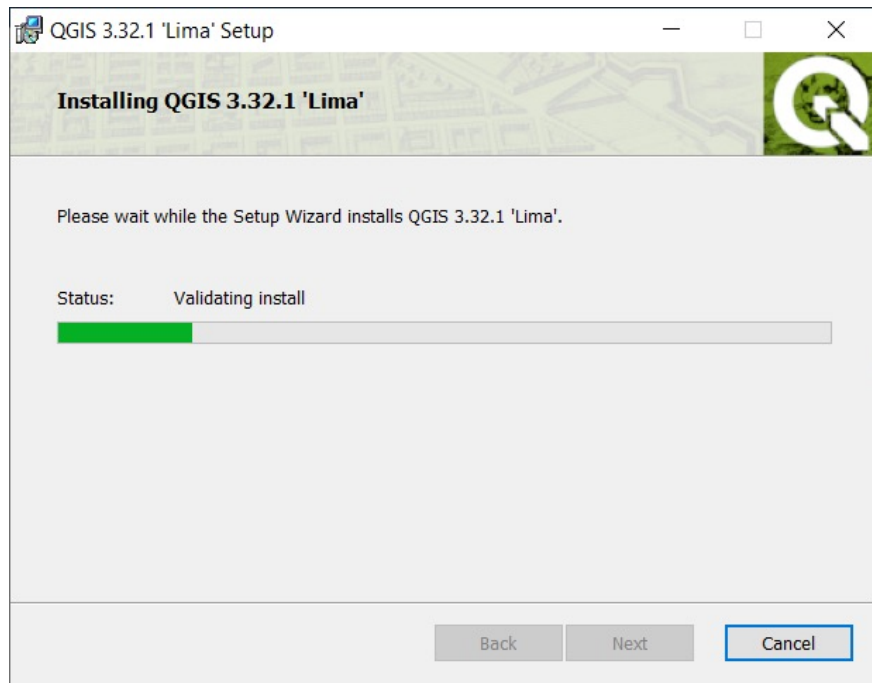
# QGIS Installation



# QGIS Installation



# QGIS Installation





# Work groups – ‘paper and pencil Activity’

---

## ■ GROUP 1

- Deslone Lanbong
- Malia Pisi
- Rickiuo Robon
- Johnny Musrasrik
- Kenson Stoddard
- Lining Sun

## ■ Scenario

- Local event while you are stuck in traffic when back to the hotel (Ala Moana Boulevard and Queen Street)

## ■ GROUP 2

- Junior Cruise
- Litiana Bainimarama
- Heileen-Annette Togiamana
- Lu’isa Taunga
- Lyndon David-Pelle
- Frank Bale

## ■ Scenario

- Local event while you are at the Makai Food Court (Ala Moana Center)

# Work groups – ‘paper and pencil Activity’

---

## ■ GROUP 3

- Miriam Kataunati
- Sitamipa Paea
- Soane Laitia Fifita
- Glen Perrin
- Dennis Marcelle

## ■ Scenario

- Local event while you are checking-in to the hotel (Ala Moana Hotel)

## ■ GROUP 4

- Aisea Fungavai
- Limoni Mativa
- Erouscilla Joseph
- Daniel Epprecht
- Miguel Abitang
- Truyen Pham

## ■ Scenario

- Local event while you are asleep in your hotel room in the early morning (Ala Moana Hotel, floor 5)

# Work groups – ‘paper and pencil Activity’

---

## ■ GROUP 5

- Rocky Neveserveth
- Saula Mule
- Gerardo Rodriguez
- Shaila Barzola
- Simon Boxall
- Ariffin Munirah

## ■ Scenario

- Local event while you are having dinner at Red Lobster (Ala Moana Boulevard and Hobron Lane)

## ■ GROUP 6

- Sharl Noboa
- Tauempa Tutakiao
- Nathan Tisam
- Eumni Kim
- Kristel Espinoza Hernandez
- Racquel Davis

## ■ Scenario

- Local event while you are enjoying your day at the beach next to the Hilton Lagoon



UNESCO/IOC – NOAA ITIC Training Program in Hawaii (ITP-Hawaii)  
TSUNAMI EARLY WARNING SYSTEMS  
AND THE PACIFIC TSUNAMI WARNING CENTER (PTWC) ENHANCED PRODUCTS  
TSUNAMI EVACUATION PLANNING AND UNESCO IOC TSUNAMI READY PROGRAMME  
7-18 August 2023, Honolulu, Hawaii USA

# Thank You

---

Carolina Hincapie-Cardenas      Desiree Bayouth-Garcia

UNESCO/IOC – NOAA International Tsunami Information Center

