

# Tsunami Information Guide

Whakatāne District

**Developed by Whakatāne District Council** October 2023





All of New Zealand's coastline is at risk of tsunami. **Knowing the warning signs** and the right action to take can help save lives. Find out what to do before, during and after a tsunami in the Whakatāne District.

# Remember: **Long or Strong: Get Gone**

If an earthquake is Long or Strong: Get Gone.

Move immediately to the nearest high ground or as far inland as possible. Don't wait for an official tsunami warning.





# What is a tsunami?

A tsunami is a series of surges generated when a large volume of ocean water is rapidly displaced. A tsunami surge can occur following a large earthquake. These are caused by uplifting or slipping of the seabed. There are three types of tsunami that pose a threat to coastal communities along the Bay of Plenty coastline.

#### **Local Source**

Local source tsunami occur anywhere from one minute to one hour after an earthquake has occurred. They can be triggered by quakes in fault lines close to the shore of New Zealand, or from nearby areas outside of the country, such as the southern part of the Kermadec Trench.

### **Regional Source**

Generally, regional source tsunami are generated along the Kermadec/Tongan trench (which includes earthquakes close to the Pacific Islands), which lies to the northeast of New Zealand, Regional source tsunami have a travel time of between one and three hours. depending on how close the source is to New 7ealand

### **Distant Source**

Distant source tsunami are generated by earthquakes in other areas of the Pacific, such as Japan, South America or North America. Due to the distance that waves have to travel to reach our shores we have a much longer time frame in which to respond appropriately.

# Get ready before a tsunami

- Work out what supplies you may need and make a plan together.
- Know your tsunami evacuation zones. Make sure you know where to go, whether you are at home, at work or on holiday.
- Understand the different types of warnings: Natural, Official and Unofficial.
- Regularly practice your tsunami evacuation by signing up for New Zealand ShakeOut, our national earthquake drill and tsunami hīkoi.

### Tsunami evacuation zones in the Whakatāne District

Pages 7 - 15 of this guide have tsunami evacuation zone maps and local advice for where and how to evacuate. Make sure you know where to go, whether you're at home, at work or out and about.

### Work out what supplies you need

Have grab bags ready for everyone in your family. Each bag should have warm clothes. a bottle of water, snacks, copies of important documents and photo ID. Remember any medications you might need and keep your first aid kit, torch, radio and batteries somewhere you can grab them in a hurry.

In an emergency, you may be stuck at home for three days or more. Figure out what supplies you need and make a plan to work out what you need to get your family/whānau through.

### Make an emergency plan

Make a plan with your family/whānau/ flatmates/friends to get through an emergency. Think about the things you need every day and work out what you would do if vou didn't have them.

If you have accessibility challenges or do not have access to a cellphone capable of receiving Emergency Mobile Alerts (EMA), you should develop a plan with neighbours/family/ whānau/friends for being alerted and being evacuated if necessary.

### Practice your tsunami hīkoi (Tsunami evacuation drill)

Practice your evacuation route or 'tsunami hīkoi'. A tsunami hīkoi is a walk that takes vou along your tsunami evacuation route either inland or towards high ground. Being familiar with your route may save your life.

Practice your evacuation walk to high ground or inland by foot or bicycle.

- Make sure you can follow your route at night and during bad weather.
- Practicing your tsunami evacuation route helps your muscle memory kick in when an event occurs, even in a very stressful situation

### **Kura/school evacuation plan**

Kura/schools all have their own emergency evacuation plans, which they practice and prepare for, including for tsunami where teachers will take students to a planned safe location.

If your children's kura/school is in a tsunami evacuation zone, find out what the kura/school evacuation plan is. During an event. do not travel through tsunami evacuation zones to your children's kura/school.

Parents and guardians need to know, in advance, all emergency procedures, especially the safe locations and family reunification procedures.

Find out where the kura/school's safe location is so you know where your children can be picked up from, after the "all-clear" is given.

# What to do during a tsunami or when a tsunami warning is issued

### **Know the natural warning signs** and take action

For a local source tsunami, which could arrive in minutes, there won't be time for an official warning. It is important to recognise the natural warning signs and act quickly.

If you are near a shore and experience any of the following, take action. Do not wait for official warnings.



Feel a strong earthquake that makes it hard to stand or a long earthquake that lasts more than a minute



See a sudden rise or fall in sea level



Hear loud or unusual noises from the sea

Drop, Cover and Hold during the shaking. As soon as the shaking stops, move immediately to the nearest high ground, out of all tsunami evacuation zones, or as far inland as you can.

#### Remember: Long or Strong: Get Gone.

Walk, run or cycle if at all possible to reduce the chances of getting stuck in traffic congestion.

Take your animals with you only if it will not delay you. Do not spend time looking for them and if you are not at home, do not return to get them.

While evacuating, avoid hazards caused by earthquake damage, especially fallen power lines.

Do not return until an official all-clear message is given by Civil Defence.

### Official warnings

When tsunami travel across the ocean from far away, we have more time to warn people what to do.

The National Emergency Management Agency (NEMA) is responsible for issuing tsunami warnings in New Zealand.

Tsunami warnings are published on www.civildefence.govt.nz and on the Civil Defence social media accounts (Twitter. Instagram and Facebook). Tsunami warnings will also be broadcast on radio and television. An Emergency Mobile Alert may also be issued if there is a threat of flooding of land areas.

You can visit www.bopcivildefence.govt.nz or facebook.com/BOPCivilDefence for up-todate emergency management information from Bay of Plenty Civil Defence Emergency Management.

Local radio station, 1XX has an agreement with NEMA to broadcast official tsunami warning information. You can listen to 1XX (90.5FM, 92.9FM or 1242AM) for official warnings and updates.



### Keep up to date during and after a tsunami:

### Follow these Facebook pages:

**f** bopcivildefence

# MetService

WhakataneDistrictCouncil

Listen to local radio on these frequencies:

1XX: 90.5 FM Sun FM: 106.5 FM Tumeke FM: 96.9 FM **RNZ National 101.7FM** Radio Live 92.1FM.

Car radios can be used if there is no power.



### **Emergency Mobile Alerts**

Emergency Mobile Alerts are messages about emergencies sent by authorised emergency agencies to capable mobile phones. The alerts are designed to keep people safe and are broadcast to all capable phones from targeted cell towers.

The alerts are targeted to areas affected by serious hazards and will only be sent when there is a serious threat to life, health or property, and, in some cases, for test purposes.

Immediately follow the advice of any emergency warning. You may receive warnings from one or several sources. Respond to the first source. Do not wait for more messages before you act.



### **Unofficial or informal warnings**

You may receive warnings from friends, other members of the public, international media and from the internet. Verify the warning only if you can do so quickly. If official warnings are available, trust their message over informal warnings.

# What to do after a tsunami



Only return home once you are told it is safe to do so.



Keep listening to the radio or following Bay of Plenty Civil Defence Emergency Management online for information and instructions



If there was an earthquake, expect aftershocks. Aftershocks may generate another tsunami. Be prepared to evacuate.



Stay away from coastal water, tidal estuaries, rivers and streams for at least 24 hours after any tsunami or tsunami warning, as even small waves create dangerous currents.



Avoid areas impacted by the tsunami. Your presence might hamper rescue and other emergency operations and put you at further risk from the residual effects of tsunami flooding, such as contaminated water, crumbled roads, or other hazards.

# Tsunami evacuation zone maps and information

### Remember: if an earthquake is Long or Strong: Get Gone.

Move immediately to the nearest high ground or as far inland as possible. Don't wait for an official tsunami warning.

### Scan to view if vou're in the BLUE



#### **BLUE** zones **Evacuation zones are now BLUE**

Bay of Plenty tsunami evacuation zones are now **BLUE** to make them simpler and easier to read.

**BLUE means Go:** in a tsunami warning, get out of the BLUE.

# Understanding the BLUE evacuation zone

All those located in the BLUE tsunami evacuation zone must evacuate immediately in a Long or Strong earthquake, or if an official warning asks you to evacuate immediately.

It is likely that it may take some time to estimate inundation heights for a regional source tsunami so you should prepare to evacuate if you live, work or play in the BLUE tsunami evacuation zone.

### In a tsunami, get out of the BLUE.

It's important that you know where to go to be out of the BLUE tsunami evacuation zone. Have a plan to stay with family/whānau or friends who live well away from the BLUE tsunami evacuation zone or prepare to go to a designated Civil Defence Centre - listen to the radio for details about the location of the Civil Defence Centre(s).

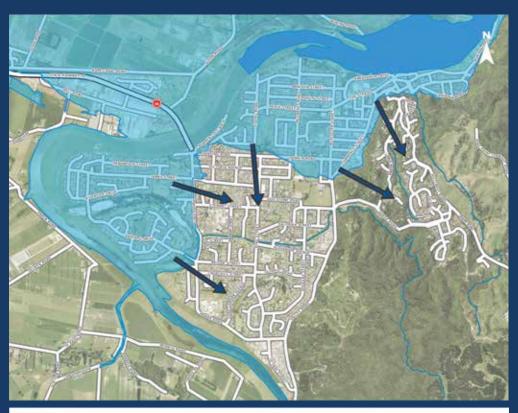
 If you are within walking or cycling distance (1-2km) of a blue arrow you should not use a vehicle to reach the evacuation point on the map, unless absolutely necessary. This will

- help to keep roads free for those who need to use vehicles to reach safety.
- Follow any directions given by the Emergency Services or Civil Defence staff.
- If you are on the beach, move to higher ground or go inland as far as possible.
- If you don't have time to travel to higher ground, but are in a multi-story building, go to an upper level.
- Where possible, use the route through the coastal evacuation area closest to your home, as indicated on the map. Only drive if higher ground is not easily accessible by foot or bicycle. Please do not stop along the route, as this may cause blockages and reduce the ability of other vehicles to reach safety. This will help to get people out of the area more efficiently and reduce possible road congestion.

## Do not return to your home until Civil Defence announce the emergency is over and it is safe to go back.

The first tsunami surge is often not the largest. There may be more surges spaced many minutes apart and continue to arrive for many hours.

# **TSUNAMI EVACUATION ZONE:** Whakatāne





Tsunami Evacuation



Tsunami Safe Area beyond the Tsunami



Tsunami Safe Locations are noskible quation points



Scale: 1:7,500

# **MPORTAN**

Parts of this area are at risk of tsunami

A LONG or STRONG earthquake could be your only warning.

### **LONG or STRONG: GET GONE**

#### WHAT TO DO?

- 1 Leave immediately, don't wait for an official warning
- Walk or bike quickly if possible. Only drive if you
- Move quickly to higher ground, or as far from the coastline as possible.

#### STAY OUT OF THE TSUNAMI EVACUATION ZONE AND LOW-LYING AREAS UNTIL YOU GET THE ALL CLEAR FROM OFFICIAL CHANNELS

For more information visit:

### www.bopcivildefence.govt.nz

Follow Bay of Plenty Civil Defence on social media for updates.



twitter.com/bopcivildefence





# TSUNAMI EVACUATION ZONE: Thornton





Tsunami Evacuation Zone



Tsunami Safe Area is anywhere beyond the Tsunami Evacuation zone



Tsunami Safe Locations are possible vacuation points



Waterway

Scale: 1:7,500

# **IMPORTANT**

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# **TSUNAMI EVACUATION ZONE:** Coastlands





Tsunami Evacuation



Tsunami Safe Area beyond the Tisurami Evacuation zone



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Waterwa

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# **TSUNAMI EVACUATION ZONE:** Matatā





Tsunami Evacuation



Tsunami Safe Area is anywhere beyond the Tsunami Evacuation zone



Tsunami Safe Locations are noskible souation points



Scale: 1:7,500

# **IMPORTAN**

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- facebook.com/bopcivildefence
- twitter.com/bopcivildefence
- Listen to the radio





# **TSUNAMI EVACUATION ZONE: Pikowai**





Tsunami Evacuation



Tsunami Safe Area is anywhere beyond the Tsunam Évacuation zone



Locations are possible ouation points



Waterway

Scale: 1:7,500

# **IMPORTAN**

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# TSUNAMI EVACUATION ZONE: West End Ohope





Tsunami Evacuation Zone



Tsunami Safe Area is anywhere beyond the Tsunami Evacuation zone



Tsunami Safe Locations are possible vacuation points



Waterway

Scale: 1:7,500

# **IMPORTANT**

Parts of this area are at risk of tsunami

A **LONG** or **STRONG** earthquake could be your only warning.

### **LONG or STRONG: GET GONE**

#### WHAT TO DO?

- Leave immediately, don't wait for an official warning
- Walk or bike quickly if possible. Only drive if you have to.
- Move quickly to higher ground, or as far from the coastline as possible.

#### STAY OUT OF THE TSUNAMI EVACUATION ZONE AND LOW-LYING AREAS UNTIL YOU GET THE ALL CLEAR FROM OFFICIAL CHANNELS

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# **TSUNAMI EVACUATION ZONE:** Ōhope





Tsunami Evacuation



Tsunami Safe Area beyond the Tsunami Evacuation zone



Tsunami Safe Locations are noskible ouation points



Scale: 1:7,500

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# TSUNAMI EVACUATION ZONE: Öhope Mid





Tsunami Evacuation Zone



Tsunami Safe Area is anywhere beyond the Tsunami Evacuation zone



Tsunami Safe Locations are possible vacuation points



Waterway

Scale: 1:7,500

# IMPORTANT

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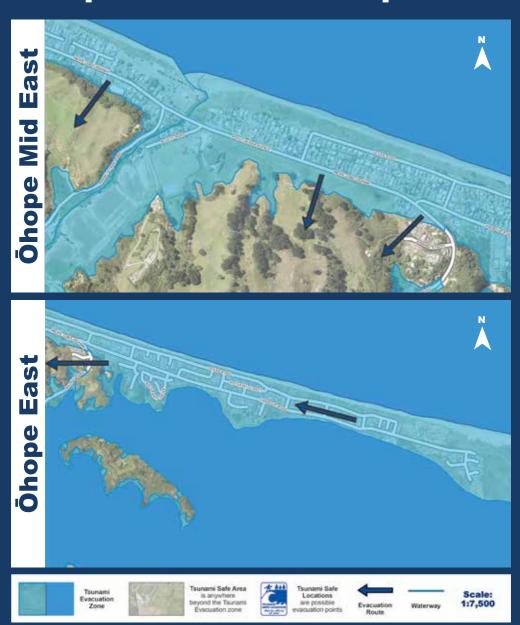
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# **TSUNAMI EVACUATION ZONE: Öhope Mid East & Öhope East**



# **Get prepared** Me takatū

# How to get ready:

1 Get your family ready.

Get your family together to develop and practice your household emergency plan. Assemble and maintain an emergency survival kit. Have a grab bag in case you have to leave in a hurry. Know where your local evacuation assembly points are.

2 Remember your pets.

If you have pets or livestock, include them in your emergency planning.

3 Keep your car ready.

Plan ahead for what you will do if you are in your car when a disaster strikes. In some emergencies you may be stranded in your vehicle for some time. A flood or major traffic accident could make it impossible to proceed. Consider having essential emergency survival items in your car and keep enough fuel in your car.

Assist vulnerable people in your family or community.

If you, a family member or neighbour has a disability or any special requirement that may affect their ability to cope in a disaster, develop a support plan. For more information visit bopcivildefence.govt.nz

## Your grab bag:

In some emergencies you may need to evacuate in a hurry. Everyone should have a grab bag in an easily accessible place at home and at work, which includes:

- · Torch and radio with spare batteries.
- Portable cellphone charger or additional battery pack.
- Any special needs such as hearing aids, batteries, glasses or mobility needs.
- Water and easy-to-carry food rations for three days or more.
- · Supplies of special dietary needs.
- First aid kit and personal medicines.
- Essential items for infants/babies eg formula and food, nappies and a favourite toy or book.
- · Face and dust masks.
- Change of clothes wind/waterproof clothing and strong outdoor footwear.
- Toiletries towel, soap, toothbrush, sanitary items, toilet paper, wipes.
- Blankets or sleeping bags.
- · Pet supplies.
- Important documents and photo ID: Birth and Marriage certificates, driver licence, passports; insurance policies, mortgage info; and precious family photos.



Visit *getready.govt.nz* for further information about hazards and how to be prepared for an emergency.

#### **Emergency Management Bay of Plenty**

- W bopcivildefence.govt.nz
- facebook.com/bopcivildefence
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#### Whakatāne District Council

- whakatane.govt.nz
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