

Earthquake long or strong? Get gone!



Walk or bike, don't drive



Have a grab bag ready



Know your safe meeting place



There are no civil defence sirens

# ARE YOU PREPARED FOR A TSUNAMI?

Your property could be affected if a tsunami hit the Kāpiti Coast

#### Inside this booklet you'll find tips on:

- the natural warning signs of tsunami
- · how to plan your route to safety
- · getting better prepared for an emergency
- · staying informed during and after a disaster
- learning new skills to help you help others



# Make sure you're tsunami-ready

Your home is one of just over 8000 properties in Kāpiti Coast tsunami evacuation zones. If an earthquake happens close to Kāpiti, a tsunami could arrive in minutes.

It's important to spend time now making sure all members of your family know the warning signs of a tsunami and could quickly evacuate to safe ground. We know from tsunami overseas that planning and being prepared saves lives.

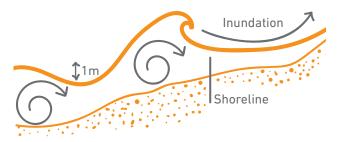
#### What is a tsunami?

Tsunami are long, deep, fast travelling ocean waves caused by earthquakes, landslides or volcanic eruptions beneath or near the ocean. They can be spread over a 12 hour period arriving up to an hour apart. Tsunami travel much further inland than ordinary coastal waves and may also cause strong currents and fast rising tides.

#### Normal waves



#### Tsunami waves



1 When to evacuate – know the signs:



A big earthquake that is STRONG enough to knock you off your feet, or lasts LONGER than a minute.



Strange ocean behaviour: loud or strange noises, sudden rise or fall in sea level or the ocean drawing away from the shore.

Don't wait to be told. Evacuate immediately.

# Tsunami in Kāpiti: what's our risk?

With the coast running the length of our district, we can't afford to be complacent about the risk of tsunami. There's evidence of previous tsunami reaching Kāpiti, including waves created by the 1855 Wairarapa earthquake.

#### 2 Where to evacuate:



Head inland beyond the evacuation zone, keeping an eye out for any useful areas of high ground as you go.



How to evacuate:

Walk or bike
Don't take your car. Roads out
of the tsunami evacuation zones
could be damaged and will
block quickly.



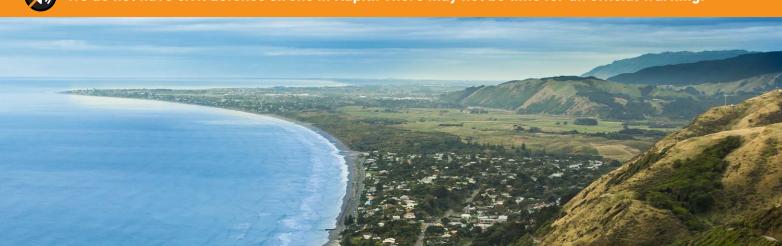
Know your meeting place Head to friends or family who live outside the evacuation zones or to safe assembly areas marked on the maps (pages 9–14). Practise the route with members of your household.



Have a grab bag of essential items prepared for fast evacuations.



We do not have civil defence sirens in Kāpiti. There may not be time for an official warning.



The main risk of tsunami for the Kāpiti Coast would be a large earthquake on the Hikurangi subduction zone off the Wairarapa coast. Cook Strait is an open corridor for waves and they could arrive quickly. Kāpiti Island won't act as a barrier and inlets and river areas would also be at risk.

We also have several local fault lines capable of causing tsunami under the sea off the Kāpiti Coast. We won't be able to tell which fault has ruptured until we have information from hazard experts, so it's important to evacuate the zone as quickly as possible after a long and strong earthquake.

Tsunami could also be generated from elsewhere in the Pacific, such as Chile, Alaska, Japan or the Solomon Islands. The good news is that Kāpiti's location on the west of New Zealand means we would probably be sheltered from their worst impacts – however

strong and unusual currents would still occur and advice may be issued to avoid the beach and marine areas. For these tsunami there would be time for official warnings.

#### **Evacuating quickly and safely**

The layout of our road network could make evacuating our coastal areas challenging. There are limited roads running inland from the coast and they will clog quickly. It's best to evacuate on foot or by bike. Too many cars blocking the roads could make it difficult for people closest to the coast, and therefore most at risk, to evacuate in time.

In most cases people who live within a tsunami zone could walk inland to safety within 10–15 minutes. Your quickest route might be through your neighbours' properties.

## How prepared are you?



Make a plan with your family that includes what you'll do if you can't get home, who can help you and who might need your help.



**Download a printable**'Household Plan' template:
getready.govt.nz/make-a-plan



#### Test your evacuation path

Practise walking inland beyond the evacuation zone, keeping an eye out for any useful areas of high ground as you go. Your quickest path to safety might be through your neighbours' properties.



Pick a **safe meeting place** and make sure each member of your family knows how to get there.

A friend or family member's house just inland from the yellow tsunami evacuation zone is a good option. It will be more comfortable than a tsunami assembly area.



Agree on ways for **getting in touch** with family members. If you can, use text or online messaging as phone lines can become overloaded quickly.

#### The three types of tsunami





Local tsunami

are generated close by.
A long or strong earthquake may be the only warning you get and a tsunami could arrive in minutes.



1-3hrs

#### **Regional tsunami**

are generated between one and three hours' travel time away (e.g. Pacific Islands).

For **regional** and **distant** source tsunami there may be time for official warnings and evacuations. **Find out more on how to stay informed on the back cover.** 



If you have kids, make sure you know their school or day care centre's emergency plans. Give the school names of three people who could pick the kids up if you can't get there.



If you need extra help to evacuate, make arrangements with neighbours ahead of time.



#### 3+hrs

#### **Distant tsunami**

are generated from a long way away, such as from South America. In most cases we'll have more than 3 hours warning.



#### **Tsunami evacuation zones**

Tsunami evacuation maps (pages 8–14) have three zones: red, orange, and yellow. If there's a long or strong earthquake nearby, your zone doesn't matter – people in all three zones should evacuate immediately without waiting for official warnings.

But knowing your zone is important for tsunami where there is time for official warnings – it's possible that for regional and distant source tsunami some zones won't be evacuated.

The red zone in Kāpiti is the beach and sand dunes. This is the highest risk area and the first place people should evacuate from in any sort of tsunami warning.

The orange zone is the dune area alongside the beach and nearby residential streets. It is likely to be evacuated during official warnings and evacuations.

The yellow zone runs a further 200 to 300 metres inland from the beach and includes low lying areas close to rivers. This area will be impacted by the current worst case scenario. This zone is most at risk from a local source tsunami generated by a long or strong earthquake nearby.

The **tsunami assembly areas** are large open spaces where people can gather but there won't be welfare facilities available. Your local **Community Emergency Hub** (formerly known as Civil Defence Centre) is a place for communities to co-ordinate their own response to helping each other during and after a disaster. Bring your grab bag – there are no stores of food and water at the hubs.

## Getting prepared at home

In an emergency we could be isolated for up to seven days. The most immediate sources of aid will be your community and actions you took to prepare before an event.



Do you have at least 3 litres of water per person, per day for 7 days?



Do you have enough non-perishable food (canned or dried food) to last for 7 days?



Do you have a grab bag?

#### Preparing your grab bag

Everyone should have a packed getaway kit in an easily accessible place at home and at work which includes:

- √ a torch
- ✓ portable radio and spare batteries
- √ first aid kit (and your essential daily medications)
- √ warm clothes
- √ water
- easy-to-carry food rations such as energy bars and dried foods, and
- copies of important documents and photos.



For more information visit: www.wremo.nz/grab-bags





#### Know your neighbours, know your community

Connecting and building a relationship with your neighbours will help you in an emergency.

Work together and know what resources are available so that you can collectively stay safe and as comfortable as possible.

People living on their own, those new to the area, younger folk and migrants might appreciate a friendly hello and some guidance. If you need extra help to evacuate, make arrangements with neighbours ahead of time.

Keep a copy of your neighbours' contact details handy, and add them as contacts in your mobile phone.

#### **Community Emergency Hubs**

Hubs used to be called Civil Defence Centres. It's up to the community to activate and run them. The success of your local hub is wholly dependent on you and your community's willingness to make it work. See hub locations at:



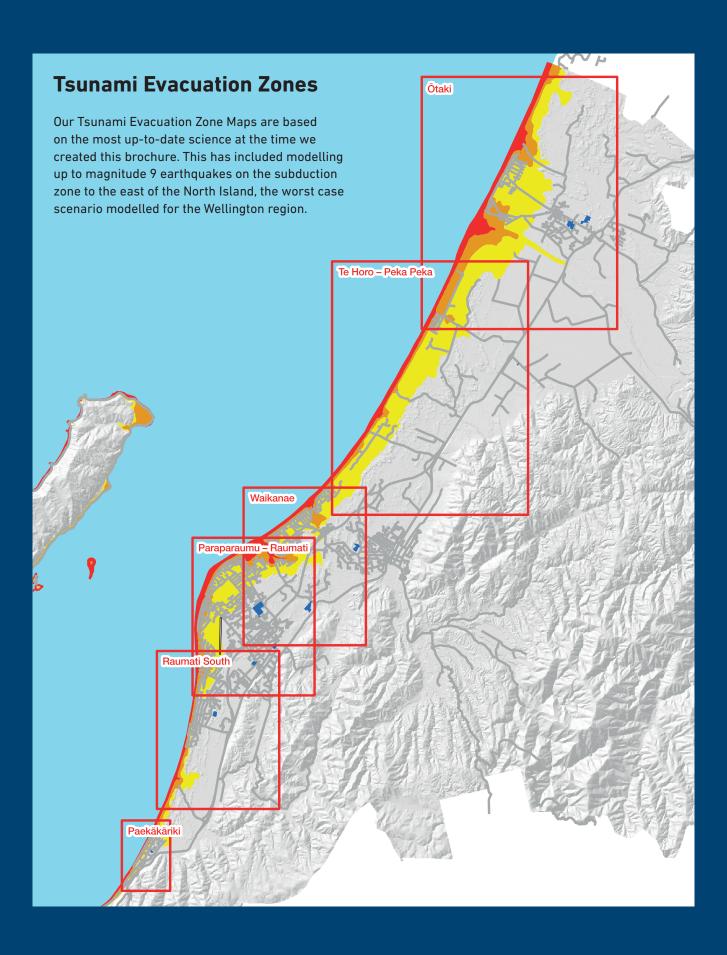
www.wremo.nz/community-emergency-hubs

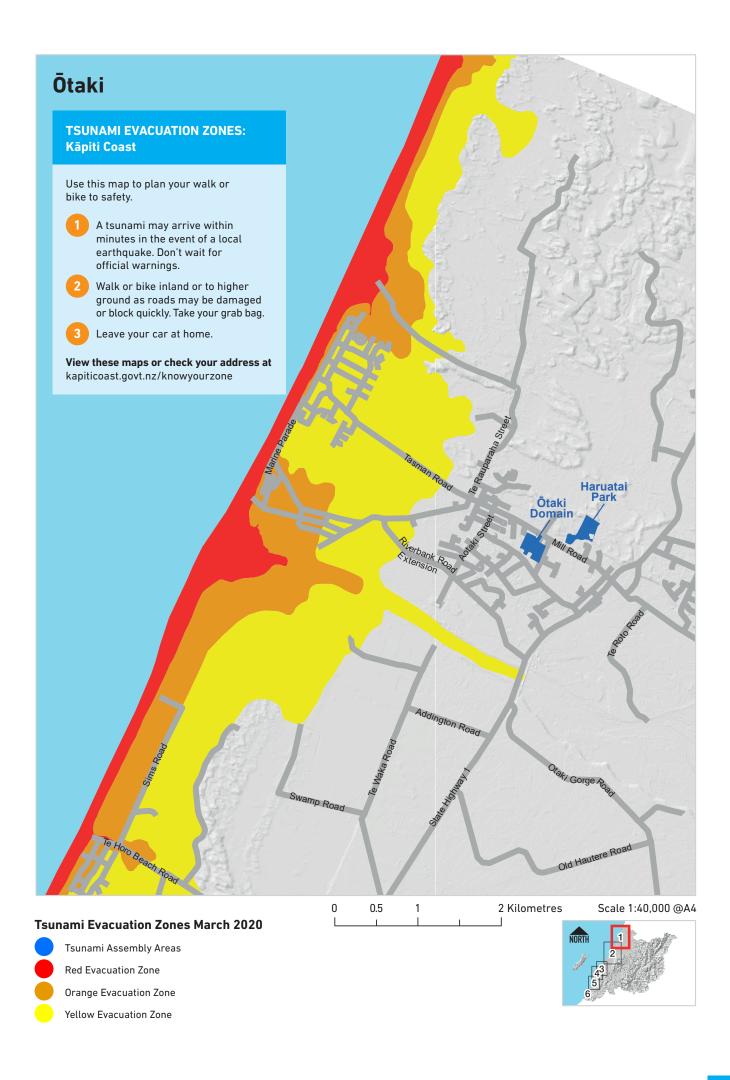
#### **Community Response Plans**

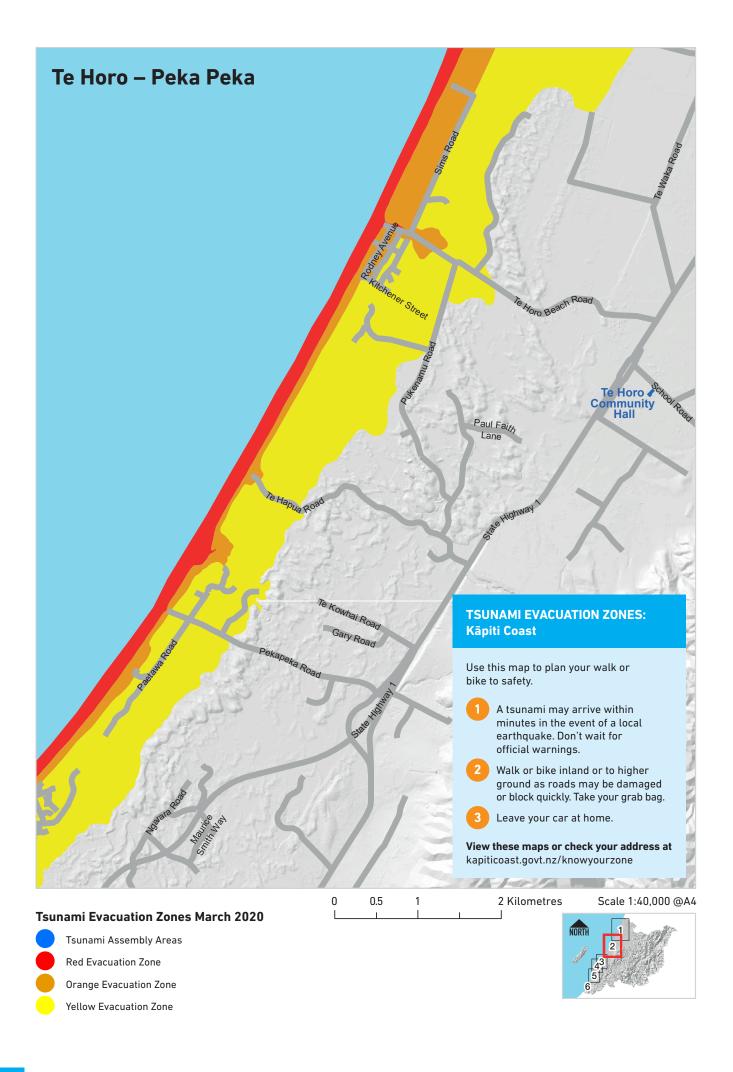
People in your neighbourhood might have already contributed to your local Community Response Plan. You can get involved in developing or reviewing yours. See details at: www.wremo.nz/community-ready

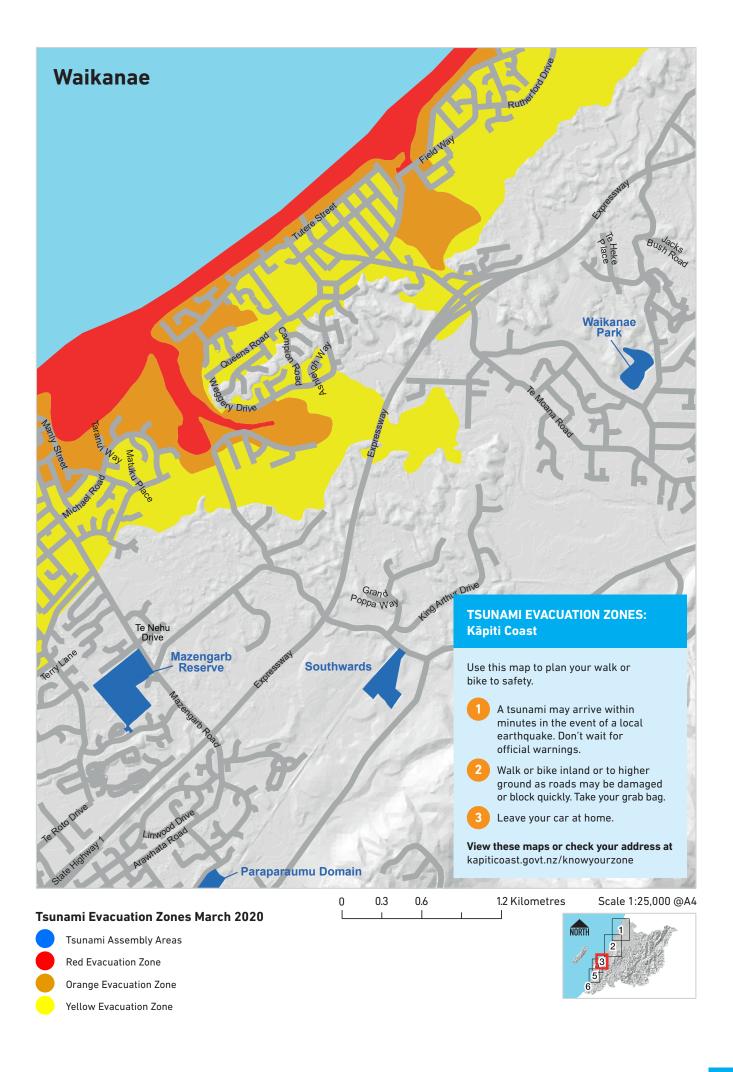


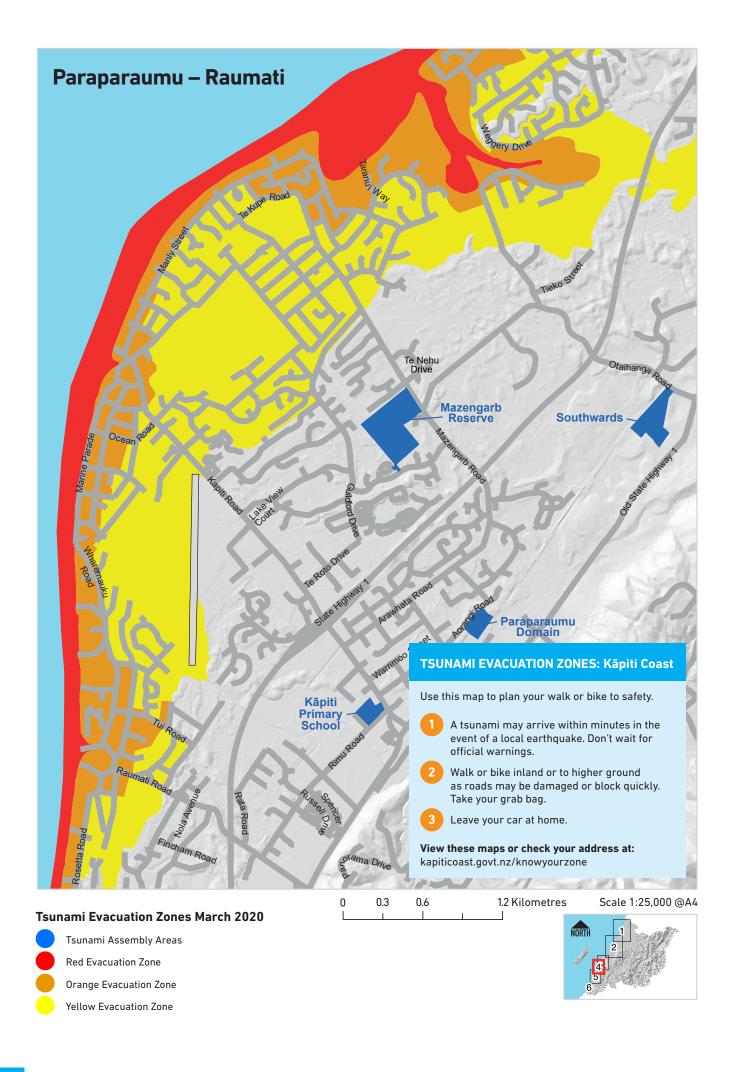
To find out more about assisting at a hub visit: www.wremo.nz/get-involved or attend the Community Response Practice in your area soon.

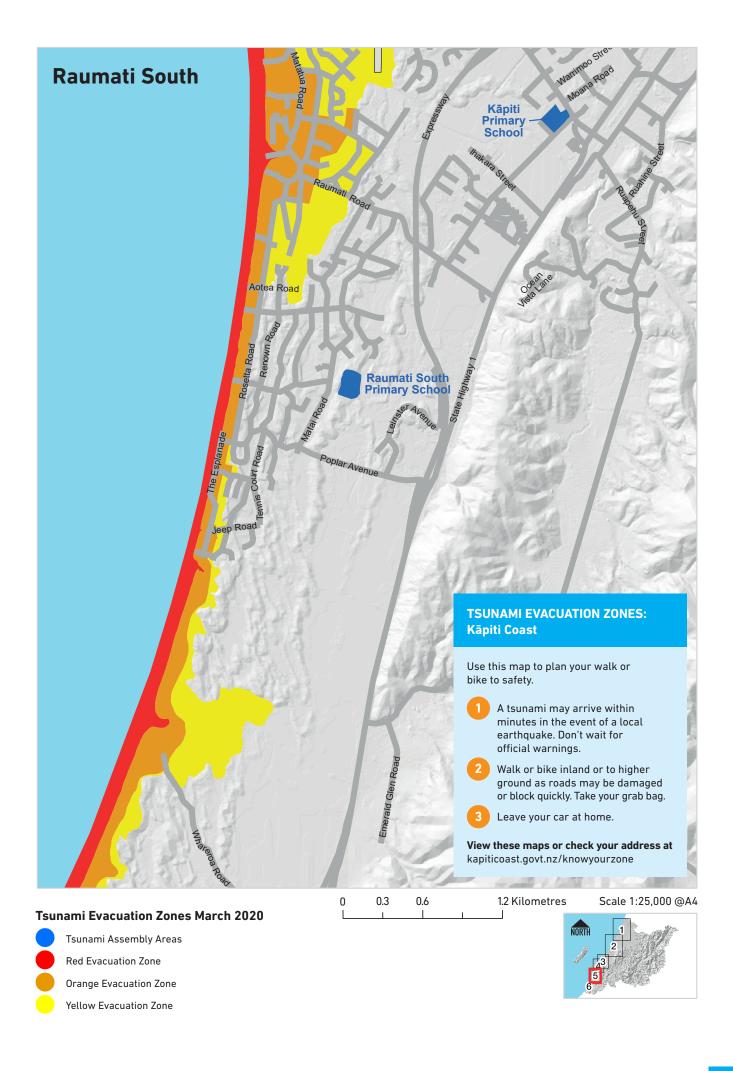


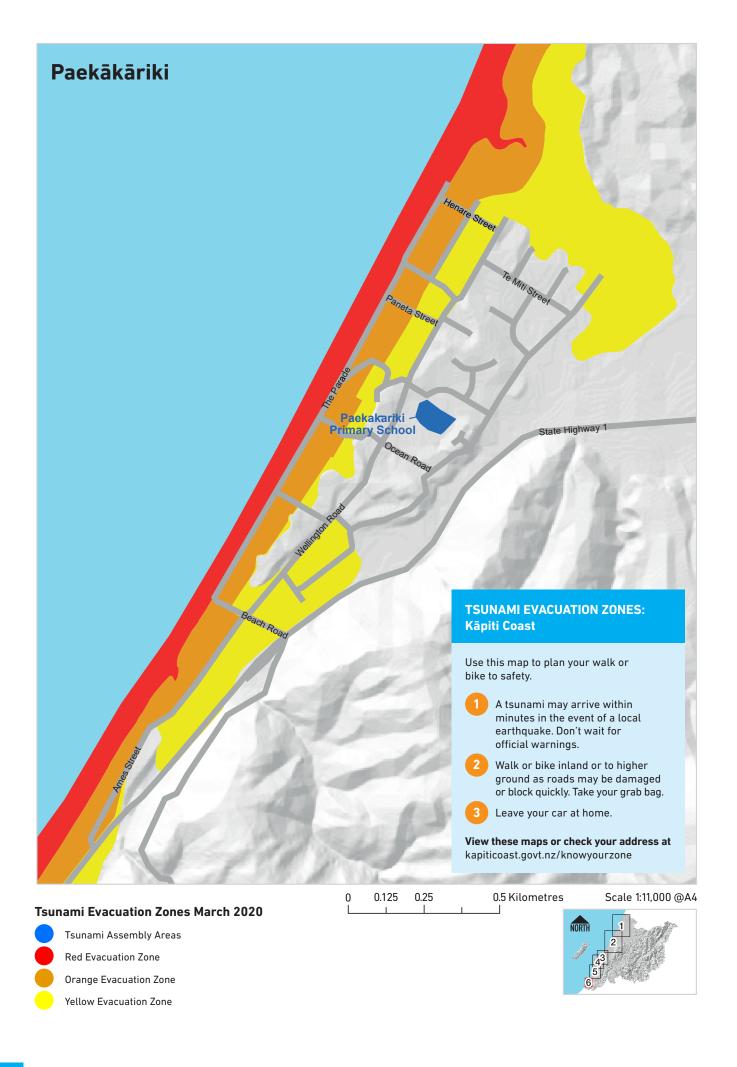












# **Notes**

- ✓ Making a Household Plan now and being prepared is important, and can save lives.
- ✓ Use this page to start making notes for your household.

0	Download a copy of the Earthquake Preparedness guide
	www.wremo.nz/earthquake-planning-guide


### Staying informed



Major nationwide radio stations will be the best choice to get credible information immediately after a major emergency.

National Radio (Radio NZ), 101.5FM, 567AM

Newstalk ZB, 89.5FM

Once a **Kāpiti** emergency response is underway listen to:

Beach FM, 106.3FM

Coast Access, 104.7FM

See the following social media sites and websites for credible sources of information before, during and after a disaster.



WREMOnz

kapiticoastdistrictcouncil



@WREMOinfo

@NZcivildefence



www.wremo.nz

kapiticoast.govt.nz/getready

getready.govt.nz

eqc.govt.nz/be-prepared

redcross.org.nz/first-aid



**Download the Red Cross's Hazard App to receive emergency alerts redcross.org.nz** 



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For more information visit kapiticoast.govt.nz or phone 0800 486 486