



Eastern Coromandel Tsunami Strategy

Workshop with Tairua-Pauanui
Community Board

Thames Coromandel District Council
Waikato Regional Council



Eastern



Coromandel Tsunami Strategy

- Long-term, over-arching strategy for the Coromandel Peninsula
- Purpose is to work with communities to better manage tsunami risks
- Progressive work with communities over time
- starting with Whitianga





Image source: www.thecoromandel .com/scallopfestival/ index.html





Eastern



Coromandel Tsunami Strategy

- Long-term, over-arching strategy for the Coromandel Peninsula
- Purpose is to work with communities to better manage tsunami risks
- Progressive work with communities over time
- starting with Whitianga
- Builds upon the good work already being done in communities





Purpose of workshop

- To present our thoughts on how the project will be undertaken and seek your feedback
- •Two parts:
 - Modelling presentation and discussion: Jose Borrero
 - Roll out of the project in Tairua-Pauanui and discussion: Brendan Morris, Peter Wishart, Adam Munro, Gary Talbot, Alison Smith.



What do we want to achieve?



- Improved community awareness of:
 - Tsunami hazards and risks
 - Recognition and understanding of natural warning signs
 - What to do in the event of a tsunami
- Active community involvement in and ownership of risk management actions



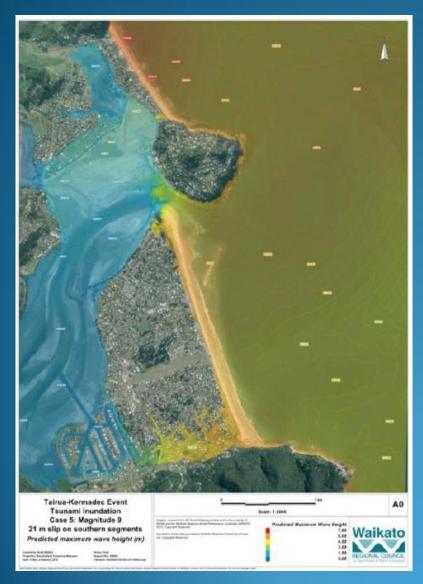
What do we need to address?



- •Risk management and community engagement exercise:
 - Identify hazards
 - Identify and evaluate risks likelihood and consequence











What do we need to address?



- Risk management and community engagement exercise:
 - Identify hazards 🗸
 - Identify and evaluate risks likelihood and consequence
 - Treat risks numerous options and approaches



Communicate and consult







Risk treatment

- •For tsunami, this usually involves a combination of:
 - Emergency Management:
 - Warnings
 - Evacuation
 - Public education and awareness
 - Land-use planning





Emergency Management

•Warning systems:

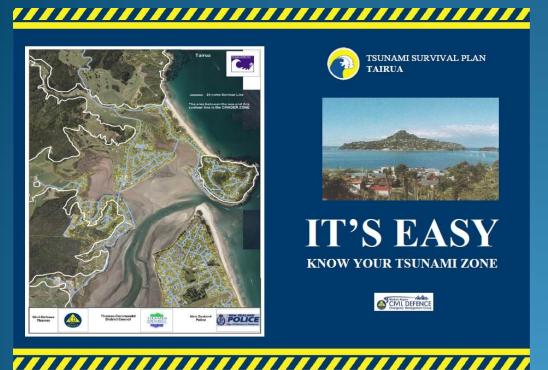
Can include natural signs, sirens, radio/TV, social media, indoor alerting systems, new technology such as cell broadcasting to smartphones

•Evacuation planning:

Can include pre-defined walking/traffic routes, signage, maps, definition of safe zones, vertical evacuation sites, neighbourhood support











Public education and awareness



- Can include on-going activities such as:
 - Regular media releases
 - Messaging during siren testing
 - Use of social media
 - Piggy-backing on community events
 - Community buy-in projects such as "Blue lines" project in Wellington
- Core role in emergency management



Tsunami sirens to be tested this weekend

will be tested at 9:20am and to ensure advertising about 10:00am in coastal and harbour tsunami sirens runs about the locations along the east coast time of the test, If you turn on the from Bland Bay in the north of radio and you hear one of these the Whangarei District, south ads you will know everything is to Mangawhai Heads in the working the way it should be."

Kairora District. people know what the sirens telling people to be aware and sound like and to seek seek information so they can information when they hear keep themselves and the people them," said Whangarei District Council's Major Projects and "New Zealand's Ministry of Infrastructure Services Manager Civil Defence and Emergency

they should turn on the radio, TV, of a tsunami is known and we

sirens mean 'get away from the tsunami sirens will be activated coast', but they don't. Usually at that point to tell people to seek we have quite a lot of warning information. about tsunamis and the sirens

working with local radio stations

Our key aim is to ensure unother part of the big picture,

Management gets news out to all "When pepole hear the siren media as soon as the possibility computer or contact someone to advise our coastal emergency find out what is going on. networks and emergency "Some people assume the services. From now on the

"During the Japan quake and the media, friends and relatives are a signal for people to tune in tsunami anyone watching the and neighbours. The sirens and find out what they need to do news saw the events unfolding are just an additional warning before they make any decision as they were happening. In New Zealand the systems were these." "This Saturday we will be up and running right away

Testing schedule tomorrow - Saturday 4 June

system that works with all of The network of 70 sirens

what direction the tsunami was travelling, how large it was, how

soon it was likely to reach our

said Northlands Civil Defence Emergency Management Senior Programme Manager Graeme

throughout the country,

including Whangarei, Far North and Kaipara District Councils.

The WDC team rang the coastal

community contacts who started

their telephone trees, letting people in their communities know to be on alert and listen to

the news," he said.
"People obtain information.

MacDonald. "The Ministry sent updates regularly to the local Civil Defence teams

shores and how long the danger might exist around our coast,"

Civil Defence Emergency Management Group, whose members include the region's Northland Regional Council, emergency services and lifeline utilities and Northpower,

Northpower's existing ripple

It is jointly funded by Whangarei District Council (\$60,000) and the Civil Defence Emergency Management Group (\$60,000), with significant which built and installed the In an emergency this siren is a signal that a tsunami warning has been issued and people should seek information, listen to the radio or television, check the internet, check with neighbours. When you hear the siren this weekend turn on your radio and listen for the

Second test 10am; sirens will sound for 30 seconds at 10:00am and the light will stop when the siren stops. To hear what the siren sounds like go to: www.nrc.govt.nz/tsunamiwarning

Tsunami sizens will be tested in Coastal areas in the Whangarei District and Mangawhai, from Bland Bay in the north to Mangawhai in the south. First fest: 9.26am: sirons will sound for ten minutes at 9:26am and their blue lights will flash until the end.

Community groups kicking into gear



is, we're more likely to be waves and create disturbances on the receiving end of one in the sea like strong currents,

putting up teanami warning warning that tidal surges could signs at Oakura following the be expected from about 7am and earthquake in Japan in Marchthis a response plan had swung into year and consequent warnings action.

Rev. Lambert was out at Sam - onlington late the night before

Committee members were The Whangarei District contacted, the phone tree establishment of a community

What is a tsunami?

On a world scale, New run-up heights up to 10 metres. says the key thing to be aware Zealand has a high risk Tsunami waves travel of is that the first wave is very from tsunami hazards - that much further than ordinary often not the largest.

and the risk of damage and whitpoots and surging. The flauncial loss is becoming biggest tsunamis are likely to greater with increasing constal be caused by events close to work, the first of which may

velopment and use. There's a our shore and can arrive within not be the biggest," he says. lot of evidence to suggest New just a few minutes of a severe "There may be many waves Zealand's coastline has been earthquake and before any separated by up to an hour or affected by destructive banami official warning can be issued, more, and strong currents or

in the past, with some reaching. Northland. CDEM. Group. whir/pools can appear at any 30 metres or more on land with. Manager. Graeme. MacDonald. time around our coastline."

Mr Lambert says, was the way it

He says the water racing up a creek on the beach was strong enough to knock anyone over, while further out at the the water was 'turnaltuous' particularly when an outgoing surge met an incoming one.

two days at a lesser rate, but still control when coming into the

Mr Lambert is pleased and proud of the community response to the alert and believes the high level of community awareness is include the number of transmiin the last couple of years, the Council phoned the Oukura activated and the community response group. Oukura's Community Response co- alerted. When the surges did hit, isolation and the community's

"The tsunami danger period

there was no one on the beach. knowledge that it has to look. happen if a wave hit our coast, The Oukura group is one of do something?"

"I contacted the Whangare District Council and discovered along the east coast between Bland Bay and Mangawhai. With 11 committee members, it was about to contact me over the same matter and then the Oakura group covers about 25 kilometres of coastline from other members of the Oukurn community said they were all Matui in the north to Helena Buy willing to help out." Farms in the south, taking in Fifteen months later Oakura Pungruku and Mokan

has its tsunami response plan completed and posted in various throughout the year, but Helena sites around the area. There's a list of resources available: workers on site while Punaruku chainsaws, generators, pumps and Mokau have permanent populations. Oakura is the main holiday area. Mr Lambert says his and so on, the phone tree is ready to issue personal warnings, committee members have been assigned tasks like traffic control, resource acquisition, involvement in the repronsegroup came almost by accident.

To become part of a community

What causes a tsunam

"I was attending a

Ratepayers meeting soon after

the Pacific and asked what would



Things to look out for

Strong earthquake shaking, as this may trigger a teursent; Week, rolling earthquake shaking of a minute or more; Out-of-the-ordinary axes behaviour — like unusual and sudden see level fall or risk

Evacuation zones and tsunami siren locations Tsunami sirens Tutukaka information Evacuation Zone Orange Langs Six Tuesday sizes location

Tsunami warning what to do

and trigger sirens where they have been installed - after receiving an official tsunami warning from the Ministry of Civil Defence and Emergency Management National Warning System, There are a number of things you can do to prepare for a tsunami and to respond when a warning is issued.

- . Find out what the tauremi threat level is by exw.nc.govt.ru/civildelence, or checking the TV news.

 Call your neighbours to find out if they know what's
- happening.

 If you've received a text message warring from the official source, pass this information on to your family, friends
- and neighbours.

 If your area has a Community Response Plan in place follow the plan.

When an order to evacuate is issued:

- · If you've on the coast move quickly to higher ground,
- streams for at least 24 hours after any taunami warring, as even small waves can made decommon warring.

Preparing for a tsunami

- Get to know your community response plan.
 Know your evacuation route and where t
- emergency shelter will be set up. Put a Getaway Kit together.

Waikato REGIONAL COUNCIL

e Kaunihera ā Rohe o Waikato













Land use planning

- •Can include development of rules for:
 - Undeveloped land
 - Critical facilities
 - Vertical evacuation facilities
 - Future road and sub-division design
- Building configuration, design and construction guidelines
- Structural and non-structural works





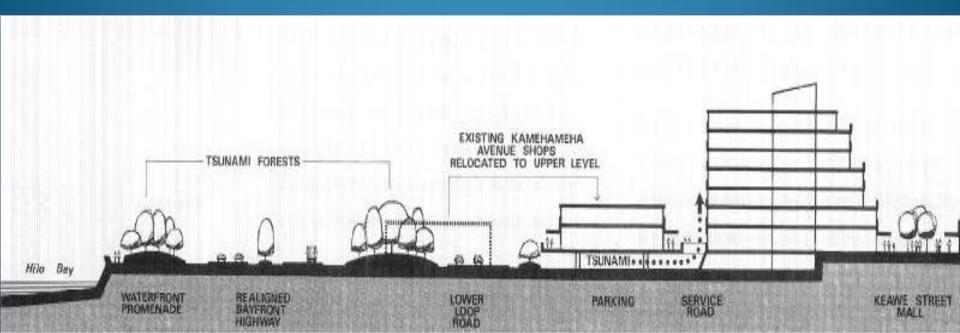
Photo Credit: U.S. Navy

Waiakea area, Hilo, Hawai'i. Bent parking meters show direction of tsunami arrived from. In Hawaii, 61 deaths, \$26.5 million damage.

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U.S. Government Indian Ocean Tsunami Warning System Program

Hilo, Hawaii redevelopment plan







Timeline

•2013:

- Form Working Group to guide risk management
- Prepare for open days
- Communicate with the community
- Report regularly to the Community Board

•2014:

- Hold open days (Jan)
- Finalise risk management plan (May)
- Implement on-going activities (July)





Working group

- •Purpose is to provide:
 - Local knowledge and community representation
 - Tsunami risk management expertise technical, emergency management, planning, communications
 - Advice to the Community Board
- •Risk management plan (of some sort) is the expected result informing future work



Working group membership



- Matt Goodwin
- Chris New
- Steve Morgan
- Fred Crawford
- Kim Coppersmith

- Lynette Day
- Paul Petley
- Garry Towler
- Lorna Price



Working group



support and invitations

- •TCDC staff:
 - Gary Talbot
 - Peter Wishart
 - Alison Smith*
- •WRC staff/Cr.:
 - Adam Munro
 - Julie Beaufill
 - Cr. Simon Friar

Brendan Morris*(facilitator)





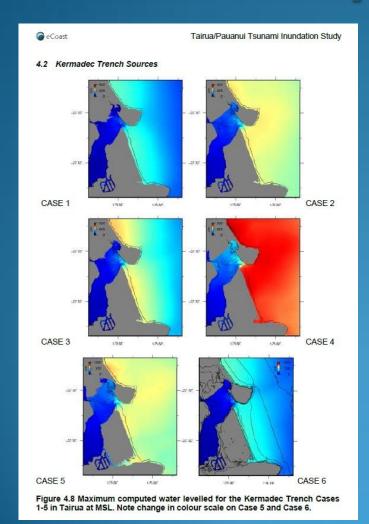
Open days

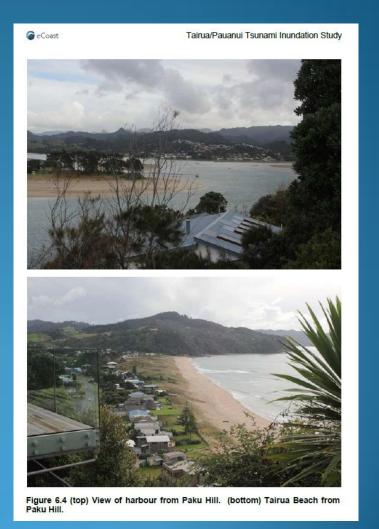






Feedback/discussion









Next steps

- Form working group and hold first meeting (late Aug/early Sept):
 - Background, technical work, process we are proposing
- Communication with the community
- Develop support material
- Report back to Community Board