



RESILIENT

WELLINGTON



- ROUND ONE CITIES
- ROUND TWO CITIES
- ROUND THREE CITIES





Syndex Pro

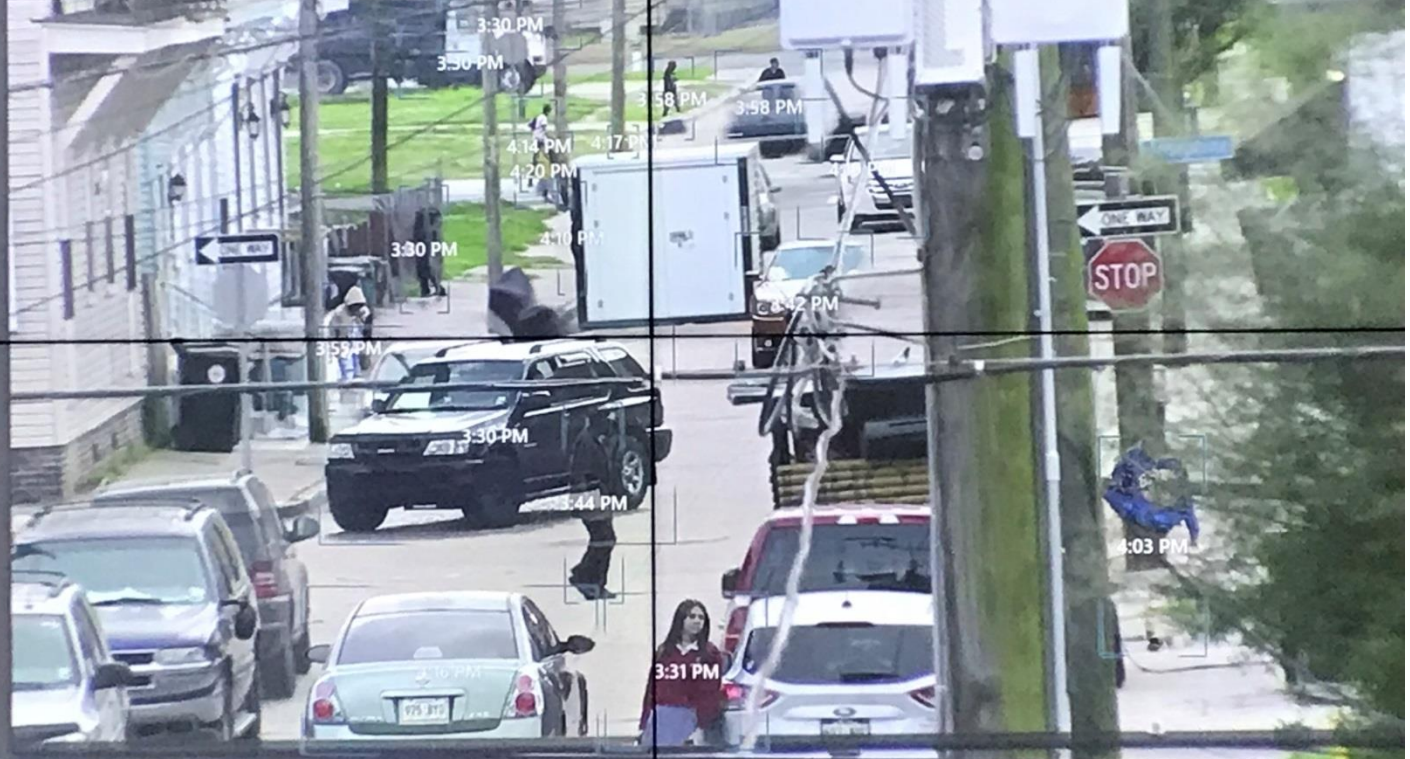
Viewer | Investigations | More

1788 Ob
Refine:

10A42203301800-S. Liberty (1810)
3/1/2018 3:30:00 PM - 3/1/2018 5:00:00 PM (UTC-06:00) Central Time (US & Canada)
Order by: Auto

Area | Class | Size | Speed | Direction | Color | Path | Dwell | Similarity

1800-S. Liberty (1810) 2018-03-01 16:09:33



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Wellington Resilience Strategy

March 2017



PIONEERED BY THE
ROCKEFELLER FOUNDATION



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Wellington City Council
Me Heke Kōwhiri



Name	Appointment	Organisation
Justin Lester	Mayor	Mayor
Professor David Johnston	Director	Joint Centre for Disaster Research
Shane Bayley	Manager	Department of the Prime Minister and Cabinet
Ali Hamlin-Paenga	Chief Executive Kaihautu	Ngati Kahungunu Whanau Services
Colin Crampton	Chief Executive	Wellington Water
Tim Grafton	Chief Executive	New Zealand Insurance Council
John Milford	Chief Executive	Wellington Chamber of Commerce
Jeremy Holmes	Manager	Wellington Region Emergency Management Office
Alison Cadman	Chief Executive	Dwell
Malcolm Sparrow	Councillor	WCC
Ray Wallace	Mayor	Hutt City

Wellington Resilience Strategy

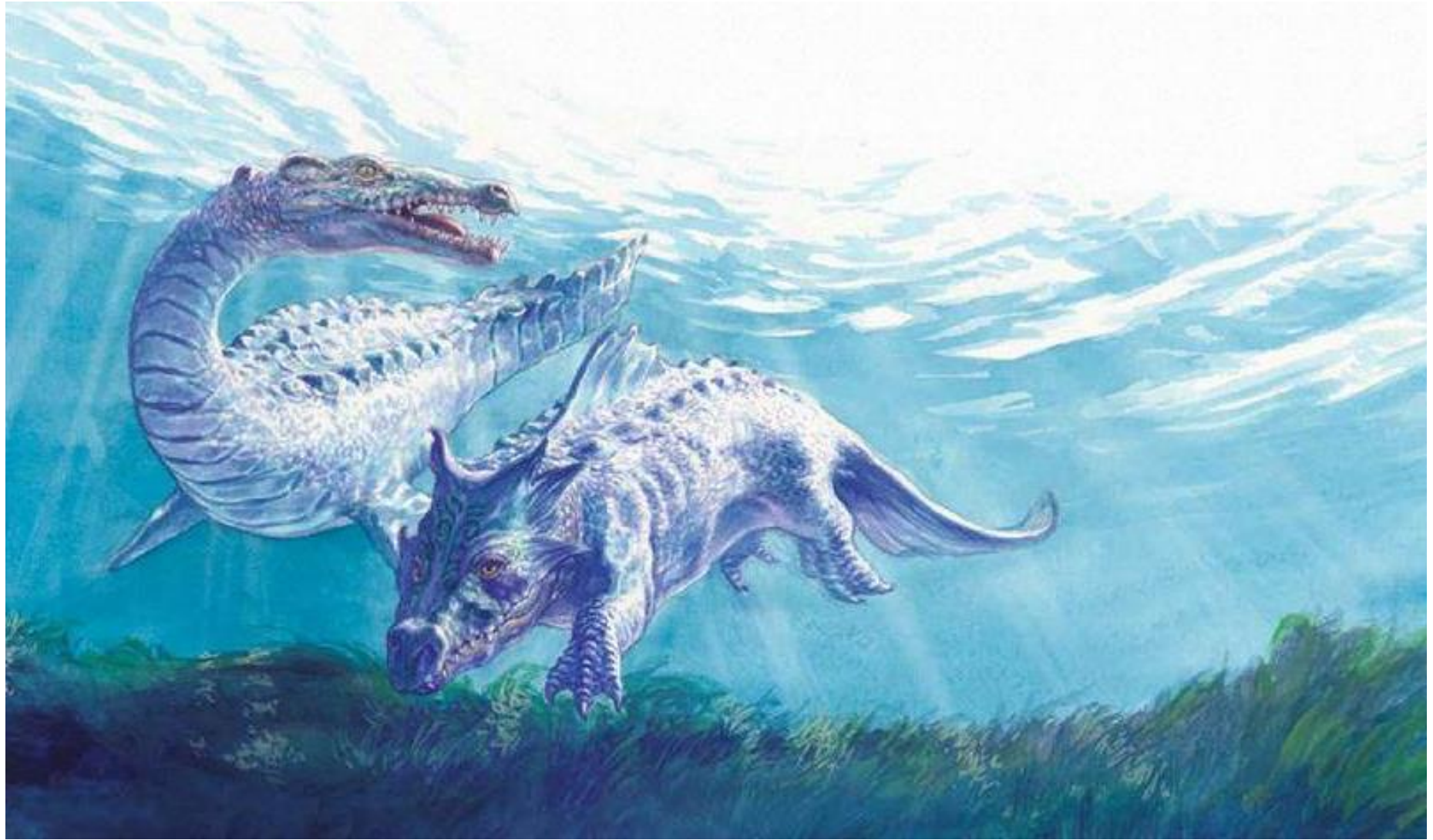
March 2017



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1855 earthquake





STATE STATE STATE MILO MILO MILO SAMSUNG SAMSUNG export gold Newstalk ZB TNT TNT arup.com ARUP TRIBRO MARLEY plumb

DAMAGE WIDESPREAD

MASTERTON'S BUSINESS AREA
BADLY WRECKED

MILITARY TAKE OVER CONTROL

1942



Wellington Resilience Strategy

March 2017



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Event	Probability of occurrence in 50 year period	Loss estimate
Alpine fault earthquake (AF8)	30%	\$10bn
Central North Island major volcanic eruption	99%	\$1bn
Mt Taranaki eruption	20%	\$10bn
Hikurangi subduction zone M8 earthquake and tsunami	30%	\$40bn
Hope fault M7.2 earthquake	50%	\$1bn
South American M9 earthquake causing NZ tsunami	50%	\$1bn
Taupo Region major eruption	10%	\$10bn
Wellington fault M7.5 earthquake on Wellington/Hutt section	10%	\$50bn
Auckland volcanic eruption	5%	\$30bn
Multiple earthquake sequence like 1929-1942	50%	\$10bn

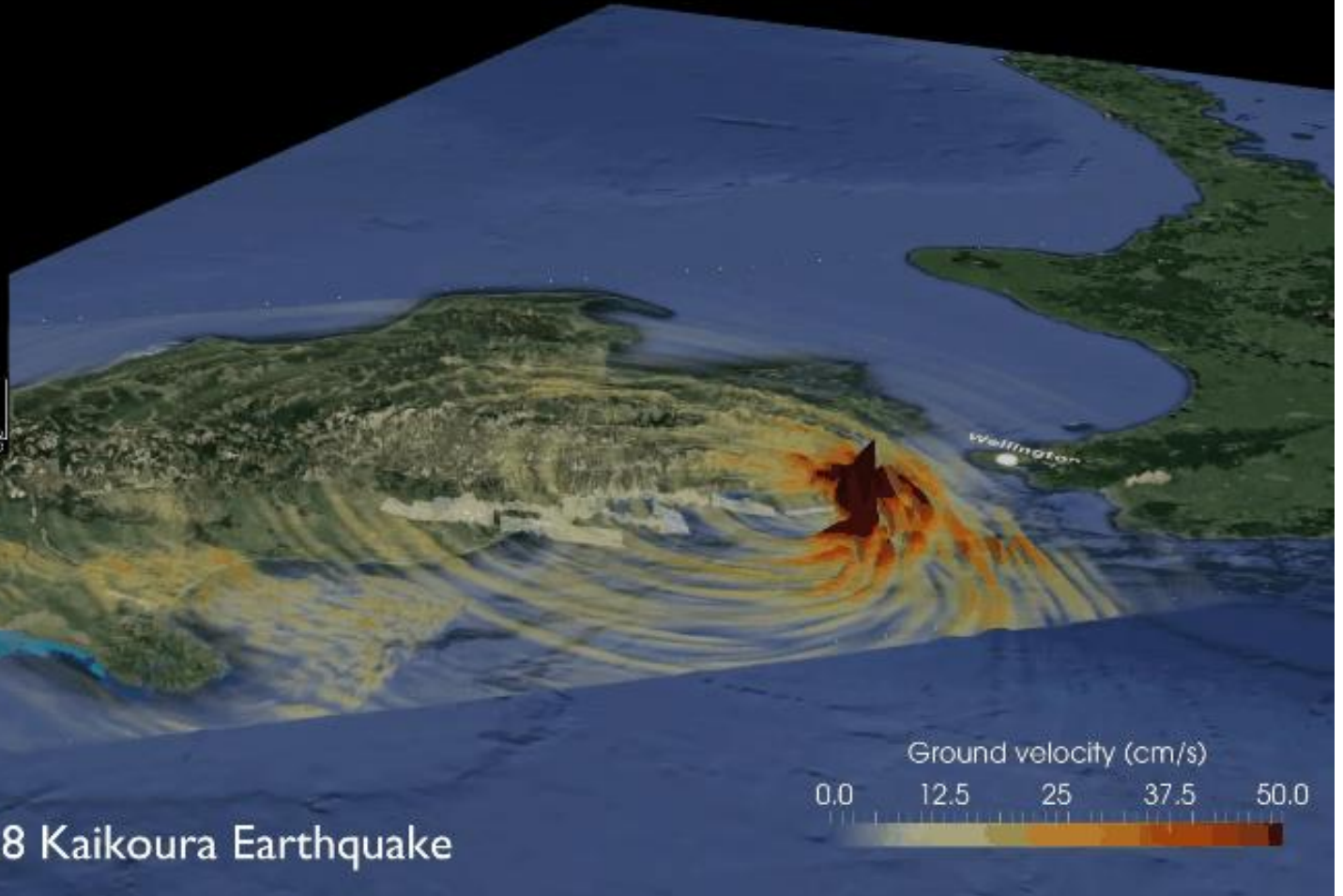
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Earthquake Scenario	Time of day	Wellington Casualties	
		Deaths	Injuries
Wellington	Day	1,810	7,611
	Night	508	5,157
Tararua	Day	6	107
	Night	0	21
Ohariu South	Day	635	4,075
	Night	176	2,703
BooBoo	Day	48	271
	Night	9	83
Wairau	Day	17	335
	Night	2	115
Subduction (no rupture south of Cape Palliser)	Day	154	1,542
	Night	64	1,017
Subduction-Cook (rupture extends into Cook Strait)	Day	2,305	3,570
	Night	1,428	2,229
Wairarapa	Day	334	2,474
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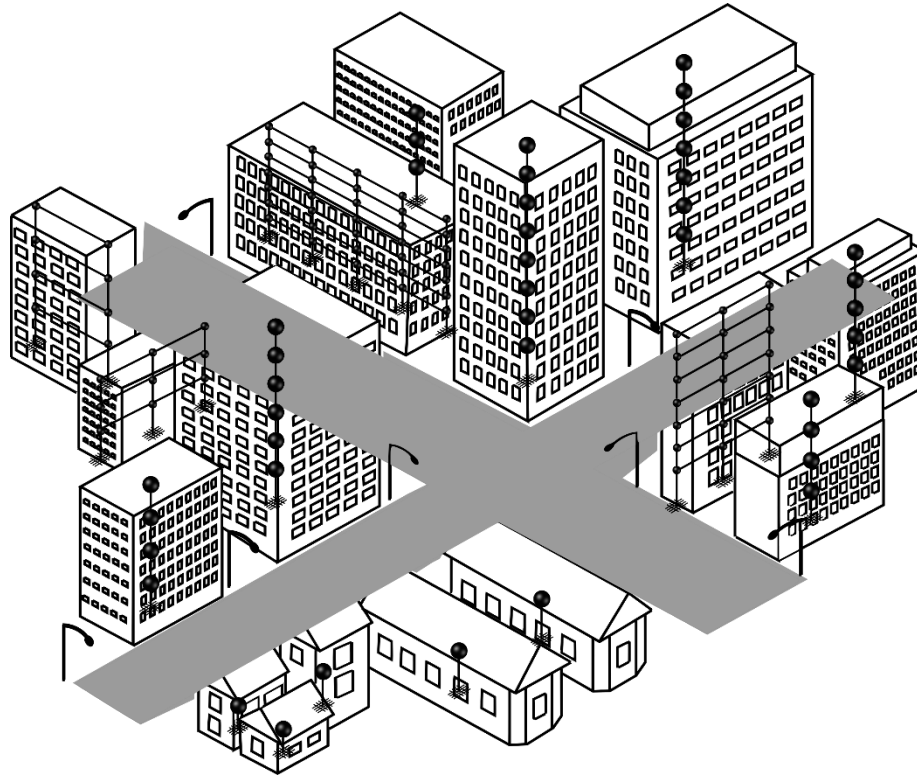
Buildings in Wellington



2016 M7.8 Kaikoura Earthquake



City of models



GUIDANCE

Securing parapets and facades on unreinforced masonry buildings

Advice for building owners, councils and engineers



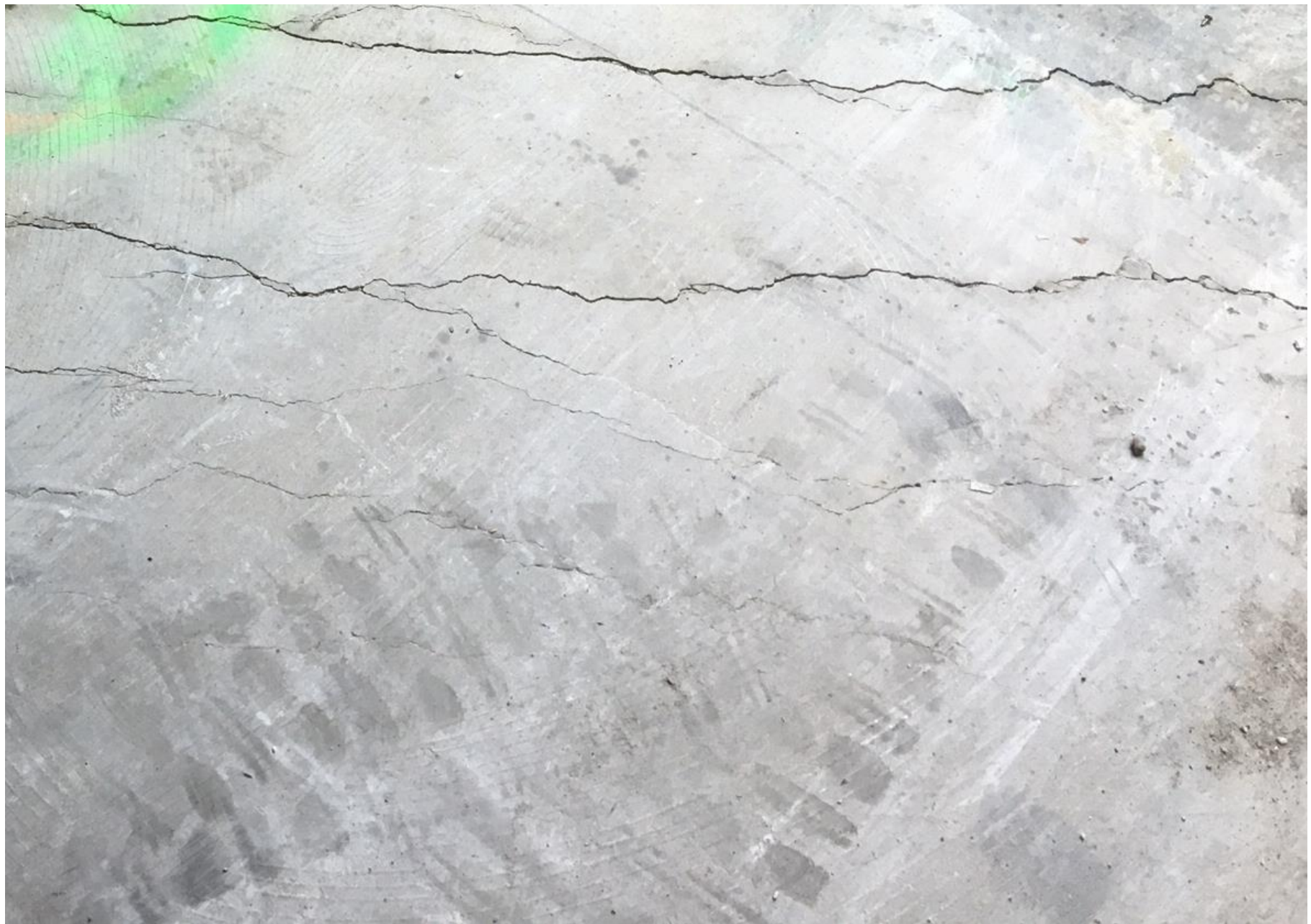
Earthquake-Prone Priority Buildings

Identifying High Traffic Routes
and Emergency Transport Routes

Statement of Proposal - October 2018

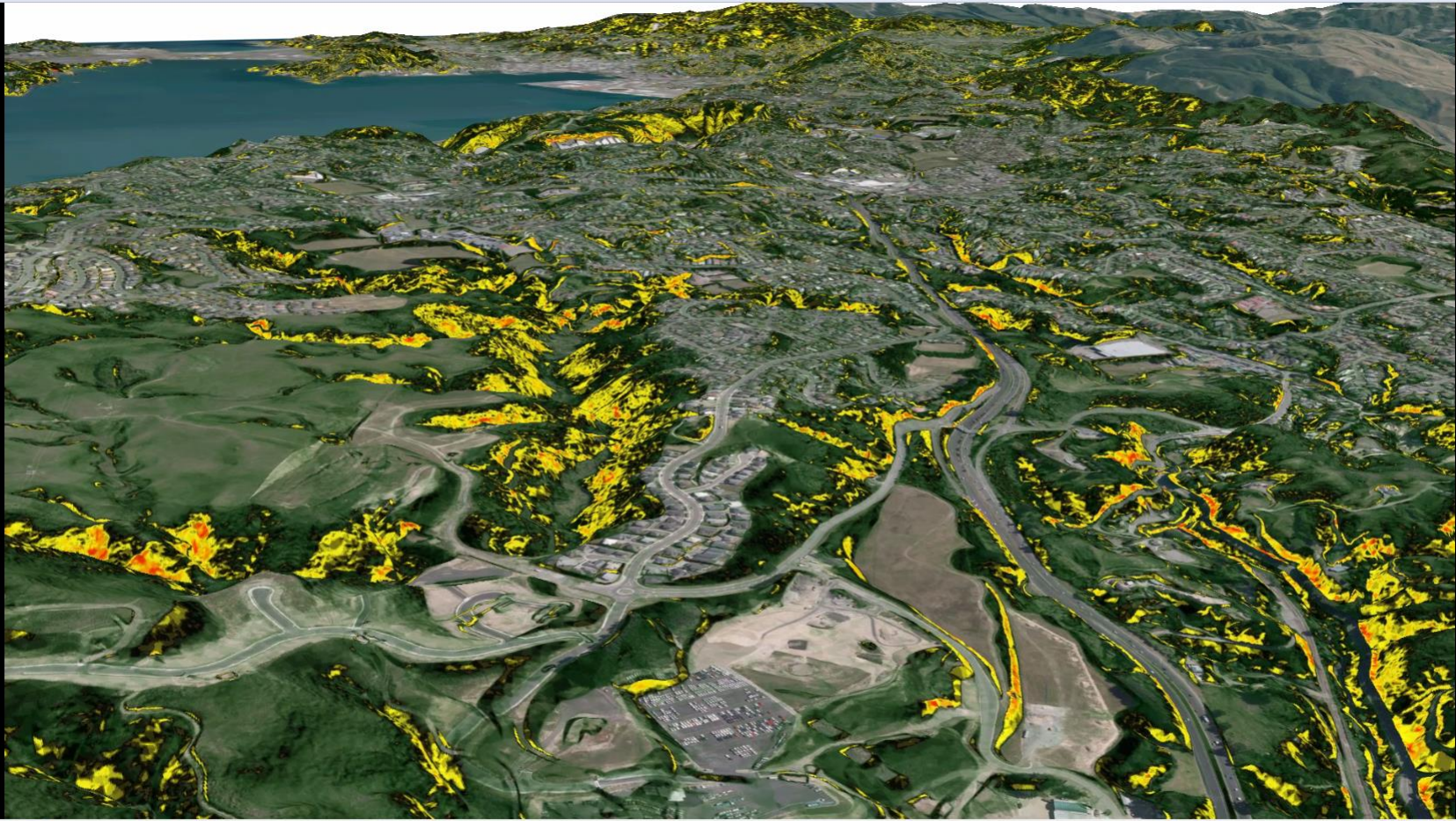






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Media Playback Audio Video Tools View Help



00:10



02:11





Tsunami
safe
zone



Wellington Resilience Strategy

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How will we live with more water?



Flooding
map















Coastal changes, including sea level rise and storm surges are going to impact the way we live, work and play in Makara Beach. We need to plan for this.

Makara Beach is a harsh and dynamic coastline. AND this is what we love about it. As you might know, Makara Beach was badly impacted by ex-Cyclone Gita in February this year, and we know it will happen again, sooner or later.

So, we're setting up a panel of community representatives who want to be part of a small and empowered team helping to create the 100 year strategy for Makara Beach.

Locals who live here, divers and boaties who fish and swim here, walkers who hike here - if you're interested in being involved in this panel, or want to know more about the process - we invite you to come along to the information session.

**June 28: Makara Beach Cafe: 7.30pm - 8.30pm
(a snack and drink will be provided)**

For more information phone Jacqui 021 87 67 87

Makara Beach Workshop Timeline

Last updated: 3 August 2018

7 August 5.30 – 8pm @ WCC	18 August Sat :10am – 2pm @ Makara	4 September 5.30 – 8pm @ WCC	24 September 5.30 – 8pm @ WCC	13 October Sat: 10am – 1pm @ Makara
Workshop One <ul style="list-style-type: none"> • Terms Of Reference agreed • Process confirmed • 'What we know & what we don't know' – presentation by Dr Andrew Tait, NIWA & Jon Clarke, Tonkin + Taylor • Round table discussion on local knowledge & observations 	Workshop Two <ul style="list-style-type: none"> • Cultural places of significance – led by Morrie Love • DoC land and walkway presentation – led by Robert Ashe • The 'Adaptation menu' presentation – led by Jon Clarke, Tonkin + Taylor 	Workshop Three <ul style="list-style-type: none"> • Pathway option development • Workshop different options in groups and present back ideas (The Panel, Project Team, Technical Advisory Group, Councillors all involved) 	Workshop Four <ul style="list-style-type: none"> • Shortlist of Pathways decided • Agree assessment criteria • Agree weighting of Cultural, Social, Environmental, Tech/Science (pause on financial for now) • Economist to start Real Options Assessment (ROA) 	Feedback Session <ul style="list-style-type: none"> • The Panel presents it's shortlisted Pathways to the wider community and seeks feedback (Technical Advisory Group available to answer questions)
19 October* 9am – 4pm @ WCC	9 November 5.30 – 8pm @ WCC	20 November 5.30 - 8pm @ WCC	December TBC	Notes
Workshop Five <ul style="list-style-type: none"> • Multi-Criteria Decision Analysis evaluation • Values Assessment • Scoring Pathways <p>*Please note that this workshop is a full day on a Friday & Monday 22 October is Labour Day.</p>	Workshop Six <ul style="list-style-type: none"> • Economist presents Real Options Assessment (ROA) findings (report will be pre-circulated in Oct) • The Panel decides on preferred pathways and final recommendation/s 	Place Holder	Wrap-up <ul style="list-style-type: none"> • Makara short, medium & long term adaptation Pathway presented to Councillors • Signing Ceremony • Hand over to implementation team TBC 	<p>Wellington City Council meetings will be held at 101 Wakefield Street Committee Room 1 Ground Floor</p> <p>For more information phone Jacqui 021876787</p>

Wellington Sea Level Tool

This map helps to tell the story of what sea level rise might look like at the high tide mark.

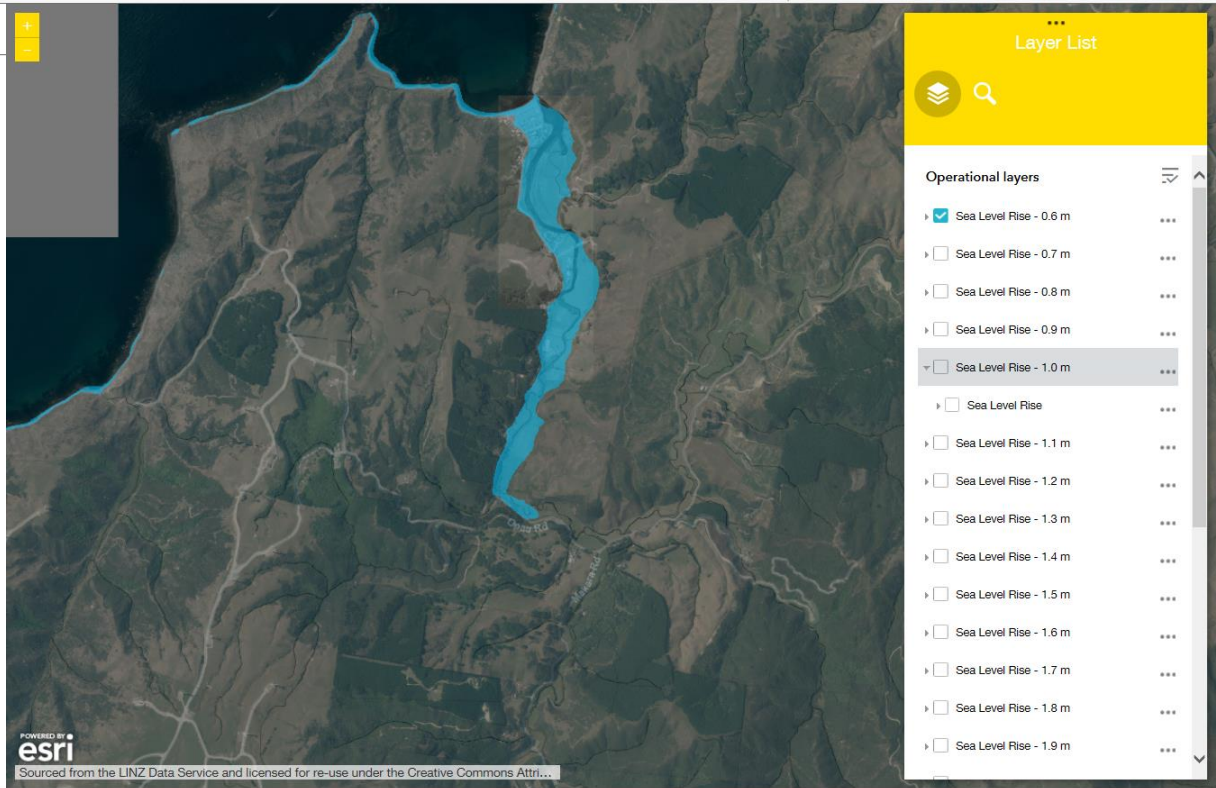
Use this tool to help identify the areas that get wet first and see what an extreme sea rise will do to our capital city.

This map doesn't show the effects of a sea level rise below 0.6 meters and it doesn't illustrate the other consequences of a warming climate. This is a conversation we will be having with our communities over the next few years so that together, we can better understand these consequences and look at how we can adapt.

How to use this tool

Turn the layers on and off to see what areas of Wellington might look like at different sea levels.

The layers start at 0.6 meters and go up to 3 meters in 0.1 meter increments.





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Layer List

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- Sea Level Rise - 0.7 m
- Sea Level Rise - 0.8 m
- Sea Level Rise - 0.9 m
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- Sea Level Rise
- Sea Level Rise - 1.1 m
- Sea Level Rise - 1.2 m
- Sea Level Rise - 1.3 m
- Sea Level Rise - 1.4 m
- Sea Level Rise - 1.5 m
- Sea Level Rise - 1.6 m
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