

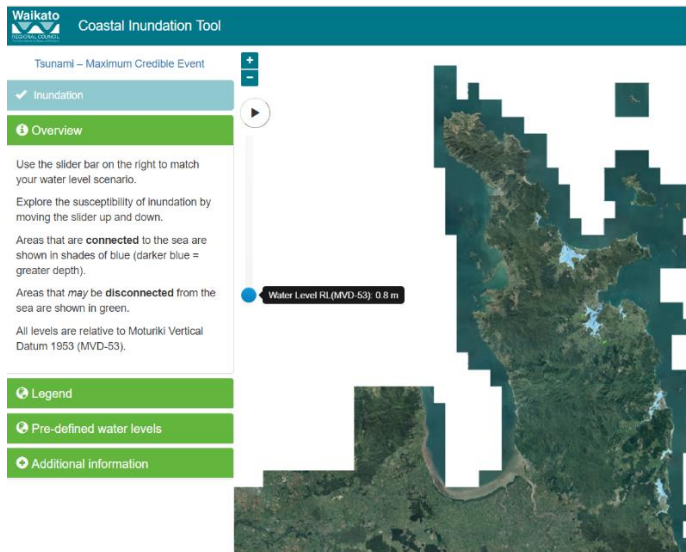
How to Use Regional Council's Inundation Tool

What is the Coastal Inundation Tool?

The Regional Council has provided a very useful online sea-flooding / inundation tool which can be found at <http://coastalinundation.waikatoregion.govt.nz/>. The purpose of this tool is to see what low lying coastal areas in Thames -Coromandel may be subject to inundation (sea flooding) from tides, storms and projected sea level rise. The tool only shows 'static' water levels. It does not include the effects of currents or waves which may add to the flood risk.

Step 1 Go to Website

<http://coastalinundation.waikatoregion.govt.nz/>



Step 2 Zoom in to Area of Interest

Zoom in by choosing a region from the top right corner – eg. Firth of Thames, East coast or West coast. Or double click the map or use the + or – buttons.

Step 3 Choose Water level

Click on the “Pre-defined water levels” button. Then choose the region and sub region you are interested in. eg. Firth of Thames / Thames Tararu. Tidal and storm tide levels vary between regions/towns so it is important to select the area you are interested in. A pop up a table like this will appear -

Location		Thames (Tararu)		
Present Day	MHWS (m)	1.79		
	Max Tide (m)	2.11		
	Storm Tide Range (Estimate)	Lower (m)	2.20	
		Upper (m)	3.22	
Future Projected	0.5 m projected Sea Level Rise	MHWS (m)	2.29	
		Max Tide (m)	2.61	
	Storm Tide Range (Estimate)	Lower (m)	2.70	
		Upper (m)	3.72	
	1.0 m projected Sea Level Rise	MHWS (m)	2.79	
		Max Tide (m)	3.11	
		Storm Tide Range (Estimate)	Lower (m)	3.20
			Upper (m)	4.22

Step 4 Choose a Scenario from the Table.

In the Pre-defined Table you are presented with 3 scenarios – Present Day, Future Projected 0.5m of sea level rise, and 1.0m of sea level rise.

Within each scenario you can then choose Mean High Water Springs (MHWS), Maximum Tide (“King Tide”), or a Low or High Storm Tide. A Storm Tide or Storm Surge: may occur when a low-pressure system causes the tide/water to rise and onshore winds ‘push’ water from deep water towards the coastline. eg. for a “Low” Storm Tide and 0.5m of sea level rise for Thames choose 2.70m.

Storm Tide Frequency

The Parliamentary Commissioner for the Environment has reported that extreme “1-in-100-year” storm tides will occur every 6-12 months with just 0.5m of sea level rise and daily with 1m of sea level rise

1-in-100 yr event becomes an annual affair with modest sea-level rise (by around 2050-60s): low uncertainty

SLR	Auckland	Wellington
0cm	Every 100 years	Every 100 years
10cm	Every 25 years	Every 20 years
20cm	Every 12 years	Every 4 years
30cm	Every 4 years	Once a year
40cm	Every 2 years	Every 2 months
50cm	Every 6 months	Twice a month
60cm	Every 2 months	3 times a week
70cm	Every month	Every tide
80cm	Every week	Every tide
90cm	Twice a week	Every tide
100cm	Every day	Every tide

2.8 m spring tide range | 1.4 m spring tide range

PCF (2015). www.pcf.org.nz/

Step 5 Move the Slider to Chosen Water Level

Move the slider to the nearest match of your chosen water level and explore.

More Information - FAQ

https://www.waikatoregion.govt.nz/assets/PageFiles/41257/3700622-Coastal_Inundation_Tool_Guidance.pdf