

# New Zealand Hazard Mapping Current challenges

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# Challenges

- Lack of clarity over responsibilities between organisations
- Multiple methods
- No central government leadership or direction
- Without a firm foundation of input information (e.g. estimates of extreme rainfall and flows) and accepted models;
  - How can climate change effects be incorporated?
  - How can public confidence be built?
- Example: Town of Masterton
  - Uncertainties
  - How to engage with communities and build public confidence

An aerial photograph of a city area with a large green hatched region in the center and red hatched regions along the edges and in some smaller patches. The green hatched area covers most of the central urban and industrial zones. The red hatched areas are primarily located along the perimeter of the green area, following roads and some industrial sites. The surrounding areas are shown in natural colors, representing residential and undeveloped land.

2014 (Wellington Regional Council) model results

“Models released in 2014 predicted a one-in-a-hundred-year flood of the Waipoua River would leave swathes of the town underwater with protection measures estimated to cost at least \$10 million.

But the Masterton District Council did not accept the Greater Wellington Regional Council's findings and challenged them with its own information and research.”

An aerial photograph of a city, likely in the Pacific Northwest, showing a dense urban grid. A prominent river, highlighted in a bright blue color, flows from the top center towards the bottom right. The city features a mix of residential buildings, commercial structures, and green spaces. A large, dark, circular feature, possibly a pond or a large tree canopy, is visible in the lower right quadrant. The text "2018 (Revised with new information)" is overlaid in white on the left side of the image.

**2018 (Revised with new information)**

"We have used the **same software** but taken advantage of **improved modelling** techniques that have become more readily available since 2014."

A Masterton District Council source said the regional council's original model was not calibrated to an existing flood event and the historical data did not take into account the present levels of flood protection.

"The problem was that they never spoke to anybody and they never took any consideration of the history of the river going way back. These guys only had **20 years of bad data.**"

(Extracts from (As at 1 Nov 2018):

<https://www.stuff.co.nz/environment/108218442/pushing-back-mastertons-flood-projections-expected-to-save-ratepayers-millions>)