Risk Modelling (Floods on Property)

Edgecumbe after Cyclone Debbie April 2017

ICNZ Insurance Council of New Zealand
Te Kāhui Inihua o Aotearoa

NZILA Conference October 2026

What does modelling do?

For Insurers: Estimation of future flood claims loss potential against the expected annual average loss today based on historical claims.

For Councils: Mapping traditionally shows the worst flood area's and may not show flood effects on the properties in harms way.

The New National Flood Map Project by MCERT: to align all councils mapping. What are going to be the data standards?

Responsiveness to Council Flood Improvements

Insurance Council of New Zealand
Te Kāhui Inihua o Aotearoa

Can Insurers be more responsive to Council Flood improvements?

Are Insurers able to input changes into their own models immediately.

If Insurers can, then we could see stronger incentives for Councils to undertake flood mitigation work as the insured customer terms would be reflected at their next renewal keeping everyone happy.

Columbia Earthquake
August 2026

Adjacent buildings before and after the Columbia 2010 Earthquake Code change NSR10
That brought in 1% inter story drift limits. New Zealand is still at 2.5%

Columbia Earthquake
August 2026

Pre code Residential Building Failure

Venezuela Earthquake June 2026

Insurance Council of New Zealand
Te Kāhui Inihua o Aotearoa

Steel Frame Hotel Building Failure – Macuto. Example of a modern steel frame structure failing. This could be typical of damage we could see in New Zealand with a similar sized earthquake event.

Venezuela Earthquake
June 2026

Hotel Building renovation started before the earthquake.
Heavy stiff concrete construction no structural damage – Macuto Venezuela

Thank you

www.icnz.org.nz