

Interactive comment on “The utility of earth science information in post-earthquake land-use decision-making: the 2010–2011 Canterbury earthquake sequence in Aotearoa New Zealand” by Mark C. Quigley et al.

Anonymous Referee #2

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This paper is written primarily by geologists and provide recommendations to the land-use planning communities. In essence, the authors argue for more pre-planning ahead of all sorts of disasters. The authors focus on mass-movements, though many other hazards were present during the CES (i.e., liquefaction) (unless I missed something, it's unclear to me why so much emphasis was placed on mass movement instead of liquefaction).

The authors present an exhaustive account of what happened from both a geology and policy point of view during and following the CES. However, I fear that the authors have

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not documented much data in the way of showing how earth science observations actually influence policy. The authors lay out numerous events in their jam-packed Figure 2, yet provide no real metrics on how valuable Earth Science information was to these decisions.

I would recommend the authors create some sort of "influence metric" that is used to figure out how useful/used ES info was at the time of decision making. No doubt, this is all included in the text, but needs to be summarized somehow and quantified. Of course, the authors point out something that really everyone knows/is common knowledge: proper preparation prevents poor performance. (not to say the performance of councils was poor—this is just a common phrase) They have an opportunity to actually show this quantitatively. More attention (perhaps another figure) should be paid to a decision made based on ES data, vs one not, and compare and contrast the outcomes.

In general, I found the manuscript a bit sprawling and challenging to retain, particularly because of the lack of figures in the text (why not include the color coded table in the Supplement, table S1, in the main text? This was far more helpful to me than Figure 2). Additionally, I found the language used throughout the manuscript quite grandiose and emphatic—word choice and tone could be softened and less polarizing.

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