4

Volcanoes in the Big Smoke

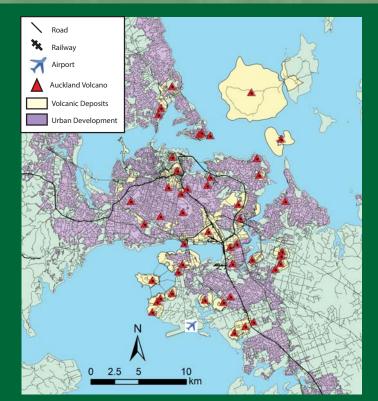


Summary

Although Auckland's volcanoes are generally small and eruptions are thought to be infrequent, the Auckland Volcanic Field still poses a risk to the city's population. Understanding this risk has been challenging, but research is ongoing through the DEtermining VOlcanic Risk in Auckland (DEVORA) project. This article summarizes research between 2000 – 2010 that has greatly increased our understanding of how the field works and what to expect in a future eruption.

Key Points

- Auckland's volcanoes are generally small, and are thought to have formed in eruptions that lasted a few months to a few years. The ages of many of the volcanoes are poorly understood.
- Eruptions occur randomly (i.e. the location of the last eruption doesn't provide any clues about the next one). Scientists can assess volcanic hazards by investigating past eruptions, comparing Auckland's volcanoes with others around the world, and creating models that predict what might happen in a future eruption.
- Although eruptions are usually small and infrequent, the possibility of a future eruption poses a risk to Auckland due to the high number of businesses and residents in the region.
 Such an event could have a large impact on the local and national economy.
- Scientists, authorities and government agencies are constantly monitoring the situation, and through DEVORA are working together to make sure that Auckland is prepared for a possible eruption in the future.



Map of Auckland showing urban development and infrastructure (airport, roads, railways, etc.) as well as the locations of known volcanoes. Due to the widespread nature of Auckland's infrastructure, another eruption anywhere in the field is likely to cause major losses.

This DEVORA field note summarises the journal article: Volcanoes in the big smoke: a review of hazard and risk in the Auckland Volcanic Field. By Linsday, J.M. (2010). In: Williams A.L., Pinches G.M., Chin C.Y. McMorran T.J. and Massey C.I. (eds). Geologically Active. Delegate Papers of the 11th Congress of the International Association for Engineering Geology and the Environment (IAEG). 2010 Taylor & Francis Group, London.

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