

Sea-level rise impacts on groundwater: exploring misconceptions and future research needs

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Sea-level rise causes groundwater salinization and water table rise. The impacts these processes can have on ecosystems, water security, agricultural production and infrastructure are becoming widely recognised. However, while teaching groundwater hydrology at Te Whare Wānanga o Waitaha University of Canterbury, I have observed several recurring misconceptions relating to sea-level rise impacts on groundwater. Misconceptions may interfere with further learning and the application of science principles to future careers, and so it is important (and fun – no surfing though, sorry!) to explore these. This is what we'll do in this talk with the aid of a Jupyter Notebook webtool. Additionally, highlights from international and local coastal management research programs, with a particular focus on the conference location of Ōtautahi Christchurch, will provide context for a discussion of future research needs.

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