



Ministry for the
Environment
Manatū Mō Te Taiao

Groundwater quality, 1964–2014

Title

Groundwater quality, 1964–2014

Publisher

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Description

Groundwater quality indicators include E.coli, nitrate-nitrogen, ammoniacal nitrogen, and dissolved reactive phosphorus. Also included is data on pesticides, iron, manganese, electrical conductivity, and total dissolved solids. Information on sampling protocol, equipment, and method is provided. Nitrogen occurs naturally in groundwater, but usually at very low concentrations. Agricultural and urban land use can add more nitrate-nitrogen to groundwater. If used for drinking water, high levels of nitrogen in groundwater can affect human health and the quality of surrounding rivers and lakes. Ammoniacal nitrogen is undesirable if groundwater is used for drinking, and elevated levels of nitrate and ammoniacal nitrogen can be toxic to fish and other animals. Surplus phosphorus drains (leaches) into groundwater as dissolved reactive phosphorus. It can also be present naturally from interactions between groundwater and rocks. Too much phosphorus can lead to excessive plant and algae growth where groundwater flows into surface water. E.coli in fresh water can indicate the presence of pathogens (disease-causing organisms) from animal or human faeces. The pathogens can cause illness for anyone who ingests them. The file contains the raw data for all groundwater quality indicators. This dataset was used to calculate the percent exceedances of the drinking water standards for E.coli and nitrate-nitrogen over the period 2012–14.

Source

GNS Science and regional councils

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Coverage

National 1964–2014

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<https://data.mfe.govt.nz/table/53602-groundwater-quality-19642014/>

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FW17/005

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Dataset

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New Zealand English

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