

Meeting demand for drinking water

Are our water supplies in hot water?

High-quality drinking water is essential for people's health. About 87 percent of New Zealanders receive drinking water from local authorities (city, district and regional councils).

Concerns have arisen that some authorities are not well equipped to manage water supplies. In response, the Office of the Auditor-General (OAG) audited a representative sample of eight local authorities around the country. The audit revealed that, in managing water supplies to meet forecast demand:

- three local authorities were performing effectively
- three were performing adequately but could be doing better
- two were performing poorly.

This case study summarises the audit results. It outlines how drinking water is supplied and how demand is forecast, and describes strategies to meet demand. It also looks at what characterises effective management of water supplies.

In light of the audit results, students can reflect on the challenges that local authorities face and the efficacy and sustainability of strategies to meet water demand. They could go on to explore water-supply management practices in their local area.

Curriculum links

National Certificate of Educational Achievement (NCEA)	
Geography, Level 1	AS 91009 (1.3) – Demonstrate geographical understanding of the sustainable use of an environment
Geography, Level 1	AS 91011 (1.5) – Conduct geographic research
Geography, Level 1	AS 91014 (1.8) – Apply spatial analysis to solve a geographic problem

New Zealand Curriculum (NZC)	
Social sciences, Level 6	Geography – Understand how people interact with natural and cultural environments and that this interaction has consequences
Social sciences, Level 7	Geography – Understand how people's perceptions of and interactions with natural and cultural environments differ and have changed over time
Education for sustainability	 The case study is ideal for use in the context of education for sustainability, where there are numerous relevant achievement objectives, including those below: Explain possible strategies to achieve a sustainable future. Research a range of case studies on sustainability issues. See the Education for Sustainability Teaching and Learning Guidelines

References

Office of the Auditor-General (2010), *Local authorities: Planning to meet the forecast demand for drinking water*, Wellington: Office of the Auditor-General.

Health (Drinking Water) Amendment Act 2007.