

Title	River water quality, raw data by site, 1975–2013
Type	Dataset
Subject	nutrients, watercourse, physical status
Source	National Institute of Water and Atmospheric Research; all regional councils
Description	<p>River water quality water is valued for many reasons including ecological function and habitat, recreational value, its role in supporting people and industry, and its cultural significance. Nutrients such as nitrogen and phosphorus are essential for plant growth, however too much in rivers can lead to ‘nuisance’ growths of river algae and aquatic plants, degrading habitat. High concentrations in the form of ammoniacal nitrogen and nitrate-nitrogen can be toxic to fish and other aquatic animals. Water clarity is a measure of underwater visibility, and affects habitat of aquatic life such as fish and birds, and can also impact on aesthetic values and recreational use of rivers and streams. Escherichia coli (E.coli) can indicate the presence of pathogens (disease-causing organisms) from animal or human faeces, which can cause illness.</p> <p>File contains raw data collected at regional council and NIWA monitored sites over the period 1975–2013. Fields are described as follows. Refer to Larned et al. 2015 for further details:</p> <ul style="list-style-type: none"> <li>* nemarid ---- Unique NIWA ID</li> <li>* lawaid ---- Unique LAWA ID</li> <li>* rcid ---- Collection agency</li> <li>* srcid ---- Region site is located in</li> <li>* sflag ---- River (r) or Estuary (e)</li> <li>* river ---- River name</li> <li>* location ---- Name of site, assigned by collection agency</li> <li>* nzmge ---- easting</li> <li>* nzmgn ---- northing</li> <li>* nzreach ---- REC1 segment identifier</li> <li>* sdate ---- Sample date (yyyy-mm-dd)</li> <li>* Q ---- Flow recorded when sample was taken (if available), cumecs</li> <li>* npid ---- NIWA parameter ID (as used in Larned et al. 2015)</li> <li>* lpid ---- LAWA parameter ID</li> <li>* fdval ---- Parameter value (units are mg/m<sup>3</sup>, except CLAR (m) and ECOLI (n/100 mL))</li> </ul> <p>For more information please see: Larned, S, Snelder, T, Unwin, M, McBride, G, Verburg, P, McMillan, H (2015). Analysis of Water Quality in New Zealand lakes and Rivers: data</p>

	<p>sources, data sets, assumptions, limitations, methods and results. NIWA Client Report no. CHC2015-033</p> <p>Available at <a href="https://data.mfe.govt.nz/x/Mo8VUY">https://data.mfe.govt.nz/x/Mo8VUY</a> from the Ministry for the Environment dataservice.</p> <p>This dataset relates to the "River water quality" measures on the Environmental Indicators, Te taiao Aotearoa website.</p>
Rights	Creative Commons Attribution 3.0 New Zealand
Publisher	New Zealand's Environment Reporting Series: The Ministry for the Environment and Statistics New Zealand
Coverage	National, 1975–2013
Identifier	<a href="https://data.mfe.govt.nz/x/GxXeE5">https://data.mfe.govt.nz/x/GxXeE5</a>
Language	eng-nz
Issued	21/10/2015
Environmental reporting topic	Chemical properties of river water, lake water, and groundwater
Environmental reporting category	Case study
Methodology (collection & analyses)	<p>Raw data from the 16 regional councils, and 77 sites along 35 major rivers measured by the National Institute of Water and Atmospheric Research (NIWA).</p> <p>Refer to Larned et al (2015) for further information on data acquisition, processing and analyses.</p> <p>References:</p> <p>Larned S, Snelder T, Unwin M, McBride G, Verburg P, McMillan H (2015). Analysis of Water Quality in New Zealand lakes and Rivers: data sources, data sets, assumptions, limitations, methods and results. NIWA Client Report no. CHC2015-033.</p>
Limitations to data & analysis	The accuracy of the data source is of medium quality. The regional council monitored sites had a non constant probability of selection, favouring areas of interest for management purposes (such as pastoral catchments rather than indigenous landscapes).
Changes to time series	None