

Title	<b>Freshwater fish observational data, 1977–2015</b>
Type	Dataset
Subject	indigenous, exotic, biodiversity
Source	NIWA
Description	<p>Freshwater fish are an important component of freshwater ecosystems, have intrinsic biodiversity values and are a valued resource for Māori, recreational and commercial fishers. The presence or absence of a fish species can be affected by changes in catchment land cover and land use, in-stream habitat, fish passages (routes for moving up and down waterways), pests, and contaminants.</p> <p>The file contains the information associated with each record in the New Zealand Freshwater Fish Database used in the report, and the associated River Environment Classification information of the location of the observation.</p>
Variables	See attached Excel spreadsheet freshwater-fish-observational-data-and-variables.xlsx
Rights	Creative Commons Attribution 4.0 New Zealand
Publisher	New Zealand's Environment Reporting Series: The Ministry for the Environment and StatsNZ
Coverage	National, 1977–2015
Identifier	FW17/010
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Issued	27 April 2017
Environmental reporting topic	Freshwater species, taonga species and genetic diversity
Environmental reporting category	Case study
Environmental report	Our fresh water 2017
Relevant measure on the <a href="#">Environmental Indicators, Te taiao Aotearoa</a> website	Trends in freshwater fish
Other data and reports which relate to this	Predicted capture of 11 fish species, 1977–2015

measure	
Methodology (collection & analyses)	<p>The New Zealand Freshwater Fish Database (NZFFD) contains the longest time-series of information on freshwater fish occurrence in New Zealand. The NZFFD contains 35,000 freshwater fish observations from across New Zealand and observations date back to 1901. The NZFFD is an open source database for anyone (e.g. anglers, DOC, interest groups, scientists) to input catch information of native and exotic fish species. The database is owned by NIWA.</p> <p>Further details on methodology can be found in Crow et al (2016).</p>
Limitations to data & analysis	<p>The accuracy of the data source is of medium quality.</p> <p>The following limitations exist to the freshwater fish database:</p> <ul style="list-style-type: none"> <li>• It is open source – anyone can input data into it, so no common sampling approach from year to year</li> <li>• Fish display distinct habitat preferences, so where you sample and the time of year can influence what is caught</li> <li>• Fishing method used and the skill of the collector can influence catch rates</li> </ul> <p>The following variables are known to influence what is caught:</p> <ul style="list-style-type: none"> <li>• Temperature</li> <li>• Presence of barriers</li> <li>• Downstream and local slope</li> <li>• Sediment</li> <li>• Rainfall</li> <li>• Distance to coast</li> <li>• Indigenous forest cover</li> <li>• Nutrients</li> </ul> <p>Further details on limitations can be found in Crow et al, (2016).</p>
Changes to time series	There is no time series associated with any particular sites or data points.
References	Crow, S, Snelder, T, Jellyman, P, Greenwood, M, & Dunn, A (2016). Temporal trends in the relative abundance of New Zealand freshwater fishes: Analysis of New Zealand Freshwater Fish Database records. Prepared for the Ministry for the Environment. NIWA Client Report No CHC2016-049.