

Title	<b>Performance of assessed fish stock in relation to the hard limit (2009–15)</b>
Type	Dataset
Subject	fisheries, fish stocks
Source	Ministry for Primary Industries
Description	Our fish stocks are affected by commercial, customary, and recreational fishing, and environmental pressures (eg ocean temperature, acidity, and productivity). The Ministry for Primary Industries uses three performance measures to assess influences on fish stocks: a soft limit (below which a rebuilding plan is required), a hard limit (below which closing a fishery should be considered), and an overfishing threshold (where the rate of extraction is higher than the rate of replenishment).
Variables	<ul style="list-style-type: none"> <li>- year: 2009–15</li> <li>- performance_of_stocks_hard_limit: <ul style="list-style-type: none"> <li>o landings_from_stocks_above_hard_limit</li> <li>o stocks_above_hard_limit</li> </ul> </li> <li>- percent</li> </ul>
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	2009–15, Territorial Sea and Exclusive Economic Zone
Identifier	<a href="https://data.mfe.govt.nz/x/ppCtuP">https://data.mfe.govt.nz/x/ppCtuP</a>
Language	eng-nz
Issued	27 October 2016
Environmental reporting topic	Marine species, taonga species, and genetic diversity
Environmental reporting category	Case study
Environmental report	Our Marine Environment 2016
Relevant measure on the <a href="#">Environmental Indicators, Te taiao Aotearoa</a> website	<a href="#">State of fish stocks</a>
Other data and reports which relate to this measure	<ul style="list-style-type: none"> <li>- <a href="#">Performance of assessed fish stock in relation to the soft limit (2009–15)</a></li> <li>- <a href="#">Performance of assessed fish stock in relation to the hard limit (2009–15)</a></li> </ul>

	<ul style="list-style-type: none"> <li>- <a href="#">Performance of assessed fish stock in relation to the overfishing threshold (2009–15)</a></li> </ul>
Methodology (collection & analyses)	<p>The Ministry for Primary Industries uses three performance measures to assess fish stocks: a soft biomass limit (below which a stock rebuilding plan is required), a hard biomass limit (below which closing a fishery should be considered), and an overfishing threshold (above which the rate of extraction exceeds the optimal extraction rate).</p> <p>Models for assessing fish stocks include data on any significant customary or recreational catch. These data are taken into account in assessing stock status against the performance measures for soft limit, hard limit, and overfishing thresholds (Ministry of Fisheries, 2008).</p> <p>The commercial fishing year for most fish stocks goes from 1 October to 30 September, but some fish stocks have a fishing year of 1 April to 31 March. For example, the 2013 fishing year relates to fishing that took place between 1 October 2012 and 30 September 2013.</p>
Limitations to data & analysis	<p>We know the status of only some quota management system (QMS) stocks. There are 636 fish stocks in the QMS – 292 of which are considered nominal (trivial or unlikely to occur in a particular location). Of 344 non-trivial stocks for New Zealand fisheries, we know the status in 2015 of:</p> <ul style="list-style-type: none"> <li>- 157 relating to the soft limit</li> <li>- 183 relating to the hard limit</li> <li>- 121 relating to the overfishing threshold</li> </ul> <p>These stocks represent most of the main commercial fish species: in 2015, stocks of known status relative to the soft limit accounted for 78 percent of the total landings by weight and value, representing most of the main commercial fish species (Ministry for Primary Industries, 2016).</p> <p>A single stock with high landings can strongly influence results based on landings data. Results based on stock data can be overly influenced by the large number of small stocks, which often receive relatively little research effort.</p> <p>The QMS performance measures do not take into account the effects that a particular fishery could have on the marine environment (eg by damaging seabed habitats).</p>
Changes to time series	n/a
References	<p>Ministry of Fisheries (2008). Harvest strategy standard for New Zealand fisheries. Retrieved from <a href="http://fs.fish.govt.nz">http://fs.fish.govt.nz</a>.</p> <p>Ministry for Primary Industries (2016). The status of New Zealand's fisheries 2015. Retrieved from <a href="http://fs.fish.govt.nz/">http://fs.fish.govt.nz/</a>.</p>