

Data Grade and Approval Level Guide

The Otago Regional Council (ORC) considers it essential that the end user has an understanding of the data collection methodologies used, the data limitations, and the intended purpose of the original data sets.

ORC implements a **grade** (quality code) and **approval level** (quality assurance) schema that provides insight and detail for the end user, as well as highlighting any need to review supplementary data, comments, or other associated metadata. Time series data sourced from the ORC should only be used once its fitness for purpose is understood. It is the user's responsibility to determine if the data is appropriate for its intended use and communicate any assumptions about its use.

It should be noted that grades and approval levels can potentially change over time because of the data audit process and/or improved knowledge regarding the data and its interpretation.

Grade

Grades assigned to data are quality codes that conform to the National Environmental Monitoring Standards (NEMS). Grades enable end users to consistently utilise and/or review environmental data sourced from multiple councils and organisations throughout New Zealand.

[Find out about the NEMS monitoring standards.](#)

The table below summarises the NEMS quality codes in use at ORC:

Grade	Grade Description
100 Missing Record	Data is missing from the record.
200 No Quality or Non-Verified	Data is either raw (not quality assured), of unknown quality , or no relevant NEMS standard exists. Metadata should be requested to assess suitability for use.
300 Synthetic	Data is estimated from either: relationships, calculations, models, or limited measured data. Metadata should be requested to assess suitability for use.
400	Data is either compromised in its ability to represent the monitored parameter and/or has been significantly modified . Metadata should be requested to assess suitability for use.
500	Data has undergone minor modification and/or data does not meet operational best practices but is considered a fair representation of the monitored parameter.
600	Data was measured using best practices at the time of acquisition. Data is considered a good representation of the monitored parameter.

Approval Level

Approval levels describe the progression of data through ORC’s quality assurance processes and should be referred to in association with grades. Below are the approval levels used by ORC:

Approval Level	Approval Level Description
600 Env-Raw	Data may be from external providers or has yet to undergo quality assurance and is to be treated as raw/non-validated data. Data is subject to change.
800 Working	Data is in the process of being quality assured and is, therefore, subject to change.
900 Tech Reviewed	Data has been verified by technicians but has not gone through the whole quality assurance process.
1000 Approved	Data has been quality assured and is approved for use.

Please note:

1. Data set grades and approval levels are subject to change as new information becomes available and data gets reviewed.
2. Only data with an approval level of 1000 is available for download via the ORC Environmental Data Portal.