

Grades and Approvals Guide

Time series information sourced from the Aquarius database via Springboard, WebPortal or the Application Programming Interface (API) should only be used once its fitness for purpose is understood. It is the user's responsibility to determine if the provided data is appropriate for its intended use and communicate any assumptions in its use.

It is critical that an understanding of the data collection methodologies used, data limitations and intended purpose of the original data sets are known by the end users. Aquarius implements a Grade (quality code) and Approval (quality assurance process) schema that provides insight and detail for the end user of the provided data sets and highlights any need to review supplementary data comments or other associated metadata.

The Grades used conform to a nationally consistent quality code schema and will enable end users to consistently utilise and/or review environmental data sourced from multiple Councils and organisations throughout New Zealand.

The application of Grades and Approvals does not preclude data from change into the future due to improved knowledge about the data and its interpretation is collected.

Grades

Grades associated with data are quality codes that conform to National Environmental Monitoring Standards (NEMS) which are available at <http://www.nems.org.nz>. However NEMS do not exist for all measurements as their existence is only relatively recent and some are either in current development or yet to be developed as demands occur. Grades codes associated with data are:

Grade	Description	Meaning
-1,-2, 0 or blank	Undefined or Unspecified	Data does not conform to normal Grade process.
100	Missing	Data is missing.
200	Non-verified	Data is either yet to be verified or does not have a relevant NEMS to verify data against.
300	Synthetic	Data is estimated from any of the following: <ul style="list-style-type: none"> relationships calculations or models, or limited measured data
400	Poor	Measured data has been compromised in its ability to represent the monitored parameter and/or has been significantly modified.
500	Fair	Data that doesn't meet full standards but is considered to be a fair representation of the monitored parameter.
600	Good	Data measured to standards at the time of acquisition. Data is considered a good representation of the monitored parameter.

Approvals

Approval codes describe the progression of data through in-house quality assurance process and need to be referred to in association with the Grades. As data passes through quality assurance process both Grade and Approval codes may change.

Approval	Description	Meaning
0 or -1	Undefined or Unspecified	Data does not conform to normal Approval process.
1	Raw – yet to be reviewed	Data has yet to enter a quality assurance checking process and is to be considered as being raw data.
2	In Review	Data has yet to complete a quality assurance checking process and is to be considered as being raw data. Data is subject to change.
3	Approved	Data has been passed through initial stage quality assurance and approved for use.
4	Audited	Data has been through comparative checks and audit review process to confirm validity of recorded data.