



Bay of Plenty Regional Council

Data Grade and Approval Level Guide

It is essential that an understanding of the data collection methodologies used, data limitations and intended purpose of the original data sets are known by the end user. The Bay of Plenty Regional Council (BOPRC) 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 BOPRC 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 in its use.

It should be noted that grades and approval levels can potentially change over time as a result 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. The table below summarises the NEMS quality codes:

| Grade | Grade Description |
|--|--|
| 100 Missing Record | Data is missing from record. |
| 200 No Quality or Non Verified | Data is either raw (not quality assured), of unknown quality or no relevant NEMS standard exists. |
| 300 Synthetic | Data is estimated from either; relationships, calculations, models or limited measured data. |
| 400 | Data is either compromised in its ability to represent the monitored parameter and/or has been significantly modified. |
| 500 | Data has undergone minor modification and/or data that does not meet operational best practices, but is considered a fair representation of the monitored parameter. |
| 600 | Data 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 BOPRC's quality assurance processes and should be referred to in association with grades. Below are the approval levels used by BOPRC:

| Approval Level | Approval Level Description |
|--|--|
| 900 Raw – yet to review | Data has yet to undergo quality assurance and is to be treated as raw/non validated data. Data is subject to change. |
| 950 In Review | Data is in the process of being quality assured and is, therefore, subject to change. |
| 1200 Approved | Data has been quality assured and is approved for use. |
| 1300 Audited | Data has passed an in-depth audit review process to confirm validity of data record. |
| 1600 Validated | Data has been validated and approved for use, but its source of truth is external to the BOPRC AQUARIUS database. |