

GUIDELINES FOR SUBMISSION OF WATER QUALITY DATA

New Mexico Environment Department – Surface Water Quality Bureau

1.0 Introduction

During preparation of the draft Clean Water Act (CWA) §303(d)/ §305(b) Integrated Report and List (IR), the New Mexico Environment Department Surface Water Quality Bureau (SWQB) solicits water quality data from local, state, federal, public and private entities for consideration. Development of the IR fulfills the federal requirement to compile and publish a biennial report describing both a general assessment of surface water quality and a list of surface waters not meeting water quality standards. The SWQB evaluates readily available data while developing these reports.

This guidance has been prepared to assist entities wanting to submit data for consideration. These guidelines contain minimum requirements which must be met for the data to be used to determine designated use attainment reported on the Integrated List (Appendix A of the IR). If the data do not meet these minimum requirements, data may still be useful for prioritizing future SWQB monitoring efforts or other SWQB activities.

2.0 Planning Process

Any entity planning a sampling effort for CWA §303(d)/ §305(b) use attainment decisions should first obtain a thorough understanding of New Mexico's current water quality standards (WQS) (<https://www.env.nm.gov/surface-water-quality/wqs/>) and the current Comprehensive Assessment and Listing Methodology (CALM, <https://www.env.nm.gov/surface-water-quality/calm/>) that will be applied to the applicable WQS to determine whether or not a surface water is attaining its designated uses. Other important resources for those wishing to submit data to SWQB for use attainment consideration are the most recent IR and the associated Assessment Rationale (<https://www.env.nm.gov/surface-water-quality/303d-305b/>). Before submitting data to the SWQB, entities are encouraged to review these documents to become more familiar with past SWQB sampling and use attainment decisions (i.e., impairments) in the water body of concern.

All data gathering efforts require planning prior to data collection. Typically, this is summarized in a Sampling and Analysis Plan (SAP) or a Quality Assurance Project Plan (QAPP) and a Field Sampling Plan (FSP), which detail the procedural and analytical requirements of the project including monitoring locations. These documents should identify the project objectives, as well as provide guidance for all fieldwork by detailing sampling methods, analytical methods, specific quality assurance (QA) and quality control (QC) activities, and laboratory requirements designed to achieve the data quality goals. QA refers to the system of management activities that are designed to ensure quality, whereas QC refers to the system of preventive and corrective technical activities that measure or monitor performance against defined standards and describes adjustments to maintain acceptable performance. The U.S Environmental Protection Agency (EPA) has prepared a QAPP guidance document which includes QAPP requirements for Non-EPA organizations (available at <https://www.epa.gov/quality/agency-wide-quality-program-documents>).

The SWQB's most recent QAPP is available at <https://www.env.nm.gov/surface-water-quality/qaqc/>. The SWQB's website also has an extensive list of Standard Operating Procedures (SOPs) for data collection and associated templates, including one on how to develop a FSP, available at <https://www.env.nm.gov/surface-water-quality/sop/>. Any of the applicable portions in these SWQB documents may be included by reference in the SAP, QAPP, or FSP that accompanies data submittals (please include any revision numbers or dates).

Although data submitters are not required to use SWQB's exact data collection SOPs or QAPP, use of these data collection techniques, analytical methods, and QA/QC reviews will ensure data usability in the assessment process. For example, data submitters may use a different type of sampling equipment or different EPA or SWQB approved analytical techniques as long as required quality controls and detection limits are obtained. In contrast, SWQB's sedimentation assessment protocol requires very specific data collection, so it is important that this assessment protocol is reviewed as part of the project planning process if a project goal is to monitor and assess sedimentation impairment. If concurrent supporting data (such as hardness measurements for calculation of applicable water quality criterion) are not submitted or of high enough data quality to utilize, SWQB may consider using conservative hardness estimates when available to calculate an applicable water quality criterion for assessment.

3.0 Data Submission Process

Data packages for consideration in the IR process should be submitted to **Meredith Zeigler, SWQB's Assessment Coordinator**, preferably electronically via Meredith.Zeigler@state.nm.us. Data results must be submitted in Excel or compatible format, and must include, at a minimum, all the fields in the *Data Template or Long-Term Deployment Data (LTD) Template* (as applicable) available at <https://www.env.nm.gov/surface-water-quality/data-submittals/>. Any questions regarding required data fields in the template should be directed to Ms. Zeigler at Meredith.Zeigler@state.nm.us or 505-490-5866.

SWQB recognizes that organizations have their own reporting and data storage requirements. While we strongly encourage entities that regularly collect surface water chemical/physical data to upload their data through the [Water Quality Exchange \(WQX\)](#) so that data can be easily accessed in an electronic and compatible format ([Water Quality Portal](#)), please note that this is not our primary source of obtaining data from other entities. Data uploaded to other data repositories should not be used as a substitute for submitting data directly to SWQB. We request that you follow the guidelines outlined in this document and submit data directly to SWQB. Habitat and biological data should be submitted in a common electronic format. Data that are submitted in hard copy, PDF, or alternate formats will be considered subject to SWQB resource limitations to convert the data into the needed format, and therefore may not be included in SWQB's assessment process. Please also include information on any citable reports summarizing the data, if available.

Along with the actual data results, the following items must be submitted for data quality to be evaluated:

Contact Info - All data submitted to SWQB for evaluation must be accompanied by contact information including organization represented, name, email address, physical address, and phone number.

Station Description(s) - Each sample site for which data are submitted must be identified by latitude/longitude, preferably in decimal degrees. Also, the coordinate system should be identified, preferably as NAD 27 or NAD 83. Coordinates can be obtained from a GPS unit, a topographic map, or Google Earth (<https://www.google.com/earth/>). GPS coordinates are preferred, and they should be checked in Google Earth to ensure accuracy. In addition, verbal descriptions of the sample sites, including estimated distances to notable features or tributaries, are helpful for location identification.

SAP, QAPP and FSP – For data to be considered for use attainment decisions (i.e., impairment determinations), data submitters must include information regarding sampling methods, analytical methods, specific QA/QC activities, and laboratory requirements designed to achieve the data quality goals (Table 1).

All data submissions from outside sources will be reviewed by the SWQB QA Officer to ensure the suitability of the QA/QC procedures under which the data were collected. Specifically, submitted documentation associated with the dataset will be reviewed to determine: (1) if there is documentation of QA/QC procedures that, at a minimum, meet the QA/QC requirements described in the SWQB’s most recent QAPP; and (2) if there is reasonable evidence or assurance that these procedures were followed. If these minimum requirements are met, the submitted data will be incorporated into the data set used to make attainment determinations. If these minimum requirements are not met, the submitted data will not be used for use attainment determinations but may still be useful for prioritizing future SWQB monitoring efforts. Any questions regarding QA/QC, including SAP, QAPP and FSP concerns, should be directed to **Miguel Montoya, SWQB’s Quality Assurance Officer**, at miguel.montoya@state.nm.us or 505-819-9882.

Table 1.

QA/QC Evaluation Criteria for External Data
Entity submitted supporting QA/QC documentation provided or available (SAP, QAPP, FSP, SOPs, etc.)
Data collection methods follow, or are comparable to, current SWQB SOPs*
Sample handling procedures and holding times are the same as, or comparable to, the requirements in Appendix A of the current SWQB QAPP**
Analytical methods used meet, or are comparable to, the requirements in Appendix B of the current SWQB QAPP**
QA/QC procedures are comparable to those outlined in the current SWQB QAPP**
Data verification and validation procedures are documented.

Notes: * Available at <https://www.env.nm.gov/surface-water-quality/sop/>.

** Available at <https://www.env.nm.gov/surface-water-quality/qaqc/>.

Data quality with respect to assessment will be assigned as described in Appendix A of New Mexico’s most recent CALM (<https://www.env.nm.gov/surface-water-quality/calm/>). Categories with respect to submitted data evaluation for assessment use are summarized below:

Data Quality 3 (Good) or 4 (Excellent)-Data as submitted meets quality assurance standards required to be used for assessment purposes.

Data Quality 2 (Fair)-Data, as submitted, does not meet all the requirements for assessment purposes but may be usable for purposes such as supporting data (i.e., estimated input parameters for applicable WQ criterion calculations), screening, planning, and informal information gathering to guide decision making.

Data Quality 1 (Low)-Data, as submitted, does not contain enough information to be used by the SWQB for assessment purposes at this time.