

A. Project Management:

The Department's Watershed Evaluation and TMDL (Total Maximum Daily Load) Section (WET) resides within the Water Quality Evaluation and TMDL Program (WQETP) and has the primary responsibility for determining TMDLs for nonpoint source pollutants to state surface waters ([TMDL Website](#)). The TMDLs are derived using mathematical and/or statistical models or water quality studies to determine the assimilative capacity of receiving surface waterbodies. The section's objective in developing a TMDL is to assure that nonpoint source pollutants and discharges into the surface waters of the state will not degrade receiving water quality below applicable surface water quality standards (Rule 62-302, F.A.C.) or affect the designated uses of the receiving water. The WET section has an adopted quality assurance (QA) Plan titled "[Quality Plan for Watershed Evaluation and TMDL Section](#)". Section 2 of the Plan outlines the primary objectives for the WET sampling program. Section 3.0 of the Plan contains an organizational chart, list of project management responsibilities, and detailed information regarding project management. Section 4 contains information on staff training requirements and documentation.

B. Data Generation and Acquisition:

The WET section will at times collect its own data for specific projects but primarily uses data collected by other groups. The WET section follows the [DEP SOPs](#) for all sampling activities (except as noted in Section 9 of the WET QA Plan) including field-meter testing, sample collection, and documentation. Surface water sampling follows SOP FS 2100, and sediment sampling follows SOP FS 4000. WET follows SOP FD 1000 for documentation requirements for field sampling activities, and SOP FQ 1000 for quality control requirements, including required field blank frequency of 5 %. Field-meters are maintained by Groundwater Section staff within WQETP and are available for use by WET section staff. WQETP staff follow the field instrument calibration and verification procedures in FT 1000-FT 1700. Meters are verified for temperature, pH, specific conductance/salinity, and dissolved oxygen, as applicable, before each sampling trip, and calibrated if the verifications fail. Section 5 of the WET QA Plan contains specific information on sampling design, Section 8 covers section sampling capabilities, and Section 9.0 describes instrument calibration, care, and use.

The WET section obtains sampling kits and necessary preservatives from, and sends all samples for analysis to the [FDEP Central Laboratory](#), so the analytical procedures follow its lab standards, which comply with all lab requirements of the QA Rule. All information regarding field collections, preservation, preservation checks, and staff performing the sampling is recorded on the DEP Water Sampling form, to fulfill documentation requirements of Part II of the [QA Rule](#). All preservation, holding times, equipment, and collection materials follow requirements in SOP FS 1000. Minor maintenance for meters is conducted within the WQETP, and meters are sent to the manufacturer in cases of major maintenance needs.

As stated in Section 3.1 of the WET QA Plan, the WET QA Officer ensures that corrective actions are implemented for data non-conformance incidents as determined by evaluation of the data against our program's Data Quality Objectives (DQOs). Any corrective actions required and the steps taken to ensure compliance with QA requirements are documented and summarized as part of the WET Section Annual QA Report.

Section 6 of the WET QA Plan describes WET data management procedures. Data collected by WET are entered by the lab into the Bureau of Labs Lab Information Management System (LIMS). Data entry accuracy is verified by a second staff member for all data entry. Water quality data are uploaded into the WIN database by WET staff.

C. Assessment and Oversight:

The WET QA Plan Section 3.0 contains information on project oversight, Section 7 covers issues related to data assessment, Section 6, Data Review, covers topics related to data assessment procedures, and Section 10 contains information on WET audit procedures.

Program audits and performance audits are carried out on an as-needed basis. Section 10 of the WET QA Plan describes the various audits conducted by WET staff. Those audits include internal section sampling performance audits and field audits. The procedures for conducting and documenting the audits are in Section 10 which addresses audit evaluations as well as the corrective actions. The WET QA Officer, James Albright, is lead auditor and organizes the audit preparation.

The WET section contributes to the Florida Department of Environmental Protection (DEP) Annual QA Report to the DEP Secretary, the first of which was submitted in February 2012. This annual report is a compilation of types and outcomes of QA activities conducted throughout the year in all DEP programs.

D. Data Review, Validation and Verification:

The WET section reviews data to determine its usability for determination of compliance with permits or rules and for development of water quality models. These procedures are based on our established Data Quality Objectives and Data Quality Indicators discussed in Section 3 of the WET QA Plan, which incorporate the concepts and criteria found in DEP's "[Process for Assessing Data Usability](#)", DEP-EA-001/07. The WET section uses the data qualifiers, from Table FM 1000-1 of SOP FM 1000. These activities are taken on by the WET section as a "team approach" providing for multiple staff and management review to ensure accuracy and defensibility of any decisions associated with the data.

If data quality is in question for data generated in-house, the results and sampling circumstances are evaluated to determine the potential cause for the aberration. If an analyte is detected in a field blank, then accompanying samples are given a J qualifier and therefore not used if their value is less than ten times the blank detection. If a sample result was a high outlier based on expectations for a given site, but no quality control (QC) measure failed and no errors can be found with the lab or field crew, the data are retained in the dataset. If data quality or consistency is in question for data generated by another party, WET requests QC records from that party, or coordinates a lab and field comparison study, in which replicate samples are collected and analyzed by DEP and the other party to determine comparability of results. These investigations are coordinated with the WET Project Manager by the WET QA Officer.