



2011 Annual Quality Assurance Report

Ground Water Management Section

January 2012

Executive Summary

The DEP Ground Water Management section (GWMS) is responsible for conducting statewide, basin-scale, and detailed assessments of ground water quality, focusing on ground water as a potable water resource as well as a source of base flow to streams, lakes and estuaries. The section conducts quarterly monitoring of a network of Florida's springs for water quality, and carries out biological assessments using appropriate assessment tools, in coordination with section staff, other DEP staff, and contractors. The GWMS also is responsible for data management (water quality and discharge data), QA and assessment of data from the Springs monitoring network and special springs projects. The GWMS collects springs water quality and discharge data from various agencies, analyzes the data and produces assessment reports. The GWMS also has an integral role in assessing the springs for TMDL development, writing TMDL documents for springs, and working on BMAP activities pertaining to springs. GWMS staff members also serve as DEP contacts, providing technical input to the Florida Department of Agriculture and Consumer Services (FDACS) by reviewing new pesticide registrations and evaluating best management practices (BMP) manuals.

The 2011 calendar year included a few examples of QA in action within the section. Staff conducted an audit of our springs monitoring samplers in January to insure that all DEP SOPs are followed properly in sample collection and preservation. The section QA officer attended a two day training workshop given by the Standards and Assessment Section in March. We also experienced some data management issues with our springs monitoring data, that were addressed, and steps were taken to avoid future issues.

In 2012, the GWMS plans to focus more effort on getting additional training on different bioassessment methods for field staff, conducting restoration assessment monitoring, as well as performing more and diverse types of audits in the section for field and office staff.

Report of Quality Assurance Activities and Issue

1. Quality Assurance Training Activities

General Quality Assurance Training

The QA officer for the GWMS attended a training workshop developed by the SAS in March 2011. This training was designed to address QA topics of general relevance to DEP's programs. The workshop provided both classroom and "hands-on" lab and field training, and included information on the QA Directive (#972), evaluation of analytical data (data usability), approved laboratory methods, QA planning documents (for grants, contracts and research projects), field and lab audits, and DEP SOP sampling and field testing procedures. The DEP SOP training included both classroom and hands-on field training.

2. Audit Activities

Audit of Field Staff

The section conducted an internal audit of our springs sampling staff in January 2011. This audit included evaluation of the field documentation, field quality control, field testing and calibration, general sampling procedures, and surface water sampling methods.

3. Quality Assurance Issues and Corrective Actions

Data Management Issues

In May 2011, the section lost the staff member who was responsible for key data management tasks and was not able to fill the vacant position until November 2011. During this period of time, and for a 2 month-long training period for the replacement, springs water quality data were not processed for uploading to the database, which included data review for quality assurance purposes. With the new QA reviewer hired and properly trained, the data flow and QA reviews will resume in early 2012.

4. Section QA Goals for 2012

The GWMS intends to accomplish the following quality assurance activities in the 2012 calendar year:

- Additional training on the Stream Condition Index (SCI) bioassessment procedures for staff that perform field work. Staff was already trained on Rapid Periphyton Survey (RPS) in 2010.
- Additional audits for field staff and a special purpose audit of our data management activities.