

FY2016 Water Quality Monitoring Program QA/QC Metrics

1. Performance Metrics

Lab Analysis Tasks Complete Within 15 Days (through September 2016)

Purpose: To track total reporting time for laboratory analyses.

Goal: Maintain 90% or more of all tasks within 15-day maximum turn-around test time, where applicable.

Total Analysis Tasks	Analysis Tasks Complete in 14 Days	% Analysis Tasks Complete in 14 Days	% Analysis Tasks Exceeding 14 Days	Goal Met
51358	36665	71%*	29%	N

*The 14-day analysis reporting time is a self-imposed tracking metric that can be affected by circumstances outside of an analyst's control such as downtime due to instrument failure. While the 14-day analysis reporting time goal was not met for FY2016, the percentage of analyses outside method hold time, which is a metric critical to data quality, remained exceptionally low during FY2016 at 0.5%.

Scheduled Versus Actual Sample Events by Resource and Site Type (through September 2016)

Purpose: To track the percentage of sample collection tasks performed as scheduled. *

Goal: 90% or more of all scheduled sample collection tasks performed on schedule.

Resource Type	Scheduled	Actual	% Complete	% Not Sampled	Goal Met
Groundwater	1281	1223	95%	5%	Y
Surface Water, Grab Samples	1351	1313	97%	3%	Y

* This metric can be affected by events outside of sampler's control such as access denial by property owners, surface water sites being dry, and conditions unsafe for sampling (flooding).

Annual Cost Savings (through September 2016)

Purpose: To track annual savings realized through efficient purchasing and repair/maintenance practices.

Goal: Realize annual total savings of at least 5% per section per fiscal year in the operating budget.

Budget Line	\$ Savings	FY2016 Budget	% Savings for Budget Line	Goal Met
Lab Parts & Supplies	\$920	\$60,159	1.5%	N
WQMP Repair & Maintenance and Equipment Rental*	\$23,175	\$8,496	273%	Y
WQMP Parts & Supplies	\$1,355	\$42,575	3%	N

*Total savings includes an estimate of savings realized through in-house monthly meter maintenance versus sending meters out for routine servicing by the vendor.

Annual Water Quality Records Loaded to State Water Quality Databases

Purpose: To track the number of surface water records loaded annually to State databases in accordance with Chapter 62-40.540(3), F.A.C.

Goal: 100% of Calendar Year 2015 surface water records loaded annually to District databases will be loaded to State databases.

	Record Totals in District Database	Record Totals in State Database	Percent Data Loaded to State Database	Goal Met
CY2015 Data	48790	44508	91%*	N

* Not all analytes are appropriate for loading to State Database

2. QA/QC Metrics

Duplicate Analysis Exceeding 20% Relative Percent Difference (RPD)

Purpose: Purpose: To track the reproducibility and precision of field sample collection and sample analysis. This metric tracks the instances where a field duplicate analysis for a parameters exceeds a relative percent difference of 20%.

Goal: Maintain 10% or less duplicate analyses that exceed a 20% relative percent difference.

	Total Duplicate Analyses	Analyses Exceeding 20% RPD	Duplicate % Exceedances	Goal Met
Quarter 1	607	8	1%	Y
Quarter 2	677	4	1%	Y
Quarter 3	759	5	1%	Y
Quarter 4	669	7	1%	Y

Equipment Blank Analyses Exceeding the Method Detection Limit (MDL)

Purpose: To track potential contamination issues in sample collection, field equipment or laboratory analysis. This metric tracks the instances where a parameters exceeds the established method detection limit for a field blank sample.

Goal: Maintain 10% or less method detection exceedances for field blank analyses.

	Total Blank Analyses	Analyses Exceeding the MDL	Blank % Exceedances	Goal Met
Quarter 1	417	21	5%	Y
Quarter 2	525	20	4%	Y
Quarter 3	616	28	5%	Y
Quarter 4	513	33	6%	Y

Field Data Qualified as Questionable

Purpose: To track the accuracy of field data collection. This metric tracks the number of field records flagged because they failed to meet established field quality control criteria.

Goal: Maintain 10% or less total field records flagged with a 'J' value qualifier code.

	Total Field Readings Collected	# of Qualified Field Readings	Qualified Field Readings %	Goal Met
Quarter 1	4348	0	0.00%	Y
Quarter 2	5092	0	0.00%	Y
Quarter 3	6192	8	0.13%	Y
Quarter 4	5576	0	0.00%	Y

FIELD AUDITS

PURPOSE: To track that field activities are being performed in compliance with the Water Quality Monitoring Program's field sampling Standard Operating Procedures and the Florida Department of Environmental Protection Standard Operating Procedures (001/01), in accordance with Chapter 62-160-650 F.A.C.

Goal: Maintain 100 percent satisfactory for all audits performed.

QUARTERLY FIELD AUDITS	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
AUDITS PERFORMED	3	5	3	6
SATISFACTORY AUDITS	3	5	3	6
UNSATISFACTORY AUDITS	0	0	0	0
FINDINGS & CORRECTIVE ACTIONS	2	1	1	1
RESOLVED OR ADDRESSED	2	1	1	1