

# FY2017 PERFORMANCE METRICS

## Hydrologic Data Section

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### VTSCADA AVAILABILITY

**PURPOSE:** To quantify the time SCADA is operational

**GOAL:** SCADA server (primary or secondary server) will be operational (UP) 100% of the time

SCADA SERVER SYSTEM	Q3_FY2017		Q4_FY2017	
	OPERATIONAL (UP) TIME (%)	INOPERATIONAL (DOWN) TIME (%)	OPERATIONAL (UP) TIME (%)	INOPERATIONAL (DOWN) TIME (%)
Brooksville Primary SCADA Server ( <i>BKVSCADASRV01</i> )	99.59%	0.41%	99.37%	0.63%
Brooksville Secondary SCADA Server ( <i>BKVSCADASRV02</i> )	99.94%	0.06%	99.35%	0.65%
Brooksville Public Information Web Server ( <i>BKVSCADASRV03</i> )	100.00%	0.00%	100.00%	0.00%
Brooksville Citrix Control Web Server ( <i>BKVSCADASRV04</i> )	99.98%	0.02%	99.27%	0.73%
Tampa Primary SCADA Server ( <i>TPASCADASRV01</i> )	97.08%	2.92%	99.99%	0.01%
Bartow Primary SCADA Server ( <i>BARSCADASRV01</i> )	N/A**	N/A**	N/A**	N/A**

*Notes: \*\*Bartow Server Has Been Offline Since March 2014, while Tampa Server was reactivated as of October 2016. Combined availability of the primary and secondary servers meets the 100% goal.*

## NAVD88 MIGRATION

**PURPOSE:** To quantify the number of active groundwater and surface water sites that have been surveyed or migrated to NAVD88 and evaluate completion rate

**GOAL:** Migration of 345 active sites and adjustment of 70 staff gauges to the NAVD88 datum, per quarter

GROUNDWATER & SURFACE WATER LEVEL SITES	Q3_FY2017	Q4_FY2017	CHANGE (Value)	CHANGE (%)
Total Number of Active Sites**	2397	2397	0	0.0%
Sites Migrated to NAVD88	2340	2385	45	1.9%
**Data Migration Complete (%)	97.6%	99.5%	----	1.9%
Active Staff Gauge Sites***	799	799	0	0.0%
Staff Gauge Sites migrated to NAVD88	770	783	13	1.7%
***Staff Gauge Migration Complete (%)	96.4%	98.0%	----	1.6%

*Notes: \*\*Achieving this goal will result in 95% of active sites migrated to NAVD88 by December 31, 2015.*

*\*\*\*Staff gauges are to be surveyed/adjusted on a 3-year cycle (January 2014 – December 2016).*

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## SITE REPAIR WORK ORDERS

**PURPOSE:** To quantify the number of site repair work orders issued quarterly and evaluate completion rate

**GOAL:** To achieve 100% completion of site repair work orders, per quarter

ITEM	Q3_FY2017	Q4_FY2017	CHANGE (Value)	CHANGE (%)
Number Issued	98	111	13	13.3%
Number Completed	86	105	19	22.1%
Number Incomplete	12	6	-6	-50.0%
Percent (%) Completed	88.0%	94.6%	----	6.6%

*Notes: The reasons for this metric's goal not being met include work orders issued at the end of one quarter being completed in a subsequent quarter; and cancelled or closed work orders not being properly cancelled/closed in MPET in a timely manner by the technician. Changes in procedures have been implemented to facilitate proper closures of work orders.*

## SITE INSTALLATION WORK ORDERS

**PURPOSE:** To quantify the number of site installation work orders issued and evaluate completion rate

**GOAL:** To achieve 100% completion of site installation work orders, per quarter

ITEM	Q3_FY2017	Q4_FY2017	CHANGE (Value)
Number Issued	1	4	3
Number Completed	1	4	3
Number Incomplete	0	0	0
Percent (%) Completed	100.0%	100.0%	100.0%

*Notes: Site installations include constructing new data collection sites; or significant modifications/upgrades to existing sites which do not change the overall size of the network. \*\*The incomplete status of this site is the result of delays regarding retrofits to the well.*

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## SITE MAINTENANCE WORK ORDERS

**PURPOSE:** To quantify the number of site maintenance work orders issued and evaluate the completion rate

**GOAL:** To achieve 100% completion of scheduled site maintenance work orders, per semi-annual period

ITEM	**Semi-Annual (Jul-Dec_2016)	**Semi-Annual (Jan-Jun_2017)	CHANGE (Value)	CHANGE (%)
Number Issued	635	844	209	32.9%
Number Completed	625	808	183	29.3%
Number Incomplete	10	36	26	260.0%
Percent (%) Completed	98.4%	95.7%	---	-2.7%

*Notes: \*\*Routine site maintenance work orders are issued twice a year (at the beginning of January and July) and the technician has a six-month time-period to complete the work. Rainfall calibration work orders are issued in January, accounting for more work orders issued in the first six-month period. Procedures have been implemented to improve completion of work orders.*

## MANUALLY COLLECTED DATA – SCHEDULED SITE VISITS

**PURPOSE:** To quantify the number of scheduled and completed site visits, per quarter

**GOAL:** To achieve 100% completion of scheduled site visits, per quarter

ITEM	Q3_FY2017	Q4_FY2017	CHANGE (Value)
Total "Scheduled" Site Visits	8303	8324	21
Total Site Visits Completed	8247	8322	75
Site Visits "Missed"	56	2	-54
Percent (%) Completed	99.3%	99.9%	N/A

*Notes: A small number of site visits are missed quarterly, due to unforeseen circumstances or events.*

## ACTIVE DATA COLLECTION SITES, BY PARAMETER AND COLLECTION METHOD

**PURPOSE:** To quantify the number of active data collection sites, by hydrologic parameter and collection method

**GOAL:** To track changes to the Hydrologic Data Monitoring Network

SITE TYPE	Q3_FY2017				Q4_FY2017				TOTAL CHANGE (VALUE)
	MANUAL	NRT	RECORDER	TOTAL	MANUAL	NRT	RECORDER	TOTAL	
Rainfall	0	137	41	178	0	141	41	182	4
Groundwater (Well)	771	415	409	1595	771	415	409	1595	0
Surface Water (Lake)	373	27	4	404	373	27	4	404	0
Surface Water (Streamflow)	8	33	1	42	8	36	1	45	3
Surface Water (Wetland)	220	9	3	232	220	9	3	232	0
Surface Water (Other)	18	65	7	90	18	65	7	90	0
<b>TOTAL</b>	<b>1390</b>	<b>686</b>	<b>465</b>	<b>2541</b>	<b>1390</b>	<b>693</b>	<b>465</b>	<b>2548</b>	<b>7</b>

*Notes: This metric characterizes the size of the active hydrologic monitoring network, and as such reflects changes in the absolute number of active monitoring sites. These changes can consist of addition of new monitoring sites, discontinuation of sites, or temporary losses of sites for numerous reasons. Reestablishment of data collection at sites lost temporarily may occur in the same quarter, following quarter or much later.*

## **HYDROLOGIC DATA QUALITY ASSURANCE METRIC**

**PURPOSE:** Assessment of inherent good quality of raw hydrologic data measurements relative to need for correction

**GOAL:** Per quarter, greater than 90% of measured points are “good,” less than 5% are “validated” and less than 5% are “missing”

<b>FY</b>	<b>Quarter</b>	<b>Total Measured Points</b>	<b>Good Data</b>	<b>Validated Data</b>	<b>Missing Data</b>
2015	1	3,793,353	97.4%	2.3%	0.3%
2015	2	3,671,285	97.0%	2.1%	0.9%
2015	3	3,848,939	97.9%	1.5%	0.1%
2015	4	3,749,173	99.1%	0.5%	0.1%
2016	1	3,610,562	99.3%	0.2%	0.2%
2016	2	3,696,463	99.1%	0.7%	0.2%
2016	3	3,772,336	99.3%	0.1%	0.3%
2016	4	3,869,619	98.7%	0.6%	0.4%
2017	1	3,900,983	98.5%	0.8%	0.4%
2017	2	3,692,076	98.9%	0.2%	0.6%
2017	3	3,942,065	95.8%	0.1%	0.8%
2017	4	3,791,605	98.7%	0.2%	1.0%

*Notes: Due to the large number of values recorded by dataloggers, adjustments are necessary to some readings to correct them to acceptable quality standards. Good site maintenance procedures and annotation of field conditions ensure that the goal for this metric is met.*

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## **HYDROLOGIC DATA SITE MAINTENANCE vs DATA QUALITY OVER TIME**

**PURPOSE:** Quantifies the percentage of HDS site maintenance work orders completed over a calendar-year period, against the percentage of good quality data, missing data, and validated data for the same period

**GOAL:** Per quarter, greater than 90% of measured points are “good,” less than 5% are “validated” and less than 5% are “missing”

<b>Calendar Year</b>	<b>Percent PM Work Order Completion</b>	<b>Percent “Good” Quality Data</b>
2014	95%	95%
2015	96%	97%
2016	98%	98%

*Notes: Good site maintenance procedures and annotation of field conditions ensure that the goal for this metric is met*

## **FIELD AUDITS**

PURPOSE: To assess adherence to standard data collection procedures and data management practices.

<b>QUARTERLY FIELD AUDITS</b>	<b>QUARTER 1</b>	<b>QUARTER 2</b>	<b>QUARTER 3</b>	<b>QUARTER 4</b>
AUDITS PERFORMED	22	8	22	13
SATISFACTORY AUDITS	22	8	22	13
UNSATISFACTORY AUDITS	0	0	0	0
FINDINGS & CORRECTIVE ACTIONS	1	0	4	0
RESOLVED OR ADDRESSED	1	0	4	0