City of Columbia, SC Stormwater Management — Partnering for clean waterways

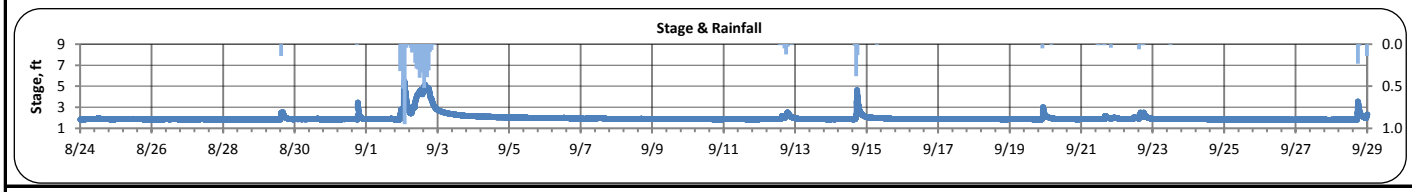
Continuous Water Quality Monitoring Periodic Report

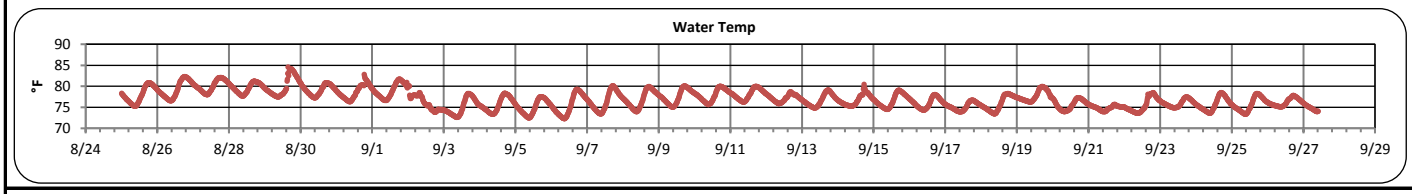
WOOLPERT

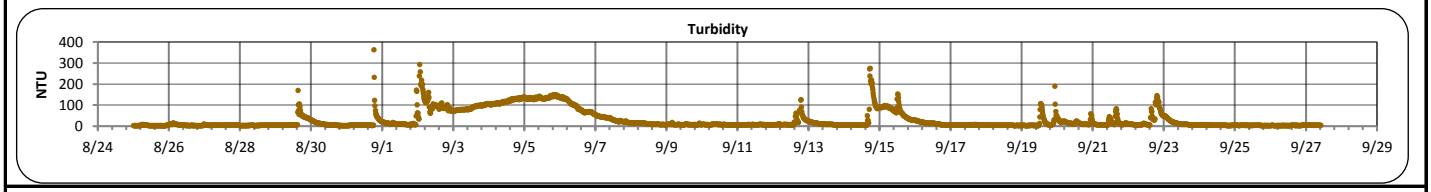
Smith Branch A (August 24, 2016 -- September 28, 2016)

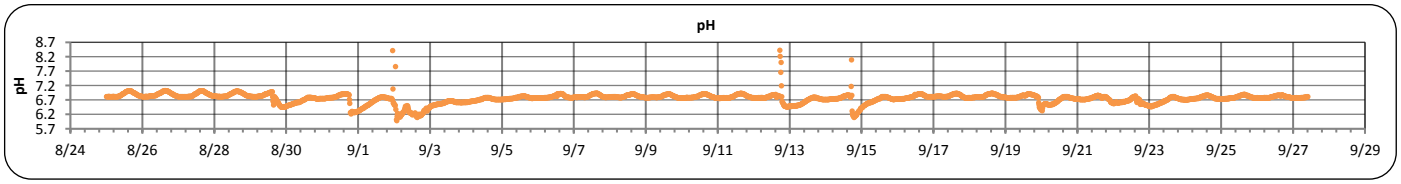
PARAMETER	DESCRIPTION
STREAM NAME:	Smith Branch
LOCATION:	Earlewood Park
ADDRESS:	1111 Parkside Dr Columbia, SC 29201
COORDINATES:	34.027289,-81.04265
TMDL/IMPAIRMENT:	Fecal Coliform
NEIGHBORING LANDUSE:	Residential and commercial
SPATIAL LOCATION:	Most upstream site
TOTAL NO. STORMS OVER 0.1 INCH:	6
MAX. DAILY RAINFALL:	5.4 inches
TOTAL RAINFALL (FOR PERIOD):	7.2 inches

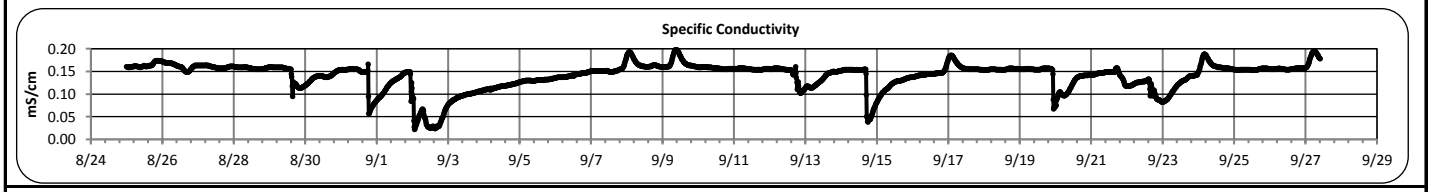
CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STAGE (FT):	1.8	5.5	1.9	2.0	0.4
TEMPERATURE (°F):	72	85	77	77	2
TURBIDITY (NTU):	3	364	9	30	43
pH:	6.0	8.4	6.8	6.8	0.2
SPECIFIC CONDUCTIVITY (mS/cm):	0.022	0.198	0.153	0.141	0.029
DISSOLVED OXYGEN (mg/L):	4.0	8.2	7.1	7.1	0.6

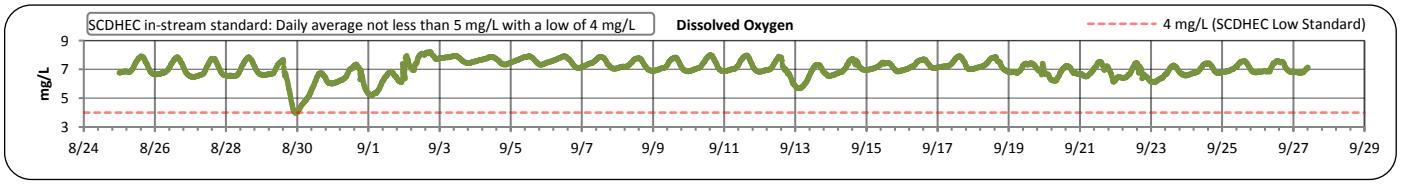












Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

REPORT GENERATED ON 10/18/2016

Continuous Water Quality
Monitoring Periodic Report

Smith Branch A (August 24, 2016 -- September 28, 2016)

Explanation of Statistics:

MINIMUM OBSERVED	The minimum of the values recorded by the datasonde in 15 minute intervals.
MAXIMUM OBSERVED	The maximum of the values recorded by the datasonde in 15 minute intervals.
MEDIAN OBSERVED	The median of all the values recorded by the datasonde in 15 minute intervals.
MEAN OBSERVED	The average of all the values recorded by the datasonde in 15 minute intervals.
STANDARD DEVIATION	The standard deviation of all the values recorded by the datasonde in 15 minute intervals.

Grab Sample Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	9/2/2016		9/2/2016		9/2/2016			
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	9:46	8,704	11:13	5,818	13:11	6,510		
Total Suspended Solids (mg/L)	9:46	105	11:13	107	13:11	94		
Total Phosphorus (mg/L)	9:46	0.14	11:13	0.15	13:11	0.15		
Total Nitrogen (mg/L)	9:46	0.83	11:13	0.71	13:11	0.81		

Note:

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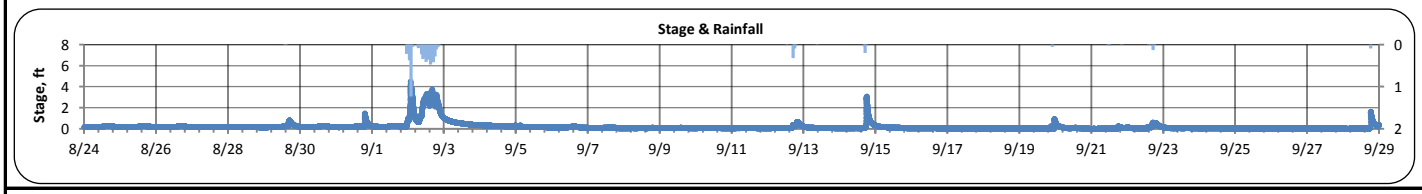
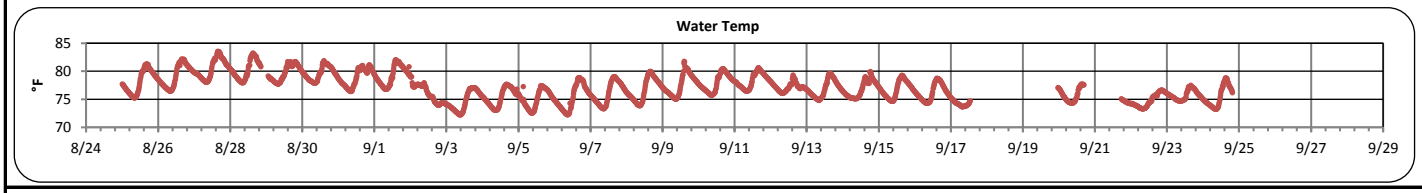
WOOLPERT

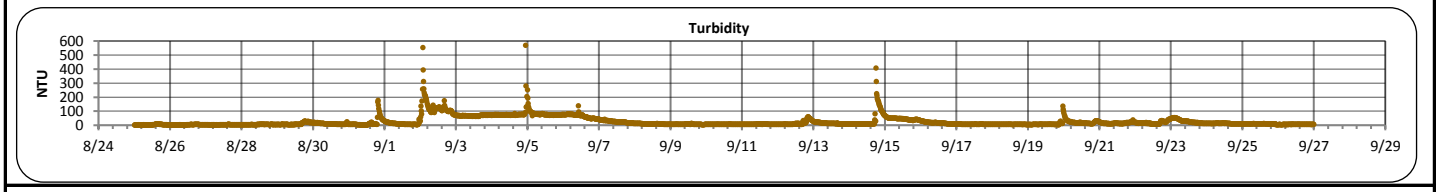
Smith Branch B (August 24, 2016 -- September 28, 2016)

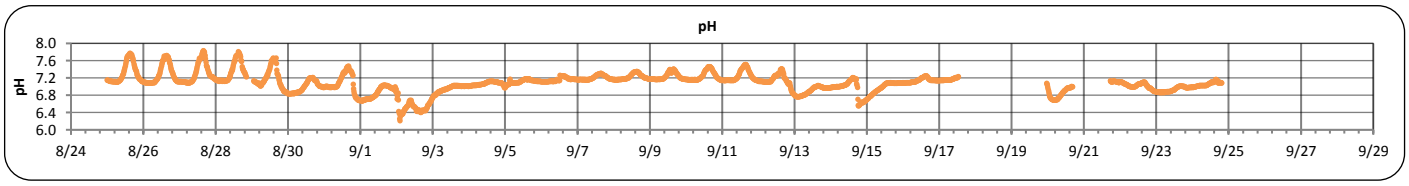
PARAMETER	DESCRIPTION
STREAM NAME:	Smith Branch
LOCATION:	Off Mountain Drive
NEAREST ADDRESS:	3950 Clement Rd Columbia, SC 29203
COORDINATES:	34.037933,-81.0591
TMDL/IMPAIRMENT:	Fecal Coliform
NEIGHBORING LANDUSE:	Residential and commercial
SPATIAL LOCATION:	Most Downstream Site
TOTAL NO. STORMS OVER 0.1 INCH:	5
MAX. DAILY RAINFALL:	5.5 inches
TOTAL RAINFALL (FOR PERIOD):	7.2 inches

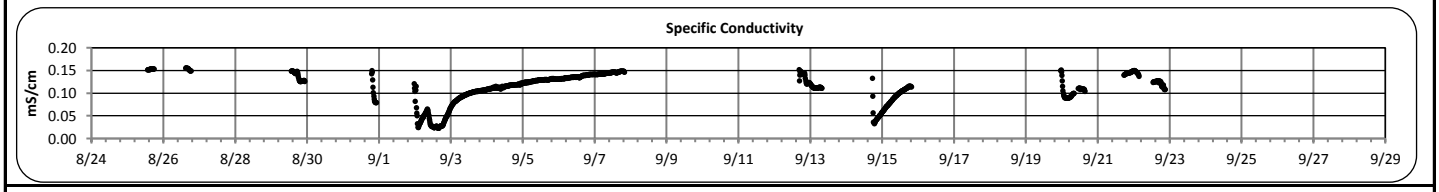
CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STAGE (FT):	0.0	4.5	0.1	0.2	0.4
TEMPERATURE (°F):	72	84	77	77	2
TURBIDITY (NTU):	3	570	12	26	37
pH:	6.2	7.8	7.1	7.1	0.2
SPECIFIC CONDUCTIVITY (mS/cm):	0.023	0.156	0.118	0.111	0.033
DISSOLVED OXYGEN (mg/L):	5.9	9.3	7.7	7.6	0.6

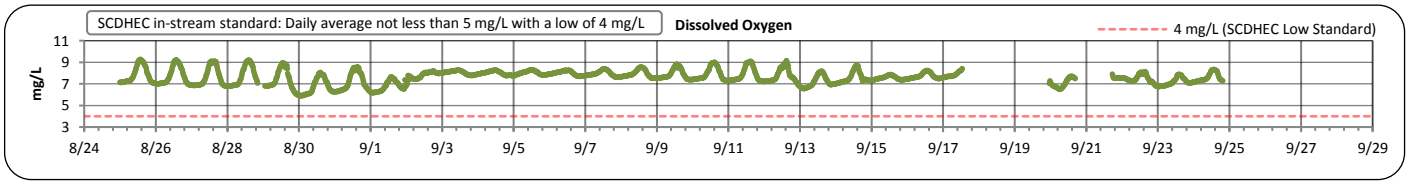












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Sampled Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	9/2/2016		9/2/2016		9/2/2016			
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	10:00	9,222	11:26	6,260	13:27	5,974		
Total Suspended Solids (mg/L)	10:00	162	11:26	140	13:27	144		
Total Phosphorus (mg/L)	10:00	0.19	11:26	0.18	13:27	0.17		
Total Nitrogen (mg/L)	10:00	0.99	11:26	0.82	13:27	0.77		

Note: