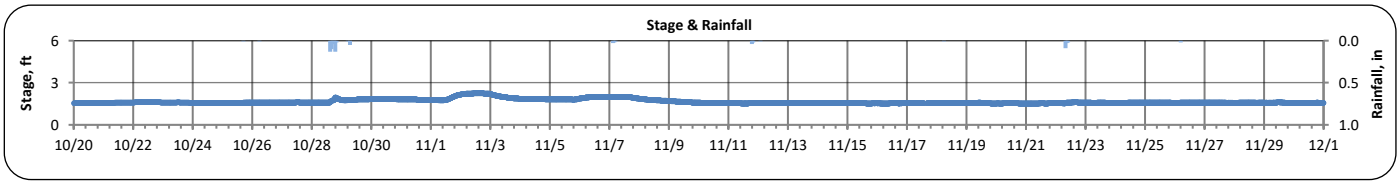
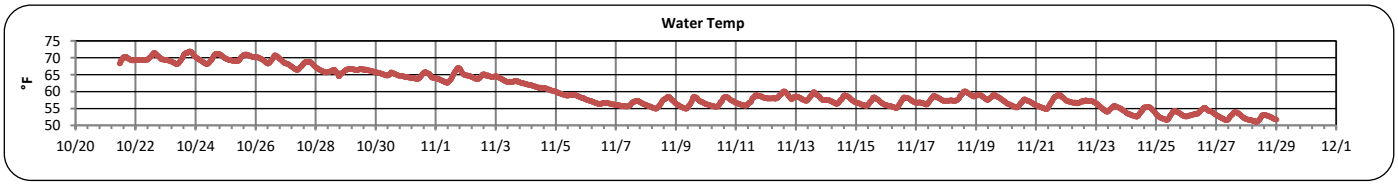
Continuous Water Quality Monitoring Periodic Report

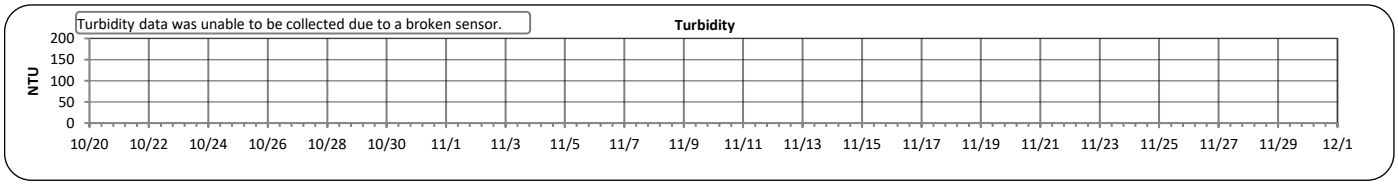
Gills Creek A (October 20, 2021 - November 30, 2021)

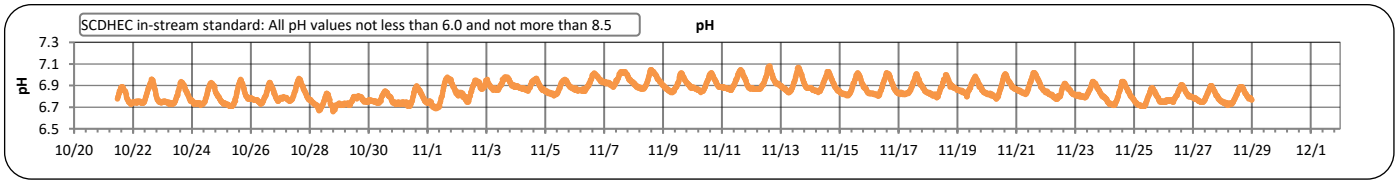
PARAMETER	DESCRIPTION
STREAM NAME:	Gills Creek
LOCATION:	Forest Drive Bridge
ADDRESS:	4840 Forest Drive, Columbia, SC 29206
COORDINATES:	34.019826, -80.963566
TMDL/IMPAIRMENT:	Fecal & Dissolved Oxygen
NEIGHBORING LANDUSE:	Residential and commercial
APPROX. DRAINAGE AREA:	48 square miles
SPATIAL LOCATION:	Most upstream site
TOTAL NO. STORMS OVER 0.1 INCH:	2
MAX. DAILY RAINFALL:	0.4 inches
TOTAL RAINFALL (FOR PERIOD):	0.8 inches

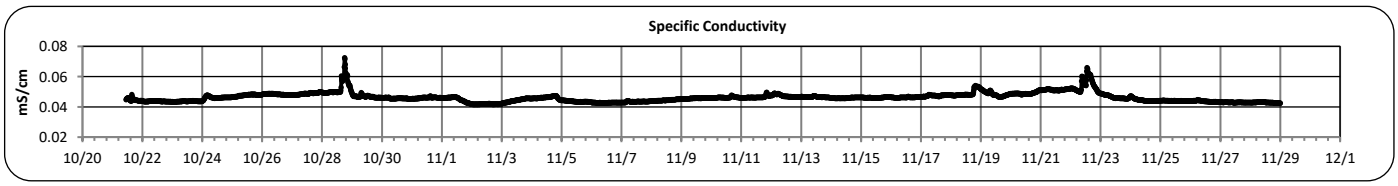
CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STAGE (FT):	1.5	2.3	1.6	1.7	0.2
TEMPERATURE (°F):	55	72	65	65	5
TURBIDITY (NTU):	-	-	-	-	-
pH:	6.7	7.1	6.8	6.8	0.1
SPECIFIC CONDUCTIVITY (mS/cm):	0.042	0.073	0.046	0.046	0.003
DISSOLVED OXYGEN (mg/L):	7.9	10.5	8.8	9.0	0.8

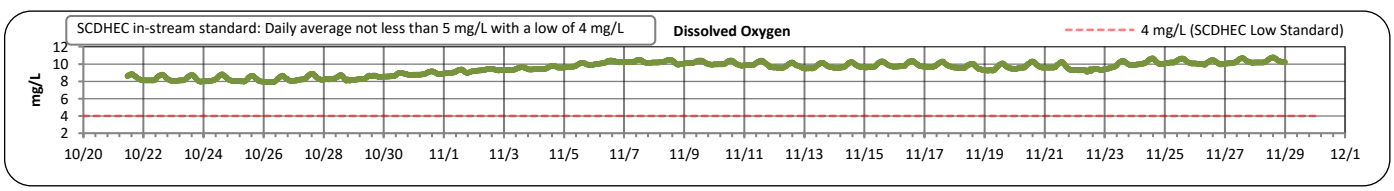












Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

REPORT GENERATED ON 3/22/2022

Continuous Water Quality
Monitoring Periodic Report

Gills Creek A (October 20, 2021 - November 30, 2021)

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.

Sampled Data: No grab samples were collected during this monitoring period.

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli (MPN/100mL)								
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Notes:

Data Gaps

Turbidity data was not collected at GILA during this monitoring period due to a broken sensor.

Potential Illicit Discharges and Abnormal Events:

The specific conductivity increased on October 28th and November 19th and 22nd, which may have been the result of illicit discharges.

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

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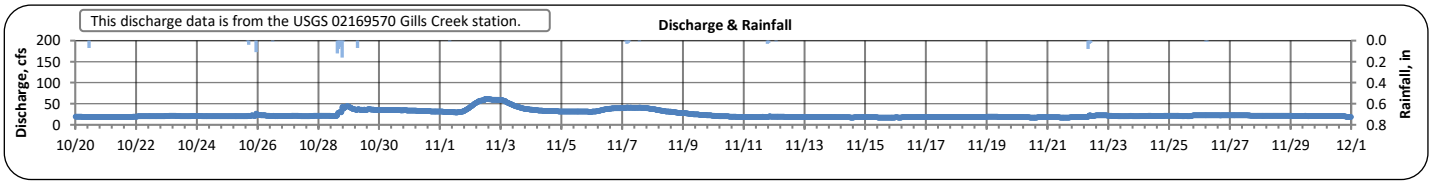
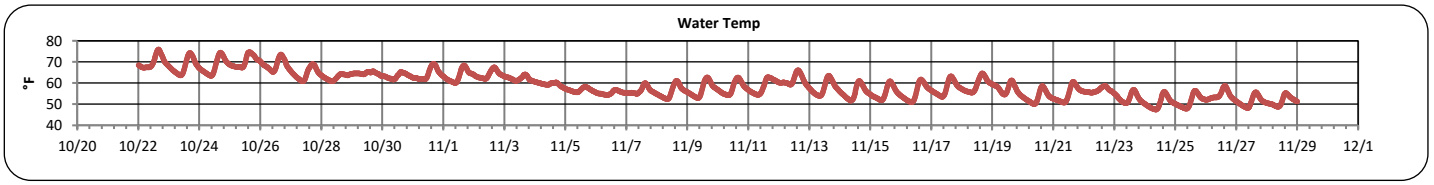
Continuous Water Quality Monitoring Periodic Report

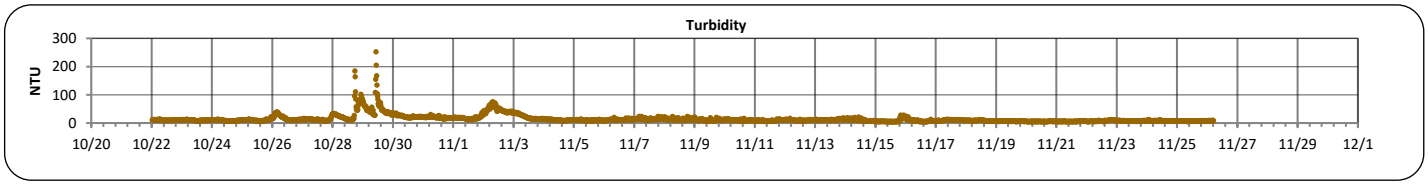
Gills Creek B (October 20, 2021 - November 30, 2021)

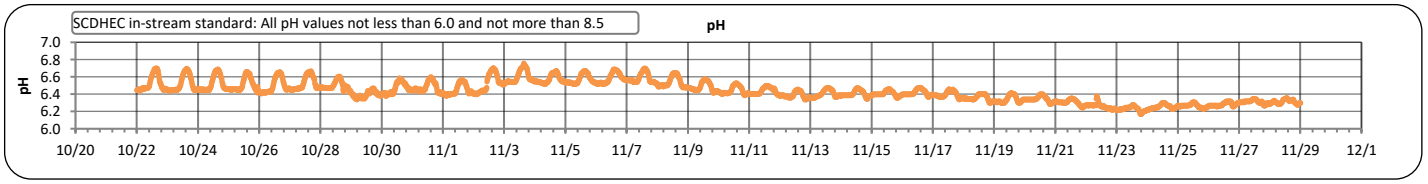
PARAMETER	DESCRIPTION
STREAM NAME:	Gills Creek
LOCATION:	Devine Street bridge
ADDRESS:	4716 Devine Street Columbia, SC 29209
COORDINATES:	33.989656, -80.97433
TMDL/IMPAIRMENT:	Fecal & Dissolved Oxygen
NEIGHBORING LANDUSE:	Residential and commercial
APPROX. DRAINAGE AREA:	59 square miles
SPATIAL LOCATION:	Middle site
TOTAL NO. STORMS OVER 0.1 INCH:	3
MAX. DAILY RAINFALL:	0.5 inches
TOTAL RAINFALL (FOR PERIOD):	1.1 inches

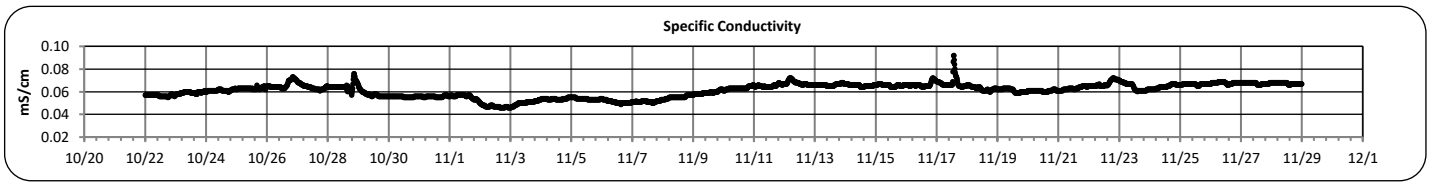
CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
DISCHARGE (CFS):	17.6	62.6	21.3	25.0	8.9
TEMPERATURE (°F):	48	76	59	59	6
TURBIDITY (NTU):	5	254	11	15	14
pH:	6.2	6.8	6.4	6.4	0.1
SPECIFIC CONDUCTIVITY (mS/cm):	0.046	0.092	0.062	0.061	0.006
DISSOLVED OXYGEN (mg/L):	7.0	10.3	9.0	8.9	0.7

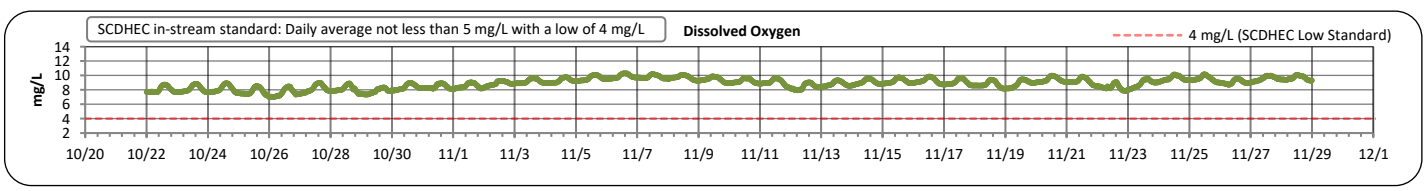












Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

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Continuous Water Quality
Monitoring Periodic Report

Gills Creek B (October 20, 2021 - November 30, 2021)

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.

Sampled Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	10/20/2021		11/22/2021					
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli (MPN/100mL)	9:10	170	12:12	1,710				
Total Suspended Solids (mg/L)	9:05	12.2	12:10	5.3				
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Sample 1 was collected during dry weather conditions. Sample 2 was collected during wet weather conditons.

Notes:

Data Gaps

There were gaps in turbidity at GILB during this monitoring period from November 26th to November 29th.

Potential Illicit Discharges and Abnormal Events:

The specific conductivity increased on October 26th and 28th and November 12th, 16th, 17th, and 22nd, which may have been the result of illicit discharges.

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

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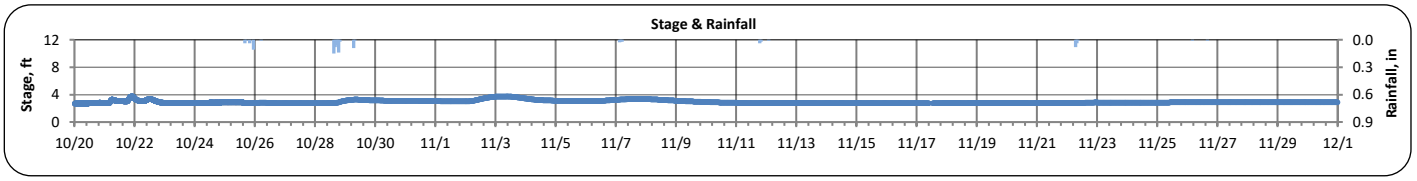
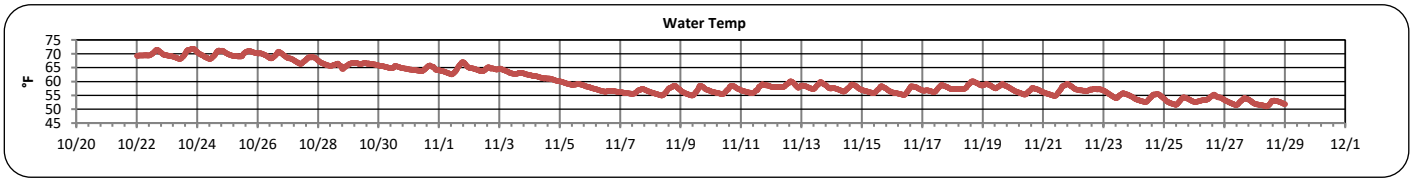
Continuous Water Quality
Monitoring Periodic Report

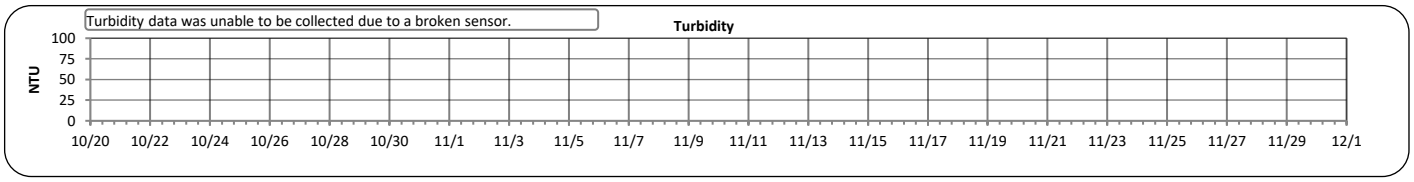
Gills Creek C (October 20, 2021 - November 30, 2021)

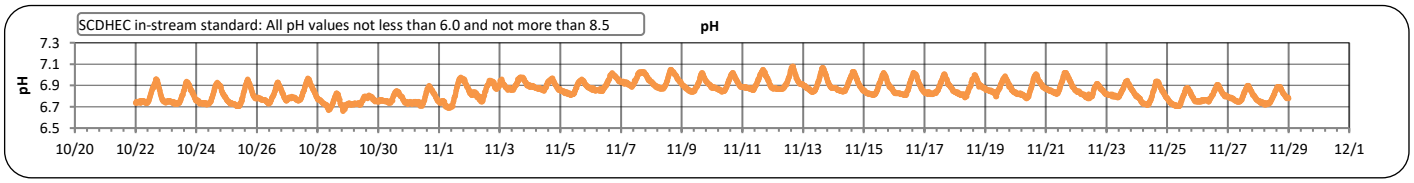
PARAMETER	DESCRIPTION
STREAM NAME:	Gills Creek
LOCATION:	Bluff Road bridge
ADDRESS:	3009 Bluff Rd. Columbia, SC 29209
COORDINATES:	33.948043, -80.9889
TMDL/IMPAIRMENT:	Fecal & Dissolved Oxygen
NEIGHBORING LANDUSE:	Residential and commercial
APPROX. DRAINAGE AREA:	64 square miles
SPATIAL LOCATION:	Most downstream site
TOTAL NO. STORMS OVER 0.1 INCH:	5
MAX. DAILY RAINFALL:	0.48 inches
TOTAL RAINFALL (FOR PERIOD):	1.1 inches

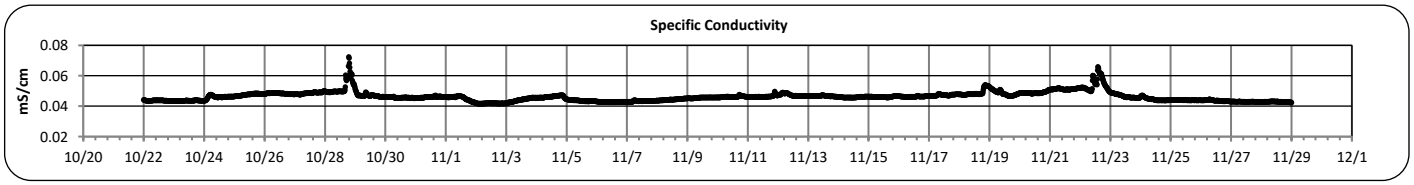
CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STAGE (FT):	2.7	3.8	2.8	3.0	0.2
TEMPERATURE (°F):	51	72	58	60	6
TURBIDITY (NTU):	-	-	-	-	-
pH:	6.7	7.1	6.9	6.9	0.1
SPECIFIC CONDUCTIVITY (mS/cm):	0.042	0.073	0.046	0.046	0.003
DISSOLVED OXYGEN (mg/L):	7.9	10.8	9.7	9.5	0.7

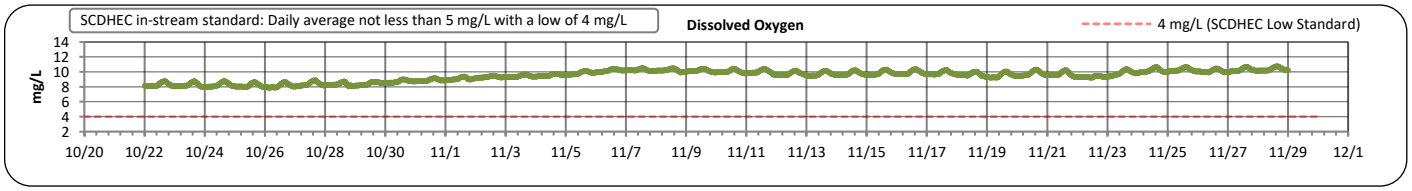












Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

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Continuous Water Quality
Monitoring Periodic Report

Gills Creek C (October 20, 2021 - November 30, 2021)

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.

Sampled Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	10/20/2021		11/22/2021					
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli (MPN/100mL)	9:35	150	12:52	172				
Total Suspended Solids (mg/L)	9:30	10.7	12:50	3.9				
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Sample 1 was collected during dry weather conditions. Sample 2 was collected during wet weather conditions.

Notes:

Data Gaps

Turbidity data was not collected at GILC during this monitoring period due to a broken sensor.

Potential Illicit Discharges and Abnormal Events:

The specific conductivity increased on October 28th and November 18th and 22nd, which may have been the result of illicit discharges.

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

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