## Continuous Water Quality <br> Monitoring Periodic Report

Gills Creek A (September 16, 2021 - October 19, 2021)



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Gills Creek A (September 16, 2021 - October 19, 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 <br> 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 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $9 / 21 / 2021$ |  | $9 / 21 / 2021$ |  |  |  | Results | Time |
|  | Time | Results | Time | Results | Time | Results |  |  |
| Escherichia coli <br> (MPN/100mL) | $10: 35$ | 82 | $12: 24$ | 194 |  |  |  |  |
| Total Suspended <br> Solids (mg/L) | $10: 35$ | 10.5 | $12: 24$ | 6 |  |  |  |  |
| Total Phosphorus <br> (mg/L) | $10: 35$ | 0.035 | $12: 24$ | 0.032 |  |  |  |  |
| Total Nitrogen <br> (mg/L) | $10: 35$ | 0.557 | $12: 24$ | 0.524 |  |  |  |  |

All samples were collected during wet weather conditions.

## Notes:

Data Gaps
There were no data gaps at the GIL A station during this monitoring period.

## Potential Illicit Discharges and Abnormal Events:

The specific conductivity increased on September $22^{\text {nd }}$ and October $5^{\text {th }}$, which may have been the result of illicit discharges.

## Continuous Water Quality <br> Monitoring Periodic Report

Gills Creek B (September 16, 2021 - October 19, 2021)

| PARAMETER | DESCRIPTION | CONTINUOUS WATER QUALITY PARAMETERS: | SUMMARY STATISTICS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | MINIMUM OBSERVED | MAXIMUM ObSERVED | MEDIAN OBSERVED | MEAN OBSERVED | STANDARD DEVIATION |
| STREAM NAME: | Gills Creek | DISCHARGE (CFS): | 19.1 | 313.0 | 33.5 | 45.6 | 34.3 |
| LOCATION: | Devine Street bridge | TEMPERATURE ( ${ }^{\circ} \mathrm{F}$ ): | 63 | 84 | 76 | 76 | 4 |
| ADDRESS: | 4716 Devine Street Columbia, SC 29209 |  |  |  |  |  |  |
| COORDINATES: | 33.989656, -80.97433 | TURBIDITY (NTU): | 7 | 626 | 20 | 33 | 40 |
| TMDL/IMPAIRMENT: | Fecal \& Dissolved Oxygen |  |  |  |  |  |  |
| NEIGHBORING LANDUSE: | Residential and commercial | pH: | 6.1 | 8.7 | 6.5 | 6.5 | 0.1 |
| APPROX. DRAINAGE AREA: | 59 square miles |  |  |  |  |  |  |
| SPATIAL LOCATION: | Middle site | SPECIFIC CONDUCTIVITY (mS/cm): | 0.031 | 0.067 | 0.055 | 0.054 | 0.005 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 7 |  |  |  |  |  |  |
| MAX. DAILY RAINFALL: | 1.0 inches | DISSOLVED <br> OXYGEN (mg/L): | 6.0 | 8.4 | 7.3 | 7.3 | 0.5 |
| TOTAL RAINFALL (FOR PERIOD): | 2.8 inches |  |  |  |  |  |  |








## Continuous Water Quality <br> Monitoring Periodic Report

Gills Creek B (September 16, 2021 - October 19, 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 <br> 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 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $9 / 20 / 2021$ |  | $9 / 21 / 2021$ |  | $9 / 21 / 2021$ |  |  |  |
|  | Time | Results | Time | Results | Time | Results | Time | Results |
| Escherichia coli <br> (MPN/100mL) | $11: 53$ | 406 | $10: 12$ | 610 | $11: 54$ | 398 |  |  |
| Total Suspended <br> Solids (mg/L) | $11: 53$ | 19.7 | $10: 12$ | 15.6 | $11: 54$ | 18.7 |  |  |
| Total Phosphorus <br> (mg/L) |  |  | $10: 12$ | 0.051 | $11: 54$ | 0.039 |  |  |
| Total Nitrogen <br> $(\mathrm{mg} / \mathrm{L})$ |  |  | $10: 12$ | 0.766 | $11: 54$ | 0.597 |  |  |

Sample 1 was collected during dry weather conditions. Samples 2 and 3 were collected during wet weather conditons.

## Notes:

## Data Gaps

There were no data gaps at the GILB station during this monitoring period.

Potential Illicit Discharges and Abnormal Events:
The specific conductivity parameter increased on September $17^{\text {th }}$ and September $22^{\text {nd }}$, which may have been the result of illicit discharges.

## Continuous Water Quality <br> Monitoring Periodic Report

Gills Creek C (September 16, 2021 - October 19, 2021)

| PARAMETER | DESCRIPTION | CONTINUOUS WATER QUALITY PARAMETERS: | SUMMARY STATISTICS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | MINIMUM OBSERVED | MAXIMUM OBSERVED | MEDIAN OBSERVED | MEAN OBSERVED | STANDARD deviation |
| STREAM NAME: | Gills Creek | STAGE (FT): | 2.7 | 5.4 | 3.1 | 3.3 | 0.7 |
| LOCATION: | Bluff Road bridge | TEMPERATURE ( ${ }^{\circ} \mathrm{F}$ ): | 64 | 81 | 75 | 75 | 3 |
| ADDRESS: | 3009 Bluff Rd. Columbia, SC 29209 |  |  |  |  |  |  |
| COORDINATES: | 33.948043, -80.9889 | TURBIDITY (NTU): | 7 | 87 | 10 | 12 | 6 |
| TMDL/IMPAIRMENT: | Fecal \& Dissolved Oxygen |  |  |  |  |  |  |
| NEIGHBORING LANDUSE: | Residential and commercial | pH: | 6.1 | 6.6 | 6.5 | 6.4 | 0.1 |
| APPROX. DRAINAGE AREA: | 64 square miles |  |  |  |  |  |  |
| SPATIAL LOCATION: | Most downstream site | SPECIFIC CONDUCTIVITY (mS/cm): | 0.041 | 0.066 | 0.059 | 0.058 | 0.006 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 7 |  |  |  |  |  |  |
| MAX. DAILY RAINFALL: | 0.96 inches | DISSOLVED <br> OXYGEN (mg/L): | 5.1 | 7.9 | 6.5 | 6.4 | 0.5 |
| TOTAL RAINFALL (FOR PERIOD): | 3.4 inches |  |  |  |  |  |  |








# Continuous Water Quality <br> Monitoring Periodic Report 

Gills Creek C (September 16, 2021 - October 19, 2021)

## Explanation of Statistics:

| MINIMUM OBSERVED | The minimum of the values recorded by the datasonde in 15 minute intervals. |
| :---: | :--- |
| MAXIMUM <br> 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 <br> 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 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $9 / 20 / 2021$ |  | $9 / 21 / 2021$ |  | $9 / 21 / 2021$ |  | $9 / 21 / 2021$ |  |
|  | Time | Results | Time | Results | Time | Results | Time | Results |
| Escherichia coli <br> (MPN/100mL) | $12: 13$ | 82 | $9: 45$ | 150 | $11: 45$ | 172 | $13: 15$ | 126 |
| Total Suspended <br> Solids (mg/L) | $12: 13$ | 10.7 | $9: 45$ | 11 | $11: 45$ | 7.5 | $13: 15$ | 7.4 |
| Total Phosphorus <br> (mg/L) |  |  | $9: 45$ | 0.053 | $11: 45$ | 0.046 | $13: 15$ | 0.047 |
| Total Nitrogen <br> $(\mathrm{mg} / \mathrm{L})$ |  |  | $9: 45$ | 0.663 | $11: 45$ | 0.706 | $13: 15$ | 0.751 |

Sample 1 was collected during dry weather conditions. Samples 2-4 were collected during wet weather conditions.

## Notes:

Data Gaps
There were no data gaps at the GILC station during this monitoring period.

## Potential Illicit Discharges and Abnormal Events:

The specific conductivity increased on September $22^{\text {nd }}$, which may have the result of an illicit discharge.


[^0]:    Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

