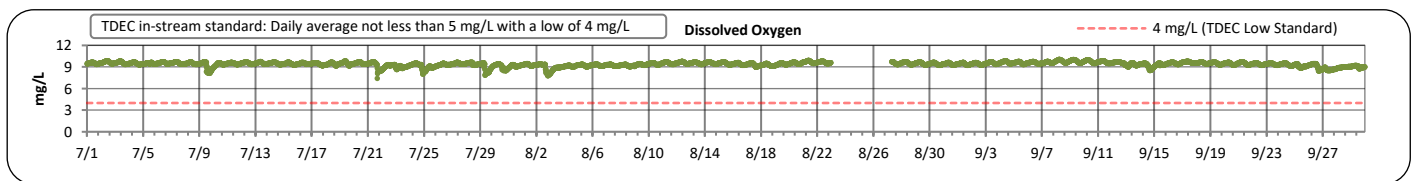
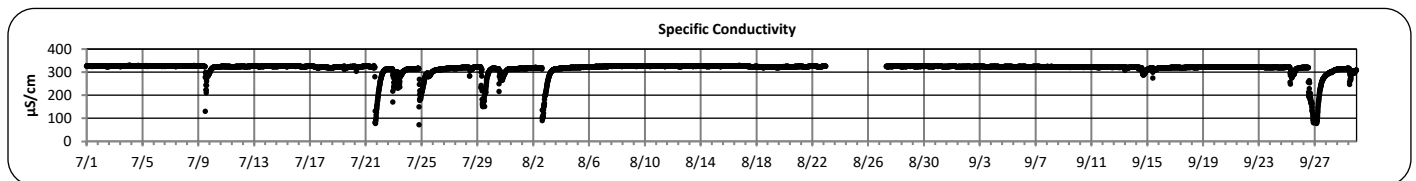
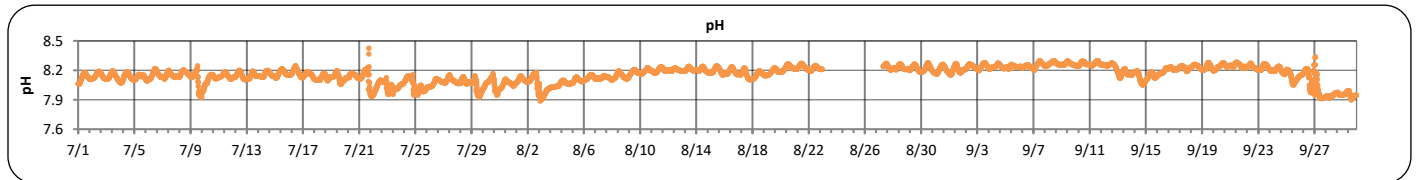
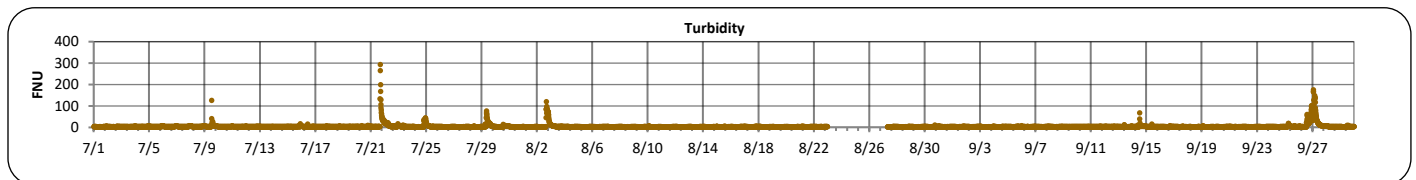
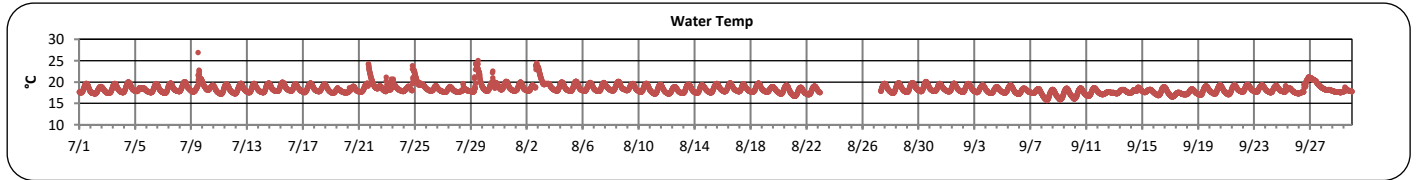
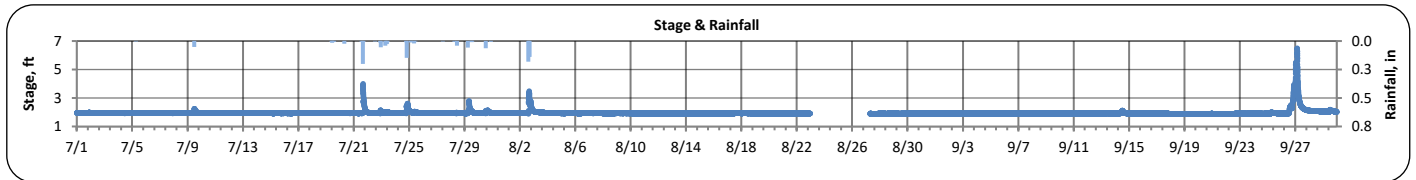




The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (July 1, 2024 - September 30, 2024) Stringers Branch at Signal Mountain



| PARAMETER | DESCRIPTION | CONTINUOUS WATER QUALITY PARAMETERS: | SUMMARY STATISTICS | | | | |
|---------------------------------|--|--------------------------------------|--------------------|------------------|-----------------|---------------|--------------------|
| | | | MINIMUM OBSERVED | MAXIMUM OBSERVED | MEDIAN OBSERVED | MEAN OBSERVED | STANDARD DEVIATION |
| STREAM NAME: | Stringers Branch | STAGE (FT): | 1.9 | 6.5 | 1.9 | 2.0 | 0.2 |
| LOCATION: | Signal Mountain Rd | TEMPERATURE (°C): | 16 | 27 | 18 | 18 | 1 |
| TMDL/IMPAIRMENT: | <i>E. coli</i> , Siltation, Habitat Alteration | TURBIDITY (FNU): | 2 | 293 | 3 | 5 | 10 |
| | | pH: | 7.9 | 8.5 | 8.2 | 8.2 | 0.1 |
| APPROX. DRAINAGE AREA: | 5.7 square miles | SPECIFIC CONDUCTIVITY (µS/cm): | 72 | 330 | 324 | 317 | 27 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 20 | DISSOLVED OXYGEN (mg/L): | 7.4 | 10.0 | 9.4 | 9.4 | 0.3 |
| MAX. DAILY RAINFALL: | 0.5 inches | | | | | | |
| TOTAL RAINFALL (FOR PERIOD): | 1.3 inches | | | | | | |



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



**The City of Chattanooga and Hamilton County Joint Water Quality Monitoring
Quarterly Report (July 1, 2024 - September 30, 2024)
Stringers Branch at Signal Mountain**



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 for the Stringers Branch at Signal Mountain location this monitoring period.

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

Notes:

Parameters reporting in EST (-5:00).

Data Gaps

Data gap present in all water quality parameters during 8/22-8/27 due to sensors being buried.



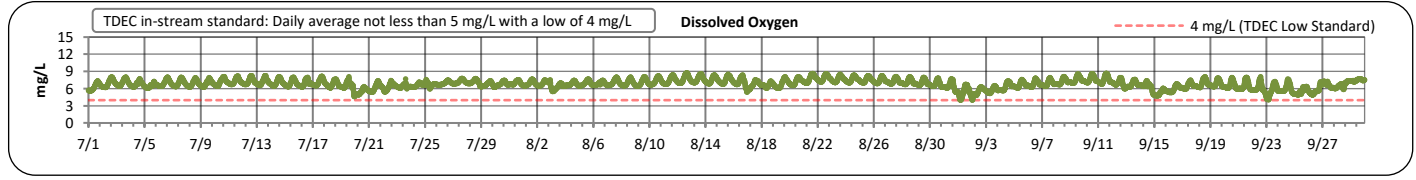
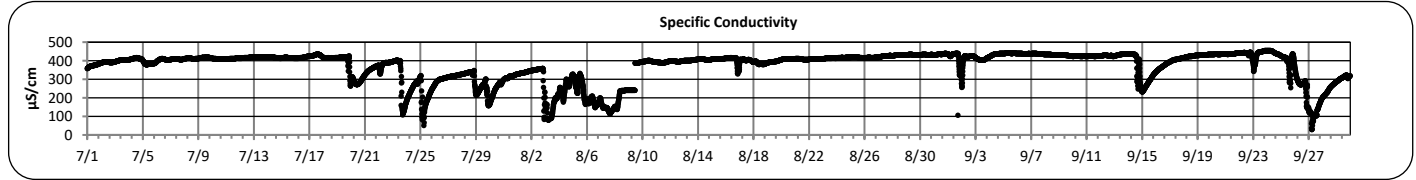
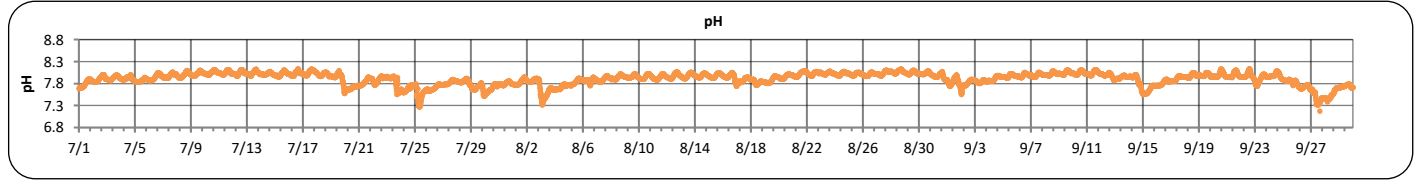
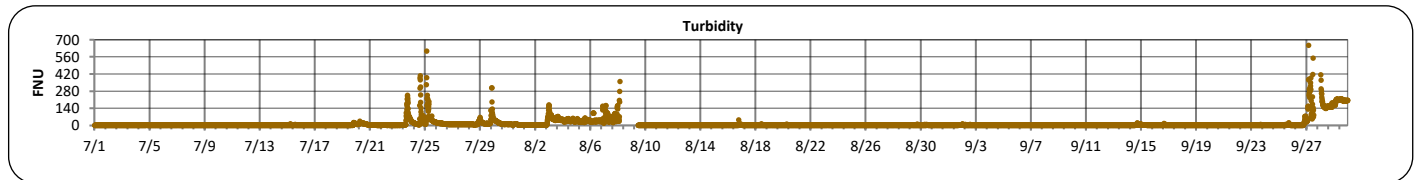
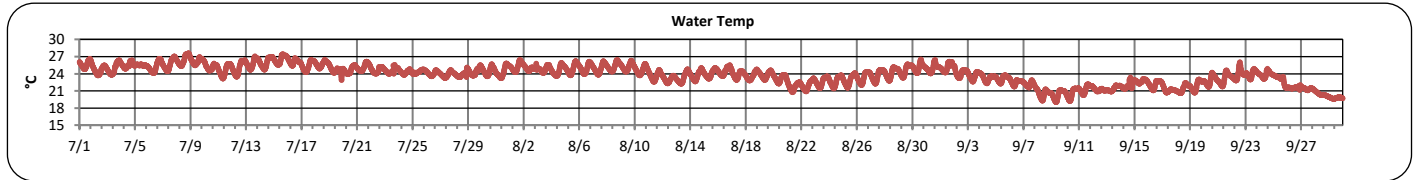
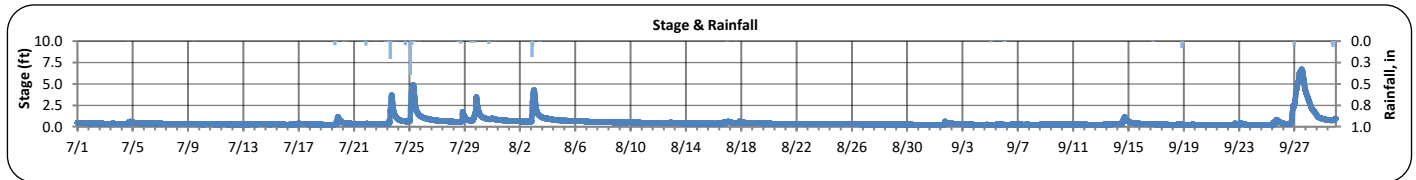
The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (July 1, 2024 - September 30, 2024)



Hamilton County
Water Quality Program

Friar Branch at Polymer Drive

| PARAMETER | DESCRIPTION | CONTINUOUS WATER QUALITY PARAMETERS: | SUMMARY STATISTICS | | | | |
|---------------------------------|--|--------------------------------------|--------------------|------------------|-----------------|---------------|--------------------|
| | | | MINIMUM OBSERVED | MAXIMUM OBSERVED | MEDIAN OBSERVED | MEAN OBSERVED | STANDARD DEVIATION |
| STREAM NAME: | Friar Branch | STAGE (FT): | 0.2 | 6.7 | 0.4 | 0.4 | 0.3 |
| LOCATION: | Polymer Drive Bridge | TEMPERATURE (°C): | 19 | 28 | 24 | 24 | 2 |
| TMDL/IMPAIRMENT: | <i>E. coli</i> , Siltation, Habitat Alteration | TURBIDITY (FNU): | 1 | 655 | 2 | 15 | 45 |
| | | pH: | 7.2 | 8.2 | 8.0 | 7.9 | 0.1 |
| APPROX. DRAINAGE AREA: | 20.7 square miles | SPECIFIC CONDUCTIVITY (µS/cm): | 28 | 456 | 410 | 373 | 81 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 22 | | | | | | |
| MAX. DAILY RAINFALL: | 1.2 inches | DISSOLVED OXYGEN (mg/L): | 4.0 | 8.8 | 6.9 | 6.9 | 0.8 |
| TOTAL RAINFALL (FOR PERIOD): | 3.6 inches | | | | | | |



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

REPORT GENERATED ON 11/13/2024





**The City of Chattanooga and Hamilton County Joint Water Quality Monitoring
Quarterly Report (July 1, 2024 - September 30, 2024)
Friar Branch at Polymer Drive**



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: One dry grab sample was collected at the Friar Branch at Ploymer Drive location during this monitoring period.

| Analyte (units) | Sample 1 | | Sample 2 | | Sample 3 | | Sample 4 | |
|--|-----------|---------|----------|---------|----------|---------|----------|---------|
| | 8/20/2024 | | | | | | | |
| | Time | Results | Time | Results | Time | Results | Time | Results |
| <i>Escherichia coli</i> (MPN/100mL) | 11:50 | 130 | | | | | | |
| Total Suspended Solids (mg/L) | 11:50 | 2.4 | | | | | | |
| Total Phosphorus (mg/L) | 11:50 | <0.5 | | | | | | |
| Total Nitrogen (mg/L) | 11:50 | <0.5 | | | | | | |

Notes:

Parameters reporting in EST (-5:00).

Data Gaps

Data gap present in turbidity data on 8/9 due to sensor fouling.



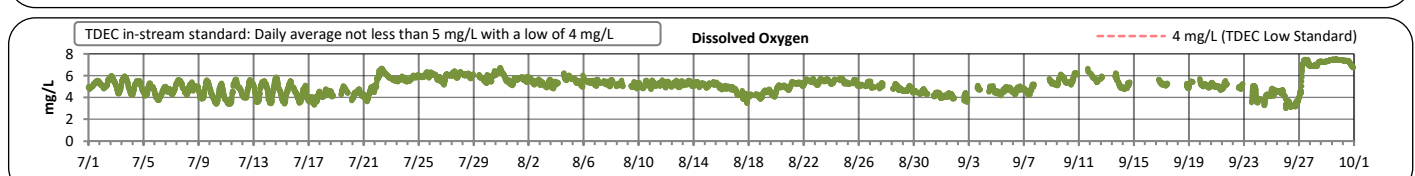
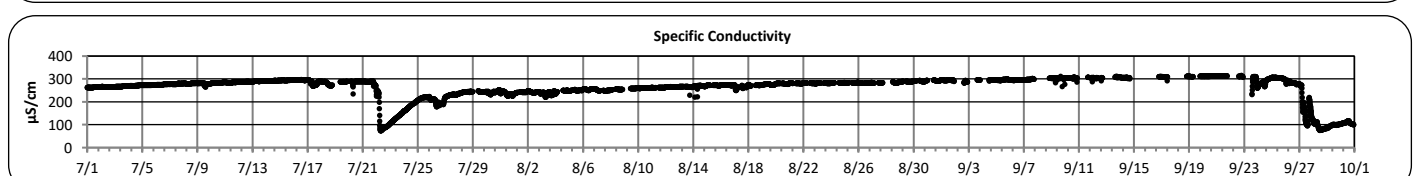
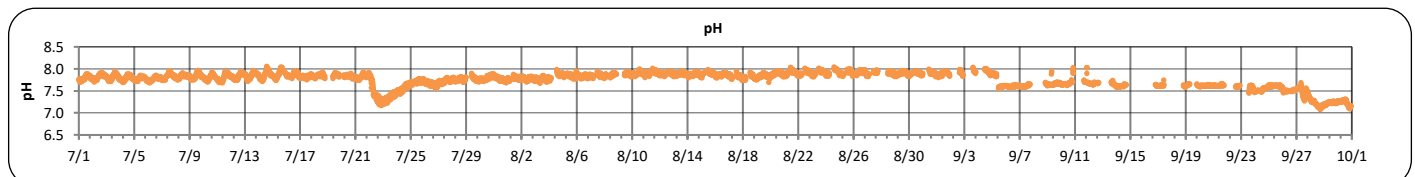
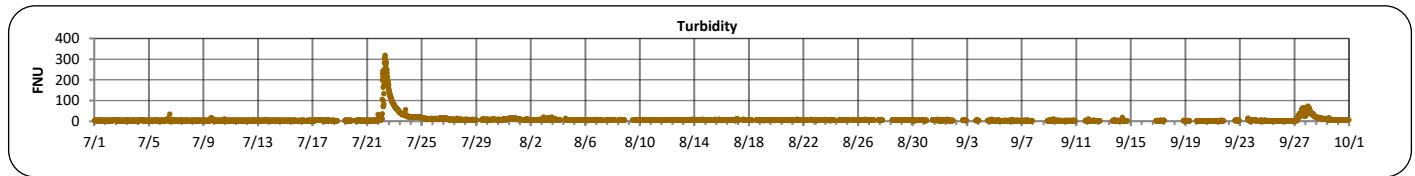
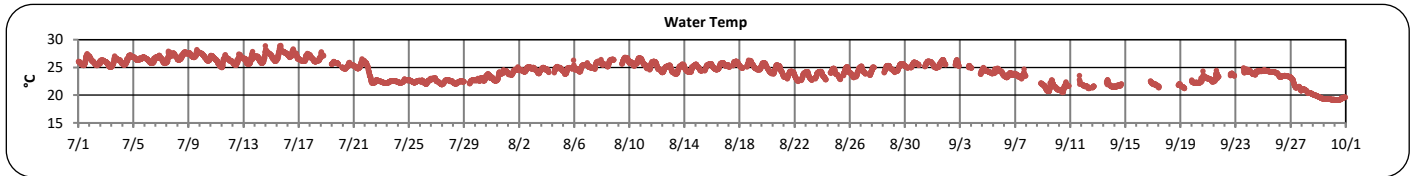
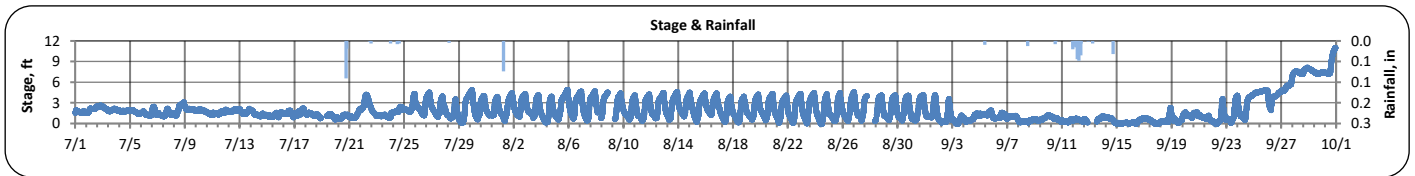
The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (July 1, 2024 - September 30, 2024)



Hamilton County
Water Quality Program

N. Chick Creek at Greenway Farms

| PARAMETER | DESCRIPTION | CONTINUOUS WATER QUALITY PARAMETERS: | SUMMARY STATISTICS | | | | |
|---------------------------------|-----------------------------------|--------------------------------------|--------------------|------------------|-----------------|---------------|--------------------|
| | | | MINIMUM OBSERVED | MAXIMUM OBSERVED | MEDIAN OBSERVED | MEAN OBSERVED | STANDARD DEVIATION |
| STREAM NAME: | N. Chick | STAGE (FT): | 0.0 | 11.0 | 1.5 | 2.0 | 1.7 |
| LOCATION: | Greenway Farms Boat Launch | TEMPERATURE (°C): | 19 | 29 | 25 | 24 | 2 |
| TMDL/IMPAIRMENT: | pH, Siltation, Habitat Alteration | TURBIDITY (FNU): | 2 | 319 | 5 | 9 | 21 |
| | | pH: | 7.1 | 8.1 | 7.8 | 7.8 | 0.2 |
| APPROX. DRAINAGE AREA: | 117.4 square miles | SPECIFIC CONDUCTIVITY (µS/cm): | 73 | 316 | 277 | 261 | 51 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 19 | DISSOLVED OXYGEN (mg/L): | 3.0 | 7.6 | 5.2 | 5.1 | 0.8 |
| MAX. DAILY RAINFALL: | 1.1 inches | | | | | | |
| TOTAL RAINFALL (FOR PERIOD): | 3.4 inches | | | | | | |



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

REPORT GENERATED ON 11/13/2024





**The City of Chattanooga and Hamilton County Joint Water Quality Monitoring
Quarterly Report (July 1, 2024 - September 30, 2024)
N. Chick Creek at Greenway Farms**



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: One dry grab sample was collected at the N. Chick Creek at Greenway Farms location during this monitoring period.

| Analyte (units) | Sample 1 | | Sample 2 | | Sample 3 | | Sample 4 | |
|--|-----------|---------|----------|---------|----------|---------|----------|---------|
| | 8/20/2024 | | | | | | | |
| | Time | Results | Time | Results | Time | Results | Time | Results |
| <i>Escherichia coli</i> (MPN/100mL) | 11:40 | 270 | | | | | | |
| Total Suspended Solids (mg/L) | 11:40 | 3.8 | | | | | | |
| Total Phosphorus (mg/L) | 11:40 | <0.5 | | | | | | |
| Total Nitrogen (mg/L) | 11:40 | <0.5 | | | | | | |

Notes:

Parameters reporting in EST (-5:00).

Data Gaps

Data gaps present for all water quality parameters throughout the entire monitoring period do to unsubmergence.



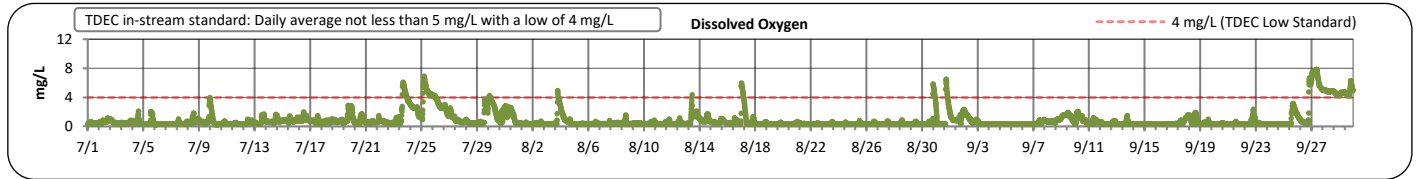
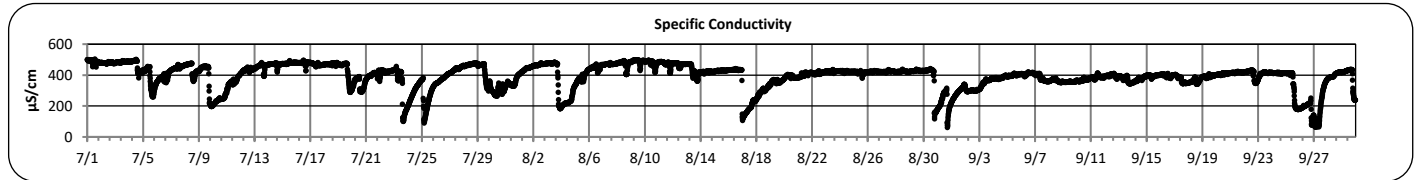
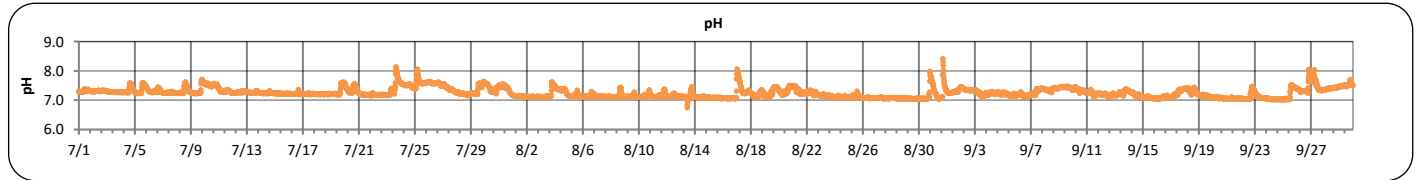
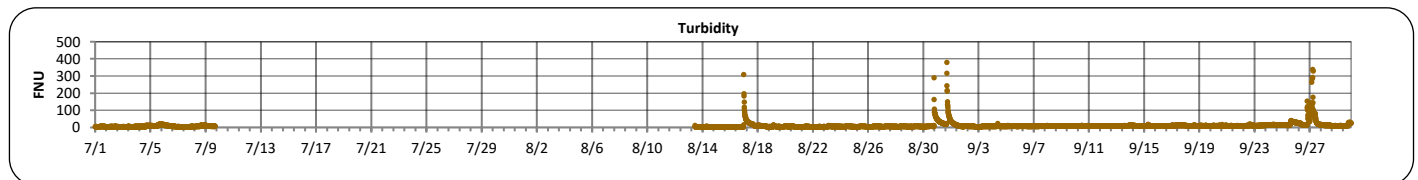
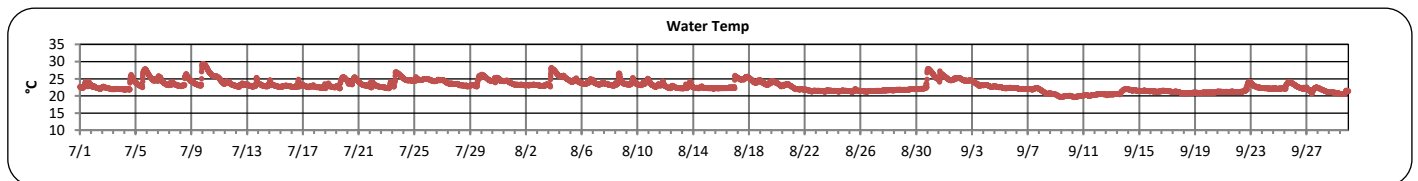
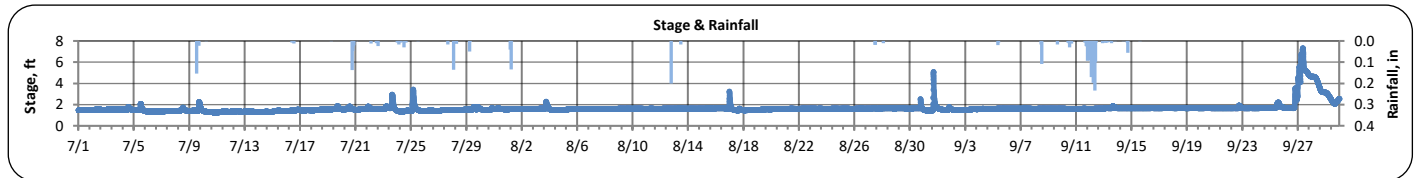
The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (July 1, 2024 - September 30, 2024)



Hamilton County
Water Quality Program

Dobbs Branch at Park City Park

| PARAMETER | DESCRIPTION | CONTINUOUS WATER QUALITY PARAMETERS: | SUMMARY STATISTICS | | | | |
|---------------------------------|--|--------------------------------------|--------------------|------------------|-----------------|---------------|--------------------|
| | | | MINIMUM OBSERVED | MAXIMUM OBSERVED | MEDIAN OBSERVED | MEAN OBSERVED | STANDARD DEVIATION |
| STREAM NAME: | Dobbs Branch | STAGE (FT): | 1.3 | 7.3 | 1.6 | 1.6 | 0.5 |
| LOCATION: | Park City Park | TEMPERATURE (°C): | 20 | 29 | 23 | 23 | 2 |
| TMDL/IMPAIRMENT: | <i>E. coli</i> , Siltation, Habitat Alteration | TURBIDITY (FNU): | 2 | 381 | 9 | 12 | 18 |
| | | pH: | 6.8 | 8.4 | 7.2 | 7.3 | 0.2 |
| APPROX. DRAINAGE AREA: | 6.2 square miles | SPECIFIC CONDUCTIVITY (µS/cm): | 62 | 505 | 413 | 393 | 80 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 18 | | | | | | |
| MAX. DAILY RAINFALL: | 1.1 inches | DISSOLVED OXYGEN (mg/L): | 0.3 | 7.9 | 0.5 | 1.0 | 1.2 |
| TOTAL RAINFALL (FOR PERIOD): | 3.4 inches | | | | | | |



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

REPORT GENERATED ON 11/13/2024





**The City of Chattanooga and Hamilton County Joint Water Quality Monitoring
Quarterly Report (July 1, 2024 - September 30, 2024)
Dobbs Branch at Park City Park**



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:

One dry grab sample was collected at the Dobbs Branch at Park City Park location during this monitoring period.

| Analyte (units) | Sample 1 | | Sample 2 | | Sample 3 | | Sample 4 | |
|-------------------------------------|-----------|---------|----------|---------|----------|---------|----------|---------|
| | 8/20/2024 | | | | | | | |
| | Time | Results | Time | Results | Time | Results | Time | Results |
| <i>Escherichia coli</i> (MPN/100mL) | 9:55 | 40,000 | | | | | | |
| Total Suspended Solids (mg/L) | 9:55 | 53.7 | | | | | | |
| Total Phosphorus (mg/L) | 9:55 | 0.587 | | | | | | |
| Total Nitrogen (mg/L) | 9:55 | 2.03 | | | | | | |

Notes:

Parameters reporting in EST (-5:00).

Data Gaps

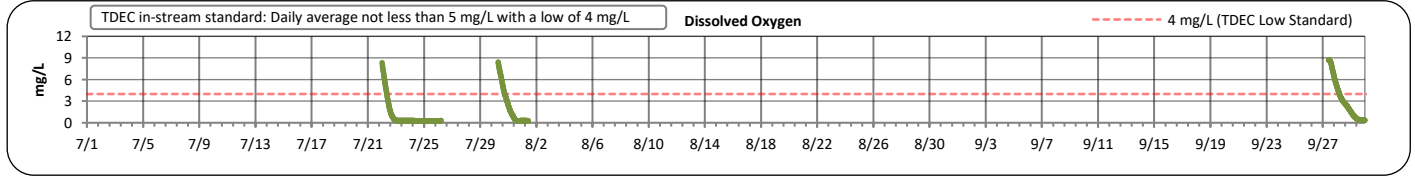
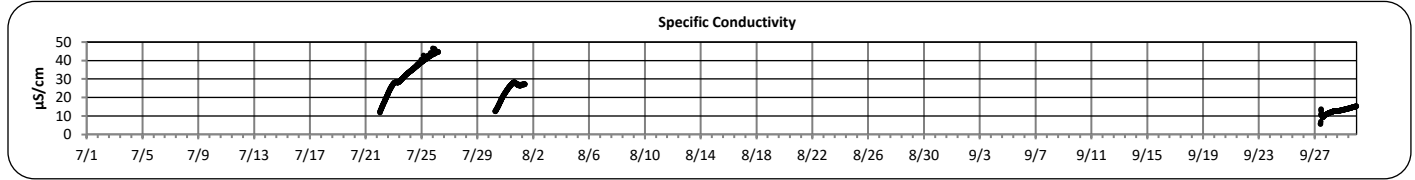
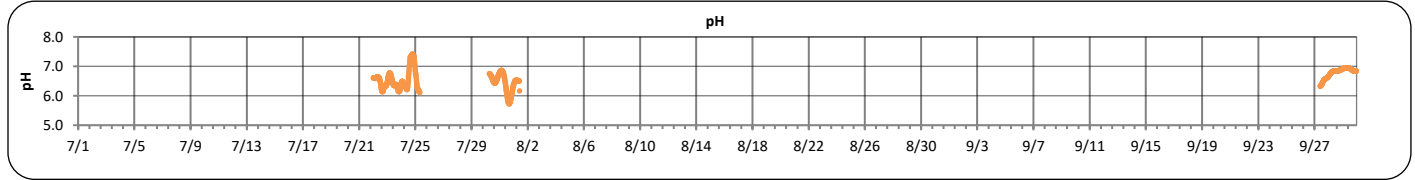
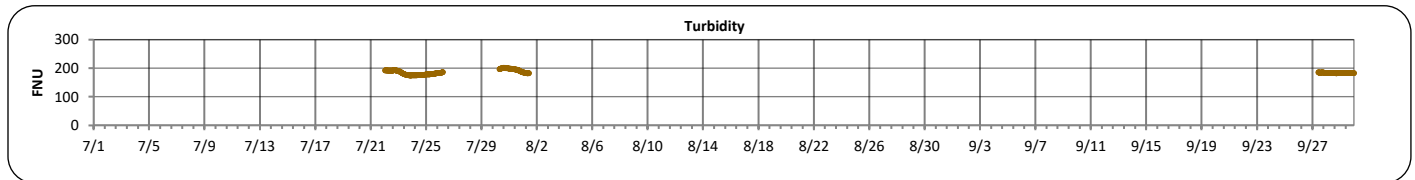
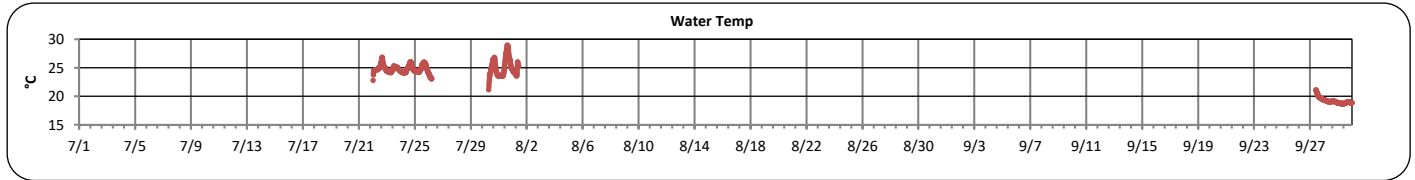
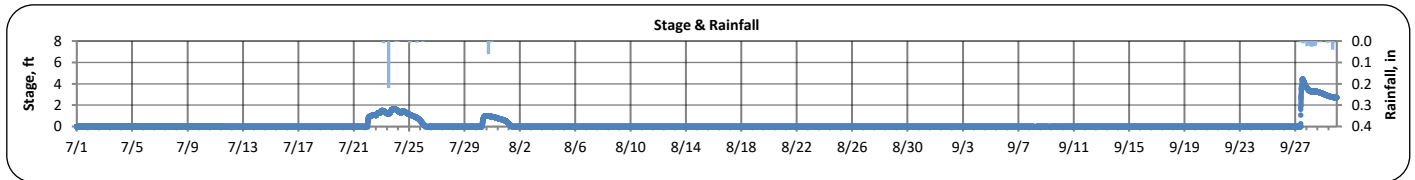
Data gap present for turbidity between 7/9-8/13 due to sensor malfunction.



The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (July 1, 2024 - September 30, 2024) North Chick at Ivy Academy



| PARAMETER | DESCRIPTION | CONTINUOUS WATER QUALITY PARAMETERS: | SUMMARY STATISTICS | | | | |
|---------------------------------|-------------------------------|--------------------------------------|--------------------|------------------|-----------------|---------------|--------------------|
| | | | MINIMUM OBSERVED | MAXIMUM OBSERVED | MEDIAN OBSERVED | MEAN OBSERVED | STANDARD DEVIATION |
| STREAM NAME: | North Chick Creek | STAGE (FT): | 0.001 | 4.462 | 0.005 | 0.098 | 0.464 |
| LOCATION: | Ivy Academy | TEMPERATURE (°C): | 19 | 29 | 24 | 23 | 3 |
| TMDL/IMPAIRMENT: | Siltation, Habitat Alteration | TURBIDITY (FNU): | 175 | 202 | 184 | 185 | 7 |
| | | pH: | 5.7 | 7.4 | 6.6 | 6.6 | 0.3 |
| APPROX. DRAINAGE AREA: | 17 square miles | SPECIFIC CONDUCTIVITY (µS/cm): | 6 | 47 | 23 | 24 | 11 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 17 | DISSOLVED OXYGEN (mg/L): | 0.3 | 8.8 | 0.4 | 1.7 | 2.3 |
| MAX. DAILY RAINFALL: | 0.2 inches | | | | | | |
| TOTAL RAINFALL (FOR PERIOD): | 0.7 inches | | | | | | |



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



The City of Chattanooga and Hamilton County Joint Water Quality Monitoring
 Quarterly Report (July 1, 2024 - September 30, 2024)
 North Chick at Ivy Academy



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 at the North Chick at Ivy Academy location during this monitoring period.

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

Notes:

All paramaters reporting in EST (-5:00).

Data Gaps

Multiple data gaps present in all water quality parameters, excluding stage and rainfall, due to unsubmergence.



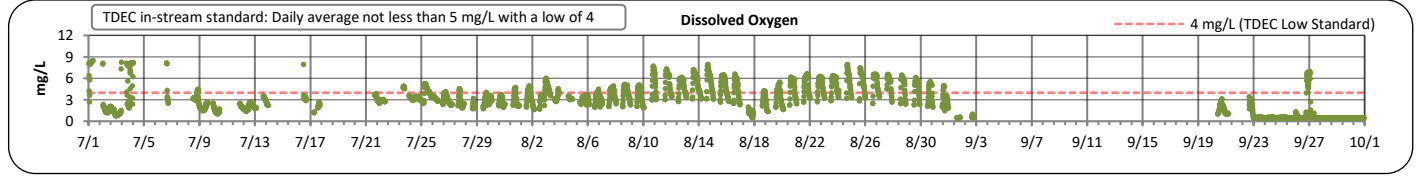
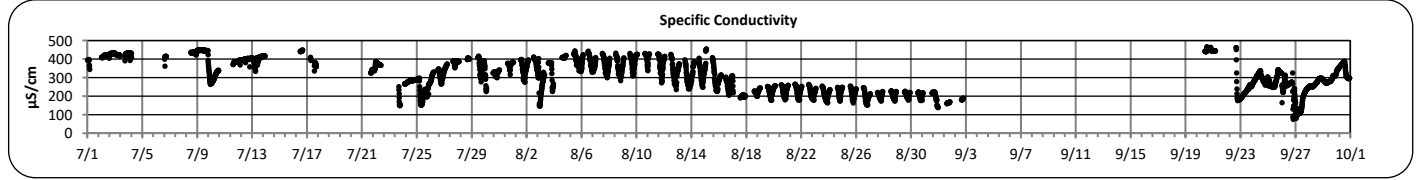
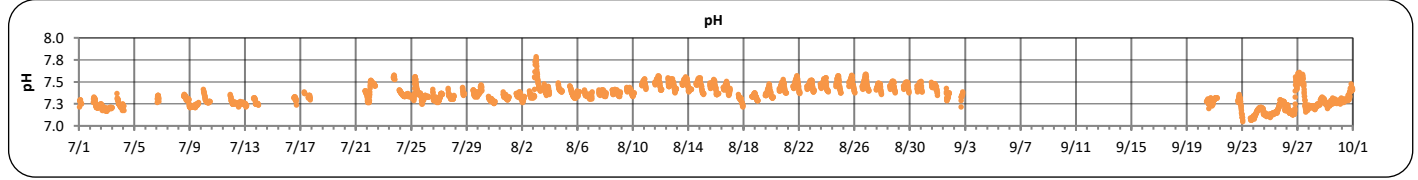
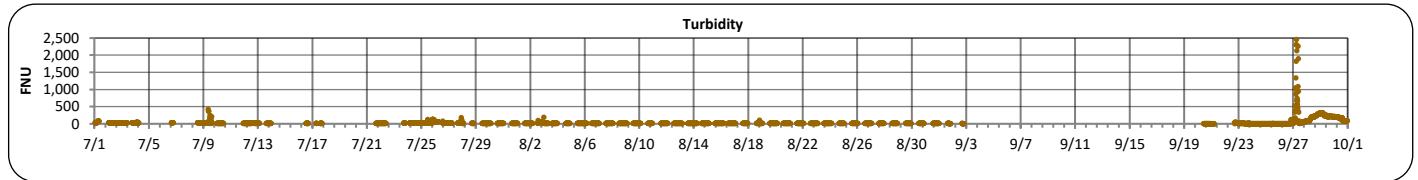
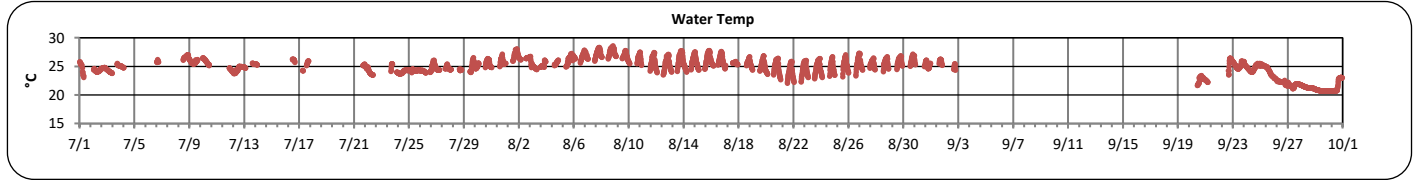
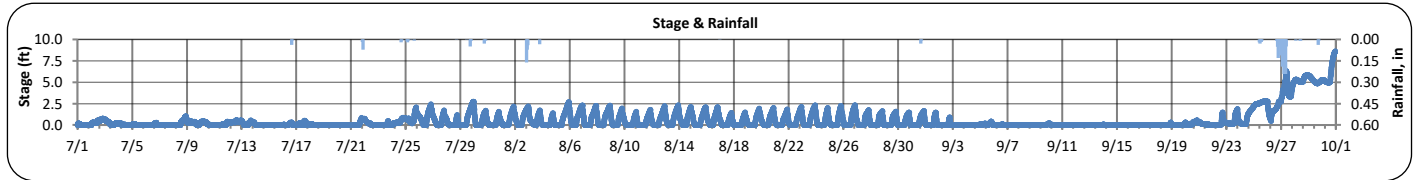
The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (July 1, 2024 - September 30, 2024)



Hamilton County
Water Quality Program

Citico Creek

| PARAMETER | DESCRIPTION | CONTINUOUS WATER QUALITY PARAMETERS: | SUMMARY STATISTICS | | | | |
|---------------------------------|--|--------------------------------------|--------------------|------------------|-----------------|---------------|--------------------|
| | | | MINIMUM OBSERVED | MAXIMUM OBSERVED | MEDIAN OBSERVED | MEAN OBSERVED | STANDARD DEVIATION |
| STREAM NAME: | Citico Creek | STAGE (FT): | 0.001 | 8.623 | 0.034 | 0.468 | 1.016 |
| LOCATION: | Waterwalk Pl Rd | TEMPERATURE (°C): | 21 | 29 | 25 | 25 | 2 |
| TMDL/IMPAIRMENT: | pH, E. coli, Siltation, Habitat Alteration | TURBIDITY (FNU): | 2 | 2463 | 18 | 43 | 122 |
| | | pH: | 7.1 | 7.8 | 7.4 | 7.3 | 0.1 |
| APPROX. DRAINAGE AREA: | 6 square miles | SPECIFIC CONDUCTIVITY (µS/cm): | 74.8 | 468 | 305 | 310 | 85 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 18 | | | | | | |
| MAX. DAILY RAINFALL: | 0.4 inches | DISSOLVED OXYGEN (mg/L): | 0.5 | 8.5 | 2.9 | 3.0 | 2.0 |
| TOTAL RAINFALL (FOR PERIOD): | 0.9 inches | | | | | | |



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

REPORT GENERATED ON 11/13/2024





The City of Chattanooga and Hamilton County Joint Water Quality Monitoring
 Quarterly Report (July 1, 2024 - September 30, 2024)
 Citico Creek



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:

One grab sample was obtained during dry conditions at the Citico Creek location during this monitoring period.

| Analyte (units) | Sample 1 | | Sample 2 | | Sample 3 | | Sample 4 | |
|-------------------------------------|-----------|---------|----------|---------|----------|---------|----------|---------|
| | 8/20/2024 | | | | | | | |
| | Time | Results | Time | Results | Time | Results | Time | Results |
| <i>Escherichia coli</i> (MPN/100mL) | 12:30 | 580 | | | | | | |
| Total Suspended Solids (mg/L) | 12:30 | 3.43 | | | | | | |
| Total Phosphorus (mg/L) | 12:30 | <0.500 | | | | | | |
| Total Nitrogen (mg/L) | 12:30 | *0.128 | | | | | | |

*Value represents Nitrate/Nitrite concentrations only. TKN was below the detection limit of 0.5 mg/L.

Notes:

All paramaters reporting in EST (-5:00).

Data Gaps

Periodic data gaps are present throughout monitoring period for all water quality parameters, excluding rainfall, due to downstream influences from the Tennessee River and partial unsubmergence.



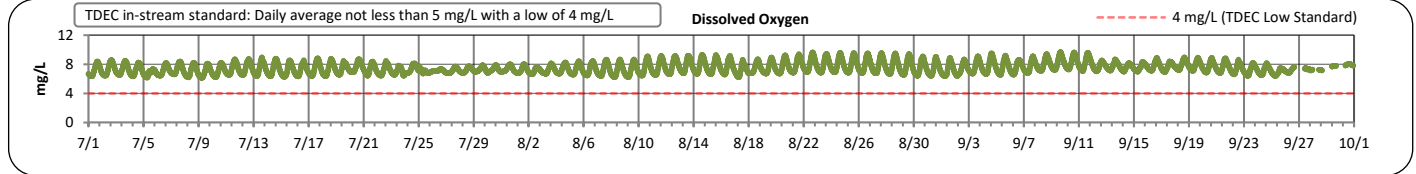
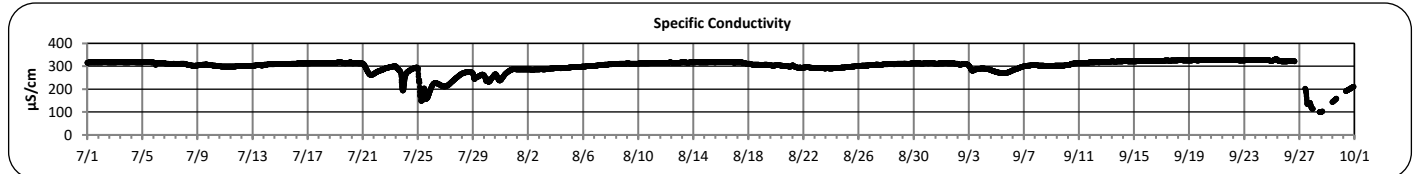
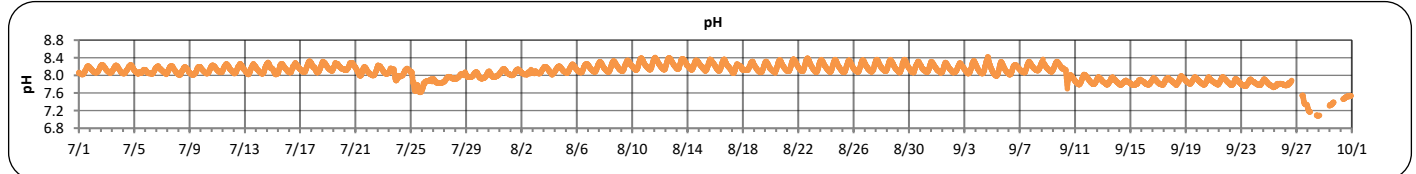
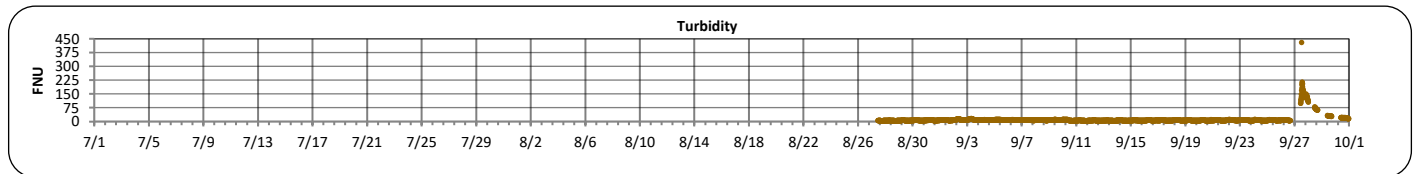
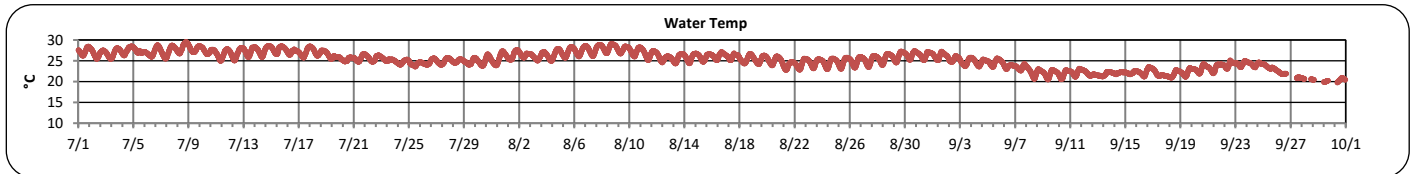
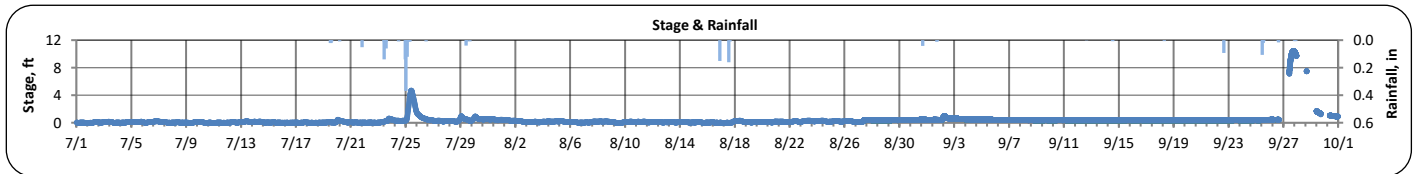
The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (July 1, 2024 - September 30, 2024)



Hamilton County
Water Quality Program

S. Chick Creek at West Chick Creek

| PARAMETER | DESCRIPTION | CONTINUOUS WATER QUALITY PARAMETERS: | SUMMARY STATISTICS | | | | |
|---------------------------------|---------------------------------------|--------------------------------------|--------------------|------------------|-----------------|---------------|--------------------|
| | | | MINIMUM OBSERVED | MAXIMUM OBSERVED | MEDIAN OBSERVED | MEAN OBSERVED | STANDARD DEVIATION |
| STREAM NAME: | S. Chick Creek | STAGE (FT): | 0.001 | 10.461 | 0.397 | 0.552 | 1.179 |
| LOCATION: | S. Chick at West Chick Creek | TEMPERATURE (°C): | 20 | 29 | 25 | 25 | 2 |
| TMDL/IMPAIRMENT: | E.coli, Siltation, Habitat Alteration | TURBIDITY (FNU): | 5 | 430 | 7 | 11 | 21 |
| | | pH: | 7.1 | 8.4 | 8.1 | 8.1 | 0.2 |
| APPROX. DRAINAGE AREA: | 23 square miles | SPECIFIC CONDUCTIVITY (µS/cm): | 100 | 331 | 310 | 300 | 32 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 0 | DISSOLVED OXYGEN (mg/L): | 6.2 | 9.7 | 7.4 | 7.5 | 0.8 |
| MAX. DAILY RAINFALL: | 0.6 inches | | | | | | |
| TOTAL RAINFALL (FOR PERIOD): | 2.0 inches | | | | | | |



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

REPORT GENERATED ON 11/13/2024





The City of Chattanooga and Hamilton County Joint Water Quality Monitoring
 Quarterly Report (July 1, 2024 - September 30, 2024)
 S. Chick Creek at West Chick



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: One grab sample was obtained during dry conditions at the S. Chick Creek at West Chick location during this monitoring period.

| Analyte (units) | Sample 1 | | Sample 2 | | Sample 3 | | Sample 4 | |
|-------------------------------------|-----------|---------|----------|---------|----------|---------|----------|---------|
| | 8/20/2024 | | | | | | | |
| | Time | Results | Time | Results | Time | Results | Time | Results |
| <i>Escherichia coli</i> (MPN/100mL) | 10:50 | 610 | | | | | | |
| Total Suspended Solids (mg/L) | 10:50 | 9.4 | | | | | | |
| Total Phosphorus (mg/L) | 10:50 | <0.5 | | | | | | |
| Total Nitrogen (mg/L) | 10:50 | *0.351 | | | | | | |

*Value represents Nitrate/Nitrite concentrations only. TKN was below the detection limit of 0.5 mg/L.

Notes:

All paramaters reporting in EST (-5:00).

Data Gaps

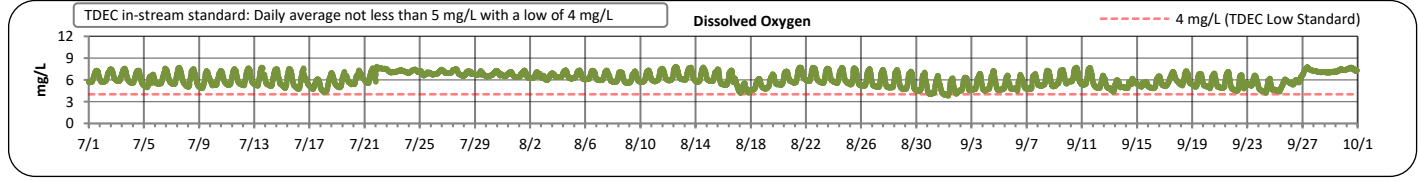
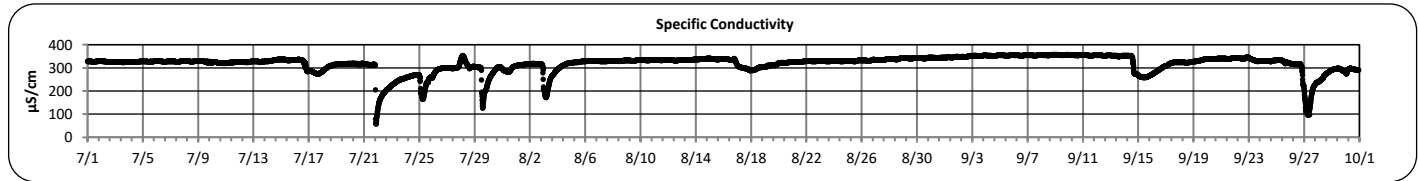
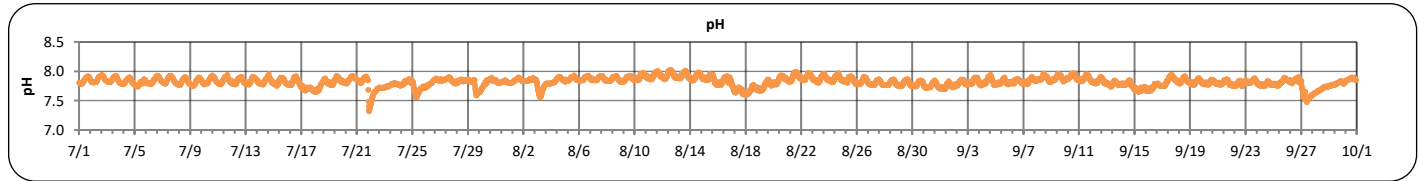
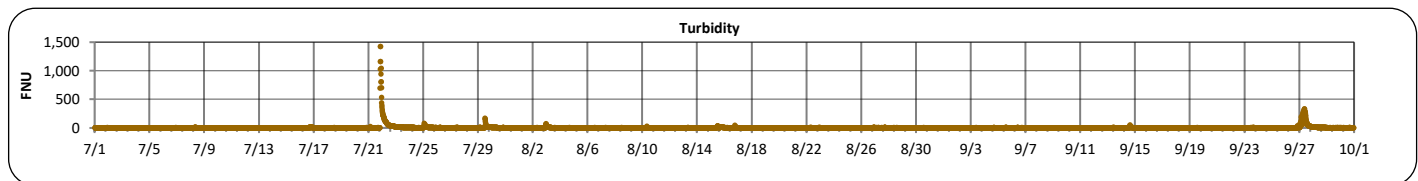
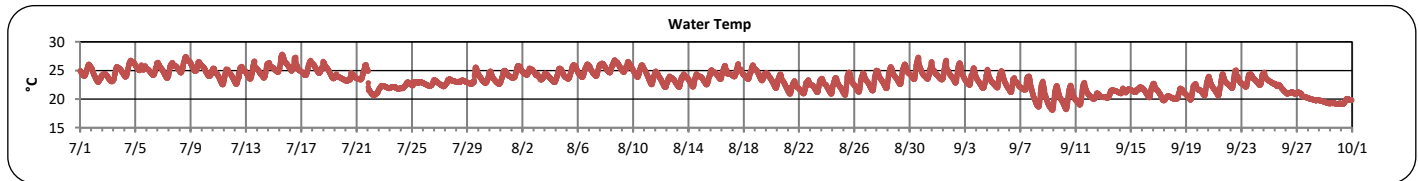
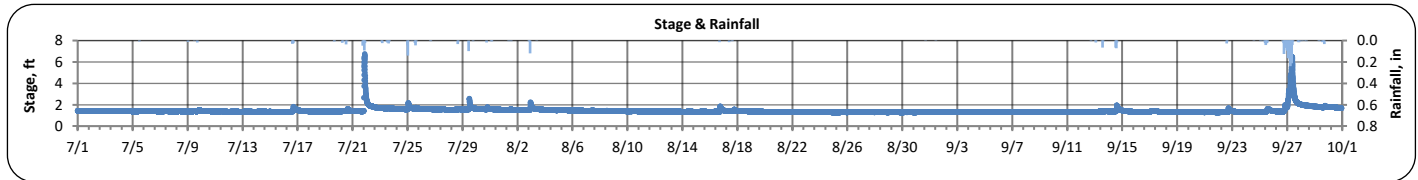
Data gap present for turbidity during 7/1-8/27 due to equipment failure.



The City of Chattanooga and Hamilton County Joint Water Quality Monitoring
 Quarterly Report (July 1, 2024 - September 30, 2024)
 Mountain Creek at Elementary School



| PARAMETER | DESCRIPTION | CONTINUOUS WATER QUALITY PARAMETERS: | SUMMARY STATISTICS | | | | |
|---------------------------------|--|--------------------------------------|--------------------|------------------|-----------------|---------------|--------------------|
| | | | MINIMUM OBSERVED | MAXIMUM OBSERVED | MEDIAN OBSERVED | MEAN OBSERVED | STANDARD DEVIATION |
| STREAM NAME: | Mountain Creek | STAGE (FT): | 1.3 | 6.8 | 1.4 | 1.4 | 0.3 |
| LOCATION: | Red Bank Elementary School | TEMPERATURE (°C): | 18 | 28 | 23 | 23 | 2 |
| TMDL/IMPAIRMENT: | <i>E. coli</i> , Siltation, Habitat Alteration | TURBIDITY (FNU): | 1 | 1,424 | 3 | 8 | 42 |
| | | pH: | 7.3 | 8.0 | 7.8 | 7.8 | 0.1 |
| APPROX. DRAINAGE AREA: | 5.5 square miles | SPECIFIC CONDUCTIVITY (µS/cm): | 57 | 358 | 329 | 319 | 37 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 21 | DISSOLVED OXYGEN (mg/L): | 3.8 | 7.8 | 6.1 | 6.1 | 0.9 |
| MAX. DAILY RAINFALL: | 1.3 inches | | | | | | |
| TOTAL RAINFALL (FOR PERIOD): | 3.5 inches | | | | | | |



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



The City of Chattanooga and Hamilton County Joint Water Quality Monitoring
 Quarterly Report (July 1, 2024 - September 30, 2024)
 Mountain Creek at Elementary School



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:

One grab sample was obtained during dry conditions at the Mountain Creek at Elementary School location during this monitoring period.

| Analyte (units) | Sample 1 | | Sample 2 | | Sample 3 | | Sample 4 | |
|-------------------------------------|-----------|---------|----------|---------|----------|---------|----------|---------|
| | 8/20/2024 | | | | | | | |
| | Time | Results | Time | Results | Time | Results | Time | Results |
| <i>Escherichia coli</i> (MPN/100mL) | 10:45 | 220 | | | | | | |
| Total Suspended Solids (mg/L) | 10:45 | 1.4 | | | | | | |
| Total Phosphorus (mg/L) | 10:45 | <0.5 | | | | | | |
| Total Nitrogen (mg/L) | 10:45 | *0.201 | | | | | | |

*Value represents Nitrate/Nitrite concentrations only. TKN was below the detection limit of 0.5 mg/L.

Notes:

All paramaters reporting in EST (-5:00).

Data Gaps

There were no data gaps at the Mountain Creek at Elementary School location during this monitoring period.