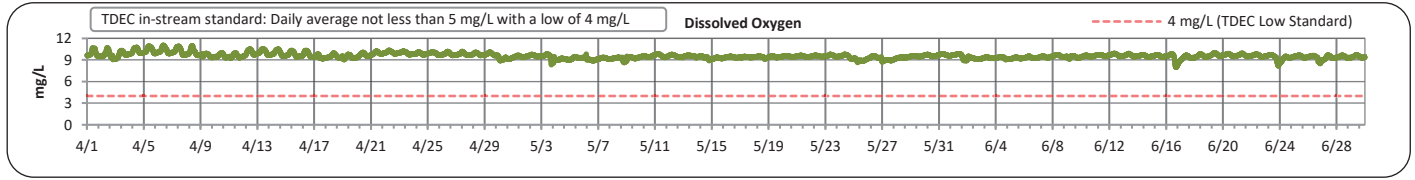
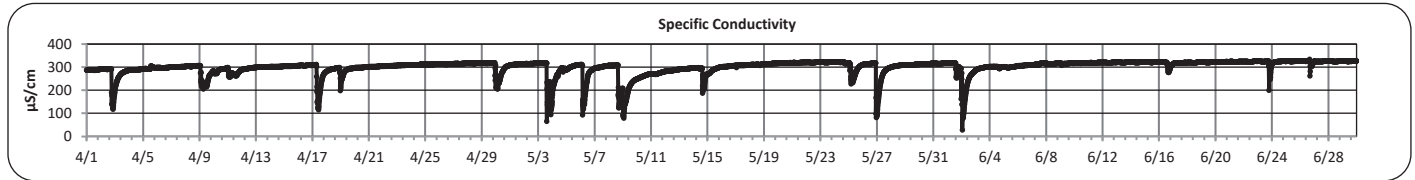
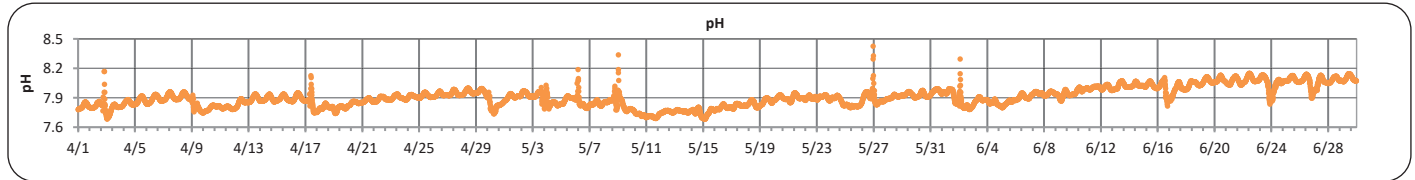
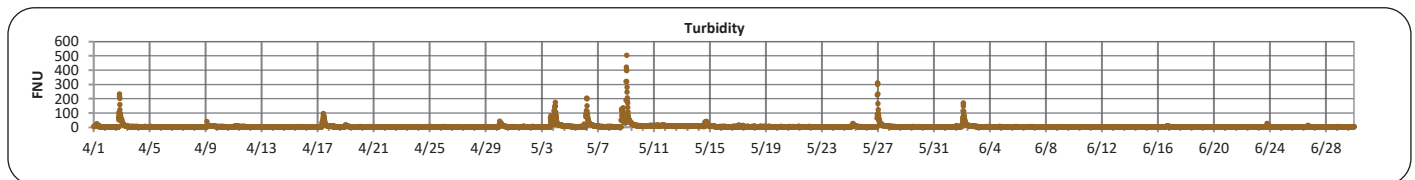
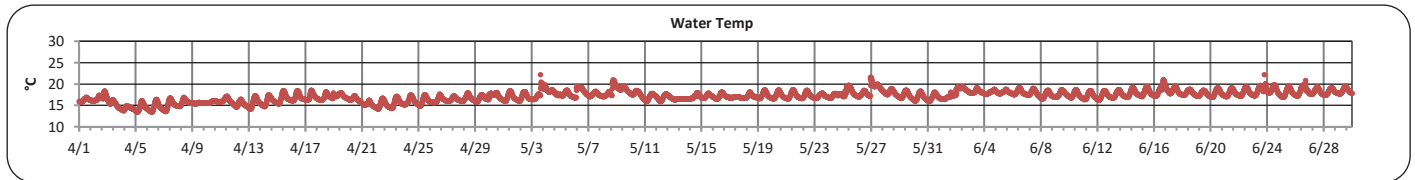
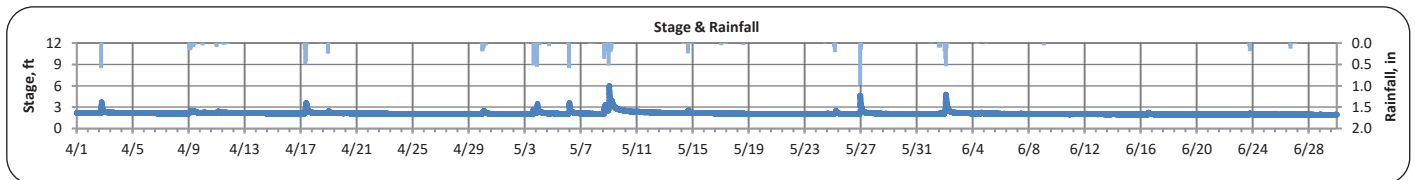




The City of Chattanooga and Hamilton County Joint Water Quality Monitoring  
 Quarterly Report (April 1, 2024 - June 30, 2024)  
 Stringers Branch at Signal Mountain



| 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                | 6.0              | 2.1             | 2.1           | 0.2                |
| LOCATION:                       | Signal Mountain Rd                             | TEMPERATURE (°C):                    | 13                 | 22               | 17              | 17            | 1                  |
| TMDL/IMPAIRMENT:                | <i>E. coli</i> , Siltation, Habitat Alteration | TURBIDITY (FNU):                     | 1                  | 505              | 3               | 7             | 18                 |
|                                 |  | pH:                                  | 7.7                | 8.4              | 7.9             | 7.9           | 0.1                |
| APPROX. DRAINAGE AREA:          | 5.7 square miles                               | SPECIFIC CONDUCTIVITY (µS/cm):       | 29                 | 335              | 310             | 301           | 33                 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 20   | DISSOLVED OXYGEN (mg/L):             | 8.0                | 11.0             | 9.5             | 9.6           | 0.4                |
| MAX. DAILY RAINFALL:            | 1.6 inches                                     |                                      |                    |                  |                 |               |                    |
| TOTAL RAINFALL (FOR PERIOD):    | 12.9 inches                                    |                                      |                    |                  |                 |               |                    |



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

REPORT GENERATED ON 8/28/2024





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



**Explanation of Statistics:**

|                           |  |
|---------------------------|--|
| <b>MINIMUM OBSERVED</b>   | The minimum of the values recorded by the datasonde in 15 minute intervals.                |
| <b>MAXIMUM OBSERVED</b>   | The maximum of the values recorded by the datasonde in 15 minute intervals.                |
| <b>MEDIAN OBSERVED</b>    | The median of all the values recorded by the datasonde in 15 minute intervals.             |
| <b>MEAN OBSERVED</b>      | The average of all the values recorded by the datasonde in 15 minute intervals.            |
| <b>STANDARD DEVIATION</b> | 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 |         |
|--|----------|---------|----------|---------|----------|---------|----------|---------|
|  | Time     | Results | Time     | Results | Time     | Results | Time     | Results |
| <i>Escherichia coli</i><br>(MPN/100mL) |          |         |          |         |          |         |          |         |
| Total Suspended Solids (mg/L)          |          |         |          |         |          |         |          |         |
| Total Phosphorus (mg/L)                |          |         |          |         |          |         |          |         |
| Total Nitrogen (mg/L)                  |          |         |          |         |          |         |          |         |

**Notes:**

No grab samples were collected for the Stringers Branch at Signal Mountain location this monitoring period. Parameters reporting in EST (-5:00), beginning April 1st.

Data Gaps

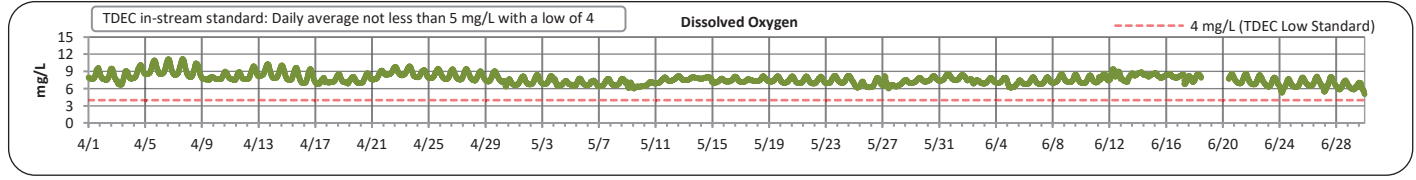
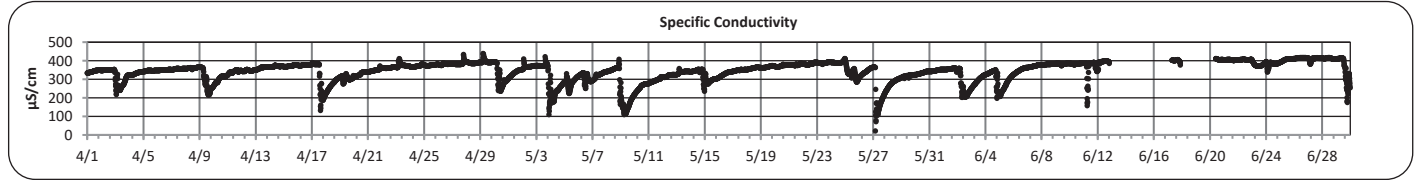
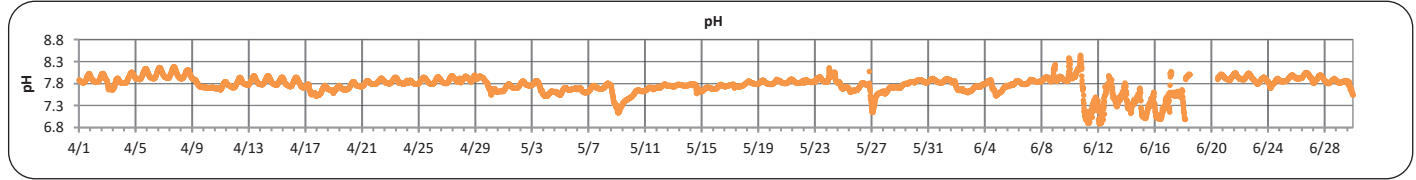
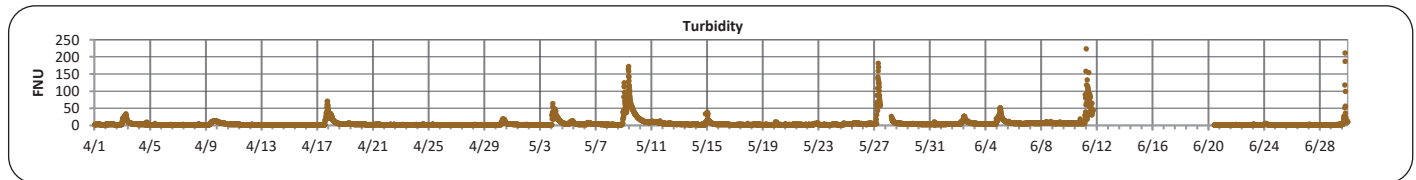
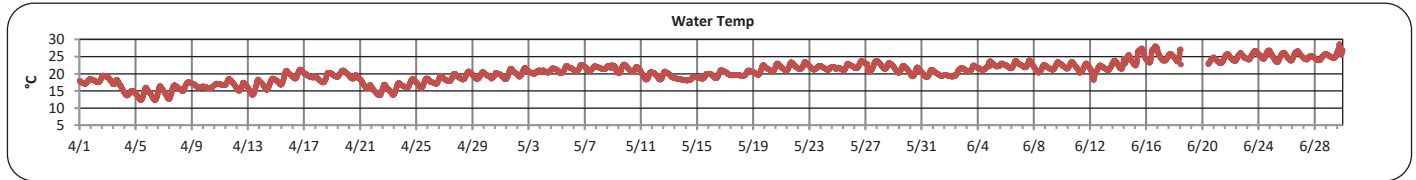
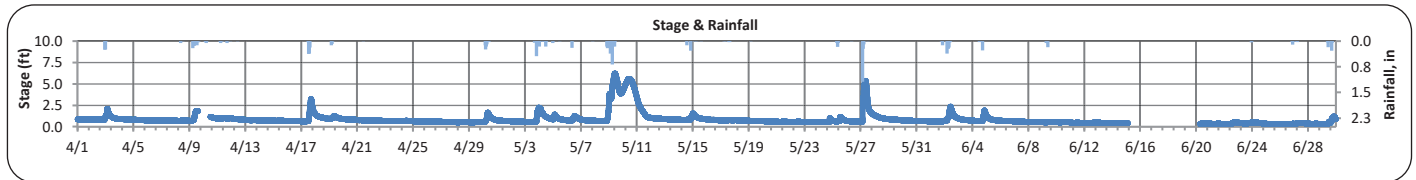
There were no data gaps at the Stringers Branch at Signal Mountain location during this monitoring



# The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2024 - June 30, 2024) 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):                          | 0.3                | 6.3              | 0.7             | 0.9           | 0.7                |
| LOCATION:                       | Polymer Drive Bridge                           | TEMPERATURE (°C):                    | 12                 | 29               | 21              | 21            | 3                  |
| TMDL/IMPAIRMENT:                | <i>E. coli</i> , Siltation, Habitat Alteration | TURBIDITY (FNU):                     | 1                  | 224              | 3               | 6             | 13                 |
|                                 |  | pH:                                  | 6.9                | 8.5              | 7.8             | 7.8           | 0.2                |
| APPROX. DRAINAGE AREA:          | 20.7 square miles                              | SPECIFIC CONDUCTIVITY (µS/cm):       | 21                 | 441              | 354             | 344           | 53                 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 22   |                                      |                    |                  |                 |               |                    |
| MAX. DAILY RAINFALL:            | 1.7 inches                                     | DISSOLVED OXYGEN (mg/L):             | 4.5                | 11.2             | 7.6             | 7.7           | 0.9                |
| TOTAL RAINFALL (FOR PERIOD):    | 12.1 inches                                    |                                      |                    |                  |                 |               |                    |



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

REPORT GENERATED ON 8/28/2024





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



**Explanation of Statistics:**

|                           |  |
|---------------------------|--|
| <b>MINIMUM OBSERVED</b>   | The minimum of the values recorded by the datasonde in 15 minute intervals.                |
| <b>MAXIMUM OBSERVED</b>   | The maximum of the values recorded by the datasonde in 15 minute intervals.                |
| <b>MEDIAN OBSERVED</b>    | The median of all the values recorded by the datasonde in 15 minute intervals.             |
| <b>MEAN OBSERVED</b>      | The average of all the values recorded by the datasonde in 15 minute intervals.            |
| <b>STANDARD DEVIATION</b> | 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 |         |
|--|-----------|---------|----------|---------|----------|---------|----------|---------|
|  | 5/14/2024 |         |          |         |          |         |          |         |
|  | Time      | Results | Time     | Results | Time     | Results | Time     | Results |
| <i>Escherichia coli</i><br>(MPN/100mL) | 11:05     | 290     |          |         |          |         |          |         |
| Total Suspended Solids (mg/L)          | 11:05     | 2       |          |         |          |         |          |         |
| Total Phosphorus (mg/L)                | 11:05     | <0.5    |          |         |          |         |          |         |
| Total Nitrogen (mg/L)                  | 11:05     | <0.5    |          |         |          |         |          |         |

**Notes:**

One dry grab sample was collected at the Friar Branch at Ploymer Drive location during this monitoring period. Parameters reporting in EST (-5:00), beginning April 1st.

Data Gaps

Data gap present for turbidity readings between 6/11 - 6/20 due to equipment issues.

Specific conductivity data gaps placed 6/12-6/17 and 6/17 - 6/20 due to apparent fouling and partial unsubmergence throughout the monitoring period.

Water quality data were removed between 6/18-6/20 due to apparent calibration period.

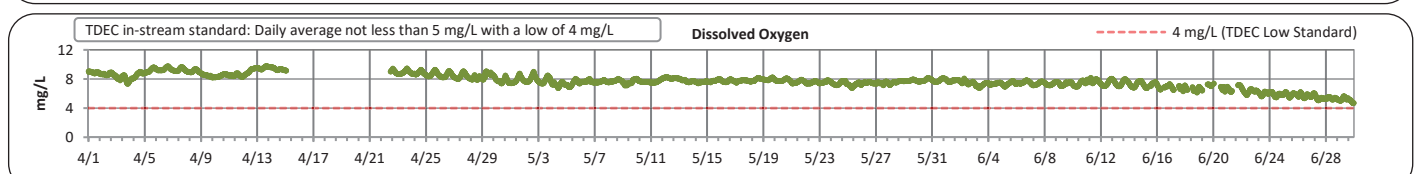
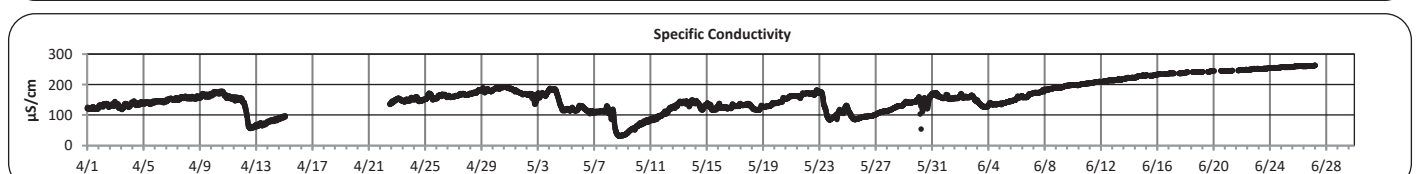
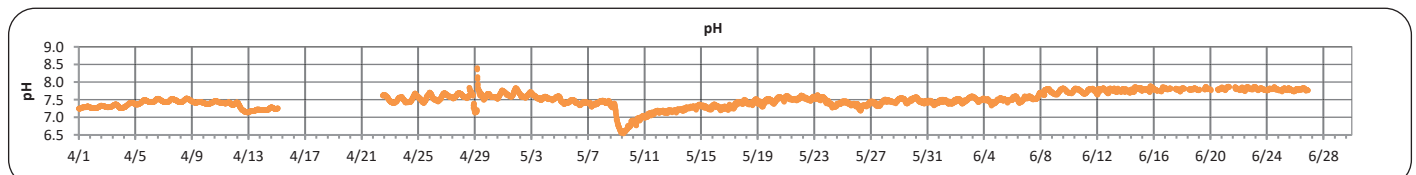
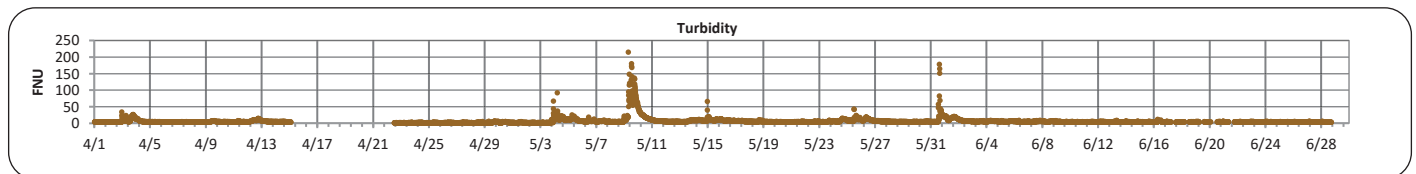
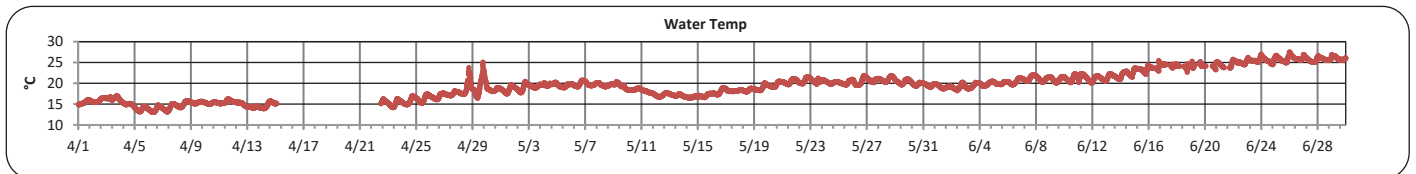
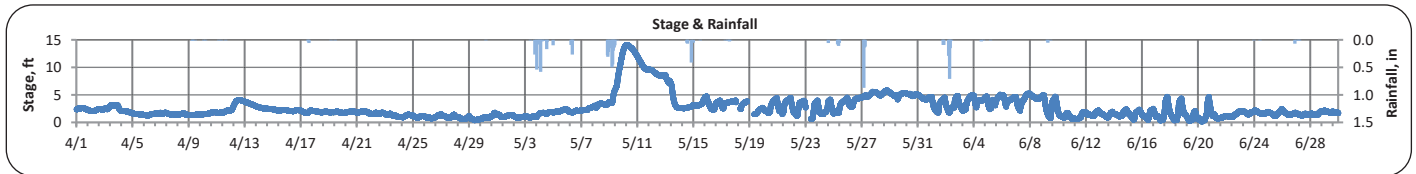
Data gap present for stage readings between 6/15 - 6/20 due to equipment issues.



# The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2024 - June 30, 2024) 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):                          | 0.2                | 14.1             | 2.0             | 2.7           | 2.1                |
| LOCATION:                       | Greenway Farms Boat Launch        | TEMPERATURE (°C):                    | 13                 | 28               | 20              | 19            | 3                  |
| TMDL/IMPAIRMENT:                | pH, Siltation, Habitat Alteration | TURBIDITY (FNU):                     | 1                  | 215              | 5               | 7             | 10                 |
|                                 |                                   | pH:                                  | 6.6                | 8.4              | 7.5             | 7.5           | 0.2                |
| APPROX. DRAINAGE AREA:          | 117.4 square miles                | SPECIFIC CONDUCTIVITY (µS/cm):       | 31                 | 263              | 153             | 157           | 49                 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 19                                | DISSOLVED OXYGEN (mg/L):             | 4.7                | 9.8              | 7.7             | 7.7           | 1.0                |
| MAX. DAILY RAINFALL:            | 1.8 inches                        |                                      |                    |                  |                 |               |                    |
| TOTAL RAINFALL (FOR PERIOD):    | 12.6 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 (April 1, 2024 - June 30, 2024)  
N. Chick Creek at Greenway Farms**



**Explanation of Statistics:**

|                           |  |
|---------------------------|--|
| <b>MINIMUM OBSERVED</b>   | The minimum of the values recorded by the datasonde in 15 minute intervals.                |
| <b>MAXIMUM OBSERVED</b>   | The maximum of the values recorded by the datasonde in 15 minute intervals.                |
| <b>MEDIAN OBSERVED</b>    | The median of all the values recorded by the datasonde in 15 minute intervals.             |
| <b>MEAN OBSERVED</b>      | The average of all the values recorded by the datasonde in 15 minute intervals.            |
| <b>STANDARD DEVIATION</b> | 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 |         |
|--|-----------|---------|----------|---------|----------|---------|----------|---------|
|  | 5/14/2024 |         |          |         |          |         |          |         |
|  | Time      | Results | Time     | Results | Time     | Results | Time     | Results |
| <i>Escherichia coli</i><br>(MPN/100mL) | 11:45     | 320     |          |         |          |         |          |         |
| Total Suspended Solids (mg/L)          | 11:45     | 7.2     |          |         |          |         |          |         |
| Total Phosphorus (mg/L)                | 11:45     | <0.5    |          |         |          |         |          |         |
| Total Nitrogen (mg/L)                  | 11:45     | <0.5    |          |         |          |         |          |         |

**Notes:**

One dry grab sample was collected at the N. Chick Creek at Greenway Farms location during this monitoring period. Parameters reporting in EST (-5:00), beginning April 1st.

Data Gaps

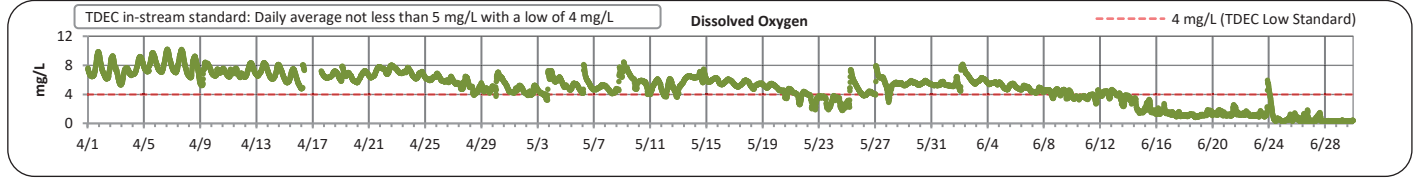
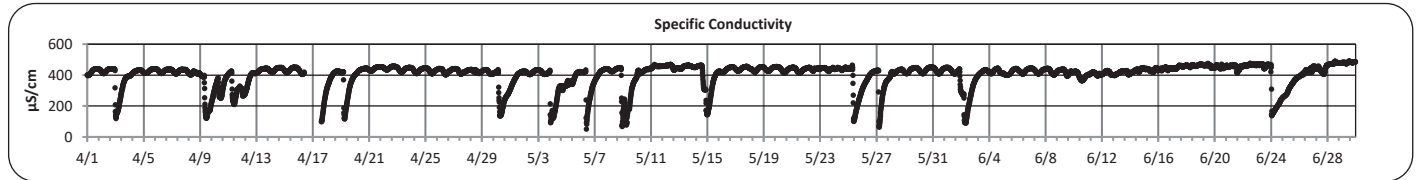
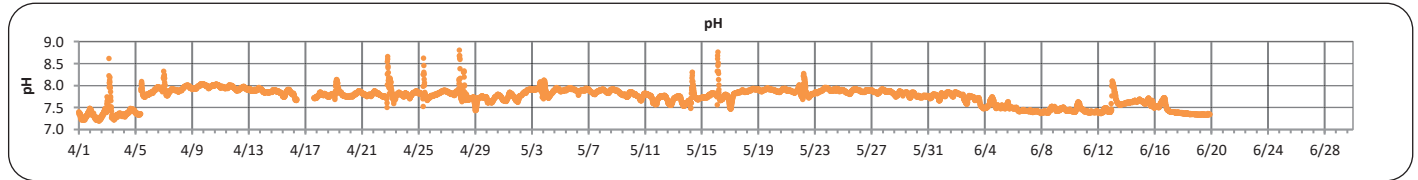
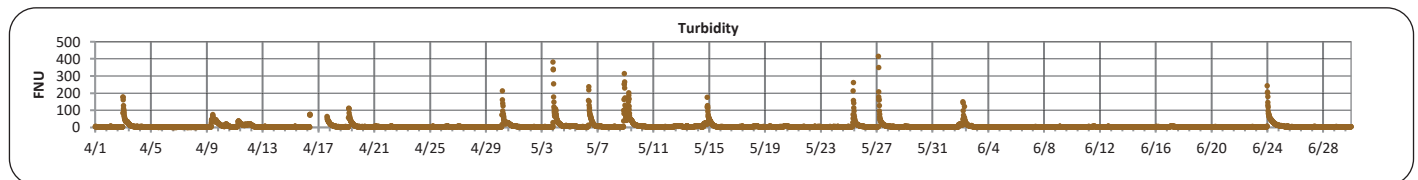
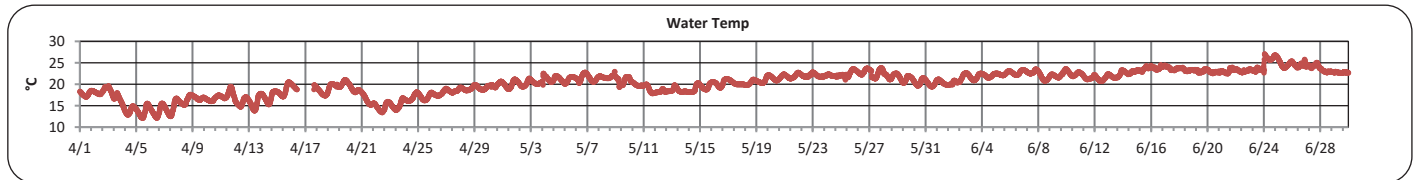
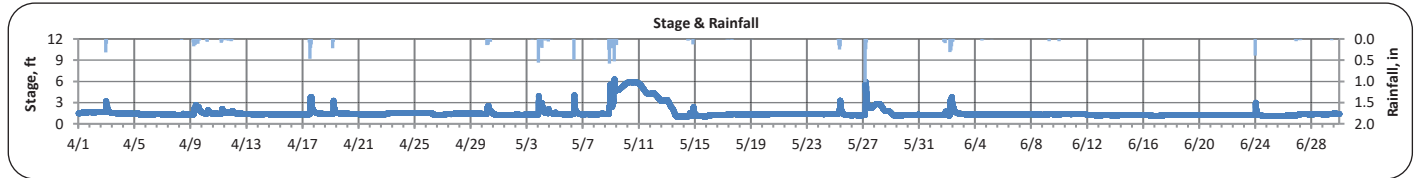
Data gap present for all water quality parameters between 4/15-4/22 due to apparent calibration period.  
Data gap present for pH and specific conductivity from 6/27-6/30 due to partial unsubmergence and fouling.  
Data gap present for turbidity from 6/28-6/30 due to partial unsubmergence.



# The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2024 - June 30, 2024) 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):                          | 1.0                | 6.3              | 1.4             | 1.6           | 0.8                |
| LOCATION:                       | Park City Park                                 | TEMPERATURE (°C):                    | 12                 | 27               | 21              | 20            | 3                  |
| TMDL/IMPAIRMENT:                | <i>E. coli</i> , Siltation, Habitat Alteration | TURBIDITY (FNU):                     | 2                  | 416              | 5               | 9             | 20                 |
|                                 |  | pH:                                  | 7.2                | 8.8              | 7.8             | 7.7           | 0.2                |
| APPROX. DRAINAGE AREA:          | 6.2 square miles                               | SPECIFIC CONDUCTIVITY (µS/cm):       | 50                 | 502              | 429             | 406           | 74                 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 18   |                                      |                    |                  |                 |               |                    |
| MAX. DAILY RAINFALL:            | 1.4 inches                                     | DISSOLVED OXYGEN (mg/L):             | 0.3                | 10.2             | 5.3             | 4.9           | 2.2                |
| TOTAL RAINFALL (FOR PERIOD):    | 12.2 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 (April 1, 2024 - June 30, 2024)  
 Dobbs Branch at Park City Park



**Explanation of Statistics:**

|                           |  |
|---------------------------|--|
| <b>MINIMUM OBSERVED</b>   | The minimum of the values recorded by the datasonde in 15 minute intervals.                |
| <b>MAXIMUM OBSERVED</b>   | The maximum of the values recorded by the datasonde in 15 minute intervals.                |
| <b>MEDIAN OBSERVED</b>    | The median of all the values recorded by the datasonde in 15 minute intervals.             |
| <b>MEAN OBSERVED</b>      | The average of all the values recorded by the datasonde in 15 minute intervals.            |
| <b>STANDARD DEVIATION</b> | 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 |         |
|--|-----------|---------|----------|---------|----------|---------|----------|---------|
|  | 5/14/2024 |         |          |         |          |         |          |         |
|  | Time      | Results | Time     | Results | Time     | Results | Time     | Results |
| <i>Escherichia coli</i><br>(MPN/100mL) | 9:45      | 740     |          |         |          |         |          |         |
| Total Suspended Solids (mg/L)          | 9:45      | 10.2    |          |         |          |         |          |         |
| Total Phosphorus (mg/L)                | 9:45      | <0.5    |          |         |          |         |          |         |
| Total Nitrogen (mg/L)                  | 9:45      | <0.5    |          |         |          |         |          |         |

**Notes:**

One dry grab sample was collected at the Dobbs Branch at Park City Park location during this monitoring period. Parameters reporting in EST (-5:00), beginning April 1st.

Data Gaps

Data gap present for all water quality parameters between 4/16-4/17 due to apparent calibration period.  
 Data gap present for pH between 6/19-6/30 due to partial unsubmergence and fouling.  
 Periodic data gaps present throughout monitoring period for specific conductivity and dissolved oxygen due to sensor fouling.

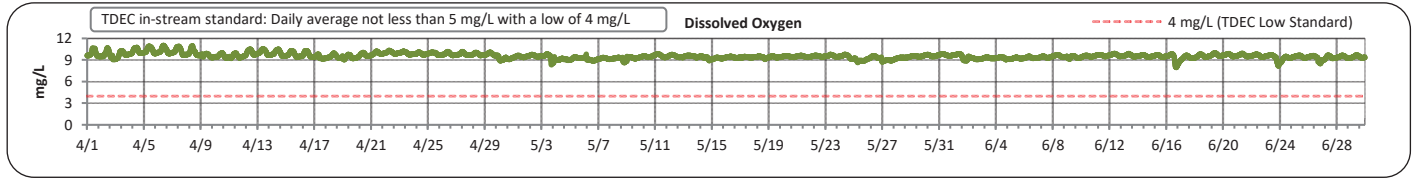
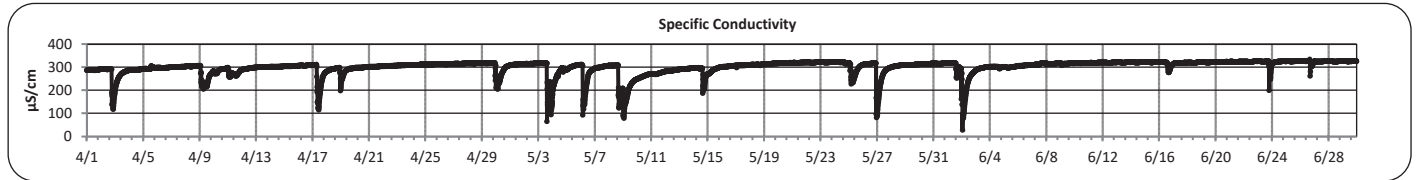
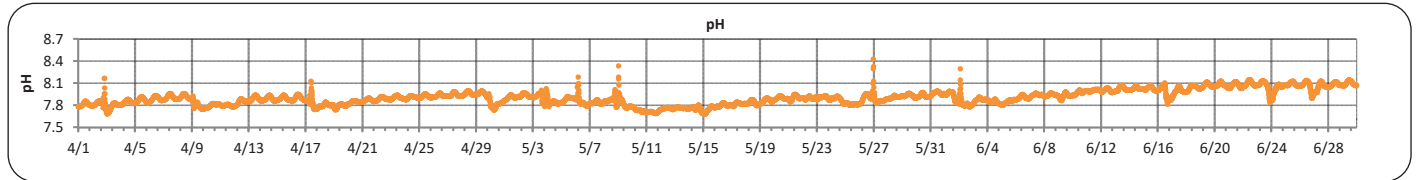
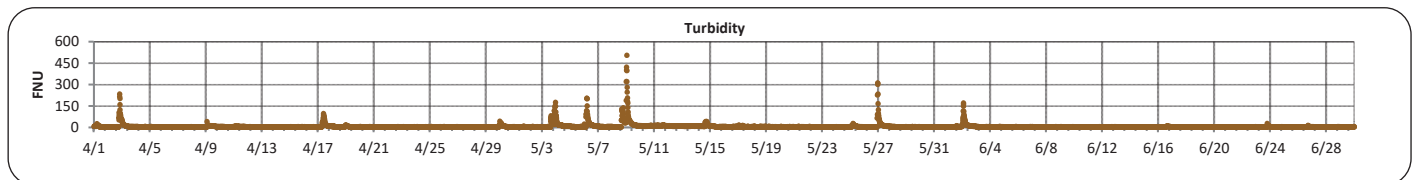
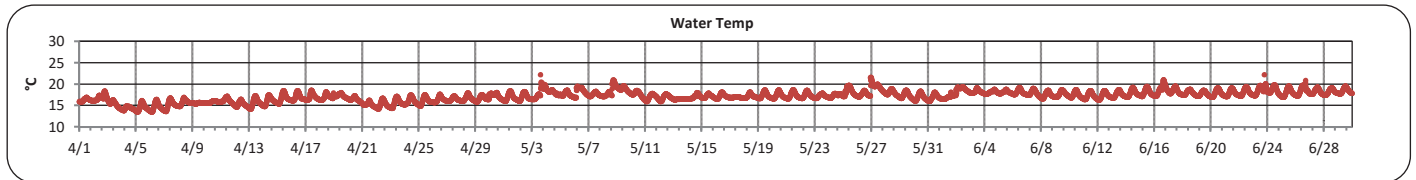
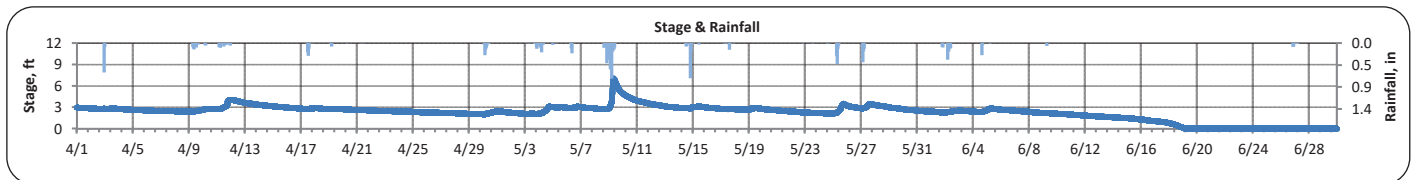




# The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2024 - June 30, 2024) North Chick at Ivy Academy



| 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):                          | 0.0                | 7.1              | 2.5             | 2.3           | 1.1                |
| LOCATION:                       | Ivy Academy                   | TEMPERATURE (°C):                    | 13                 | 22               | 17              | 17            | 1                  |
| TMDL/IMPAIRMENT:                | Siltation, Habitat Alteration | TURBIDITY (FNU):                     | 1                  | 505              | 3               | 7             | 18                 |
|                                 |                               | pH:                                  | 7.7                | 8.4              | 7.9             | 7.9           | 0.1                |
| APPROX. DRAINAGE AREA:          | 17 square miles               | SPECIFIC CONDUCTIVITY (µS/cm):       | 29                 | 335              | 310             | 301           | 33                 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 17                            |                                      |                    |                  |                 |               |                    |
| MAX. DAILY RAINFALL:            | 2.2 inches                    | DISSOLVED OXYGEN (mg/L):             | 8.0                | 11.0             | 9.5             | 9.6           | 0.4                |
| TOTAL RAINFALL (FOR PERIOD):    | 12.4 inches                   |                                      |                    |                  |                 |               |                    |



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

REPORT GENERATED ON 9/3/2024





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



**Explanation of Statistics:**

|                           |  |
|---------------------------|--|
| <b>MINIMUM OBSERVED</b>   | The minimum of the values recorded by the datasonde in 15 minute intervals.                |
| <b>MAXIMUM OBSERVED</b>   | The maximum of the values recorded by the datasonde in 15 minute intervals.                |
| <b>MEDIAN OBSERVED</b>    | The median of all the values recorded by the datasonde in 15 minute intervals.             |
| <b>MEAN OBSERVED</b>      | The average of all the values recorded by the datasonde in 15 minute intervals.            |
| <b>STANDARD DEVIATION</b> | 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 |         |
|--|----------|---------|----------|---------|----------|---------|----------|---------|
|  | Time     | Results | Time     | Results | Time     | Results | Time     | Results |
| <i>Escherichia coli</i><br>(MPN/100mL) |          |         |          |         |          |         |          |         |
| Total Suspended Solids (mg/L)          |          |         |          |         |          |         |          |         |
| Total Phosphorus (mg/L)                |          |         |          |         |          |         |          |         |
| Total Nitrogen (mg/L)                  |          |         |          |         |          |         |          |         |

**Notes:**

No grab samples were collected at the North Chick at Ivy Academy location during this monitoring period. All parameters reporting in EST (-5:00), beginning April 1st.

Data Gaps

There were no data gaps at the North Chick at Ivy Academy location during this monitoring period.



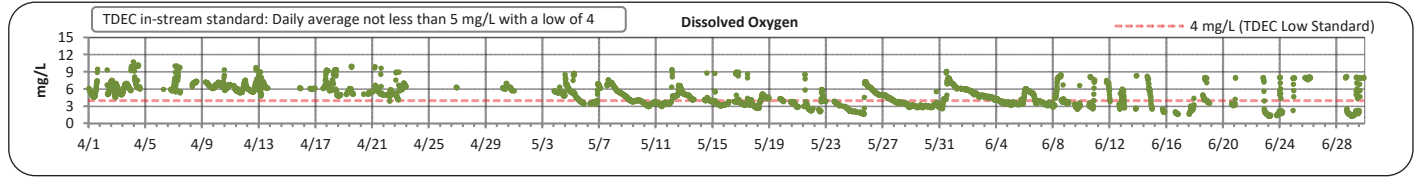
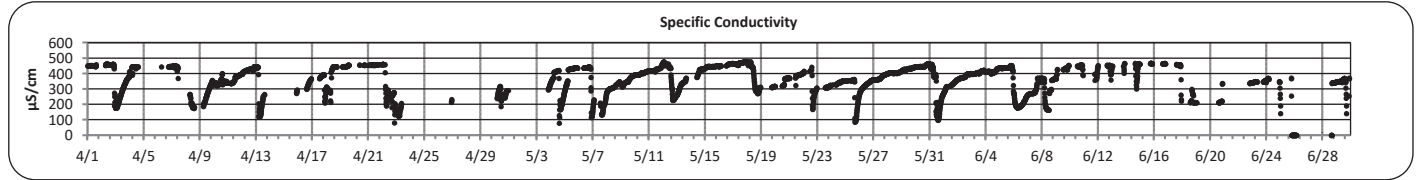
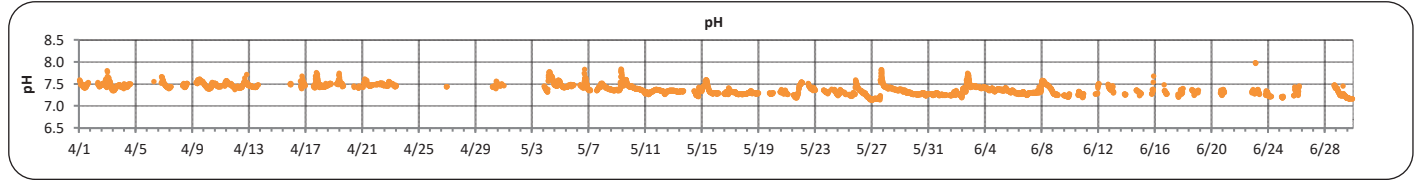
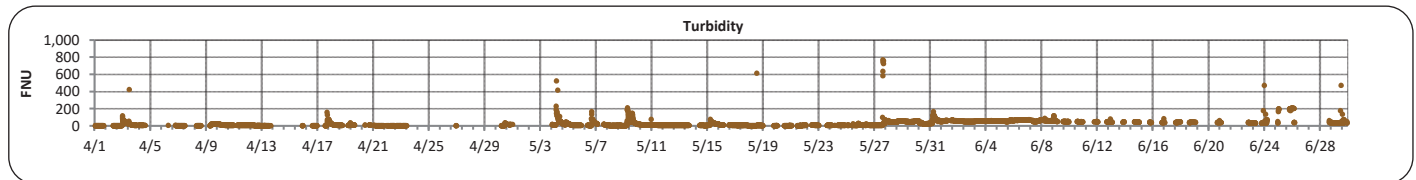
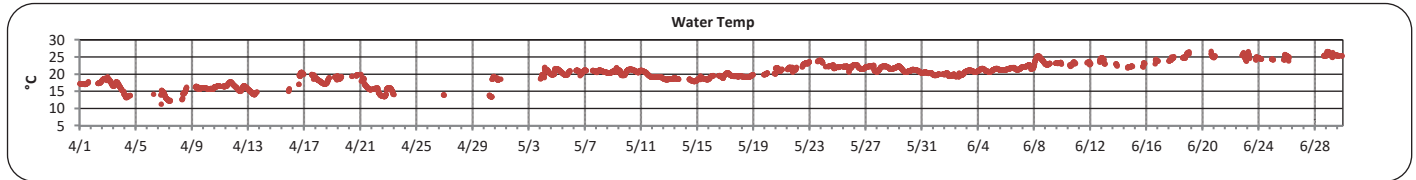
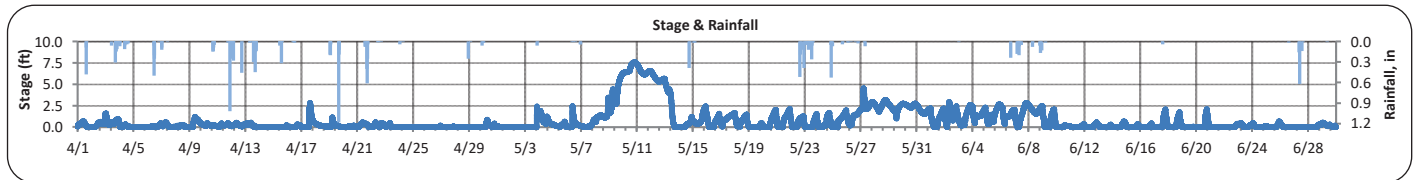
# The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2024 - June 30, 2024)



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):                          | 0.0                | 7.6              | 0.2             | 0.8           | 1.4                |
| LOCATION:                       | Waterwalk Pl Rd                            | TEMPERATURE (°C):                    | 11                 | 27               | 21              | 20            | 3                  |
| TMDL/IMPAIRMENT:                | pH, E. coli, Siltation, Habitat Alteration | TURBIDITY (FNU):                     | 3                  | 773              | 13              | 31            | 46                 |
|                                 |  | pH:                                  | 7.1                | 8.3              | 7.4             | 7.4           | 0.1                |
| APPROX. DRAINAGE AREA:          | 6 square miles                             | SPECIFIC CONDUCTIVITY (µS/cm):       | 0.1                | 478              | 378             | 357           | 96                 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 18   | DISSOLVED OXYGEN (mg/L):             | 1.3                | 10.8             | 4.7             | 4.9           | 1.8                |
| MAX. DAILY RAINFALL:            | 2.2 inches                                 |                                      |                    |                  |                 |               |                    |
| TOTAL RAINFALL (FOR PERIOD):    | 44.7 inches                                |                                      |                    |                  |                 |               |                    |



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

REPORT GENERATED ON 9/3/2024





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



**Explanation of Statistics:**

|                           |  |
|---------------------------|--|
| <b>MINIMUM OBSERVED</b>   | The minimum of the values recorded by the datasonde in 15 minute intervals.                |
| <b>MAXIMUM OBSERVED</b>   | The maximum of the values recorded by the datasonde in 15 minute intervals.                |
| <b>MEDIAN OBSERVED</b>    | The median of all the values recorded by the datasonde in 15 minute intervals.             |
| <b>MEAN OBSERVED</b>      | The average of all the values recorded by the datasonde in 15 minute intervals.            |
| <b>STANDARD DEVIATION</b> | 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 |         |
|-------------------------------------|-----------|---------|----------|---------|----------|---------|----------|---------|
|                                     | 5/14/2024 |         |          |         |          |         |          |         |
|                                     | Time      | Results | Time     | Results | Time     | Results | Time     | Results |
| <i>Escherichia coli</i> (MPN/100mL) | 12:05     | 2,200   |          |         |          |         |          |         |
| Total Suspended Solids (mg/L)       | 12:05     | 7       |          |         |          |         |          |         |
| Total Phosphorus (mg/L)             | 12:05     | <0.500  |          |         |          |         |          |         |
| Total Nitrogen (mg/L)               | 12:05     | *1.16   |          |         |          |         |          |         |

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

**Notes:**

No grab samples were obtained at the Citico Creek location during this monitoring period.

All paramaters reporting in EST (-5:00), beginning April 1st.

Data Gaps

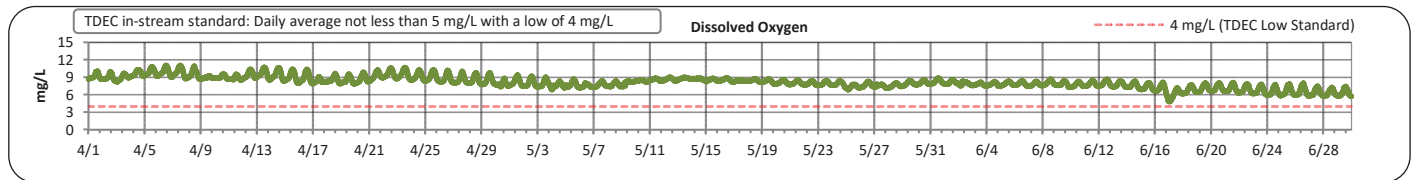
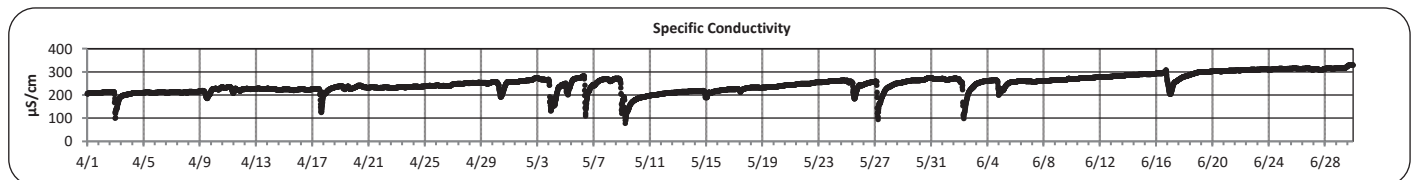
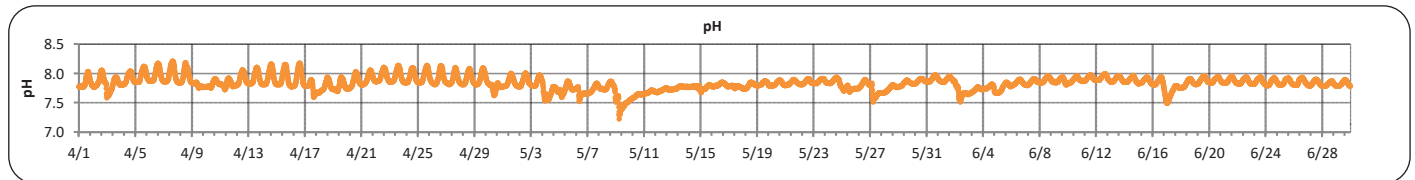
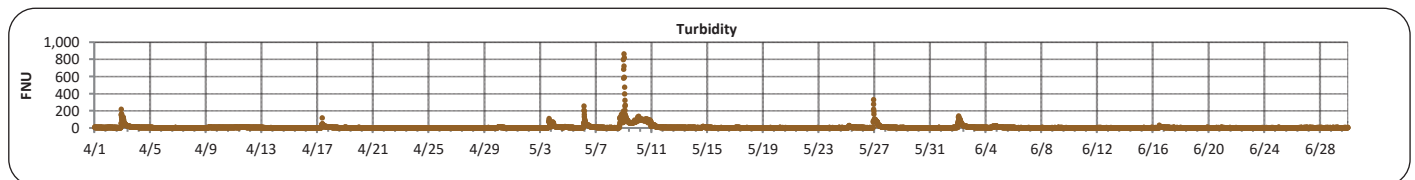
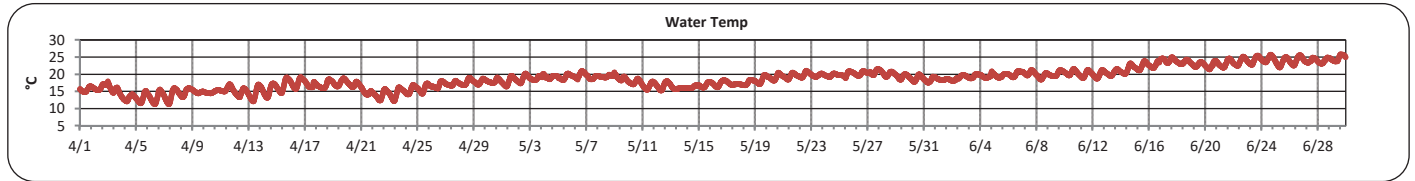
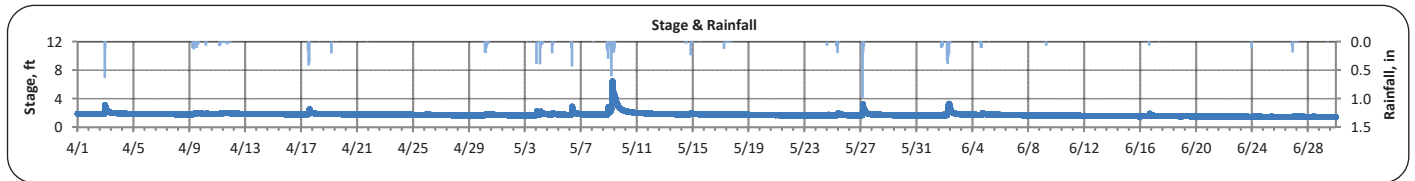
Periodic data gaps are present throughout monitoring period for all water quality parameters, excluding stage and rainfall, due to downstream influences from the Tennessee River.



# The City of Chattanooga and Hamilton County Joint Water Quality Monitoring Quarterly Report (April 1, 2024 - June 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):                          | 1.4                | 6.5              | 1.7             | 1.8           | 0.3                |
| LOCATION:                       | Red Bank Elementary School                     | TEMPERATURE (°C):                    | 11                 | 26               | 19              | 19            | 3                  |
| TMDL/IMPAIRMENT:                | <i>E. coli</i> , Siltation, Habitat Alteration | TURBIDITY (FNU):                     | 2                  | 866              | 4               | 9             | 29                 |
|                                 |  | pH:                                  | 7.2                | 8.2              | 7.8             | 7.8           | 0.1                |
| APPROX. DRAINAGE AREA:          | 5.5 square miles                               | SPECIFIC CONDUCTIVITY (µS/cm):       | 78                 | 332              | 247             | 249           | 37                 |
| TOTAL NO. STORMS OVER 0.1 INCH: | 21   |                                      |                    |                  |                 |               |                    |
| MAX. DAILY RAINFALL:            | 1.7 inches                                     | DISSOLVED OXYGEN (mg/L):             | 4.8                | 11.0             | 8.2             | 8.1           | 1.0                |
| TOTAL RAINFALL (FOR PERIOD):    | 13.2 inches                                    |                                      |                    |                  |                 |               |                    |



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

REPORT GENERATED ON 9/3/2024





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



**Explanation of Statistics:**

|                           |  |
|---------------------------|--|
| <b>MINIMUM OBSERVED</b>   | The minimum of the values recorded by the datasonde in 15 minute intervals.                |
| <b>MAXIMUM OBSERVED</b>   | The maximum of the values recorded by the datasonde in 15 minute intervals.                |
| <b>MEDIAN OBSERVED</b>    | The median of all the values recorded by the datasonde in 15 minute intervals.             |
| <b>MEAN OBSERVED</b>      | The average of all the values recorded by the datasonde in 15 minute intervals.            |
| <b>STANDARD DEVIATION</b> | 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 |         |
|--|-----------|---------|----------|---------|----------|---------|----------|---------|
|  | 5/14/2024 |         |          |         |          |         |          |         |
|  | Time      | Results | Time     | Results | Time     | Results | Time     | Results |
| <i>Escherichia coli</i><br>(MPN/100mL) | 10:45     | 460     |          |         |          |         |          |         |
| Total Suspended Solids (mg/L)          | 10:45     | 2.8     |          |         |          |         |          |         |
| Total Phosphorus (mg/L)                | 10:45     | <0.5    |          |         |          |         |          |         |
| Total Nitrogen (mg/L)                  | 10:45     | *0.38   |          |         |          |         |          |         |

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

**Notes:**

Two dry grab samples were collected at the Mountain Creek at Elementary School location during this monitoring period.

All paramaters reporting in EST (-5:00), beginning April 1st.

Data Gaps

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