



# CITY OF HOT SPRINGS

Utilities Department

780 Adams Street

Hot Springs, Arkansas 71901

July 13, 2022

VIA Email

Leslie Allen-Daniel  
Enforcement Analyst – Water Division  
Arkansas Energy & Environment – Environmental Quality  
5301 Northshore Drive  
North Little Rock, AR 72118-5317

**RE: City of Hot Springs Utilities  
Permit No. AR0033880 / AFIN 26-00145 / CAO LIS 22-007  
Progress Report and SECAP Delivery**

Dear Ms. Allen-Daniel,

The following components are a brief synopsis of progress regarding the CAO.

Hawkins-Weir Engineers, Inc. has the contract for the Spring Street Collection System Improvements project. The project is funded by the 2020 Wastewater Bond.

| Spring Street Collection System Improvements – Hawkins-Weir Engineers |           |           |  |
|---|-----------|-----------|--|
| Item No.  | Begin     | End       | Description  |
| 1   | 3/22/22   | 09/25/22  | Design Phase Services  |
| 2   | 3/30/22   | Complete  | Survey – Crist has completed 90% of the topographic survey as well as locating all of the existing sewer manholes and 95% of the existing utilities. They are in the process of completing the boundary portion of the survey.   |
| 3   | 6/22/2022 | 6/22/2022 | CHS and Hawkins-Weir (HW) met with the Hot Springs National Park Service (NPS) to discuss permitting requirements and construction limitations for the capacity improvements within the National Park. HW is working to prepare a project description and preliminary plans for NPS compliance review. |
| 3   | 9/25/22   | 10/25/22  | Bidding and Negotiation Services   |
| 4   | 10/26/22  | 3/31/2024 | Construction Services  |

The RJN Group, Inc. has the contract for the Lower Gulpha Gravity Interceptor from Spring Street to the Gulpha Pump Station. The project is funded by the 2020 Wastewater Bond.

| Lower Gulpha Interceptor – RJN Group |         |          |  |
|--------------------------------------|---------|----------|--|
| Item No.                             | Begin   | End      | Description  |
| 1                                    | 3/22/22 | 10/16/22 | Conceptual Design Report Draft (anticipated schedule)  |
| 2                                    | 3/22/22 | 10/16/22 | 30% Plan Submittal (anticipated schedule)  |
| 3                                    | 3/22/22 | 1/21/23  | Conceptual Design Report Final (anticipated schedule)  |
| 4                                    | 3/22/22 | 1/21/23  | 60% Plan Submittal (anticipated schedule)  |
| <b>Sub Consultants</b>               |         |          |  |
| 5                                    | 3/22/22 | Ongoing  | Crist Survey – Continued survey field work. Crist anticipates being able to submit a complete topo by end of July.   |
| 6                                    | 3/22/22 | Ongoing  | Ace Pipe – Multi-Sensor Inspection – completed field work and submitted summary documentation. RJN in process of reviewing data.                                     |
| 7                                    | 3/22/22 | Ongoing  | Eco Environmental - Completed USFWS IPAC and correspondence with USFWS Bat Biologist for tree cutting dates. Also completed the request for comments letter to SHPO. |
| 8                                    | 4/29/22 | N/A      |  |

Crist Engineers, Inc. has the contract for the Gulpha Pump Station Improvements. The project is funded by the 2020 Wastewater Bond.

| Gulpha Pump Station Improvements – Crist Engineers |         |   |  |
|--|---------|---|--|
| Item No.   | Begin   | End   | Description  |
| 1  | 3/22/22 | Ongoing<br>7/1/2022<br>9/1/2022<br>1/1/2023<br>3/1/2023 | Engagement of professional services with Crist Engineers<br>Conceptual Design Phase<br>60% Design Phase<br>90% Design Phase<br>100% Design Phase   |
| 2  | 3/22/22 | 4/8/22  | On site survey on the pump station site, planimetrics, surface features, and contour development   |
| 3  | 3/22/22 | Ongoing   | Commenced initial hydraulic evaluation of pump alternatives for pump station site. Acceptable pump manufacturers are Cornell, Fairbanks and Flygt. |
| 4  | 3/22/22 | Ongoing   | Design Phase Services – Meeting next week to coordinate with Gulpha Force Main Consulting Engineer, Hanson & McLaughlin, LLC                       |
| 5  | 3/1/23  | 5/1/23  | Bidding and Negotiation Services   |
| 6  | 5/1/23  | 9/1/24  | Construction Phase Services  |

Hanson & McLaughlin, LLC is working on the Gulpha Force Main from the Gulpha Pump Station to the Davidson Drive Wastewater Treatment Plant. The project will be bid this year. The project is funded by the 2020 Wastewater Bond.

| Gulpha Force Main – Hanson McLaughlin |         |          |   |
|---------------------------------------|---------|----------|---|
| Item No.                              | Begin   | End      | Description   |
| 1                                     | 3/15/22 | 12/31/23 | Gulpha 36-Inch Force Main contract signed                 |
| 2                                     | 3/15/22 | Ongoing  | Surveying and geotechnical engineering proposals received |
| 6                                     | 4/8/22  | Ongoing  | Design Process  |
| 7                                     | 4/8/22  | Ongoing  | Project Manual (specifications) preparation               |
| 8                                     | 4/15/22 | Complete | 30% Plan Submittal  |
| 9                                     | 6/1/22  | 7/31/22  | 60% Plan Submittal  |
| 10                                    | 8/1/22  | 11/30/22 | 100% Plan Submittal                                       |
| 11                                    | 12/1/22 | 3/31/23  | Bid Phase/Procurement Services                            |
| 12                                    | 4/1/23  | 12/31/23 | Construction Phase Services                               |

Should you need further information, please contact me at (501)651-7730 or by email at [mledbetter@cityhs.net](mailto:mledbetter@cityhs.net).

Sincerely,



Monty Ledbetter  
Utilities Director

cc: **City of Hot Springs** - Bill Burrough, City Manager; Denny McPhate, Deputy City Manager; Harold Mauldin, Wastewater Facilities Operations Manager; Todd Piller, Capital Project Manager;  
**Consultants** - Karl Hanson, Hanson McLaughlin; Chris Leathers, RJN Group; Craig Johnson, Crist Engineers; Elizabeth Heiles, Hawkins-Weir Engineers  
**Arkansas Energy & Environment** | Richard Healey, Enforcement Manager

Attachment: Water Quality Assessment results June 2022



# June 2022

City of Hot Springs Utilities  
Permit No. AR0033880 / AFIN 26-00145 / CAO LIS 22-007  
Overflows Related to Manhole 1750

## AVERAGE WATER QUALITY ASSESSMENT RESULTS

| <b>Averages<br/>June 2022</b> | Location 1 | Upstream Site 2 | Downstream<br>Site 3 |
|-------------------------------|------------|-----------------|----------------------|
| pH SU                         | 6.94       | 7.08            | 6.97                 |
| Temperature C                 | 20.90      | 20.15           | 20.50                |
| DO ppm                        | 8.92       | 9.20            | 8.72                 |
| Conductivity uS/cm            | 46.18      | 45.03           | 46.39                |
| Turbidity NTU                 | 16.25      | 12.90           | 16.00                |
| Alkalinity mg/L               | 10.00      | 12.50           | 10.00                |
| BOD mg/L                      | 0.74       | 0.48            | 0.65                 |
| TSS mg/L                      | 19.90      | 5.20            | 7.50                 |
| Ammonia mg/L                  | 0.02       | 0.02            | 0.02                 |
| Total Phosphorus mg/L         | 0.07       | 0.05            | 0.05                 |
| Ortho-phosphate mg/L          | 0.04       | 0.04            | 0.06                 |
| Sulfate mg/L                  | 16.90      | 16.15           | 15.90                |
| TDS mg/L                      | 41.50      | 40.00           | 40.00                |
| Chloride mg/L                 | 2.45       | 2.05            | 2.15                 |
| Nitrate/Nitrite mg/L          | <0.5       | <0.5            | <0.5                 |
| TKN mg/L                      | 0.79       | 0.70            | 0.72                 |
| Chlorophyll A mg/L            | <0.005     | <0.005          | <0.005               |
| Fecal Coliforms / 100 ml      | 40.63      | 25.00           | 40.63                |
| E. coli cfu/100 ml            | 499.85     | 581.1           | 489.95               |

During the month of June, Hot Springs Utilities submitted three SSO reports related to Manhole 1750.

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## June 8, 2022

A June 8, 2022 SSO at Manhole 1750 (Confirmation No. e9f5f14d-379c-4950-a48e-99fa0c20b5a9) overflowed into Gulpha Creek due to rainfall and line failure. The overflow began at approximately 2:30 pm on June 8 and ended at approximately 3:45 am on June 9. Utility crews used a jet-vac, hydro-cleaned, disinfected/deodorized, spread lime on the affected area and removed any debris in the affected area.

The advisory sign at Site 1 was deployed. However, signs for the other sites have been removed by unknown parties. The Arkansas Department of Health is out of their supply of signage. We have ten (10) new signs made.

### WQA

|                           | Overflow Date: <b>6/8/22</b> |                 |                   |
|---------------------------|------------------------------|-----------------|-------------------|
|                           | Sample Date: 6/9/22          |                 |                   |
|                           | Location 1                   | Upstream Site 2 | Downstream Site 3 |
| pH SU                     | 6.99                         | 6.99            | 7                 |
| Temperature C             | 19.8                         | 19.2            | 19.4              |
| DO ppm                    | 8.99                         | 9.34            | 8.74              |
| Conductivity uS/cm        | 48.98                        | 47.79           | 48.81             |
| Turbidity NTU             | 21.8                         | 15.3            | 21.4              |
| Alkalinity mg/L           | 10                           | 15              | 10                |
| BOD mg/L                  | 0.72                         | 0.45            | 0.75              |
| TSS mg/L                  | 33.5                         | 6.1             | 12                |
| Ammonia mg/L              | 0.03                         | 0.02            | 0.03              |
| Total Phosphorus mg/L     | 0.09                         | 0.06            | 0.07              |
| Ortho-phosphate mg/L      | 0.07                         | 0.06            | 0.06              |
| Sulfate mg/L              | 18.3                         | 16.6            | 16.8              |
| TDS mg/L                  | 46                           | 42              | 46                |
| Chloride mg/L             | 2.9                          | 2.2             | 2.3               |
| Nitrate/Nitrite mg/L      | <0.5                         | <0.5            | <0.5              |
| TKN mg/L                  | 0.86                         | 0.68            | 0.67              |
| Chlorophyll A mg/L        | <0.005                       | <0.005          | <0.005            |
| Fecal Coliforms / 100 ml  | 0                            | 0               | 0                 |
| <i>E. coli</i> cfu/100 ml | 686.7                        | 727             | 770.1             |

### Fecal Coliform/*E. coli* Sampling

| Sample Date: 6/13/22 |                 |                | Sample Date: 6/16/22 |                 |                |
|----------------------|-----------------|----------------|----------------------|-----------------|----------------|
| Site No.             | Fecal Coliforms | <i>E. coli</i> | Site No.             | Fecal Coliforms | <i>E. coli</i> |
| 2                    | 181.25          | 209.8          | 2                    | 106.25          | 104.3          |
| 3                    | 250             | 210.5          | 3                    | 218.75          | 104.3          |
| 4                    | 131.25          | 60.9           | 4                    | 50              | 63.8           |
| 5                    | 50              | 38.8           | 5                    | 12.5            | 3              |

| Sample Date: 6/18/22 |                 |                | Sample Date: 6/22/22 |                 |                |
|----------------------|-----------------|----------------|----------------------|-----------------|----------------|
| Site No.             | Fecal Coliforms | <i>E. coli</i> | Site No.             | Fecal Coliforms | <i>E. coli</i> |
| 2                    | 50              | 126.7          | 2                    | 81.25           | 86.7           |
| 3                    | 50              | 57.3           | 3                    | 12.5            | 58.1           |
| 4                    | 68.75           | 25.6           | 4                    | 75              | 28.5           |
| 5                    | 12.5            | 5.2            | 5                    | 0               | 3.1            |

| Sample Date: 6/23/22 |                 |                |
|----------------------|-----------------|----------------|
| Site No.             | Fecal Coliforms | <i>E. coli</i> |
| 2                    | 137.5           | 54.5           |
| 3                    | 31.25           | 58.1           |
| 4                    | 18.75           | 12.1           |
| 5                    | 0               | 5.2            |

## June 10 and 11, 2022

On June 10, 2022, Manhole 1750 overflowed (Confirmation No. 406c35fl-9ed7-4325-8069-1d0e36b094da) into Gulpha Creek due to rainfall. The spill began around 8:00 am on the 10<sup>th</sup> and ended at approximately noon on June 11, 2022. Utility crews used a jet-vac, hydro-cleaned, disinfected/deodorized, spread lime on the affected area and removed any debris in the affected area.

A second SSO occurred at Manhole 1748, upstream of Manhole 1750 on June 10, 2022 due to rainfall. The overflow started around 4:00 pm on the 10<sup>th</sup> and ended around 6:00 am on the 11<sup>th</sup>. Utility crews, hydro-cleaned, disinfected/deodorized, spread lime, raked and picked up debris in the affected area. The advisory sign at Site 1 was deployed. Testing for the two SSOs is combined in the chart below. The advisory sign at Site 1 was still up from the previous SSO.

### WQA

|                           | Overflow Date: 6/10-11/22 |                 |                   |
|---------------------------|---------------------------|-----------------|-------------------|
|                           | Sample Date: 6/11/22      |                 |                   |
|                           | Location 1                | Upstream Site 2 | Downstream Site 3 |
| pH SU                     | 6.88                      | 7.17            | 6.93              |
| Temperature C             | 22                        | 21.1            | 21.6              |
| DO ppm                    | 8.85                      | 9.05            | 8.70              |
| Conductivity uS/cm        | 43.38                     | 42.26           | 43.96             |
| Turbidity NTU             | 10.70                     | 10.50           | 10.60             |
| Alkalinity mg/L           | 10                        | 10              | 10                |
| BOD mg/L                  | 0.76                      | 0.51            | 0.55              |
| TSS mg/L                  | 6.30                      | 4.3             | 3                 |
| Ammonia mg/L              | 0.01                      | 1.01            | 0.01              |
| Total Phosphorus mg/L     | 0.05                      | 0.03            | 0.03              |
| Ortho-phosphate mg/L      | 0.01                      | 0.02            | 0.05              |
| Sulfate mg/L              | 15.70                     | 15.7            | 15                |
| TDS mg/L                  | 38                        | 38              | 34                |
| Chloride mg/L             | 1.90                      | 1.90            | 2                 |
| Nitrate/Nitrite mg/L      | <0.5                      | <0.5            | <0.5              |
| TKN mg/L                  | 0.71                      | 0.71            | 0.76              |
| Chlorophyll A mg/L        | <0.005                    | <0.005          | <0.005            |
| Fecal Coliforms / 100 ml  | 81.25                     | 50              | 81.25             |
| <i>E. coli</i> cfu/100 ml | 313                       | 435.2           | 209.8             |

### Fecal Coliform/E. coli Sampling

#### SSO Sampling Data for Fecal Coliform/E.coli

| Sample Date: 6/13/22 |                 |                | Sample Date: 6/16/22 |                 |                |
|----------------------|-----------------|----------------|----------------------|-----------------|----------------|
| Site No.             | Fecal Coliforms | <i>E. coli</i> | Site No.             | Fecal Coliforms | <i>E. coli</i> |
| 2                    | 181.25          | 209.8          | 2                    | 106.25          | 104.3          |
| 3                    | 250             | 210.5          | 3                    | 218.75          | 387.3          |
| 4                    | 131.25          | 60.9           | 4                    | 50              | 63.8           |
| 5                    | 50              | 38.8           | 5                    | 12.5            | 3              |

| Sample Date: 6/18/22 |                 |                | Sample Date: 6/22/22 |                 |                |
|----------------------|-----------------|----------------|----------------------|-----------------|----------------|
| Site No.             | Fecal Coliforms | <i>E. coli</i> | Site No.             | Fecal Coliforms | <i>E. coli</i> |
| 2                    | 50              | 126.7          | 2                    | 81.25           | 86.7           |
| 3                    | 50              | 57.3           | 3                    | 12.5            | 58.1           |
| 4                    | 68.75           | 25.6           | 4                    | 75              | 28.5           |
| 5                    | 12.5            | 5.2            | 5                    | 0               | 3.1            |

| Sample Date: 6/23/22 |                 |                |
|----------------------|-----------------|----------------|
| Site No.             | Fecal Coliforms | <i>E. coli</i> |
| 2                    | 137.5           | 54.5           |
| 3                    | 21.25           | 58.1           |
| 4                    | 18.75           | 12.1           |
| 5                    | 0               | 5.2            |