

## **UTILITY COMMITTEE Meeting Notice**

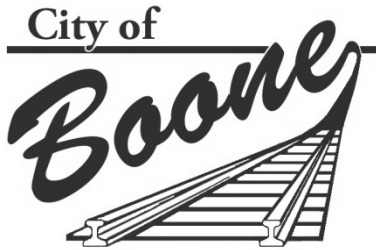
**Governing Body:** Utility Committee of Boone, Iowa

**Date of Meeting:** April 15, 2024

**Time of Meeting:** 4:30 P.M.

**Place of Meeting:** City Hall Council Chambers

1. Call Meeting to Order.
2. Approve Minutes from the March 12, 2024 Meeting.
3. Request to Reduce Storm Sewer Change on High Water Bill. – Ryan Gray.
4. Review March 2024 US Water Monthly Report.
5. Meter Upgrade Report.
  - a. March
6. Stop Box Repair/Shut Off Report.
  - a. March
7. Other Business.
8. Adjourn.



## UTILITY COMMITTEE

### Meeting Notice

**Governing Body:** Utility Committee of Boone, Iowa

**Date of Meeting:** March 12, 2024

**Time of Meeting:** 4:30 P.M.

**Place of Meeting:** City Hall Council Chambers

1. Call Meeting to Order.

*Present: Angstrom, Moorman, and Byrd*

*Others present: Andrews, Robbins, Elmquist, Skare, Vote, Perry Gjersvik, JD Roberts, Representatives of Rolling Meadows Byron Rippke, Gary Eshelman, and Bill Greenley.*

2. Approve Minutes from the February 13, 2024 Meeting.

*Byrd moved; Moorman seconded to approve the minutes from the February 13, 2024, Utility Meeting. Ayes: all those in attendance. Nays: none.*

3. Request to Use Leak Protection to Reduce Water Bill. – Rolling Meadows.

*Byron Rippke, President of the Rolling Meadows Association, requested to use the Leak Protection Program to reduce their \$104,000.00 water bill by \$78,000.00 for a leak that used 9,959,880 gallons of water. Andrews advised that no alarm sounded from the Rolling Meadows' master meter but under their agreement with the City, Rolling Meadows is responsible for maintaining and monitoring the master meter for leaks, that this leak went on for twenty-nine (29) days, and that staff feels negligence could be proven.*

*Robbins advised that through the agreement, there is coverage to provide leak protection but that it is for the individual houses, and it states the maximum amount that can be deducted appears to be \$200.00. Robbins stated that through the agreement, all the obligation falls on Rolling Meadows that leaks do not occur.*

*Rippke stated he did not receive any training on the master meter other than when Andrews explained reading the meter, and that they depend on the alarms to let them know when there is a leak. Angstrom stated he thought Rolling Meadows should have been maintaining the master meter through preventative measures and it is not up to the City to maintain.*

*Byrd moved; Moorman seconded to approve staff to set up a payment plan with the Rolling Meadows Association for the full amount of the bill, approximately \$2,900.00 a month over thirty-six (36) months, interest free. Ayes: all those in attendance. Nays: none.*

4. Request by US Water to Add Bluegill to Final Clarifiers for Midge and Water Flea Consumption. – JD Roberts.

*JD Roberts, US Water, requested to add fifty (50) Bluegill fish to the final clarifiers to control midge larvae and water fleas at the Wastewater Treatment Facility. The Bluegill are \$1.00 each. Moorman moved; Byrd seconded to approve the request to add fifty (50) Bluegill to the final clarifiers to control midge larvae and water fleas at the Wastewater Treatment Facility. Ayes: all those in attendance. Nays: none.*

5. Review/Approve Task Order Amendment #4 for Wastewater UV Disinfection Project.

*Skare presented Task Order Amendment #4 for the Wastewater UV Disinfection Improvements Project from Strand Associates, Inc. for consultant post-construction services for the contractor's claim for differing subsurface conditions and the City's claim for liquidated damages. Moorman moved; Byrd seconded to bring Task Order Amendment #4 to full Council with a recommendation of approval at the next Council meeting. Ayes: all those in attendance. Nays: none.*

6. Review Final Request and Statement of Completion for the UV Project to Make Recommendation to Council March 18, 2024.

*Skare presented the final pay request and Statement of Completion for the Wastewater UV Disinfection Project. Skare advised that staff added paragraph #5 to the Statement of Completion stating that nothing contained herein shall be construed or interpreted as a waiver by the City of Boone as to its claim to liquidated damages for late completion by Contractor or additional costs incurred by the City of Boone. Skare stated that this will close out the project but does not take care of the maintenance and/or warranty items. Moorman moved; Byrd seconded to bring the Statement of Completion to full Council with a recommendation of approval at the next Council meeting. Ayes: all those in attendance. Nays: none.*

7. Review February 2024 US Water Monthly Report.

*The Committee reviewed the monthly US Water and Wastewater Operations and Maintenance Report for February 2024.*

8. Meter Upgrade Report.

a. February

*Andrews reported that in February staff finished twenty-six (26) meter upgrades. Andrews stated that meters have now been delivered to the 22<sup>nd</sup> and Linn Street development project and are in the process of being installed.*

9. Stop Box Repair/Shut Off Report.

a. February

*Vote stated that in February, \$10,302.51 was collected during shut-offs; fifty-three (53) accounts qualified to be on the shut off list. Six (6) delinquent bills totaling \$1,371.21 were certified February 27, 2024, and if left unpaid, sixteen (16) bills totaling \$4,785.60 are scheduled to be certified on March 26, 2024. Vote also reported that there are one hundred thirty-two (132) stop boxes in need of repair, fifty-seven (57) of which have lead service lines and Andrews has ordered six (6) to be repaired.*

10. Other Business.

*Angstrom stated he has requested that Utility meetings be changed to the third Monday of the month beginning April 15, 2024 at 4:30 p.m. This will be discussed at the next Council meeting.*

11. Adjourn.

*Moorman moved; Byrd seconded to adjourn at 5:29 p.m. Ayes: all those in attendance. Nays: none.*

**Kim Majors**

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**To:** Ryan Gray  
**Subject:** RE: 422 S Linn St Boone Water Usage

Good Morning,

I am emailing you in regards to a property I own and unfortunately the furnace stopped working and then resumed working on its own during a cold snap. We had some waterlines burst and flood the basement. The water/sewer bill was VERY high. I understand it sounds like we denied leak protection when we setup the account. However, the floor drain was plugged and we had to manually pump the water to the back yard with submergible pumps. The storm sewer portion on this bill was \$2,083.50. I am asking if you would consider reducing the storm sewer to our monthly average for the previous months.

Water account #0110430006  
Reading from 12/28-1/30

I appreciate you taking the time to consider this and I am happy to provide anything else you may need.

Ryan Gray  
Lrg Investments  
(515)577-6642

March 2024

# City of Boone, Iowa

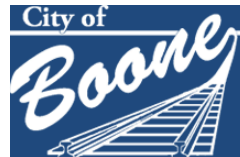
Water & Wastewater Treatment Facilities, Storage, and Lift Stations  
Monthly Operations & Maintenance Report

Prepared by:



1406 Central Avenue  
Fort Dodge, IA 50501  
(515) 269-2338

Prepared For:



923 8<sup>th</sup> Street  
Boone, IA 50036  
(515) 432-4211

March 2024

City of Boone  
William J. Skare, City Administrator  
923 8<sup>th</sup> Street  
Boone, IA 50036

**March Monthly Water & Wastewater Operations Report**

Dear Mr. Skare:

In accordance with contract requirements, we are pleased to provide the following monthly report for November 2023. Below is a list of the significant events that occurred during the month:

**SUBMITTED TO:** William J. Skare, City Administrator  
Utility Committee and City Council, City of Boone  
Aaron Voss, U.S. Water Services Corporation

We appreciate the opportunity to be of service to the City of Boone. We are available to discuss this report, or any other aspect of our operations, at your convenience. Should you have any questions or need additional information, please do not hesitate to contact us.

Sincerely,

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J.D. Roberts, Water Environment Plant Supervisor  
USW Utility Group  
(712) 259-0805  
JRoberts@USWaterCorp.net

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Dave Moore, Water Works Supervisor  
USW Utility Group  
(515) 230-3130  
DMoore@USWaterCorp.net

## WATER

### Water Treatment Facility

| Finished Water Monthly Flows and Hardness |         |            |            |
|---|---------|------------|------------|
|   |         | March-2023 | March-2024 |
| Water                                     | Units   |            |            |
| Average Daily Pumped                      | gallons | 1,572,000  | 1,494,000  |
| Maximum Daily Pumped                      | gallons | 1,724,000  | 1,668,000  |
| Minimum Daily Pumped                      | gallons | 1,221,000  | 1,119,000  |
| Hardness                                  |         |            |            |
| Hardness - Avg Raw                        | grains  | 18.8       | 21.2       |
| Hardness - Avg Finish                     | grains  | 9.6        | 10.9       |
| Iron mg/l                                 |         |            |            |
| Avg Raw                                   | mg/L    | .02        | .01        |
| Avg Finish                                | mg/L    | .01        | .01        |
| Fluoride mg/l                             |         |            |            |
| Avg Raw Fl.                               | mg/L    | .57        | .46        |
| Avg Finish Fl.                            | mg/L    | .77        | .77        |

### Water Storage

During the month of March all three water towers were in operation as well as the 2-million-gallon reservoir and 100,000-gallon contact basin for a total of 3,700,000 gallons of storage.

### Maintenance Report

During the month of March, the following maintenance tasks were completed:

- Cut, pulled and removed trees around lime pond #2 and surrounding areas
- Cut and removed trees around pump station
- Serviced water heater
- Repairs were done to rooftop dehumidifier #2
- Replaced backflow preventer on ClariCone #1



- Added PLC automation for flow pacing to liquid chlorine pump at pump station
- Serviced and made repairs to mower decks in preparation of mowing season
- Repaired CO2 pH probe feed line
- Verified calibration on and all five turbidity meters weekly
- Calibrated all five turbidity meters
- Cleaned and verified calibration on all three CL2 analyzers weekly
- Rebuilt chlorine cylinder feed regulator
- Cleaned chlorine injector at pump station
- Replaced rooftop dehumidifier filters

### Current & Planned Projects

During the month of April, the following maintenance tasks are planned:

- Replace dehumidifier filters
- Service tractor and mower
- Continue to cut down and remove trees around lime pond, plant, and pump station as required by the Sanitary Survey report from IDNR
- Replace backflow valve on cone #2
- Service remaining chlorine regulators
- Drain, clean and service claricone #1
- Misc. yard and building maintenance.

### Health & Safety

There were no safety violations to report for the current month.

The subjects of the monthly safety training were:

- Plan The Work and Work The plan
- Basic CPR Saving Lives
- Working Safely in Confined Space
- Carpal Tunnel Syndrome
- Fire Extinguisher Safety

### Regulatory Reports

See attached documents

## WASTEWATER

### Wastewater Treatment Facility

| Wastewater Treatment Facility Flows |                |                |       |
|-------------------------------------|----------------|----------------|-------|
|                                     | Plant Influent | Plant Effluent | Units |
| Total                               | 53.57          | •              | MGD   |
| Average per day                     | 1.73           | •              | MGD   |
| Minimum                             | 1.2            | •              | MGD   |
| Maximum                             | 3.71           | •              | MGD   |

| Wastewater Influent & Effluent Quality |                   |                      |             |                                  |                     |                                 |                   |                       |
|--|-------------------|----------------------|-------------|----------------------------------|---------------------|---------------------------------|-------------------|-----------------------|
| Parameter                              | Influent          |                      | Effluent    |                                  |                     |                                 |                   |                       |
|  | Daily Ave<br>MG/L | Daily Ave<br>LBS/Day | Daily Max   | Permit<br>Daily<br>MG/L<br>Limit | 7 Day<br>Max<br>Ave | Permit<br>7 Day<br>Max<br>Limit | 30 Day<br>Average | Permit<br>30 Day Ave  |
| BOD <sub>5</sub>                       | 165               | 2238                 | •           | •                                | •                   | •                               | •                 | •                     |
| CBOD <sub>5</sub>                      | •                 | •                    | 7           | •                                | 5                   | 40                              | 3.75              | 25                    |
| Suspended<br>solids                    | 201               | 3042                 | 6.0         | •                                | 6                   | 45                              | 4.8               | 30                    |
| Nitrogen<br>Ammonia                    | 15.5              | 182                  | .1          | 16                               | .1                  | •                               | .1<br>MG/L        | 3.5<br>MG/L           |
| Nitrate<br>Nitrogen                    | •                 | •                    | 147 LBS/Day | 1075<br>LBS/Day                  | •                   | •                               | •                 | 657<br>LBS/Day        |
| Dissolved<br>Oxygen                    | •                 | •                    | 10.0        | >5.0                             | 9.60                | •                               | 9.25              | >5.0                  |
| pH                                     | 7.6               | •                    | 7.84        | 6.5 to 9<br>STD Units            | •                   | •                               | 7.67              | 6.5 to 9 STD<br>Units |

ND= No Detection

• = No limit set

## Solids Inventory

During the month of March, we pressed for 6 days (199,000 gallons) and 85.91 hauled tons.

## Lift Stations

Lift Station on Airport Road has problems with Pump 1 not pumping for a while. It is unable to prime or keep a prime when the pump is off.

3-7-24: Automatic Systems came and fixed the pump failures that happen when the electrical switches from normal power to generator power and vice versa. Bill put in two on-delay timer relays that are tied into the transfer switch control panel.

## Maintenance Report

3-5-24 Changed clarifier skimmer blades

3-6-24: Automatic Systems came and changed out an Ethernet switch that had gone bad on the press. The switch is used for communications between the press and SCADA systems.

3-13-24: Put two 50-pound weights on the South Clarifier plows to help prevent the suction header from dragging.

3-26-24: A&E Millwright came and replaced the air valve to VLR 1

Fifty-five (55) Preventive Maintenance Work orders were Completed

## Current & Planned Projects

- RAS pumps replacement-(March 2024)
- Sand Blasting on North Clarifier: Project will resume in summer 2024.
- Roof Replacements-(currently in Engineering)
- In-plant Lift Station-(currently in Engineering)
- Preliminary Screen Install-(currently in Engineering)

## Health & Safety

There were no safety violations to report for the current month.

The subjects of the monthly safety training was Fire Extinguisher Safety (OSHA ANNUAL 1910.157) and Carpal Tunnel Syndrome

The subjects of the monthly safety training were:

- Accident Investigation: Key to Preventing Future Accidents
- Reagents in Disguise: Chemical Safety
- Be Kind to Your Body: Stretch Before Working
- Build a Construction Site Safely

**Regulatory Reports**

See attached documents

# Monthly Water & Wastewater Operations Report

| SURFACE WATER/INFLUENCED GROUNDWATER MONTHLY OPERATION REPORT  |                              |                                    |                        |                       |                       |                               |                                 |   |                       |                                      |                                 |                                       |                                     |   |                      |           |  |                |  |
|--|------------------------------|------------------------------------|------------------------|-----------------------|-----------------------|-------------------------------|---------------------------------|---|-----------------------|--------------------------------------|---------------------------------|---------------------------------------|-------------------------------------|---|----------------------|-----------|--|----------------|--|
| IOWA DNR WATER SUPPLY SECTION  |                              |                                    |                        |                       |                       |                               |                                 |   |                       |                                      |                                 |                                       |                                     |   |                      |           |  |                |  |
| Basic Information  |                              |                                    |                        |                       |                       |                               |                                 |   |                       |                                      |                                 |                                       |                                     |   |                      |           |  |                |  |
| S/EP #: 1  |                              |                                    |                        |                       |                       |                               |                                 |   |                       |                                      |                                 |                                       |                                     |   |                      |           |  |                |  |
| SYSTEM NAME: Boone Water Works   |                              |                                    |                        |                       |                       | PWSID #: 0819033              |                                 |   | MONTH: March          |                                      | YEAR: 2024                      |                                       |                                     |   |                      |           |  |                |  |
| DAY  | Pumpage                      |                                    | Operating Hours        | Fluoride              |                       | Chlorine Residual             |                                 |   |                       |                                      |                                 |                                       |                                     | CT  | Cl <sub>2</sub> Used |           |  |                |  |
|  | Raw in 1000s Gallons Per Day | To System in 1000s Gallons Per Day |                        | Quantity Used in lbs. | Finished Water (mg/L) | Source/Entry Point (S/EP)     |                                 |   |                       | Distribution                         |                                 |                                       |                                     |   |                      |           |  |                |  |
|  |                              |                                    | Number of Tests Taken* |                       |                       | Specify Free (F) or Total (T) | Lowest Measured Residual (mg/L) | Continuous Hours Less Than 0.3 mg/L Free or 15 mg/L Total | Number of Tests Taken | Lowest Measured Residual Free (mg/L) | Number With Undetected Residual | Highest Measured Residual Free (mg/L) | Ratio of CT Obtained to CT Required | Chlorine in lbs.                                    |                      |           |  |                |  |
| 1  | 1,554                        | 1,280                              | 16.75                  | 17                    | 0.73                  | "C"                           | (F)                             | 0.96  | 0                     | 1                                    | 0.97                            | 0                                     | 0.97                                | 7.3   | 26                   |           |  |                |  |
| 2  | 1,944                        | 1,668                              | 20.75                  | 24                    | 0.77                  | "C"                           | (F)                             | 1.01  | 0                     | 1                                    | 0.96                            | 0                                     | 0.96                                | 6.0   | 34                   |           |  |                |  |
| 3  | 1,917                        | 1,621                              | 20.25                  | 25                    | 0.75                  | "C"                           | (F)                             | 0.94  | 0                     | 1                                    | 0.96                            | 0                                     | 0.96                                | 5.7   | 32                   |           |  |                |  |
| 4  | 1,758                        | 1,480                              | 18.75                  | 20                    | 0.76                  | "C"                           | (F)                             | 0.86  | 0                     | 6                                    | 0.93                            | 0                                     | 1.36                                | 5.6   | 27                   |           |  |                |  |
| 5  | 1,890                        | 1,619                              | 20.25                  | 24                    | 0.82                  | "C"                           | (F)                             | 0.87  | 0                     | 1                                    | 0.92                            | 0                                     | 0.92                                | 5.1   | 32                   |           |  |                |  |
| 6  | 1,797                        | 1,461                              | 19.00                  | 20                    | 0.79                  | "C"                           | (F)                             | 0.89  | 0                     | 1                                    | 0.92                            | 0                                     | 0.92                                | 5.4   | 29                   |           |  |                |  |
| 7  | 1,802                        | 1,496                              | 19.50                  | 25                    | 0.76                  | "C"                           | (F)                             | 0.90  | 0                     | 1                                    | 0.89                            | 0                                     | 0.89                                | 5.4   | 31                   |           |  |                |  |
| 8  | 1,633                        | 1,327                              | 17.50                  | 21                    | 0.75                  | "C"                           | (F)                             | 0.93  | 0                     | 1                                    | 0.88                            | 0                                     | 0.88                                | 6.2   | 29                   |           |  |                |  |
| 9  | 1,764                        | 1,431                              | 19.75                  | 22                    | 0.73                  | "C"                           | (F)                             | 0.89  | 0                     | 1                                    | 0.89                            | 0                                     | 0.89                                | 5.6   | 35                   |           |  |                |  |
| 10   | 2,006                        | 1,634                              | 21.25                  | 22                    | 0.73                  | "C"                           | (F)                             | 0.89  | 0                     | 1                                    | 0.89                            | 0                                     | 0.89                                | 4.8   | 34                   |           |  |                |  |
| 11   | 1,863                        | 1,530                              | 19.75                  | 24                    | 0.79                  | "C"                           | (F)                             | 0.96  | 0                     | 6                                    | 0.94                            | 0                                     | 1.60                                | 6.6   | 36                   |           |  |                |  |
| 12   | 1,964                        | 1,602                              | 21.00                  | 23                    | 0.78                  | "C"                           | (F)                             | 0.88  | 0                     | 1                                    | 0.96                            | 0                                     | 0.96                                | 5.1   | 35                   |           |  |                |  |
| 13   | 1,759                        | 1,589                              | 18.50                  | 21                    | 0.79                  | "C"                           | (F)                             | 0.89  | 0                     | 1                                    | 0.96                            | 0                                     | 0.96                                | 5.8   | 30                   |           |  |                |  |
| 14   | 1,702                        | 1,393                              | 18.00                  | 20                    | 0.70                  | "C"                           | (F)                             | 0.95  | 0                     | 1                                    | 0.95                            | 0                                     | 0.95                                | 6.3   | 32                   |           |  |                |  |
| 15   | 1,869                        | 1,499                              | 19.75                  | 22                    | 0.69                  | "C"                           | (F)                             | 0.95  | 0                     | 1                                    | 0.94                            | 0                                     | 0.94                                | 5.6   | 32                   |           |  |                |  |
| 16   | 1,855                        | 1,531                              | 19.75                  | 24                    | 0.78                  | "C"                           | (F)                             | 0.97  | 0                     | 1                                    | 0.92                            | 0                                     | 0.92                                | 5.9   | 32                   |           |  |                |  |
| 17   | 1,938                        | 1,565                              | 20.75                  | 24                    | 0.77                  | "C"                           | (F)                             | 0.99  | 0                     | 1                                    | 0.92                            | 0                                     | 0.92                                | 5.7   | 36                   |           |  |                |  |
| 18   | 1,762                        | 1,424                              | 18.75                  | 20                    | 0.78                  | "C"                           | (F)                             | 0.94  | 0                     | 1                                    | 0.92                            | 0                                     | 0.92                                | 5.8   | 30                   |           |  |                |  |
| 19   | 1,910                        | 1,610                              | 20.25                  | 24                    | 0.67                  | "C"                           | (F)                             | 0.93  | 0                     | 6                                    | 0.95                            | 0                                     | 1.20                                | 5.4   | 33                   |           |  |                |  |
| 20   | 1,711                        | 1,470                              | 16.25                  | 23                    | 0.71                  | "C"                           | (F)                             | 0.98  | 0                     | 1                                    | 0.94                            | 0                                     | 0.94                                | 6.4   | 30                   |           |  |                |  |
| 21   | 1,715                        | 1,481                              | 16.25                  | 22                    | 0.77                  | "C"                           | (F)                             | 0.94  | 0                     | 1                                    | 0.95                            | 0                                     | 0.95                                | 6.0   | 31                   |           |  |                |  |
| 22   | 1,481                        | 1,270                              | 14.25                  | 19                    | 0.68                  | "C"                           | (F)                             | 0.87  | 0                     | 1                                    | 0.95                            | 0                                     | 0.95                                | 6.2   | 26                   |           |  |                |  |
| 23   | 1,903                        | 1,650                              | 18.50                  | 21                    | 0.66                  | "C"                           | (F)                             | 0.86  | 0                     | 1                                    | 0.65                            | 0                                     | 0.95                                | 4.8   | 35                   |           |  |                |  |
| 24   | 1,865                        | 1,119                              | 18.00                  | 24                    | 0.83                  | "C"                           | (F)                             | 0.81  | 0                     | 1                                    | 0.96                            | 0                                     | 0.96                                | 4.6   | 36                   |           |  |                |  |
| 25   | 1,577                        | 1,344                              | 15.25                  | 21                    | 0.79                  | "C"                           | (F)                             | 0.77  | 0                     | 1                                    | 0.95                            | 0                                     | 0.95                                | 5.1   | 32                   |           |  |                |  |
| 26   | 1,875                        | 1,631                              | 18.00                  | 24                    | 0.72                  | "C"                           | (F)                             | 0.83  | 0                     | 1                                    | 0.94                            | 0                                     | 0.94                                | 4.8   | 35                   |           |  |                |  |
| 27   | 1,828                        | 1,570                              | 17.75                  | 24                    | 0.87                  | "C"                           | (F)                             | 0.82  | 0                     | 1                                    | 0.94                            | 0                                     | 0.94                                | 4.6   | 37                   |           |  |                |  |
| 28   | 1,699                        | 1,461                              | 16.25                  | 20                    | 0.72                  | "C"                           | (F)                             | 0.83  | 0                     | 1                                    | 0.95                            | 0                                     | 0.95                                | 5.1   | 32                   |           |  |                |  |
| 29   | 1,764                        | 1,520                              | 16.75                  | 23                    | 0.89                  | "C"                           | (F)                             | 0.90  | 0                     | 1                                    | 0.99                            | 0                                     | 0.99                                | 5.4   | 33                   |           |  |                |  |
| 30   | 1,643                        | 1,416                              | 15.75                  | 20                    | 0.86                  | "C"                           | (F)                             | 0.85  | 0                     | 1                                    | 0.99                            | 0                                     | 0.99                                | 5.4   | 32                   |           |  |                |  |
| 31   | 1,886                        | 1,635                              | 18.00                  | 22                    | 0.88                  | "C"                           | (F)                             | 0.83  | 0                     | 1                                    | 0.99                            | 0                                     | 0.99                                | 4.7   | 35                   |           |  |                |  |
| Total  | 55,634                       | 46,327                             | 571.25                 | 685                   |                       |                               |                                 |   |                       | 46                                   |                                 | 0                                     |                                     |   | 999                  |           |  |                |  |
| Avg  | 1,795                        | 1,494                              | 18.41                  | 22                    | 0.77                  |                               |                                 |   |                       |                                      |                                 |                                       |                                     |   | 32                   |           |  |                |  |
| Max  | 2,006                        | 1,668                              | 21.25                  | 25                    | 0.89                  |                               |                                 |   | 0                     |                                      |                                 |                                       | 1.60                                |   | 37                   |           |  |                |  |
| Min  | 1,481                        | 1,119                              | 14.25                  | 17                    | 0.66                  |                               |                                 | 0.77  |                       |                                      | 0.65                            |                                       |                                     | 4.6   | 26                   |           |  |                |  |
| *If continuous monitoring of chlorine is provided, enter "C" in the space provided.  |                              |                                    |                        |                       |                       |                               |                                 |   |                       |                                      |                                 |                                       |                                     |   |                      |           |  |                |  |
| I certify that I am familiar with the information contained in this report and that the information is true, complete, and accurate. |                              |                                    |                        |                       |                       |                               |                                 |   |                       |                                      |                                 |                                       |                                     |   |                      |           |  |                |  |
|  |                              |                                    |                        |                       |                       |                               |                                 |   |                       |                                      |                                 |                                       |                                     | DRC Operator's or Designee's Signature: David Moore |                      |           |  |                |  |
|  |                              |                                    |                        |                       |                       |                               |                                 |   |                       |                                      |                                 |                                       |                                     | Certificate #: 4108                                 |                      | Grade: IV |  | Date: 4/2/2024 |  |

# Monthly Water & Wastewater Operations Report

| SURFACE WATER/INFLUENCED GROUNDWATER MONTHLY OPERATION REPORT |                             |                             |                             |  |                     |                             |  |                     |                             |  |                     |                             |  |                     |                             |  |                     |                             |   |   |
|---|-----------------------------|-----------------------------|-----------------------------|--|---------------------|-----------------------------|--|---------------------|-----------------------------|--|---------------------|-----------------------------|--|---------------------|-----------------------------|--|---------------------|-----------------------------|---|---|
| IOWA DNR WATER SUPPLY SECTION                                 |                             |                             |                             |  |                     |                             |  |                     |                             |  |                     |                             |  |                     |                             |  |                     |                             |   |   |
| Turbidity Data Page 1 of 1                                    |                             |                             |                             |  |                     |                             |  |                     |                             |  |                     |                             |  |                     |                             |  |                     |                             |   |   |
| S/EP: #1  |                             |                             |                             | SYSTEM NAME: Boone Water Works   |                     |                             |  | PWSID #: 0819033    |                             |  |                     | MONTH: March                |  |                     |                             | YEAR: 2024   |                     |                             |   |   |
| DAY   | Finished Water              |                             |                             | Filter Effluent  |                     |                             |  |                     |                             |  |                     |                             |  |                     |                             |  |                     |                             |   | Raw Water Turbidity (Highest Daily Reading NTU) |
|   | Number of Readings Taken ** | Number of Readings >0.3 NTU | Highest Daily Reading (NTU) | #1   |                     |                             |  | #2                  |                             |  |                     | #3                          |  |                     |                             | #4   |                     |                             |   |   |
|   |                             |                             |                             | Highest Consecutive Results >0.5 NTU Anytime After 4 Hours From Start Up or Backwash | Daily Highest (NTU) | # of Consec Results >10 NTU | Highest Consecutive Results >0.5 NTU Anytime After 4 Hours From Start Up or Backwash | Daily Highest (NTU) | # of Consec Results >10 NTU | Highest Consecutive Results >0.5 NTU Anytime After 4 Hours From Start Up or Backwash | Daily Highest (NTU) | # of Consec Results >10 NTU | Highest Consecutive Results >0.5 NTU Anytime After 4 Hours From Start Up or Backwash | Daily Highest (NTU) | # of Consec Results >10 NTU | Highest Consecutive Results >0.5 NTU Anytime After 4 Hours From Start Up or Backwash | Daily Highest (NTU) | # of Consec Results >10 NTU |   |   |
| 1   | 22                          | 0                           | .03                         | .04  | .04                 | .05                         | 0  | .03                 | .03                         | .05  | 0                   | .02                         | .02  | .03                 | 0                           | .02  | .02                 | .02                         | 0 | 0.07  |
| 2   | 17                          | 0                           | .02                         | .02  | .02                 | .02                         | 0  | .02                 | .02                         | .03  | 0                   | .04                         | .04  | .04                 | 0                           | .02  | .02                 | .02                         | 0 | 0.07  |
| 3   | 21                          | 0                           | .02                         | .02  | .02                 | .03                         | 0  | .02                 | .02                         | .06  | 0                   | .02                         | .02  | .05                 | 0                           | .04  | .04                 | .05                         | 0 | 0.07  |
| 4   | 21                          | 0                           | .03                         | .03  | .04                 | .04                         | 0  | .02                 | .02                         | .04  | 0                   | .02                         | .02  | .03                 | 0                           | .02  | .02                 | .02                         | 0 | 0.07  |
| 5   | 19                          | 0                           | .03                         | .03  | .04                 | .05                         | 0  | .03                 | .03                         | .05  | 0                   | .02                         | .02  | .07                 | 0                           | .02  | .02                 | .05                         | 0 | 0.07  |
| 6   | 20                          | 0                           | .02                         | .02  | .02                 | .02                         | 0  | .02                 | .02                         | .03  | 0                   | .04                         | .04  | .04                 | 0                           | .02  | .02                 | .06                         | 0 | 0.07  |
| 7   | 19                          | 0                           | .02                         | .02  | .02                 | .03                         | 0  | .02                 | .02                         | .11  | 0                   | .04                         | .03  | .04                 | 0                           | .04  | .04                 | .05                         | 0 | 0.08  |
| 8   | 20                          | 0                           | .02                         | .03  | .02                 | .04                         | 0  | .02                 | .02                         | .24  | 0                   | .02                         | .02  | .13                 | 0                           | .02  | .02                 | .10                         | 0 | 0.09  |
| 9   | 18                          | 0                           | .03                         | .03  | .03                 | .05                         | 0  | .05                 | .05                         | .05  | 0                   | .02                         | .02  | .03                 | 0                           | .02  | .02                 | .02                         | 0 | 0.08  |
| 10  | 20                          | 0                           | .02                         | .02  | .02                 | .02                         | 0  | .04                 | .04                         | .04  | 0                   | .05                         | .05  | .05                 | 0                           | .02  | .02                 | .03                         | 0 | 0.09  |
| 11  | 21                          | 0                           | .02                         | .02  | .02                 | .02                         | 0  | .02                 | .02                         | .03  | 0                   | .03                         | .03  | .05                 | 0                           | .04  | .04                 | .05                         | 0 | 0.08  |
| 12  | 20                          | 0                           | .02                         | .03  | .04                 | .04                         | 0  | .02                 | .02                         | .03  | 0                   | .02                         | .02  | .03                 | 0                           | .02  | .02                 | .02                         | 0 | 0.07  |
| 13  | 21                          | 0                           | .03                         | .03  | .04                 | .05                         | 0  | .03                 | .03                         | .05  | 0                   | .02                         | .02  | .03                 | 0                           | .02  | .02                 | .02                         | 0 | 0.06  |
| 14  | 19                          | 0                           | .02                         | .02  | .02                 | .02                         | 0  | .02                 | .02                         | .02  | 0                   | .05                         | .04  | .05                 | 0                           | .02  | .02                 | .02                         | 0 | 0.09  |
| 15  | 18                          | 0                           | .02                         | .02  | .02                 | .03                         | 0  | .02                 | .02                         | .03  | 0                   | .03                         | .03  | .05                 | 0                           | .04  | .04                 | .05                         | 0 | 0.07  |
| 16  | 20                          | 0                           | .02                         | .04  | .03                 | .04                         | 0  | .02                 | .02                         | .03  | 0                   | .02                         | .02  | .04                 | 0                           | .02  | .02                 | .02                         | 0 | 0.08  |
| 17  | 20                          | 0                           | .03                         | .05  | .03                 | .05                         | 0  | .03                 | .02                         | .05  | 0                   | .02                         | .02  | .04                 | 0                           | .02  | .02                 | .03                         | 0 | 0.07  |
| 18  | 20                          | 0                           | .02                         | .02  | .02                 | .02                         | 0  | .02                 | .02                         | .03  | 0                   | .05                         | .05  | .05                 | 0                           | .02  | .02                 | .02                         | 0 | 0.08  |
| 19  | 19                          | 0                           | .02                         | .02  | .02                 | .02                         | 0  | .02                 | .02                         | .04  | 0                   | .03                         | .03  | .06                 | 0                           | .05  | .04                 | .05                         | 0 | 0.08  |
| 20  | 21                          | 0                           | .02                         | .04  | .04                 | .04                         | 0  | .02                 | .02                         | .04  | 0                   | .02                         | .02  | .04                 | 0                           | .02  | .02                 | .02                         | 0 | 0.08  |
| 21  | 17                          | 0                           | .03                         | .04  | .04                 | .05                         | 0  | .03                 | .02                         | .05  | 0                   | .02                         | .02  | .03                 | 0                           | .02  | .02                 | .02                         | 0 | 0.08  |
| 22  | 16                          | 0                           | .02                         | .02  | .02                 | .02                         | 0  | .02                 | .02                         | .03  | 0                   | .04                         | .04  | .04                 | 0                           | .02  | .02                 | .02                         | 0 | 0.08  |
| 23  | 15                          | 0                           | .03                         | .02  | .02                 | .03                         | 0  | .02                 | .02                         | .06  | 0                   | .02                         | .02  | .08                 | 0                           | .04  | .04                 | .05                         | 0 | 0.07  |
| 24  | 19                          | 0                           | .02                         | .04  | .04                 | .04                         | 0  | .02                 | .02                         | .04  | 0                   | .02                         | .02  | .04                 | 0                           | .02  | .02                 | .03                         | 0 | 0.07  |
| 25  | 19                          | 0                           | .03                         | .04  | .04                 | .05                         | 0  | .03                 | .03                         | .05  | 0                   | .02                         | .02  | .03                 | 0                           | .02  | .02                 | .03                         | 0 | 0.07  |
| 26  | 16                          | 0                           | .03                         | .02  | .02                 | .02                         | 0  | .02                 | .02                         | .03  | 0                   | .05                         | .05  | .05                 | 0                           | .02  | .02                 | .03                         | 0 | 0.07  |
| 27  | 17                          | 0                           | .03                         | .02  | .02                 | .03                         | 0  | .02                 | .02                         | .12  | 0                   | .03                         | .03  | .08                 | 0                           | .05  | .04                 | .07                         | 0 | 0.06  |
| 28  | 17                          | 0                           | .03                         | .05  | .03                 | .05                         | 0  | .02                 | .02                         | .06  | 0                   | .02                         | .02  | .04                 | 0                           | .03  | .03                 | .03                         | 0 | 0.06  |
| 29  | 17                          | 0                           | .04                         | .03  | .04                 | .05                         | 0  | .03                 | .02                         | .05  | 0                   | .02                         | .02  | .03                 | 0                           | .02  | .02                 | .03                         | 0 | 0.07  |
| 30  | 17                          | 0                           | .03                         | .02  | .02                 | .03                         | 0  | .02                 | .02                         | .14  | 0                   | .05                         | .05  | .05                 | 0                           | .03  | .02                 | .08                         | 0 | 0.07  |
| 31  | 16                          | 0                           | .02                         | .02  | .02                 | .03                         | 0  | .02                 | .02                         | .16  | 0                   | .02                         | .03  | .05                 | 0                           | .04  | .04                 | .12                         | 0 | 0.07  |
| Total   | 582                         | 0                           |                             |  |                     |                             | 0  |                     |                             |  | 0                   |                             |  |                     | 0                           |  |                     |                             | 0 |   |
| Avg   |                             |                             |                             |  |                     |                             |  |                     |                             |  |                     |                             |  |                     |                             |  |                     |                             |   | 0.07  |
| Max   |                             |                             | .04                         |  |                     | .05                         |  |                     |                             | .24  |                     |                             |  | .13                 |                             |  |                     | .12                         |   | 0.09  |
| Min   |                             |                             |                             |  |                     |                             |  |                     |                             |  |                     |                             |  |                     |                             |  |                     |                             |   | 0.06  |

\*\*If continuous monitoring of turbidity is provided, measurements must be recorded at equal time intervals at least once every four hours or hourly for plants w/pop. >100,000.

I certify that I am familiar with the information contained in this report and that the information is true, complete, and accurate.

DRC Operator's or Designee's Signature: David Moore  
 Certificate #: 4108      Grade: IV      Date: 4/2/2024

# Monthly Water & Wastewater Operations Report

| SURFACE WATER/INFLUENCED GROUNDWATER MONTHLY OPERATION REPORT |                 |                              |                                    |  |                       |                 |   |                                   |                                   |                                   |                                     |       |         |         |         |
|---|-----------------|------------------------------|------------------------------------|--|-----------------------|-----------------|---|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|-------|---------|---------|---------|
| IOWA DNR WATER SUPPLY   |                 |                              |                                    |  |                       |                 |   |                                   |                                   |                                   |                                     |       |         |         |         |
| Basic Information   |                 |                              |                                    |  |                       |                 |   |                                   |                                   |                                   |                                     |       |         |         |         |
| S/EP: #1  |                 |                              |                                    |  |                       |                 |   |                                   |                                   |                                   |                                     |       |         |         |         |
| System Name:  |                 |                              |                                    |  |                       | PWSID #: 819033 |   | Month: March                      |                                   | Year: 2024                        |                                     |       |         |         |         |
| Day   | Operating Hours | Pumpage                      |                                    | Fluoride                                   |                       | Raw Turbidity   | Settled Turbidity<br>(individual sedimentation basin) |                                   |                                   |                                   | Gallons Of Liquid Chlorine Used 65% |       |         |         |         |
|   |                 | Raw in 1000s Gallons Per Day | To System in 1000s Gallons Per Day | Quantity Used in lbs. or gal. (circle one) | Finished Water (mg/L) |                 | Highest Daily Reading Sed 1 (NTU)                     | Highest Daily Reading Sed 2 (NTU) | Highest Daily Reading Sed 3 (NTU) | Highest Daily Reading Sed 4 (NTU) |                                     |       |         |         |         |
| 1   | 16.75           | 1554.00                      | 1280.00                            | 17.00                                      | 0.73                  | 0.07            |   | 1.53                              |                                   |                                   |                                     | 10    |         |         |         |
| 2   | 20.75           | 1944.00                      | 1668.00                            | 24.00                                      | 0.77                  | 0.07            |   | 3.24                              |                                   |                                   |                                     | 12    |         |         |         |
| 3   | 20.25           | 1917.00                      | 1621.00                            | 25.00                                      | 0.75                  | 0.07            |   | 1.11                              |                                   |                                   |                                     | 11.8  |         |         |         |
| 4   | 18.75           | 1758.00                      | 1480.00                            | 20.00                                      | 0.76                  | 0.07            |   | 1.58                              |                                   |                                   |                                     | 11.1  |         |         |         |
| 5   | 20.25           | 1890.00                      | 1619.00                            | 24.00                                      | 0.82                  | 0.07            |   | 1.72                              |                                   |                                   |                                     | 12    |         |         |         |
| 6   | 19.00           | 1797.00                      | 1461.00                            | 20.00                                      | 0.79                  | 0.07            |   | 1.79                              |                                   |                                   |                                     | 11.9  |         |         |         |
| 7   | 19.50           | 1802.00                      | 1496.00                            | 25.00                                      | 0.76                  | 0.08            |   | 0.74                              |                                   |                                   |                                     | 12    |         |         |         |
| 8   | 17.50           | 1633.00                      | 1327.00                            | 21.00                                      | 0.75                  | 0.09            |   | 1.50                              |                                   |                                   |                                     | 10.1  |         |         |         |
| 9   | 19.75           | 1764.00                      | 1431.00                            | 22.00                                      | 0.73                  | 0.08            |   | 0.77                              |                                   |                                   |                                     | 10.1  |         |         |         |
| 10  | 21.25           | 2006.00                      | 1634.00                            | 22.00                                      | 0.73                  | 0.09            |   | 0.89                              |                                   |                                   |                                     | 12.3  |         |         |         |
| 11  | 19.75           | 1863.00                      | 1530.00                            | 24.00                                      | 0.79                  | 0.08            |   | 0.86                              |                                   |                                   |                                     | 11.3  |         |         |         |
| 12  | 21.00           | 1964.00                      | 1602.00                            | 23.00                                      | 0.78                  | 0.07            |   | 1.04                              |                                   |                                   |                                     | 11.9  |         |         |         |
| 13  | 18.50           | 1759.00                      | 1589.00                            | 21.00                                      | 0.79                  | 0.06            |   | 1.93                              |                                   |                                   |                                     | 9.3   |         |         |         |
| 14  | 18.00           | 1702.00                      | 1393.00                            | 20.00                                      | 0.70                  | 0.09            |   | 1.54                              |                                   |                                   |                                     | 7     |         |         |         |
| 15  | 19.75           | 1869.00                      | 1499.00                            | 22.00                                      | 0.69                  | 0.07            |   | 1.31                              |                                   |                                   |                                     | 9.9   |         |         |         |
| 16  | 19.75           | 1855.00                      | 1531.00                            | 24.00                                      | 0.78                  | 0.08            |   | 1.23                              |                                   |                                   |                                     | 9.9   |         |         |         |
| 17  | 20.75           | 1938.00                      | 1565.00                            | 24.00                                      | 0.77                  | 0.07            |   | 0.63                              |                                   |                                   |                                     | 9.9   |         |         |         |
| 18  | 18.75           | 1762.00                      | 1424.00                            | 20.00                                      | 0.78                  | 0.08            |   | 0.93                              |                                   |                                   |                                     | 10    |         |         |         |
| 19  | 20.25           | 1910.00                      | 1610.00                            | 24.00                                      | 0.67                  | 0.08            |   | 1.44                              |                                   |                                   |                                     | 10.1  |         |         |         |
| 20  | 16.25           | 1711.00                      | 1470.00                            | 23.00                                      | 0.71                  | 0.08            |   | 1.56                              |                                   |                                   |                                     | 9     |         |         |         |
| 21  | 16.25           | 1715.00                      | 1481.00                            | 22.00                                      | 0.77                  | 0.08            |   | 1.03                              |                                   |                                   |                                     | 9.8   |         |         |         |
| 22  | 14.25           | 1481.00                      | 1270.00                            | 19.00                                      | 0.68                  | 0.08            |   | 0.82                              |                                   |                                   |                                     | 8.2   |         |         |         |
| 23  | 18.50           | 1903.00                      | 1650.00                            | 21.00                                      | 0.66                  | 0.07            |   | 0.86                              |                                   |                                   |                                     | 11.1  |         |         |         |
| 24  | 18.00           | 1865.00                      | 1119.00                            | 24.00                                      | 0.83                  | 0.07            |   | 0.79                              |                                   |                                   |                                     | 11.1  |         |         |         |
| 25  | 15.25           | 1577.00                      | 1344.00                            | 21.00                                      | 0.79                  | 0.07            |   | 1.13                              |                                   |                                   |                                     | 11.2  |         |         |         |
| 26  | 18.00           | 1875.00                      | 1631.00                            | 24.00                                      | 0.72                  | 0.07            |   | 0.89                              |                                   |                                   |                                     | 12.3  |         |         |         |
| 27  | 17.75           | 1828.00                      | 1570.00                            | 24.00                                      | 0.87                  | 0.06            |   | 0.82                              |                                   |                                   |                                     | 12.2  |         |         |         |
| 28  | 16.25           | 1699.00                      | 1461.00                            | 20.00                                      | 0.72                  | 0.06            |   | 0.61                              |                                   |                                   |                                     | 12    |         |         |         |
| 29  | 16.75           | 1764.00                      | 1520.00                            | 23.00                                      | 0.89                  | 0.07            |   | 1.75                              |                                   |                                   |                                     | 12    |         |         |         |
| 30  | 15.75           | 1643.00                      | 1416.00                            | 20.00                                      | 0.86                  | 0.07            |   | 0.97                              |                                   |                                   |                                     | 11    |         |         |         |
| 31  | 18.00           | 1886.00                      | 1635.00                            | 22.00                                      | 0.88                  | 0.07            |   | 1.12                              |                                   |                                   |                                     | 12    |         |         |         |
| Total   | 571             | 55,634                       | 46,327                             | 685  |                       |                 |   |                                   |                                   |                                   |                                     | 334.5 | 0       | 0       | 0       |
| Avg   | 18.43           | 1,795                        | 1,494                              | 22.10                                      | 0.77                  | 0.07            | #DIV/0!   | 1.23                              | #DIV/0!                           | #DIV/0!                           |                                     | 10.79 | #DIV/0! | #DIV/0! | #DIV/0! |
| Max   | 21.25           | 2,006                        | 1,668                              | 25.00                                      | 0.89                  | 0.09            | 0.00  | 3.2                               | 0.0                               | 0.00                              |                                     | 12.30 | 0.00    | 0.00    | 0.00    |
| Min   | 14.25           | 1,481                        | 1,119                              | 17.00                                      | 0.66                  | 0.06            | 0.00  | 0.61                              | 0.00                              | 0.00                              |                                     | 7.00  | 0.00    | 0.00    | 0.00    |

I certify that I am familiar with the information contained in this report and that the information is true, complete, and accurate.

DRC Operator or Designee's Signature: David Moore

Certificate #: 4108      Grade: IV      Date: 4/2/2024

October 2018 FORM 542-8027

IOWA DEPARTMENT OF NATURAL RESOURCES  
NPDS REPORTING SYSTEM - DISCHARGE MONITORING REPORT  
FACILITY INFORMATION

*This form is valid 2/1/2023 to 7/31/2024*

**Facility Name:** BOONE CITY OF STP

**Permit #:** 0819001

**Month/Year:**

**Outfall #(s):** 001 - DISCHARGE FROM AN ACTIVATED SLUDGE WASTEWATER TREATMENT FACILITY.

**Operator Name:**

**Certification #:**

**Phone #:**

**Lab Cert. #:**

**Comments:**

\*Include Comments longer than 1000 characters in email

**Signature:**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations.



# Monthly Water & Wastewater Operations Report

Permit # 0819001  
 Facility Name: BOONE CITY OF STP

Monthly Operation Report  
 IOWA DEPARTMENT OF NATURAL RESOURCES  
 NPDS - Operation Permit System  
 INFLUENT Data

Outfall #: 001  
 Month/Year: 3-2024

| Mon. Point<br>Parameter | RAW WASTE       |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                  |                  |
|-------------------------|-----------------|------------------|------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|
|                         | FLOW            | BOD5             |                  | TSS              |                  | TOT-N           |                 | TKN             |                 | PHOS            |                 | TEMP             | PH               |
| Units                   | MGD             | MG/L             | LBS/DAY          | MG/L             | LBS/DAY          | MG/L            | LBS/DAY         | MG/L            | LBS/DAY         | MG/L            | LBS/DAY         | FAHRENHEIT       | STD UNITS        |
| Frequency               | 7/WEEK OR DAILY | 2 TIMES PER WEEK | 2 TIMES PER WEEK | 2 TIMES PER WEEK | 2 TIMES PER WEEK | 1 TIME PER WEEK | 1 TIME PER WEEK | 1 EVERY MONTH   | 1 EVERY MONTH   | 1 TIME PER WEEK | 1 TIME PER WEEK | 2 TIMES PER WEEK | 2 TIMES PER WEEK |
| Start Date              |                 |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                  |                  |
| End Date                | Permit Duration | Permit Duration  | Permit Duration  | Permit Duration  | Permit Duration  | Permit Duration | Permit Duration | Permit Duration | Permit Duration | Permit Duration | Permit Duration | Permit Duration  | Permit Duration  |
| No Discharge            |                 |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                  |                  |
| LOQ                     |                 |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                  |                  |
| Day: 1                  | 1.275           |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 | 55               | 7.6              |
| 2                       | 1.259           |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                  |                  |
| 3                       | 1.274           |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                  |                  |
| 4                       | 1.259           |                  |                  | 183              | 1921.51098       |                 |                 |                 |                 |                 |                 | 56               | 7.6              |
| 5                       | 1.246           |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 | 56               | 7.7              |
| 6                       | 1.268           | 133              | 1406.49096       | 290              | 3066.7848        | 33.7            | 356.381544      | 32              | 338.40384       | 6.4             | 67.680768       | 58               | 7.6              |
| 7                       | 1.252           |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 | 58               | 7.6              |
| 8                       | 1.286           | 208              | 2230.84992       |                  |                  |                 |                 |                 |                 |                 |                 | 56               | 7.5              |
| 9                       | 1.172           |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                  |                  |
| 10                      | 1.259           |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                  |                  |
| 11                      | 1.242           |                  |                  | 217              | 2247.74676       |                 |                 |                 |                 |                 |                 | 58               | 7.6              |
| 12                      | 1.257           |                  |                  |                  |                  | 37.8            | 396.271764      | 35              | 366.9183        | 6.6             | 69.190308       | 58               | 7.7              |
| 13                      | 1.235           | 151              | 1555.2849        | 174              | 1792.1826        |                 |                 |                 |                 |                 |                 | 58               | 7.6              |
| 14                      | 1.839           | 136              | 2085.86736       |                  |                  |                 |                 |                 |                 |                 |                 | 56               | 7.6              |
| 15                      | 1.458           |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 | 61               | 7.9              |
| 16                      | 1.37            |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                  |                  |
| 17                      | 1.4             |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                  |                  |
| 18                      | 1.369           |                  |                  | 193              | 2203.56978       |                 |                 |                 |                 |                 |                 | 54               | 7.6              |
| 19                      | 1.351           |                  |                  |                  |                  | 34              | 383.08956       | 31              | 349.28754       | 5               | 56.3367         | 58               | 7.7              |
| 20                      | 1.319           | 206              | 2266.09476       | 163              | 1793.07498       |                 |                 |                 |                 |                 |                 | 56               | 7.4              |
| 21                      | 1.317           |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 | 56               | 7.7              |
| 22                      | 1.523           | 257              | 3264.36774       |                  |                  |                 |                 |                 |                 |                 |                 | 56               | 7.5              |
| 23                      | 1.496           |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                  |                  |
| 24                      | 3.36            |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                  |                  |
| 25                      | 3.708           |                  |                  | 287              | 8875.39464       |                 |                 |                 |                 |                 |                 | 54               | 7.5              |
| 26                      | 3.214           |                  |                  |                  |                  | 17.1            | 458.361396      | 12              | 321.65712       | 3.1             | 83.094756       | 52               | 7.5              |
| 27                      | 2.869           | 110              | 2632.0206        | 102              | 2440.60092       |                 |                 |                 |                 |                 |                 | 54               | 7.6              |
| 28                      | 2.614           |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 | 56               | 7.6              |
| 29                      | 2.484           | 119              | 2465.27064       |                  |                  |                 |                 |                 |                 |                 |                 | 54               | 7.7              |
| 30                      | 2.322           |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                  |                  |
| 31                      | 2.273           |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                  |                  |
| <b>Total</b>            | 53.57           | 1320             | 17906.24688      | 1609             | 24340.86546      | 122.6           | 1594.104264     | 110             | 1376.2668       | 21.1            | 276.302532      | 1180             | 159.8            |
| <b>Monthly Avg.</b>     | 1.728064516     | 165              | 2238.28086       | 201.125          | 3042.608183      | 30.65           | 398.526066      | 27.5            | 344.0667        | 5.275           | 69.075633       | 56.19047619      | 7.60952381       |
| <b>Daily Max.</b>       | 3.708           | 257              | 3264.36774       | 290              | 8875.39464       | 37.8            | 458.361396      | 35              | 366.9183        | 6.6             | 83.094756       | 61               | 7.9              |
| <b>Daily Min.</b>       | 1.172           | 110              | 1406.49096       | 102              | 1792.1826        | 17.1            | 356.381544      | 12              | 321.65712       | 3.1             | 56.3367         | 52               | 7.4              |
| <b>Max. 7/Avg.</b>      | 2.683428571     | 206              | 2948.19417       | 236.5            | 5657.99778       | 37.8            | 458.361396      | 35              | 366.9183        | 6.6             | 83.094756       | 57.2             | 7.66             |

# Monthly Water & Wastewater Operations Report

| Permit # 0819001                 |                                | Monthly Operation Report             |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
|----------------------------------|--------------------------------|--------------------------------------|------------------|------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------------------|-------------------|-------------------|------------------|------------------|------------------|----------------------|-------------------|
| Facility Name: BOONE CITY OF STP |                                | IOWA DEPARTMENT OF NATURAL RESOURCES |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
|                                  |                                | NPDS - Operation Permit System       |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
|                                  |                                | EFFLUENT Data                        |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
| Outfall #: 001                   |                                |                                      |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
| Month/Year: 3-2024               |                                |                                      |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
| Mon. Point                       | EFFLUENT PRIOR TO DISINFECTION |                                      |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 | EFFLUENT AFTER DISINFECTION |                   |                   |                  |                  |                  |                      |                   |
| Parameter                        | CBOD5                          |                                      | TSS              |                  | NH3-N            |                  | NO3-N           |                 | TOT-N           |                 | PHOS            |                 | TOX CER                     |                   | TOX PIM           |                  | TEMP             | DO               | PH                   | E COLI            |
| Units                            | MGL                            | LBS/DAY                              | MGL              | LBS/DAY          | MGL              | LBS/DAY          | LBS/DAY         | MGL             | LBS/DAY         | MGL             | LBS/DAY         | MGL             | LBS/DAY                     | NO TOXICITY       | NO TOXICITY       | FAHRENHEIT       | MGL              | STD UNITS        | #100 ML              |                   |
| Frequency                        | 2 TIMES PER WEEK               | 2 TIMES PER WEEK                     | 2 TIMES PER WEEK | 2 TIMES PER WEEK | 2 TIMES PER WEEK | 2 TIMES PER WEEK | 1 EVERY MONTH   | 1 TIME PER WEEK | 1 TIME PER WEEK | 1 TIME PER WEEK | 1 TIME PER WEEK | 1 TIME PER WEEK | 1 TIME PER WEEK             | 1 EVERY 12 MONTHS | 1 EVERY 12 MONTHS | 2 TIMES PER WEEK | 2 TIMES PER WEEK | 5 TIMES PER WEEK | GEO. MEAN 1/3 MONTHS |                   |
| Start Date                       | Permit Duration                | Permit Duration                      | Permit Duration  | Permit Duration  | Permit Duration  | Permit Duration  | Permit Duration | Permit Duration | Permit Duration | Permit Duration | Permit Duration | Permit Duration | Permit Duration             | Permit Duration   | Permit Duration   | Permit Duration  | Permit Duration  | Permit Duration  | Permit Duration      | 8/1/2023          |
| End Date                         | Permit Duration                | Permit Duration                      | Permit Duration  | Permit Duration  | Permit Duration  | Permit Duration  | Permit Duration | Permit Duration | Permit Duration | Permit Duration | Permit Duration | Permit Duration | Permit Duration             | Permit Duration   | Permit Duration   | Permit Duration  | Permit Duration  | Permit Duration  | Permit Duration      | 7/31/2024         |
| No Discharge                     |                                |                                      |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             | 06 - NOT REQ / MP | 06 - NOT REQ / MP |                  |                  |                  |                      | 06 - NOT REQ / MP |
| LOQ                              |                                |                                      |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
| Day: 1                           |                                |                                      |                  |                  | 0.1              | 1.06335          |                 |                 |                 |                 |                 |                 |                             |                   |                   | 55               | 8.2              | 7.3              |                      |                   |
| 2                                |                                |                                      |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
| 3                                |                                |                                      |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
| 4                                |                                |                                      | 4                | 42.00024         |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   | 54               | 7.9              | 7.4              |                      |                   |
| 5                                |                                |                                      |                  |                  | 0.1              | 1.039164         |                 |                 |                 |                 |                 |                 |                             |                   |                   | 54               | 9.2              | 7.5              |                      |                   |
| 6                                | 3                              | 31.72536                             | 6                | 63.45072         | 0.1              | 1.057512         |                 | 17.6            | 186.122112      | 4.1             | 43.357992       |                 |                             |                   | 52                | 8.5              | 7.4              |                  |                      |                   |
| 7                                |                                |                                      |                  |                  | 0.1              | 1.044168         |                 |                 |                 |                 |                 |                 |                             |                   |                   | 54               | 9.6              | 7.8              |                      |                   |
| 8                                | 3                              | 32.17572                             |                  |                  | 0.1              | 1.072524         |                 |                 |                 |                 |                 |                 |                             |                   |                   | 52               | 9                | 7.8              |                      |                   |
| 9                                |                                |                                      |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
| 10                               |                                |                                      |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
| 11                               |                                |                                      | 5                | 51.7914          |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   | 54               | 9                | 7.6              |                      |                   |
| 12                               |                                |                                      |                  |                  | 0.1              | 1.048338         | 147             | 16.3            | 170.879094      | 4.4             | 46.126872       |                 |                             |                   | 54                | 9.5              | 7.7              |                  |                      |                   |
| 13                               | 3                              | 30.8997                              | 4                | 41.1996          | 0.1              | 1.02999          |                 |                 |                 |                 |                 |                 |                             |                   | 56                | 9.7              | 7.7              |                  |                      |                   |
| 14                               | 3                              | 46.01178                             |                  |                  | 0.1              | 1.533726         |                 |                 |                 |                 |                 |                 |                             |                   | 56                | 9                | 7.6              |                  |                      |                   |
| 15                               |                                |                                      |                  |                  | 0.1              | 1.215972         |                 |                 |                 |                 |                 |                 |                             |                   |                   | 59               | 9                | 8                |                      |                   |
| 16                               |                                |                                      |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
| 17                               |                                |                                      |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
| 18                               |                                |                                      | 4                | 45.66984         |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   | 52               | 9.4              | 7.6              |                      |                   |
| 19                               |                                |                                      |                  |                  | 0.1              | 1.126734         |                 | 15.3            | 172.390302      | 3.5             | 39.43569        |                 |                             |                   | 52                | 9.3              | 7.5              |                  |                      |                   |
| 20                               | 5                              | 55.0023                              | 4                | 44.00184         | 0.1              | 1.100046         |                 |                 |                 |                 |                 |                 |                             |                   | 52                | 9.2              | 7.5              |                  |                      |                   |
| 21                               |                                |                                      |                  |                  | 0.1              | 1.098378         |                 |                 |                 |                 |                 |                 |                             |                   | 52                | 9.9              | 7.7              |                  |                      |                   |
| 22                               | 7                              | 88.91274                             |                  |                  | 0.1              | 1.270182         |                 |                 |                 |                 |                 |                 |                             |                   | 50                | 8.9              | 7.9              |                  |                      |                   |
| 23                               |                                |                                      |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
| 24                               |                                |                                      |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
| 25                               |                                |                                      | 6                | 185.54832        |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   | 52                | 9.7              | 7.9              |                  |                      |                   |
| 26                               |                                |                                      |                  |                  | 0.1              | 2.680476         |                 | 11.93           | 319.7807868     | 2.1             | 56.289996       |                 |                             |                   | 52                | 9.7              | 7.7              |                  |                      |                   |
| 27                               | 3                              | 71.78238                             | 6                | 143.56476        | 0.1              | 2.392746         |                 |                 |                 |                 |                 |                 |                             |                   | 52                | 10               | 7.8              |                  |                      |                   |
| 28                               |                                |                                      |                  |                  | 0.1              | 2.180076         |                 |                 |                 |                 |                 |                 |                             |                   | 52                | 9.8              | 7.9              |                  |                      |                   |
| 29                               | 3                              | 62.14968                             |                  |                  | 0.1              | 2.071656         |                 |                 |                 |                 |                 |                 |                             |                   | 54                | 9.8              | 7.9              |                  |                      |                   |
| 30                               |                                |                                      |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
| 31                               |                                |                                      |                  |                  |                  |                  |                 |                 |                 |                 |                 |                 |                             |                   |                   |                  |                  |                  |                      |                   |
| Total                            | 30                             | 418.65966                            | 39               | 617.22672        | 1.7              | 24.025038        | 147             | 61.13           | 849.1722948     | 14.1            | 185.21055       |                 |                             |                   | 1120              | 194.3            | 161.2            |                  |                      |                   |
| Monthly Avg.                     | 3.75                           | 52.3324575                           | 4.875            | 77.15334         | 0.1              | 1.413237529      | 147             | 15.2825         | 212.2930737     | 3.525           | 46.3026375      |                 |                             |                   | 53.33333333       | 9.252380952      | 7.676190476      |                  |                      |                   |
| Daily Max.                       | 7                              | 88.91274                             | 6                | 185.54832        | 0.1              | 2.680476         | 147             | 17.6            | 319.7807868     | 4.4             | 56.289996       |                 |                             |                   | 59                | 10               | 8                |                  |                      |                   |
| Daily Min.                       | 3                              | 30.8997                              | 4                | 41.1996          | 0.1              | 1.02999          | 147             | 11.93           | 170.879094      | 2.1             | 39.43569        |                 |                             |                   | 50                | 7.9              | 7.3              |                  |                      |                   |
| Max. 7/Avg.                      | 5                              | 80.34756                             | 6                | 164.55654        | 0.1              | 2.13087          | 147             | 17.6            | 319.7807868     | 4.4             | 56.289996       |                 |                             |                   | 54.4              | 9.62             | 7.84             |                  |                      |                   |



1406 Central Avenue  
Fort Dodge, Iowa 50501  
515-269-2338

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| <b>UPGRADE PROGRAM</b> |                      | <b>March 2024</b>   |             |            |            |             |
|------------------------|----------------------|---------------------|-------------|------------|------------|-------------|
| <b>DATE</b>            | <b>ADDRESS</b>       | <b>ORIG INSTALL</b> | <b>Note</b> | <b>Low</b> | <b>Med</b> | <b>High</b> |
| 3/1/2024               | 1114 14th            | 3/5/2004            |             |            |            |             |
| 3/1/2024               | 528 Greene           | Frozen              |             |            |            |             |
| 3/1/2024               | 2028 Crawford        | Pre 1999            |             |            |            |             |
| 3/1/2024               | 233 S Story          | 2/26/1999           |             |            |            |             |
| 3/1/2024               | 509 Clinton          | 11/17/1999          |             |            |            |             |
| 3/1/2024               | 303 Webster          | 4/12/2000           |             |            |            |             |
| 3/1/2024               | 305 Webster          | 4/12/2000           |             |            |            |             |
| 3/1/2024               | 307 Webster          | 4/12/2000           |             |            |            |             |
| 3/1/2024               | 309 Webster          | 4/12/2000           |             |            |            |             |
| 3/1/2024               | 311 Webster          | 4/12/2000           |             |            |            |             |
| 3/4/2024               | 204 Benton           | 5/20/1999           |             |            |            |             |
| 3/4/2024               | 1418 19th H          | 1206/04             |             |            |            |             |
| 3/4/2024               | 1418 19th L          | 1206/04             |             |            |            |             |
| 3/4/2024               | 510 10th             | 4/15/2002           |             |            |            |             |
| 3/4/2024               | 608 1st H            | 3/29/1999           |             |            |            |             |
| 3/4/2024               | 608 1st L            | 7/6/2001            |             |            |            |             |
| 3/5/2024               | 219 Park Ave         | 4/11/2007           |             |            |            |             |
| 3/5/2024               | 322 Main             | 5/24/2000           |             |            |            |             |
| 3/5/2024               | 1127 1st             | 6/25/2013           |             |            |            |             |
| 3/6/2024               | 220 Ashwood H        | 1/11/2007           |             |            |            |             |
| 3/6/2024               | 220 Ashwood L        | 1/11/2007           |             |            |            |             |
| 3/11/2024              | 1102-1116 Maddie Ln  | New Service         |             |            |            |             |
| 3/11/2024              | 1118-1132 Maddie Ln  | New Service         |             |            |            |             |
| 3/11/2024              | 1110 Colin Dr        | New Service         |             |            |            |             |
| 3/11/2024              | 2201-3-5 Conner Dr   | New Service         |             |            |            |             |
| 3/11/2024              | 1123-1125 Colin Dr   | New Service         |             |            |            |             |
| 3/11/2024              | 1119-1121 Colin Dr   | New Service         |             |            |            |             |
| 3/11/2024              | 2301-3-5 Conner Dr   | New Service         |             |            |            |             |
| 3/11/2024              | 2207-09-11 Conner Dr | New Service         |             |            |            |             |
| 3/11/2024              | 1103-05 Colin Dr     | New Service         |             |            |            |             |
| 3/11/2024              | 1107-09 Colin Dr     | New Service         |             |            |            |             |
| 3/11/2024              | 1115-17 Cloin Dr     | New Service         |             |            |            |             |
| 3/11/2024              | 1134-36-38 Maddie Ln | New Service         |             |            |            |             |
| 3/11/2024              | 543 Linden Ln        | 1/25/1999           |             |            |            |             |

|           |                                  |            |  |  |  |  |
|-----------|----------------------------------|------------|--|--|--|--|
| 3/12/2024 | 1403 Nebraska                    | 8/16/1999  |  |  |  |  |
| 3/12/2024 | 1710 Boone                       | Reinstall  |  |  |  |  |
| 3/13/2024 | 1424 W Mamie                     | 8/23/2000  |  |  |  |  |
| 3/13/2024 | 1005 7th                         | 8/12/1999  |  |  |  |  |
| 3/13/2024 | 1022 13th                        | Pre 1999   |  |  |  |  |
| 3/13/2024 | 1020 13th                        | Pre 1999   |  |  |  |  |
| 3/13/2024 | 1708 Timberlane H                | 3/16/1999  |  |  |  |  |
| 3/13/2024 | 1708 Timberlane L                | 3/16/1999  |  |  |  |  |
| 3/14/2024 | 305 8th                          | 2/22/2007  |  |  |  |  |
| 3/14/2024 | 802 10th                         | Pre 1999   |  |  |  |  |
| 3/14/2024 | 320 W Mamie                      | Pre 1999   |  |  |  |  |
| 3/20/2024 | 105 Clinton                      | 4/6/1999   |  |  |  |  |
| 3/21/2024 | 716 Union                        | 2/26/1999  |  |  |  |  |
| 3/22/2024 | 1216 6th                         | 5/30/2000  |  |  |  |  |
| 3/25/2024 | 1522 Crawford                    | Reinstall  |  |  |  |  |
| 3/27/2024 | 1008 12th                        | Pre 1999   |  |  |  |  |
| 3/27/2024 | 1004 12th                        | Pre 1999   |  |  |  |  |
| 3/28/2024 | 108 S Cedar                      | 11/19/1998 |  |  |  |  |
|           |                                  |            |  |  |  |  |
|           | <b><u>Locates 3-1 to 4-1</u></b> |            |  |  |  |  |
|           | 294                              |            |  |  |  |  |

**Curb Box Repair Update for 04/15/2024 – as of 4/8/2024**

\$3,957.53 was collected during shut offs. 21 accounts qualified to be on the list.

134 stop boxes need repaired, 57 of which have lead service lines & 6 that Waylon has ordered to be repaired.

2 failed stop box repair payment plans in the amount of \$3,000.00 were taken to the courthouse as liens on March 22<sup>nd</sup>.

8 delinquent bills totaling \$2,248.72 certified on March 28<sup>th</sup>. If left unpaid, 16 delinquent bills totaling \$7,211.97 are scheduled to certify on April 30<sup>th</sup>.

Lesli Vote  
Utility Billing Supervisor