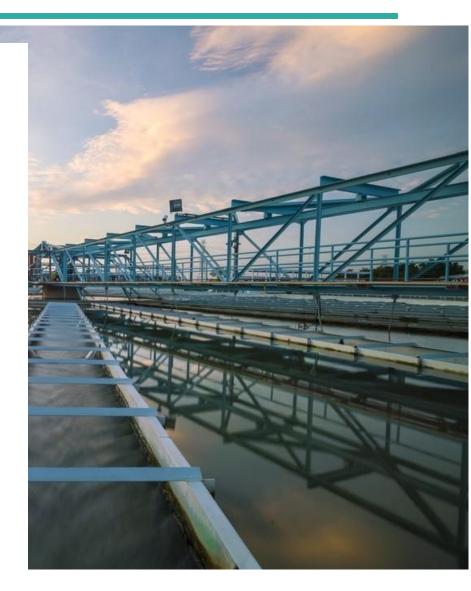
# UTILITY REPORT





#### **APRIL 2025**

Town of Bowling Green, VA Authored by: Inboden Environmental Services, Inc.



# WATER

# Water Quality

The treatment facilities and distribution system maintained compliance with all required sampling.

### **Bacteriological Analysis:**

| Location              | Date      | Result |
|-----------------------|-----------|--------|
| 010 – Jefferson Drive | 4/16/2025 | Absent |
| 040 – Town Hall       | 4/16/2025 | Absent |

#### Water Treatment

The water treatment plant met the Town's water demand with a total monthly well yield of 4.562 MG for an average daily production rate of 0.152 MGD.

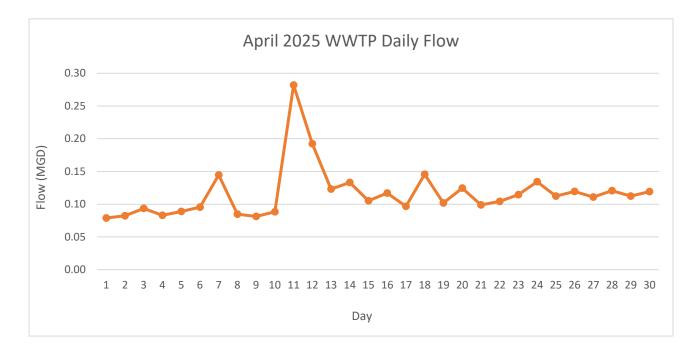
## **Operational Notes:**

- All bacteriological samples collected and passed.
- All required reports sent to regulatory agencies.

# WASTEWATER

#### **Wastewater Treatment**

The wastewater treatment plant had an average daily flow of 0.116 MGD for a total monthly effluent discharge of 3.490 MG.

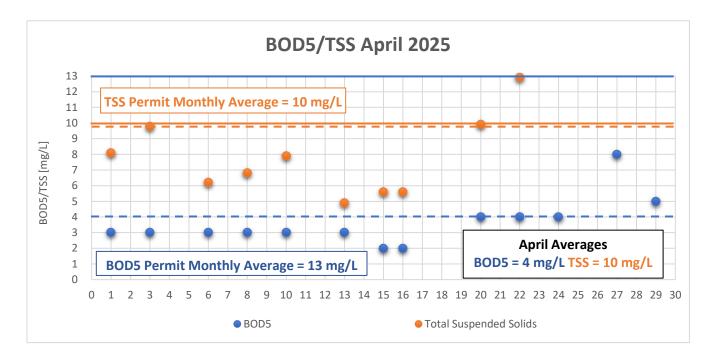


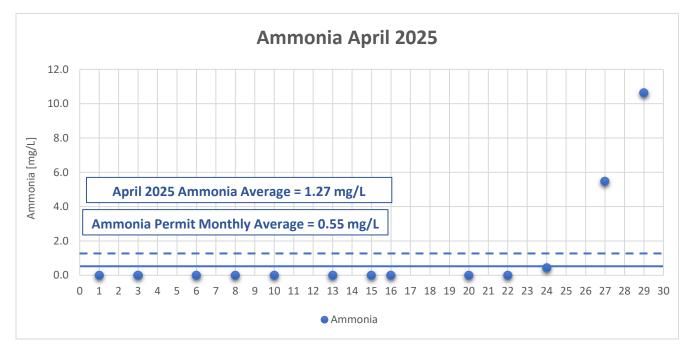
## **Operational Notes:**

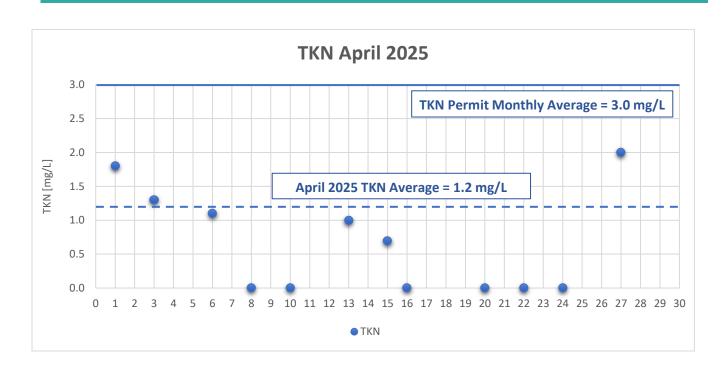
BOD, TSS, Ammonia, TKN, and E. Coli samples were collected in compliance with the WWTP permit.

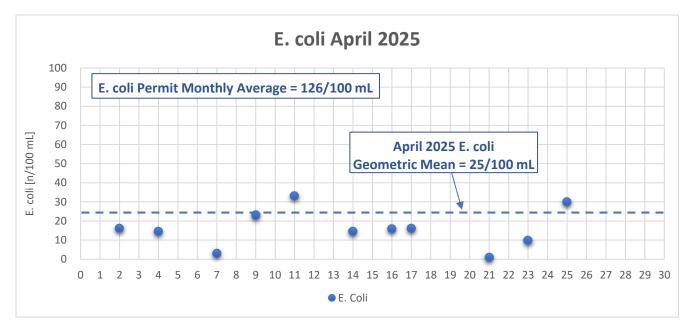
- RAS line stopped up twice. It was jetted and drained for inspection. No obstruction was found.
- Alternating clarifiers in and out of service to manage sludge blankets.
- IES evaluated drying beds due to poor performance. IES noted that the underdrain has failed.
- Wastewater plant received pump and haul loads of influent from the sewer collection lines on Main Street. The bypass pumps are now installed.
- IES performed preventative maintenance on equipment.

#### Sample Results:









# Glossary

| WWTP               | Wastewater Treatment Plant                                      |  |
|--------------------|---|--|
| WTP                | Water Treatment Plant   |  |
| UV                 | Ultraviolet Light   |  |
| TSS                | Total Suspended Solids  |  |
| TR-6               | Copper sequestering chemical for wastewater                     |  |
| TP                 | Total Phosphorous   |  |
| TN                 | Total Nitrogen  |  |
| TKN                | Total Kjeldahl Nitrogen   |  |
| STEP               | Septic Tank Effluent Pump                                       |  |
| SCADA              | Supervisory Control and Data Acquisition                        |  |
| RAS                | Return Activated Sludge   |  |
| POE                | Point of Entry  |  |
| PLC                | Programmable Logic Controller                                   |  |
| PFAS               | polyfluoroalkyl substances                                      |  |
| P/A                | Presence/Absence- bacteriological samples for drinking<br>water |  |
| Organic Nitrogen   | TKN   |  |
| N/N                | Nitrate/Nitrite   |  |
| MW                 | Monitoring Well   |  |
| MPN                | Most Probable Number -bacteriological well sample               |  |
| MLVSS              | Mixed Liquor Volatile Suspended Solids                          |  |
| MLSS               | Mixed Liquor Suspended Solids                                   |  |
| mL                 | Milliliters   |  |
| MGD                | Million Gallons Per Day   |  |
| mg/L               | Milligrams per Liter  |  |
| LS                 | Lift Station  |  |
| Inorganic Nitrogen | Nitrate + Nitrite   |  |
| 1&1                | Infiltration and Inflow   |  |
| HWTP               | Harmony Water Treatment Plant                                   |  |
| GST                | Ground Storage Tank   |  |
| FOG                | Fats, Oil and Grease  |  |
| F/M ratio          | Food to Microorganism ratio                                     |  |
| D.O.               | Dissolved Oxygen  |  |
| CMF                | Continuous Membrane Filtration?                                 |  |
| Cl2                | Chlorine  |  |
| Cl                 | Chloride Ion  |  |
| CIP                | Capital Improvement Plan or Cast/cleaned-in-place               |  |
| cfu                | colony forming unit   |  |
| CBOD               | Carbonaceous Biochemical Oxygen Demand                          |  |
| BOD5               | 5-day Biochemical Oxygen Demand                                 |  |
|                    |   |  |