

March 16, 2025

## Utility Department Monthly Operating Report Sewer Department

### February 2025 Effluent Monitoring Data

During the operating period of February 2025 there were no exceedances. See performance table below for further details of the regulatory monitoring data, for the month of February 2025.

See updated Flow, TSS and BOD Trend Charts at the end of this report.

### WWTP Monthly Performance Table

| Parameters           | Feb.             | Jan  | Dec   | YTD Low | YTD Hi | YTD         | 2024         | DEP Limit     | YTD Exceed-ances |
|----------------------|------------------|------|-------|---------|--------|-------------|--------------|---------------|------------------|
| Flow GPD Avg         | 5927             | 5977 | 21650 | 5927    | 5977   | <b>5952</b> | 18995        | <b>63,000</b> | 0                |
| Precip inches        | 0.9 – 22 in snow | 1.20 | 6.04  | 1.20    | 1.20   | 1.20        | 3.50         | n/a           | 0                |
| TSS lbs/min          | 0.3              | 1    | 1     | 0.3     | 1      | <b>0.7</b>  | 1.41         | < <b>76</b>   | 0                |
| TSS lbs max          | 1                | 1    | 8     | 1       | 1      | <b>1</b>    | 3.56         | <b>report</b> | 0                |
| TSS mg/l ave         | 14               | 11   | 13    | 11      | 14     | <b>13</b>   | 16.0         | < <b>145</b>  | 0                |
| TSS mg/l max         | 15               | 12   | 18    | 12      | 15     | <b>14</b>   | 24.0         | <b>report</b> | 0                |
| TSS % removal        | 95.1             | 99.7 | 97.8  | 95.1    | 99.7   | <b>99.7</b> | 93.8         | > <b>50</b>   | 0                |
| BOD lbs/min          | 2                | 4    | 4     | 2       | 4      | <b>3</b>    | 9.5          | < <b>107</b>  | 0                |
| BOD lbs max          | 5                | 6    | 61    | 5       | 6      | <b>6</b>    | 43.6         | <b>report</b> | 0                |
| BOD mg/l ave         | 87               | 94   | 92    | 87      | 94     | <b>91</b>   | <b>164.1</b> | < <b>203</b>  | 0                |
| BOD mg/l max         | 114              | 121  | 125   | 114     | 121    | <b>118</b>  | 232.9        | <b>report</b> | 0                |
| BOD % removal        | 70               | 68.5 | 68.2  | 68.5    | 70     | <b>69</b>   | 43.5         | > <b>30</b>   | 0                |
| pH low               | 6.7              | 6.7  | 6.7   | 6.7     | 6.7    | <b>6.7</b>  | 6.7          | > <b>6.0</b>  | 0                |
| pH high              | 7.0              | 7.0  | 6.9   | 7.0     | 7.0    | <b>7.0</b>  | 6.9          | < <b>9.0</b>  | 0                |
| St solids ml/l av    | 0.1              | 0.1  | 0.1   | 0.1     | 0.1    | <b>0.1</b>  | 0.1          | <b>report</b> | 0                |
| TRC mg/l max         | 0.03             | 0.02 | 0.02  | 0.02    | 0.03   | <b>0.03</b> | 0.03         | < <b>0.3</b>  | 0                |
| Fecal cfu ave        | <4               | <4   | <4    | <4      | <4     | < <b>4</b>  | <4           | < <b>14</b>   | 0                |
| Fecal cfu max        | <4               | <4   | <4    | <4      | <4     | < <b>4</b>  | <4           | < <b>31</b>   | 0                |
| Enterococcus cfu ave | n/a              | n/a  | n/a   | n/a     | n/a    | <b>n/a</b>  | <5           | < <b>8</b>    | 0                |
| Enterococcus cfu max | n/a              | n/a  | n/a   | n/a     | n/a    | <b>n/a</b>  | 211          | < <b>54</b>   | 0                |
| Hg ng/l ave          | n/a              | n/a  | 3.5   | n/a     | n/a    | <b>n/a</b>  | 3.5          | <b>33.4</b>   | 0                |
| Hg ng/l max          | n/a              | n/a  | 3.5   | n/a     | n/a    | <b>n/a</b>  | 3.5          | <b>50.1</b>   | 0                |

1. In Feb 2025 we experienced the lowest BOD Concentrations for some time including all of 2024.
2. Feb 2025 we experienced a 87 BOD avg mgl and a 70 percent BOD removal.
3. PLC was repaired and daily readings restored on 1-7-25. Pricing is being obtained to replace or fix the flow recorder.
4. Moore's Septage pumped first 2 tanks on each train Feb 14, 2024, Mar. 27th, 2024, all tanks on June 28, 2024 and first two tanks on each train on Oct. 25, 2024.
5. We have scheduled the 3 pump outs for 2025 as recommended in the recently completed Crowley Loading Study for the village. April 4, June 27 and Oct. 3.
6. Draft Permit received from EPA on 10-24-24. Jim Crowley has submitted comments to EPA and MDEP regarding the draft permit. These are all minor in nature spelling etc and factual corrections. There is also a public education required of primary waivers.
7. The required certification complying with the Maine Coastal Program has been processed.
8. Work is in progress on upgrading the Wet Weather Plan and Operations & Maintenance Plans as required by the new EPA Permit.
9. There was a single day flow recorded at 440,660 gallons on 6-29-24 when we received 1.07 inches of rain in very short period, resulting in a June 2024 daily average of 40,632 gallons with a 63,000 gpd permit limit.
10. I am working with Dirigo Engineering to schedule Cctv work under the FSP and CAP Program.

## **Drinking Water Department**

### February 2025 Production and Water Quality.

Purchased water for the month averaged 17,978 gpd (leak) compared to 7660 gpd (water meter down) for the same month in 2024. The weekly free chlorine residual in the drinking water ranged from 0.33 - 0.47 ppm/Cl<sup>2</sup> compared to the recommended goal of >.20 to <1.0 ppm/Cl<sup>2</sup> at the entry point to the distribution system and a detectable residual at the tap. The EPA maximum concentration level (MCL) not to be exceeded for chlorine residual related to human health is 4.0 ppm. The monthly total coliform and e-coli water sample test results were negative.

1. Some of the difference in usage readings between 2024 and 2025 are likely due to the leak discovered in January by Bill Paige.
2. The new 6 inch meter was installed on Feb. 29<sup>th</sup> 2024.
3. Two Rates structures have been approved by the Maine PUC 1.5 percent annual, one-time 25 percent increase.
4. At this time and the one-time meter replacement fee is on hold until we can experience revenues produced by the rate increases.
5. Lead service line work concluded on Oct. 16, 2024.

January 24 - February 2025 Northport Village

Flow Bod TSS Data

|                 | Jan-24 | Feb-24 | Mar-24 | Apr-24 | May-24 | Jun-24 | Jul-24 | Aug-24 | Sep-24 | Oct-24 | Nov-24 | Dec-24 | Jan-25 | Feb-25 |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Flow Avg</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Gals            | 18633  | 7748   | 43915  | 24406  | 9487   | 40632  | 17868  | 18801  | 10602  | 8800   | 4201   | 21650  | 5977   | 5927   |
| <b>BOD mg/l</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| max             | 240    | 270    | 350    | 240    | 360    | 230    | 254    | 205    | 180    | 153    | 185    | 125    | 121    | 114    |
| avg             | 192    | 223    | 170    | 147    | 248    | 139    | 74     | 174    | 159    | 110    | 142    | 92     | 94     | 87     |
| <b>TSS mg/l</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| max             | 7.7    | 16     | 7.7    | 9.7    | 13     | 22     | 42     | 64     | 44     | 26     | 27     | 18     | 12     | 15     |
| avg             | 6      | 11.8   | 6      | 7.6    | 16     | 15     | 34     | 40     | 36     | 18     | 20     | 13     | 11     | 11     |

### January 2024 - February 2025 Daily Flow Average





