

January 12, 2024

Utility Department Monthly Operating Report Sewer Department

December 2024 Effluent Monitoring Data

During the operating period of December 2024 there were no exceedances. See performance table below for further details of the regulatory monitoring data, for the month of December 2024.

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

WWTP Monthly Performance Table

Parameters	Dec	Nov.	Oct.	YTD Low	YTD Hi	YTD	2023	DEP Limit	YTD Exceed-acnes
Flow GPD Avg	2165 0	4201	8800	4201	43915	18995	20449	63,000	0
Precip inches	6.04	2.06	1.51	1.01	10	3.50	n/a	n/a	0
TSS lbs/min	1	0.3	1	0.3	4	1.41	1.36	<76	0
TSS lbs max	8	0.8	3	0.7	10	3.56	3.09	report	0
TSS mg/l ave	13	20	18	3.0	40	16.0	10.6	<145	0
TSS mg/l max	18	27	26	7.7	64	24.0	12.9	report	0
TSS % removal	97.8	93	93.8	86.2	97.9	93.8	96.1	>50	0
BOD lbs/min	4	2.7	0.3	0.3	16	9.5	19.7	<107	0
BOD lbs max	61	5.4	13	5.4	190	43.6	65.6	report	0
BOD mg/l ave	92	142	110	92	248	164.1	178	<203	2
BOD mg/l max	125	185	153	125	360	232.9	259.1	report	0
BOD % removal	68.2	51	62	14.4	68.2	43.5	39.4	>30	2
pH low	6.7	6.8	6.7	6.6	6.8	6.7	6.7	>6.0	0
pH high	6.9	6.9	7.0	6.9	7.1	6.9	6.9	<9.0	0
St solids ml/l av	0.1	0.1	0.1	0.1	0.1	0.1	0.1	report	0
TRC mg/l max	0.02	0.02	0.03	0.02	0.05	0.03	0.066	<0.3	0
Fecal cfu ave	<4	<4	<4	<4	<4	<4	<4	<14	0
Fecal cfu max	<4	<4	<4	<4	<4	<4	<4	<31	0
Entero cfu ave	n/a	n/a	11	<4	11	<5	108	<8	1
Entero cfu max	n/a	n/a	2053	<4	2053	211	9680	<54	1
Hg ng/l ave	3.5	n/a	n/a	n/a	n/a	n/a	4.1	33.4	0
Hg ng/l max	3.5	n/a	n/a	n/a	n/a	n/a	4.1	50.1	0

1. In December we experienced the lowest BOD Concentrations for 2024 and the highest BOD percent removal for 2024.
2. The flow average for November of 4201 gpd is unrealistically low and probably not accurate.
3. PLC was replaced and daily readings restored on 1-7-25. Pricing is being obtained to replace 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 are working to schedule the 3 pump outs for 2025 as recommended in the recently completed Crowley Loading Study for the village.
6. EPA renewal application was submitted on 11-29-23
7. 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.
8. The required certification complying with the Maine Coastal Program has been processed.
9. Work has started on upgrading the Wet Weather Plan and Operations & Maintenance Plans as required by the new EPA Permit.
10. 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.
11. I am working with Dirigo Engineering to schedule Cctv work under the FSP and CAP Program.
12. RCAP is schedule to begin the sewer rate discussion at the January meeting 1/17/25 which is our January meeting date.

Drinking Water Department

December 2024 Production and Water Quality.

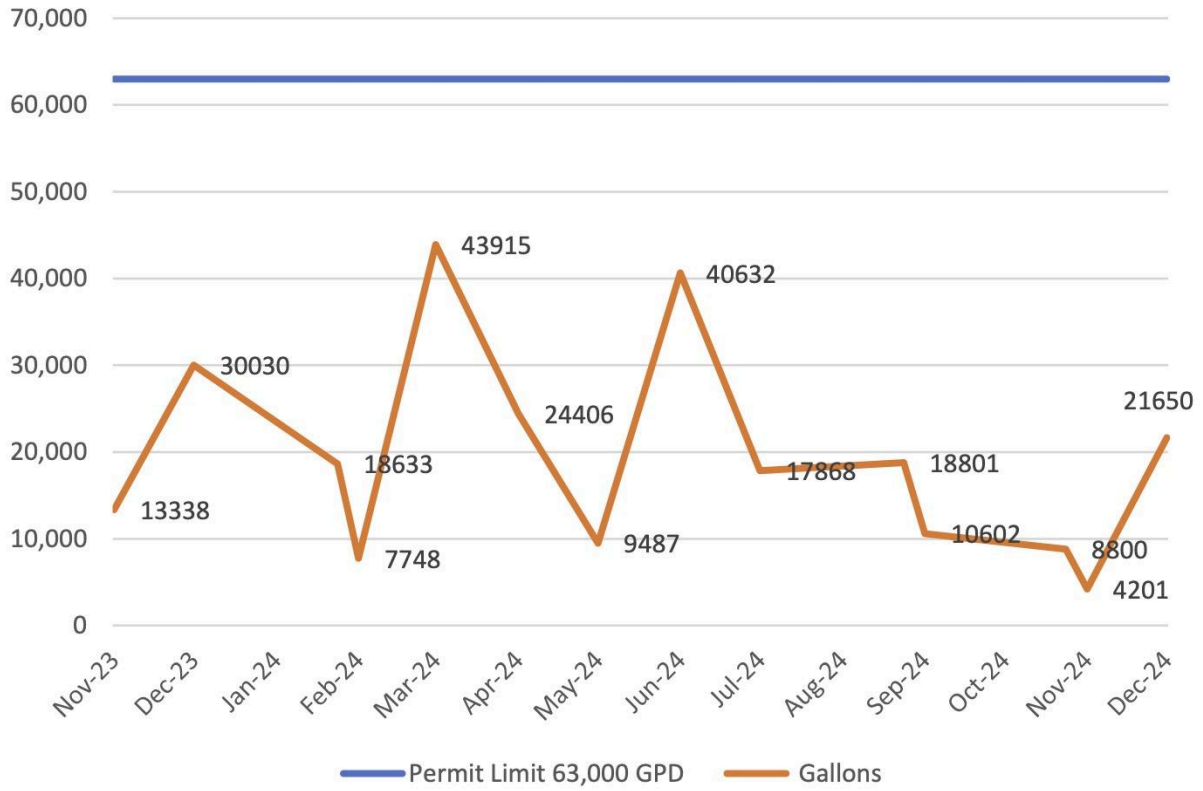
Purchased water for the month averaged 13,874 gpd compared to 12,740 gpd for the same month in 2023. The weekly free chlorine residual in the drinking water ranged from 0.38 - 0.43 ppm/Cl² compared to the recommended goal of >.20 to <1.0 ppm/Cl² at the entry point to the distribution system and a residual 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 2023 and 2024 are likely due to the leak discovered by Bill Paige.
2. The recording chart meter has been repaired so the meter and chart are communicating and we have daily flows, pressure and daily maximum gpm.
3. The new 6 inch meter was installed on Feb. 29th.
4. Two Rates structures have been approved by the Maine PUC 1.5 percent annual, one-time 25 percent increase.
 - a. The one percent and 25 percent are ready for implementation in the Nov. bill.
5. At this time and the one time meter replacement fee is on hold until we can experience revenues produced by the rate increases.
6. Lead service line work concluded on Oct. 16, 2024.
7. The proper submission has been sent to MDWP notifying them that the lead service line work has been completed. NVC reported 353 connections, 0 known lead, 31 unknowns, 1 galvanized service and 321 non lead service lines.
8. The grant reimbursement forms have also been submitted to the state for the lead service work and the village has received the grant funding.

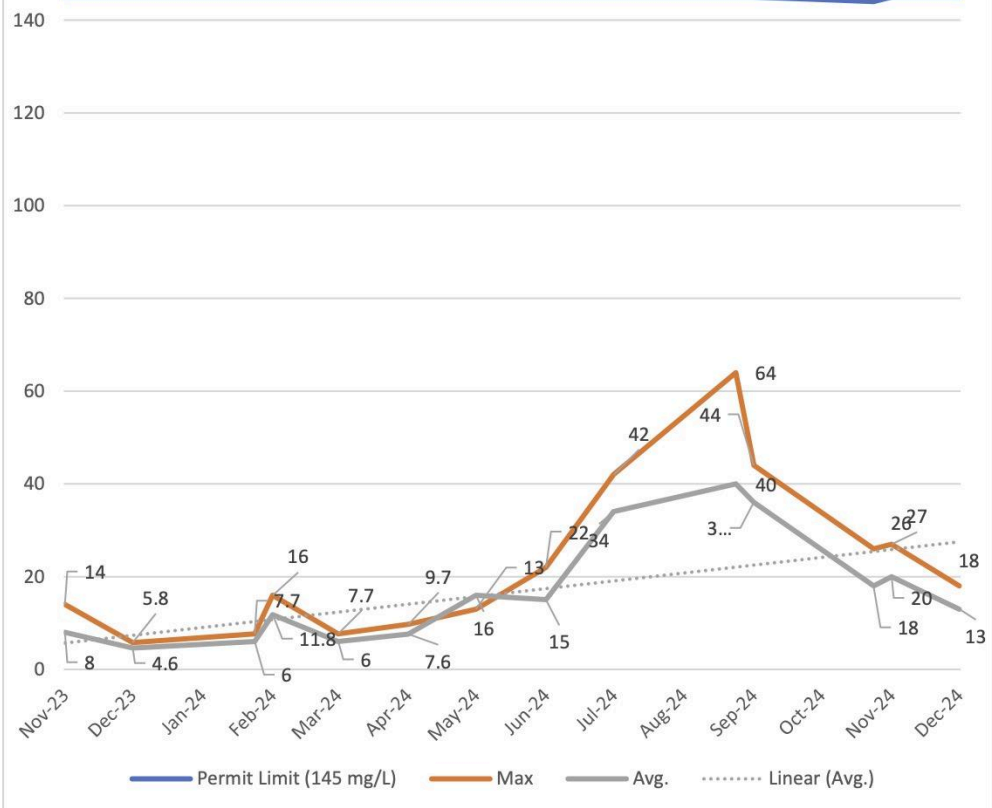
**December 23 - December 2024 Northport Village
Flow Bod TSS Data**

	Nov-23	Dec-23	Nov-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Flow Avg															
Gals	13338	30030	13338	18633	7748	43915	24406	9487	40632	17868	18801	10602	8800	4201	21650
BOD mg/l															
max	170	150	170	240	270	350	240	360	230	254	205	180	153	185	125
avg	126	113	126	192	223	170	147	248	139	74	174	159	110	142	92
TSS mg/l															
max	14	5.8	14	7.7	16	7.7	9.7	13	22	42	64	44	26	27	18
avg	8	4.6	8	6	11.8	6	7.6	16	15	34	40	36	18	20	13

December 2023 - December 2024 Daily Flow Average



December 2023 - December 2024 TSS (mg/L)



December 2023 - December 2024 BOD (mg/L)

