

Town of Friday Harbor Water, Wastewater, and Solid Waste Utilities Summary Reports

www.fridayharbor.org

Period ending: November 2024

*Based on December's billing cycle
(March's Water and Refuse Usage)

Data provided by
Jesse Douglas-Seitz, Public Works Director
Water Utility, Kasey Anderson Water Distribution Supervisor
Frank Byrne, Water Treatment Plant Supervisor
Wastewater Utility, Patrick Sandwith, Wastewater Treatment Plant Supervisor
Solid Waste Utility, Dave Smith, Refuse Supervisor

Analysis & Reports prepared by
Reid Ledgerwood, Lead Finance Clerk

Water - Use MTD

Water Class	Accounts	Gallons
Com	220	1,153,987
Ind	14	134,764
Mfr	133	1,548,788
PA	82	485,488
Sfr	1,027	2,382,124
Spe	3	3,099
Total	1,479	5,708,250

Water - Use MTD by Location

Water Class	Accounts	Gallons
Location: In		
Com	217	1,134,556
Ind	13	134,764
Mfr	128	1,450,191
PA	73	343,913
Sfr	668	1,665,783
Spe	2	364
	1,101	4,729,571
Location: Out		
Com	3	19,431
Ind	1	0
Mfr	5	98,597
PA	9	141,575
Sfr	359	716,341
Spe	1	2,735
	378	978,679
Total	1,479	5,708,250

Water Use MTD - Accounts with Sewer Connections

Sewer Class	Accounts	Gallons
Location: In		
Com In/hi Strength	42	467,876
Com In/lo Strength	163	646,088
Dot In/lo Strength	2	44,975
Ind In/hi Strength	1	15,415
Ind In/lo Strength	10	113,122
Lmf In/lo Strength	1	5,523
Low Rate / IN Town	14	25,881
Mfr In/low Strength	120	1,096,050
Mhp In/lo Strength	2	282,318
PA In/hi Strength	3	57,612
PA In/lo Strength	46	154,872
Sfr IN Town	638	1,624,270
	1,042	4,534,002
Location: Out		
Mfr Out/lo Strength	1	8,242
Sfr Out of Town	4	5,124
UW Out/hi Strength	1	114,832
	6	128,198
Total	1,048	4,662,200

Refuse - Pickups by Class

Class	Pickups
Com	2,057.0
Ind	20.0
Mfr	598.5
PA	217.5
Sfr	2,258.0
Refuse Only	359.5
Total	5,510.5

Refuse - Active Accounts

Refuse Type	Accounts
Cans	881
Cans Low Rate	13
Compactors	4
Large Dumpster	78
Medium Dumpster	53
PA	42
Small Dumpster	44
Total	1,115

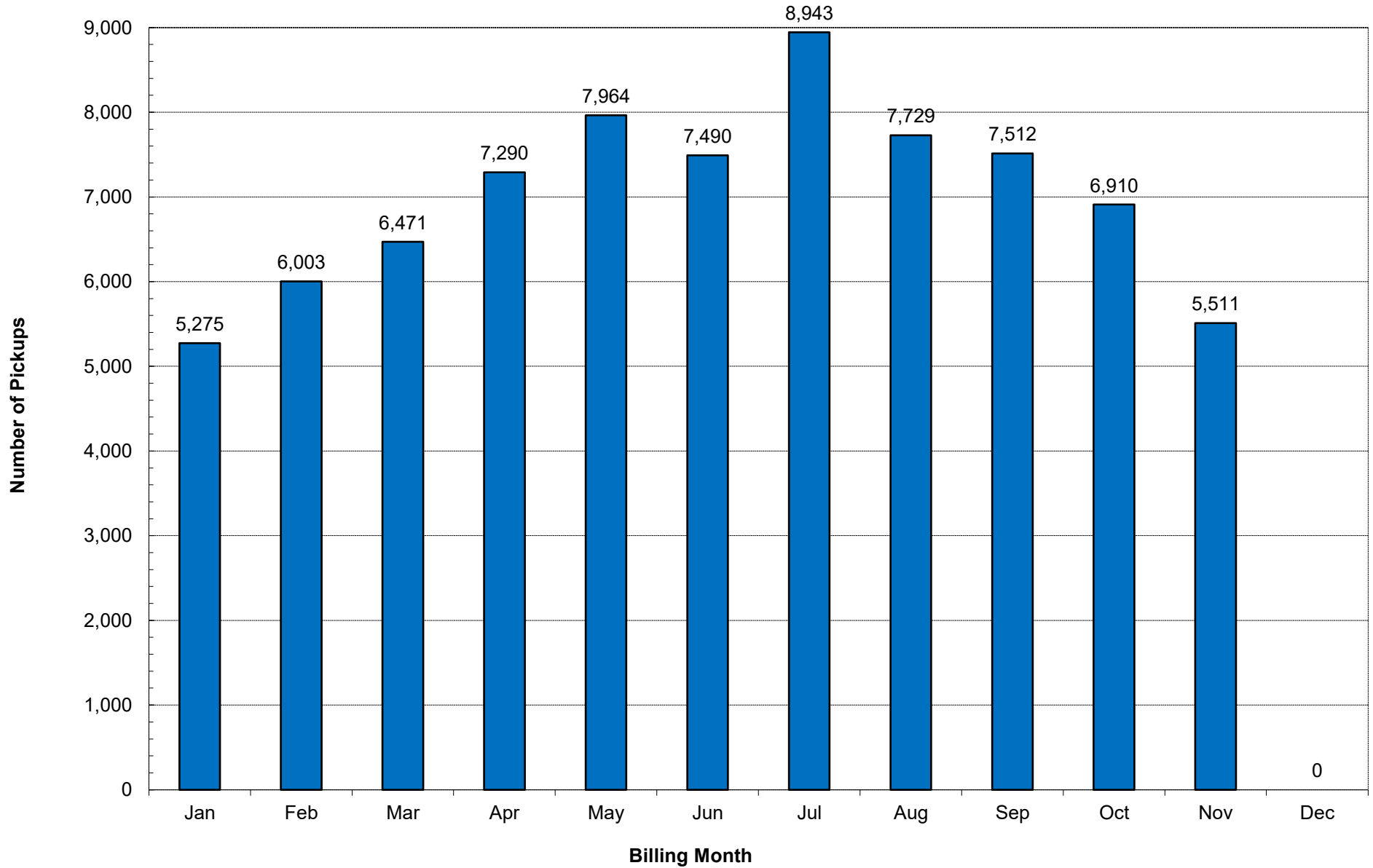
Recycle - Pickups by Class

Class	Pickups
Com	3.0
Ind	1.0
Mfr	72.0
PA	0.0
Sfr	693.0
Refuse Only	29.0
Total	798.0

Refuse Pickups by Account Type - 2024 YTD

Billing Month	SFR	Refuse Only	PA	MFR	IND	COM	Total
Jan	2,195.0	356.0	151.0	582.5	21.5	1,968.5	5,274.5
Feb	2,106.0	377.0	143.5	559.0	20.0	2,797.0	6,002.5
Mar	2,208.0	418.0	188.5	560.0	25.0	3,071.0	6,470.5
Apr	2,466.0	443.5	184.0	620.0	18.0	3,558.0	7,289.5
May	2,666.0	520.5	236.5	648.0	26.5	3,866.0	7,963.5
Jun	2,719.0	502.5	181.5	592.0	17.0	3,478.0	7,490.0
Jul	3,031.0	597.0	137.0	698.0	37.0	4,443.0	8,943.0
Aug	2,689.0	558.5	151.5	704.5	25.0	3,600.5	7,729.0
Sep	2,492.0	514.5	188.0	653.5	18.0	3,646.0	7,512.0
Oct	2,596.0	432.5	180.5	671.0	22.5	3,007.0	6,909.5
Nov	2,258.0	359.5	217.5	598.5	20.0	2,057.0	5,510.5
Dec							-
YTD	27,426.0	5,079.5	1,959.5	6,887.0	250.5	35,492.0	77,094.5

Total Refuse Pickups by Month - 2024



Trout Lake Reservoir Level

Months with positive levels may reflect that a removable 7.25 inch riser has been added to the top of the original spillway.

end of	Inches above/(below) original spillway	end of	Inches above/(below) original spillway	end of	Inches above/(below) original spillway
Jan-24	0.00	Jan-27		Jan-30	
Feb-24	0.00	Feb-27		Feb-30	
Mar-24	12.00	Mar-27		Mar-30	
Apr-24	9.00	Apr-27		Apr-30	
May-24	3.50	May-27		May-30	
Jun-24	-3.00	Jun-27		Jun-30	
Jul-24	-17.00	Jul-27		Jul-30	
Aug-24	-26.00	Aug-27		Aug-30	
Sep-24	-33.75	Sep-27		Sep-30	
Oct-24	-35.50	Oct-27		Oct-30	
Nov-24	-22.00	Nov-27		Nov-30	
Dec-24		Dec-27		Dec-30	
Jan-25		Jan-28		Jan-31	
Feb-25		Feb-28		Feb-31	
Mar-25		Mar-28		Mar-31	
Apr-25		Apr-28		Apr-31	
May-25		May-28		May-31	
Jun-25		Jun-28		Jun-31	
Jul-25		Jul-28		Jul-31	
Aug-25		Aug-28		Aug-31	
Sep-25		Sep-28		Sep-31	
Oct-25		Oct-28		Oct-31	
Nov-25		Nov-28		Nov-31	
Dec-25		Dec-28		Dec-31	
Jan-26		Jan-29		Jan-32	
Feb-26		Feb-29		Feb-32	
Mar-26		Mar-29		Mar-32	
Apr-26		Apr-29		Apr-32	
May-26		May-29		May-32	
Jun-26		Jun-29		Jun-32	
Jul-26		Jul-29		Jul-32	
Aug-26		Aug-29		Aug-32	
Sep-26		Sep-29		Sep-32	
Oct-26		Oct-29		Oct-32	
Nov-26		Nov-29		Nov-32	
Dec-26		Dec-29		Dec-32	

Flow to Town (Gross Water Production) 2024

Billing Month	Start Date		End Date	Days in Period	Gross Flow to Town
Jan	2-Jan	to	31-Jan	30	7,793,000
Feb	1-Feb	to	29-Feb	29	6,510,000
Mar	1-Mar	to	31-Mar	31	7,342,000
Apr	1-Apr	to	30-Apr	30	7,980,000
May	1-May	to	31-May	31	9,349,000
Jun	1-Jun	to	30-Jun	30	10,422,000
Jul	1-Jul	to	31-Jul	31	14,280,000
Aug	1-Aug	to	31-Aug	31	13,009,000
Sep	1-Sep	to	30-Sep	30	10,164,000
Oct	1-Oct	to	31-Oct	31	7,961,000
Nov	1-Nov	to	30-Nov	30	7,412,000
Dec		to		-	-
				334	102,222,000

Rainfall - Trout Lake Water Treatment Facility

all figures in inches

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	average (2005-14)
Jan	5.49	6.87	6.51	2.34	3.82	4.73	5.90	3.46	4.14	2.86	4.61
Feb	1.01	1.61	2.83	1.78	1.50	1.24	2.74	3.38	1.32	4.22	2.16
Mar	2.33	0.91	3.70	1.99	2.05	3.30	3.37	3.09	3.63	3.88	2.83
Apr	1.37	2.23	1.49	1.32	2.07	1.47	2.96	1.91	2.70	1.94	1.95
May	1.08	1.24	0.78	1.26	1.69	2.09	3.07	1.09	2.20	1.05	1.56
Jun	1.63	0.56	1.03	1.16	0.35	1.10	0.68	2.60	0.83	0.52	1.05
Jul	0.70	0.26	1.56	0.21	0.45	0.11	0.84	1.04	0.00	0.36	0.55
Aug	1.60	0.03	0.64	1.88	0.81	0.72	0.29	0.00	0.95	0.49	0.74
Sep	0.94	1.15	0.54	0.84	1.58	4.35	0.72	0.12	5.08	1.34	1.67
Oct	3.50	1.89	2.12	1.83	5.24	1.38	2.29	6.40	1.42	4.00	3.01
Nov	4.28	10.43	2.32	5.15	6.76	2.94	4.50	3.32	2.49	4.00	4.62
Dec	2.89	3.74	4.59	3.70	1.80	6.55	1.88	4.79	2.28	3.37	3.56
Total	26.82	30.92	28.11	23.46	28.12	29.98	29.24	31.20	27.04	28.03	28.29

Cumulative thru

Dec	26.82	30.92	28.11	23.46	28.12	29.98	29.24	31.20	27.04	28.03
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	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	average (2015-Current)
Jan	3.97	2.17	1.60	5.10	3.87	7.32	4.36	4.49	1.57	5.02	3.95
Feb	2.95	4.83	2.99	3.80	1.76	5.34	3.41	1.38	2.18	2.36	3.10
Mar	3.62	2.88	3.27	1.48	0.87	1.25	1.18	2.64	1.99	1.48	2.07
Apr	0.51	0.75	2.20	3.10	1.61	1.38	1.12	2.25	1.71	1.51	1.61
May	0.30	0.48	1.61	0.07	1.29	1.49	0.40	1.70	0.70	2.68	1.07
Jun	0.14	1.22	0.75	0.72	0.61	1.25	0.69	1.70	0.81	1.07	0.90
Jul	0.36	0.32	0.15	0.18	0.75	0.86	0.00	0.68	0.43	0.47	0.42
Aug	0.94	0.11	0.11	0.01	0.84	0.68	0.30	0.09	0.43	2.44	0.60
Sep	1.28	1.40	0.71	1.27	2.74	2.34	3.76	0.01	0.88	1.36	1.58
Oct	3.53	4.80	4.28	2.23	3.33	3.39	4.34	3.78	3.55	4.30	3.75
Nov	6.19	3.47	4.32	4.32	2.1	4.68	11.31	3.67	3.92	3.77	4.78
Dec	5.26	4.02	3.83	4.26	3.63	6.81	4.59	3.55	4.18		4.46
Total	29.05	26.45	25.82	26.54	23.40	36.79	35.46	25.94	22.35	26.46	28.27

Cumulative thru

Dec	29.05	26.45	25.82	26.54	23.40	36.79	35.46	25.94	22.35	26.46
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Net Water Production - 2023

Amounts in Gallons

	Jan	Feb	Mar	Apr	May	Jun
Gross Production	7,793,000	6,510,000	7,342,000	7,980,000	9,349,000	10,422,000
3% meter loss	184,066	163,074	189,815	206,625	246,561	274,984
Flushing	256,250	101,575	160,900	168,500	163,500	168,662
SJC#3 FD use	5,000	5,000	9,700	38,600	5,000	5,000
Leaks	800,000	200,000	250,000	75,000	70,000	300,000
Other non-metered use	-					
Total other uses	(1,245,316)	(469,649)	(610,415)	(488,725)	(485,061)	(748,646)
Net production	6,547,684	6,040,351	6,731,585	7,491,275	8,863,939	9,673,354

	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	14,280,000	13,009,000	10,164,000	7,961,000	7,412,000	-
3% meter loss	397,200	346,697	259,067	200,520	171,248	-
Flushing	108,400	202,000	134,000	198,700	156,900	
SJC#3 FD use	5,000	11,000	17,500	16,500	5,000	
Leaks	90,000	90,000	200,000	450,000	841,200	
Other non-metered use						
Total other uses	(600,600)	(649,697)	(610,567)	(865,720)	(1,174,348)	-
Net production	13,679,400	12,359,303	9,553,433	7,095,280	6,237,653	-

Water Consumption & Production

Revised meter loss reporting begin 07/09 (per Robert Krebs, Evergreen Rural Water Assoc.)

Period		Use (Consumption)	Cumulative Use YTD	Flow (Production)	Unaccounted over / (under)	Cumulative Flow YTD	Average Daily Flow	
		Metered/Other	Use YTD	Unaccounted		3% meter loss	2,869,028	
2023	Jan-23	5,964,425	5,964,425	6,653,000	-688,575	6,653,000	214,613	
	Feb-23	5,592,309	11,556,734	5,829,000	-236,691	12,482,000	208,179	
	Mar-23	6,542,184	18,098,918	7,012,000	-469,816	19,494,000	226,194	
	Apr-23	6,817,860	24,916,778	7,746,000	-928,140	27,240,000	258,200	
	May-23	9,087,367	34,004,144	9,315,000	-227,633	36,555,000	300,484	
	Jun-23	10,624,699	44,628,844	11,385,000	-760,301	47,940,000	379,500	
	Jul-23	13,638,938	58,267,782	13,850,000	-211,062	61,790,000	446,774	
	Aug-23	12,839,134	71,106,916	13,308,000	-468,866	75,098,000	429,290	
	Sep-23	9,619,225	80,726,141	10,230,000	-610,775	85,328,000	341,000	
	Average	Oct-23	7,200,290	87,926,431	7,709,000	-508,710	93,037,000	248,677
	Monthly Use	Nov-23	6,533,456	94,459,887	7,201,000	-667,544	100,238,000	240,033
	8,425,396	Dec-23	6,644,860	101,104,747	7,170,000	-525,140	107,408,000	231,290
Year Total:		12	101,104,747	Cumulative	107,408,000	-6,303,253	Cumulative	293,686
		Metered/Other	Use YTD	Unaccounted		3% meter loss	2,869,028	
2024	Jan-24	7,380,857	7,380,857	7,793,000	-412,143	7,793,000	251,387	
	Feb-24	5,905,437	13,286,294	6,510,000	-604,563	14,303,000	232,500	
	Mar-24	6,937,573	20,223,867	7,342,000	-404,427	21,645,000	236,839	
	Apr-24	7,376,216	27,600,082	7,980,000	-603,784	29,625,000	266,000	
	May-24	8,703,752	36,303,834	9,349,000	-645,248	38,974,000	301,581	
	Jun-24	9,914,784	46,218,618	10,422,000	-507,216	49,396,000	347,400	
	Jul-24	13,840,595	60,059,213	14,280,000	-439,405	63,676,000	460,645	
	Aug-24	12,206,278	72,265,491	13,009,000	-802,722	76,685,000	419,645	
	Sep-24	9,246,125	81,511,616	10,164,000	-917,875	86,849,000	338,800	
	Average	Oct-24	7,549,709	89,061,325	7,961,000	-411,291	94,810,000	256,806
	Monthly Use	Nov-24	6,882,598	95,943,922	7,412,000	-529,403	102,222,000	247,067
	8,722,175	Dec-24	0	95,943,922	0	0	102,222,000	0
Year Total:		11	95,943,922	Cumulative	102,222,000	-6,278,078	Cumulative	305,334
3 Year Average		Use 8,574,133 gal/month	Flow 9,118,857 gal/month		Daily Flow 299,613			

Utilization of Sustainable Annual Water System Capacity

Period start: Dec-23
Period end: Nov-24

Sustainable Annual Yield (TFH Comprehensive Water System Plan Update, June, 2013, page 3-6)	205 million gallons
Annual use - 12 month period	109 million gallons
percent of Sustainable Annual Yield	53%
Exceeds Sustainable Yield?	No

Finish Water Flow to Town

Source: Water Treatment Facility Monthly Report

Revised reporting period per K. Anderson

Start/end dates may change monthly.

30 Days in reporting period.

November 1, 2024		November 30, 2024	
Day	Flow	Day	Flow
1	214	1	
2	246	2	
3	204	3	
4	276	4	
5	296	5	
6	223	6	
7	286	7	
8	244	8	
9	232	9	
10	260	10	
11	256	11	
12	218	12	
13	333	13	
14	198	14	
15	233	15	
16	276	16	
17	211	17	
18	217	18	
19	243	19	
20	275	20	
21	226	21	
22	262	22	
23	251	23	
24	260	24	
25	218	25	
26	262	26	
27	237	27	
28	258	28	
29	246	29	
30	251	30	
31		31	
30	7,412	0	-
		Total Days	30
		Total Flow	7,412

Finish Water Flow to Town
Source: Water Treatment Facility Monthly Report

1,000's of gallons

TOWN OF FRIDAY HARBOR

Water Consumption By Customer Class

2023	COM	IND	MFR	PA	SFR	Special	Other Uses	TOTAL	% of Use	Avg Daily Use
Jan	1,124,538	85,828	1,586,772	465,051	2,356,600	8,779	1,230,077	6,857,645	6.9%	221,214
Feb	1,036,345	69,471	1,549,966	414,776	2,190,836	28,906	158,709	5,449,009	5.5%	187,897
Mar	1,318,786	90,816	1,651,296	561,162	2,429,922	29,750	182,452	6,264,184	6.3%	202,070
Apr	1,385,848	91,375	1,603,722	683,068	2,455,339	32,866	187,567	6,439,785	6.5%	214,659
May	1,724,169	122,758	1,923,778	1,007,855	3,633,464	43,206	253,657	8,708,887	8.8%	280,932
Jun	2,109,315	187,119	2,066,307	1,286,154	4,312,631	133,279	302,844	10,397,649	10.5%	346,588
Jul	2,762,059	250,100	2,442,009	1,879,772	5,581,112	213,820	393,866	13,522,738	13.6%	436,217
Aug	2,720,379	222,516	2,273,923	1,657,256	5,123,796	227,037	366,747	12,591,654	12.7%	406,182
Sep	2,104,079	157,590	1,927,425	1,073,213	3,673,231	119,486	271,651	9,326,675	9.4%	310,889
Oct	1,493,820	109,819	1,790,016	654,699	2,658,956	52,292	202,788	6,962,390	7.0%	224,593
Nov	1,252,153	79,824	1,738,138	527,557	2,491,986	32,144	183,654	6,305,456	6.4%	210,182
Dec	1,176,475	64,502	1,723,737	509,671	2,579,023	40,735	182,824	6,276,967	6.3%	202,483
Total	20,207,966	1,531,718	22,277,089	10,720,234	39,486,896	962,300	3,916,836	99,103,039	100.0%	270,773
Average	1,683,997	127,643	1,856,424	893,353	3,290,575	80,192	326,403	Total Use		99,103,039
								Total Loss		8,258,587
% of Use	20.4%	1.5%	22.5%	10.8%	39.8%	1.0%	4.0%	Flow (Use+Loss)		190,413,078
% of Flow	10.6%	0.8%	11.7%	5.6%	20.7%	0.5%	2.1%	Loss as % of Flow		4.3%

2024	COM	IND	MFR	PA	SFR	Special	Other Uses	TOTAL	% of Use	Avg Daily Use
Jan	1,256,441	74,748	1,751,220	479,558	2,535,257	38,317	1,245,316	7,380,857	7.7%	238,092
Feb	1,117,694	65,357	1,481,249	458,132	2,265,621	47,735	469,649	5,905,437	6.2%	203,636
Mar	1,333,676	83,625	1,688,576	573,042	2,612,184	36,055	610,415	6,937,573	7.2%	223,793
Apr	1,399,854	103,354	1,671,902	879,576	2,781,353	51,452	488,725	7,376,216	7.7%	245,874
May	1,846,369	116,225	1,793,528	911,576	3,465,636	85,357	485,061	8,703,752	9.1%	280,766
Jun	2,068,276	105,101	1,856,041	1,060,351	3,957,803	118,566	748,646	9,914,784	10.3%	330,493
Jul	2,695,273	160,748	2,202,051	2,474,526	5,493,833	213,564	600,600	13,840,595	14.4%	446,471
Aug	2,605,206	280,775	2,086,734	1,962,972	4,448,076	172,818	649,697	12,206,278	12.7%	393,751
Sep	2,075,768	255,326	1,774,607	1,144,742	3,378,198	6,917	610,567	9,246,125	9.6%	308,204
Oct	1,422,527	245,312	1,684,614	758,860	2,567,586	5,090	865,720	7,549,709	7.9%	243,539
Nov	1,153,987	134,764	1,548,788	485,488	2,382,124	3,099	1,174,348	6,882,598	7.2%	229,420
Dec							-	-	0.0%	-
Total	18,975,071	1,625,335	19,539,310	11,188,823	35,887,671	778,970	7,948,742	95,943,922	100.0%	286,400
Average	1,725,006	147,758	1,776,301	1,017,166	3,262,516	70,815	662,395	Total Use		95,943,922
								Total Loss		7,995,327
% of Use	19.8%	1.7%	20.4%	11.7%	37.4%	0.8%	8.3%	Flow (Use+Loss)		102,222,000
% of Flow	18.6%	1.6%	19.1%	10.9%	35.1%	0.8%	7.8%	Loss as % of Flow		7.8%

Prevention of Wastewater Facility Overloading

Period start: Nov-23

Period end: Oct-24

INFLUENT BOD LOADING

(Pounds per Day)

AVG. EFFLUENT FLOW

(Millions of Gallons per Day)

SUSPENDED SOLIDS LOADING

(Pounds per Day)

Design Criteria (06/06 NPDES
Permit #WA-002358-2, pg 12,
paragraph S4.A) max.month

1,600

Design Criteria (06/06 NPDES
Permit #WA-002358-2, pg 12,
paragraph S4.A) max.month

0.69000

Design Criteria (06/06 NPDES
Permit #WA-002358-2, pg 12,
paragraph S4.A) max.month

1,110

85% Capacity Planning
Threshold (06/06 NPDES
Permit #WA-002358-2, pg 12,
paragraph S4.B.1)

1,360

85% Capacity Planning
Threshold (06/06 NPDES
Permit #WA-002358-2, pg 12,
paragraph S4.B.1)

0.58650

85% Capacity Planning
Threshold (06/06 NPDES
Permit #WA-002358-2, pg 12,
paragraph S4.B.1)

944

Month with highest average
loading in period

Jul-24

Month with highest average
flow in period

Jan-24

Month with highest average
loading in period

Jan-24

Highest average monthly
loading in period

792

Highest average monthly flow
in period

0.3991

Highest average monthly
loading in period

1,057

% of Design Criteria

50%

% of Design Criteria

58%

% of Design Criteria

95%

Exceeds Design Criteria?

No

Exceeds Design Criteria?

No

Exceeds Design Criteria?

No

Previous month's loading

737

Previous month's flow

0.3136

Previous month's loading

883

Following month's loading

754

Following month's flow

0.3177

Following month's loading

1,035

Exceeds Planning Threshold
for 3 consecutive months?**No**Exceeds Planning Threshold
for 3 consecutive months?**No**Exceeds Planning Threshold for
3 consecutive months?**No**