

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

www.fridayharbor.org

Period ending: September 2024

*Based on October'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	221	2,075,768
Ind	14	255,326
Mfr	133	1,774,607
PA	82	1,144,742
Sfr	1,026	3,378,198
Spe	3	6,917
Total	1,479	8,635,558

Water - Use MTD by Location

Water Class	Accounts	Gallons
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Location: In

Com	218	2,054,983
Ind	13	250,220
Mfr	128	1,598,097
PA	73	975,182
Sfr	669	2,109,248
Spe	2	3,156

	1,103	6,990,886
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Location: Out

Com	3	20,785
Ind	1	5,106
Mfr	5	176,510
PA	9	169,560
Sfr	357	1,268,950
Spe	1	3,761

	376	1,644,672
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Total	1,479	8,635,558
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Water Use MTD - Accounts with Sewer Connections

Sewer Class	Accounts	Gallons
Location: In		
Com In/hi Strength	42	855,491
Com In/lo Strength	163	1,148,563
Dot In/lo Strength	2	60,324
Ind In/hi Strength	1	38,107
Ind In/lo Strength	10	203,366
Lmf In/lo Strength	1	4,341
Low Rate / IN Town	14	28,559
Mfr In/low Strength	120	1,220,021
Mhp In/lo Strength	2	298,656
PA In/hi Strength	3	116,778
PA In/lo Strength	46	285,478
Sfr IN Town	638	2,062,791
	1,042	6,322,475
Location: Out		
Mfr Out/lo Strength	1	8,801
Sfr Out of Town	4	16,381
UW Out/hi Strength	1	126,954
	6	152,136
Total	1,048	6,474,611

Refuse - Pickups by Class

Class	Pickups
Com	3,646.0
Ind	18.0
Mfr	653.5
PA	188.0
Sfr	2,492.0
Refuse Only	514.5
Total	7,512.0

Refuse - Active Accounts

Refuse Type	Accounts
Cans	884
Cans Low Rate	13
Compactors	4
Large Dumpster	79
Medium Dumpster	53
PA	42
Small Dumpster	44
Total	1,119

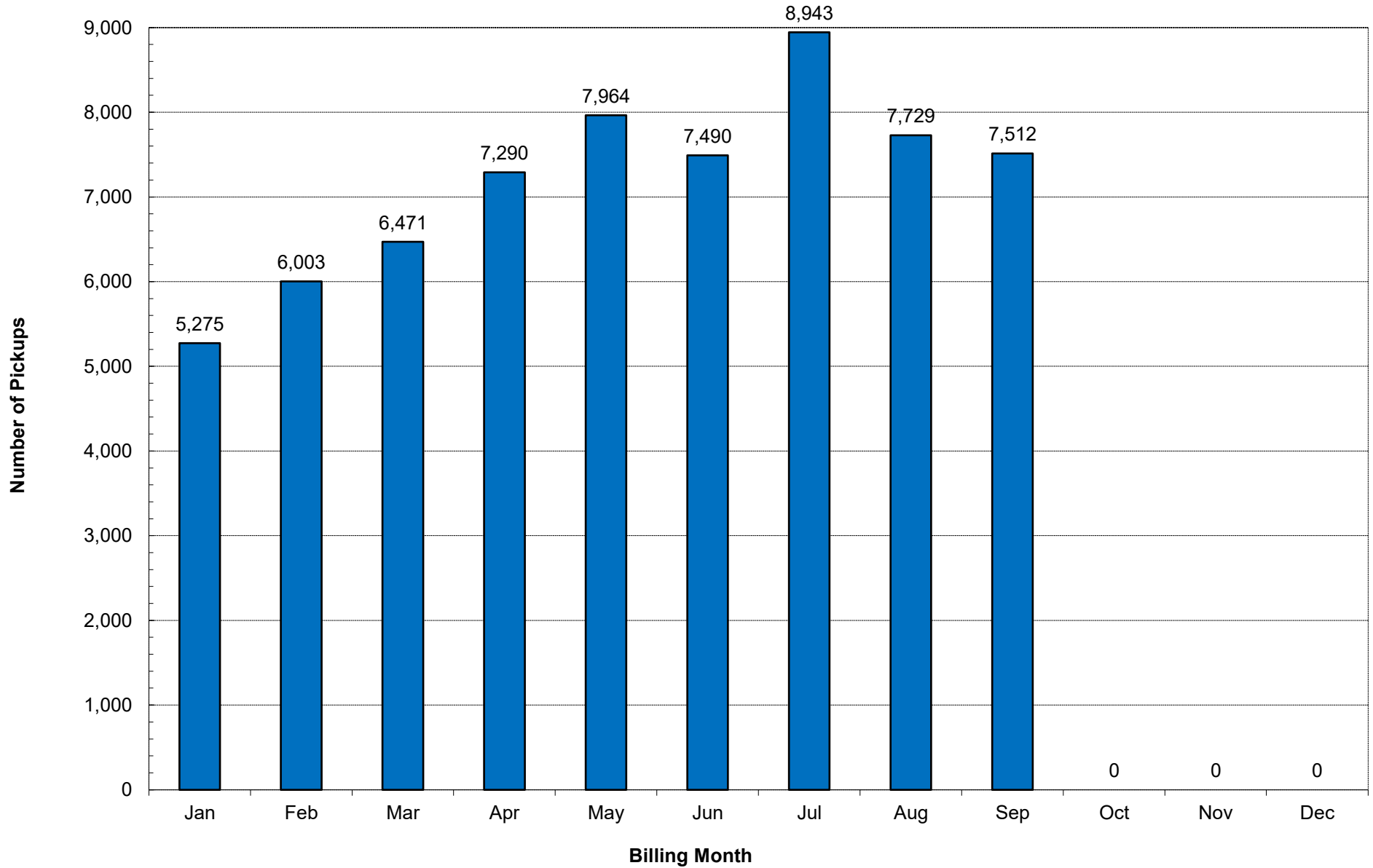
Recycle - Pickups by Class

Class	Pickups
Com	12.0
Ind	4.0
Mfr	109.0
PA	0.0
Sfr	853.0
Refuse Only	36.0
Total	1,014.0

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							-
Nov							-
Dec							-
YTD	22,572.0	4,287.5	1,561.5	5,617.5	208.0	30,428.0	64,674.5

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		Oct-27		Oct-30	
Nov-24		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		to		-	-
Nov		to		-	-
Dec		to		-	-
				273	86,849,000

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		3.69
Nov	6.19	3.47	4.32	4.32	2.1	4.68	11.31	3.67	3.92		4.89
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	18.39	28.32

Cumulative thru

Dec	29.05	26.45	25.82	26.54	23.40	36.79	35.46	25.94	22.35	18.39
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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	-	-	-
3% meter loss	397,200	346,697	259,067	-	-	-
Flushing	108,400	202,000	134,000			
SJC#3 FD use	5,000	11,000	17,500			
Leaks	90,000	90,000	200,000			
Other non-metered use						
Total other uses	(600,600)	(649,697)	(610,567)	-	-	-
Net production	13,679,400	12,359,303	9,553,433	-	-	-

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	0	81,511,616	0	0	86,849,000	0
	Monthly Use	Nov-24	0	81,511,616	0	0	86,849,000	0
	9,056,846	Dec-24	0	81,511,616	0	0	86,849,000	0
Year Total:		9	81,511,616	Cumulative	86,849,000	-5,337,384	Cumulative	317,200
3 Year Average		Use 8,656,434 gal/month	Flow 9,205,667 gal/month		Daily Flow 303,568			

Utilization of Sustainable Annual Water System Capacity

Period start: Oct-23

Period end: Sep-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.

September 1, 2024		September 30, 2024	
Day	Flow	Day	Flow
1	398	1	
2	354	2	
3	428	3	
4	369	4	
5	366	5	
6	381	6	
7	358	7	
8	392	8	
9	313	9	
10	394	10	
11	363	11	
12	329	12	
13	350	13	
14	357	14	
15	345	15	
16	334	16	
17	378	17	
18	329	18	
19	276	19	
20	351	20	
21	345	21	
22	327	22	
23	280	23	
24	336	24	
25	263	25	
26	325	26	
27	245	27	
28	306	28	
29	282	29	
30	290	30	
31		31	
30	10,164	0	-
Total Days		30	
Total Flow		10,164	
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	9.1%	238,092
Feb	1,117,694	65,357	1,481,249	458,132	2,265,621	47,735	469,649	5,905,437	7.2%	203,636
Mar	1,333,676	83,625	1,688,576	573,042	2,612,184	36,055	610,415	6,937,573	8.5%	223,793
Apr	1,399,854	103,354	1,671,902	879,576	2,781,353	51,452	488,725	7,376,216	9.0%	245,874
May	1,846,369	116,225	1,793,528	911,576	3,465,636	85,357	485,061	8,703,752	10.7%	280,766
Jun	2,068,276	105,101	1,856,041	1,060,351	3,957,803	118,566	748,646	9,914,784	12.2%	330,493
Jul	2,695,273	160,748	2,202,051	2,474,526	5,493,833	213,564	600,600	13,840,595	17.0%	446,471
Aug	2,605,206	280,775	2,086,734	1,962,972	4,448,076	172,818	649,697	12,206,278	15.0%	393,751
Sep	2,075,768	255,326	1,774,607	1,144,742	3,378,198	6,917	610,567	9,246,125	11.3%	308,204
Oct							-	-	0.0%	-
Nov							-	-	0.0%	-
Dec							-	-	0.0%	-
Total	16,398,557	1,245,259	16,305,908	9,944,475	30,937,961	770,781	5,908,675	81,511,616	100.0%	297,488
Average	1,822,062	138,362	1,811,768	1,104,942	3,437,551	85,642	492,390	Total Use		81,511,616
								Total Loss		6,792,635
% of Use	20.1%	1.5%	20.0%	12.2%	38.0%	0.9%	7.2%	Flow (Use+Loss)		86,849,000
% of Flow	18.9%	1.4%	18.8%	11.5%	35.6%	0.9%	6.8%	Loss as % of Flow		7.8%

Prevention of Wastewater Facility Overloading

Period start: Sep-23

Period end: Aug-24

INFLUENT BOD LOADING

(Pounds per Day)

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

1,600

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

1,360

Month with highest average
loading in period

Jul-24

Highest average monthly
loading in period

792

% of Design Criteria

50%

Exceeds Design Criteria?

No

Previous month's loading

737

Following month's loading

754

Exceeds Planning Threshold
for 3 consecutive months?

No

AVG. EFFLUENT FLOW

(Millions of Gallons per Day)

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

0.69000

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

0.58650

Month with highest average
flow in period

Jan-24

Highest average monthly flow
in period

0.3991

% of Design Criteria

58%

Exceeds Design Criteria?

No

Previous month's flow

0.3136

Following month's flow

0.3177

Exceeds Planning Threshold
for 3 consecutive months?

No

SUSPENDED SOLIDS LOADING

(Pounds per Day)

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)

944

Month with highest average
loading in period

Jan-24

Highest average monthly
loading in period

1,057

% of Design Criteria

95%

Exceeds Design Criteria?

No

Previous month's loading

883

Following month's loading

1,035

Exceeds Planning Threshold for
3 consecutive months?

No