

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

www.fridayharbor.org

Period ending: June 2024

*Based on July'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
Spe	3	118,566
Sfr	1,023	3,957,803
PA	83	1,060,351
Mfr	133	1,856,041
Ind	14	105,101
Com	220	2,068,276
TOTAL	1,476	9,166,138

05-Sep-24

Water - Use MTD by Location

Water Class	Accounts	Gallons
Location: IN		
Spe	3	118,566
Sfr	666	2,450,629
PA	74	841,492
Mfr	128	1,666,628
Ind	13	105,097
Com	217	2,042,417
	1,101	7,224,829
Location: Out		
Sfr	357	1,507,174
PA	9	218,859
Mfr	5	189,413
Ind	1	4
Com	3	25,859
	375	1,941,309
TOTAL	1,476	9,166,138

Water use MTD - Accounts with Sewer

Sewer Class	Accounts	Gallons
Location: IN		
Mfr In/low Strength	63	736,832
Com In/lo Strength	164	1,107,378
Dot In/lo Strength	3	41,059
Ind In/hi Strength	1	33,172
Ind In/lo Strength	10	65,708
Lmf In/lo Strength	1	2,236
Com In/hi Strength	42	881,376
Mfr In/lo Strength	58	545,341
Mhp In/lo Strength	2	302,046
PA In/hi Strength	3	143,081
PA In/lo Strength	47	516,278
Sfr IN Town	639	2,393,024
Low Rate / IN Town	12	32,567
	1,045	6,800,098
Location: Out		
UW Out/hi Strength	1	159,950
Mfr Out/lo Strength	1	8,689
Sfr Out of Town	4	17,128
	6	185,767
TOTAL	1,051	6,985,865

05-Sep-24

Refuse - Pickups by Class

Class	Pickups
Com	3,478.0
Ind	17.0
Mfr	592.0
PA	181.5
Refuse Only	502.5
Sfr	2,719.0
TOTAL	7,490.0

Refuse - Active Accounts

Refuse Type	Accounts
Cans	880
Cans Low Rate	13
Compactors	4
Large Dumpster	79
Medium Dumpste	54
PA	42
Small Dumpster	43

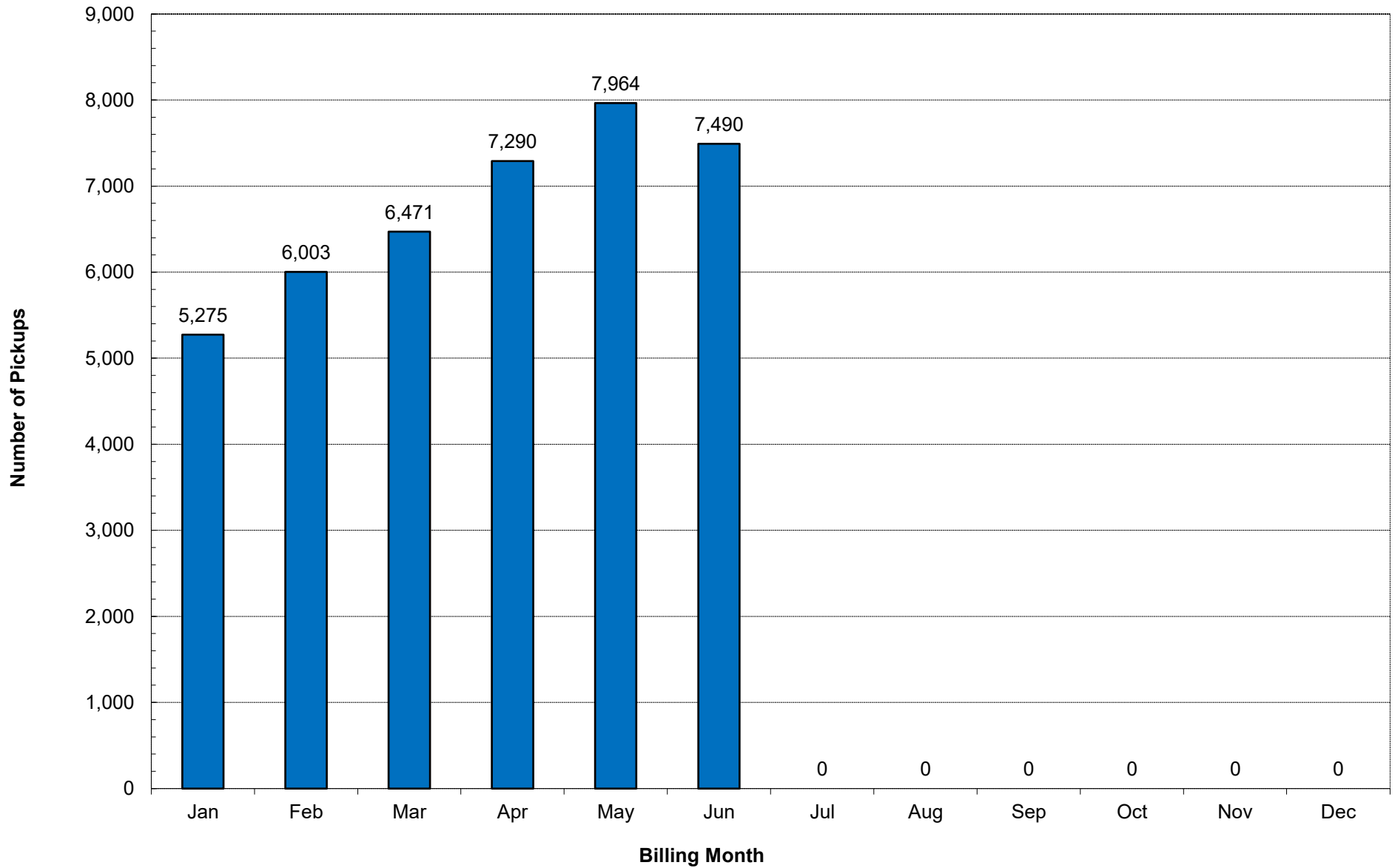
Recycle - pickups by Class

Class	Pickups
Com	9
Ind	6
Mfr	111
PA	0
RefuseOnly	33
Sfr	922
TOTAL	1,081

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							-
Aug							-
Sep							-
Oct							-
Nov							-
Dec							-
YTD	14,360.0	2,617.5	1,085.0	3,561.5	128.0	18,738.5	40,490.5

Total Refuse Pickups by Month - 2023



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		Jul-27		Jul-30	
Aug-24		Aug-27		Aug-30	
Sep-24		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		to		-	-
Aug		to		-	-
Sep		to		-	-
Oct		to		-	-
Nov		to		-	-
Dec		to		-	-
				181	49,396,000

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		0.41
Aug	0.94	0.11	0.11	0.01	0.84	0.68	0.30	0.09	0.43		0.39
Sep	1.28	1.40	0.71	1.27	2.74	2.34	3.76	0.01	0.88		1.60
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	14.12	28.14

Cumulative thru

Dec	29.05	26.45	25.82	26.54	23.40	36.79	35.46	25.94	22.35	14.12
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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	-	-	-	-	-	-
3% meter loss	-	-	-	-	-	-
Flushing						
SJC#3 FD use						
Leaks						
Other non-metered use						
Total other uses	-	-	-	-	-	-
Net production	-	-	-	-	-	-

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	0	46,218,618	0	0	49,396,000	0	
	Aug-24	0	46,218,618	0	0	49,396,000	0	
	Sep-24	0	46,218,618	0	0	49,396,000	0	
	Average	Oct-24	0	46,218,618	0	0	49,396,000	0
	Monthly Use	Nov-24	0	46,218,618	0	0	49,396,000	0
	7,703,103	Dec-24	0	46,218,618	0	0	49,396,000	0
Year Total:		6	46,218,618	Cumulative	49,396,000	-3,177,382	Cumulative	272,618
3 Year Average		Use 8,345,645 gal/month	Flow 8,877,800 gal/month		Daily Flow 288,708			

Utilization of Sustainable Annual Water System Capacity

Period start: Jul-23

Period end: Jun-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.

June 1, 2024		June 30, 2024	
Day	Flow	Day	Flow
1	329	1	
2	268	2	
3	250	3	
4	360	4	
5	334	5	
6	314	6	
7	328	7	
8	326	8	
9	375	9	
10	319	10	
11	400	11	
12	350	12	
13	313	13	
14	354	14	
15	361	15	
16	315	16	
17	303	17	
18	335	18	
19	373	19	
20	355	20	
21	362	21	
22	372	22	
23	363	23	
24	373	24	
25	406	25	
26	343	26	
27	392	27	
28	343	28	
29	421	29	
30	385	30	
31		31	
30	10,422	0	-

Total Days 30

Total Flow 10,422

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	16.0%	238,092
Feb	1,117,694	65,357	1,481,249	458,132	2,265,621	47,735	469,649	5,905,437	12.8%	203,636
Mar	1,333,676	83,625	1,688,576	573,042	2,612,184	36,055	610,415	6,937,573	15.0%	223,793
Apr	1,399,854	103,354	1,671,902	879,576	2,781,353	51,452	488,725	7,376,216	16.0%	245,874
May	1,846,369	116,225	1,793,528	911,576	3,465,636	85,357	485,061	8,703,752	18.8%	280,766
Jun	2,068,276	105,101	1,856,041	1,060,351	3,957,803	118,566	748,646	9,914,784	21.5%	330,493
Jul							-	-	0.0%	-
Aug							-	-	0.0%	-
Sep							-	-	0.0%	-
Oct							-	-	0.0%	-
Nov							-	-	0.0%	-
Dec							-	-	0.0%	-
Total	9,022,310	548,410	10,242,516	4,362,235	17,617,854	377,482	4,047,811	46,218,618	100.0%	253,948
Average	1,503,718	91,402	1,707,086	727,039	2,936,309	62,914	337,318	Total Use		46,218,618
								Total Loss		3,851,552
% of Use	19.5%	1.2%	22.2%	9.4%	38.1%	0.8%	8.8%	Flow (Use+Loss)		49,396,000
% of Flow	18.3%	1.1%	20.7%	8.8%	35.7%	0.8%	8.2%	Loss as % of Flow		7.8%

Prevention of Wastewater Facility Overloading

Period start: May-23

Period end: Apr-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

Jun-23

Highest average monthly
loading in period

788

% of Design Criteria

49%

Exceeds Design Criteria?

No

Previous month's loading

806

Following month's loading

499

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