

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

www.fridayharbor.org

Period ending: February 2024

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

Data provided by
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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	47,735
Sfr	1,019	2,265,621
PA	82	458,132
Mfr	134	1,481,249
Ind	14	65,357
Com	220	1,117,694
TOTAL	1,472	5,435,788

Water - Use MTD by Location

Water Class	Accounts	Gallons
Location: IN		
Spe	3	47,735
Sfr	662	1,586,626
PA	73	342,692
Mfr	129	1,417,941
Ind	13	62,032
Com	217	1,097,776
	1,097	4,554,802
Location: Out		
Sfr	357	678,995
PA	9	115,440
Mfr	5	63,308
Ind	1	3,325
Com	3	19,918
	375	880,986
TOTAL	1,472	5,435,788

06-May-24

Water use MTD - Accounts with Sewer

Sewer Class	Accounts	Gallons
Location: IN		
Mfr In/low Strength	55	535,219
Com In/lo Strength	164	581,624
Dot In/lo Strength	3	27,274
Ind In/hi Strength	1	17,111
Ind In/lo Strength	10	43,745
Lmf In/lo Strength	1	811
Com In/hi Strength	42	495,115
Mfr In/lo Strength	66	543,155
Mhp In/lo Strength	2	273,005
PA In/hi Strength	3	51,703
PA In/lo Strength	46	207,588
Sfr IN Town	637	1,547,317
Low Rate / IN Town	12	19,327
	1,042	4,342,994
Location: Out		
UW Out/hi Strength	1	76,841
Mfr Out/lo Strength	1	10,315
Sfr Out of Town	4	6,828
	6	93,984
TOTAL	1,048	4,436,978

06-May-24

Refuse - Pickups by Class

Class	Pickups
Com	2,797.0
Ind	20.0
Mfr	559.5
PA	143.5
Refuse Only	377.0
Sfr	2,106.0
TOTAL	6,003.0

Refuse - Active Accounts

Refuse Type	Accounts
Cans	880
Cans Low Rate	13
Compactors	4
Large Dumpster	77
Medium Dumpste	55
PA	42
Small Dumpster	41

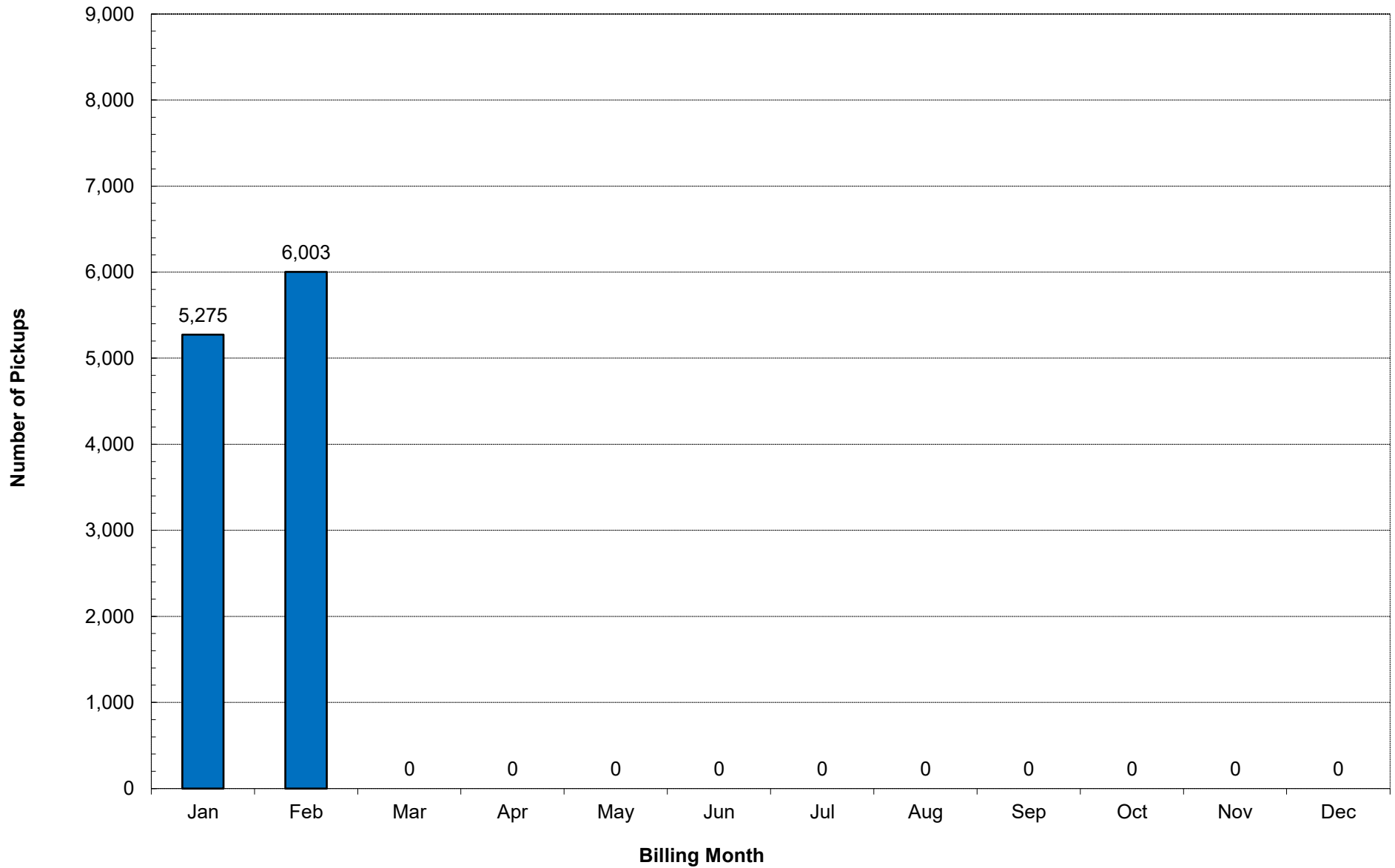
Recycle - pickups by Class

Class	Pickups
Com	2
Ind	5
Mfr	85
PA	0
RefuseOnly	32
Sfr	844
TOTAL	968

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							-
Apr							-
May							-
Jun							-
Jul							-
Aug							-
Sep							-
Oct							-
Nov							-
Dec							-
YTD	4,301.0	733.0	294.5	1,141.5	41.5	4,765.5	11,277.0

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		Mar-27		Mar-30	
Apr-24		Apr-27		Apr-30	
May-24		May-27		May-30	
Jun-24		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		to		-	-	
Apr		to		-	-	
May		to		-	-	
Jun		to		-	-	
Jul		to		-	-	
Aug		to		-	-	
Sep		to		-	-	
Oct		to		-	-	
Nov		to		-	-	
Dec		to		-	-	
				59	14,303,000	

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		2.13
Apr	0.51	0.75	2.20	3.10	1.61	1.38	1.12	2.25	1.71		1.63
May	0.30	0.48	1.61	0.07	1.29	1.49	0.40	1.70	0.70		0.89
Jun	0.14	1.22	0.75	0.72	0.61	1.25	0.69	1.70	0.81		0.88
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	7.38	28.01

Cumulative thru

Dec	29.05	26.45	25.82	26.54	23.40	36.79	35.46	25.94	22.35	7.38
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TOWN OF FRIDAY HARBOR

Net Water Production - 2023

Amounts in Gallons

	Jan	Feb	Mar	Apr	May	Jun
Gross Production	7,793,000	6,510,000	-	-	-	-
3% meter loss	184,066	163,074	-	-	-	-
Flushing	256,250	101,575				
SJC#3 FD use	5,000	5,000				
Leaks	800,000	200,000				
Other non-metered use	-					
Total other uses	(1,245,316)	(469,649)	-	-	-	-
Net production	6,547,684	6,040,351	-	-	-	-

	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	0	13,286,294	0	0	14,303,000	0	
	Apr-24	0	13,286,294	0	0	14,303,000	0	
	May-24	0	13,286,294	0	0	14,303,000	0	
	Jun-24	0	13,286,294	0	0	14,303,000	0	
	Jul-24	0	13,286,294	0	0	14,303,000	0	
	Aug-24	0	13,286,294	0	0	14,303,000	0	
	Sep-24	0	13,286,294	0	0	14,303,000	0	
	Average	Oct-24	0	13,286,294	0	0	14,303,000	0
	Monthly Use	Nov-24	0	13,286,294	0	0	14,303,000	0
	6,643,147	Dec-24	0	13,286,294	0	0	14,303,000	0
Year Total:		2	13,286,294	Cumulative	14,303,000	-1,016,706	Cumulative	241,944
3 Year Average		Use 8,362,962 gal/month	Flow 8,893,885 gal/month		Daily Flow 278,483			

Utilization of Sustainable Annual Water System Capacity

Period start: Mar-23
Period end: Feb-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.

29 Days in reporting period.

February 1, 2024		February 29, 2024	
Day	Flow	Day	Flow
1	230	1	
2	252	2	
3	232	3	
4	225	4	
5	248	5	
6	195	6	
7	230	7	
8	224	8	
9	224	9	
10	208	10	
11	244	11	
12	203	12	
13	205	13	
14	229	14	
15	235	15	
16	225	16	
17	203	17	
18	217	18	
19	225	19	
20	222	20	
21	225	21	
22	232	22	
23	221	23	
24	222	24	
25	218	25	
26	227	26	
27	205	27	
28	269	28	
29	215	29	
30		30	
31		31	
29	6,510	0	-
Total Days		29	
Total Flow		6,510	

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	55.6%	238,092
Feb	1,117,694	65,357	1,481,249	458,132	2,265,621	47,735	469,649	5,905,437	44.4%	203,636
Mar							-	-	0.0%	-
Apr							-	-	0.0%	-
May							-	-	0.0%	-
Jun							-	-	0.0%	-
Jul							-	-	0.0%	-
Aug							-	-	0.0%	-
Sep							-	-	0.0%	-
Oct							-	-	0.0%	-
Nov							-	-	0.0%	-
Dec							-	-	0.0%	-
Total	2,374,135	140,105	3,232,469	937,690	4,800,878	86,052	1,714,965	13,286,294	100.0%	221,438
Average	1,187,068	70,053	1,616,235	468,845	2,400,439	43,026	142,914	Total Use		13,286,294
								Total Loss		1,107,191
% of Use	17.9%	1.1%	24.3%	7.1%	36.1%	0.6%	12.9%	Flow (Use+Loss)		14,303,000
% of Flow	16.6%	1.0%	22.6%	6.6%	33.6%	0.6%	12.0%	Loss as % of Flow		7.7%

Prevention of Wastewater Facility Overloading

Period start: Feb-23

Period end: Jan-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

Mar-23

Highest average monthly
loading in period

857

% of Design Criteria

54%

Exceeds Design Criteria?

No

Previous month's loading

686

Following month's loading

726

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