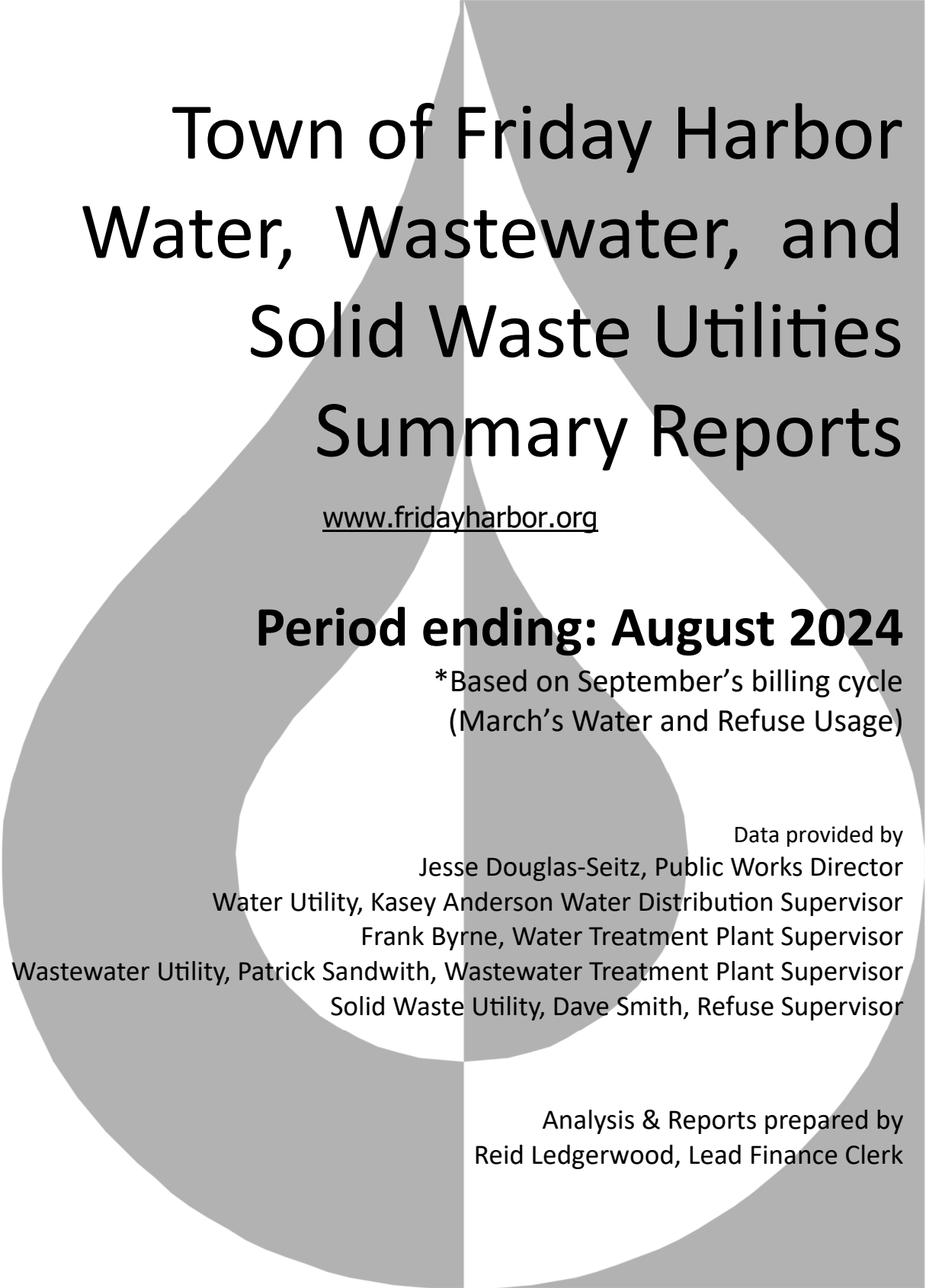




Town of Friday Harbor Water, Wastewater, and Solid Waste Utilities Summary Reports

www.fridayharbor.org

Period ending: August 2024

*Based on September'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	1,112,994
Ind	14	75,521
Mfr	133	1,558,723
PA	82	441,969
Sfr	1,028	2,465,408
Spe	3	2,594
Total	1,480	5,657,209

Water - Use MTD by Location

Water Class	Accounts	Gallons
-------------	----------	---------

Location: In

Com	217	1,093,756
Ind	13	71,157
Mfr	128	1,465,341
PA	73	330,848
Sfr	667	1,720,737
Spe	2	1,306

	1,100	4,683,145
--	-------	-----------

Location: Out

Com	3	19,238
Ind	1	4,364
Mfr	5	93,382
PA	9	111,121
Sfr	361	744,671
Spe	1	1,288

	380	974,064
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Total	1,480	5,657,209
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Water Use MTD - Accounts with Sewer Connections

Sewer Class	Accounts	Gallons
Location: In		
Com In/hi Strength	42	430,032
Com In/lo Strength	163	641,910
Dot In/lo Strength	2	55,306
Ind In/hi Strength	1	18,392
Ind In/lo Strength	10	46,323
Lmf In/lo Strength	1	4,637
Low Rate / IN Town	14	31,961
Mfr In/low Strength	120	1,111,130
Mhp In/lo Strength	2	277,157
PA In/hi Strength	3	52,091
PA In/lo Strength	46	130,849
Sfr IN Town	638	1,674,175
	1,042	4,473,963
Location: Out		
Mfr Out/lo Strength	1	7,943
Sfr Out of Town	4	5,013
UW Out/hi Strength	1	79,534
	6	92,490
Total	1,048	4,566,453

Refuse - Pickups by Class

Class	Pickups
Com	3,600.5
Ind	25.0
Mfr	704.5
PA	151.5
Sfr	2,689.0
Refuse Only	558.5
Total	7,729.0

Refuse - Active Accounts

Refuse Type	Accounts
Cans	880
Cans Low Rate	14
Compactors	4
Large Dumpster	78
Medium Dumpster	54
PA	42
Small Dumpster	44
Total	1,116

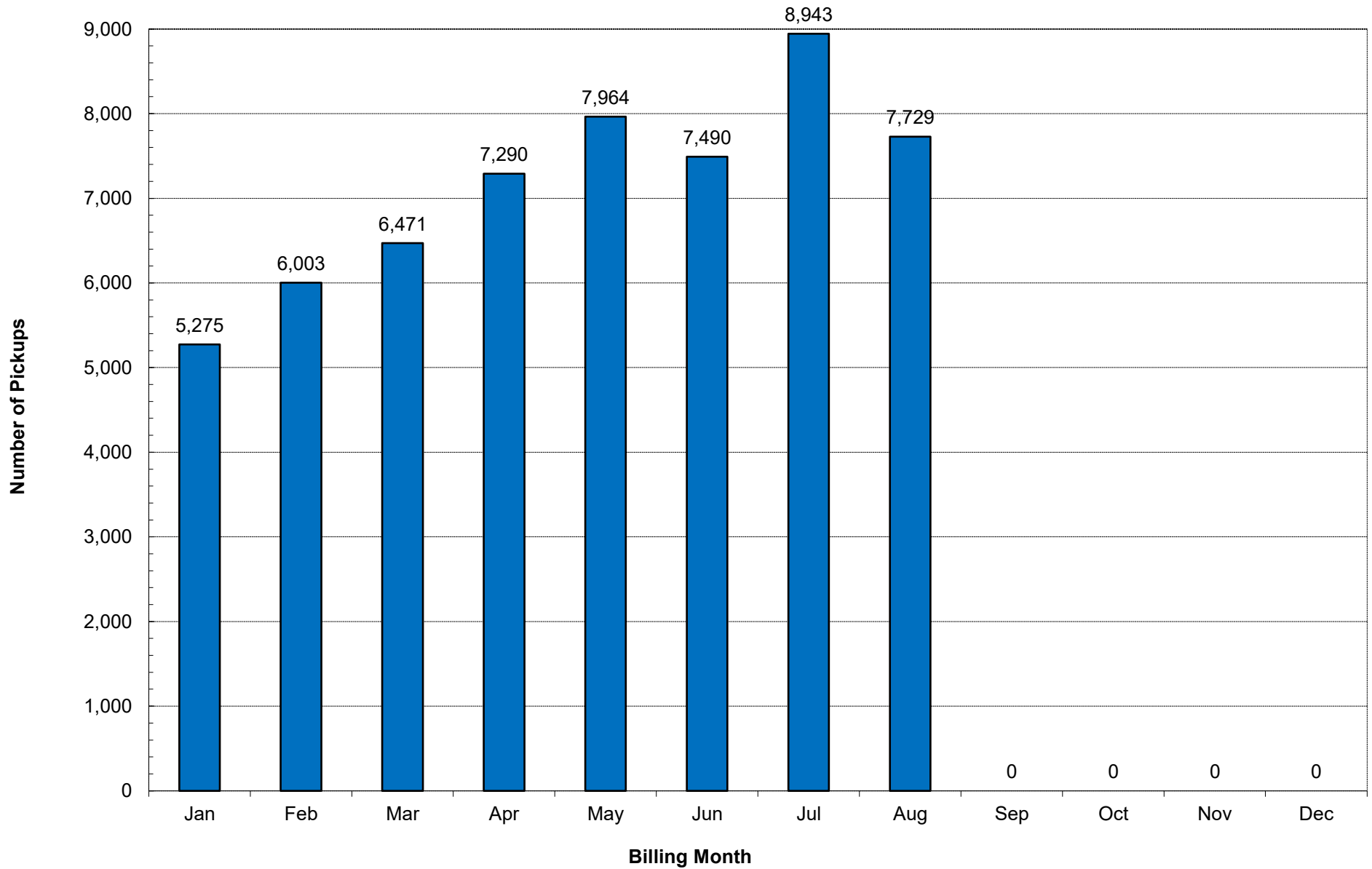
Recycle - Pickups by Class

Class	Pickups
Com	8.0
Ind	3.0
Mfr	83.0
PA	0.0
Sfr	749.0
Refuse Only	27.0
Total	870.0

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							-
Oct							-
Nov							-
Dec							-
YTD	20,080.0	3,773.0	1,373.5	4,964.0	190.0	26,782.0	57,162.5

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		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		to		-	-
Oct		to		-	-
Nov		to		-	-
Dec		to		-	-
				243	76,685,000

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		1.60
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	17.03	28.35

Cumulative thru

Dec	29.05	26.45	25.82	26.54	23.40	36.79	35.46	25.94	22.35	17.03
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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	-	-	-	-
3% meter loss	397,200	346,697	-	-	-	-
Flushing	108,400	202,000				
SJC#3 FD use	5,000	11,000				
Leaks	90,000	90,000				
Other non-metered use						
Total other uses	(600,600)	(649,697)	-	-	-	-
Net production	13,679,400	12,359,303	-	-	-	-

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	0	72,265,491	0	0	76,685,000	0	
	Average	Oct-24	0	72,265,491	0	0	76,685,000	0
	Monthly Use	Nov-24	0	72,265,491	0	0	76,685,000	0
	9,033,186	Dec-24	0	72,265,491	0	0	76,685,000	0
Year Total:		8	72,265,491	Cumulative	76,685,000	-4,419,509	Cumulative	314,500
3 Year Average		Use 8,638,007 gal/month	Flow 9,175,719 gal/month		Daily Flow 302,668			

Utilization of Sustainable Annual Water System Capacity

Period start: Sep-23
Period end: Aug-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.

31 Days in reporting period.

August 1, 2024			August 31, 2024		
Day		Flow	Day		Flow
1		409	1		
2		456	2		
3		430	3		
4		449	4		
5		444	5		
6		420	6		
7		421	7		
8		453	8		
9		484	9		
10		459	10		
11		400	11		
12		433	12		
13		423	13		
14		423	14		
15		396	15		
16		485	16		
17		449	17		
18		523	18		
19		360	19		
20		469	20		
21		395	21		
22		399	22		
23		416	23		
24		374	24		
25		346	25		
26		427	26		
27		394	27		
28		345	28		
29		319	29		
30		403	30		
31		405	31		
31		13,009	0		-

Total Days 31

Total Flow 13,009

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	10.2%	238,092
Feb	1,117,694	65,357	1,481,249	458,132	2,265,621	47,735	469,649	5,905,437	8.2%	203,636
Mar	1,333,676	83,625	1,688,576	573,042	2,612,184	36,055	610,415	6,937,573	9.6%	223,793
Apr	1,399,854	103,354	1,671,902	879,576	2,781,353	51,452	488,725	7,376,216	10.2%	245,874
May	1,846,369	116,225	1,793,528	911,576	3,465,636	85,357	485,061	8,703,752	12.0%	280,766
Jun	2,068,276	105,101	1,856,041	1,060,351	3,957,803	118,566	748,646	9,914,784	13.7%	330,493
Jul	2,695,273	160,748	2,202,051	2,474,526	5,493,833	213,564	600,600	13,840,595	19.2%	446,471
Aug	2,605,206	280,775	2,086,734	1,962,972	4,448,076	172,818	649,697	12,206,278	16.9%	393,751
Sep							-	-	0.0%	-
Oct							-	-	0.0%	-
Nov							-	-	0.0%	-
Dec							-	-	0.0%	-
Total	14,322,789	989,933	14,531,301	8,799,733	27,559,763	763,864	5,298,108	72,265,491	100.0%	296,170
Average	1,790,349	123,742	1,816,413	1,099,967	3,444,970	95,483	441,509	Total Use		72,265,491
								Total Loss		6,022,124
% of Use	19.8%	1.4%	20.1%	12.2%	38.1%	1.1%	7.3%	Flow (Use+Loss)		76,685,000
% of Flow	18.7%	1.3%	18.9%	11.5%	35.9%	1.0%	6.9%	Loss as % of Flow		7.9%

Prevention of Wastewater Facility Overloading

Period start: Aug-23

Period end: Jul-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