

Town of Fairfield Wastewater Treatment Plant Permit No.

Reporting Year: From: Jan 1 2024 To:

Max monthly design flow (dry):	232000	gpd	Design Point
Max monthly design flow (wet):	232000	gpd	Present
Peak daily design flow:	579000	gpd	Projected
Design Influent BOD loading:	193	lbs/day	Compliance with effluent
Design Influent TSS loading:	212	lbs/day	Yes

Month	Avg flow (gpd)	Peak flow (gpd)	BOD (lbs/day)
January	46595	84550	63.1
February	59736	255000	206.4
March	78335	109700	50.4
April	64478	99650	105.0
May	44885	90300	127.6
June	32537	62650	84.4
July	25345	253500	115.5
August	16588	19000	287.0
September	16405	22500	188.5
October	16911	29644	118.0
November	30307	58500	74.4
December	36511	66500	83.5

	Month	Max Monthly Average Value	Design Capacity	% Design Capacity
Dry Weather Flow gpd	May	44885	232000	19.35%
Wet Weather Flow gpd	March	78335	232000	33.77%
Peak Flow gpd	February	255000	579000	44.04%
BOD (lbs/day)	August	287.0	193.0	** 148.7%
TSS (lbs/day)	February	6030.8	212.0	** 2844.69%

If actual flow or wasteload reaches 85% of design capacity for three consecutive months, the permittee shall suspend their permit.

Year	Flow (gpd)	BOD (lbs/day)	TSS (lbs/day)
2024	47474	133.00	491.50

2023	67802	133.00	263.50
2022	277900	202.00	174.00
2021	956500	212.00	193.00

Estimated year when the design capacity is projected to be reached:

Comments:

Design Capacity Graphs

Table 4: Max month Flow Data

Year	max month a Flow, gpd	design cap, gpd
2024	47474	232000
2023	67802	232000
2022	59,083	232,000
2021	956,500	232,000
2020	168,700	232,000
2019	326,184	232,000
2018	956,500	232,000
2017	168,700	232,000
2016	196,130	232,000
2015	225,290	232,000
2014	333,390	232,000
2013	417,170	232,000

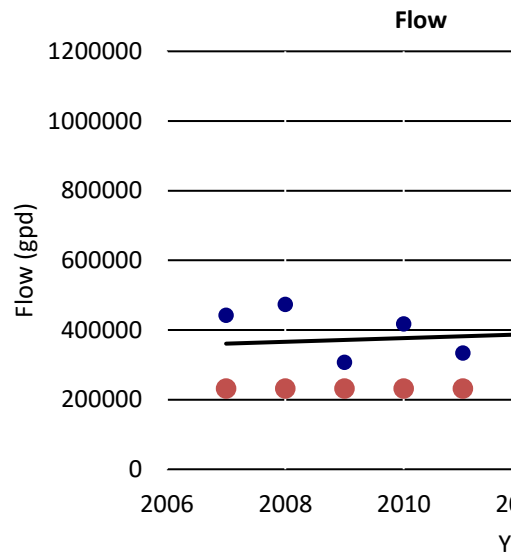
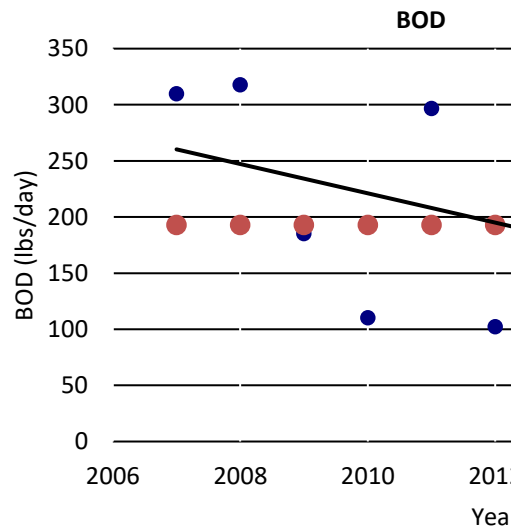


Table 5: Max month BOD Data

Year	max month a BOD, lbs/day	design cap lbs/day
2019	212.0	193.0
2018	152.1	193.0
2017	175.0	193.0
2016	212.0	193.0
2015	152.1	193.0
2014	175.0	193.0
2013	154.3	193.0
2012	102.4	193.0
2011	296.6	193.0
2010	110.2	193.0



January	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0
February	#DIV/0!	#DIV/0!	2.9	6.5	1.7	2	7.0
March	18648	10.6	1.0	16.5	2.7	37	7.2
April	22093	6.4	1.3	2.2	0.6	2	7.2
May	24935	4.3	1.2	4.3	1.0	2	7.1
June	20108	5.1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0
July	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0
August	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0
September	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0
October	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0
November	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0
December	#DIV/0!	#DIV/0!					

Table 8: Effluent monthly **MAXIMUMS** for su

Month	Max flow gpd	Effluent BOI mg/L	Effluent TSS			Fecal Coliform no./100 mL	Min pH Std. Units
			Lb.	mg/L	Lb.		
			#DIV/0!	#DIV/0!	#DIV/0!	0	0.0
January	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	0.0
February	0	#DIV/0!	2.9	6.5	1.7	2	7.0
March	55550	10.6	1.0	16.5	2.7	46	7.2
April	64400	6.4	1.3	2.2	0.6	2	7.2
May	0	4.3	1.2	4.3	1.0	2	7.1
June	45200	5.1	#DIV/0!	#DIV/0!	#DIV/0!	0	0.0
July	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	0.0
August	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	0.0
September	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	0.0
October	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	0.0
November	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	0.0
December	0	#DIV/0!					

Table 9: Effluent monthly **VIOLATIONS** calc

Month	Max flow gpd	Effluent BOI mg/L	Effluent TSS			Fecal Coliform no./100 mL	pH MIN S.U
			Lb.	mg/L	Lb.		
			#DIV/0!	#DIV/0!	#DIV/0!		
January		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
February		#DIV/0!					
March							
April							
May							
June			#DIV/0!	#DIV/0!	#DIV/0!		
July		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
August		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
September		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
October		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
November		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
December		#DIV/0!					

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31-Dec-24

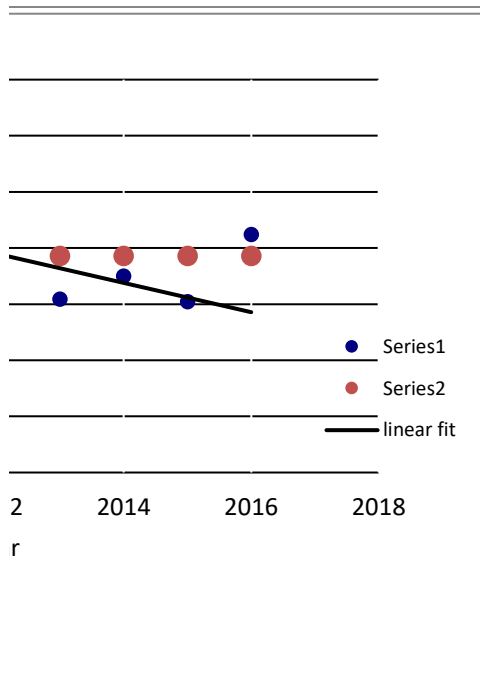
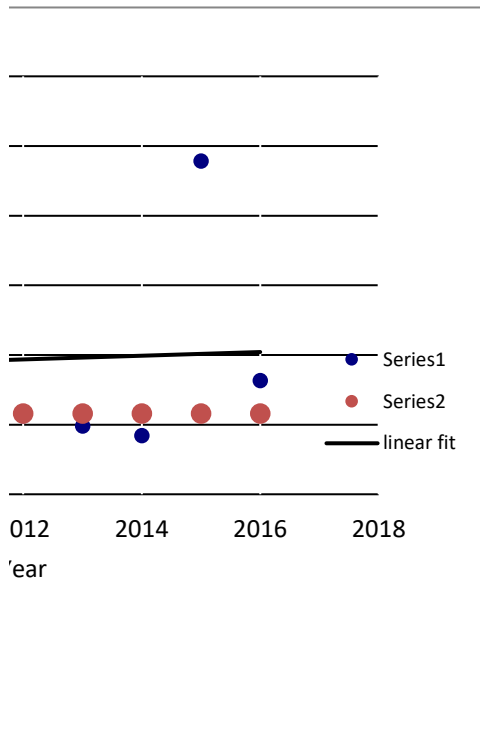
opulation Equivalent:	800
t Population Served:	620
d Population growth:	1.90%
ent permit limitation?	No

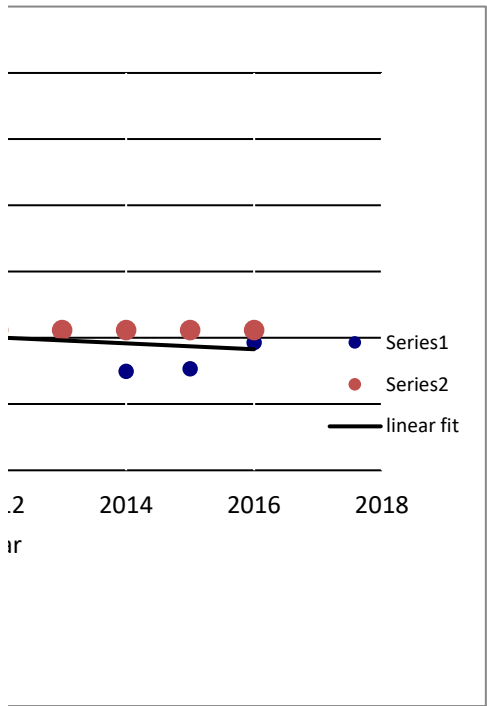
TSS (lbs/day)
53.9
6030.8
259.1
721.5
313.5
76.9
79.0
264.0
250.5
124.9
56.2
65.0

Previous year Max Monthly Avg value	% Increase / Decrease
47474	-5.45%
73502	6.58%
169950	50.04%
133.0	115.79%
491.5	1127.01%

apacity

ubmit a plan and schedule in accordance with





is your projection.

near fit line (solid).

m wet weather design flow

Max pH Std. Units	Temperature °C Avg.	NH3-N mg/L	NH3-N Lb.
0.0		#DIV/0!	

