

City of Montesano**Wastewater Treatment Plant****Annual Treatment Facility Review Report (Wasteload Assessment)**Reporting Year: From: 1/1/2023 To: 12/31/2023**Design Parameters:**

Max monthly design flow (dry):	<u>0.67</u> mgd	Design Population Equivalent:	<u>6410</u>
Max monthly design flow (wet):	<u>0.67</u> mgd	Present Population Served:	<u>4167</u>
Peak daily design flow:	<u>2</u> mgd	Projected Population growth:	<u>2030+</u>
Design Influent BOD loading:	<u>1060</u> lbs/day	Compliance with effluent permit limitation?	
Design Influent TSS loading:	<u>220</u> lbs/day	<u>X</u> Yes	No

Table 1, Influent Monthly Average Loading & Peak Daily Flow (From Monthly DMR)

Month	Avg flow (mgd)	Peak flow (mgd)	BOD (lbs/day)	TSS (lbs/day)
January	0.3030	0.3720	393.0	97.0
February	0.2910	0.3250	402.0	91.0
March	0.2930	0.3660	373.0	90.0
April	0.2910	0.3580	376.0	93.0
May	0.2760	0.3180	378.0	99.0
June	0.2740	0.3100	348.0	91.0
July	0.2770	0.3070	355.0	98.0
August	0.2850	0.3240	317.0	96.0
September	0.2830	0.3280	312.0	87.0
October	0.2920	0.3240	341.0	94.0
November	0.3150	0.3720	345.0	104.0
December	0.3300	0.5170	361.0	111.0

Table 2, Maximum Influent Monthly Average Loading (Highest Month)

	Month	Max Monthly Average Value	Design Capacity	% Design Capacity	Previous year Max Monthly Avg value	% Increase / Decrease
Dry Weather Flow MGD	October	0.2920	0.6700	43.58%	0.3030	-3.63%
Wet Weather Flow MGD	December	0.3300	0.6700	49.25%	0.3760	-12.23%
Peak Flow MGD	December	0.5170	2.0000	25.85%	0.9770	-47.08%
BOD (lbs/day)	February	402.0	1,060.0000	37.92%	425.0	-5.41%
TSS (lbs/day)	December	111.0	220.0000	50.45%	120.0	-7.50%

* Flow or wasteload reached 85% of design capacity; ** Flow or wasteload reached or exceeded its design capacity

If actual flow or wasteload reaches 85% of design capacity for three consecutive months, the permittee shall submit a plan and schedule in accordance with their permit.

Table 3, Maximum Monthly Average Data for the Last Three Years (For Plotting)

Year	Flow (mgd)	BOD (lbs/day)	TSS (lbs/day)
2023	0.517	402	111
2022	0.376	425	120
2021	0.377	416	128

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

2030+

Comments:

Signature and Title
Design Capacity Graphs

Table 4: Max month Flow Data

Year	max month avg Flow, mgd	design cap, mgd
2023	0.517	0.67
2022	0.376	0.67
2021	0.362	0.67
2020	0.377	0.67
2019	0.317	0.67
2018	0.331	0.67
2017	0.338	0.67
2016	0.464	0.67
2015	0.445	0.67
2014	0.414	0.67

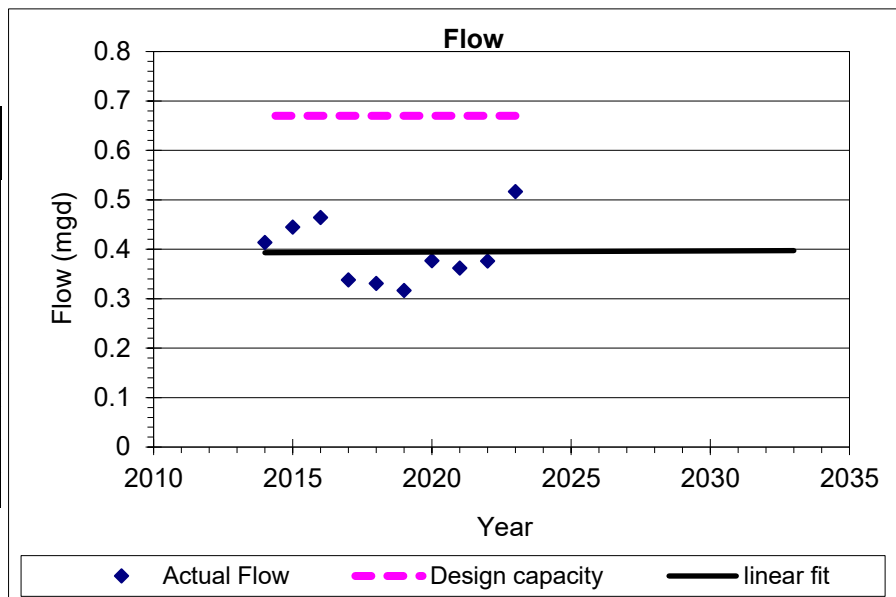


Table 5: Max month BOD Data

Year	max month avg BOD, lbs/day	design cap lbs/day
2023	402	1160
2022	425	1160
2021	416	1160
2020	383	1160
2019	384	1160
2018	382	1160
2017	425	1160
2016	546	1160
2015	490	1160
2014	465	1160

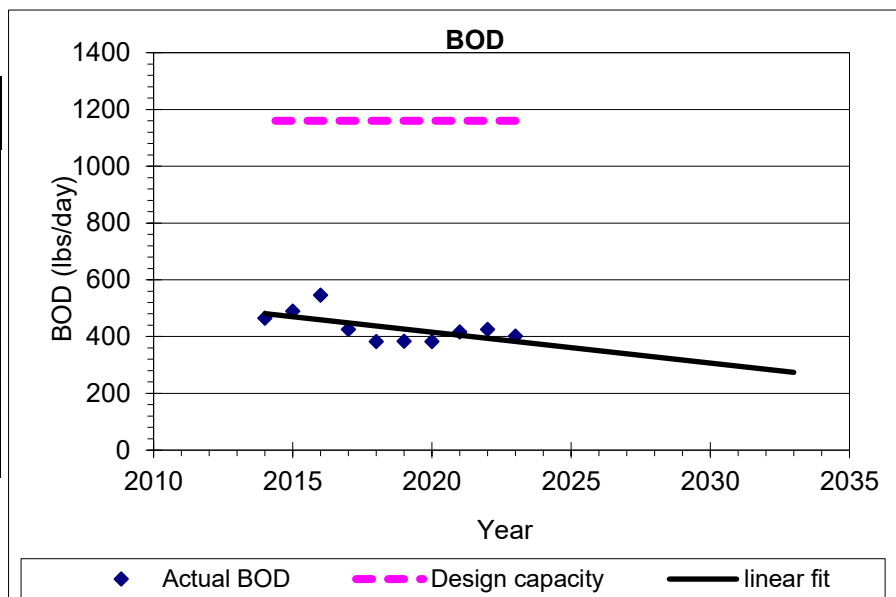
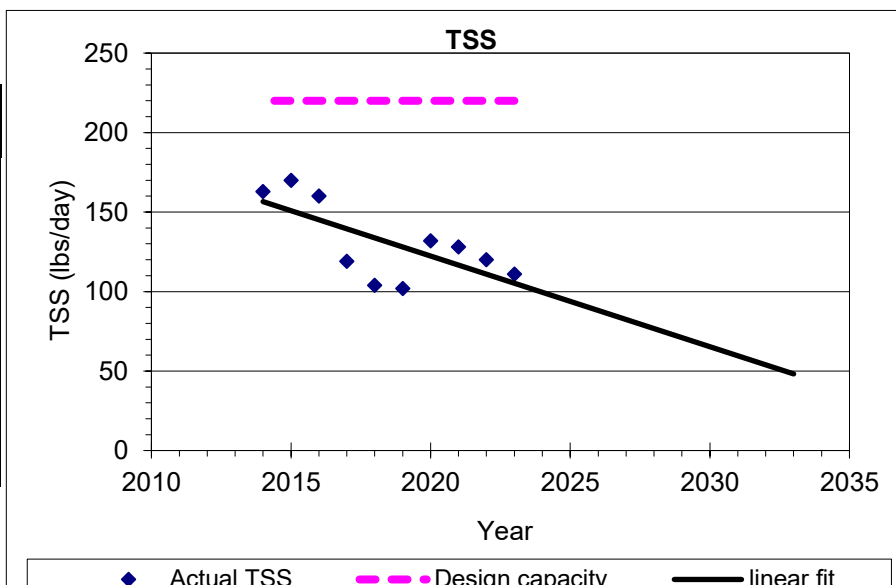


Table 6: Max month TSS Data

Year	max month avg TSS, lbs/day	design cap lbs/day
2023	111	220
2022	120	220
2021	128	220
2020	132	220
2019	102	220
2018	104	220
2017	119	220
2016	160	220
2015	170	220
2014	163	220



▼ Actual TCC	— Design capacity	incentive
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