August Superintendents Report

September 10, 2024

In August we received 7.14 inches of Rain, for a total of 34.78 inches this year.

The Average flow was 18.35 MGD with a Total of 568,810,000 gallons.

Last year between January 1 and August 31 we pumped 4,268,171,000 gallons

This year we have pumped 406,090,000 gallons more in the same time period.

CBOD = mg/L, TSS = 4 mg/L, Fecals 10 MPN, Ammonia = 0.16 mg/L and Phos =0.29 mg/L.

Micro-Turbines Produced 40,445 KWH, Solar produced 6,578 KWH.

Electricians worked in support of Matco to replace one of the parallel feeds to feeder #1 in the BAF electrical room.

While doing so they took the opportunity to remove power to the NW 4800 volt transformer and perform maintenance on it and a 480 power panel and 480-120 Transformer and receptacle panel.

Operations worked with the Electrical department and Matco to facilitate operating under the ½ electric service to the CN cells. The fact that we had a low flow and modified the operations of the CN cells and, blowers and backwash tanks enabled Matco to perform there work during regular work hours, ultimately saving money in doing so.

Mechanics continue performing their maintenance tasks utilizing the CMMS software and completed the stairs at the thickener #3 project area.

We are waiting for exact quotes for repair of the plant water pumps so we may move forward with that project.

We have received quotes for the pedestal repairs from Le chase and Vacri with PC construction offering to pay the Vacri quote. These details will have to come from the city’s attorney, we have no knowledge of the details of that transaction.

TPS project: EDR came down and took photos and notes of the building and conditions for engineering.

We continue to make progress on the CBS and PBS NOVs. The last big obstacle we overcame there was the insurance for the underground PBS tank.

Superintendents Summary Report for 2024

	FLOW	Precip	CBOD5		REM	Tot Susp Solids		REM	Settleable Solids		REM	Total Nitrogen		REM	Phosphorous		REM	Ammonia		REM	TKN		REM
	MGD	Inches	In	out	%	In	out	%	In	out	%	In	out	%	In	out	%	In	out		In	out	
	AVG			limit			limit			limit			limit			limit			limit			limit	
			18 mg/L			20 mg/L			0.3 mL/L			6.0 mg/L			1.0 mg/L			1800 lbs./Day			11000 lbs/Day		
Jan	26.40	4.71	116	10	91%	123	5	96%	7.40	0.10	99%	12.9	3.6	72%	2.40	0.340	86%	7.30	0.14	98%	12.3	1.2	90%
Feb	18.72	1.63	181	8	96%	194	3	98%	11.10	0.10	99%	17.8	3.9	78%	3.80	0.290	92%	12.90	0.15	99%	17.7	1.5	92%
Mar	24.33	4.10	137	7	95%	153	4	97%	7.70	0.10	99%	14.2	4.8	66%	2.64	0.358	86%	9.00	0.149	98%	13.7	1.4	90%
Apr	22.87	4.42	150	8	95%	170	5	97%	9.80	0.10	99%	14.9	4.4	70%	3.19	0.459	86%	9.50	0.202	98%	14.6	1.3	91%
May	16.12	3.67	175	7	96%	176	4	98%	13.00	0.10	99%	20.4	4.0	80%	3.10	0.421	86%	10.70	0.151	99%	20.3	1.3	94%
Jun	12.56	3.09	193	10	95%	193	7	96%	16.30	0.10	99%	25.6	2.0	92%	4.02	0.564	86%	12.70	0.331	97%	25.6	1.6	94%
Jul	13.79	6.02	178	9	95%	194	6	97%	14.90	0.10	99%	21.4	2.3	89%	3.74	0.480	87%	12.20	0.199	98%	21.3	1.4	93%
Aug	18.35	7.14				189	4	98%	12.50	0.10	99%				3.57	0.290	92%	10.70	0.164	98%			
Sep																							
Oct																							
Nov																							
Dec																							
		TOT																					
Avg	19.14	34.78	161	8	95%	174	4.8	97%	11.59	0.10	99%	18.2	3.6	78%	3.31	0.400	88%	10.63	0.19	98%	17.93	1.39	92%

With 4 data points remaining, TN = 3.4 mg/L and TKN = 1.1 mg/L

Ammonia limit equates to approx 6 mg/L monthly Avg. / TKN limit equates to 38 mg/L Monthly Avg.

TN limit is 6.0 mg/L From O1A REM = Removal %

The Permit for TN = Monitoring Monthly Avg. from Outfall OO1, Not to Exceed 639,261 lbs. as a Rolling 12 Month Avg.

Outfall OO1 includes Flow Through O1A (DN cells) and O1B (DN Cell Bypass)

These numbers represent Outfall from OO1

Landfill 2024 Summary

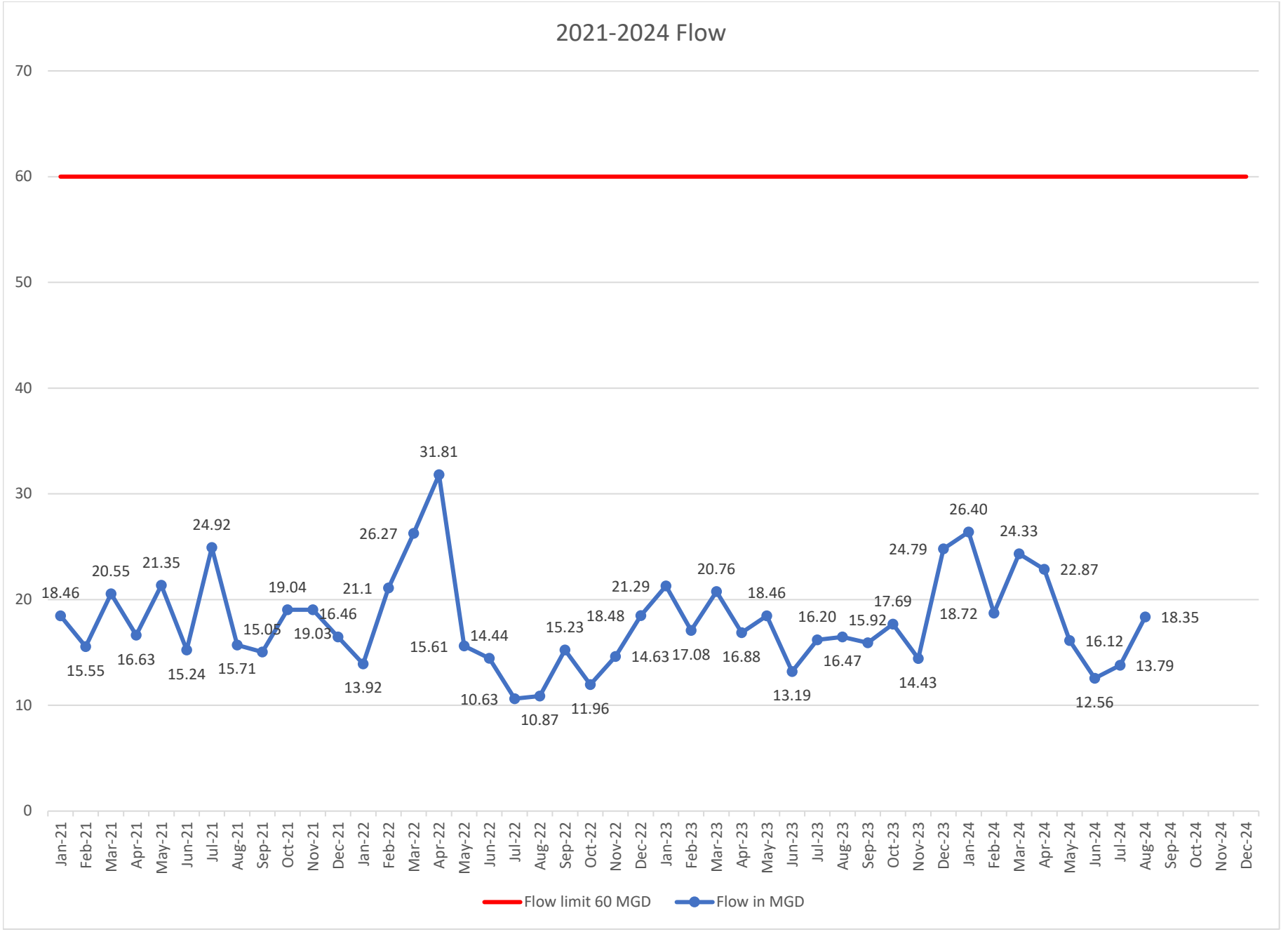
Date	Digested	Lime Stab	Solids Total		Bar screen	Grit and Screen		Grease
	Tons	Tons	Tons	Cost	Tons	Tons	Cost	Tons
January	717.02		717.02	$28,680.80		22.98	$1,034.10	
February	613.29		613.29	$24,531.60		17.01	$765.45	
March	666.43		666.43	$26,657.20		29.68	$1,335.60	
April	685.81		685.81	$27,432.40		23.46	$1,055.70	
May	627.24		627.24	$25,089.60		29.70	$1,336.50	
June	623.85		623.85	$25,035.20		22.74	$1,023.30	
July	768.65		768.65	$30,746.00		34.95	$1,572.75	
August	812.06		812.06	$32,482.40		26.29	$1,183.05	
September								
October								
November								
December								
Average	689.29		689.29	$27,581.90		25.85	$1,163.31	
Total	5,514.35		5,514.35	$220,655.20		206.81	$9,306.45	
				$40/Ton			$45/Ton	

$229,961.65

Annual Cost to Date

$420,000 budgeted for 2024

ES8130.54804


2021-2024 Flow
70
60
50
40
30
20
10
0
18.46
15.55
20.55
16.63
21.35
15.24
24.92
15.71
15.05
19.04
19.03
16.46
13.92
21.1
26.27
31.81
15.61
14.44
10.63
10.87
15.23
11.96
18.48
21.29
14.63
17.08
20.76
16.88
18.46
13.19
16.20
16.47
15.92
17.69
14.43
24.79
18.72
26.40
24.33
22.87
16.12
12.56
13.79
18.35
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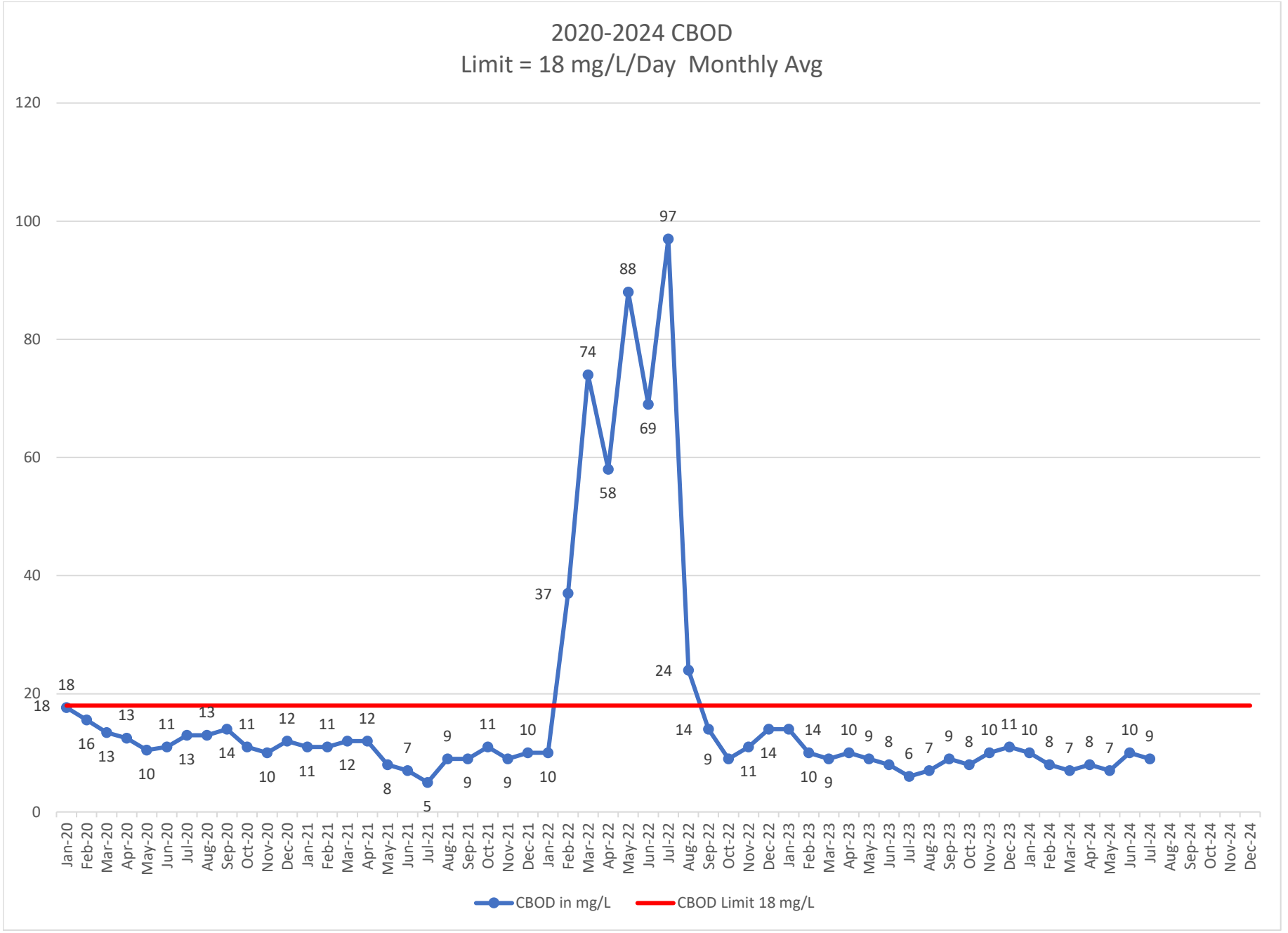
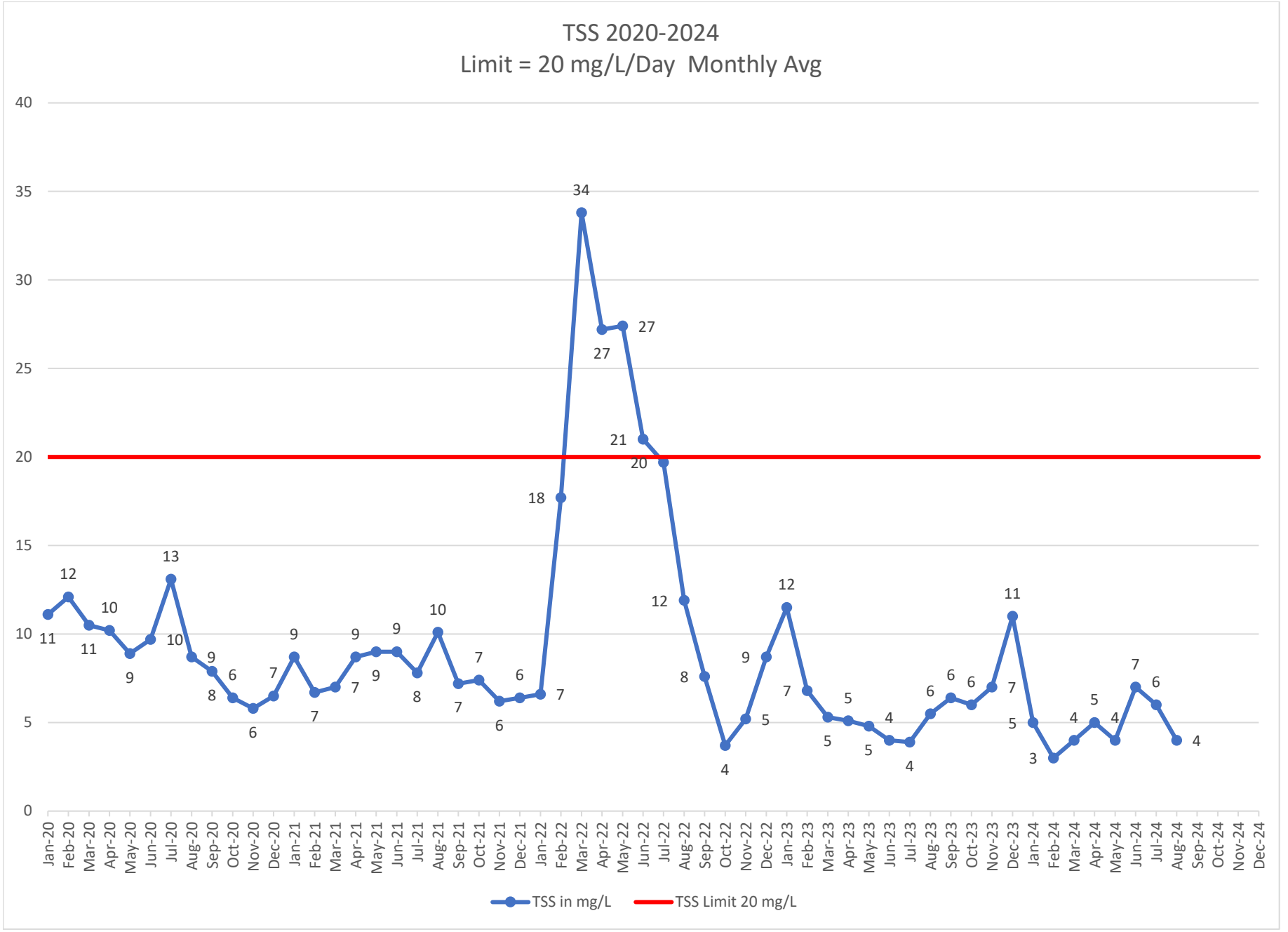
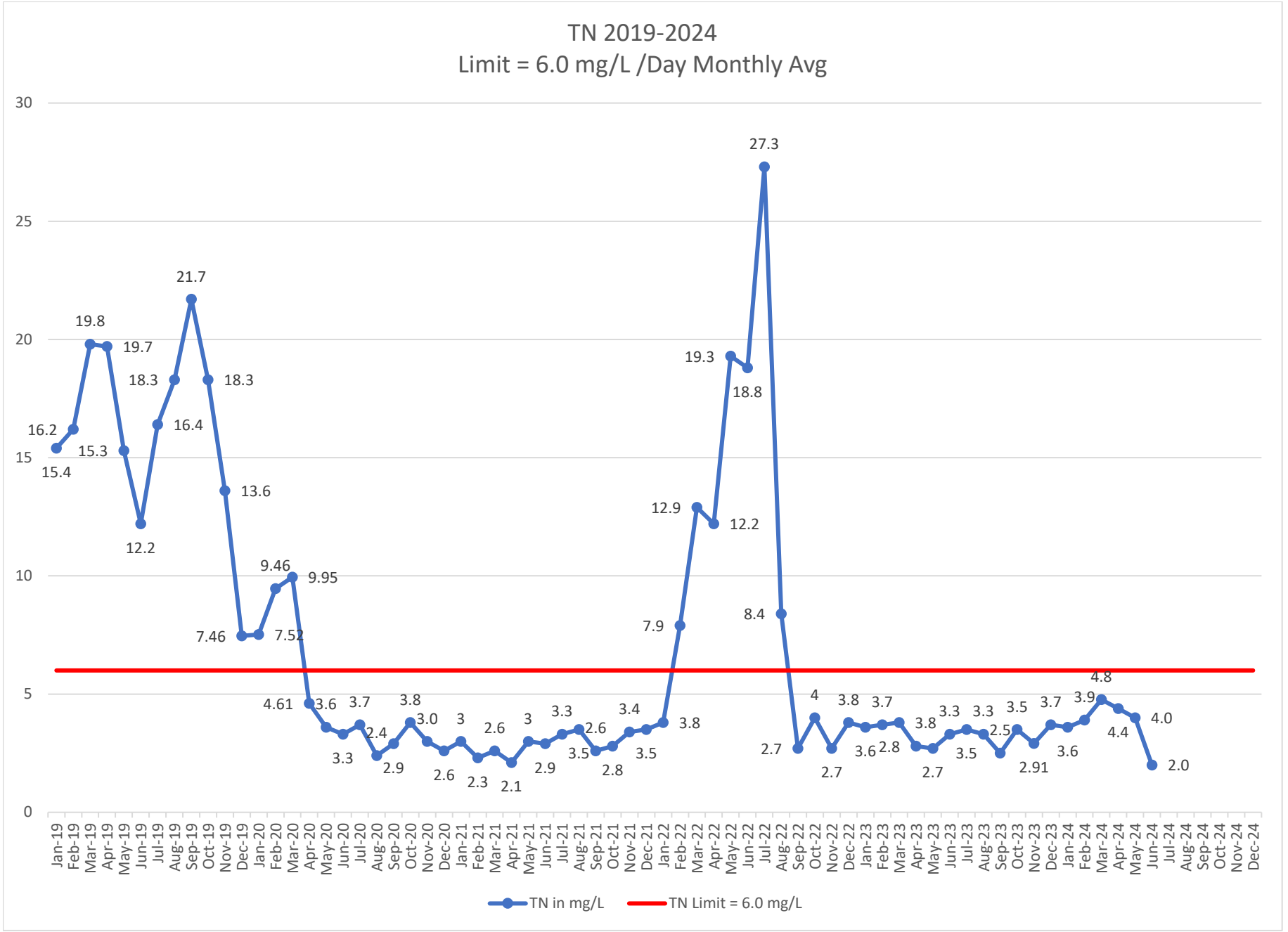
Nov-24
Dec-24
Flow limit 60 MGD
Flow in MGD


2020-2024 CBOD
Limit = 18 mg/L/Day Monthly Avg
120
100
80
60
40
20
0
18
18 16 13 13 10 11 13 13 14 11 10 12 11 11 12 12 8 7 5 9 9 11 9 10 10 37 74 58 88 69 97 24 14 9 11 14 14 10 9 10 9 8 6 7 9 8 10 11 10 8 7 8 7 10 9
Jan-20 Feb-20 Mar-20 Apr-20 May-20 Jun-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Jan-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 May-22 Jun-22 Jul-22 Aug-22 Sep-22 Oct-22 Nov-22 Dec-22 Jan-23 Feb-23 Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23 Jan-24 Feb-24 Mar-24 Apr-24 May-24 Jun-24 Jul-24 Aug-24 Sep-24 Oct-24 Nov-24 Dec-24
CBOD in mg/L
CBOD Limit 18 mg/L


TSS 2020-2024
Limit = 20 mg/L/Day Monthly Avg
40
35
30
25
20
15
10
5
0
11 12 11 10 9 9 13 10 9 8 6 6 7 9 7 7 9 9 9 8 10 7 7 6 6 7 18 34 27 27 21 20 12 8 4 5 9 12 7 5 5 4 4 6 6 6 7 11 7 5 3 4 4 5 4 7 6 4
Jan-20 Feb-20 Mar-20 Apr-20 May-20 Jun-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Jan-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 May-22 Jun-22 Jul-22 Aug-22 Sep-22 Oct-22 Nov-22 Dec-22 Jan-23 Feb-23 Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23 Jan-24 Feb-24 Mar-24 Apr-24 May-24 Jun-24 Jul-24 Aug-24 Sep-24 Oct-24 Nov-24 Dec-24
TSS in mg/L
TSS Limit 20 mg/L


TN 2019-2024
Limit = 6.0 mg/L /Day Monthly Avg
30
25
20
15
10
5
0
15.4
16.2
19.8
15.3
19.7
12.2
18.3
21.7
16.4
18.3
13.6
7.46
9.46
7.52
9.95
4.61
3.6
3.7
3.3
2.4
2.9
3.8
3.0
2.6
3
2.3
2.6
2.1
3
2.9
3.3
3.5
2.6
2.8
3.4
3.5
7.9
12.9
3.8
19.3
12.2
18.8
27.3
8.4
2.7
4
2.7
3.8
3.6
3.7
2.8
3.8
2.7
3.3
3.5
3.3
2.5
3.5
2.91
3.7
3.6
3.9
4.8
4.4
4.0
2.0
Jan-19
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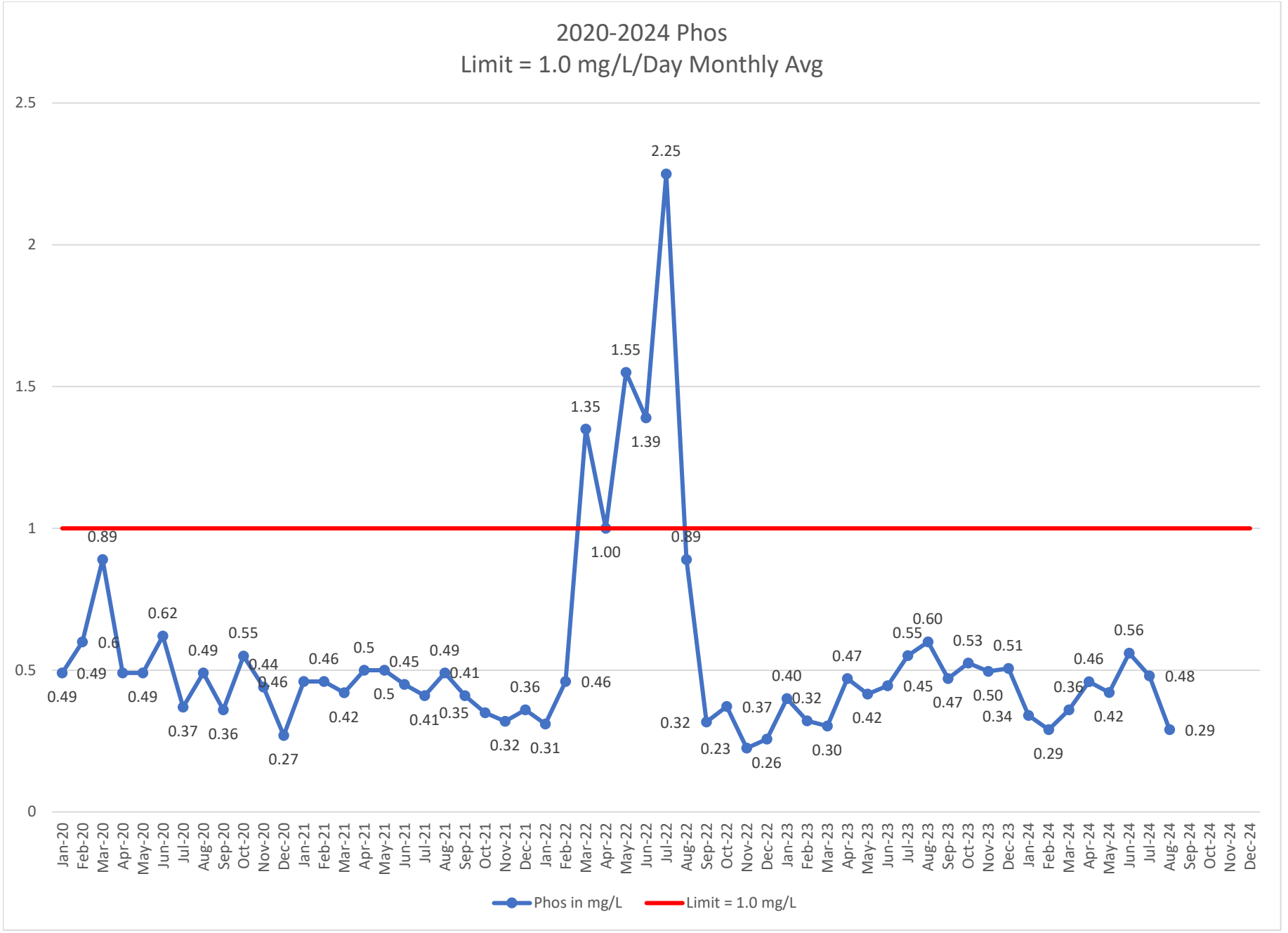
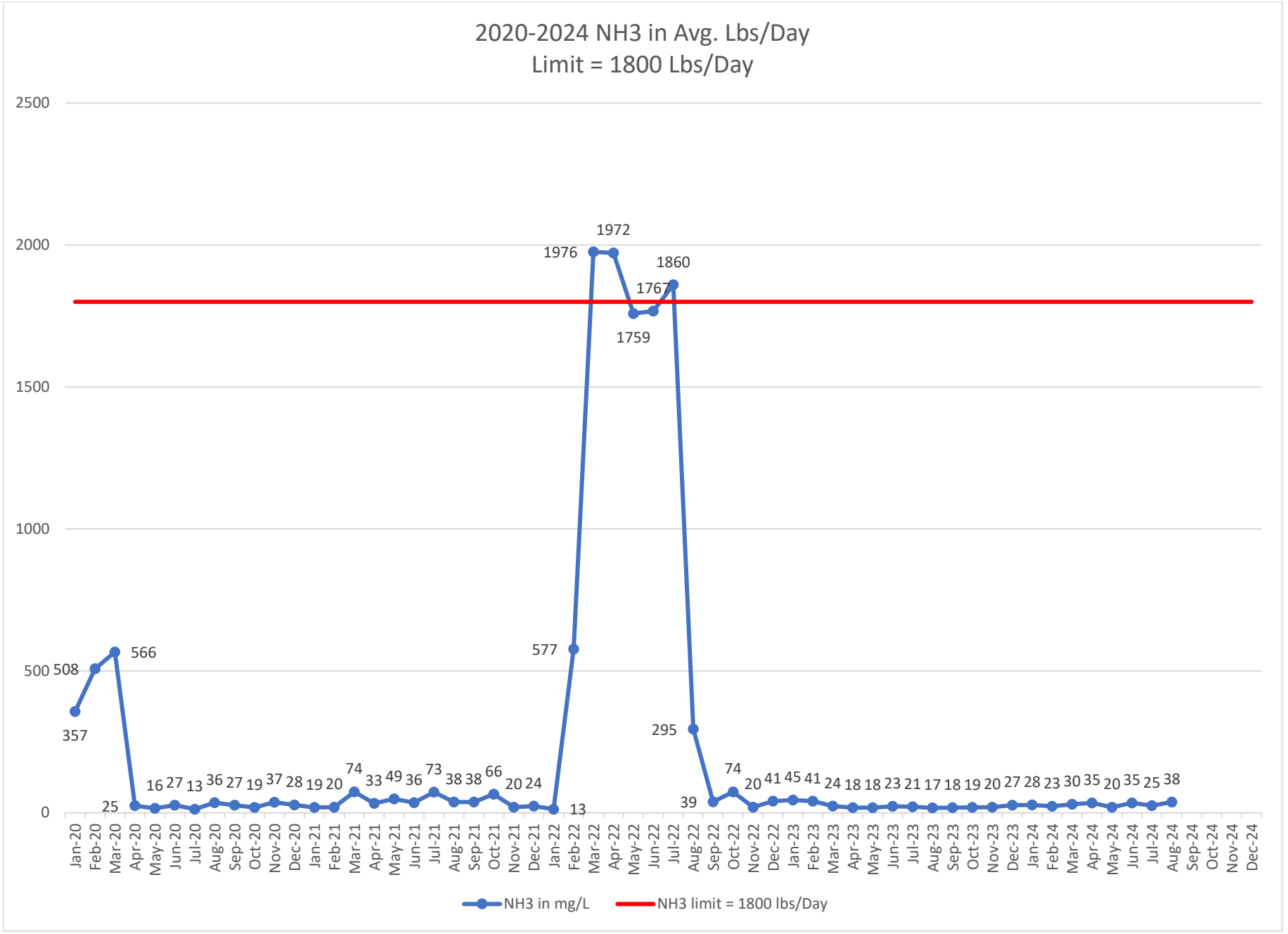
TN in mg/L
TN Limit = 6.0 mg/L


2020-2024 Phos
Limit = 1.0 mg/L/Day Monthly Avg
2.5
2
1.5
1
0.5
0
0.49 0.49 0.89 0.6 0.49 0.49 0.62 0.37 0.49 0.36 0.55 0.44 0.46 0.27 0.46 0.46 0.42 0.5 0.5 0.45 0.41 0.49 0.41 0.35 0.32 0.36 0.31 1.35 0.46 1.00 1.55 1.39 2.25 0.89 0.32 0.23 0.37 0.26 0.40 0.32 0.30 0.47 0.42 0.55 0.45 0.60 0.47 0.53 0.50 0.51 0.34 0.29 0.36 0.46 0.42 0.56 0.48 0.29
Jan-20 Feb-20 Mar-20 Apr-20 May-20 Jun-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Jan-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 May-22 Jun-22 Jul-22 Aug-22 Sep-22 Oct-22 Nov-22 Dec-22 Jan-23 Feb-23 Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23 Jan-24 Feb-24 Mar-24 Apr-24 May-24 Jun-24 Jul-24 Aug-24 Sep-24 Oct-24 Nov-24 Dec-24
Phos in mg/L
Limit = 1.0 mg/L


2020-2024 NH3 in Avg. Lbs/Day
Limit = 1800 Lbs/Day
2500
2000
1500
1000
500
0
357 508 566 25 16 27 13 36 27 19 37 28 19 20 74 33 49 36 73 38 38 66 20 24 13 577 1976 1972 1759 1767 1860 295 39 74 20 41 45 41 24 18 18 23 21 17 18 19 20 27 28 23 30 35 20 35 25 38
Jan-20 Feb-20 Mar-20 Apr-20 May-20 Jun-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Jan-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 May-22 Jun-22 Jul-22 Aug-22 Sep-22 Oct-22 Nov-22 Dec-22 Jan-23 Feb-23 Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23 Jan-24 Feb-24 Mar-24 Apr-24 May-24 Jun-24 Jul-24 Aug-24 Sep-24 Oct-24 Nov-24 Dec-24
NH3 in mg/L
NH3 limit = 1800 lbs/Day