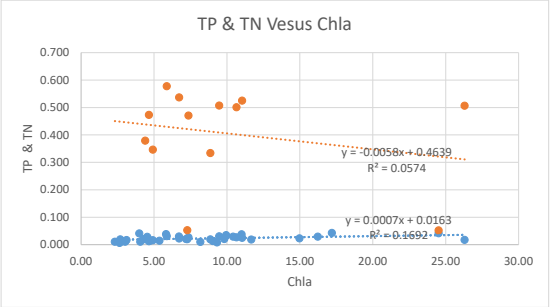
5-year Chatfield Reservoir Nutrients Growing Season

Year	Chla ug/L	TN ug/L	TP ug/L
2017	9.82	-	21
2018	8.86	334	19
2019	10.66	501	27
2020	24.52	52	42
2021	7.28	53	20
2022			

Long Term Chatfield Reservoir Nutrients Growing Season

Year	Chla mg/l	TN mg/l	TP mg/l		Chla>10	TN>.38	TP>.03
1983	17.19		0.043	Not QA/QC'd	1	0	1
1984	5.83		0.039	Not QA/QC'd	0	0	1
1985	4.25		0.020	Not QA/QC'd	0	0	0
1986				Not QA/QC'd	0	0	0
1987	9.95		0.035	Not QA/QC'd	0	0	1
1988	9.03		0.013	Not QA/QC'd	0	0	0
1989	2.31		0.011	Not QA/QC'd	0	0	0
1990	14.97		0.023	Not QA/QC'd	1	0	0
1991	2.68		0.019	Not QA/QC'd	0	0	0
1992	5.37		0.014	Not QA/QC'd	0	0	0
1993	4.77		0.015	Not QA/QC'd	0	0	0
1994	3.12		0.017	Not QA/QC'd	0	0	0
1995	4.53		0.029	Not QA/QC'd	0	0	0
1996	3.98		0.041	Not QA/QC'd	0	0	1
1997	2.83		0.012	Not QA/QC'd	0	0	0
1998	2.64		0.007	Not QA/QC'd	0	0	0
1999	3.02		0.011	Not QA/QC'd	0	0	0
2000	8.18		0.010	Not QA/QC'd	0	0	0
2001	10.42		0.029		1	0	0
2002	9.32		0.008		0	0	0
2003	11.00		0.038		1	0	1
2004	9.47	0.507	0.031		0	1	1
2005	6.72	0.537	0.022		0	1	0
2006	7.36	0.471	0.027		0	1	0
2007	5.87	0.578	0.031		0	1	1
2008	4.92	0.346	0.016		0	0	0
2009	11.67		0.019		1	0	0
2010	26.30	0.507	0.018		1	1	0
2011	4.65	0.473	0.013		0	1	0
2012	6.71		0.030		0	0	1
2013	11.03	0.525	0.025		1	1	0
2014	4.06		0.011		0	0	0
2015	7.20		0.021		0	0	0
2016	16.23		0.029		1	0	0
2017	9.82		0.021		0	0	0
2018	8.86	0.334	0.019		0	0	0
2019	10.66	0.501	0.027		1	1	0
2020	24.52	0.052	0.042		1	0	1
2021	7.28	0.053	0.020		0	0	0
2022	4.40	0.379	0.020		0	0	0



Equations:	Chla	TP or TN
TP=.0007(Chla)+.0163	10	0.0233
TN=-.0058(Chla)+.4639	10	0.4059

Observations:

1. Lowest TN when Chla>10 = .501 (Ignoring 2020)
2. Years when TN>380 and Chla<10 = 5
3. Total years with paired TN /Chla Data = 13
4. Years where Chla>10 and TN>380 = 3
5. Years where TN<380 = 5
6. Years where TN>380 = 8
7. Years where TN< .501 and Chla<10 = 6
8. Years where TN>=.501 and Chla <10 = 3
9. Years where TN=>.501 and Chla >10 = 3
10. 2004 - 2022, If assessment TN=380, # years out of complience = 8 (53%)
    Note: This assumes years with missing TN data are below 380