

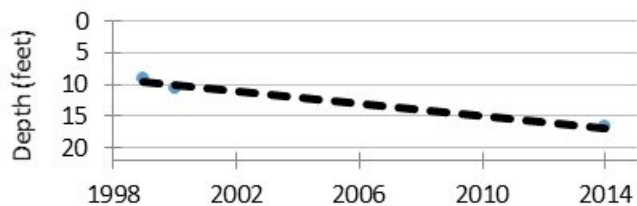
Tamarack Lake, Livingston County

2014 CLMP Results



Secchi Disk Transparency (feet)

Year	# Readings	Min	Max	Average	Std. Dev	Carlson TSI
2014	9	11.5	19.0	16.8	2.3	36
1999-2000	40	7.0	14.5	9.8	2.0	44
2014 All CLMP Lakes	3050	2.0	50.0	13.1	2.1	41



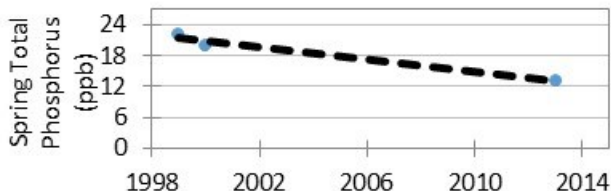
Chlorophyll-a (parts per billion)

This lake does not have Chlorophyll-a data available. Consider enrolling in this parameter next year.

Chlorophyll-a is the green photosynthetic pigment in the cells of plants. The amount of algae in a lake can be estimated by measuring the chlorophyll-a concentration in the water. As an algal productivity indicator, chlorophyll-a is often used to determine the trophic status of a lake.

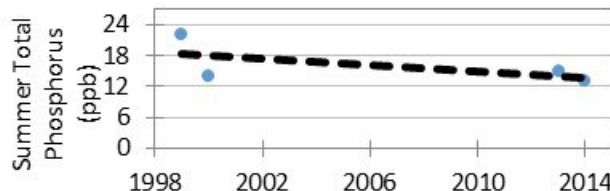
Spring Total Phosphorus (parts per billion)

Year	# Samples	Min	Max	Average	Std. Dev
2013	1	13	13	13.0	NA
1999-2000	2	20	22	21.0	1.4
2014 All CLMP Lakes	164	3 W	77	13.2	11.1

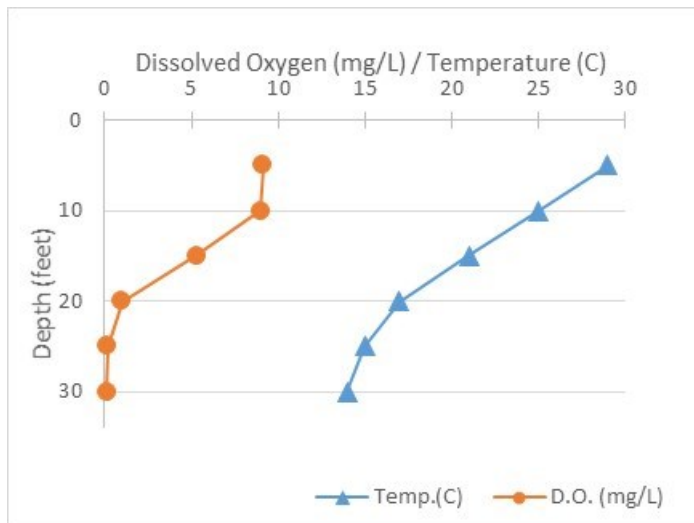


Summer Total Phosphorus (parts per billion)

Year	# Samples	Min	Max	Average	Std. Dev	Carlson TSI
2014	1	13	13	13.0	NA	41
2013	1	15	15	15.0	NA	43
1999-2000	2	14	22	18.0	5.7	45
2014 All CLMP Lakes	180	4 T	62	13.5	7.9	41



Aug 2013 Dissolved Oxygen and Water Temperature Profile



Summary

Average TSI	2014	2013	1999-2000
Tamarack	39	43	45
All CLMP Lakes	40	NA	NA

With an average TSI score of 39 based on Secchi transparency and summer total phosphorus, this lake is rated between the oligotrophic and mesotrophic lake classification. The lake leans slightly more meso than oligo.

The lake keeps some dissolved oxygen in the bottom waters through early/most of the summer, but by late summer the bottom water is completely devoid of oxygen.

CLMP recommends eight years of consistent monitoring in order to develop a strong data baseline. However, given the measurements taken in 1999-2000, we are still able to conclude that nutrient levels have decreased significantly in Tamarack Lake over the last 15 years.

*= No sample received W= Value is less than the detection limit (<3 ppb) T= Value reported is less than the reporting limit (5 ppb). Result is estimated.
 <1 = Chlorophyll-a: Sample value is less than limit of quantification (<1 ppb).