

# Nancy Lake 2014 Data Summary

## Nancy Lake Snapshot

Years Monitored: 7  
 Total # of Events: 25  
 2014 Events: 4  
 Total Hours Monitored: 101.5



## Observations

### Wildlife Observed:

Grebes  
Loons

### Water Level:

Low to medium

### Water Color:

Light green  
Yellow/light tan

### Algae:

Sparse

### Aquatic Plants:

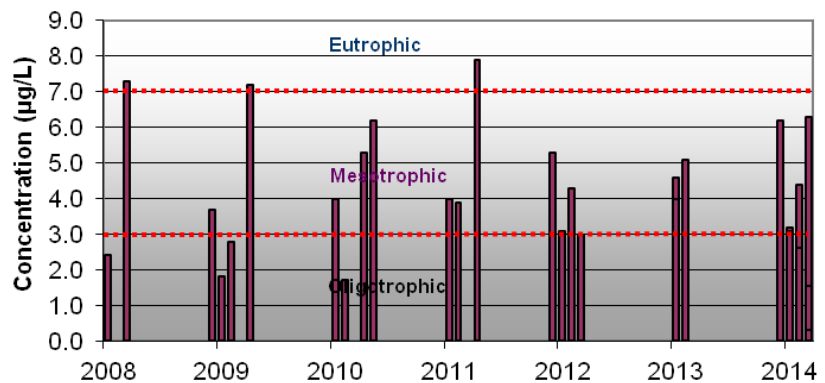
None to sparse, distributed along the shoreline.

### Additional Comments:

Water level raised in June due to rain, then went back to low.

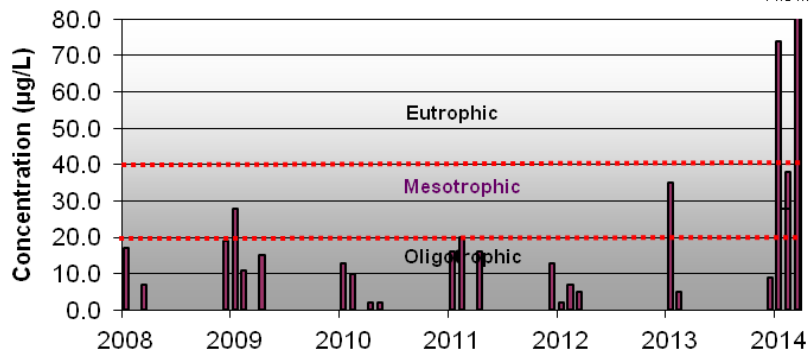


Nancy Lake • Chlorophyll a 2008-2014



Nancy Lake • Phosphorus 2008-2014

8/20/14  
109 µg/L at  
14.5 m deep



## Nancy Lake Profile Measurements

Nancy		Depth (m)	Temperature (oC)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH (SU)	Secchi Depth mean (m)
<b>Date</b>	8/20/2014	<b>0.0</b>	17.53	0.105	9.63	7.88	2.85
		<b>1.0</b>	17.31	0.105	9.52	7.89	
<b>Site Depth (m)</b>	19.50	<b>2.0</b>	17.13	0.106	9.47	7.88	
		<b>3.0</b>	16.69	0.106	9.32	7.84	
<b>Phosphorus (µg/L)</b>		<b>4.0</b>	16.53	0.106	9.05	7.79	
at 2 m	18.0	<b>5.0</b>	15.20	0.109	8.00	7.74	
at 14.5 m	109.0	<b>6.0</b>	11.28	0.123	2.16	7.60	
<b>Chlorophyll a (µg/L)</b>		<b>7.0</b>	9.18	0.135	1.66	7.54	
at 2 m	6.3	<b>8.0</b>	7.61	0.152	0.30	7.40	
at 14.5 m	0.3	<b>9.0</b>	7.31	0.158	0.23	7.31	
		<b>10.0</b>	6.89	0.188	0.18	7.20	
		<b>15.0</b>	4.42	2.740	0.17	6.87	
		<b>19.0</b>	4.59	5.430	0.15	7.11	
<b>Date</b>	7/23/2014	<b>0.0</b>	18.74	0.102	9.30	7.85	3.00
		<b>1.0</b>	18.75	0.103	9.40	7.78	
<b>Site Depth (m)</b>	19.50	<b>2.0</b>	18.71	0.102	9.31	7.76	
		<b>3.0</b>	18.52	0.102	9.34	7.73	
<b>Phosphorus (µg/L)</b>		<b>4.0</b>	18.00	0.102	9.25	7.68	
at 2 m	2.0	<b>5.0</b>	12.06	0.111	8.69	7.76	
at 14 m	38.0	<b>6.0</b>	9.57	0.120	4.78	7.47	
<b>Chlorophyll a (µg/L)</b>		<b>7.0</b>	8.16	0.133	1.90	7.31	
at 2 m	4.4	<b>8.0</b>	7.59	0.141	1.16	7.22	
at 14 m	2.6	<b>9.0</b>	7.17	0.146	0.35	7.13	
		<b>10.0</b>	6.73	0.185	0.17	7.04	
		<b>15.0</b>	4.41	2.610	0.10	7.20	
		<b>19.0</b>	4.56	5.370	0.10	7.04	
<b>Date</b>	6/28/2014	<b>0.0</b>	15.27	0.101	9.75	7.83	4.15
		<b>1.0</b>	15.22	0.101	9.70	7.82	
<b>Site Depth (m)</b>	19.50	<b>2.0</b>	15.03	0.101	9.60	7.81	
		<b>3.0</b>	14.91	0.101	9.57	7.79	
<b>Phosphorus (µg/L)</b>		<b>4.0</b>	14.16	0.101	9.45	7.75	
at 2 m	9.0	<b>5.0</b>	10.23	0.111	8.19	7.69	
at 14.5 m	74.0	<b>6.0</b>	8.76	0.118	6.17	7.59	
<b>Chlorophyll a (µg/L)</b>		<b>7.0</b>	7.98	0.124	5.23	7.52	
at 2 m	3.2	<b>8.0</b>	7.48	0.135	3.80	7.44	
at 14.5 m	3.1	<b>9.0</b>	7.07	0.143	3.19	7.38	
		<b>10.0</b>	6.42	0.179	1.62	7.24	
		<b>15.0</b>	4.53	2.590	0.33	7.26	
		<b>18.5</b>	4.68	4.980	0.23	7.13	

Highlighted data does not meet Alaska Water Quality Standards (WQS)

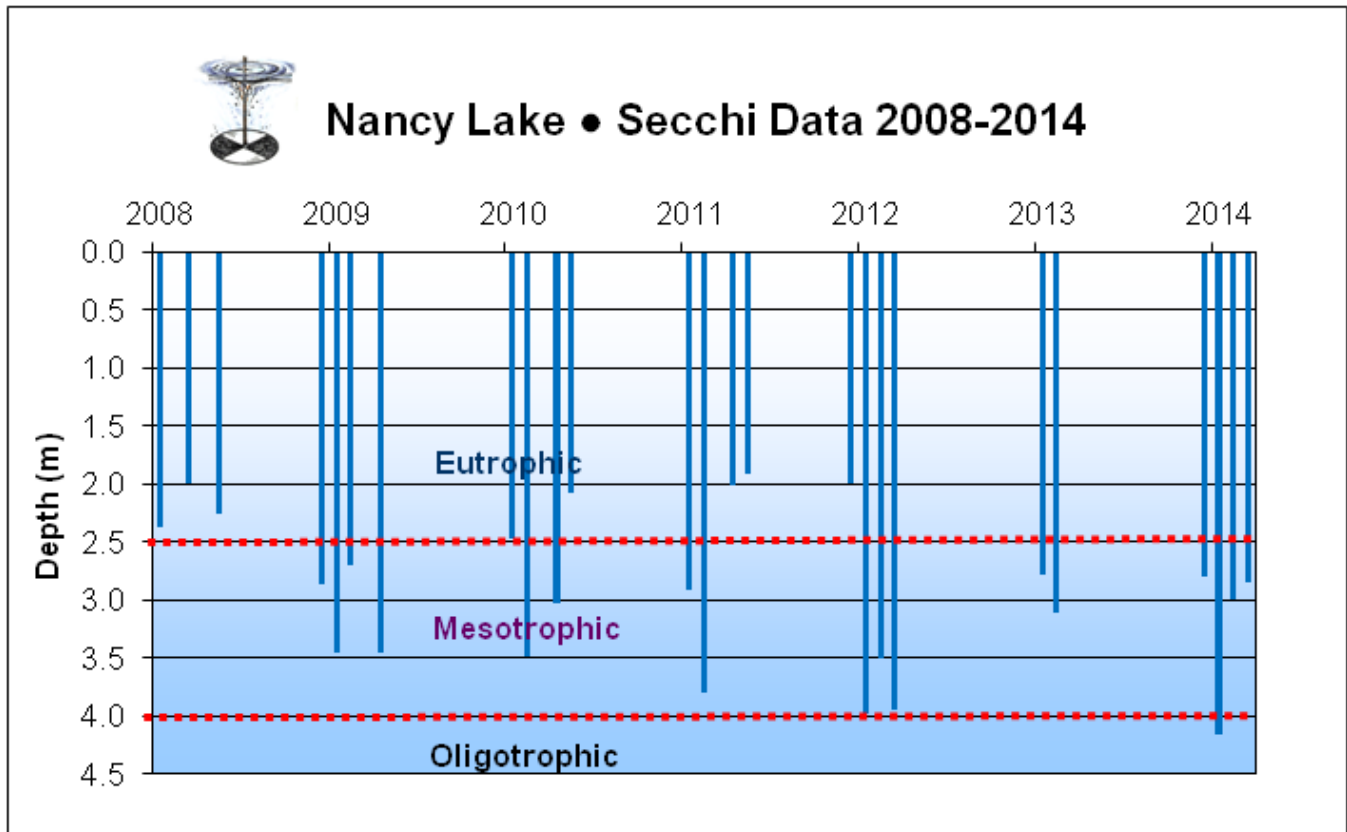


# Nancy Lake Profile Measurements

Nancy		Depth (m)	Temperature (oC)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH (SU)	Secchi Depth mean (m)	
Date	5/26/2014	0.0	12.28	0.099	10.96	7.72	2.80	
		1.0	11.53	0.100	10.90	7.72		
Site Depth (m)	19.00	2.0	11.03	0.100	10.83	7.71		
		3.0	10.91	0.100	10.81	7.70		
Phosphorus (µg/L)		4.0	10.24	0.101	10.59	7.69		
at 2 m	9.0	5.0	8.71	0.101	9.47	7.65		
		6.0	7.90	0.105	8.85	7.61		
Chlorophyll a (µg/L)		7.0	6.81	0.111	7.82	7.56		
at 2 m	6.2	8.0	6.33	0.124	7.11	7.52		
		9.0	6.09	0.135	6.47	7.46		
		10.0	4.71	0.205	4.82	7.35		
		15.0	4.32	2.730	0.11	7.75		
		18.5	4.48	5.390	0.12	7.37		
ChIA	TP	Depth	T°	Cond	DO	pH	Secchi	
6.3	109.0	19.50	18.75	5.43	10.96	7.89	4.15	Max
0.3	2.0		4.32	0.10	0.10	6.87	2.80	Min
3.2	18.0		8.97	0.11	7.47	7.61	2.93	Med
3.7	37.0		10.42	0.71	5.76	7.54	3.20	Ave
2.1	40.2		4.79	1.50	4.15	0.27	0.64	StDev

Highlighted data does not meet Alaska Water Quality Standards (WQS)

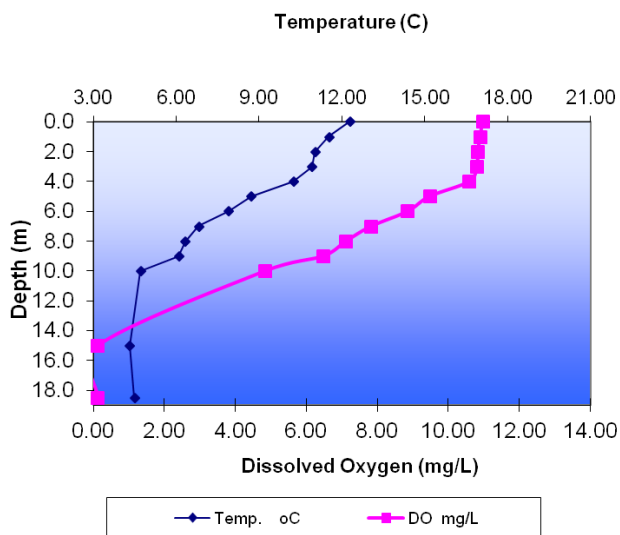
The Alaska Water Quality Standards do not apply absolutely to lakes without taking multiple factors into account. For more information on WQS, please see <http://www.dec.state.ak.us/water/wqsar/wqs/>.



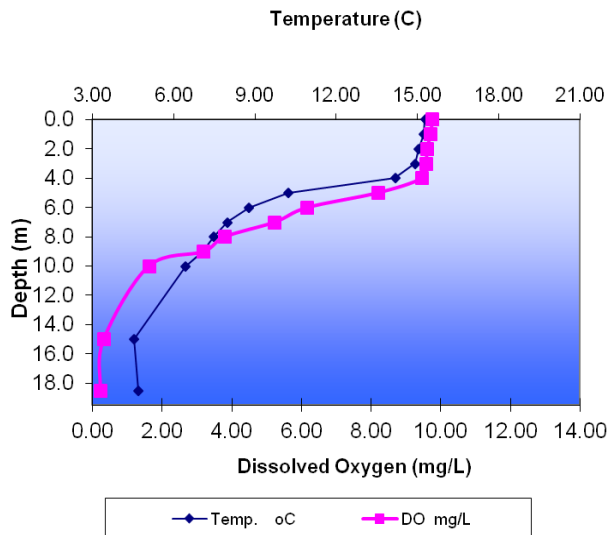
# Matanuska-Susitna Borough Volunteer Lake Monitoring Program



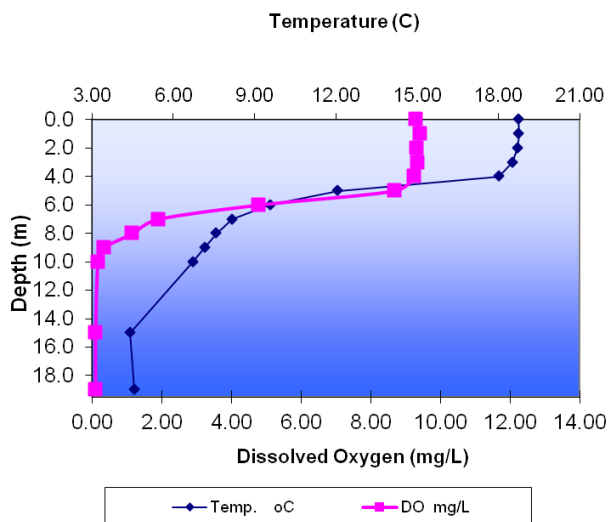
**Temperature and Dissolved Oxygen Profile  
Nancy Lake -- May 2014**



**Temperature and Dissolved Oxygen Profile  
Nancy Lake -- June 2014**



**Temperature and Dissolved Oxygen Profile  
Nancy Lake -- July 2014**



**Temperature and Dissolved Oxygen Profile  
Nancy Lake -- August 2014**

