



CVLM Program: 2017 Monitoring Season (June - September) Summary

Lakes/Reservoirs	County	Avg. Secchi Depth		Dips
		(feet)	(meters)*	
Button Rock Reservoir	Boulder	14.4	4.4	8
Aurora Reservoir	Arapahoe	12.8	3.9	7
Horseshoe Lake	Huerfano	7.9	2.4	1
Martin Lake	Huerfano	6.9	2.1	1
Quincy Reservoir	Arapahoe	5.4	1.6	7
Barr Lake	Adams	3.4	1.0	9
Runyon Lake - North Shore	Pueblo	3.0	0.9	8
West Lake	Jefferson	2.3	0.7	6

* One Meter = 3.281 feet, to convert feet to meters you need to divide by 3.281.

Monthly Summary Statewide

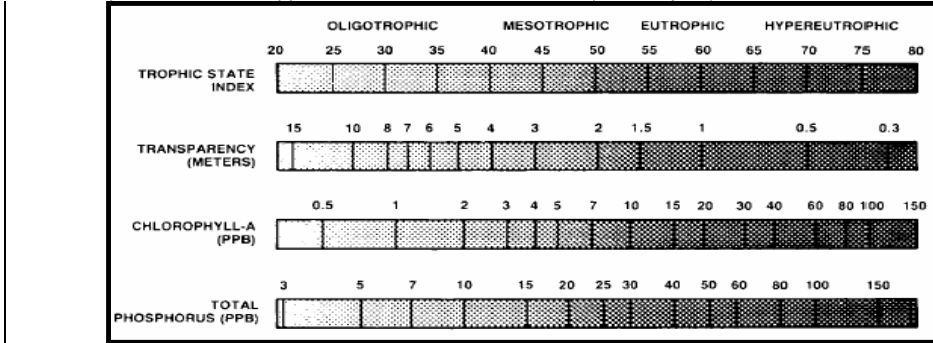
Month	# Lake Visits	Ave. Secchi Depth (feet)
<i>January</i>	4	11.9
<i>February</i>	4	8.5
<i>March</i>	4	9.6
<i>April</i>	3	10.8
<i>May</i>	8	10.7
June	13	7.6
July	12	6.3
August	13	5.9
September	9	8.2
<i>October</i>	6	11.1
<i>November</i>	0	
<i>December</i>	4	6.1
Season Total (June - September)	47	6.9
Overall	80	8.2

Carlson Trophic Status Index (Carlson TSI)

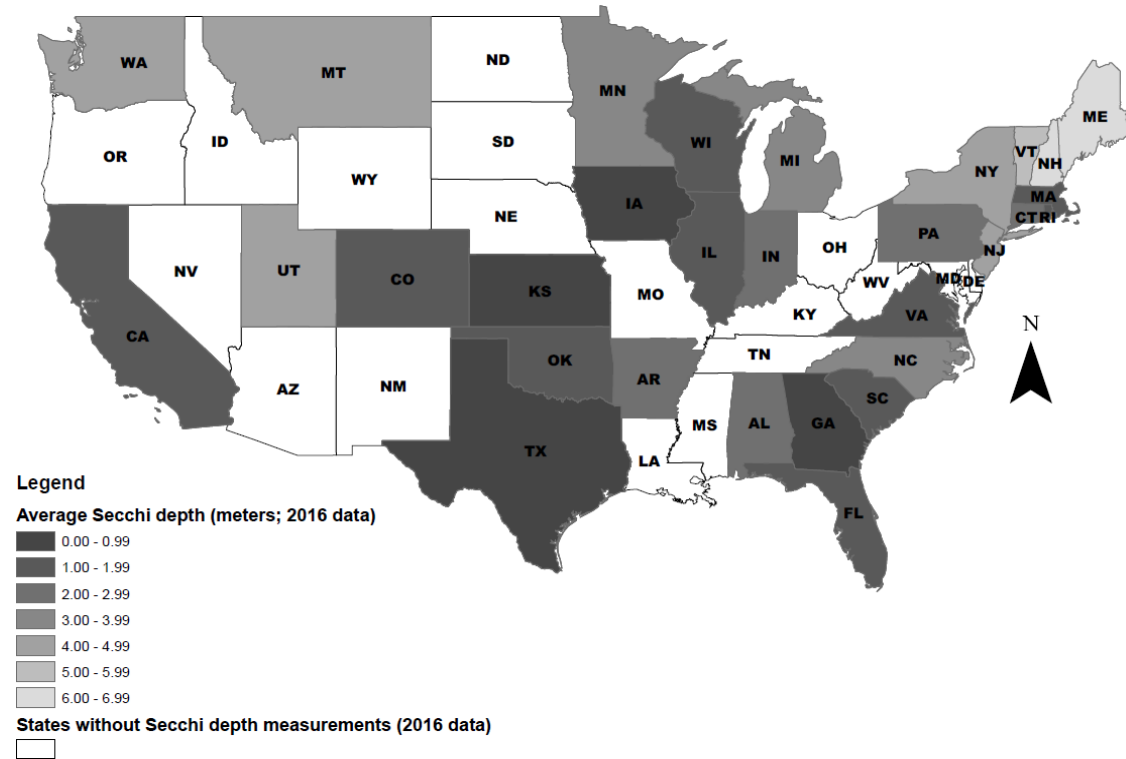
If you know your Secchi Depth, this is a rough way to estimate your chl-a and total phosphorus levels.

It is also a way to score your lake or reservoir.

Example: Runyon Lake average Secchi Depth is 3.0 ft (0.9 m), so the chl-a levels should be around 3 ppb, Total Phosphorus around 13 ppb, and a TSI score of about 42 (Mesotrophic)



National Comparison



Secchi depth data from North American Secchi Dip-In Event, 2016 Report there were 96 observations in Colorado for 2016.

Compare your Secchi depth average to the rest of the nation.

For Region 8 lakes, 6.4% Oligotrophic, 40.9% Mesotrophic, and 51.4% Eutrophic/Hyper



CVLM Program: 2017 Volunteer Monitoring Report Card Button Rock Reservoir

Reservoir Stats

Lake Name: Button Rock Reservoir
County: Boulder County
HUC: 10190005

Volunteer Stats

Name: Jamie Freel
Organization: City of Longmont
Year Started: 2005
E-mail: dennis.fisher@ci.longmont.co.us

Sample Site

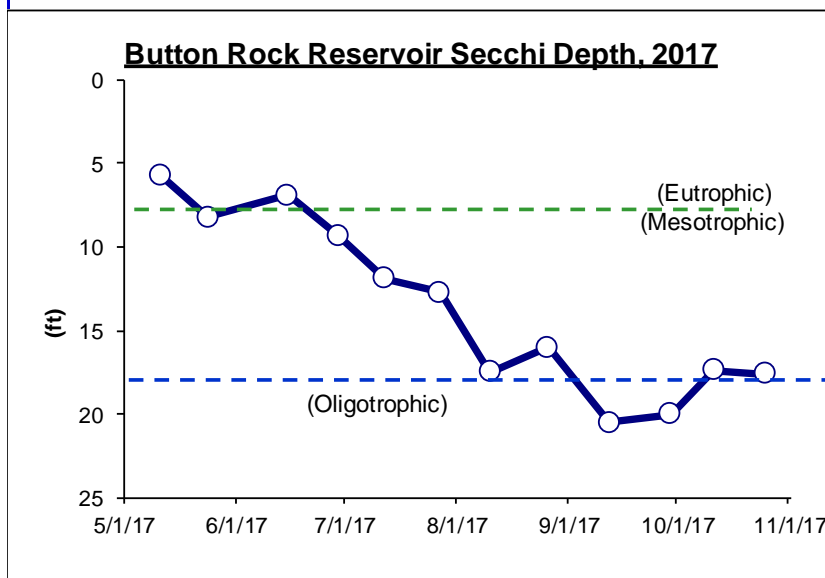
Description: Deepest area near dam
Latitude: 40.2166667
Longitude: 105.371667

Data

Date	Time	Lowering Depth (ft)	Raising Depth (ft)	Ave Depth (ft)	Water Color	Rec. Potential	Phy. Appearance	Climate
5/11/2017	3:00	6.0	5.5	5.8	1	2	2	
5/24/2017	2:00	8.5	8.0	8.3	1	2	2	
6/15/2017	1:30	7.1	6.7	6.9	1	2	2	
6/29/2017	2:30	9.6	9.0	9.3	1	2	2	
7/12/2017	3:00	12.2	11.6	11.9	1	2	2	
7/27/2017	2:30	12.8	12.6	12.7	1	1	2	
8/10/2017	1:30	17.8	17.2	17.5	1	2	1	
8/26/2017	1:00	16.2	15.8	16.0	1	2	1	
9/12/2017	12:00	20.7	20.3	20.5	1	2	1	
9/29/2017	1:30	20.2	19.8	20.0	1	2	1	
10/11/2017	12:15	17.1	17.7	17.4	1	2	1	
10/25/2017	10:30	17.8	17.4	17.6	1	2	1	

Summary

	May	Jun	Jul	Aug	Sep	Season	Overall
Ave. Secchi Depth (ft)	7.0	8.1	12.3	16.8	20.3	14.4	13.7
Ave. Water Color	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Ave. Rec. Potential	2.0	2.0	1.5	2.0	2.0	1.9	1.9
Ave. Phy. Appearance	2.0	2.0	2.0	1.0	1.0	1.5	1.5



Carlson TSI Score
Hyper-eutrophic (>70)
Eutrophic (50-70)
Mesotrophic (35-50)
Oligotrophic (20-35)
Ultra-oligotrophic (<20)

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Button Rock Reservoir

Past Scores:
 2008 Score = 40
 2009 Score = 39
 2010 Score = 40
 2011 Score = 40
 2012 Score = 39
 2014 Score = 42