

# LAKE CARMI

Franklin, VT

**Lay Monitor:** Peter Benevento  
**Former Lay Monitors:** Bob Rennie  
 Sklyer Gauvin  
 Dave Jones  
 Richard Davis

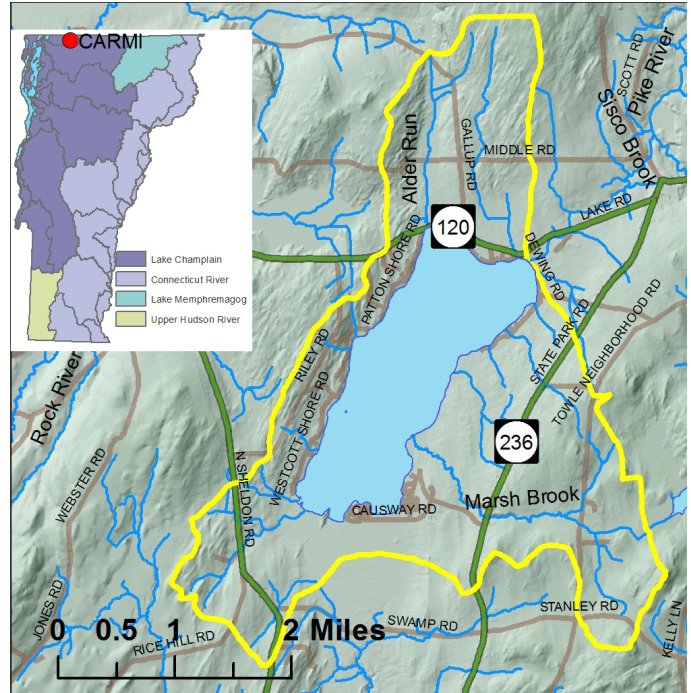
## Physical

Lake Carmi is a large, shallow, warmwater lake.

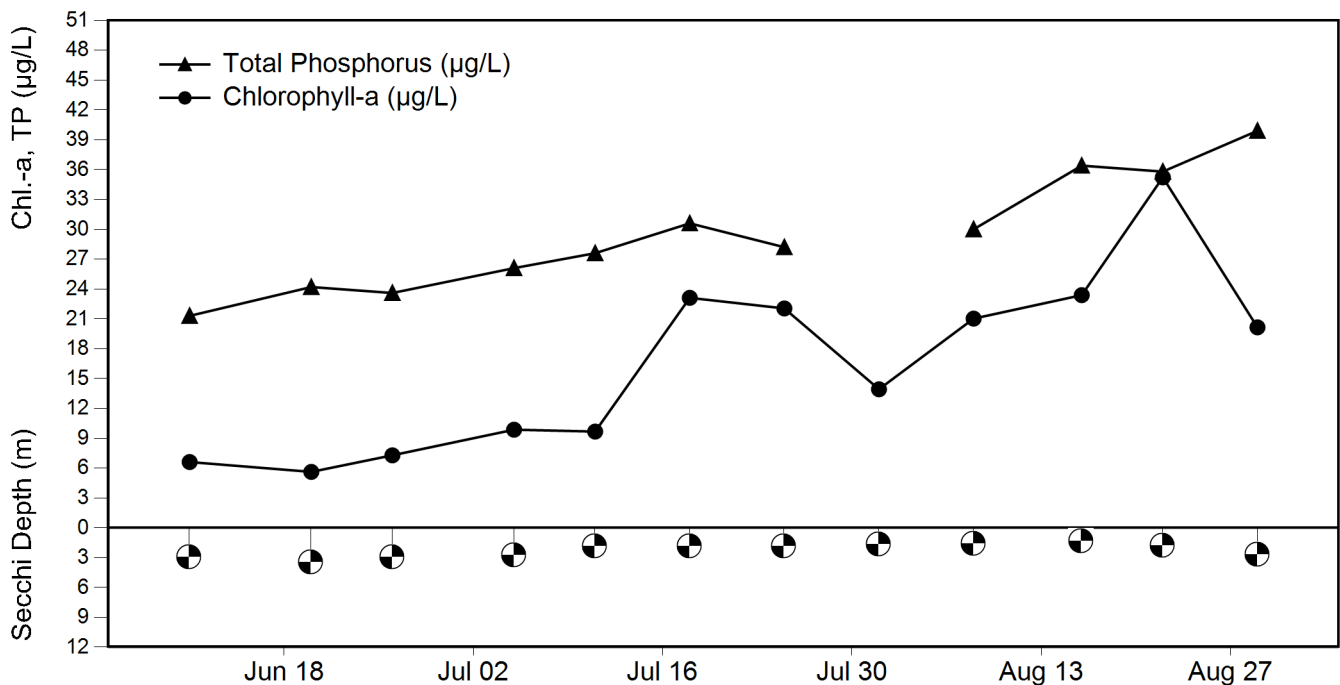
Lake Surface Area: 1,402 acres  
 Drainage Basin Area: 7,710 acres  
 Ratio (Basin/Lake): 5:1  
 Maximum Depth: 33 ft (10.1 m)  
 Mean Depth: 13 ft (4.0 m)

## 2017 Summary (Station 1)

Parameter	Days	Min	Mean	Max
Secchi (m)	12	1.4	2.3	3.5
Chl-a ( $\mu\text{g/L}$ )	12	5.6	16.5	35.2
Summer TP ( $\mu\text{g/L}$ )	11	21.3	29.4	39.9
Spring TP ( $\mu\text{g/L}$ )	1		26.3	



## 2017 Daily Values (Station 1): Total Phosphorus, Chlorophyll-a, and Secchi Depth



# LAKE CARMI

## Annual Data (Station 1)

Year	Days Sampled	Secchi (m)	Chloro-a ( $\mu\text{g/l}$ )	Summer TP ( $\mu\text{g/l}$ )	Spring TP ( $\mu\text{g/l}$ )
1979	24	1.5	15.2		18.0
1980	16	1.7	23.7		
1981	12	1.9	19.3		21.0
1982	7				31.0
1983	11	1.9	25.5	29.6	33.0
1984	12	1.5	29.8	34.9	27.0
1985	13	1.5	30.5	38.5	28.0
1986	13	1.3	27.3	37.5	22.0
1987	10	1.8	15.0	29.9	30.0
1988	13	2.0	14.4	27.5	
1989	13	2.4	12.9	29.2	
1990	17	1.7	40.4	28.0	
1991	12	2.1	13.0	27.0	
1992	13	2.2	13.6	29.5	
1993	14	1.8	14.9	26.8	
1994	14	2.2	10.3	23.8	27.3
1995	10	2.1	14.9	25.7	23.0
1996	10	2.1	10.5	27.1	27.0
1997	9	2.5	8.4	23.7	29.0
1998	9	2.2	7.6	23.2	26.3

## Annual Data (Station 1)

Year	Days Sampled	Secchi (m)	Chloro-a ( $\mu\text{g/l}$ )	Summer TP ( $\mu\text{g/l}$ )	Spring TP ( $\mu\text{g/l}$ )
1999	9	2.1	20.4	26.6	26.3
2000	8	2.5	12.1	25.8	26.3
2001	14	2.9	11.2	24.5	26.3
2002	9	2.7	8.0	24.1	22.3
2003	8	2.2	16.2	31.8	
2004	11	2.3	13.3	30.2	30.3
2005	11	2.2	15.6	29.5	
2006	10	1.2	35.6	47.1	
2007	12	2.8	12.1	29.5	22.4
2008	12	1.9	16.2	38.1	
2009	13	1.9	16.1	41.0	34.4
2010	13	2.4	15.3	36.2	
2011	12	2.1	12.2	33.6	
2012	12	2.3	13.2	31.4	27.9
2013	12	2.3	16.8	32.1	33.9
2014	12	2.8	9.9	36.4	30.9
2015	14	1.9	22.2	37.8	28.4
2016	14	2.8	9.7	29.7	23.3
2017	12	2.3	16.5	29.4	26.3

Trophic State	Mean Secchi Clarity (m)	Mean Chlorophyll-a ( $\mu\text{g/L}$ )	Mean Total Phosphorus ( $\mu\text{g/L}$ )
Oligotrophic	> 5.5	< 3.5	< 7.0
Mesotrophic	3.0 - 5.5	3.5 - 7.0	7.0 - 14
Eutrophic	< 3.0	> 7.0	>14

## Summer Annual Means (Station 1): Total Phosphorus, Chlorophyll-a, and Secchi Depth

