Part 2.

The Vermont Lay Monitoring Report

Lake Data

BEEBE POND

Hubbardton, VT

Lay Monitors: Mary Sondergeld
Barbara Cooley
Joanne Zeol

Former Monitors: Marilyn and Keith Brostek

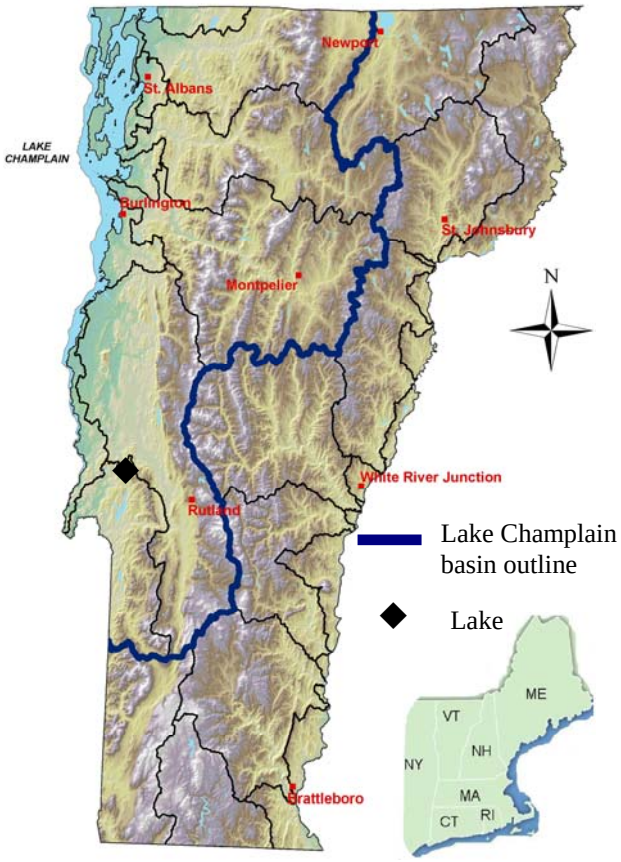
Beebe Pond is a small, warmwater lake.

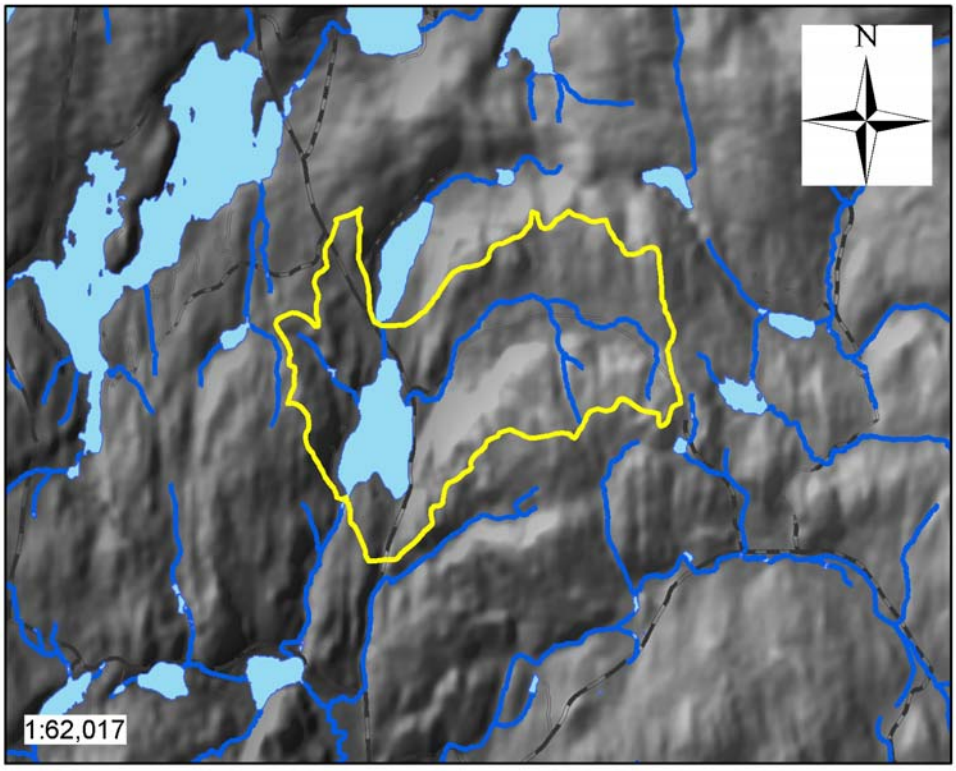
Lake Surface Area:	111	acres
Drainage Basin Area	1,843	acres
Maximum depth:	43 ft.	(13.0 m)
Average depth:	26 ft.	(7.9 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – high
Algal population density – low
Nutrient enrichment – moderate

Trophic State: Mesotrophic





Lake outlined by its watershed

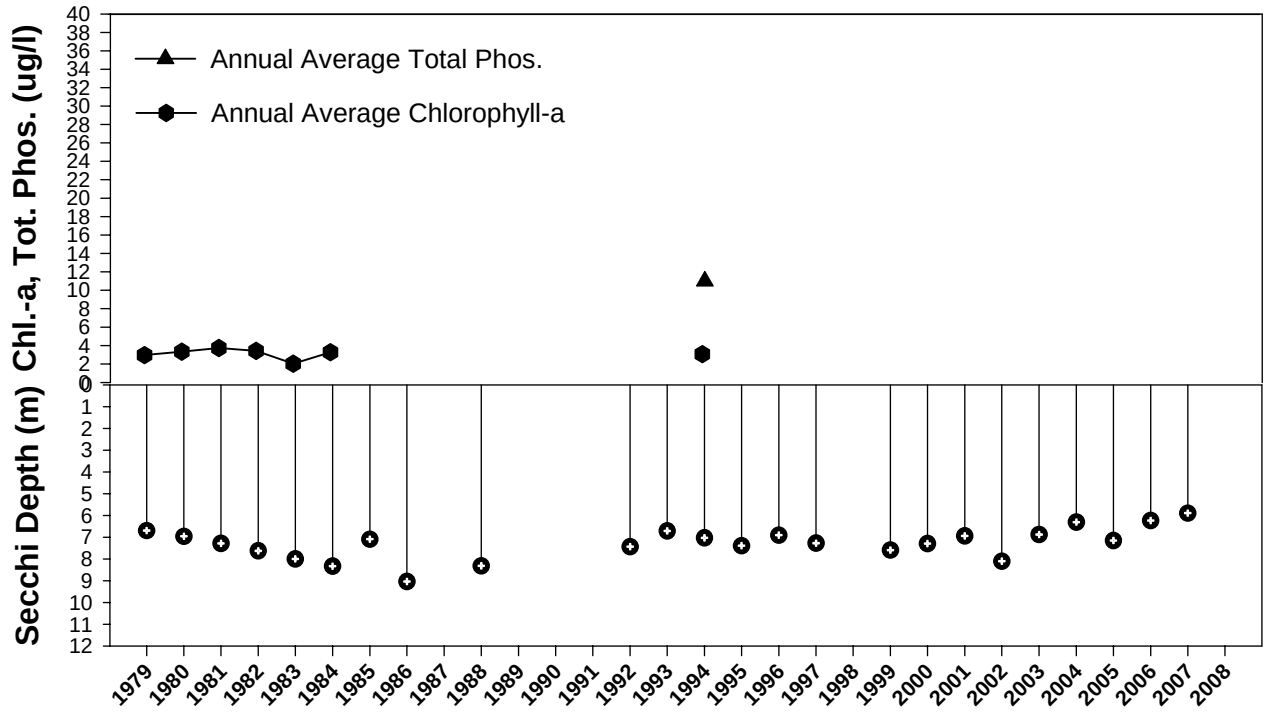
Beebe Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	7	5.0	6.7	7.5

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	16	6.7	3.0		15
1980	13	7.0	3.4		16
1981	9	7.3	3.8		14
1982	8	7.6	3.5		21
1983	8	8.0	2.1		12
1984	9	8.3	3.3		10
1985	10	7.1			12
1986	8	9.0			25
1987	4				16
1988	8	8.3			
1989	7				
1990	7				
1991	7				
1992	10	7.4			
1993	8	6.7			
1994	12	7.0	3.1	11	16
1995	9	7.4			
1996	8	6.9			
1997	9	7.3			
1998	6				12
1999	9	7.6			
2000	9	7.3			
2001	8	6.9			
2002	8	8.1			
2003	12	6.9			22
2004	8	6.3			21
2005	8	7.2			16
2006	9	6.2			15
2007	10	5.9			14
2008	7				



LAKE BOMOSEEN

Castleton and Hubbardton, VT

Lay Monitor: Alfred S. Kosloffsky

Former Lay Monitors: Jim Leamy

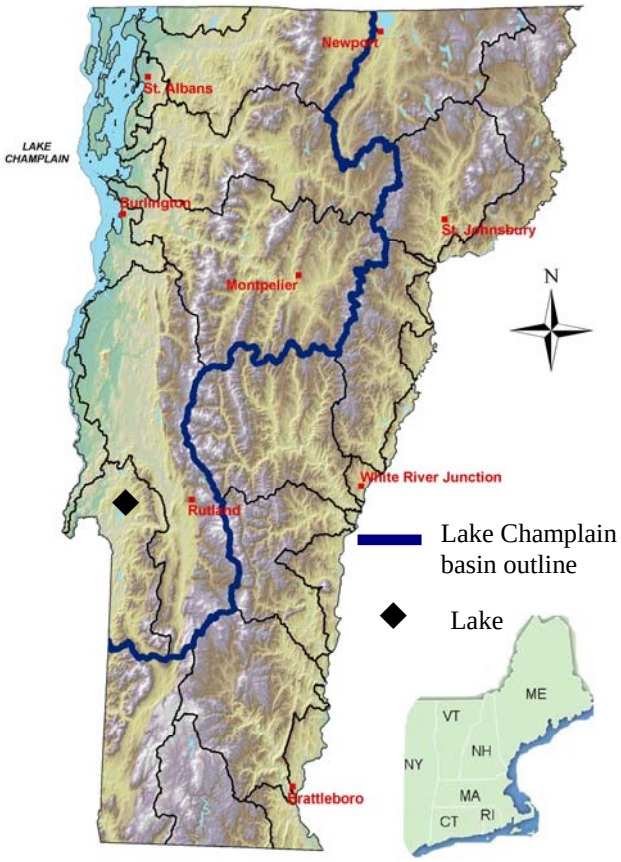
Lake Bomoseen is a large, warmwater lake.

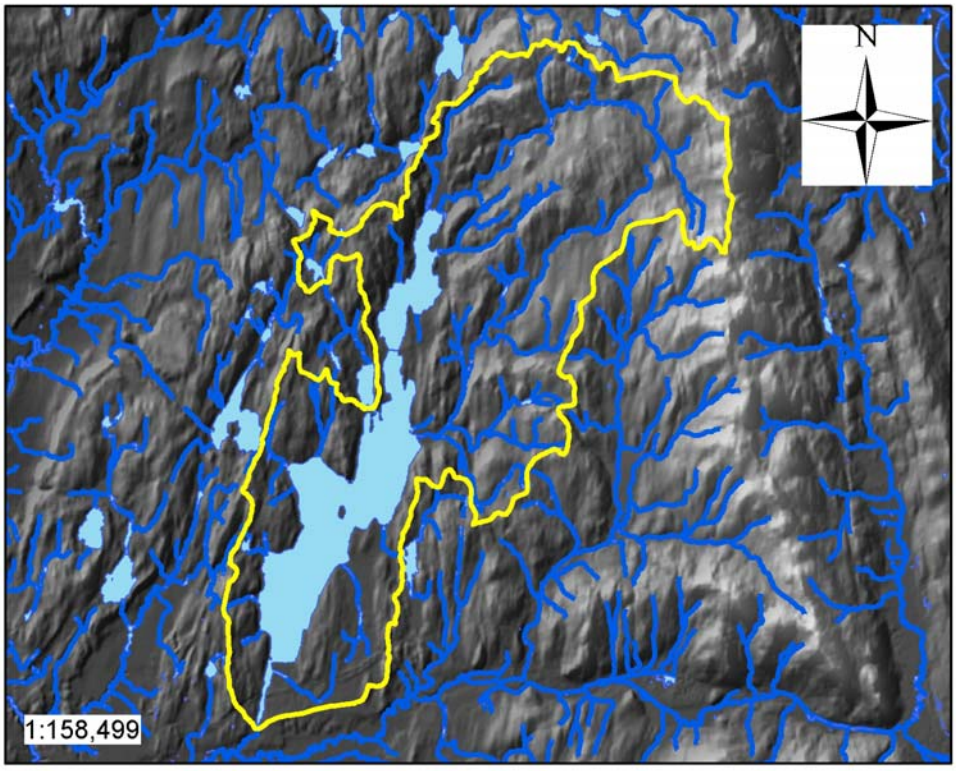
Lake Surface Area:	2,360	acres
Drainage Basin Area	23,630	acres
Maximum depth:	65 ft.	(19.7 m)
Average depth:	27 ft.	(8.2 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – high
Algal population density – not sampled
Nutrient enrichment – not sampled

Trophic State: Mesotrophic





Lake outlined by its watershed

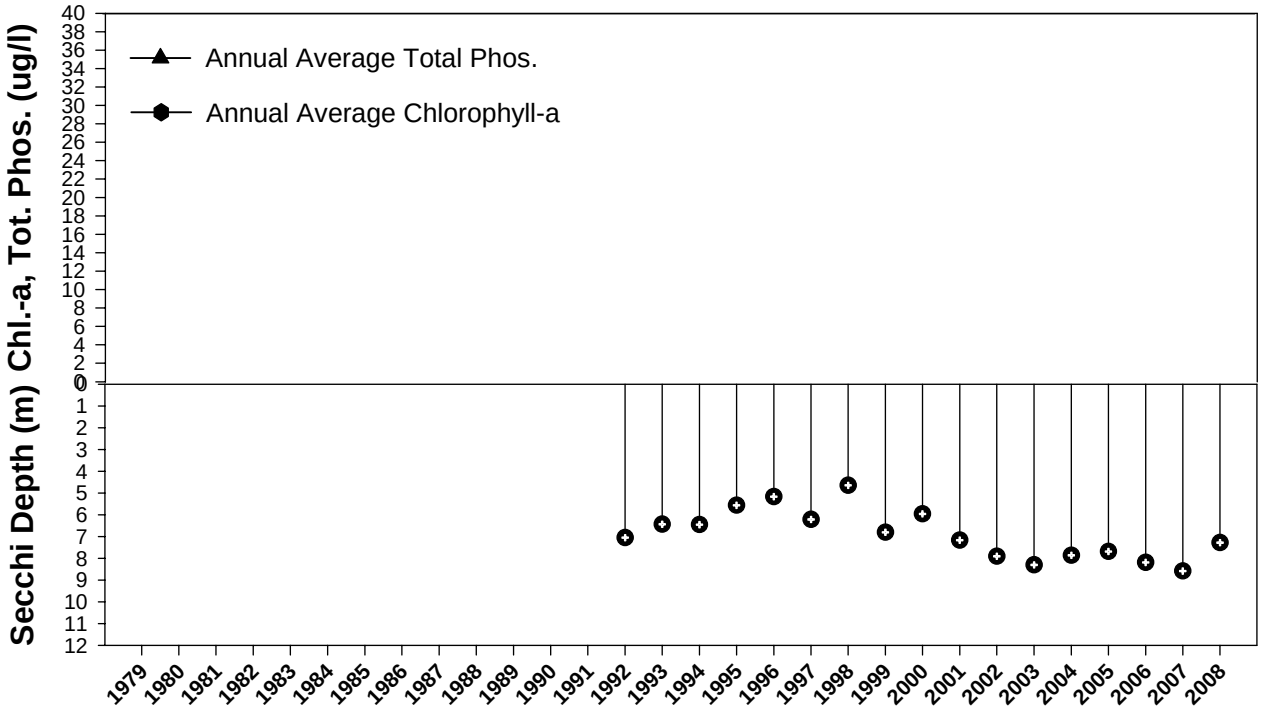
Lake Bomoseen

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	11	6.0	7.3	10
Spring TP (ug/l)	1		9.9	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1992	11	7.1			
1993	12	6.4			
1994	11	6.5			
1995	11	5.6			11
1996	11	5.2			14
1997	13	6.2			
1998	13	4.6			14
1999	13	6.8			
2000	12	6.0			
2001	9	7.2			
2002	11	7.9			
2003	13	8.3			
2004	12	7.9			12
2005	14	7.7			
2006	13	8.2			
2007	10	8.6			8.0
2008	11	7.3			9.9



LAKE CARMI

Franklin, VT

Lay Monitor: Bob Rennie

Former Lay Monitors: Dave Jones
Richard Davis

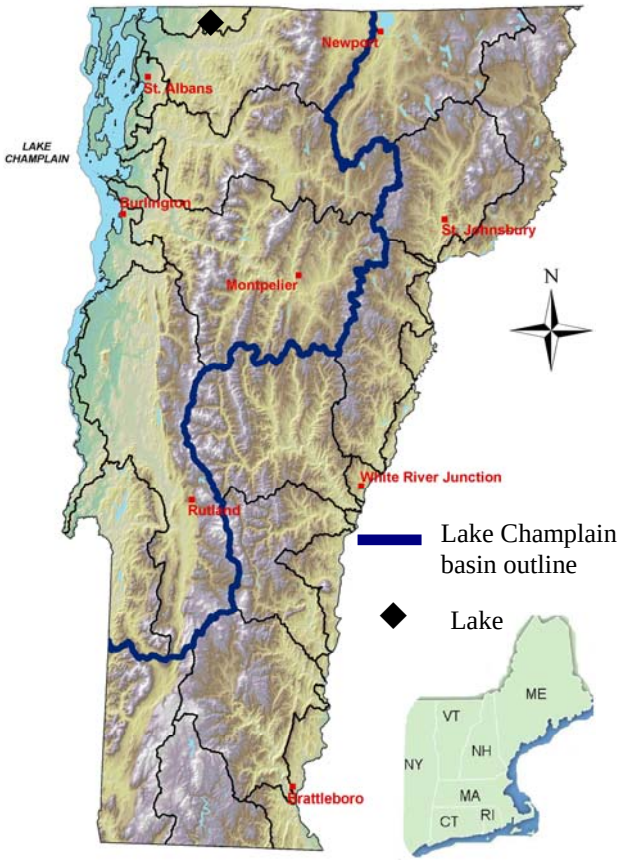
Lake Carmi is a large, shallow, warmwater lake.

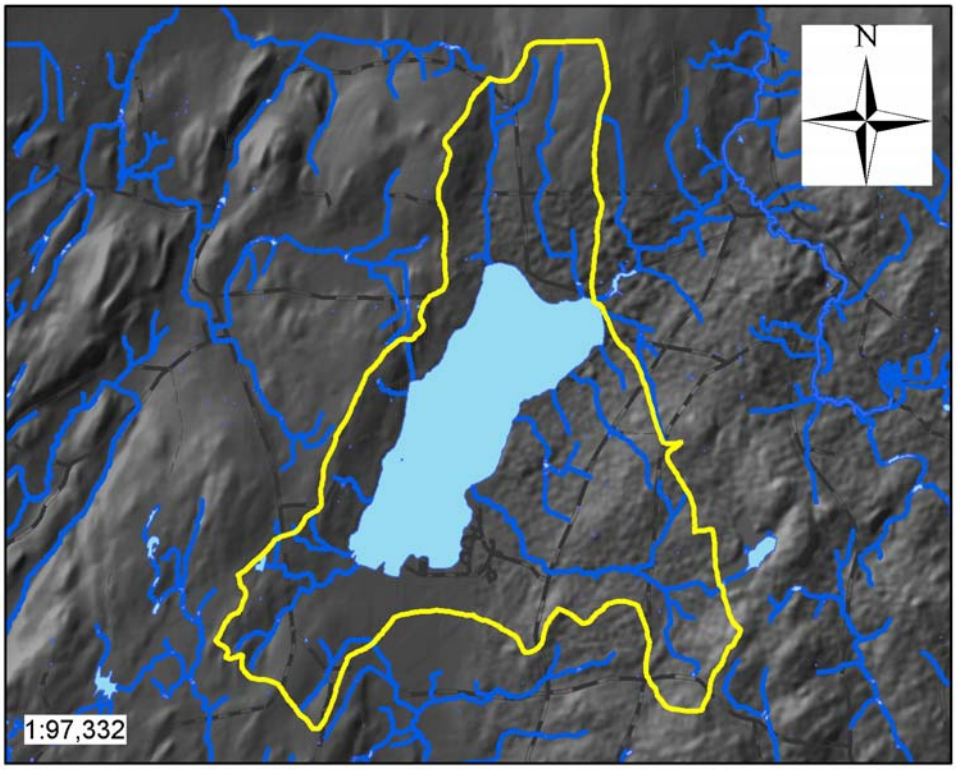
Lake Surface Area:	1,402	acres
Drainage Basin Area	7,710	acres
Maximum depth:	33 ft.	(10.0 m)
Average depth:	13ft.	(3.9 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – low
Algal population density – high
Nutrient enrichment – high

Trophic State: Eutrophic





Lake outlined by its watershed

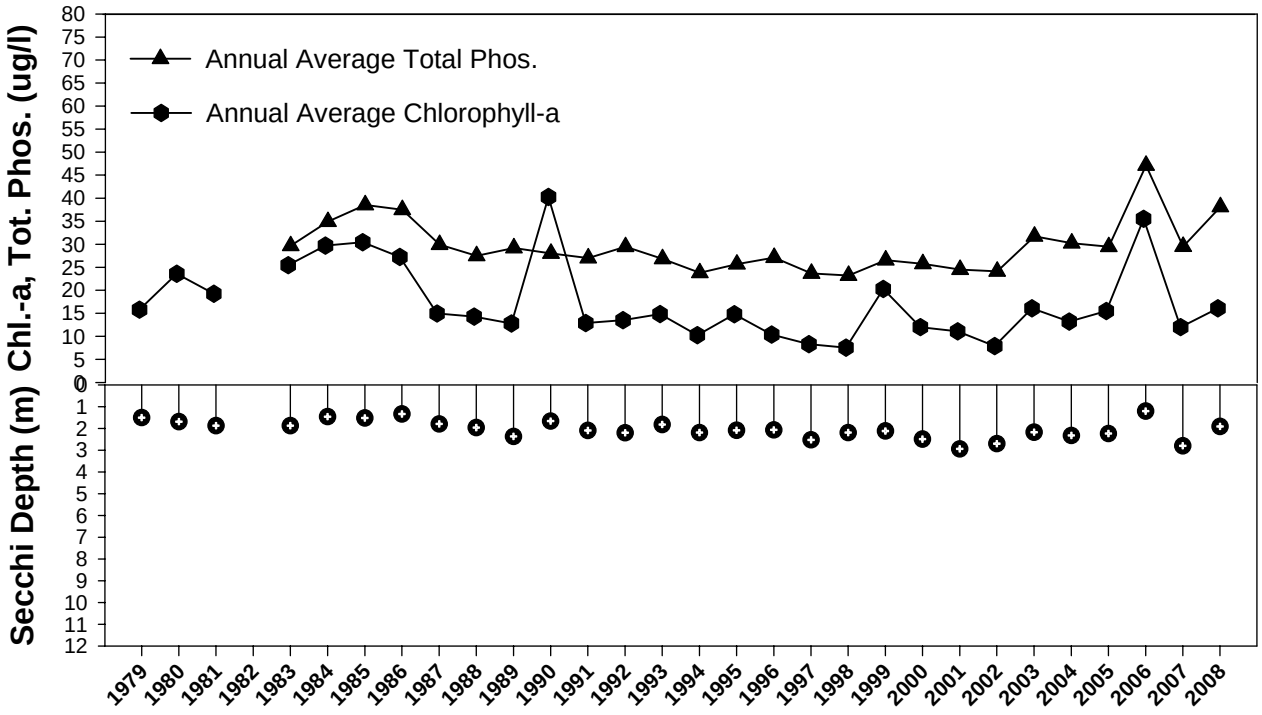
Lake Carmi

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	12	1.4	1.9	2.3
Chl-a (ug/l)	12	4.8	16	31
Summer TP (ug/l)	12	31	38	50

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	17	1.5	16		18
1980	16	1.7	24		18
1981	12	1.9	19		23
1982	7				30
1983	11	1.9	26	30	30
1984	12	1.5	30	35	25
1985	13	1.5	31	39	25
1986	13	1.3	27	37	22
1987	10	1.8	15	30	27
1988	13	2.0	14	28	
1989	13	2.4	13	29	
1990	14	1.7	40	28	
1991	12	2.1	13	27	
1992	13	2.2	14	29	
1993	14	1.8	15	27	
1994	14	2.2	10	24	27
1995	10	2.1	15	26	23
1996	10	2.1	10	27	29
1997	9	2.5	8.4	24	28
1998	9	2.2	7.6	23	24
1999	9	2.1	20	27	27
2000	8	2.5	12	26	25
2001	14	2.9	11	25	27
2002	9	2.7	8.0	24	25
2003	8	2.2	16	32	
2004	11	2.3	13	30	29
2005	11	2.2	16	29	
2006	10	1.2	36	47	
2007	12	2.8	12	29	23
2008	12	1.9	16	38	



CASPIAN LAKE

Greensboro, VT

Lay Monitor: Andy Dales
Former Lay Monitors: George Hasen
Scott Irwin

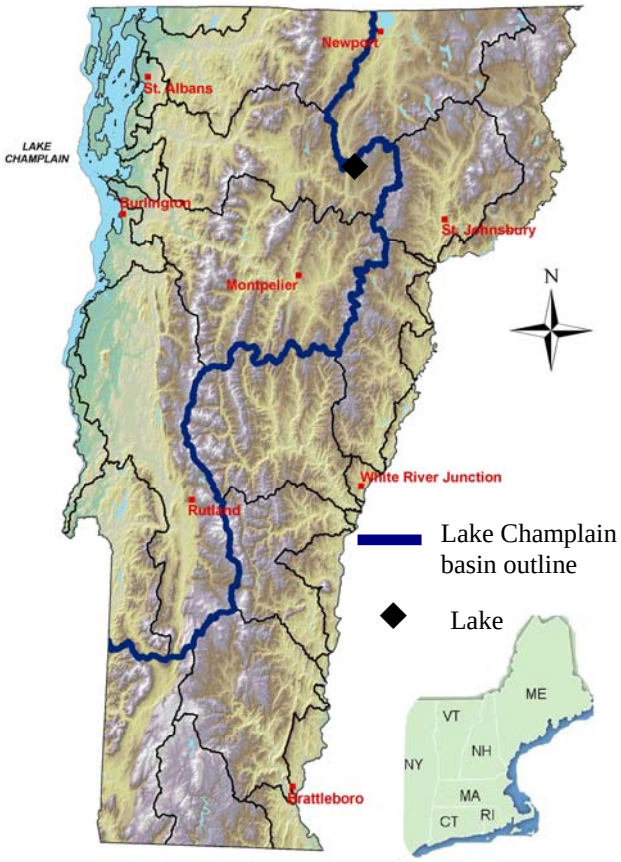
Caspian Lake is a large, deep, coldwater lake.

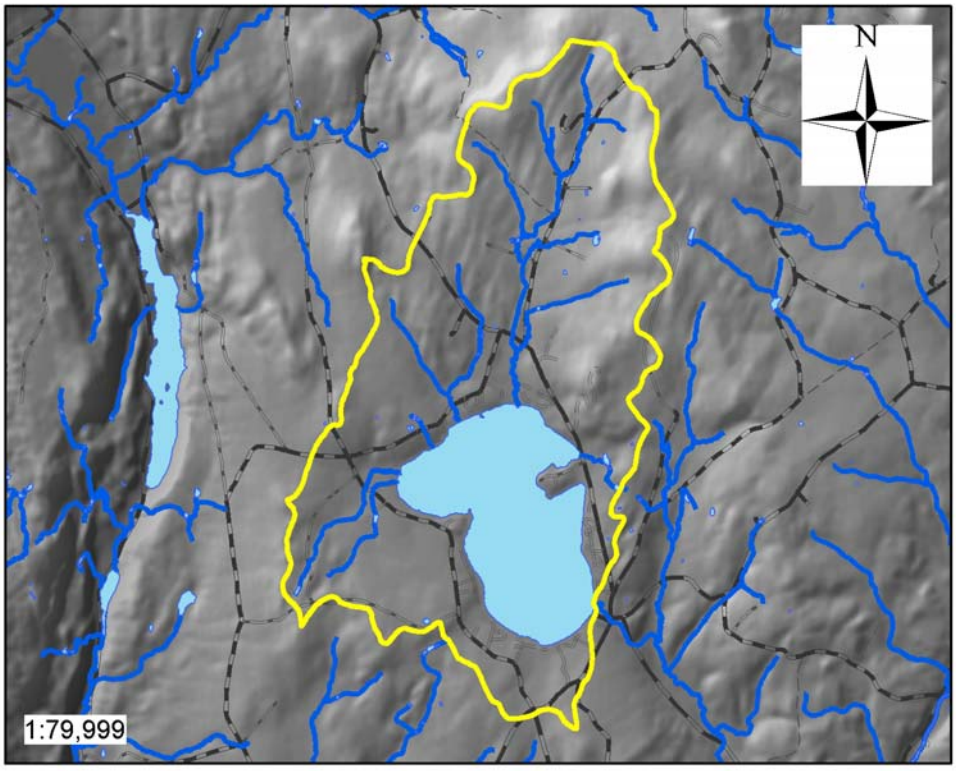
Lake Surface Area:	789	acres
Drainage Basin Area	4,510	acres
Maximum depth:	142 ft.	(43.0 m)
Average depth:	57 ft.	(17.3 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – high
Algal population density – low
Nutrient enrichment – moderate

Trophic State: Oligotrophic





Lake outlined by its watershed

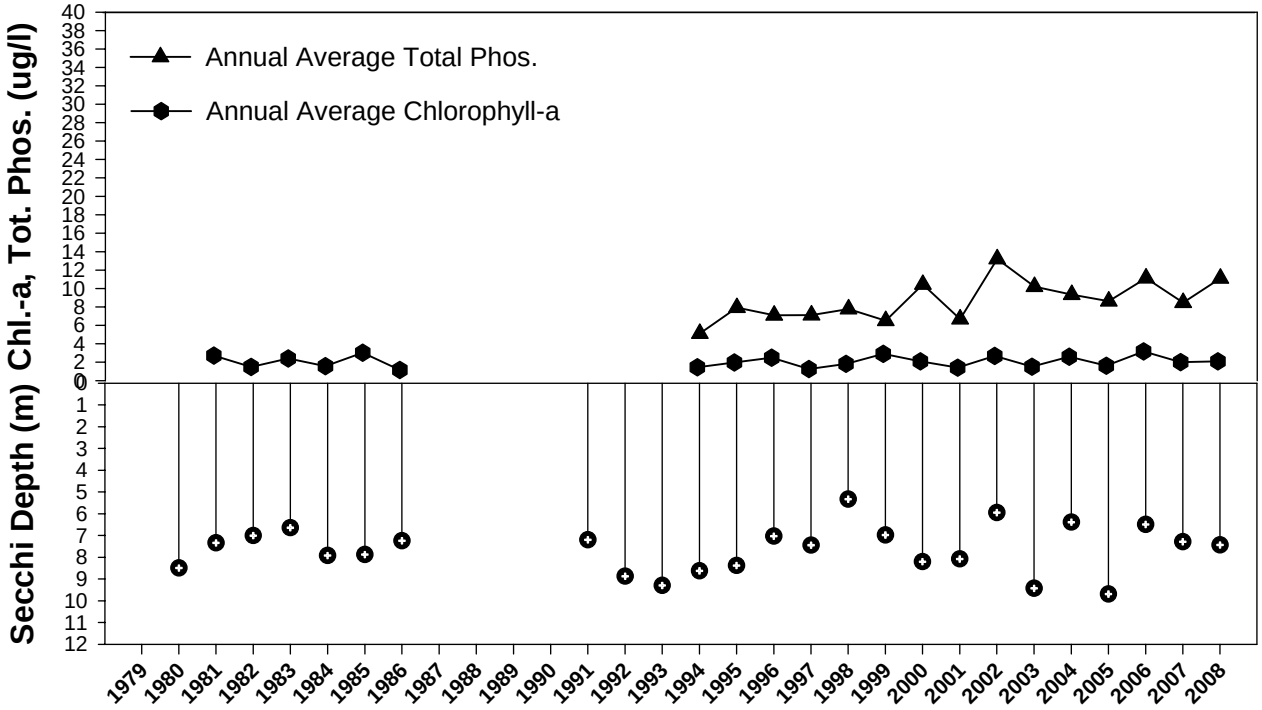
Caspian Lake

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	12	5.0	7.4	10
Chl-a (ug/l)	12	1.0	2.1	3.2
Summer TP (ug/l)	12	8.5	11	14
Spring TP (ug/l)	1		8.0	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	7				4.3
1980	9	8.5			5.3
1981	13	7.3	2.8		5.3
1982	12	7.0	1.5		7.3
1983	11	6.6	2.4		8.7
1984	12	7.9	1.6		6.0
1985	13	7.9	3.1		7.3
1986	12	7.3	1.2		8.0
1991	12	7.2			
1992	13	8.9			
1993	11	9.3			
1994	13	8.6	1.5	5.1	5.1
1995	12	8.4	2.0	7.9	
1996	12	7.0	2.5	7.1	4.6
1997	10	7.5	1.3	7.1	5.5
1998	10	5.3	1.9	7.8	
1999	10	7.0	2.9	6.5	6.9
2000	10	8.2	2.1	10	
2001	10	8.1	1.5	6.7	
2002	10	6.0	2.7	13	
2003	14	9.4	1.6	10	
2004	14	6.4	2.6	9.3	
2005	13	9.7	1.7	8.6	7.2
2006	11	6.5	3.2	11	9.6
2007	12	7.3	2.0	8.5	7.9
2008	12	7.4	2.1	11	8.0



CHIPMAN LAKE

Tinmouth, VT

Lay Monitor: Annie Robbins

Former Lay Monitors:
Joseph Frankiewicz

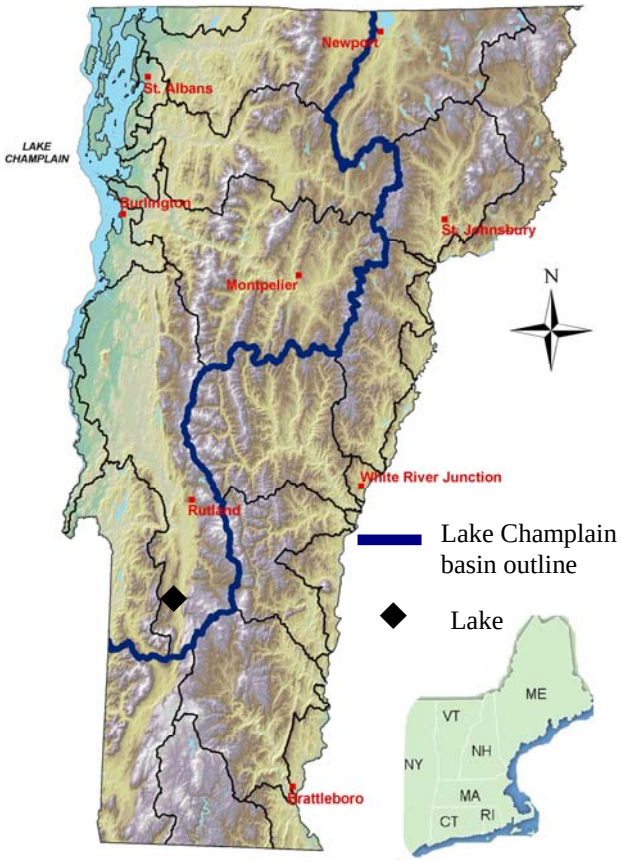
Chipman Lake is a small, shallow lake.

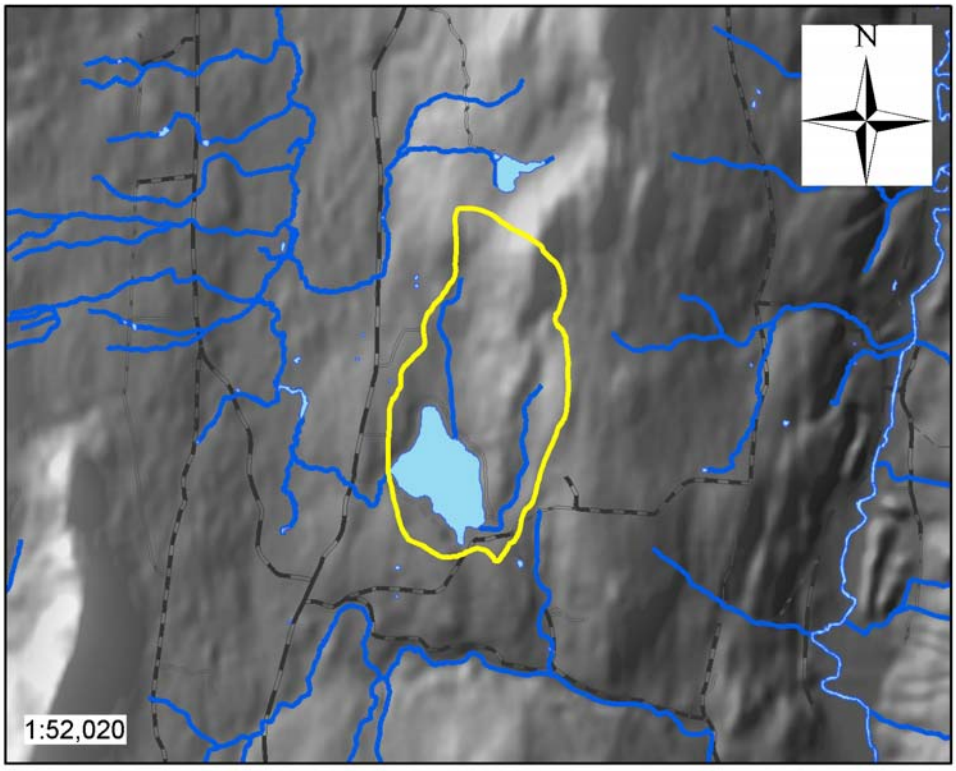
Lake Surface Area:	79	acres
Drainage Basin Area	535	acres
Maximum depth:	11 ft.	(3.4 m)
Average depth:	7 ft.	(2.1 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – Secchi disk viewed to bottom during the summer
Algal population density – low
Nutrient enrichment – moderate

Trophic State: Mesotrophic





Lake outlined by its watershed

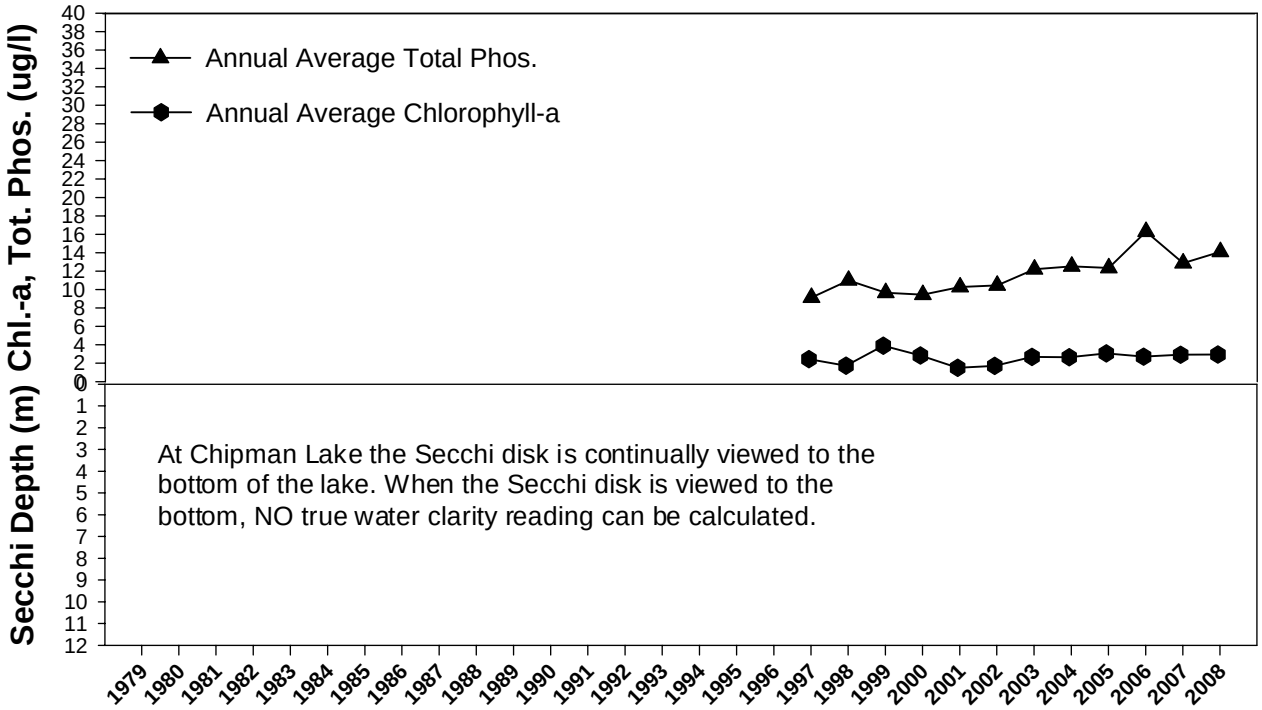
Chipman Lake

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	12	3.4	3.4	3.5
Chl-a (ug/l)	12	1.3	3.0	4.9
Summer TP (ug/l)	11	13	14	16

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1996	11				
1997	15		2.5	9.1	14
1998	15		1.8	11	
1999	14		3.9	9.6	8.0
2000	14		2.9	9.4	
2001	11		1.5	10	5.0
2002	13		1.8	10	
2003	14		2.7	12	
2004	13		2.7	13	
2005	12		3.1	12	14
2006	14		2.7	16	
2007	12		3.0	13	
2008	12		3.0	14	



COLE POND

Jamaica, VT

Lay Monitors: Sherry and Vaughn Clark

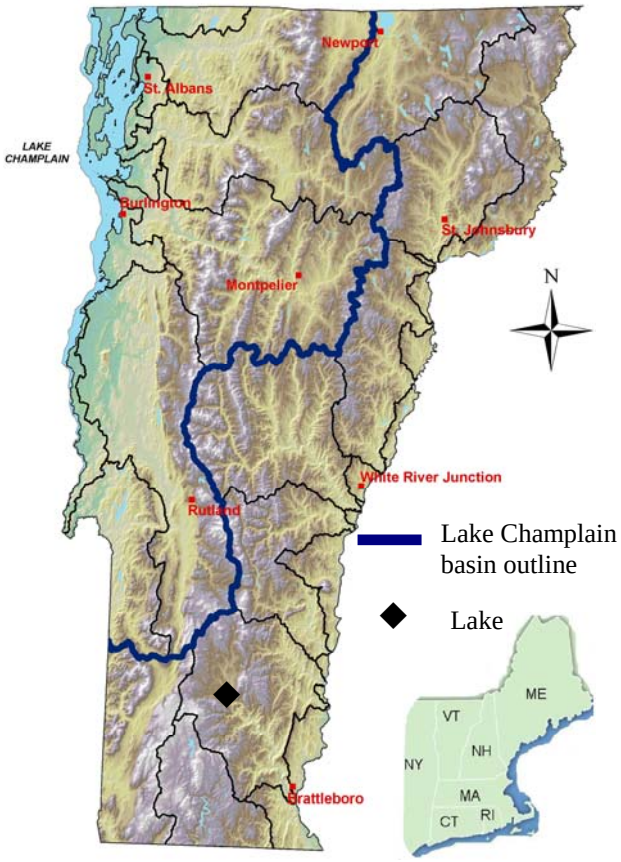
Cole Pond is a fairly remote, small, shallow lake.

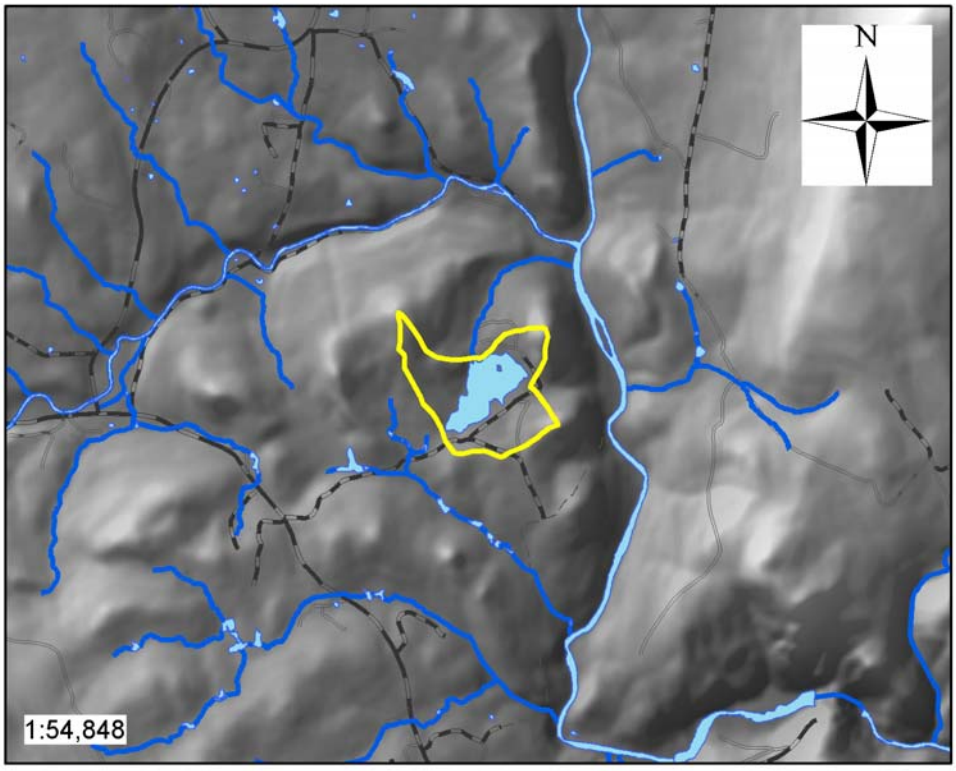
Lake Surface Area:	41	acres
Drainage Basin Area	282	acres
Maximum depth:	13 ft.	(4.0 m)
Average depth:	5 ft.	(1.5 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – Secchi disk viewed to bottom during the summer
Algal population density – low
Nutrient enrichment – moderate

Trophic State: Mesotrophic





Lake outlined by its watershed

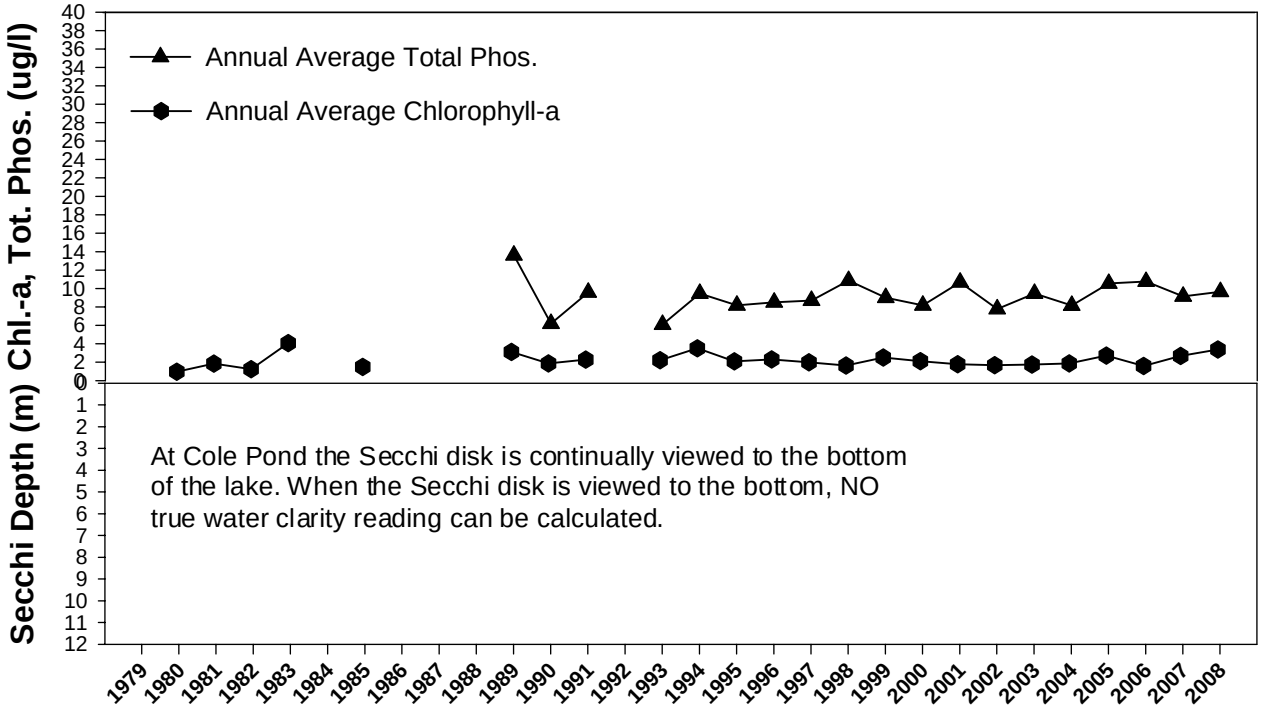
Cole Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	11	2.5	2.9	3.2
Chl-a (ug/l)	11	1.5	3.4	6.8
Summer TP (ug/l)	10	8.6	9.6	11

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1980	13		1.0		
1981	13		1.9		5.5
1982	11		1.3		9.0
1983	9		4.1		9.5
1985	11		1.5		
1988	8				
1989	10		3.2	14	12
1990	12		1.9	6.2	
1991	12		2.3	9.6	
1992	13				
1993	12		2.3	6.1	
1994	13		3.5	9.5	
1995	12		2.1	8.2	7.4
1996	13		2.3	8.5	9.7
1997	13		2.0	8.7	
1998	13		1.7	11	8.0
1999	12		2.5	9.0	
2000	12		2.2	8.2	8.9
2001	13		1.8	11	
2002	13		1.7	7.8	
2003	12		1.8	9.5	
2004	12		1.9	8.2	
2005	11		2.8	11	
2006	11		1.6	11	13
2007	11		2.7	9.2	
2008	11		3.4	9.6	



COLES POND

Stannard, Walden, VT

Lay Monitors: Joseph Engel
Samantha M. Lavertue

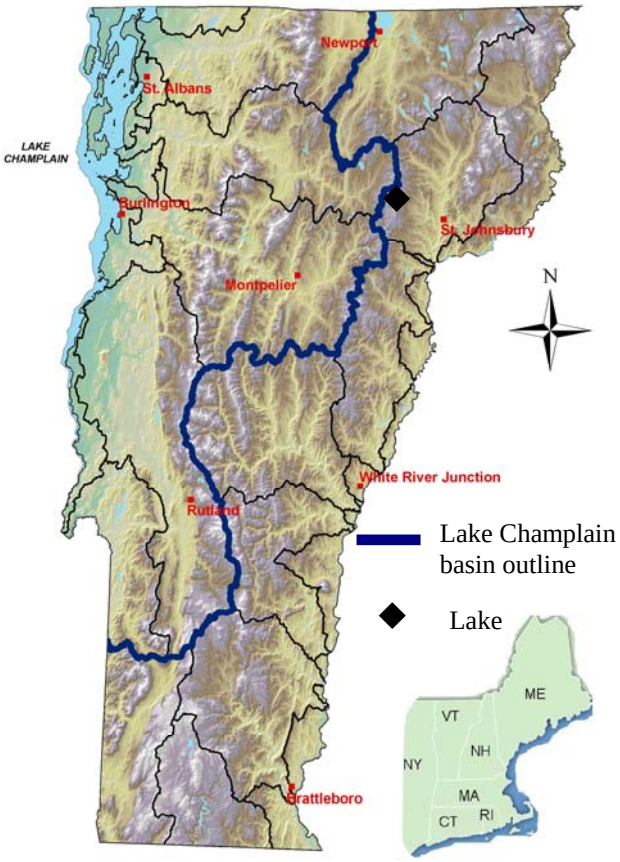
Coles Pond is a moderately sized, shallow, natural lake with artificial controls.

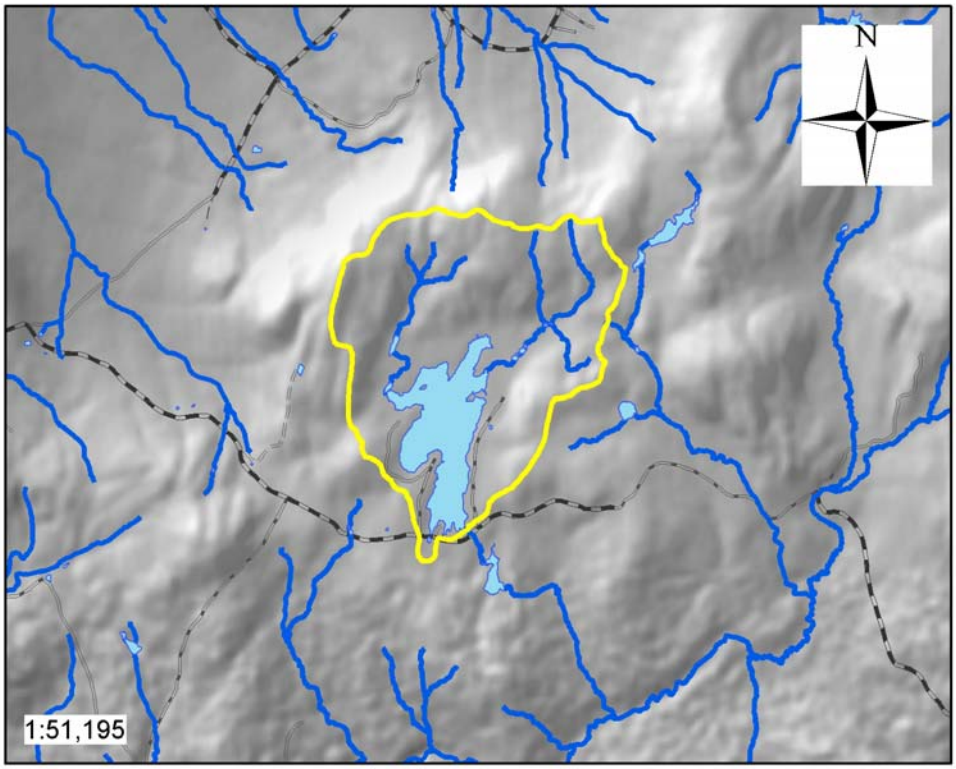
Lake Surface Area:	125	acres
Drainage Basin Area	744	acres
Maximum depth:	21 ft.	(6.4 m)
Average depth:	8 ft.	(2.4 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – moderate
Algal population density – low
Nutrient enrichment – moderate

Trophic State: Oligotrophic





Lake outlined by its watershed

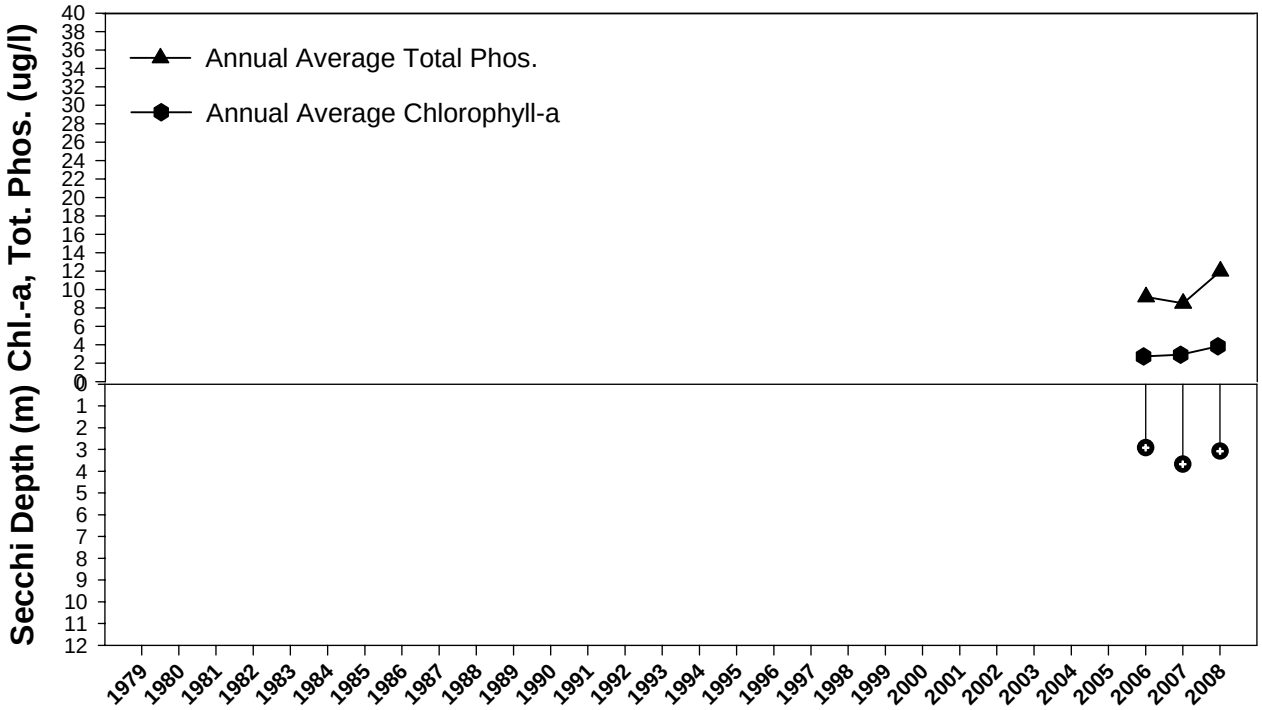
Coles Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	12	2.7	3.1	4.0
Chl-a (ug/l)	12	1.4	3.9	7.1
Summer TP (ug/l)	11	10	12	15

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
2006	12	2.9	2.8	9.2	
2007	12	3.7	3.0	8.5	
2008	12	3.1	3.9	12	



CURTIS POND

Calais, VT

Lay Monitors: Andrea and Doug Braasch

Former Lay Monitors:
Lucille and Alexander MacLellan

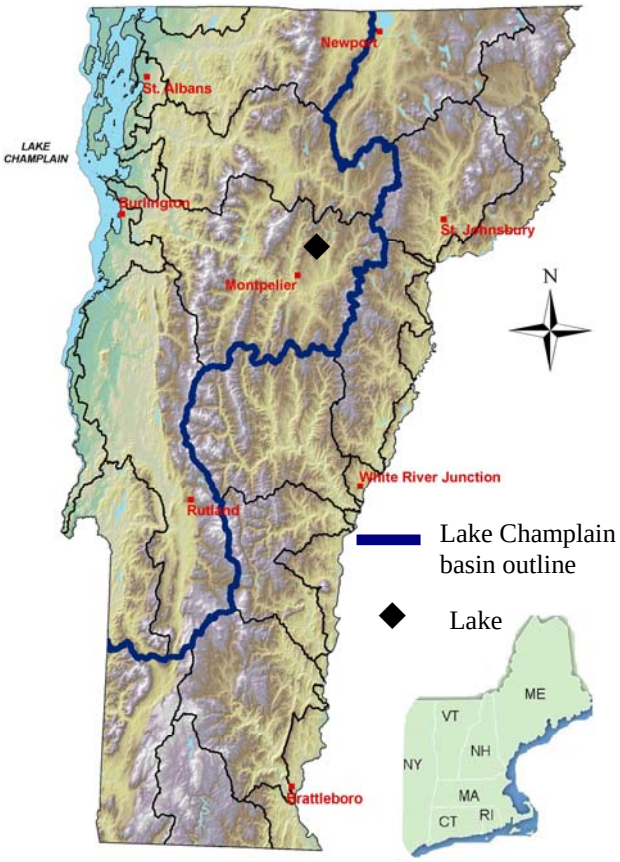
Curtis Pond is a small, warmwater lake.

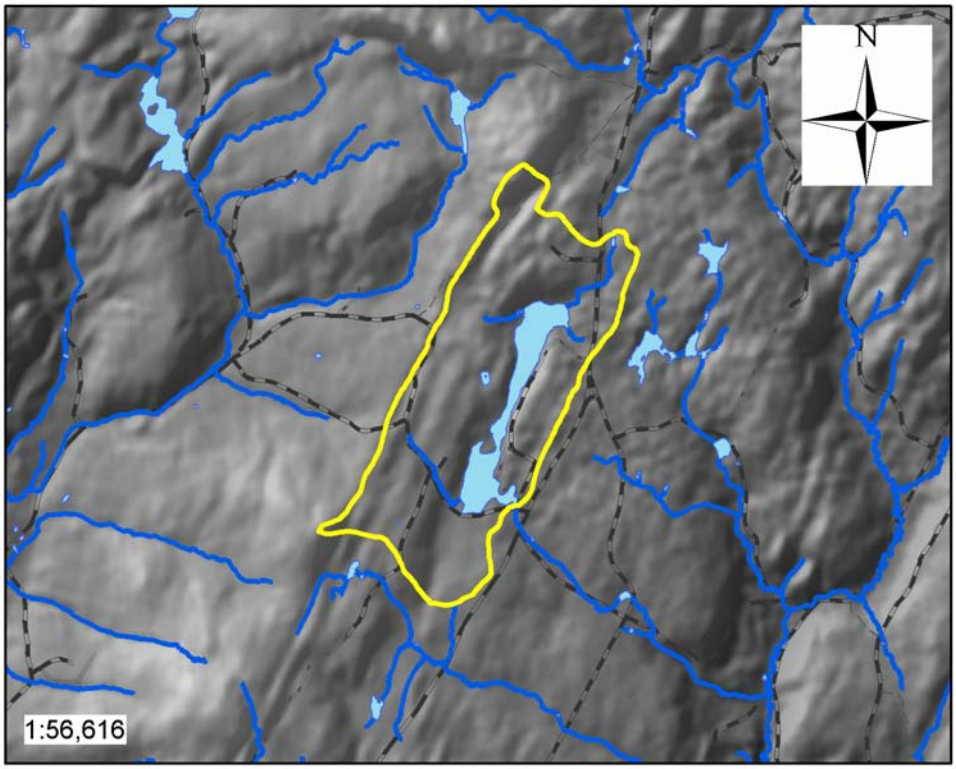
Lake Surface Area:	72	acres
Drainage Basin Area	917	acres
Maximum depth:	31 ft.	(9.4 m)
Average depth:	11 ft.	(3.4 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – moderate
Algal population density – high
Nutrient enrichment – high

Trophic State: Eutrophic





Lake outlined by its watershed

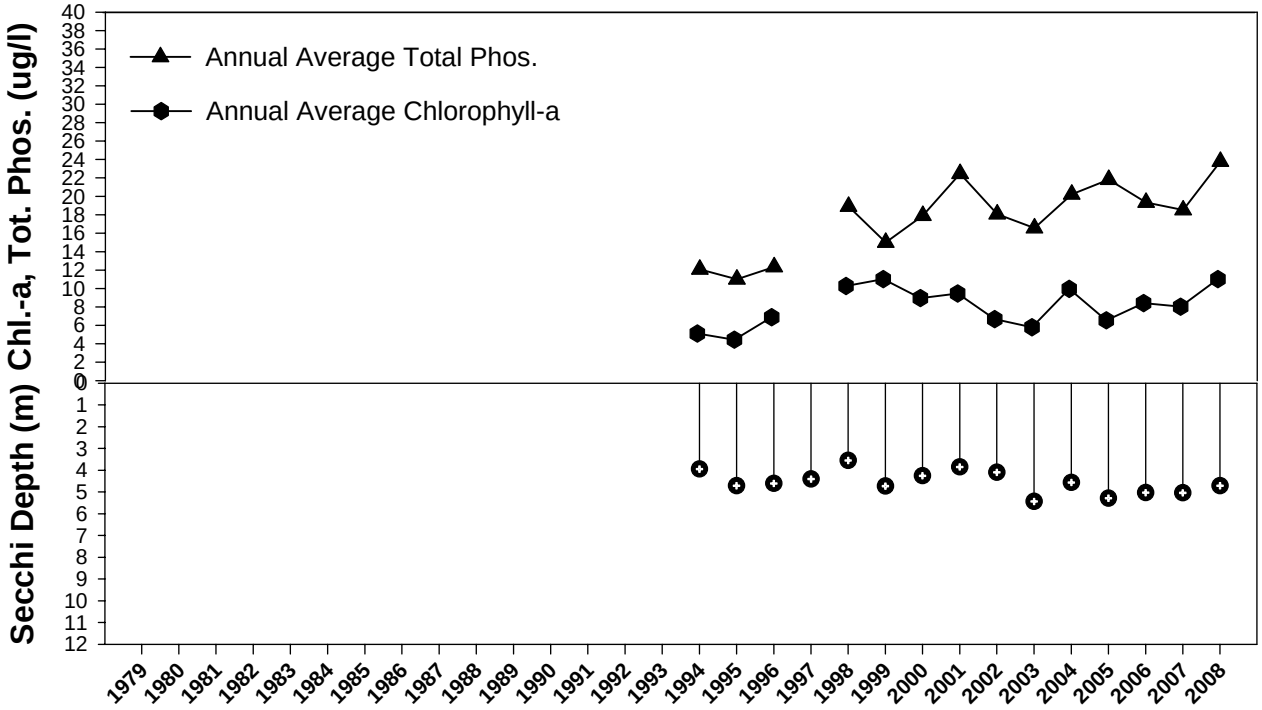
Curtis Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	14	3.5	4.7	5.4
Chl-a (ug/l)	14	4.7	11	19
Summer TP (ug/l)	14	17	24	38
Spring TP (ug/l)	1		20	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1994	12	3.9	5.1	12	
1995	10	4.7	4.5	11	18
1996	12	4.6	6.9	12	
1997	12	4.4			
1998	12	3.6	10	19	
1999	10	4.7	11	15	
2000	11	4.3	9.0	18	
2001	15	3.9	9.5	22	22
2002	13	4.1	6.7	18	
2003	11	5.4	5.8	17	
2004	14	4.6	10	20	22
2005	15	5.3	6.6	22	24
2006	14	5.0	8.5	19	21
2007	12	5.0	8.1	19	
2008	14	4.7	11	24	20

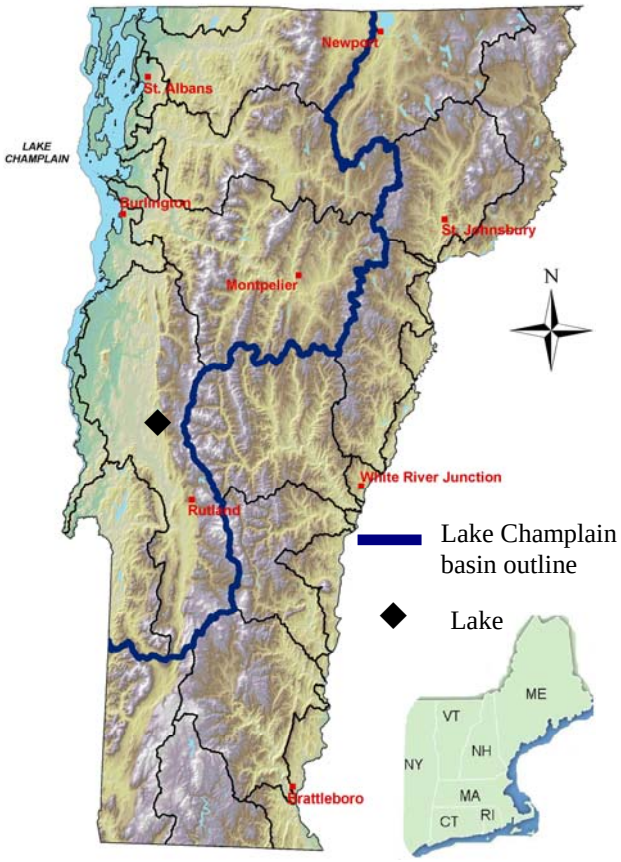


LAKE DUNMORE

Salisbury, Leicester, VT

Lay Monitor: Collin Tompkins, Derek LaRosee, Nate Bierschenk, Will Pitkin

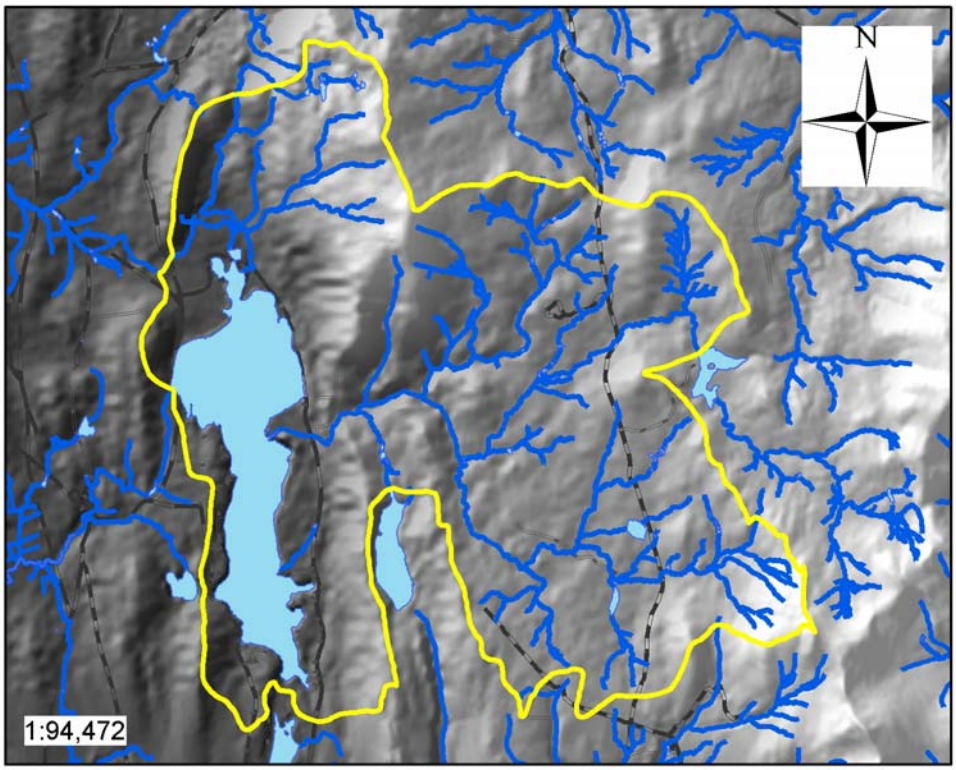
Former Lay Monitors:
Andrew Menkart and milfoil crew
Liam Powers
Matt Hayden
Nick Staats



Lake Dunmore is a long lake divided into two sections, a deep northern section in the town of Salisbury and a shallow southern section in the town of Leicester.

Lake Surface Area:	985	acres
Drainage Basin Area	13,068	acres
Maximum depth:	105 ft.	(32 m)
Average depth:	28 ft.	(8.5 m)

Compared to other lakes, long-term summer means indicate:
Water clarity – high
Algal population density – low
Nutrient enrichment – moderate



Lake outlined by its watershed

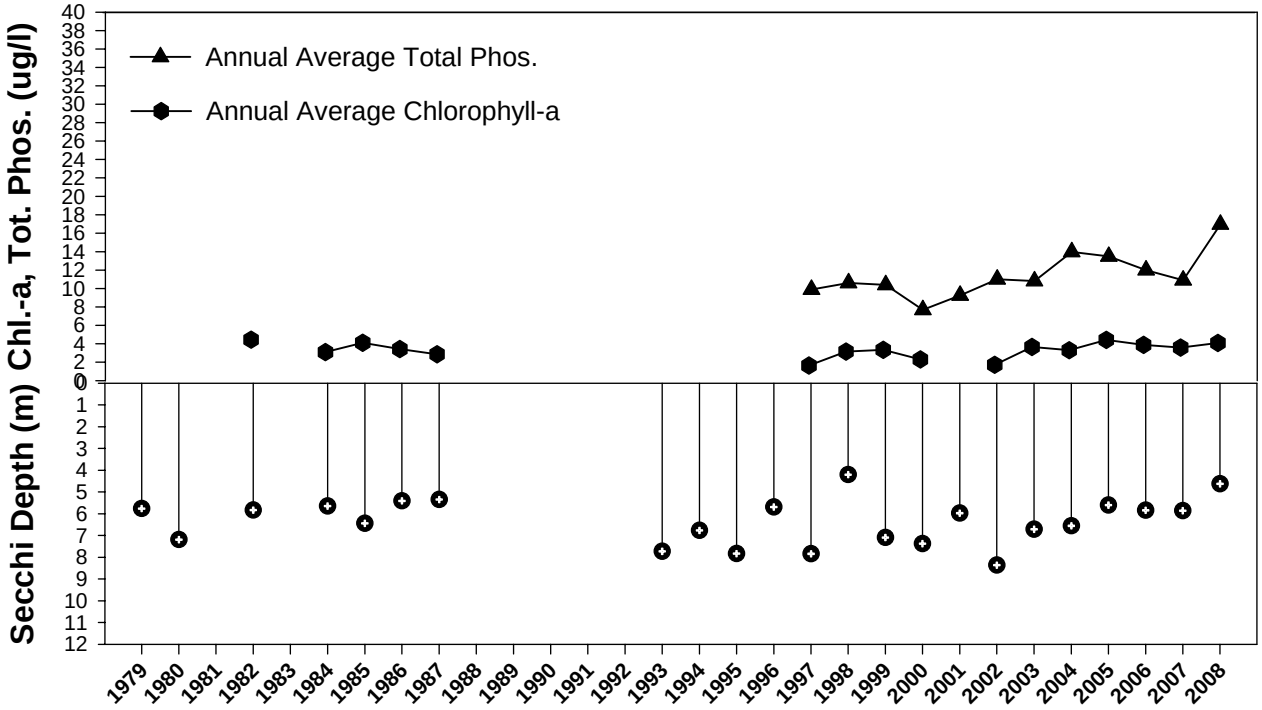
Lake Dunmore

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	9	1.5	4.6	7.0
Chl-a (ug/l)	9	2.9	4.1	5.4
Summer TP (ug/l)	10	11	17	25
Spring TP (ug/l)	1		7.1	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	15	5.8			8.5
1980	13	7.2			3.7
1982	11	5.8	4.5		10
1984	13	5.7	3.1		8.3
1985	9	6.4	4.2		7.7
1986	12	5.4	3.5		7.7
1987	10	5.4	2.9		8.0
1993	10	7.7			
1994	11	6.8			
1995	8	7.8			6.7
1996	9	5.7			7.3
1997	9	7.8	1.7	9.9	
1998	10	4.2	3.2	11	6.7
1999	10	7.1	3.4	10	6.2
2000	10	7.4	2.3	7.7	8.5
2001	8	6.0		9.3	
2002	14	8.4	1.8	11	
2003	12	6.7	3.7	11	
2004	12	6.6	3.3	14	9.8
2005	9	5.6	4.5	13	7.3
2006	10	5.9	3.9	12	
2007	11	5.9	3.6	11	
2008	10	4.6	4.1	17	7.1



ECHO LAKE

Charleston, VT

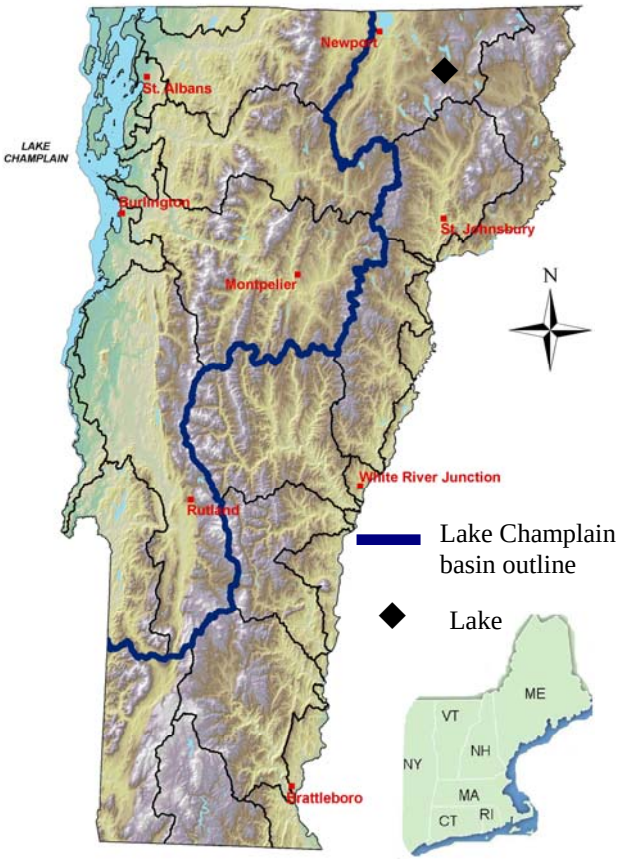
Lay Monitors: Peter Engels
Eric Stevens

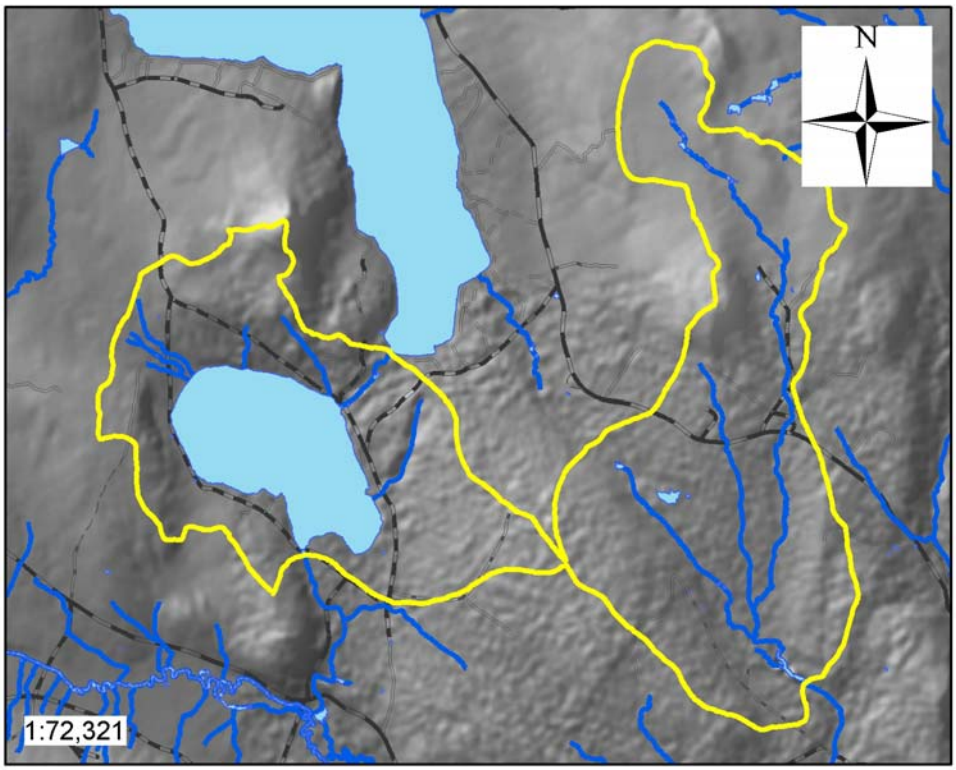
Echo Lake is a large lake that supports both warm- and coldwater fish.

Lake Surface Area:	550	acres
Drainage Basin Area	15,186	acres
Maximum depth:	129 ft.	(39 m)
Average depth:	58 ft.	(17 m)

Compared to other lakes, long-term summer means indicate:
Water clarity – high
Algal population density – low
Nutrient enrichment – moderate

Trophic State: Oligotrophic





Lake outlined by its watershed

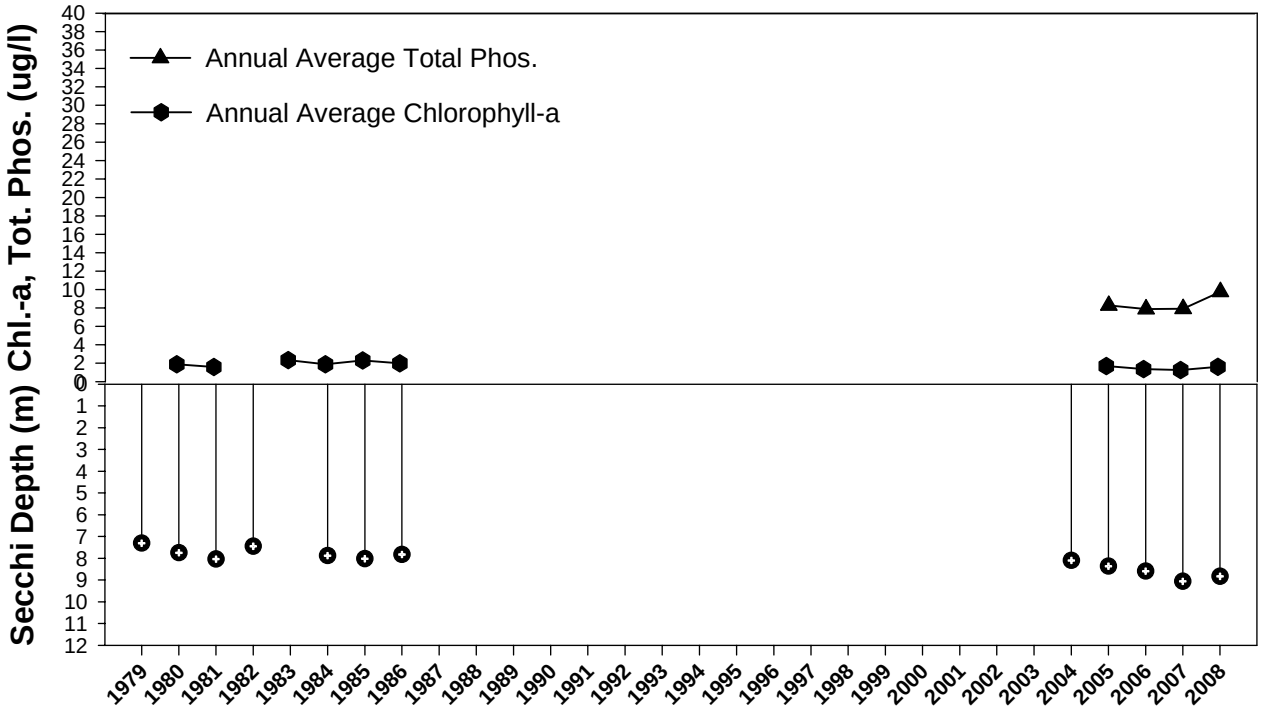
Echo Lake

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	10	5.5	8.8	13
Chl-a (ug/l)	10	1.1	1.7	2.4
Summer TP (ug/l)	10	8.2	9.7	12

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	16	7.3			3.0
1980	13	7.8	1.9		7.0
1981	14	8.0	1.6		7.5
1982	10	7.5			9.0
1983	8		2.4		6.5
1984	9	7.9	1.9		8.0
1985	15	8.0	2.3		9.0
1986	14	7.8	2.0		8.0
2004	12	8.1			7.2
2005	11	8.4	1.7	8.3	
2006	13	8.6	1.4	7.9	10
2007	11	9.1	1.3	7.9	8.5
2008	10	8.8	1.7	9.7	

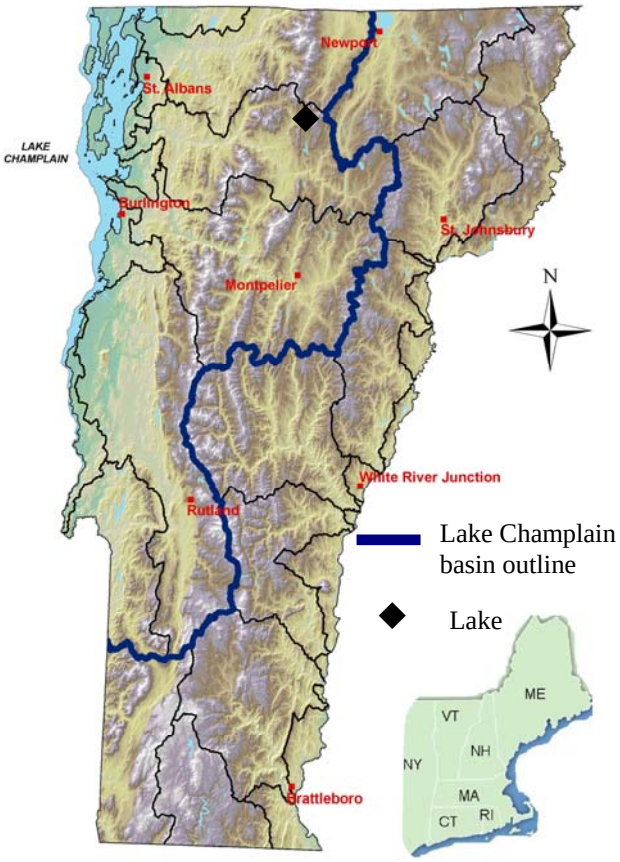


LAKE EDEN

Eden, VT

Lay Monitors: Sue and Ed Gilbert

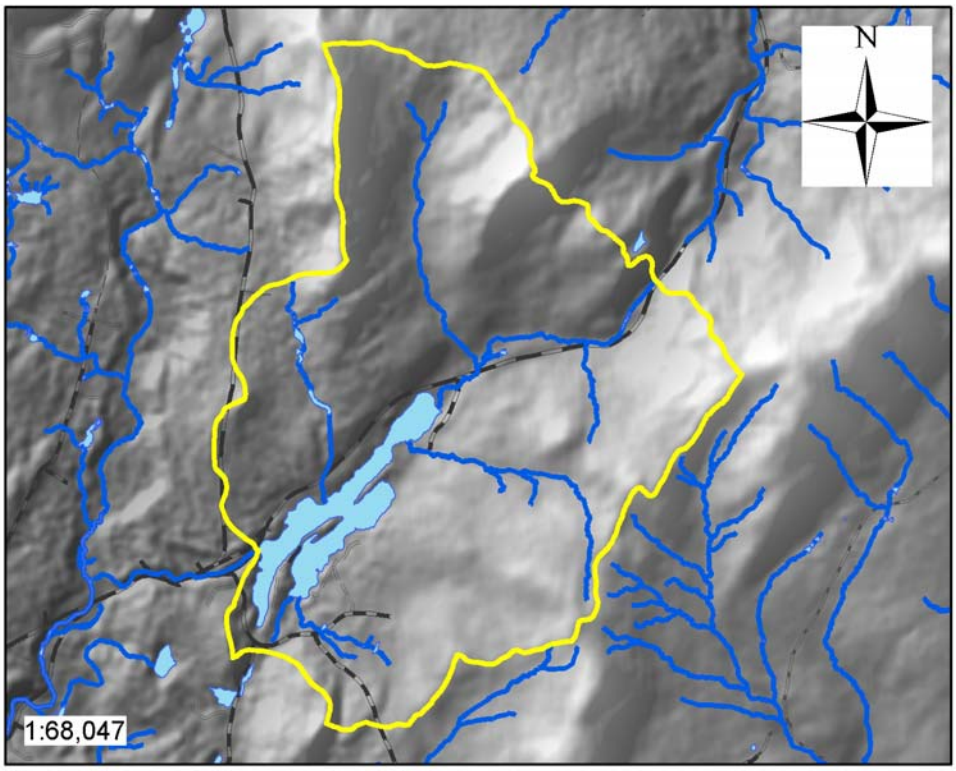
Former Lay Monitors:
Terry and Bonnie Francis
Steve and Teela Leach
Bruce Lyon
Gary Durett
Conrad Klefos



Lake Eden is a moderately sized, warmwater lake which is nearly bisected by narrow peninsulas of the northeastern and southwestern lake shores.

Lake Surface Area:	194	acres
Drainage Basin Area	2,347	acres
Maximum depth:	40 ft.	(12.2 m)
Average depth:	15 ft.	(4.5 m)

Compared to other lakes, long-term summer means indicate:
Water clarity – moderate
Algal population density – moderate
Nutrient enrichment – moderate



Lake outlined by its watershed

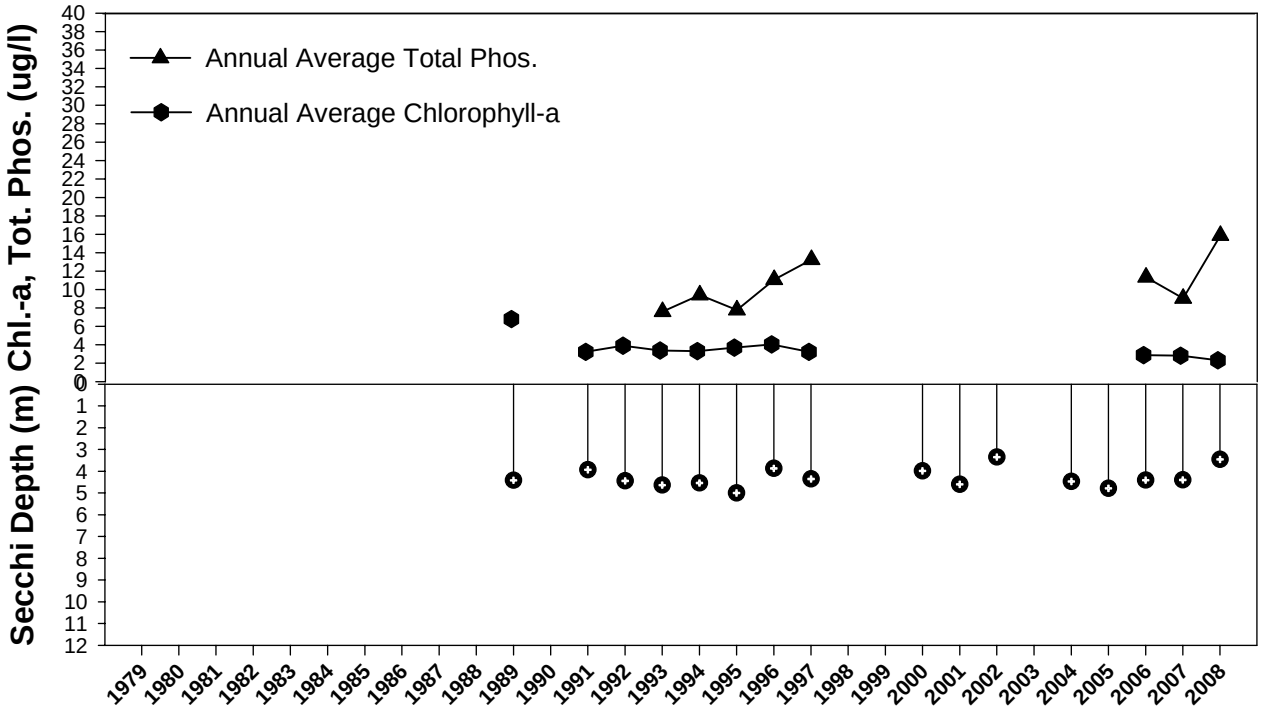
Lake Eden

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	13	1.7	3.5	4.2
Chl-a (ug/l)	13	1.4	2.4	3.8
Summer TP (ug/l)	13	9.9	16	39

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1989	9	4.4	6.8		9.7
1990	3				
1991	9	3.9	3.3		
1992	13	4.4	3.9		
1993	12	4.6	3.4	7.6	
1994	12	4.5	3.4	9.4	6.3
1995	13	5.0	3.7	7.8	
1996	11	3.9	4.1	11	
1997	9	4.4	3.3	13	
1998	6				5.7
1999	7				
2000	9	4.0			
2001	9	4.6			8.6
2002	9	3.4			
2004	8	4.5			
2005	13	4.8			
2006	11	4.4	2.9	11	
2007	12	4.4	2.9	9.1	14
2008	13	3.5	2.4	16	



ELFIN LAKE

Wallingford, VT

Lay Monitor: Michael Bird

Former Lay Monitors:
Anne Miller

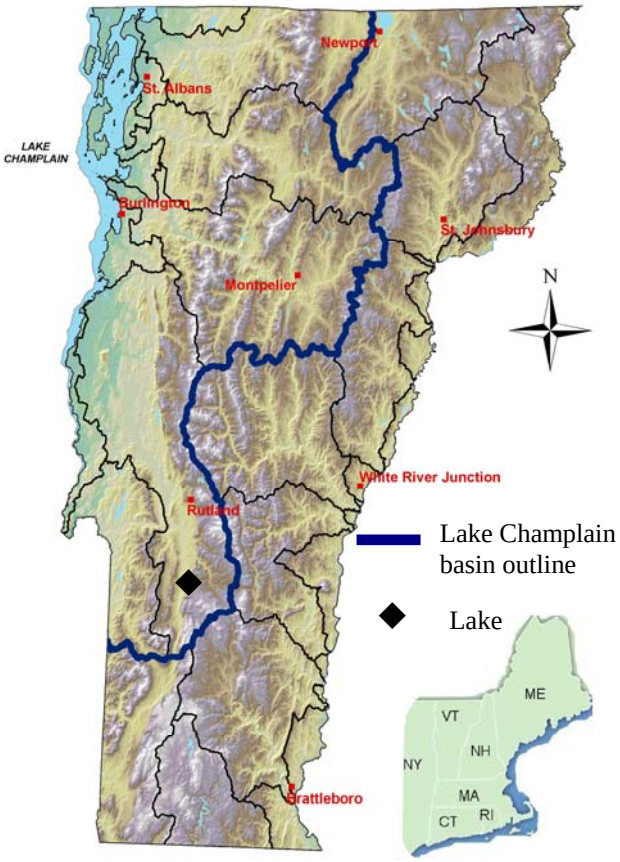
Elfin Lake is a small, undeveloped lake.

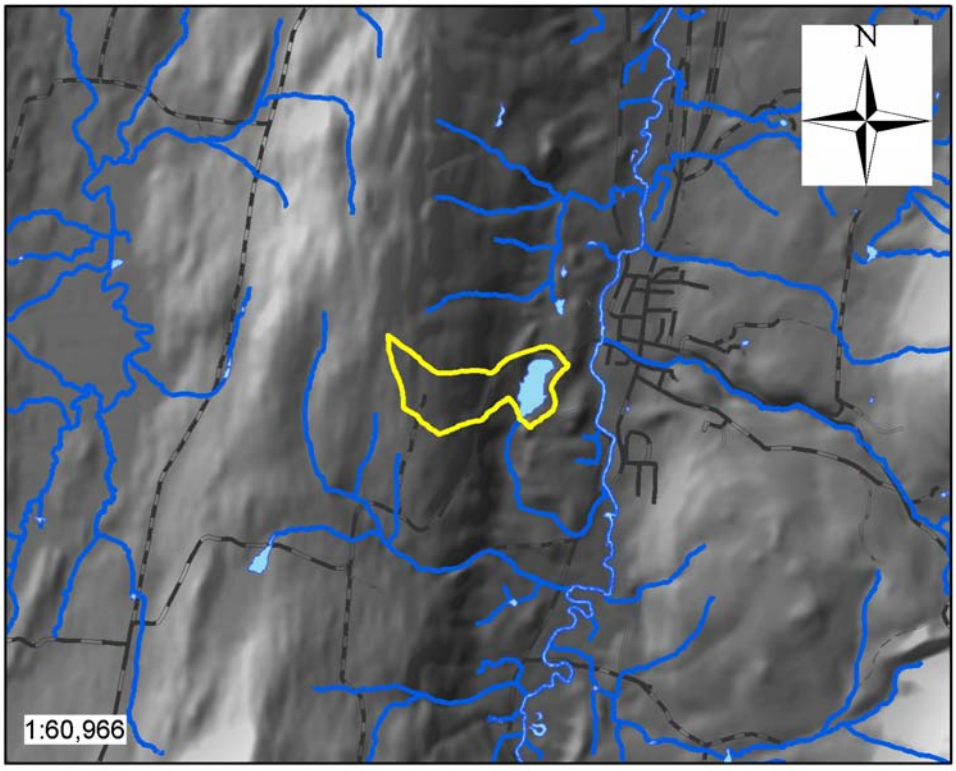
Lake Surface Area:	16	acres
Drainage Basin Area	228	acres
Maximum depth:	37 ft.	(11.2 m)
Average depth:	12 ft.	(3.7 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – moderate
Algal population density – high
Nutrient enrichment – high

Trophic State: Mesotrophic





Lake outlined by its watershed

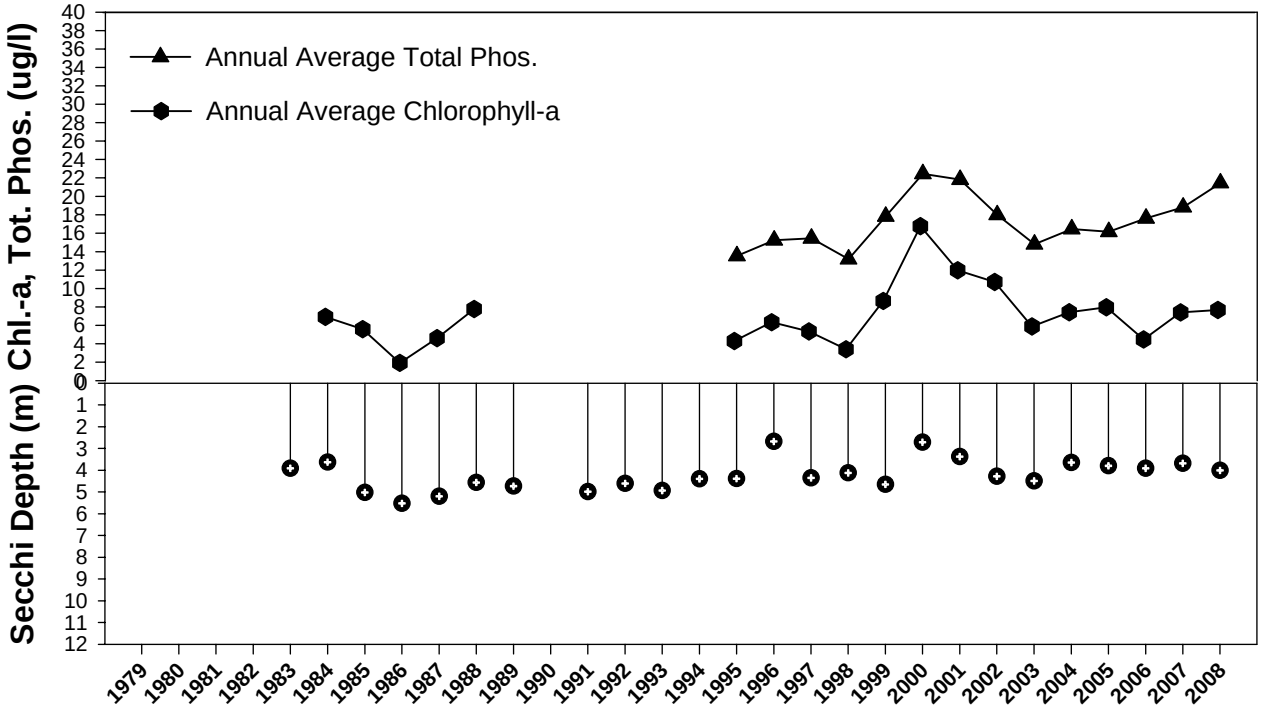
Elfin Lake

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	11	3.2	4.0	4.7
Chl-a (ug/l)	11	4.3	7.7	12
Summer TP (ug/l)	11	18	21	26

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1983	12	3.9			11
1984	13	3.6	7.0		17
1985	13	5.0	5.6		17
1986	13	5.5	2.0		
1987	13	5.2	4.6		
1988	14	4.6	7.8		
1989	8	4.7			19
1990	6				
1991	14	5.0			
1992	10	4.6			
1993	11	4.9			
1994	11	4.4			
1995	11	4.4	4.3	14	
1996	12	2.7	6.4	15	12
1997	10	4.4	5.4	15	
1998	11	4.1	3.4	13	
1999	11	4.7	8.7	18	
2000	11	2.7	17	22	
2001	12	3.4	12	22	
2002	12	4.3	11	18	
2003	10	4.5	5.9	15	
2004	10	3.7	7.5	16	17
2005	12	3.8	8.0	16	
2006	11	3.9	4.5	18	
2007	11	3.7	7.4	19	20
2008	11	4.0	7.7	21	



LAKE FAIRFIELD

Fairfield, VT

Lay Monitors: Donald and Harriet Gray

Former Lay Monitors:
Thomas Benoure with his daughter, Kimberly Benoure
Ron Bocash

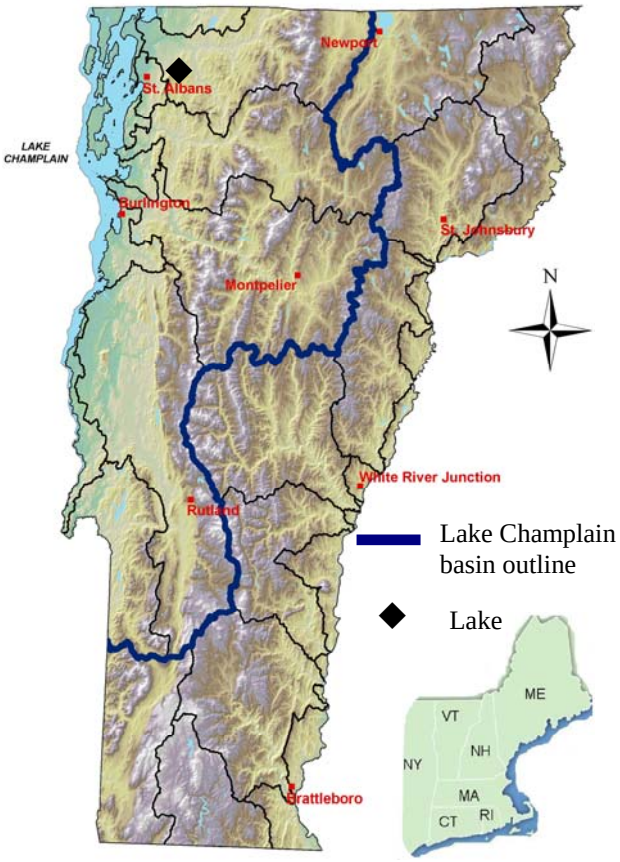
Lake Fairfield is a large, fairly shallow, natural lake.

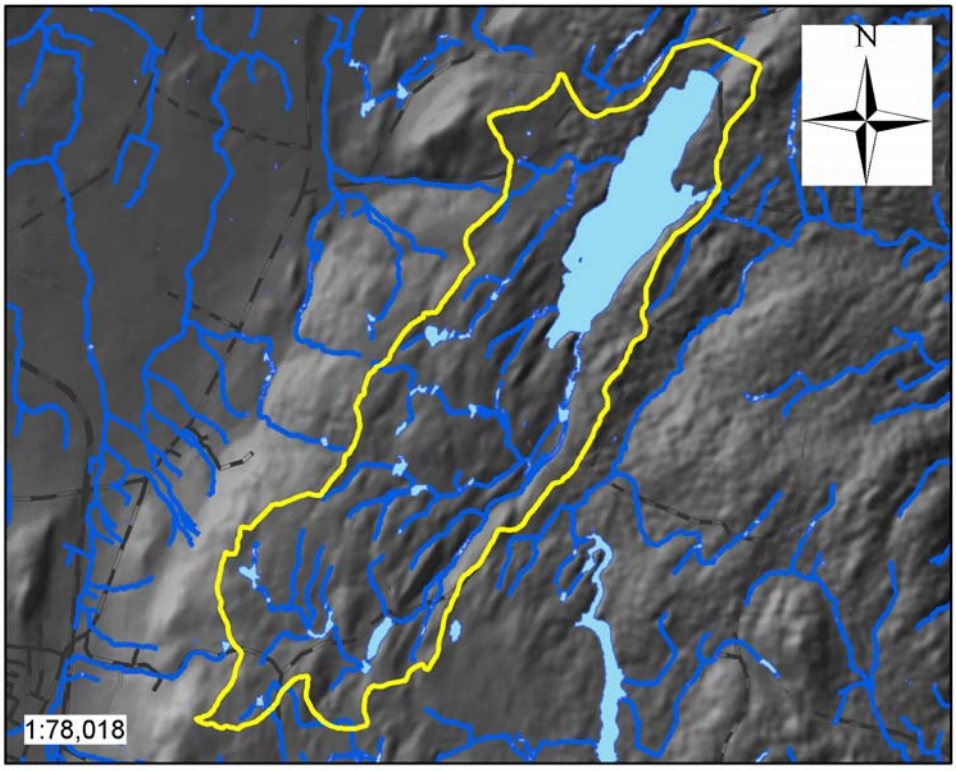
Lake Surface Area:	446	acres
Drainage Basin Area	3,758	acres
Maximum depth:	42 ft.	(12.8 m)
Average depth:	23 ft.	(7.0 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – moderate
Algal population density – high
Nutrient enrichment – high

Trophic State: Eutrophic





Lake outlined by its watershed

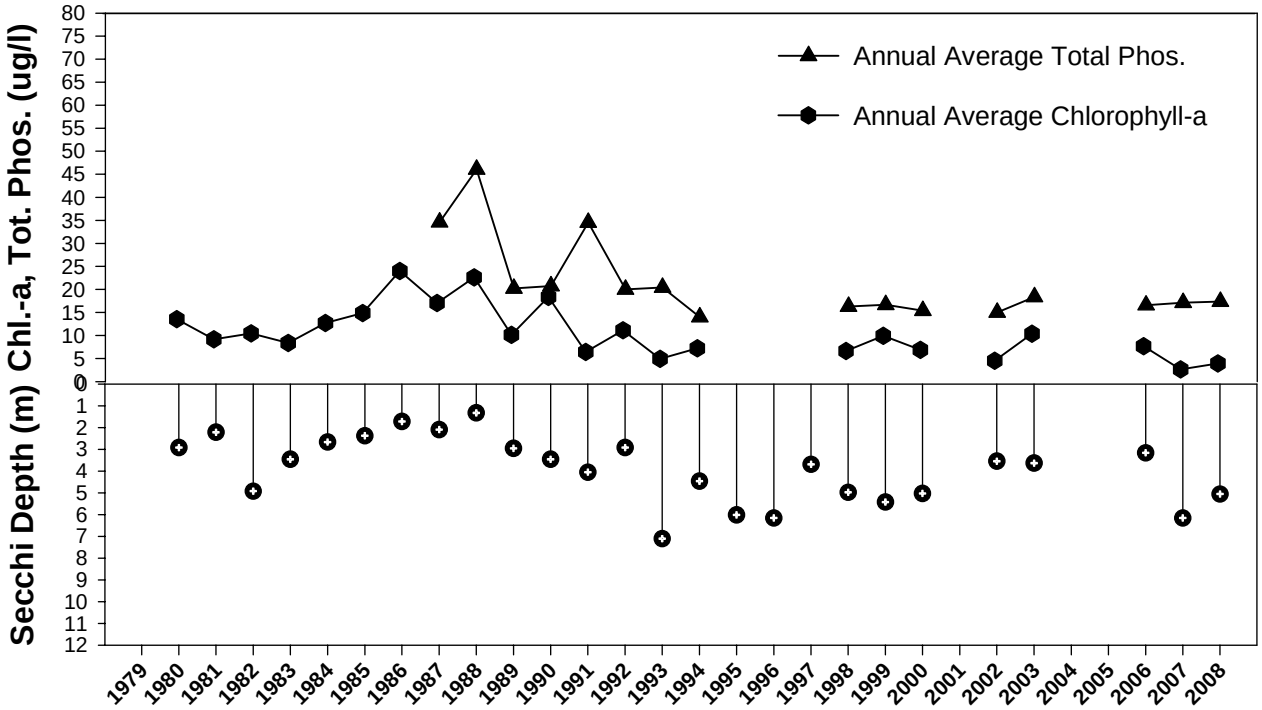
Fairfield Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	13	4.0	5.1	8.2
Chl-a (ug/l)	13	0.8	4.0	7.2
Summer TP (ug/l)	13	14	17	23

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1980	13	2.9	14		25
1981	13	2.2	9.3		22
1982	12	4.9	11		30
1983	12	3.5	8.5		34
1984	9	2.7	13		44
1985	12	2.4	15		46
1986	12	1.7	24		52
1987	13	2.1	17	35	39
1988	14	1.3	23	46	41
1989	12	3.0	10	20	27
1990	13	3.5	18	21	40
1991	13	4.0	6.5	35	18
1992	9	2.9	11	20	15
1993	12	7.1	5.0	20	17
1994	10	4.5	7.3	14	17
1995	11	6.0			14
1996	14	6.2			18
1997	11	3.7			16
1998	13	5.0	6.7	16	16
1999	12	5.4	10	17	14
2000	8	5.0	7.0	15	15
2001	5				16
2002	9	3.5	4.6	15	
2003	8	3.6	10	18	
2006	13	3.2	7.8	17	
2007	12	6.2	2.7	17	17
2008	13	5.1	4.0	17	



LAKE FAIRLEE

Fairlee, West Fairlee and Thetford, VT

Lay Monitors: Gordon Kerr

Former Lay Monitors:
Chris Madden
Don Wilson

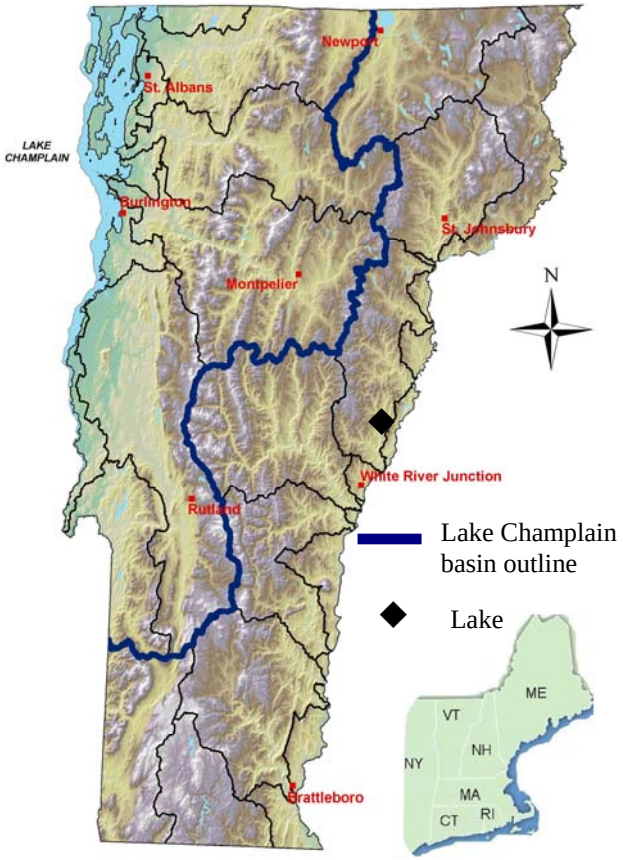
Lake Fairlee is a large, warmwater lake.

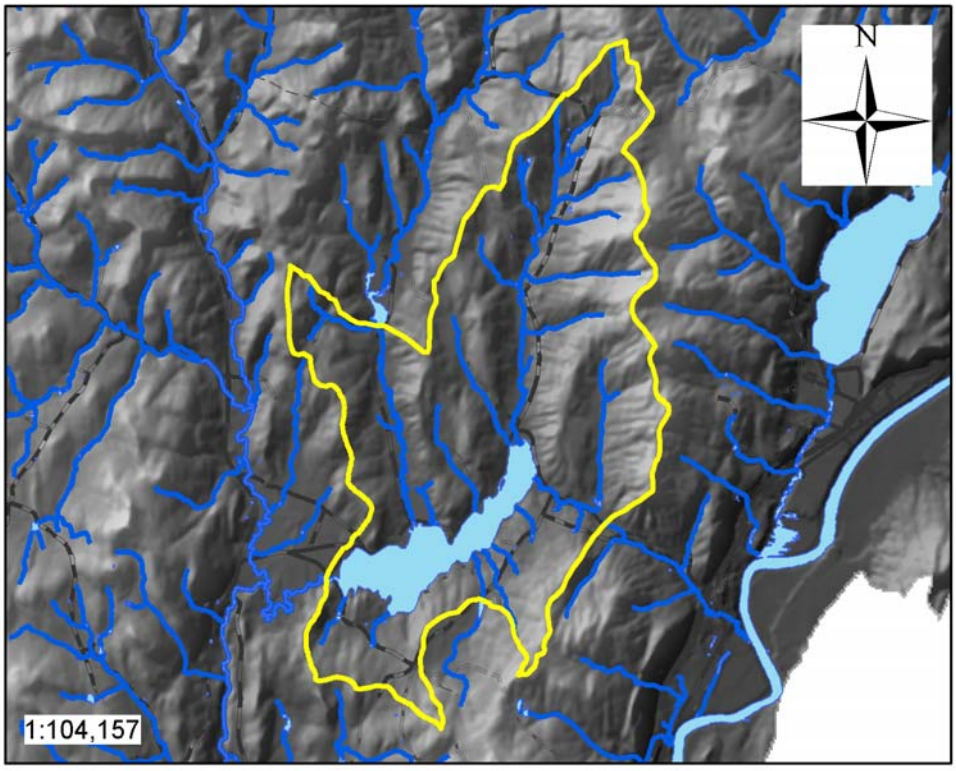
Lake Surface Area:	457	acres
Drainage Basin Area	12,976	acres
Maximum depth:	50 ft.	(15.0 m)
Average depth:	23 ft.	(7.0 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – high
Algal population density – moderate
Nutrient enrichment – moderate

Trophic State: Mesotrophic





Lake outlined by its watershed

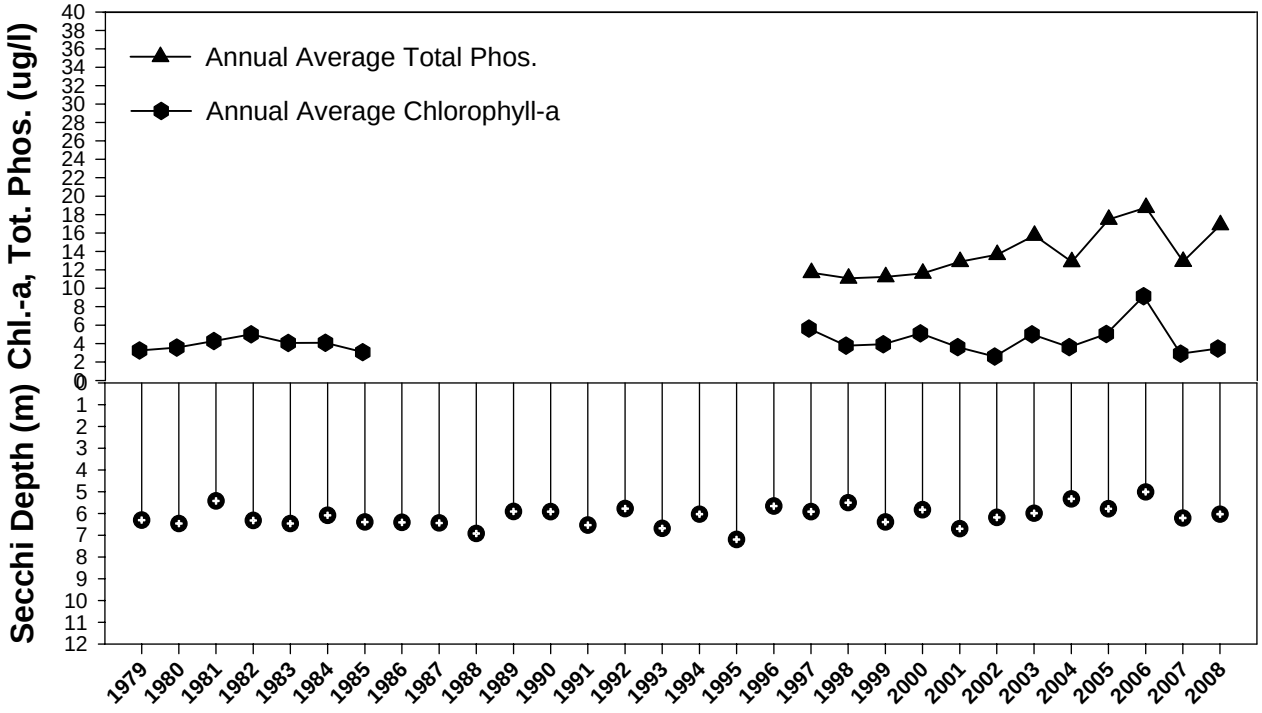
Lake Fairlee

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	9	5.3	6.0	6.6
Chl-a (ug/l)	9	1.8	3.5	4.7
Summer TP (ug/l)	9	12	17	24
Spring TP (ug/l)	1		11	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	13	6.3	3.3		6.0
1980	13	6.5	3.6		8.3
1981	13	5.4	4.3		12
1982	11	6.3	5.0		15
1983	13	6.5	4.1		10
1984	12	6.1	4.1		9.3
1985	11	6.4	3.1		10
1986	8	6.4			13
1987	12	6.4			15
1988	12	6.9			
1989	11	5.9			
1990	12	5.9			
1991	13	6.5			
1992	14	5.8			
1993	12	6.7			
1994	13	6.0			
1995	13	7.2			
1996	13	5.7			12
1997	13	5.9	5.7	12	
1998	13	5.5	3.8	11	9.0
1999	13	6.4	4.0	11	
2000	13	5.8	5.1	12	
2001	10	6.7	3.6	13	
2002	9	6.2	2.6	14	
2003	8	6.0	5.1	16	
2004	10	5.3	3.7	13	15
2005	10	5.8	5.1	17	
2006	10	5.0	9.2	19	13
2007	9	6.2	2.9	13	14
2008	9	6.0	3.5	17	11



FOSTERS POND

Peacham, VT

Lay Monitors: David and Marilyn Magnus

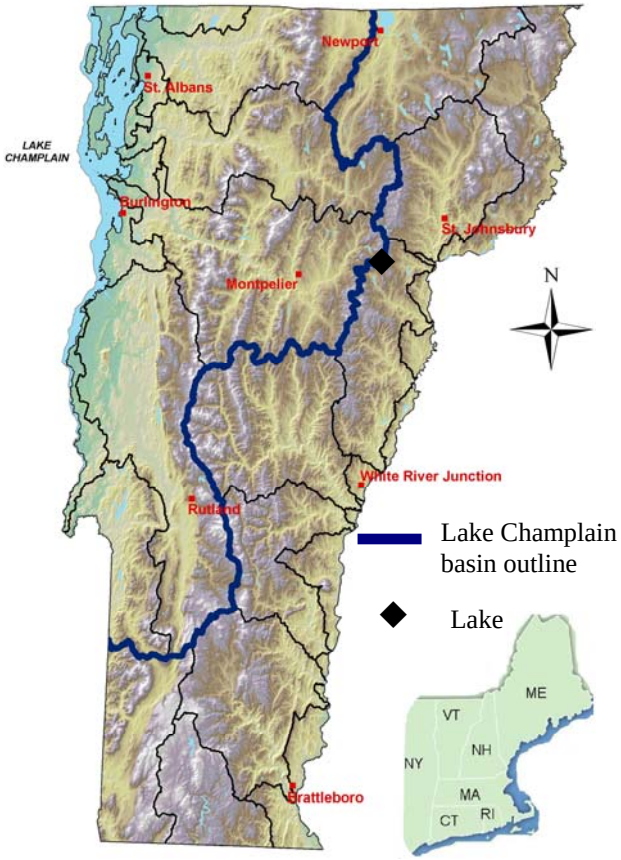
Fosters Pond is a small, shallow pond.

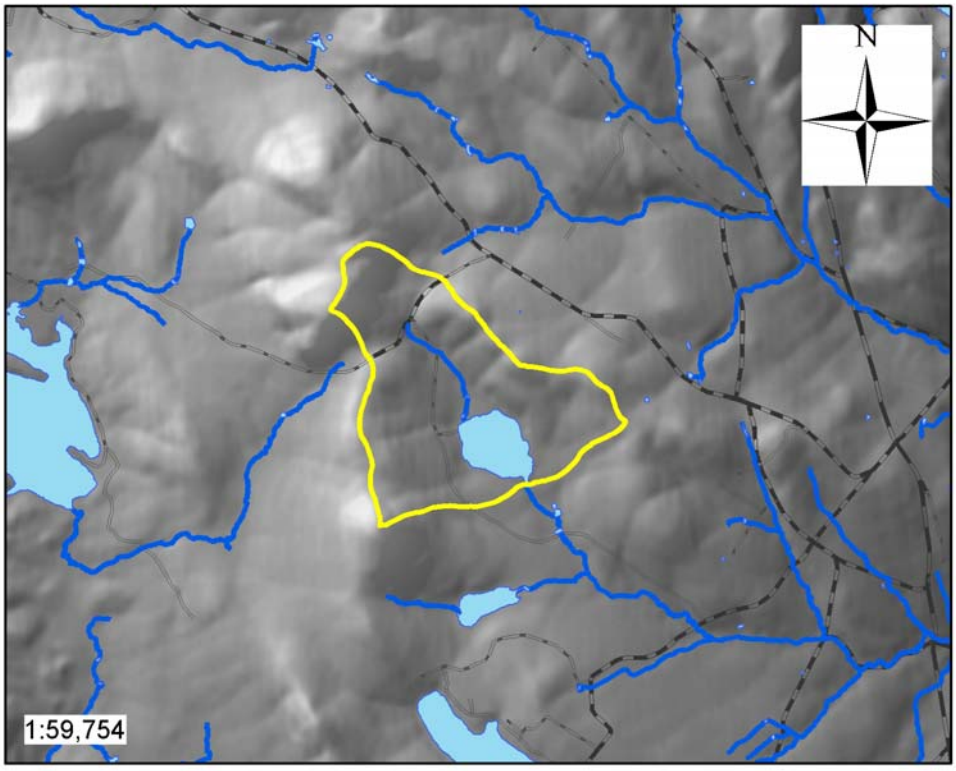
Lake Surface Area:	61	acres
Drainage Basin Area	647	acres
Maximum depth:	13 ft.	(3.9 m)
Average depth:	8 ft.	(2.4 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – low
Algal population density – moderate
Nutrient enrichment – moderate

Trophic State: Mesotrophic





Lake outlined by its watershed

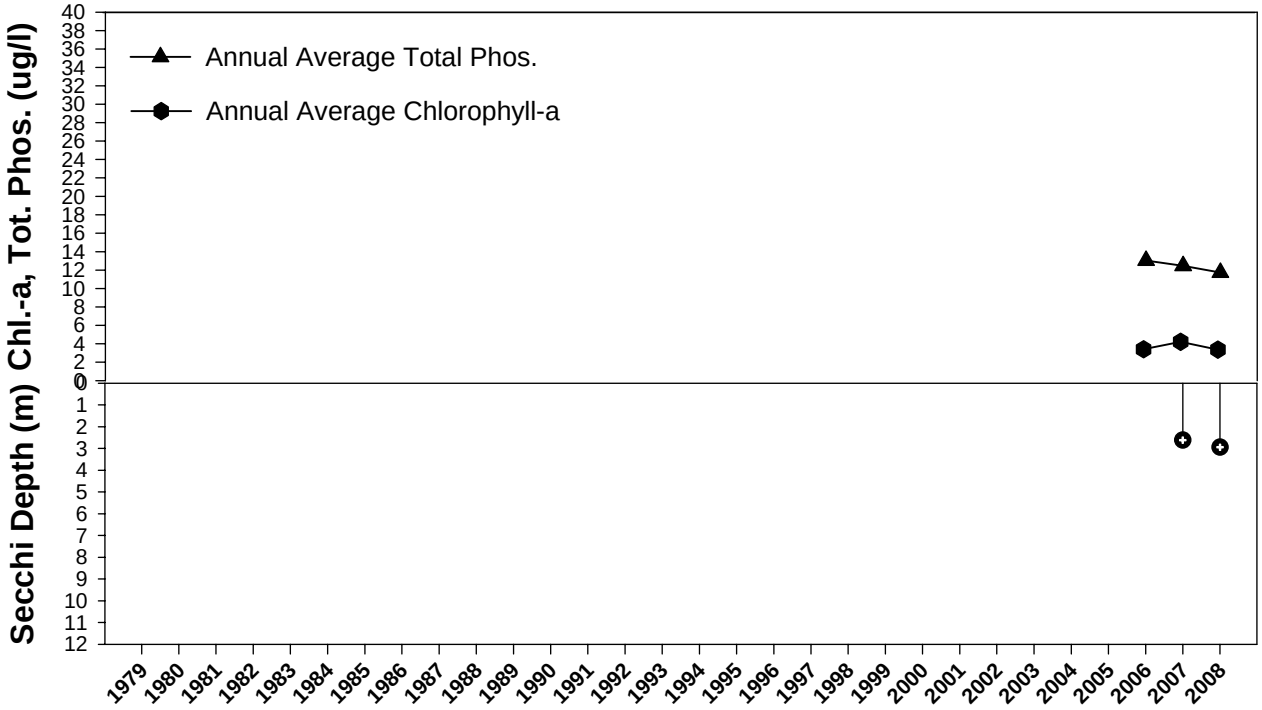
Fosters Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	10	2.6	3.0	3.2
Chl-a (ug/l)	10	0.9	3.4	11
Summer TP (ug/l)	9	8.1	12	16
Spring TP (ug/l)	1		7.8	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
2005	8				
2006	10		3.4	13	11
2007	9	2.6	4.3	12	9.3
2008	10	3.0	3.4	12	7.8



GREAT HOSMER POND

Craftsbury and Albany, VT

Lay Monitor: John Brodhead

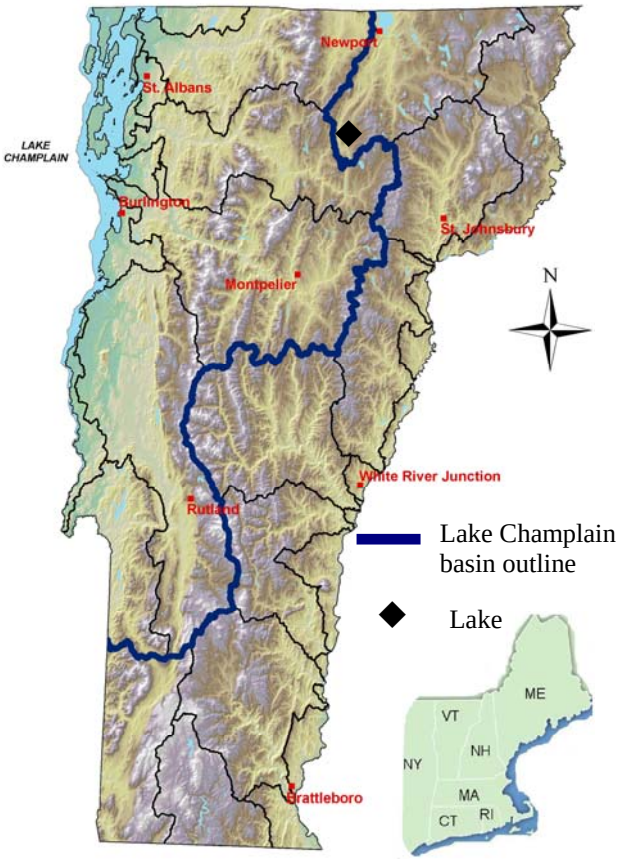
Great Hosmer is a moderately sized, long, narrow, relatively deep lake.

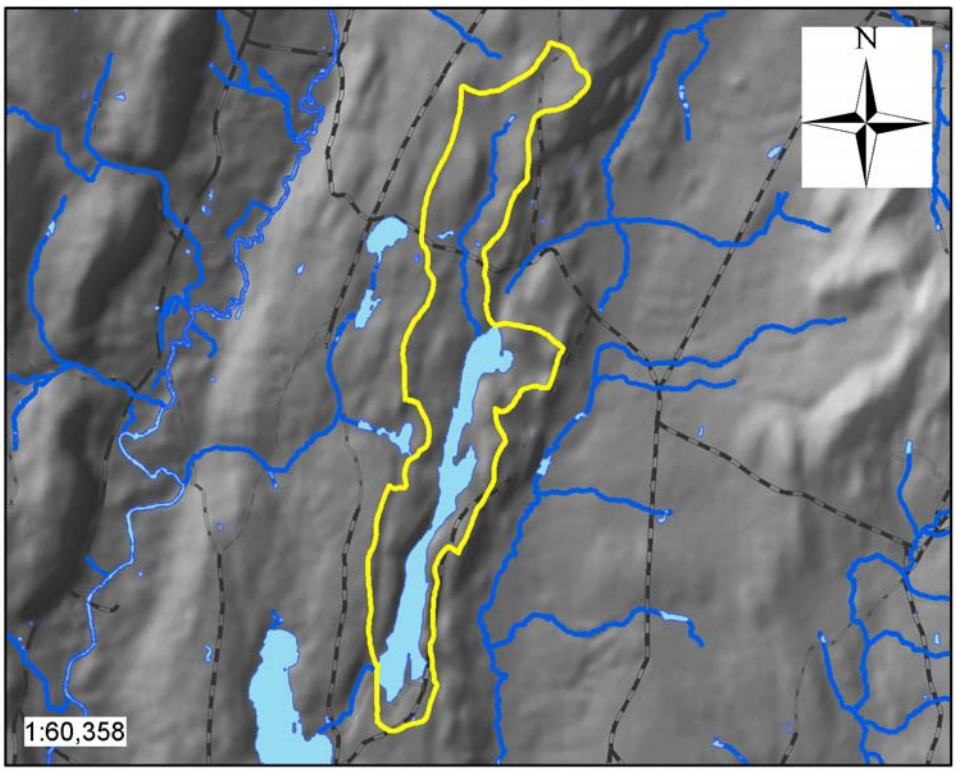
Lake Surface Area:	140	acres
Drainage Basin Area	860	acres
Maximum depth:	57 ft.	(17.4 m)
Average depth:	20 ft.	(6.1 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - moderate
Algal population density – high
Nutrient enrichment – high

Trophic State: Eutrophic





Lake outlined by its watershed

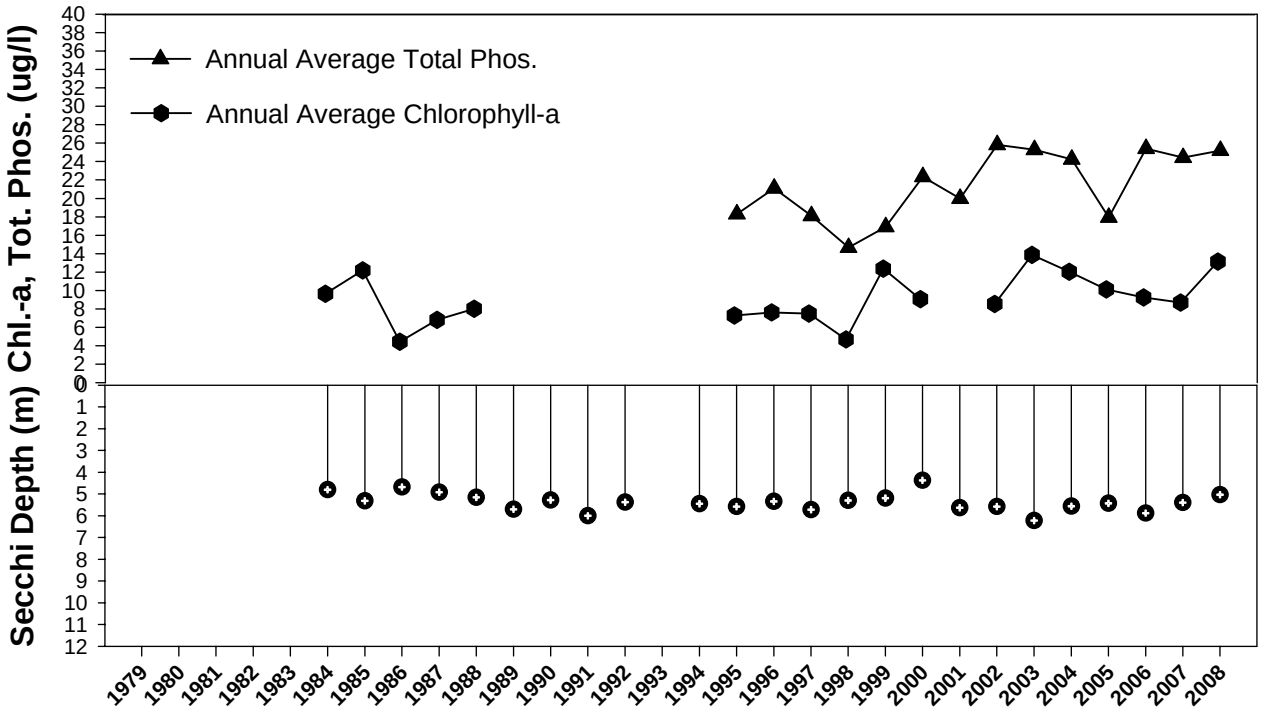
Great Hosmer Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	9	3.4	5.0	6.5
Chl-a (ug/l)	9	3.2	13	23
Summer TP (ug/l)	9	19	25	34

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1984	13	4.8	9.7		24
1985	13	5.3	12		30
1986	14	4.7	4.5		
1987	13	4.9	6.9		
1988	11	5.2	8.1		
1989	12	5.7			
1990	11	5.3			23
1991	11	6.0			
1992	8	5.4			
1993	6				
1994	10	5.4			
1995	10	5.6	7.3	18	
1996	10	5.3	7.7	21	
1997	8	5.7	7.5	18	28
1998	9	5.3	4.7	15	
1999	11	5.2	12	17	
2000	9	4.4	9.1	22	
2001	9	5.6		20	
2002	11	5.6	8.6	26	18
2003	11	6.2	14	25	
2004	10	5.6	12	24	21
2005	9	5.4	10	18	
2006	10	5.9	9.3	25	
2007	9	5.4	8.7	24	22
2008	9	5.0	13	25	

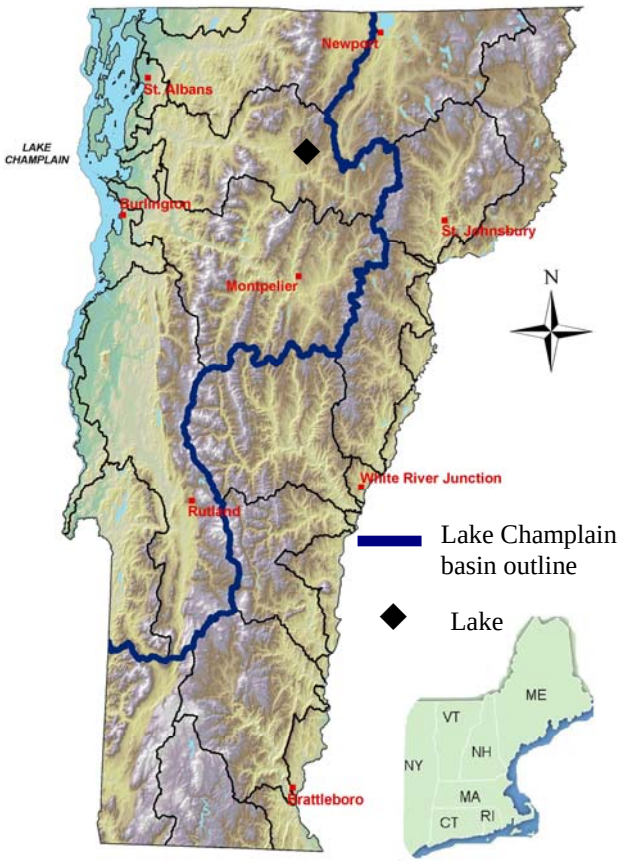


GREEN RIVER RESERVOIR

Hyde Park, VT

Lay Monitors: Jason Kelley, Sharlotte Williams, Jill Hallquist, Dan Brown, Luke Griggs

Former Lay Monitors:
Terry and Bonnie Francis
Heather Thomas
Debbie Benjamin
Terry Gregory

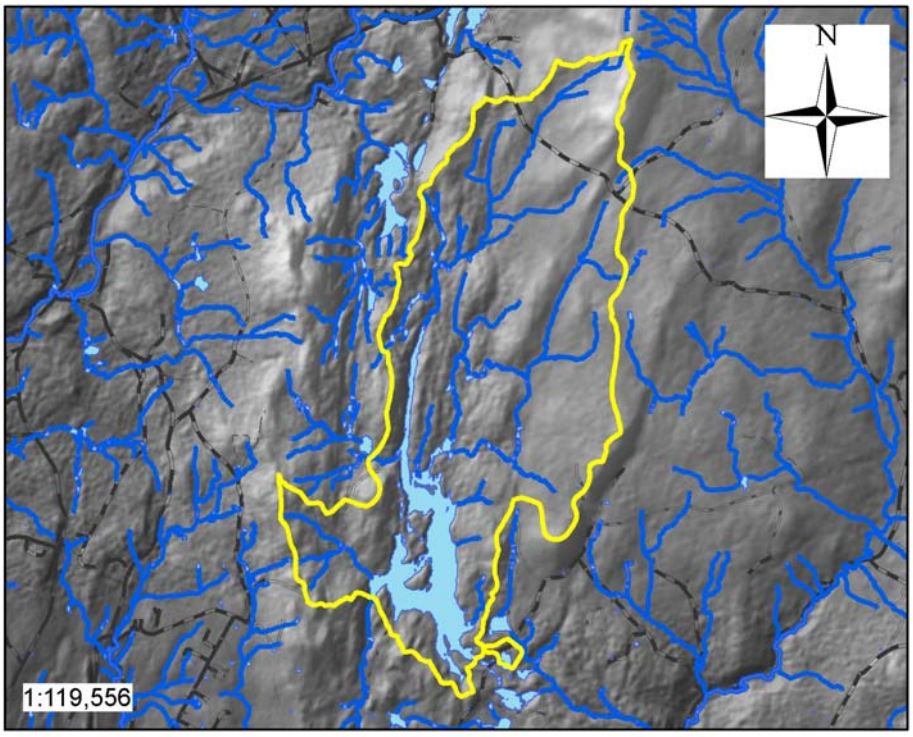


Green River Reservoir is a large, artificial, warmwater lake.

Lake Surface Area:	554	acres
Drainage Basin Area	9,075	acres
Maximum depth:	93 ft.	(28.4 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - moderate
Algal population density – low
Nutrient enrichment – moderate



Lake outlined by its watershed

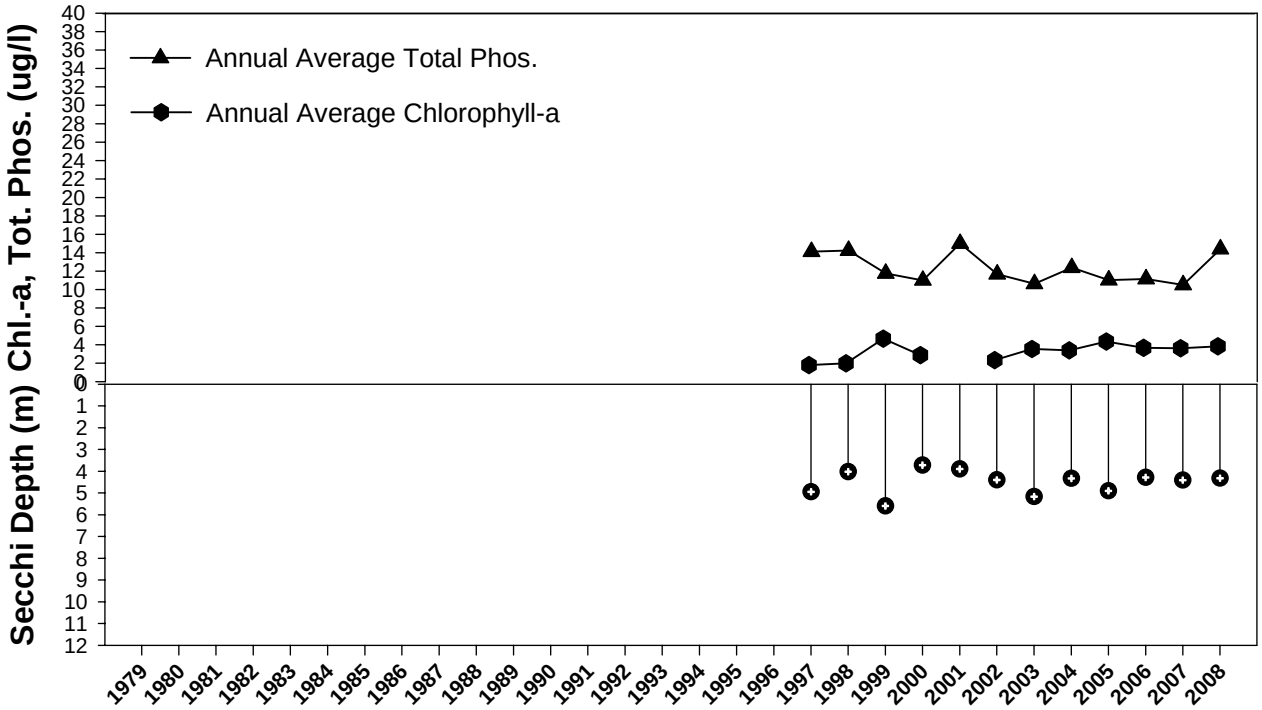
Green River Reservoir

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	11	3.5	4.3	5.0
Chl-a (ug/l)	11	2.3	3.9	6.7
Summer TP (ug/l)	11	8.6	14	25

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1997	8	4.9	1.9	14	
1998	8	4.0	2.0	14	17
1999	8	5.6	4.7	12	14
2000	9	3.7	2.9	11	
2001	8	3.9		15	
2002	9	4.4	2.4	12	
2003	9	5.2	3.6	11	
2004	12	4.3	3.4	12	
2005	10	4.9	4.4	11	11
2006	10	4.3	3.7	11	
2007	11	4.4	3.7	10	17
2008	11	4.3	3.9	14	



LAKE GREENWOOD

Woodbury, VT

Lay Monitors: Margi and Steve Swett

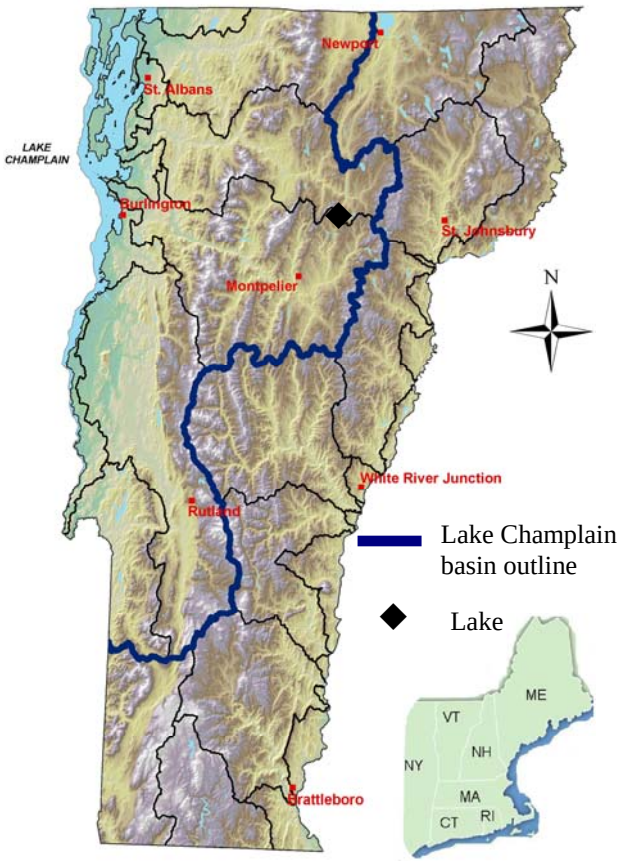
Former Lay Monitors:
Retta and Wayne Dunlap
Fred Ford
Bill Vanderclute
Patricia Gahagan

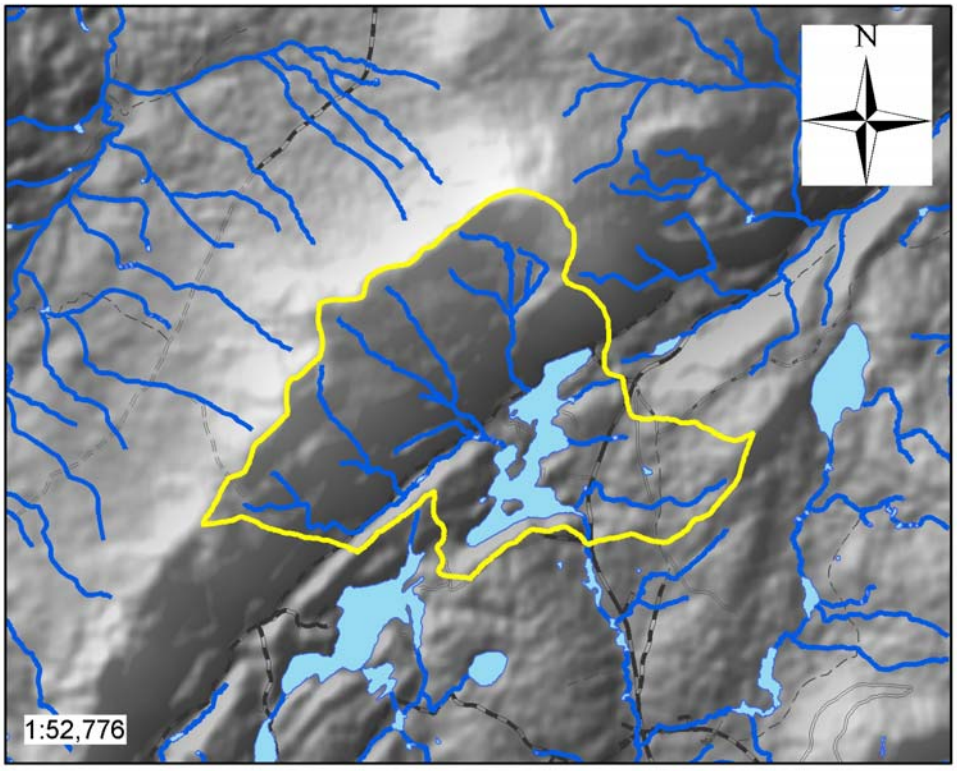
Greenwood Lake is a small, shallow, warmwater lake.

Lake Surface Area:	96	acres
Drainage Basin Area	1,138	acres
Maximum depth:	41 ft.	(12.5 m)
Average depth:	15 ft.	(4.5 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - high
Algal population density – moderate
Nutrient enrichment – high





Lake outlined by its watershed

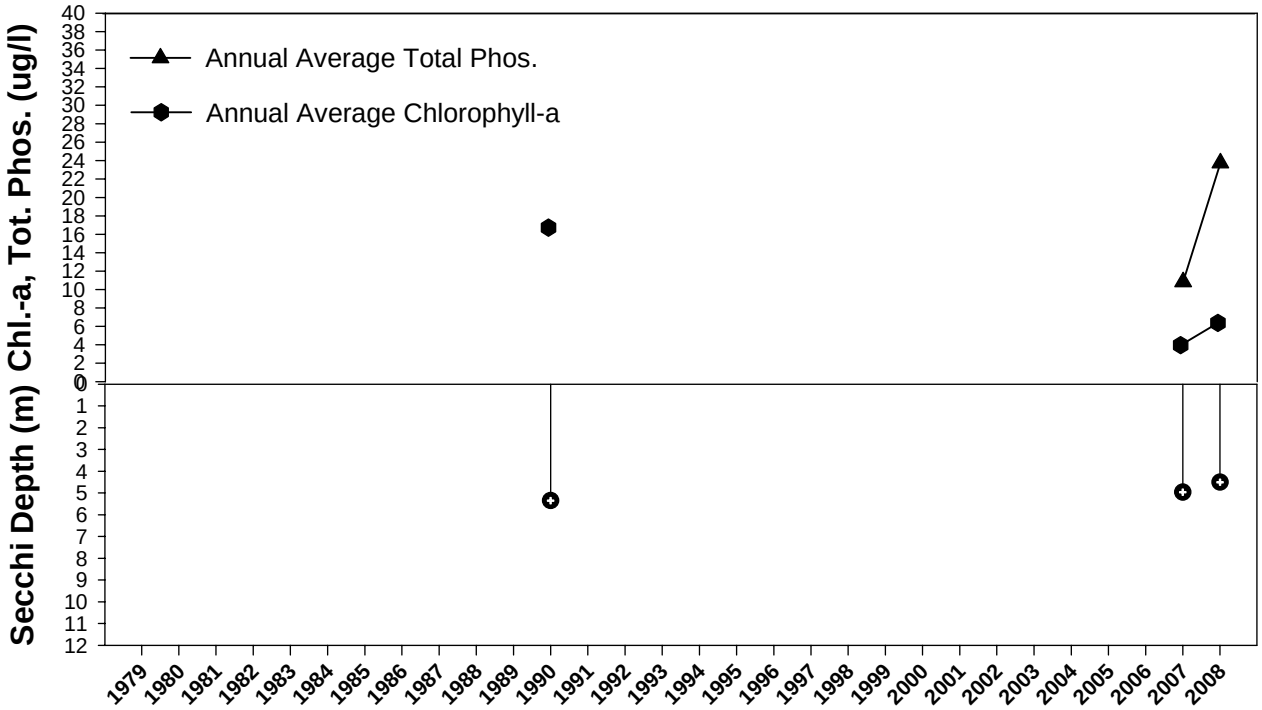
Lake Greenwood

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	12	3.3	4.5	5.3
Chl-a (ug/l)	12	3.1	6.4	10
Summer TP (ug/l)	12	11	24	42

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	4				11
1990	10	5.4	17		21
1991	5				
1992	6				
1993	5				
2007	9	5.0	4.0	11	
2008	12	4.5	6.4	24	



LAKE GROTON

Groton, VT

Lay Monitors: Cathy and David Donath

Former Lay Monitors:
Diana Rudd
Milton Lamberton

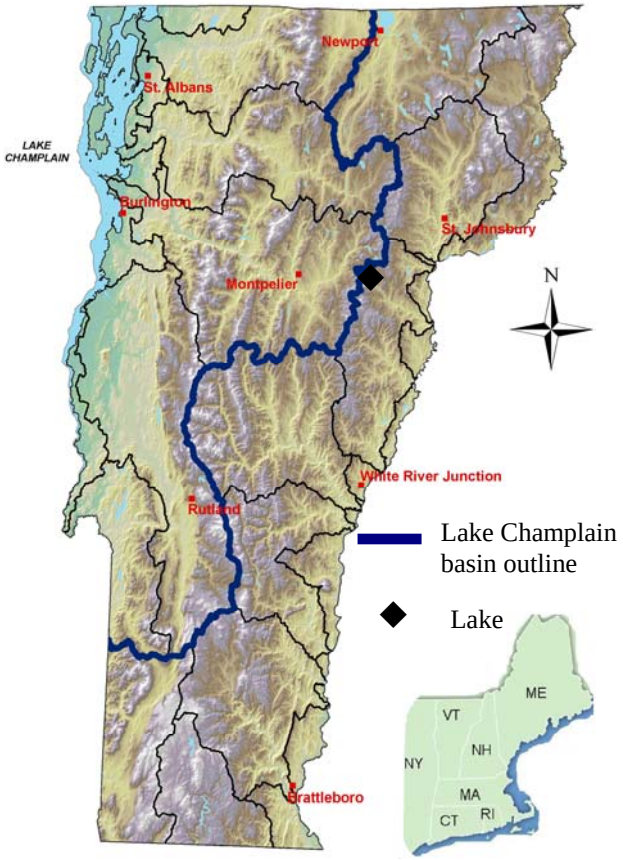
Lake Groton is a large, shallow, warmwater lake.

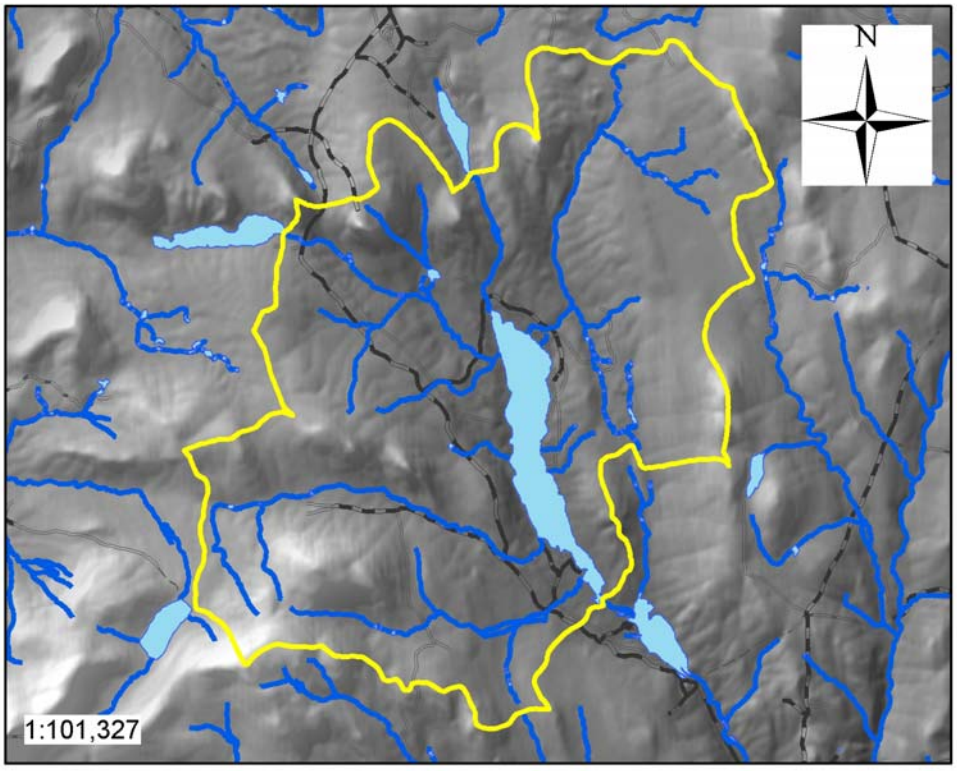
Lake Surface Area:	422	acres
Drainage Basin Area	12,006	acres
Maximum depth:	35 ft.	(10.7 m)
Average depth:	13 ft.	(4.0 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - moderate
Algal population density – moderate
Nutrient enrichment – moderate

Trophic State: Mesotrophic





Lake outlined by its watershed

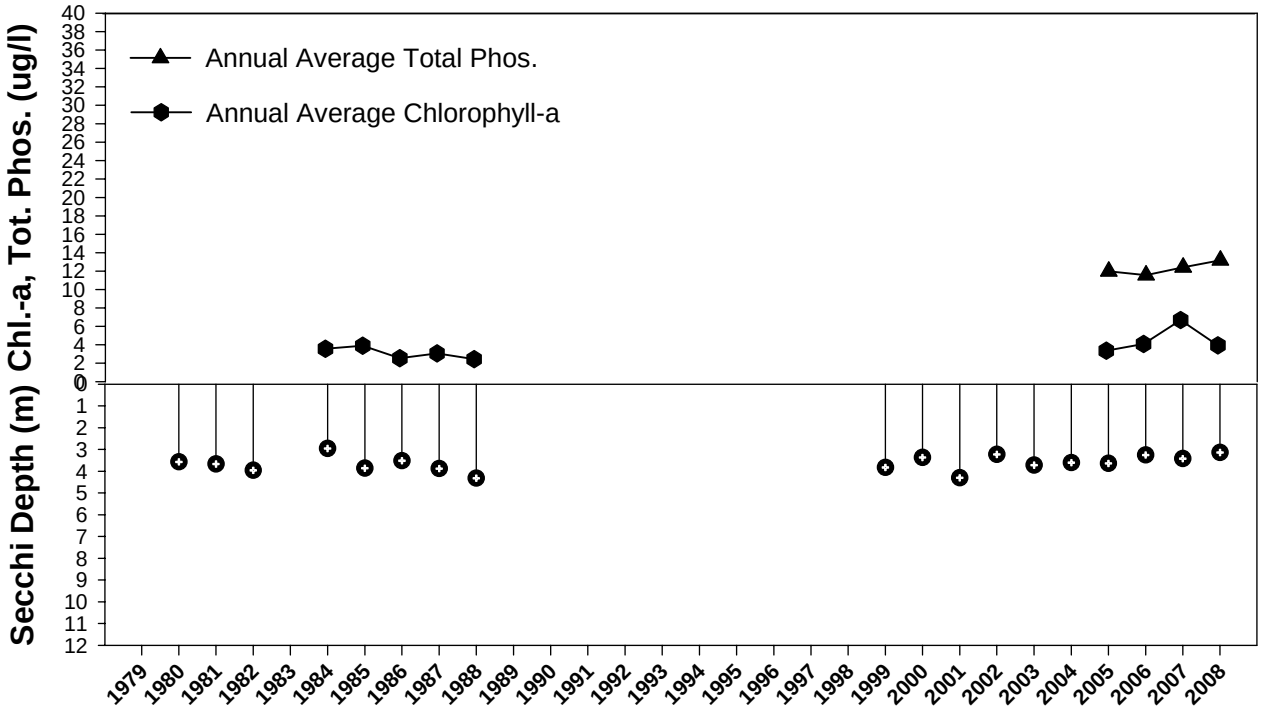
Lake Groton

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	10	2.6	3.1	3.8
Chl-a (ug/l)	10	3.1	4.0	5.2
Summer TP (ug/l)	10	12	13	16

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	6				4.0
1980	10	3.6			8.3
1981	9	3.7			6.7
1982	12	4.0			9.0
1983	4				10
1984	13	3.0	3.6		6.3
1985	13	3.9	3.9		6.7
1986	14	3.5	2.6		8.3
1987	14	3.9	3.1		16
1988	21	4.3	2.5		
1999	12	3.8			6.9
2000	10	3.4			
2001	11	4.3			
2002	8	3.2			
2003	8	3.7			
2004	9	3.6			
2005	9	3.6	3.4	12	8.6
2006	9	3.3	4.1	12	9.8
2007	10	3.4	6.7	12	
2008	10	3.1	4.0	13	

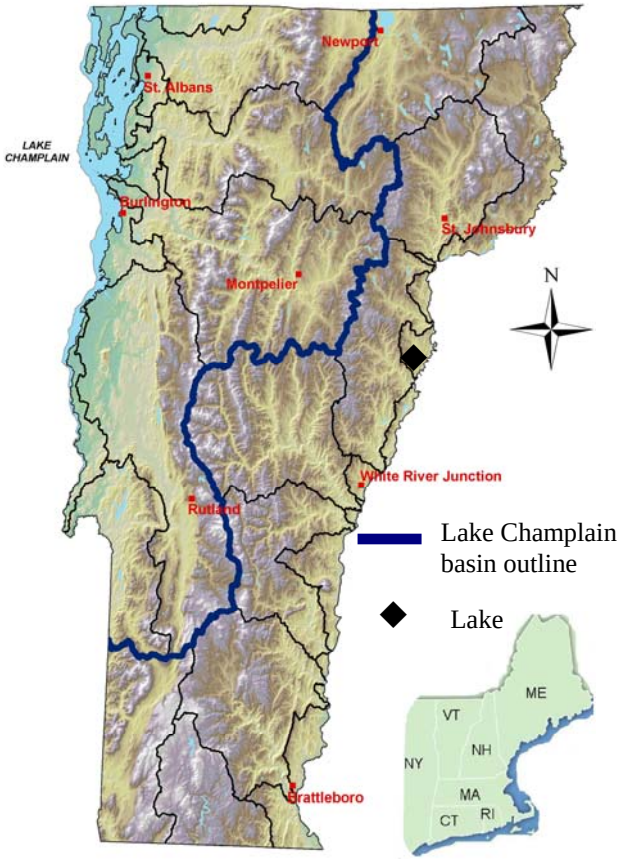


HALLS LAKE

Newbury, VT

Lay Monitor: Jeff MacQueen

Former Lay Monitors:
Joe and Mike Dekens
Albert Wright



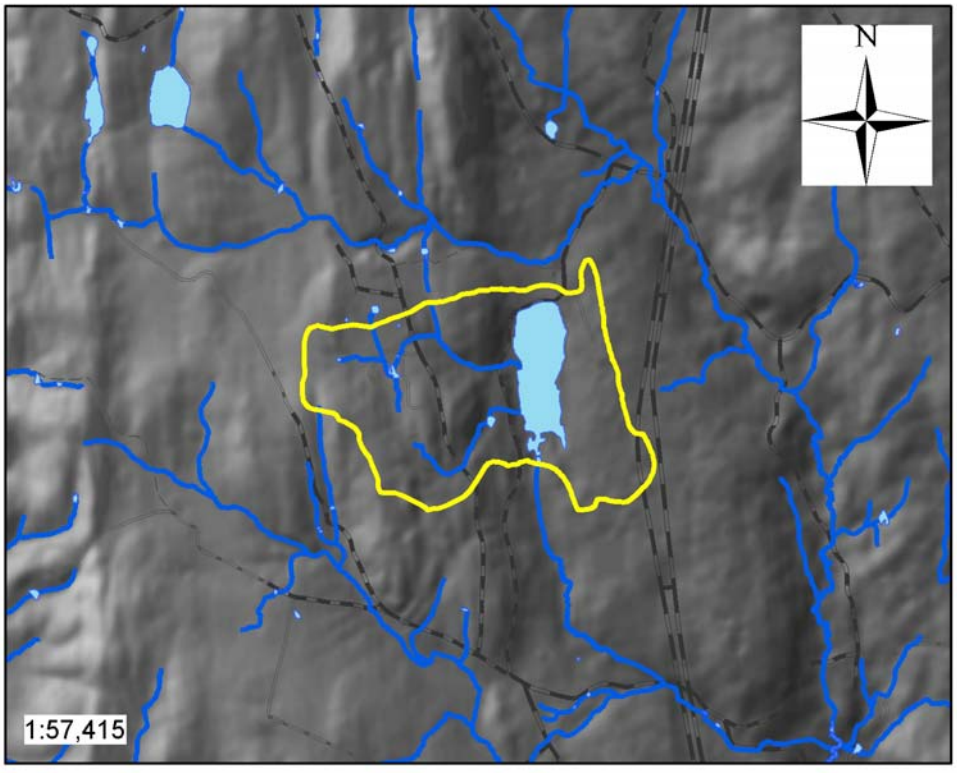
Halls Lake is a small, shallow, warmwater lake

Lake Surface Area:	85	acres
Drainage Basin Area	561	acres
Maximum depth:	30 ft.	(9.1 m)
Average depth:	17 ft.	(5.2 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - moderate
Algal population density – moderate
Nutrient enrichment – high

Trophic State: Mesotrophic



Lake outlined by its watershed

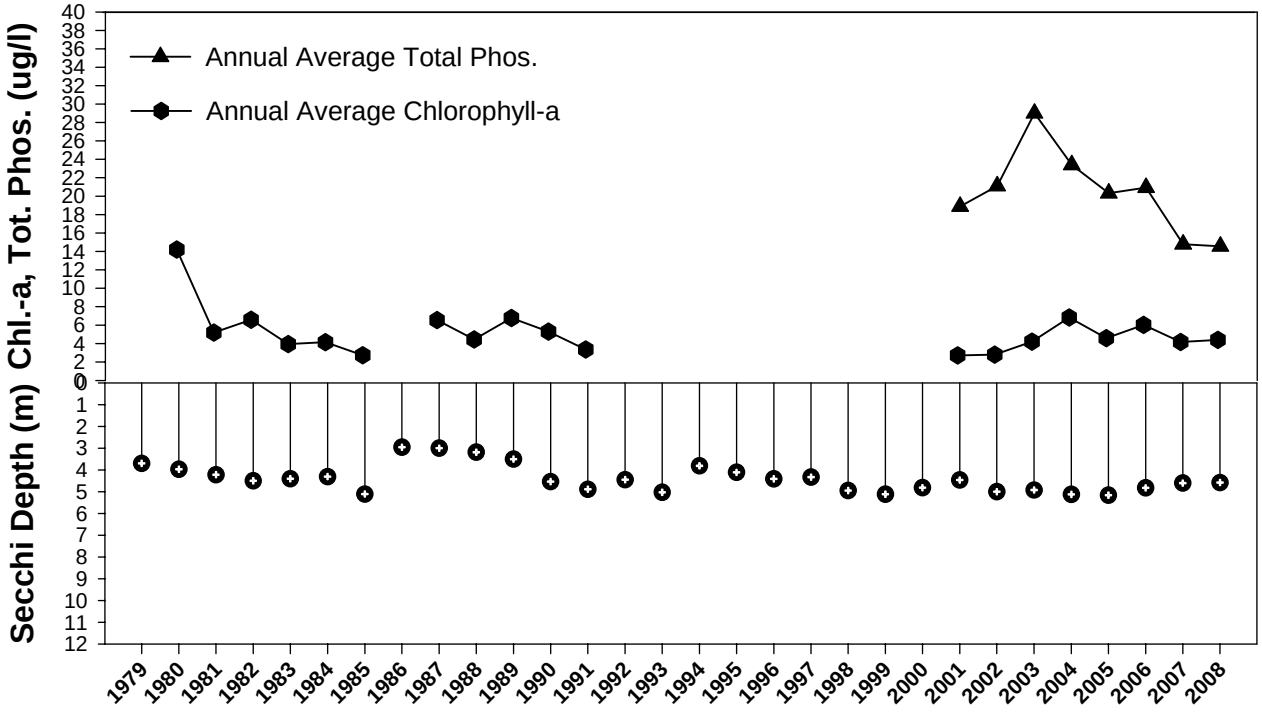
Halls Lake

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	9	3.2	4.6	5.5
Chl-a (ug/l)	9	1.4	4.4	10
Summer TP (ug/l)	9	9.3	15	20

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	13	3.7			6.0
1980	10	4.0	14		9.0
1981	12	4.2	5.2		20
1982	10	4.5	6.6		12
1983	9	4.4	4.0		19
1984	12	4.3	4.2		14
1985	11	5.1	2.8		13
1986	12	3.0			14
1987	13	3.0	6.6		13
1988	14	3.2	4.5		
1989	10	3.5	6.8		
1990	11	4.5	5.3		16
1991	16	4.9	3.4		
1992	9	4.4			
1993	11	5.0			
1994	10	3.8			
1995	11	4.1			
1996	11	4.4			
1997	11	4.3			12
1998	10	5.0			
1999	12	5.1			
2000	13	4.8			
2001	9	4.5	2.8	19	
2002	9	5.0	2.8	21	14
2003	9	4.9	4.3	29	
2004	9	5.1	6.9	23	18
2005	9	5.2	4.6	20	19
2006	9	4.8	6.1	21	20
2007	9	4.6	4.2	15	
2008	9	4.6	4.4	15	

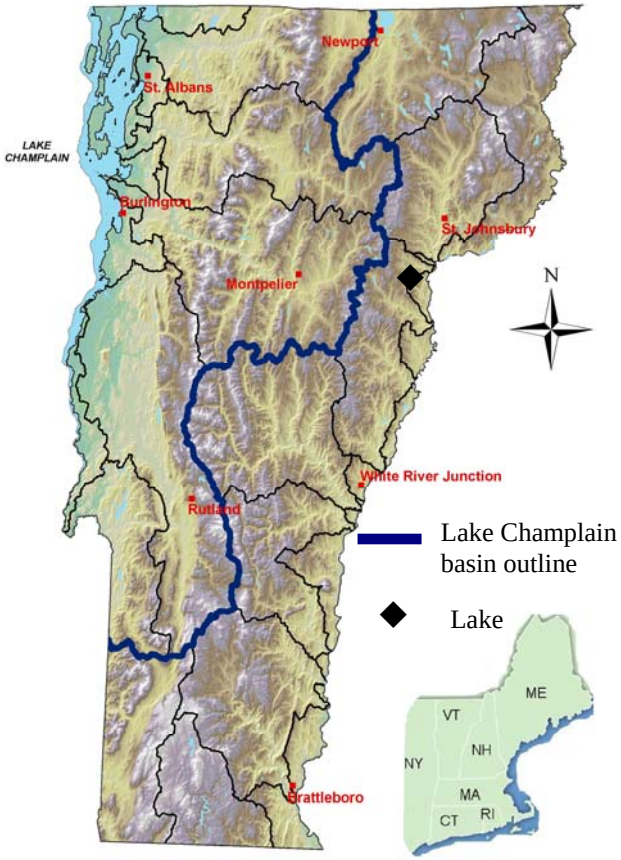


HARVEY'S LAKE

Barnett, VT

Lay Monitor: Steve Mills

Former Lay Monitors:
Jackie Sprague
Wayne Berg
Ruth Anderson
Jean Hall Bouffard
Leon and Marilyn Rank



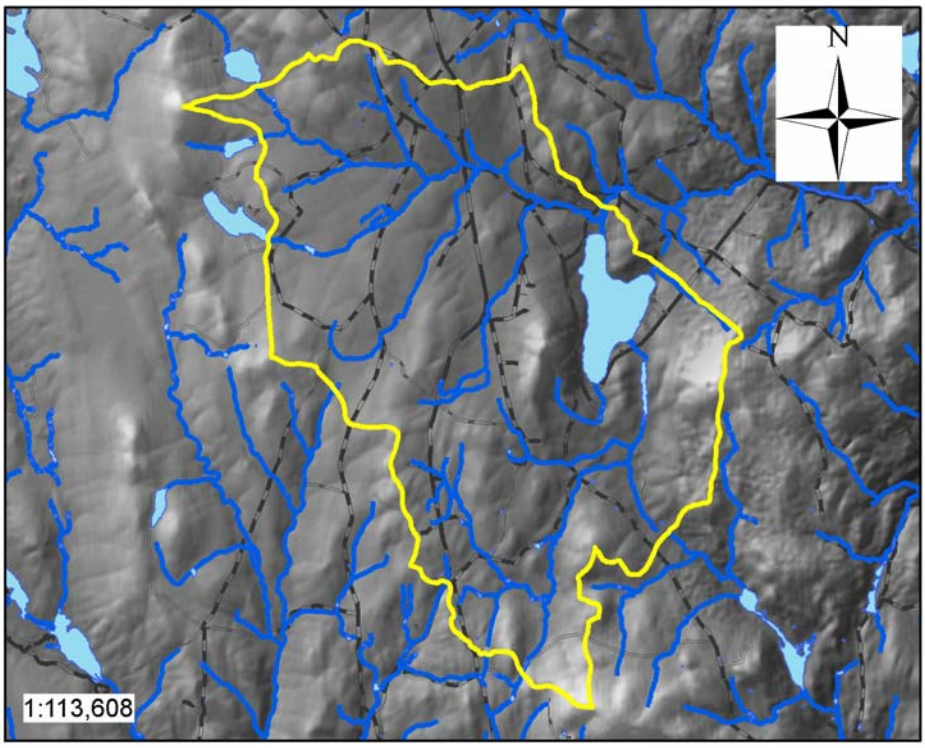
Harvey's Lake is a large, deep, coldwater lake.

Lake Surface Area:	351	acres
Drainage Basin Area	5,364	acres
Maximum depth:	145 ft.	(44.2 m)
Average depth:	66 ft.	(20.1 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - high
Algal population density – low
Nutrient enrichment – moderate

Trophic State: Mesotrophic



Lake outlined by its watershed

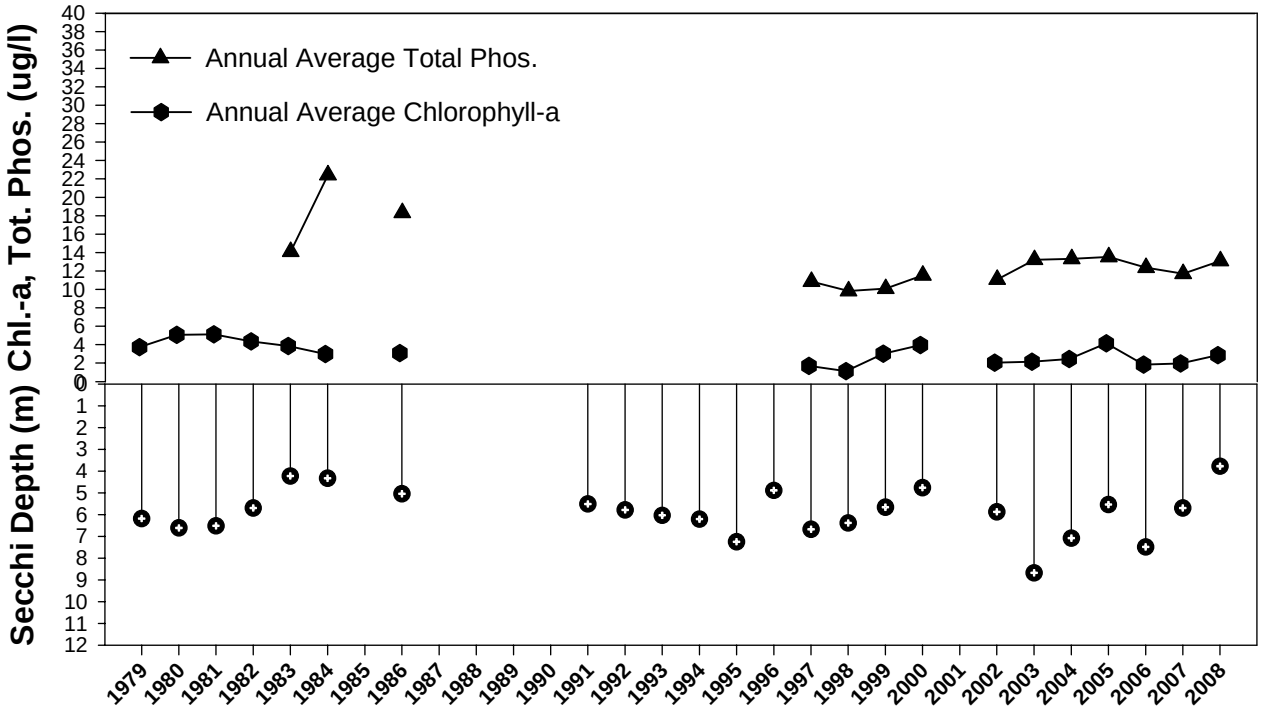
Harvey's Lake

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	9	2.5	3.8	6.0
Chl-a (ug/l)	9	2.2	2.9	3.5
Summer TP (ug/l)	9	11	13	18

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	14	6.2	3.8		14
1980	13	6.6	5.1		15
1981	12	6.5	5.2		23
1982	11	5.7	4.4		16
1983	12	4.2	3.9	14	13
1984	12	4.3	3.0	22	12
1985	6				13
1986	12	5.0	3.1	18	10
1987	7				11
1991	13	5.5			11
1992	12	5.8			9.0
1993	12	6.0			11
1994	11	6.2			8.6
1995	9	7.2			10
1996	11	4.9			
1997	13	6.7	1.7	11	8.1
1998	12	6.4	1.2	9.8	8.0
1999	11	5.7	3.1	10	11
2000	11	4.8	4.0	12	11
2001	7				11
2002	11	5.9	2.1	11	7.7
2003	9	8.7	2.2	13	
2004	9	7.1	2.5	13	10
2005	9	5.5	4.2	14	13
2006	9	7.5	1.9	12	11
2007	9	5.7	2.0	12	15
2008	9	3.8	2.9	13	



HOLLAND POND

Holland, VT

Lay Monitor: Tom Fetter

Former Lay Monitors:
Chris Owen

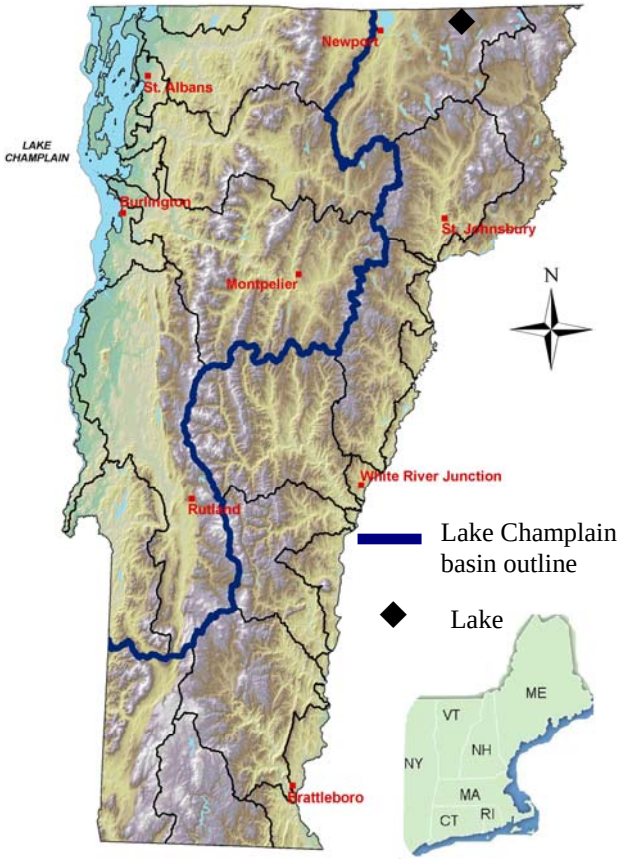
Holland Pond is a relatively large, coldwater lake with little shoreland development.

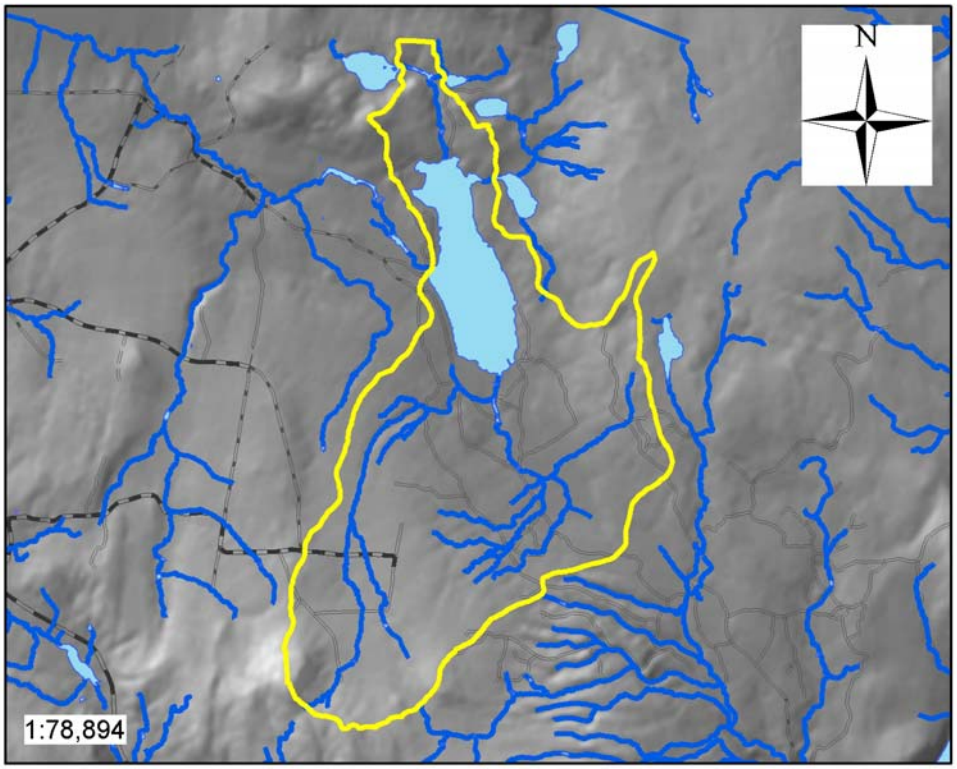
Lake Surface Area:	325	acres
Drainage Basin Area	4,431	acres
Maximum depth:	39 ft.	(11.9 m)
Average depth:	17 ft.	(5.2 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - low
Algal population density – not sampled
Nutrient enrichment – not sampled

Trophic State: Mesotrophic





Lake outlined by its watershed

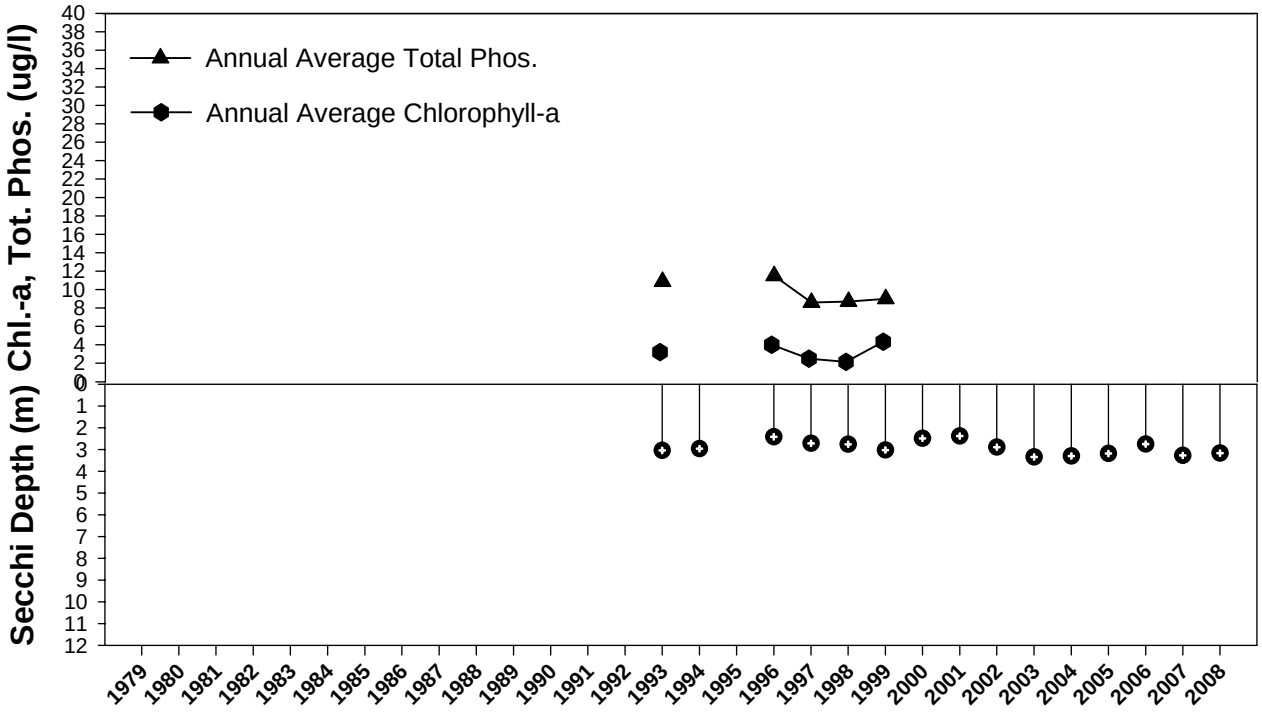
Holland Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	10	2.7	3.2	3.8

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1993	9	3.0	3.3	11	
1994	8	3.0			4.8
1995	6				8.0
1996	10	2.4	4.1	12	
1997	13	2.7	2.6	8.6	
1998	10	2.8	2.2	8.7	6.9
1999	12	3.0	4.4	9.0	8.1
2000	10	2.5			
2001	11	2.4			
2002	11	2.9			
2003	10	3.3			6.7
2004	9	3.3			
2005	12	3.2			
2006	10	2.7			
2007	11	3.3			8.9
2008	10	3.2			

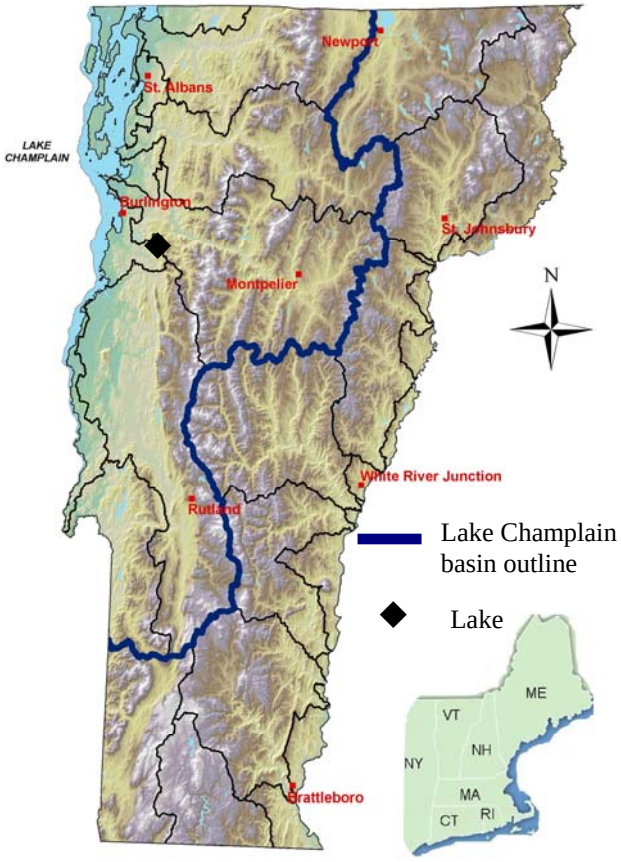


LAKE IROQUOIS

Williston and Hinesburg, VT

Lay Monitor: Daniel, Anna and Leah Sharpe
Joanne Wright
Kelli Brown

Former Lay Monitors:
Ginger and Eric Johnson
Judy Brook
Robert and Helen Hall

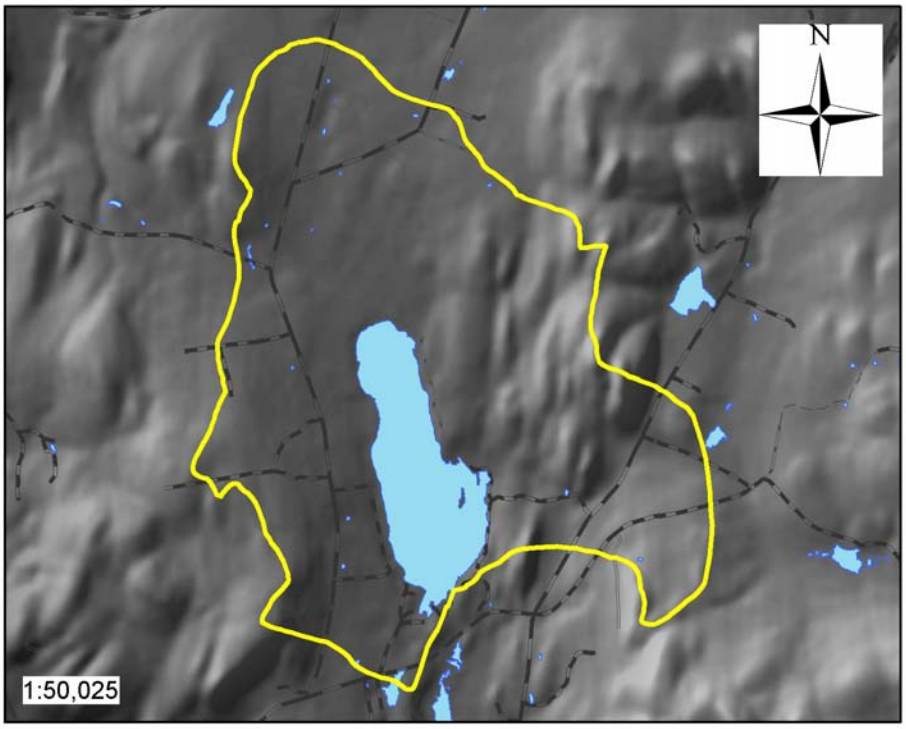


Lake Iroquois is a relatively large lake. It has a shallow, northern section and a deeper, southern basin.

Lake Surface Area:	243	acres
Drainage Basin Area	2,418	acres
Maximum depth:	37 ft.	(11.3 m)
Average depth:	19 ft.	(5.8 m)

Compared to other lakes, long-term summer means indicate:
Water clarity - moderate
Algal population density – high
Nutrient enrichment – high

Trophic State: Eutrophic



Lake outlined by its watershed

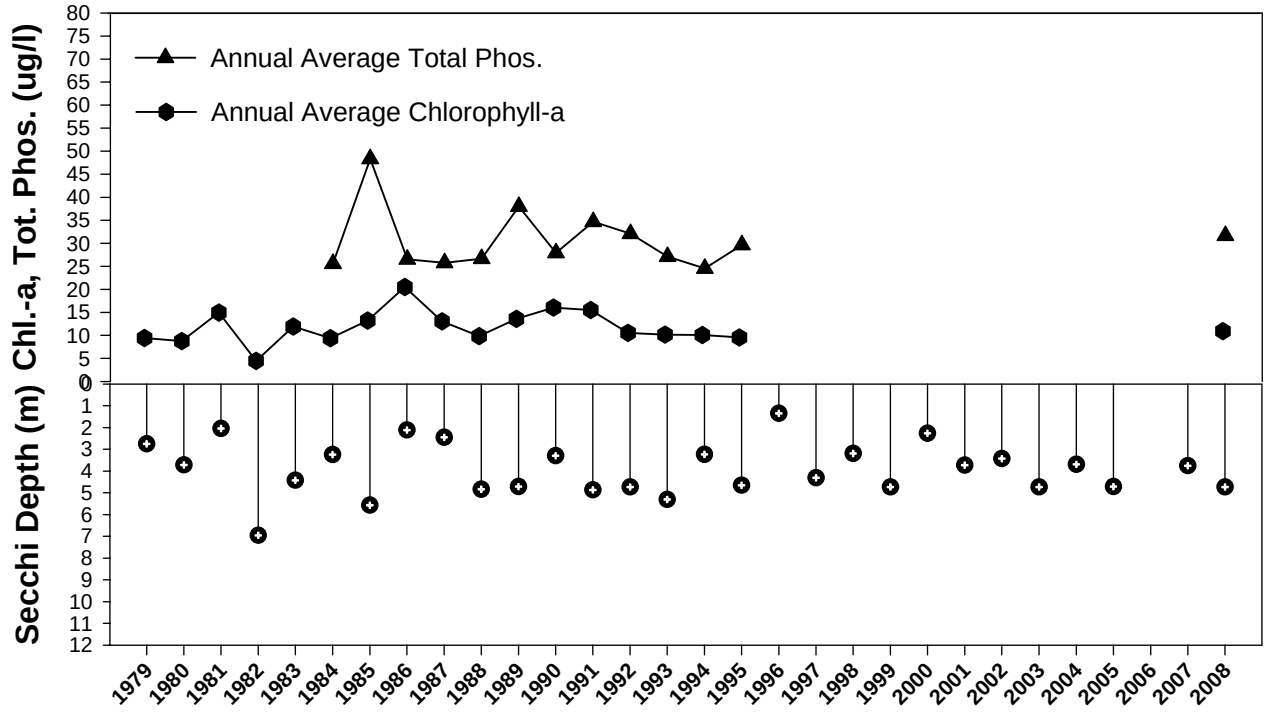
Lake Iroquois

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	14	3.5	4.7	6.3
Chl-a (ug/l)	12	4.6	11	17
Summer TP (ug/l)	12	15	32	57

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	12	2.8	9.5		26
1980	12	3.7	8.8		30
1981	13	2.0	15		29
1982	11	7.0	4.6		37
1983	13	4.4	12		27
1984	12	3.3	9.5	26	27
1985	12	5.6	13	48	28
1986	13	2.1	21	27	25
1987	12	2.5	13	26	28
1988	12	4.8	9.9	27	29
1989	11	4.7	14	38	39
1990	12	3.3	16	28	30
1991	12	4.9	16	35	23
1992	12	4.7	11	32	32
1993	11	5.3	10	27	29
1994	12	3.2	10	25	40
1995	11	4.7	9.6	30	25
1996	12	1.4			48
1997	13	4.3			13
1998	10	3.2			27
1999	12	4.7			19
2000	11	2.3			22
2001	10	3.7			22
2002	10	3.4			16
2003	9	4.7			
2004	12	3.7			25
2005	9	4.7			
2007	10	3.8			
2008	14	4.7	11	32	

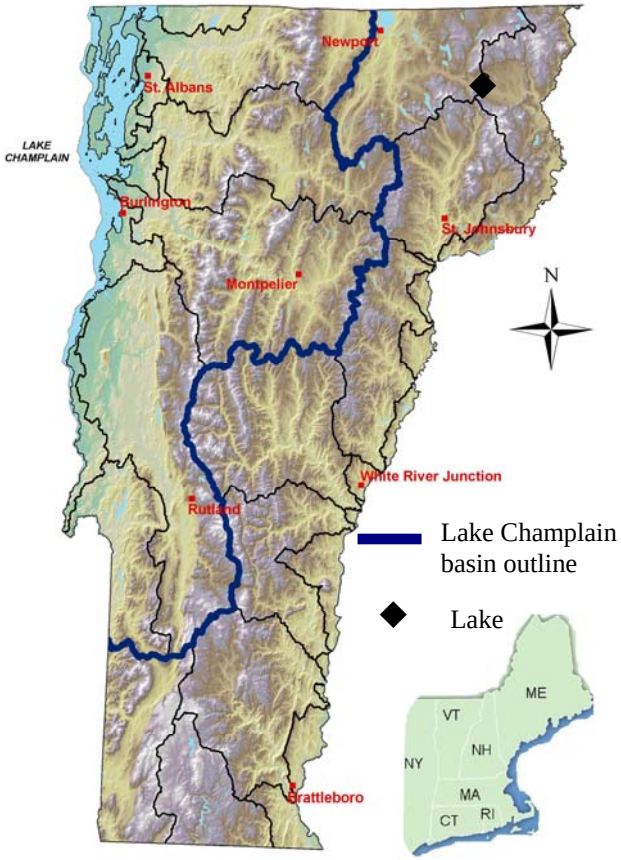


ISLAND POND

Brighton, VT

Lay Monitors: George and Patricia Wilcox

Former Lay Monitors:
Patrick Clarke
David Molloy
Ed Larsen



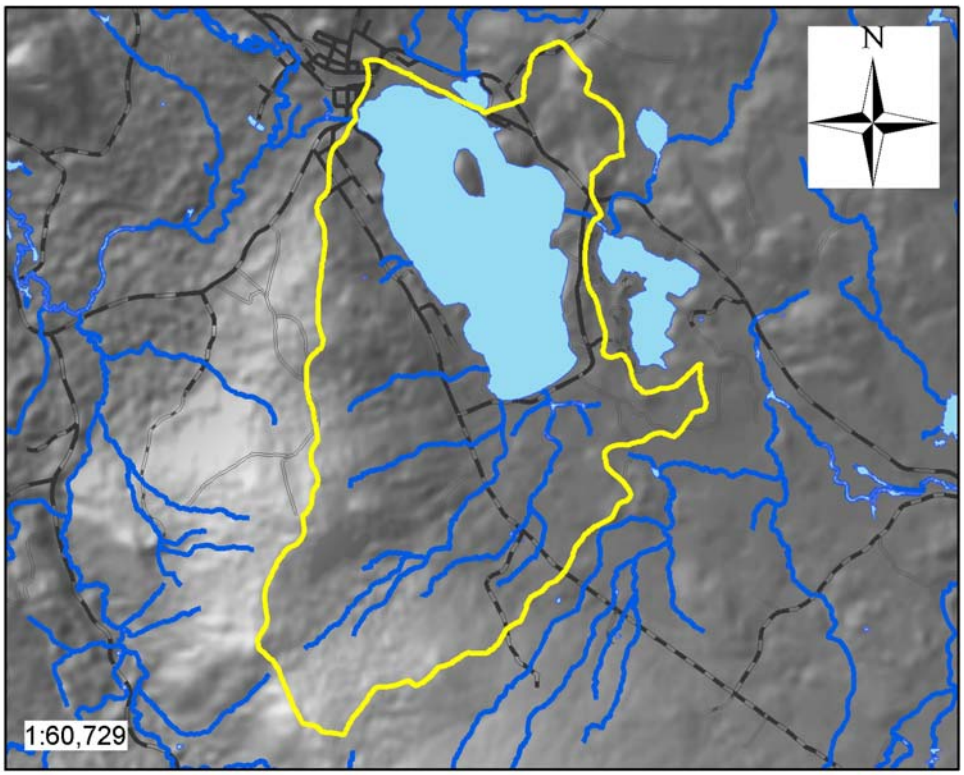
Island Pond is a large, warmwater lake with a large island in the middle.

Lake Surface Area:	626	acres
Drainage Basin Area	6,295	acres
Maximum depth:	63 ft.	(19.0 m)
Average depth:	31 ft.	(9.4 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - high
Algal population density – not sampled
Nutrient enrichment – not sampled

Trophic State: Mesotrophic



Lake outlined by its watershed

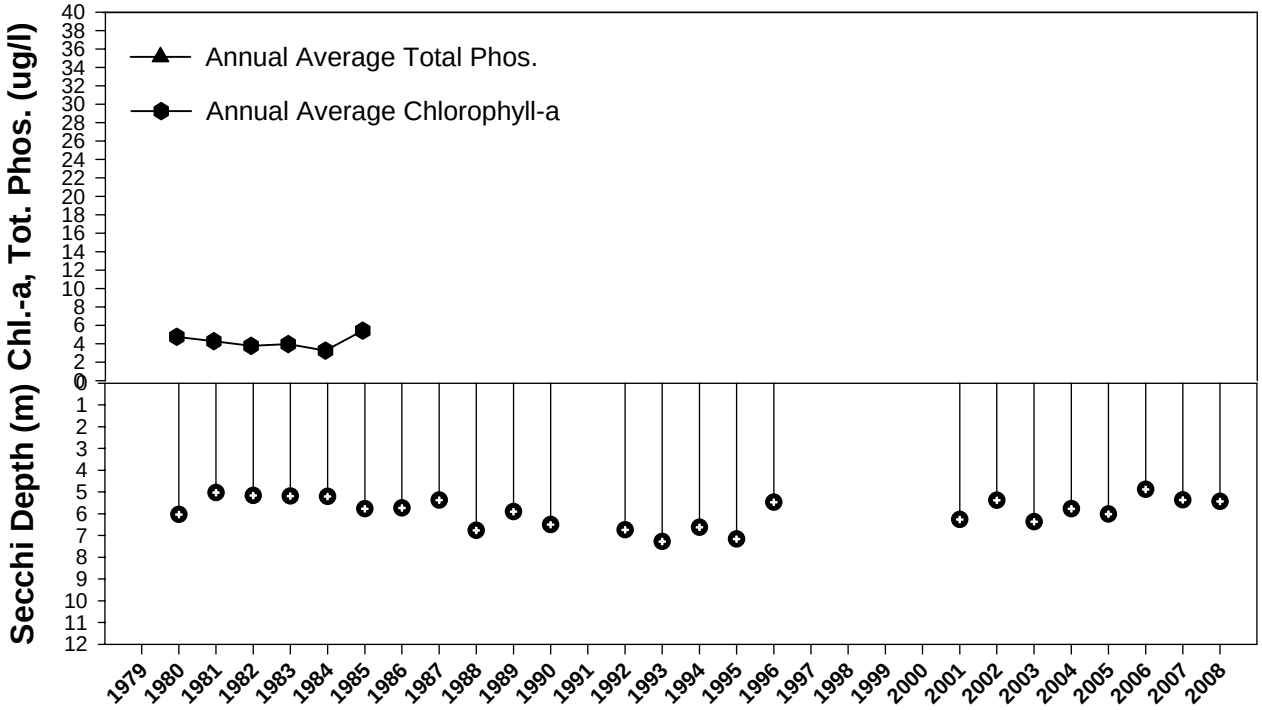
Island Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	8	5.0	5.4	5.8
Spring TP (ug/l)	1		9.9	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	4				3.0
1980	13	6.0	4.8		6.7
1981	11	5.0	4.3		6.3
1982	9	5.2	3.8		8.7
1983	12	5.2	4.0		9.3
1984	12	5.2	3.3		8.7
1985	10	5.8	5.5		10
1986	14	5.7			9.0
1987	13	5.4			8.7
1988	12	6.8			
1989	13	5.9			
1990	12	6.5			
1992	11	6.7			
1993	13	7.3			
1994	13	6.6			
1995	13	7.2			6.5
1996	14	5.5			
2000	7				
2001	9	6.3			7.7
2002	11	5.4			
2003	8	6.4			
2004	8	5.8			10
2005	9	6.0			
2006	9	4.9			
2007	10	5.4			8.5
2008	8	5.4			9.9



JOES POND

Danville and Cabot, VT

Lay Monitor: James and Marie Dimick

Former Lay Monitors:
Maurice Gardner

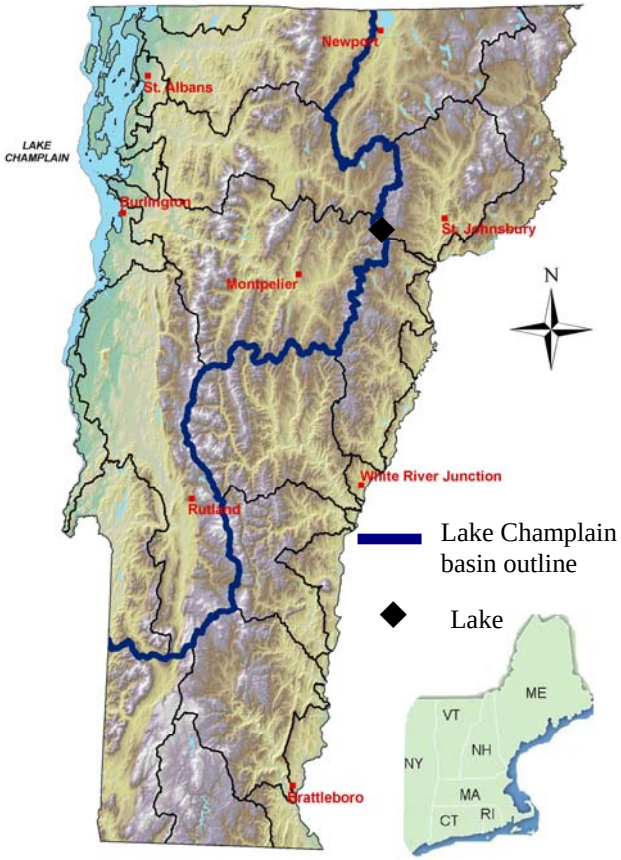
Joes Pond is an irregularly-shaped lake comprised of three distinct lake basins connected by narrow, shallow channels.

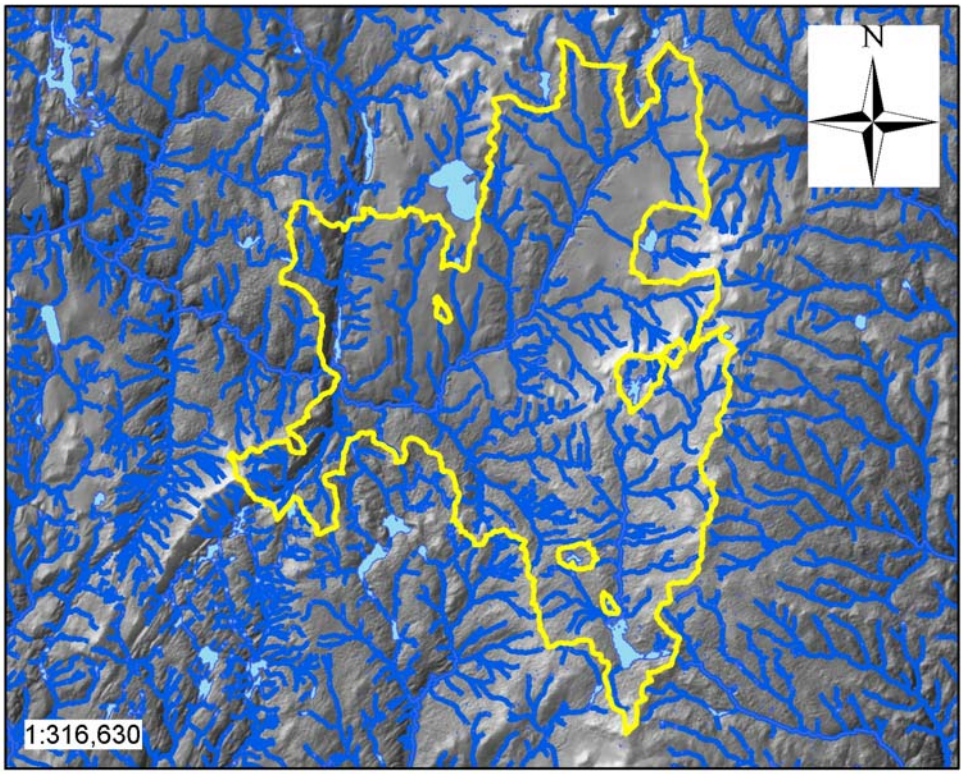
Lake Surface Area:	396	acres
Drainage Basin Area	18,445	acres
Maximum depth:	78 ft.	(23.8 m)
Average depth:	21 ft.	(6.4 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - moderate
Algal population density – low
Nutrient enrichment – high

Trophic State: Oligotrophic





Lake outlined by its watershed

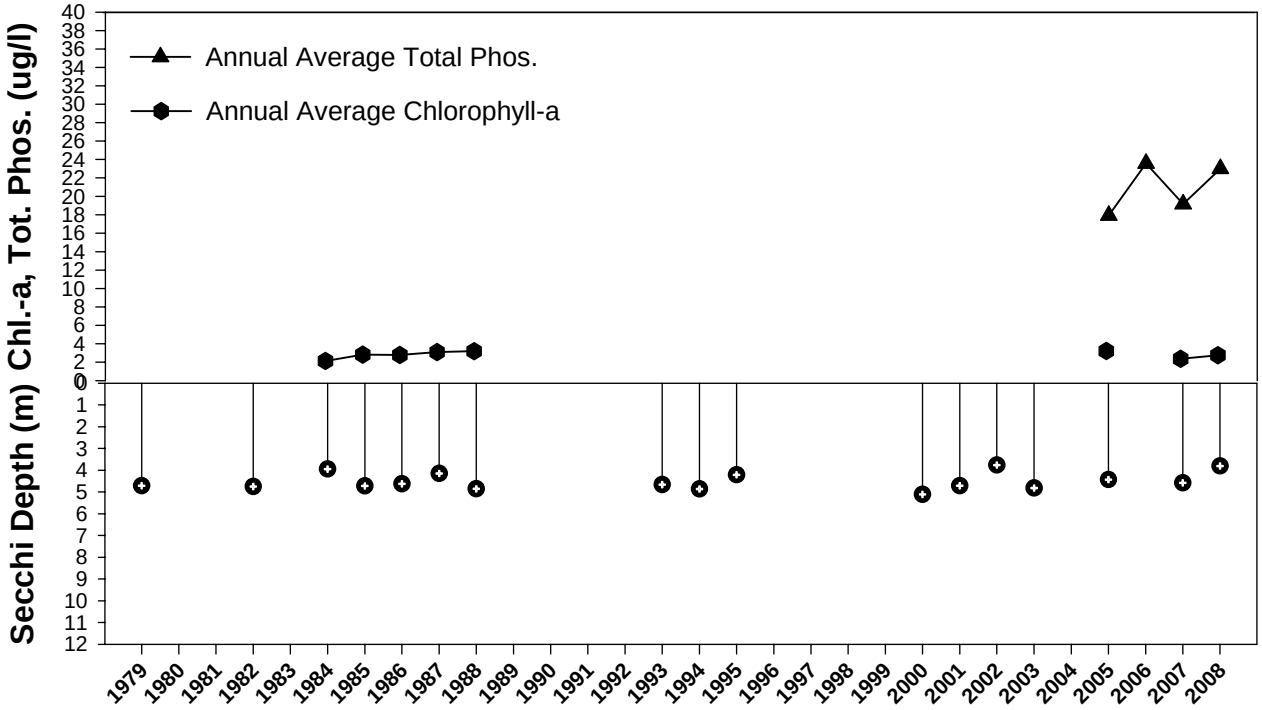
Joes Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	10	2.2	3.8	4.9
Chl-a (ug/l)	10	2.0	2.8	4.0
Summer TP (ug/l)	8	18	23	26
Spring TP (ug/l)	1		9.2	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	9	4.7			7.7
1980	4				6.7
1981	7				5.0
1982	8	4.8			7.3
1983	7				17
1984	12	3.9	2.2		6.3
1985	13	4.7	2.9		8.0
1986	13	4.6	2.8		6.7
1987	14	4.2	3.1		8.3
1988	13	4.9	3.2		
1989	5				
1993	11	4.7			7.8
1994	12	4.9			6.0
1995	10	4.2			
2000	8	5.1			
2001	10	4.7			
2002	9	3.8			
2003	9	4.8			
2004	7				8.0
2005	8	4.4	3.3	18	12
2006	8			24	
2007	10	4.6	2.4	19	12
2008	10	3.8	2.8	23	9.2



LOWER POND

Hinesburg, VT

Lay Monitor: David Fontaine
Lissa Nilsson

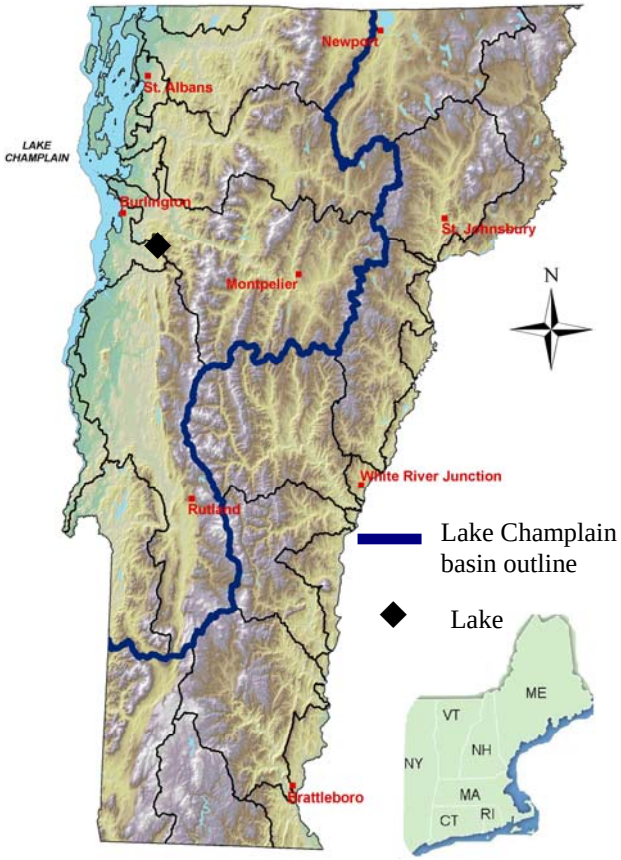
Lower Pond is a small, artificial, shallow lake.

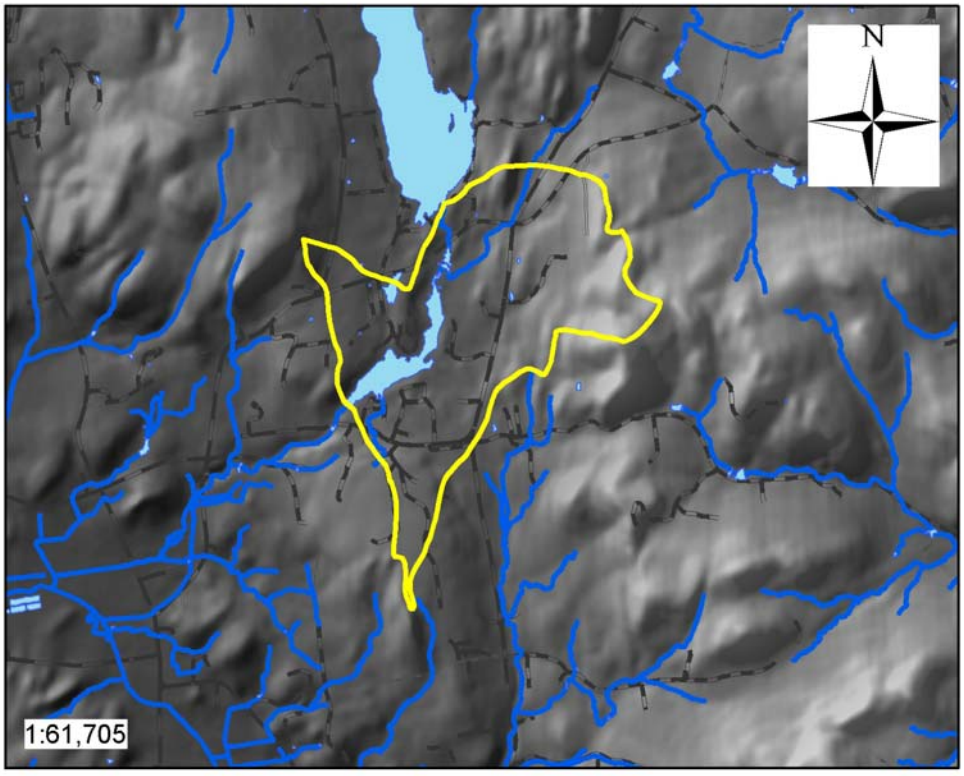
Lake Surface Area:	58	acres
Drainage Basin Area	3,461	acres
Maximum depth:	10 ft.	(3.0 m)
Average depth:	5 ft.	(1.5 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – Secchi disk viewed to the bottom
Algal population density – low
Nutrient enrichment – high

Trophic State: Eutrophic





Lake outlined by its watershed

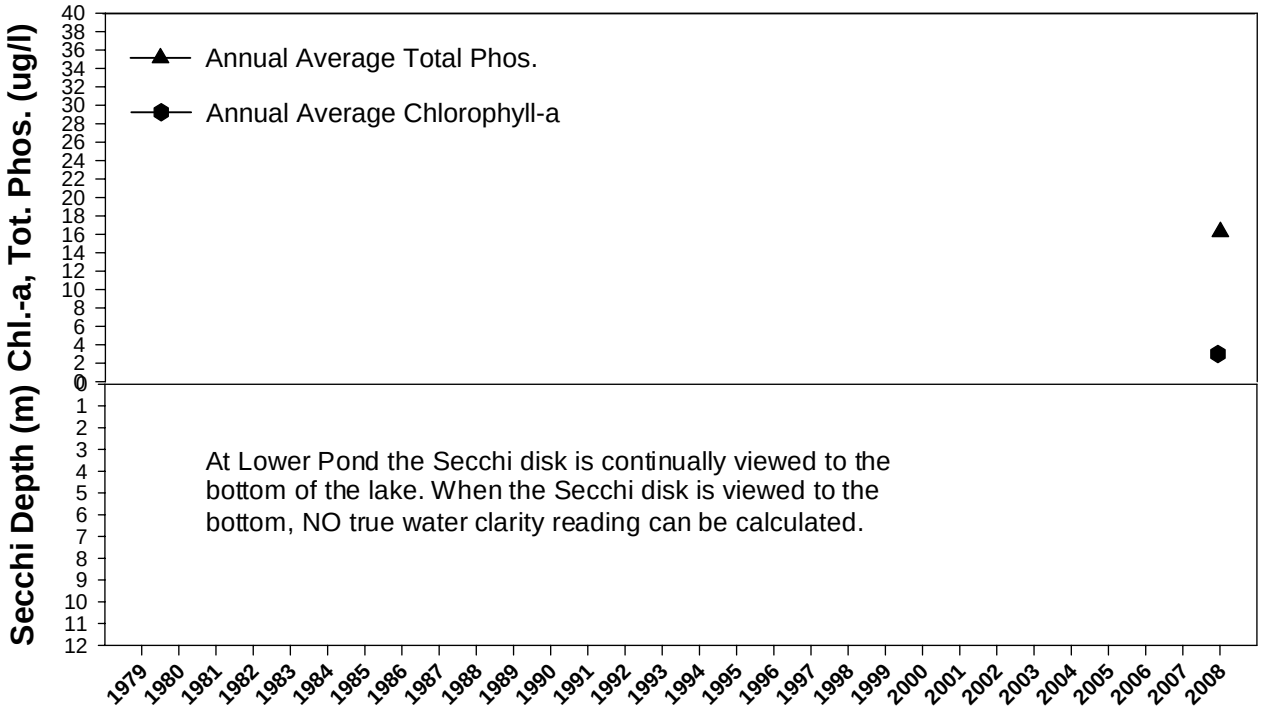
Lower Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	9	2.0	2.3	2.7
Chl-a (ug/l)	9	1.4	3.0	6.4
Summer TP (ug/l)	9	12	16	21

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
2008	9		3.0	16	



MAIDSTONE LAKE

Maidstone, VT

Lay Monitors: Lee and Mary Stewart
Lin Mixer

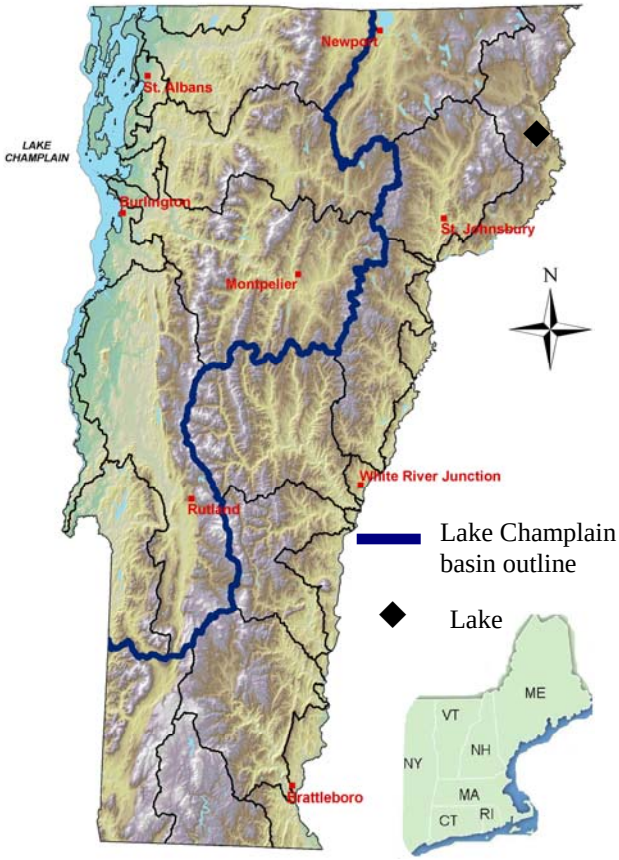
Maidstone Lake is a large, deep, coldwater lake.

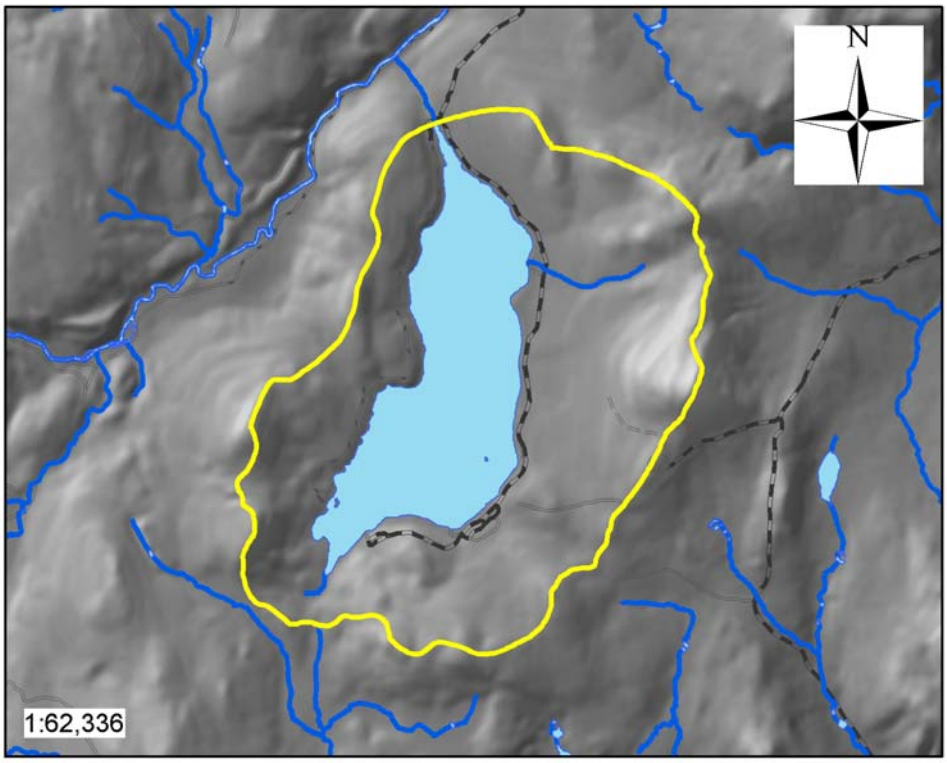
Lake Surface Area:	745	acres
Drainage Basin Area	3,103	acres
Maximum depth:	121 ft.	(36.9 m)
Average depth:	46 ft.	(14.0 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - high
Algal population density – low
Nutrient enrichment – low

Trophic State: Oligotrophic





Lake outlined by its watershed

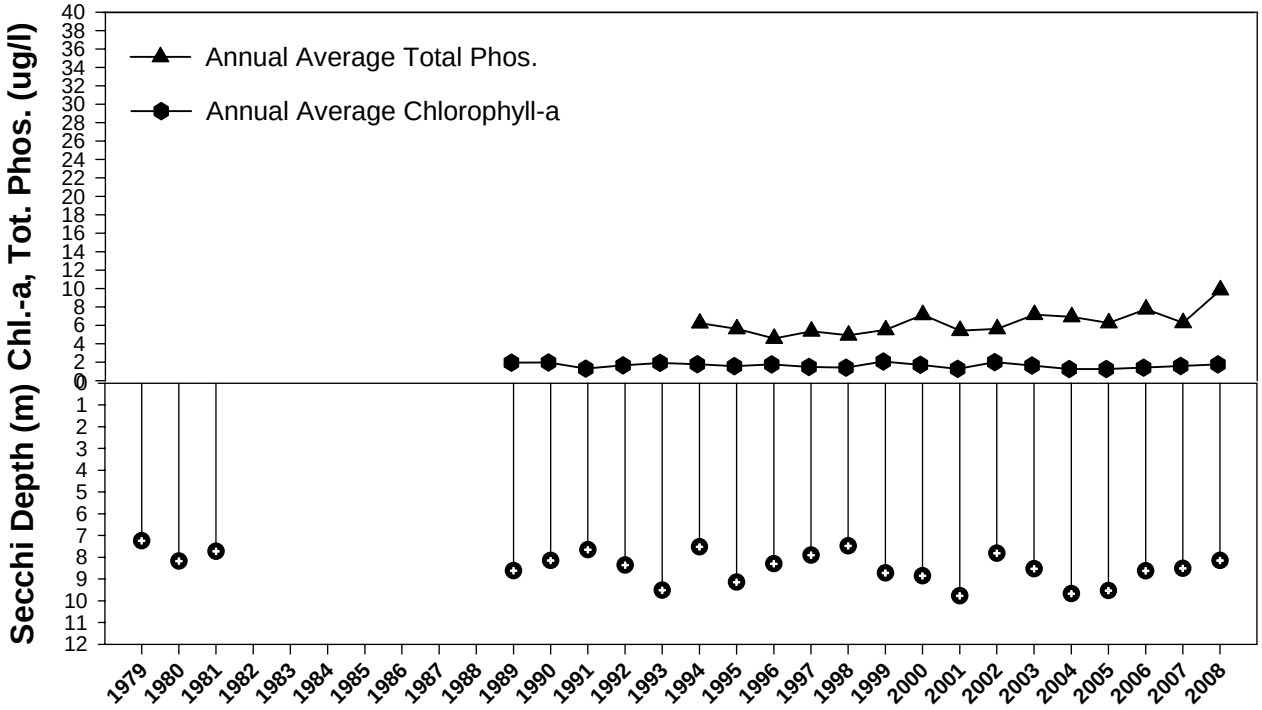
Maidstone Lake

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	13	6.2	8.2	12
Chl-a (ug/l)	13	1.2	1.8	2.3
Summer TP (ug/l)	13	6.6	9.8	14
Spring TP (ug/l)	1		6.2	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	16	7.3			4.3
1980	14	8.2			4.0
1981	13	7.7			6.0
1989	11	8.6	2.0		
1990	14	8.2	2.0		
1991	13	7.7	1.3		
1992	13	8.4	1.7		
1993	14	9.5	2.0		
1994	13	7.5	1.8	6.2	
1995	13	9.2	1.6	5.6	
1996	14	8.3	1.8	4.6	
1997	14	7.9	1.5	5.4	
1998	13	7.5	1.4	4.9	
1999	14	8.7	2.1	5.5	4.3
2000	13	8.9	1.7	7.2	
2001	14	9.8	1.3	5.4	
2002	14	7.8	2.0	5.6	
2003	12	8.5	1.7	7.2	6.0
2004	12	9.7	1.3	6.9	
2005	14	9.5	1.3	6.3	6.1
2006	13	8.6	1.4	7.7	7.7
2007	13	8.5	1.6	6.3	6.3
2008	13	8.2	1.8	9.8	6.2

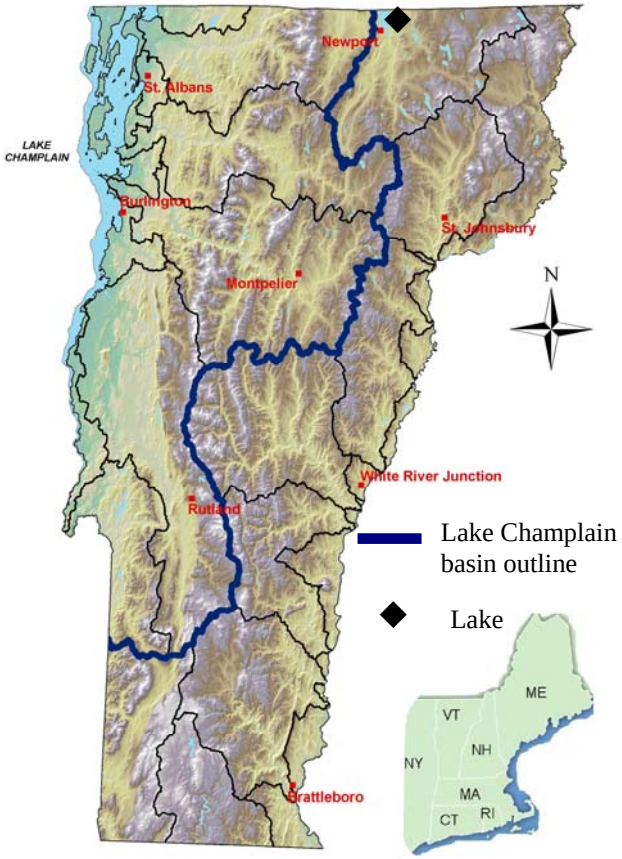


LAKE MEMPHREMAGOG

Canadian – United States Border
Towns of Derby Coventry and Newport, VT

Lay Monitor: Steve Edgerley

Former Lay Monitors:
David Converse
King Boyd
Harry Corron
Bill Morse



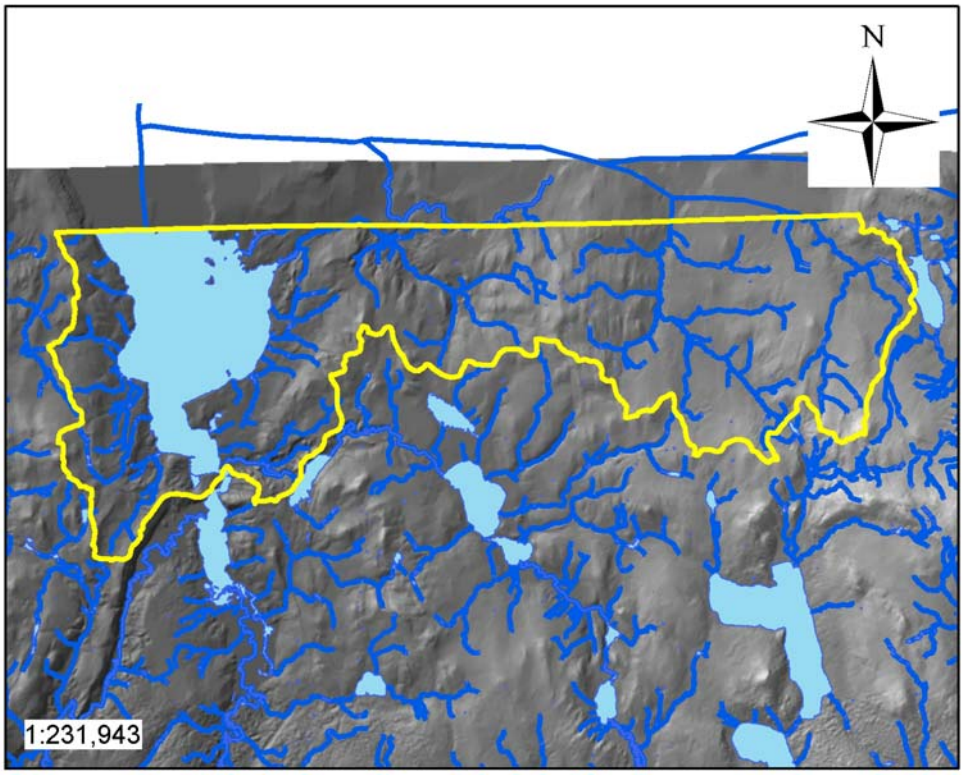
Lake Memphremagog is a 32 mile long, narrow lake

Lake Surface Area:	5,966	acres
Drainage Basin Area	416,320	acres
Maximum depth:	351 ft.	(106 m)
Average depth:	21 ft.	(6 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – moderate
Algal population density – moderate
Nutrient enrichment – high

Trophic State: Mesotrophic



Lake outlined by its watershed

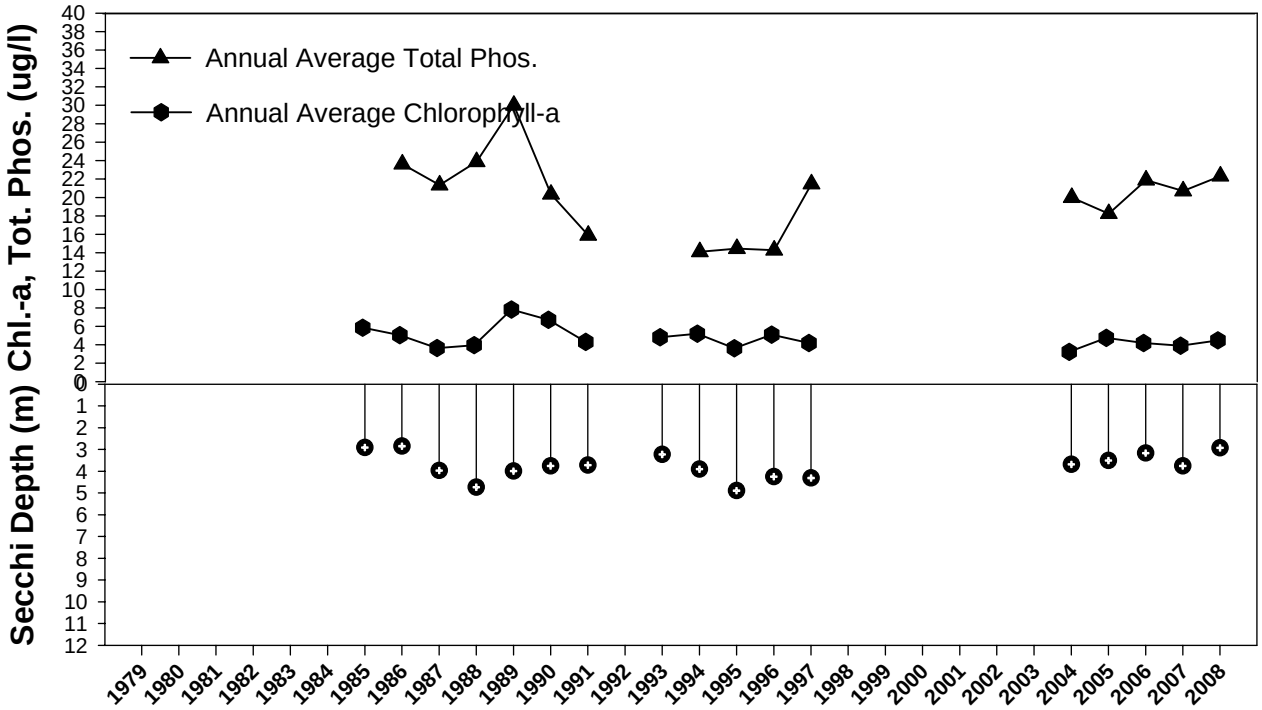
Lake Memphremagog

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	12	1.5	2.9	3.8
Chl-a (ug/l)	12	1.7	4.5	7.3
Summer TP (ug/l)	12	15	22	29

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1985	13	2.9	5.9		
1986	13	2.8	5.1	24	
1987	12	4.0	3.7	21	
1988	8	4.7	4.0	24	
1989	10	4.0	7.9	30	
1990	9	3.8	6.8	20	
1991	9	3.7	4.4	16	
1993	8	3.2	4.9		
1994	10	3.9	5.3	14	
1995	11	4.9	3.7	14	
1996	11	4.3	5.1	14	
1997	13	4.3	4.2	21	
2004	8	3.7	3.3	20	
2005	11	3.5	4.8	18	
2006	10	3.2	4.2	22	
2007	13	3.8	3.9	21	
2008	12	2.9	4.5	22	



LAKE MEMPHREMAGOG – SOUTH BAY

Canadian – United States Border
Towns of Derby, Coventry and Newport, VT

Lay Monitor: Steve Edgerley

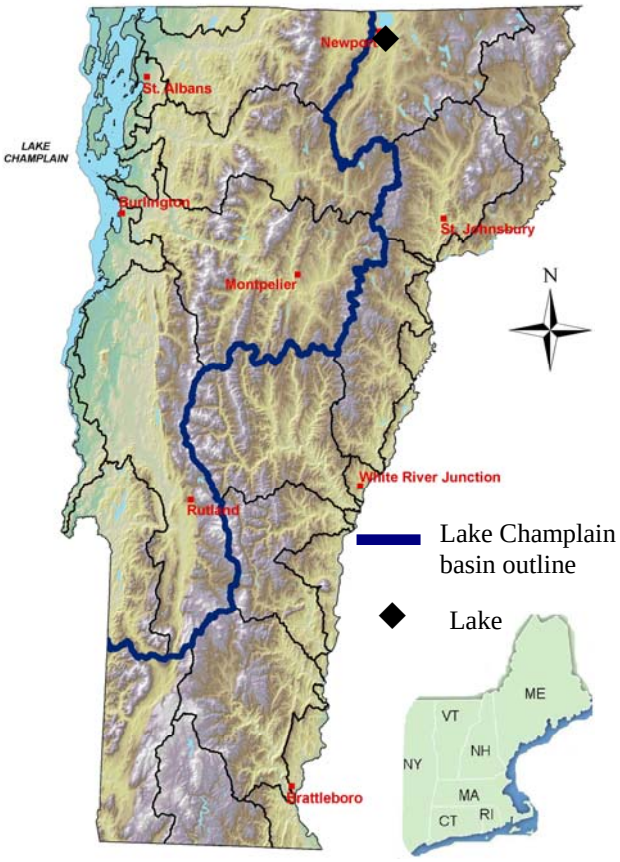
The South Bay of Lake Memphremagog is a shallow, 52 acre area with limited flow to the ma part of Lake Memphremagog because of bridges that constrict flow and isolate this bay.

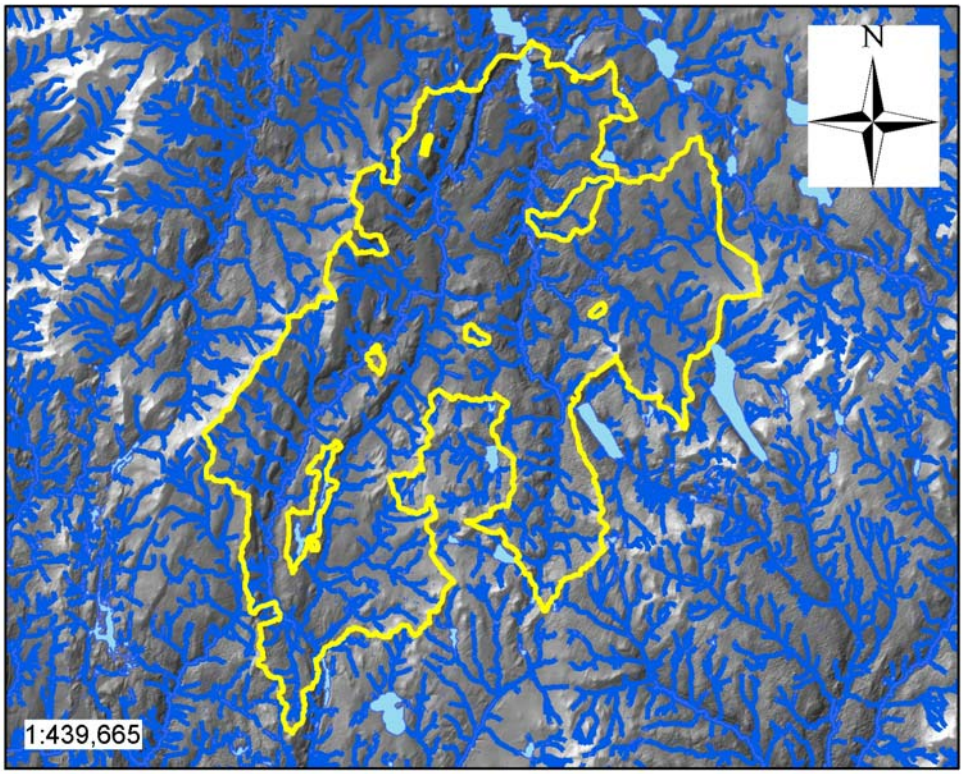
All of Lake Memphremagog:

Lake Surface Area:	5,966	acres
Drainage Basin Area	416,320	acres
Maximum depth:	351 ft.	(106 m)
Average depth:	21 ft.	(6 m)

Compared to other lakes, long-term summer means indicate:
Water clarity – low
Algal population density – moderate
Nutrient enrichment – high

Trophic State: Mesotrophic





Lake outlined by its watershed

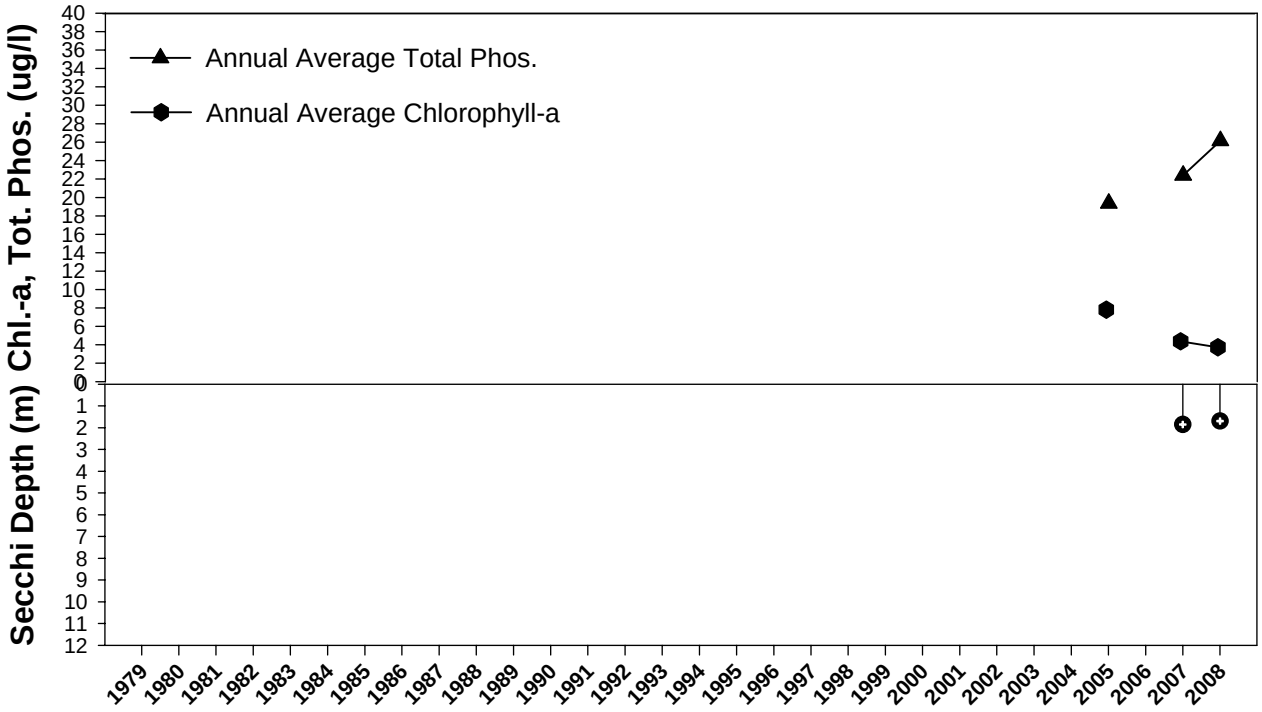
Lake Memphremagog, South Bay

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	10	1.3	1.7	2.3
Chl-a (ug/l)	10	2.2	3.8	9.0
Summer TP (ug/l)	10	18	26	45

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
2005	8		7.9	19	
2006	4				
2007	13	1.9	4.4	22	
2008	10	1.7	3.8	26	



MILES POND

Concord, VT

Lay Monitor: Nancy Darrah

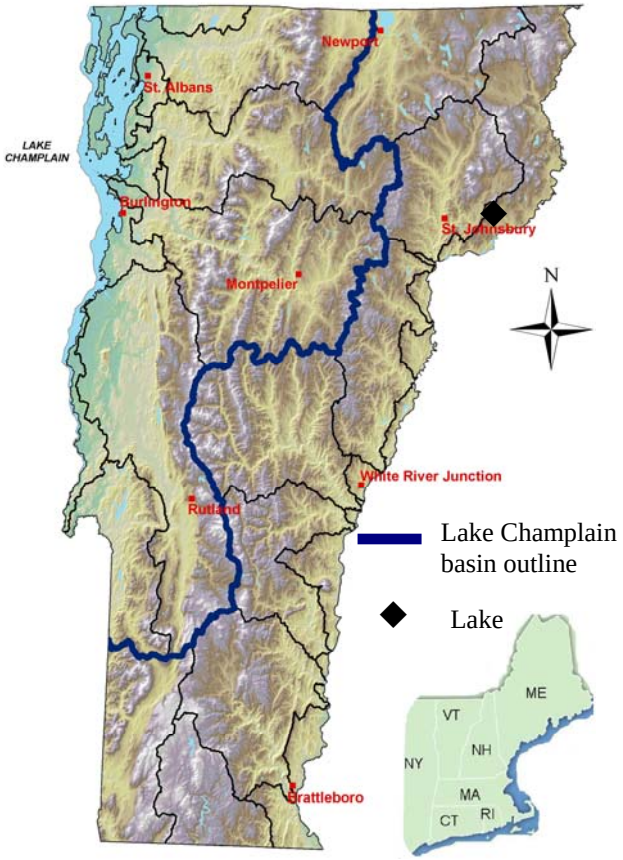
Miles Pond is a small, relatively deep, warmwater lake.

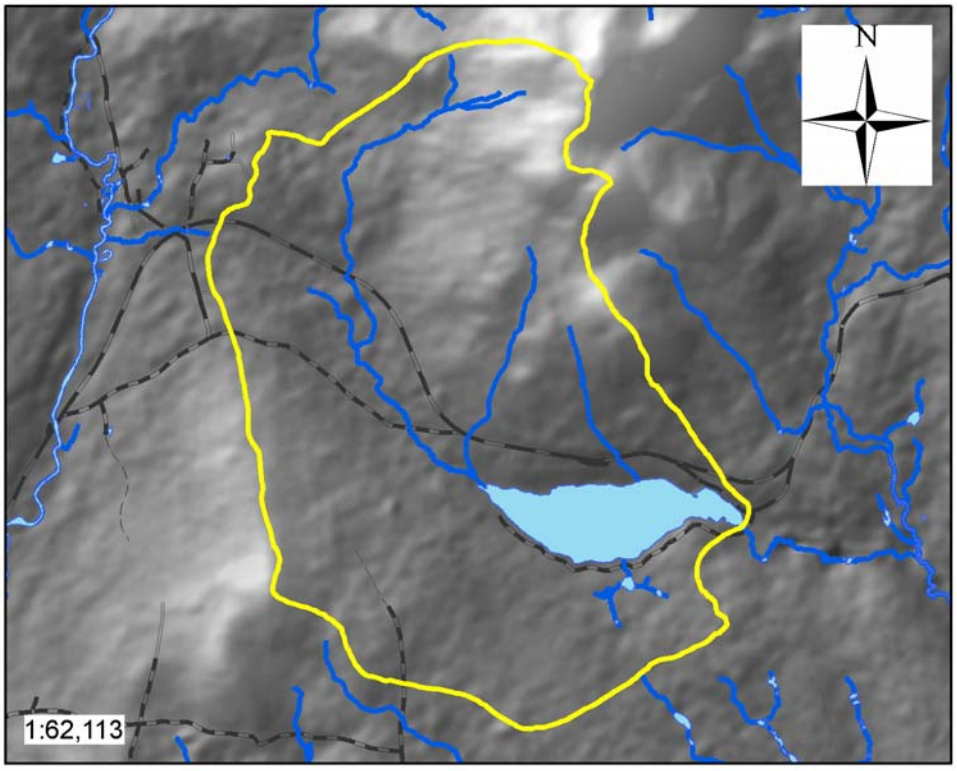
Lake Surface Area:	215	acres
Drainage Basin Area	4,158	acres
Maximum depth:	55 ft.	(16.7 m)
Average depth:	20 ft.	(6 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – moderate
Algal population density – moderate
Nutrient enrichment – moderate

Trophic State: Mesotrophic





Lake outlined by its watershed

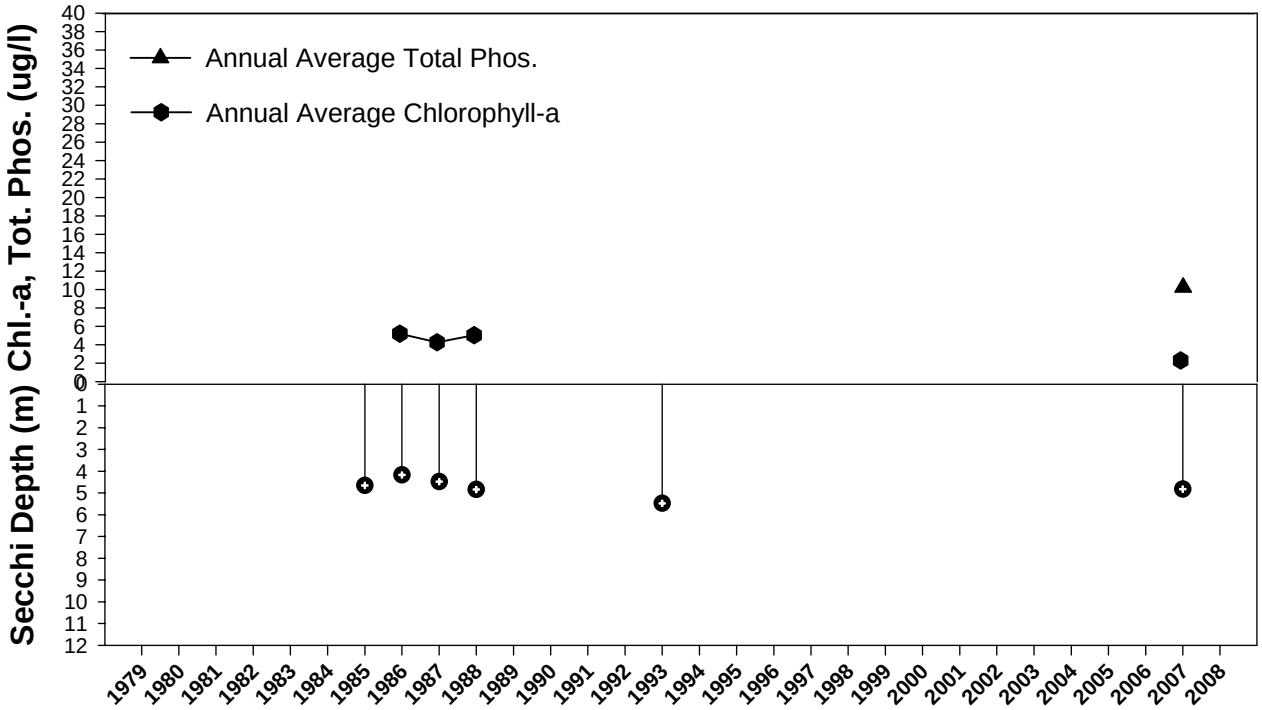
Miles Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	7	2.0	3.3	6.0
Chl-a (ug/l)	7	2.0	3.6	5.9
Summer TP (ug/l)	7	11	14	17

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1985	9	4.7			9.5
1986	8	4.2	5.3		10
1987	9	4.5	4.3		8.5
1988	9	4.8	5.1		
1989	6				
1990	7				
1991	7				
1992	7				
1993	9	5.5			
2007	8	4.8	2.3	10	9.8
2008	7				



LAKE MOREY

Fairlee, VT

Lay Monitors: Don Weaver
Bill Scott

Former Lay Monitors:
Deb Williams

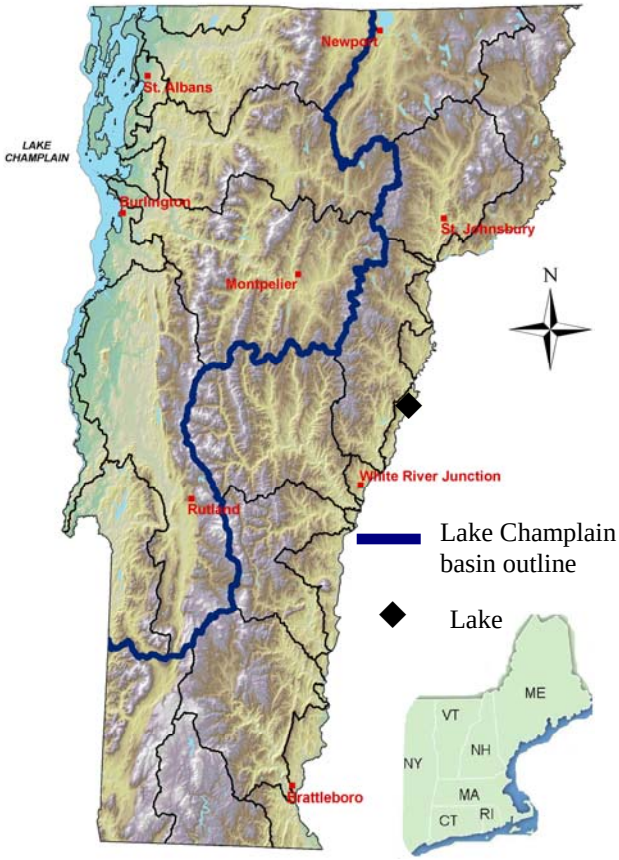
Lake Morey is a large, relatively deep, warmwater lake.

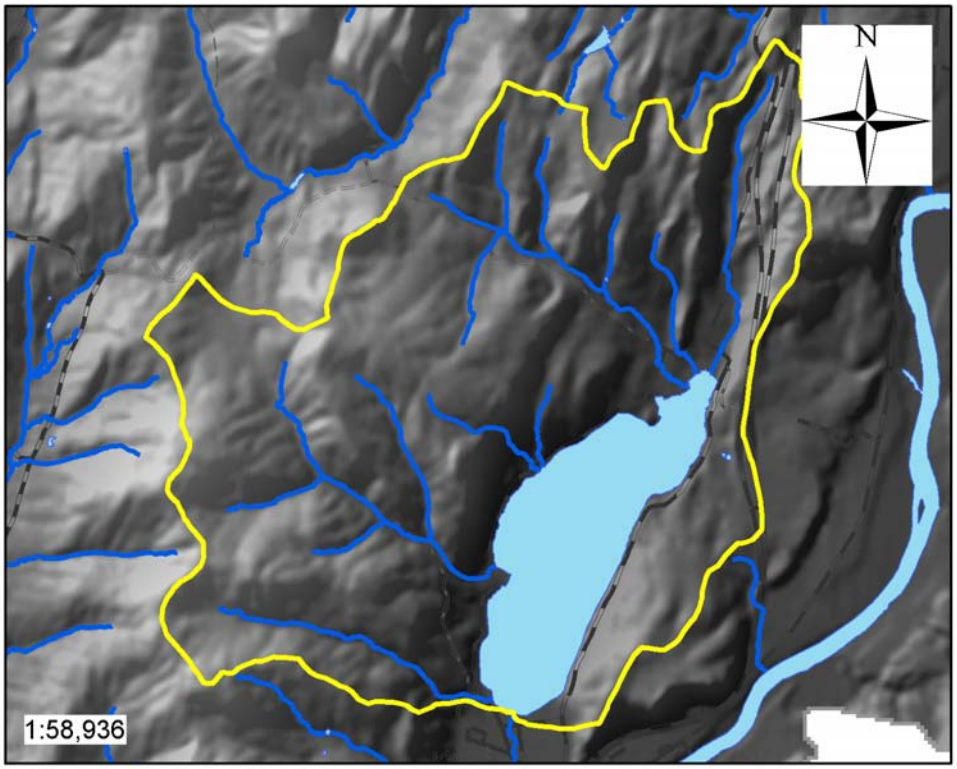
Lake Surface Area:	547	acres
Drainage Basin Area	5,101	acres
Maximum depth:	43 ft.	(13.1 m)
Average depth:	24 ft.	(7.3 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – high
Algal population density – moderate
Nutrient enrichment – high

Trophic State: Mesotrophic





Lake outlined by its watershed

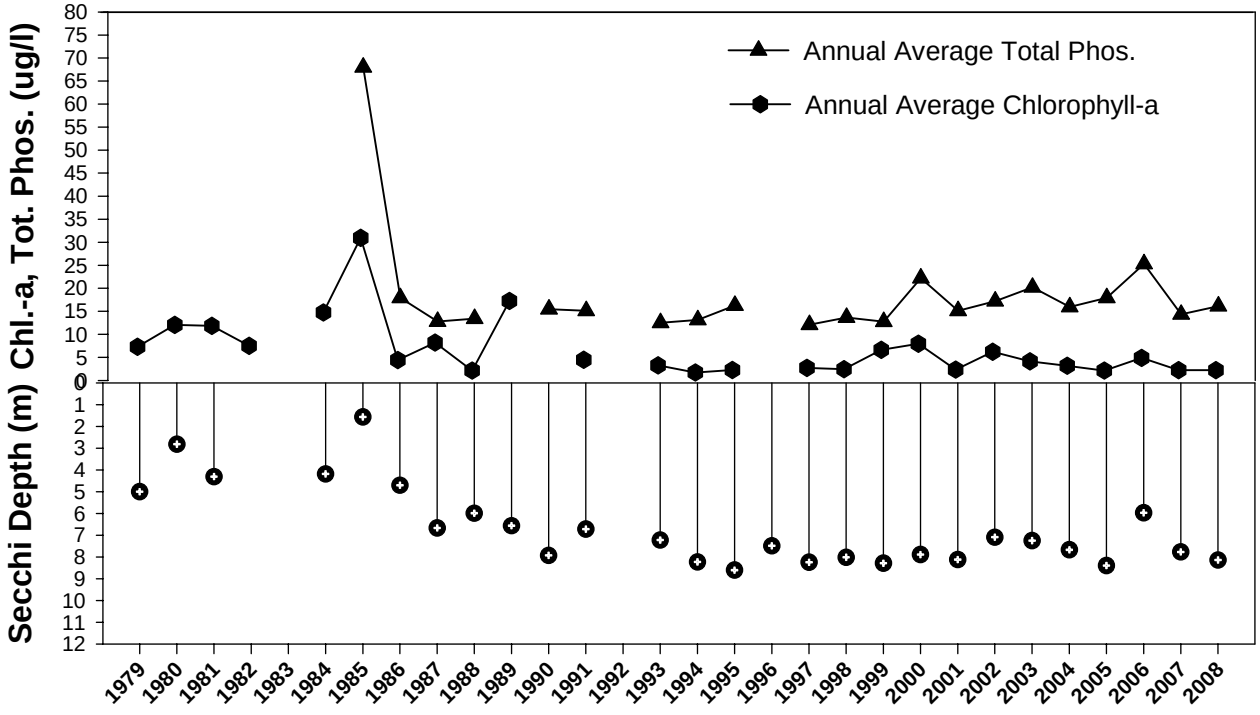
Lake Morey

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	9	7.1	8.1	8.8
Chl-a (ug/l)	9	1.1	2.3	4.0
Summer TP (ug/l)	9	13	16	19
Spring TP (ug/l)	1		12	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	13	5.0	7.4		32
1980	14	2.8	12		20
1981	14	4.3	12		48
1982	8		7.6		46
1983	7				39
1984	9	4.2	15		37
1985	12	1.6	31	68	58
1986	13	4.7	4.5	18	39
1987	13	6.7	8.3	13	9.0
1988	12	6.0	2.2	13	12
1989	8	6.6	17		17
1990	11	7.9		15	16
1991	9	6.7	4.6	15	12
1992	7				11
1993	10	7.2	3.4	13	12
1994	8	8.2	1.8	13	
1995	8	8.6	2.4	16	12
1996	8	7.5			11
1997	9	8.2	2.8	12	11
1998	9	8.0	2.5	14	12
1999	9	8.3	6.7	13	
2000	9	7.9	8.0	22	
2001	9	8.1	2.4	15	
2002	9	7.1	6.3	17	10
2003	9	7.2	4.2	20	15
2004	9	7.7	3.3	16	14
2005	9	8.4	2.2	18	12
2006	9	6.0	5.0	25	
2007	9	7.8	2.3	14	14
2008	9	8.1	2.3	16	12



NELSON POND

Calais and Woodbury, VT

Lay Monitor: Chris Bean

Former Lay Monitors:
Doug Stitely
Jan Brough

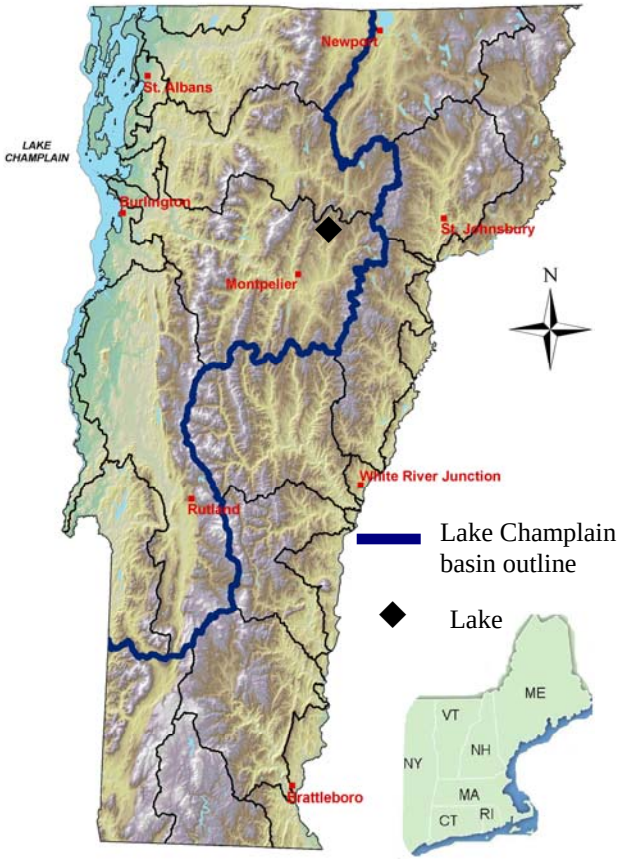
Nelson Pond, also known as Forest Lake, is a moderately sized, deep, coldwater lake.

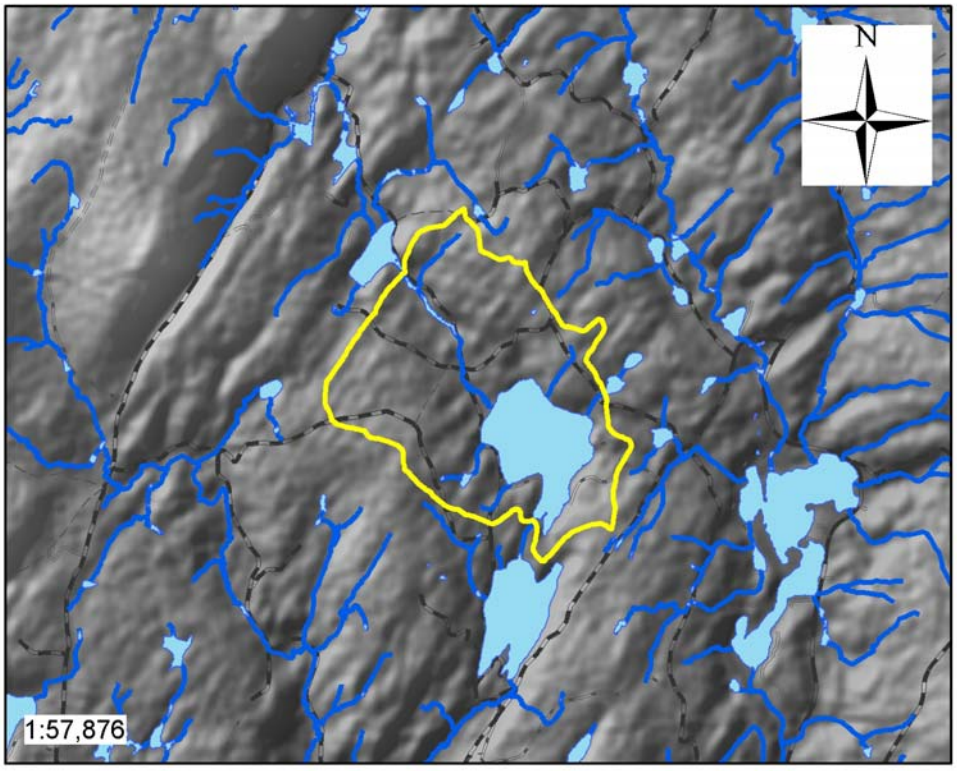
Lake Surface Area:	133	acres
Drainage Basin Area	2,827	acres
Maximum depth:	97 ft.	(29.6 m)
Average depth:	49 ft.	(14.9 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – high
Algal population density – low
Nutrient enrichment – moderate

Trophic State: Oligotrophic





Lake outlined by its watershed

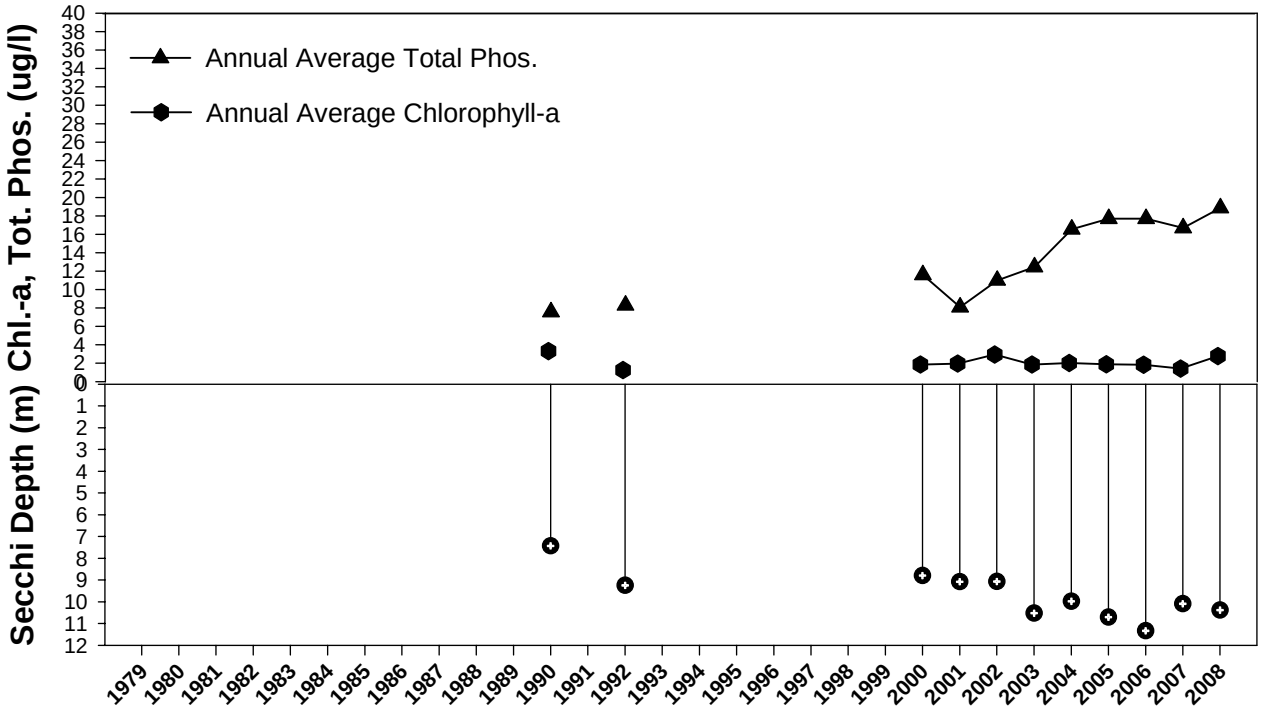
Nelson Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	11	8.8	10	12
Chl-a (ug/l)	11	1.1	2.8	4.1
Summer TP (ug/l)	11	13	19	45

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	6				5.0
1980	6				3.5
1990	10	7.4	3.4	7.6	8.0
1991	6				7.5
1992	10	9.2	1.3	8.3	5.5
2000	10	8.8	1.9	12	
2001	12	9.1	2.0	8.1	
2002	11	9.1	3.0	11	
2003	11	11	1.9	12	
2004	12	10.0	2.1	17	7.0
2005	11	11	1.9	18	6.5
2006	11	11	1.9	18	8.7
2007	12	10	1.5	17	12
2008	11	10	2.8	19	



NICHOLS POND

Woodbury, VT

Lay Monitors: Michael Gray
Ellie Hayes

Former Lay Monitors:
Doug Stitely

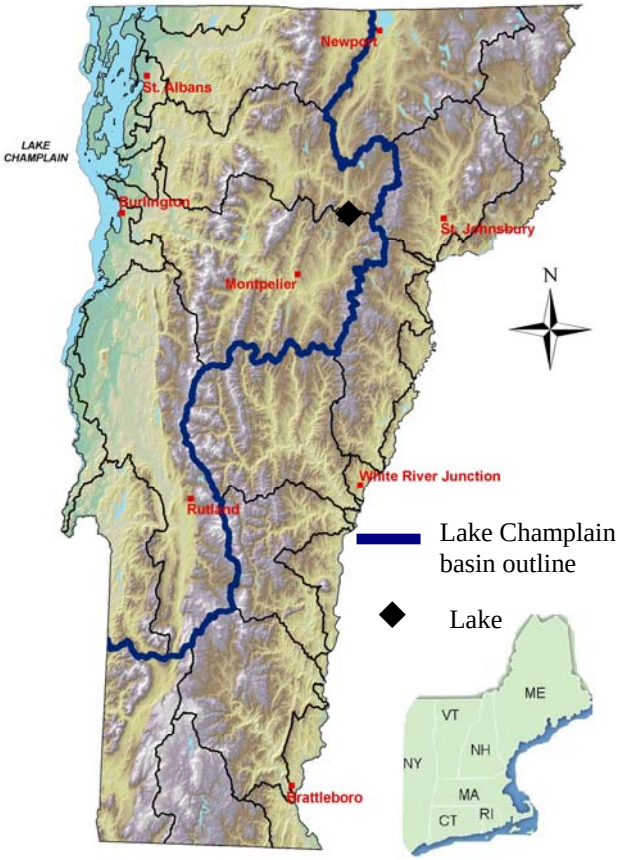
Nichols Pond is a moderately sized, deep, coldwater lake.

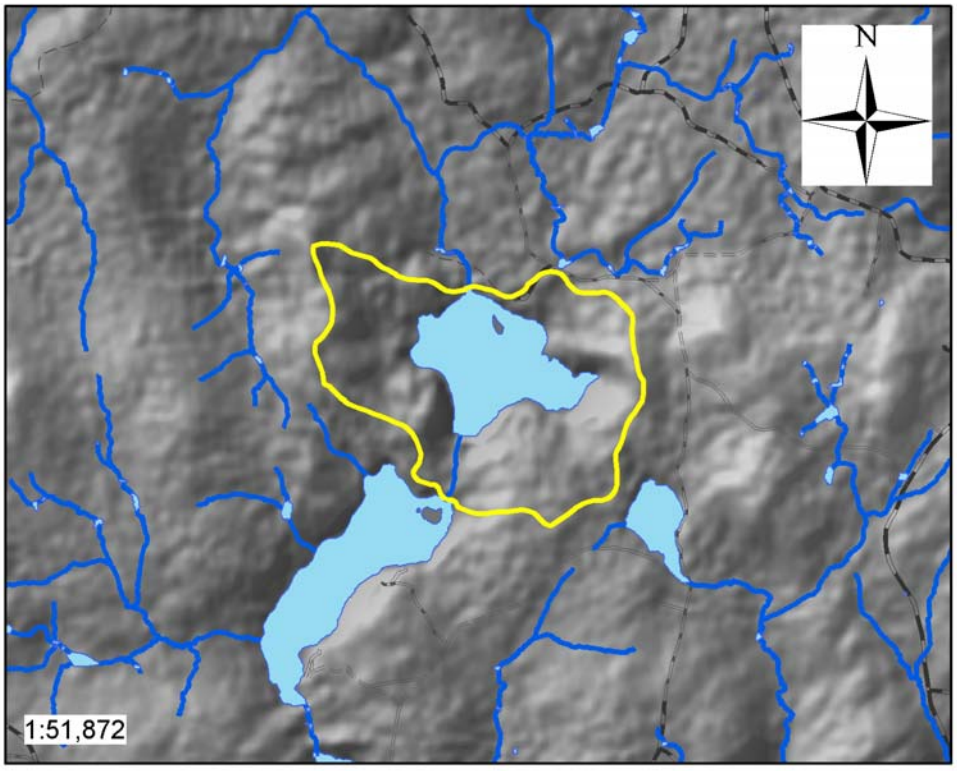
Lake Surface Area:	171	acres
Drainage Basin Area	2,920	acres
Maximum depth:	109 ft.	(33.2 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – high
Algal population density – moderate
Nutrient enrichment – moderate

Trophic State: Mesotrophic





Lake outlined by its watershed

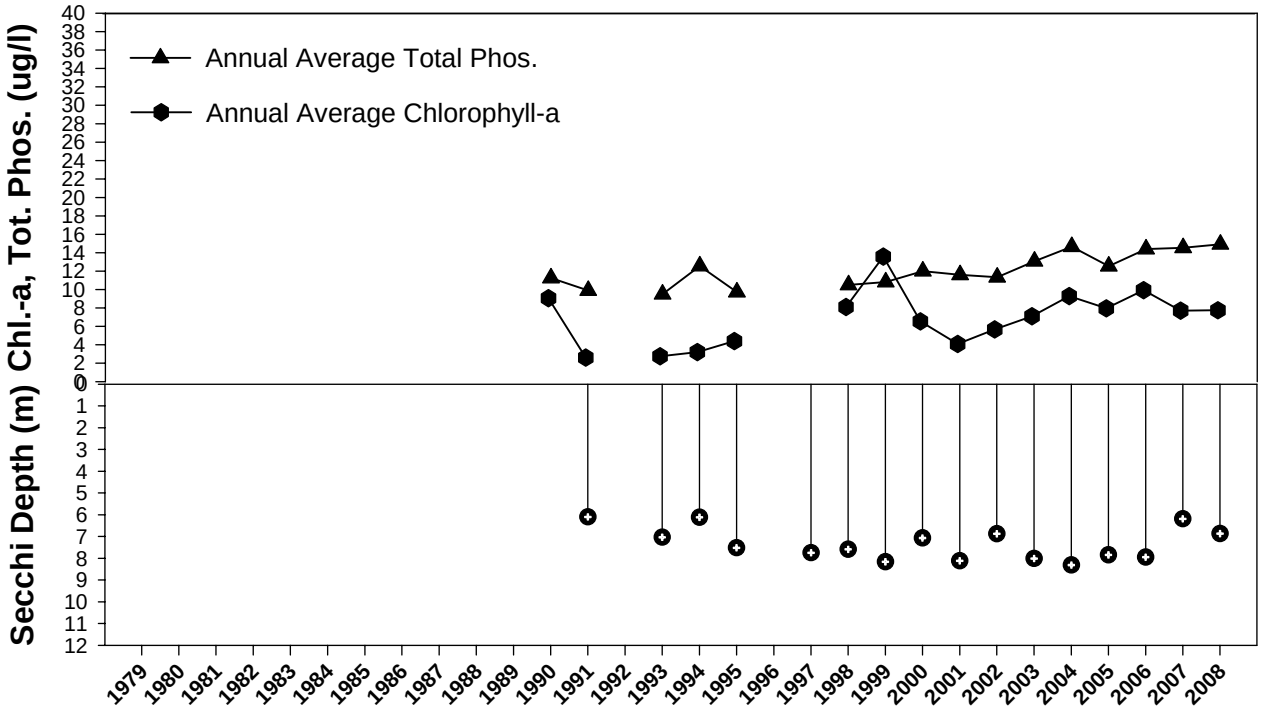
Nichols Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	11	5.8	6.9	11
Chl-a (ug/l)	11	5.0	7.8	11
Summer TP (ug/l)	11	12	15	19

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1990	12		9.1	11	9.0
1991	9	6.1	2.7	9.9	7.0
1993	8	7.0	2.8	9.5	
1994	9	6.1	3.3	13	
1995	11	7.5	4.4	9.7	
1997	12	7.8			7.3
1998	10	7.6	8.2	11	10
1999	11	8.2	14	11	
2000	11	7.1	6.6	12	
2001	10	8.1	4.1	12	
2002	12	6.9	5.7	11	
2003	12	8.0	7.1	13	
2004	12	8.3	9.3	15	10
2005	8	7.9	8.0	13	
2006	10	8.0	10.0	14	
2007	10	6.2	7.8	15	14
2008	11	6.9	7.8	15	



NORTH MONTPELIER POND

East Montpelier, VT

Lay Monitor: Laura Brown

Former Lay Monitors:
Rose Paul
George Springston

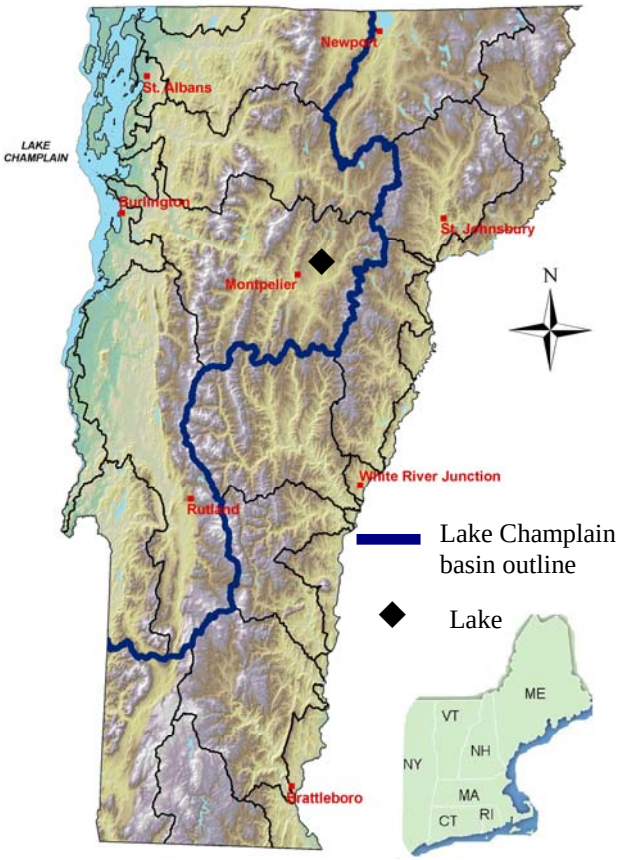
North Montpelier Pond is a small, warmwater lake.

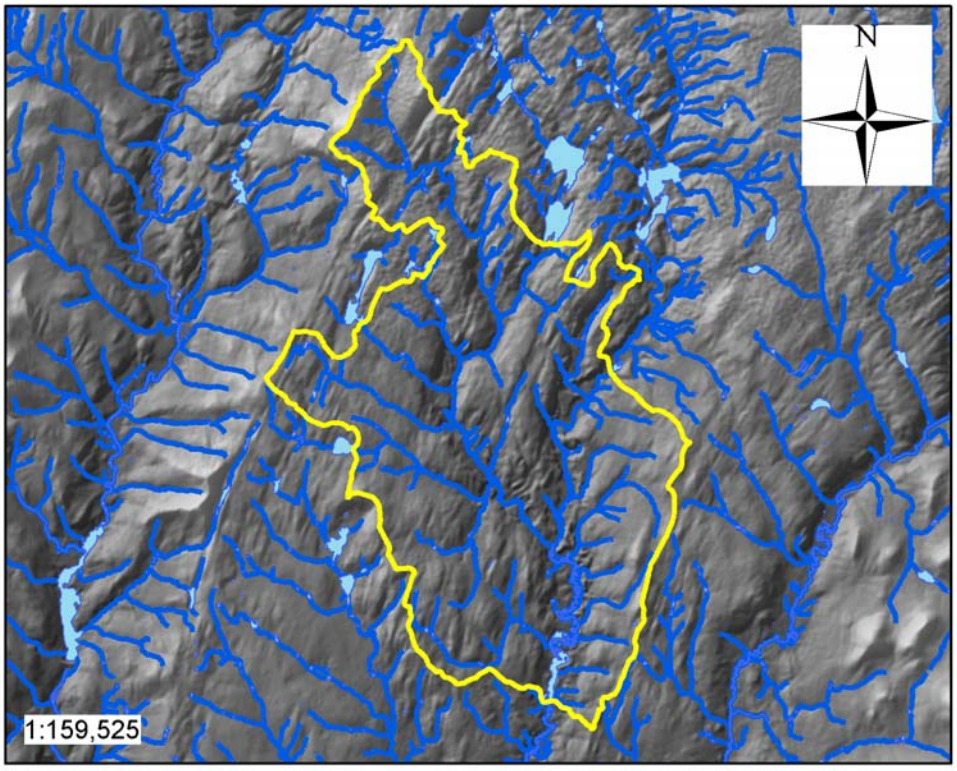
Lake Surface Area:	72	acres
Drainage Basin Area	32,581	acres
Maximum depth:	12 ft.	(3.6 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – low
Algal population density – moderate
Nutrient enrichment – high

Trophic State: Eutrophic





Lake outlined by its watershed

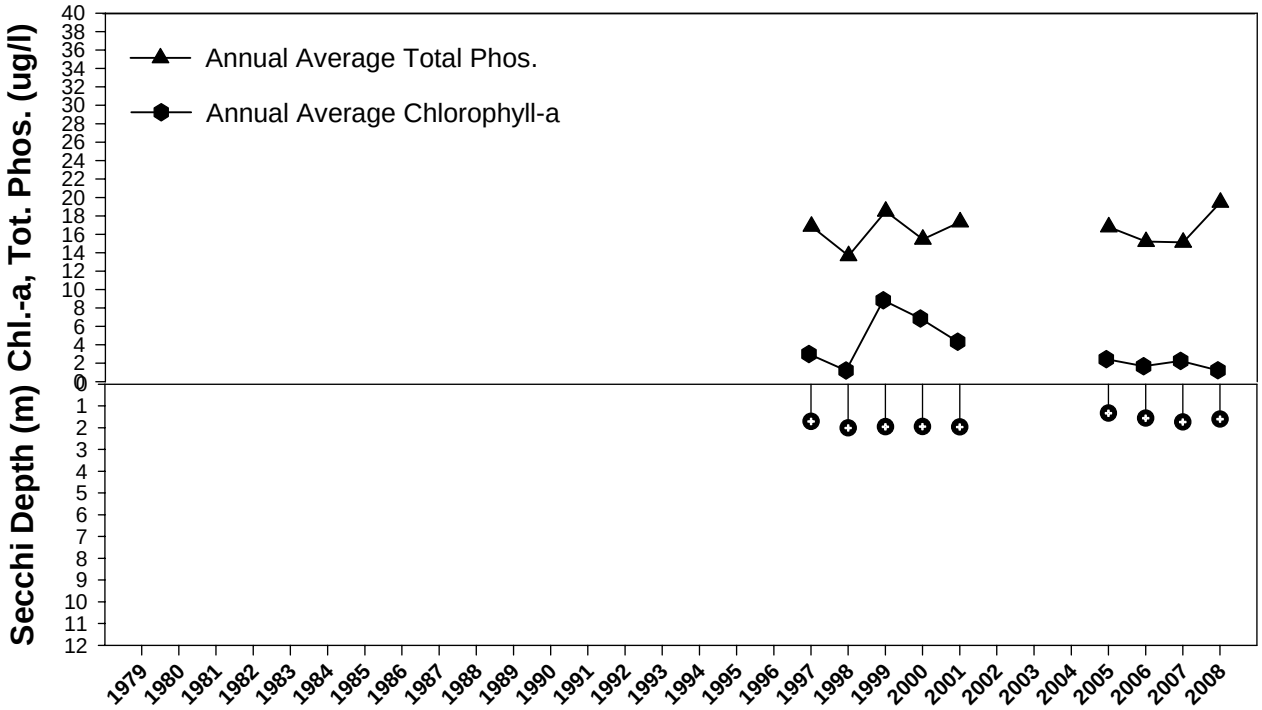
North Montpelier Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	9	1.2	1.6	2.0
Chl-a (ug/l)	9	0.8	1.3	3.0
Summer TP (ug/l)	9	17	19	23

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1997	8	1.7	3.1	17	
1998	9	2.0	1.3	14	
1999	10	2.0	8.9	19	
2000	9	2.0	6.9	15	
2001	10	2.0	4.4	17	
2005	10	1.3	2.5	17	
2006	9	1.6	1.7	15	
2007	9	1.7	2.3	15	
2008	9	1.6	1.3	19	



LAKE PARKER

Glover, VT

Lay Monitor: Bob Richards

Former Lay Monitors:
Bob Johnson
Marjorie and Arnold Smith

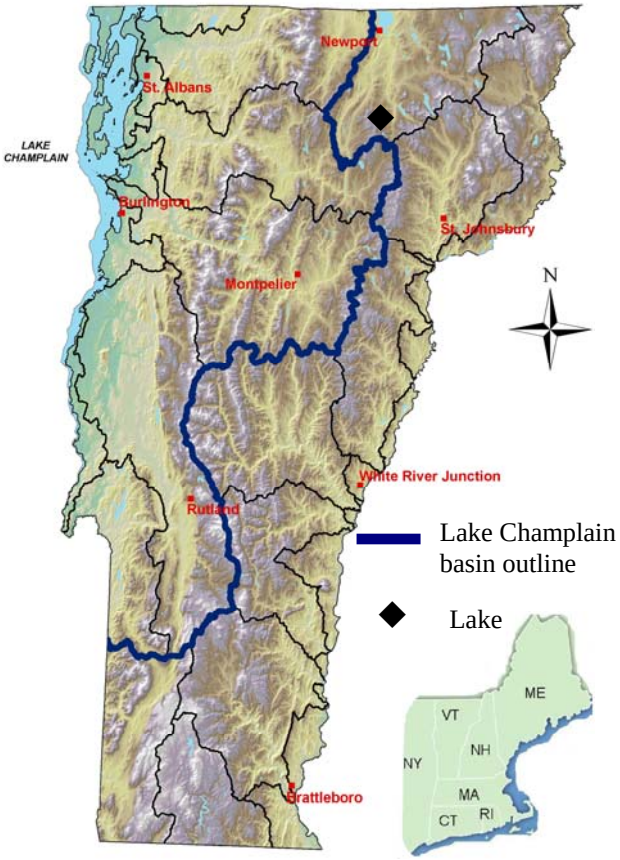
Lake Parker is a relatively large, fairly shallow, warmwater lake.

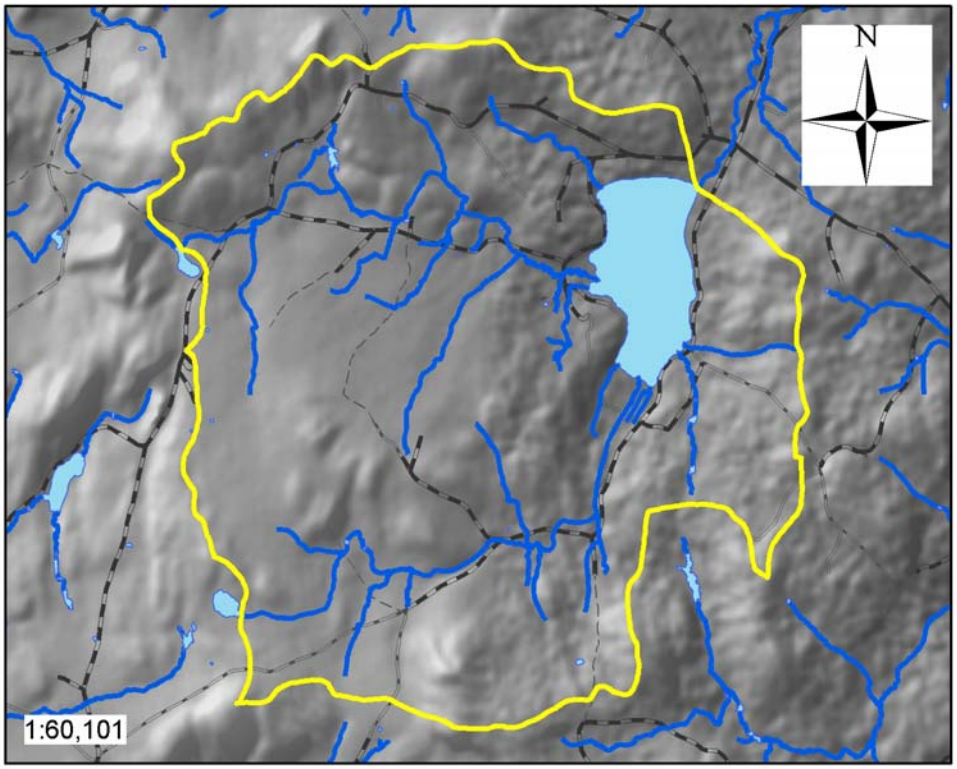
Lake Surface Area:	250	acres
Drainage Basin Area	5,418	acres
Maximum depth:	45 ft.	(13.7 m)
Average Depth:	25 ft.	(7.6 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – moderate
Algal population density – high
Nutrient enrichment – high

Trophic State: Eutrophic





Lake outlined by its watershed

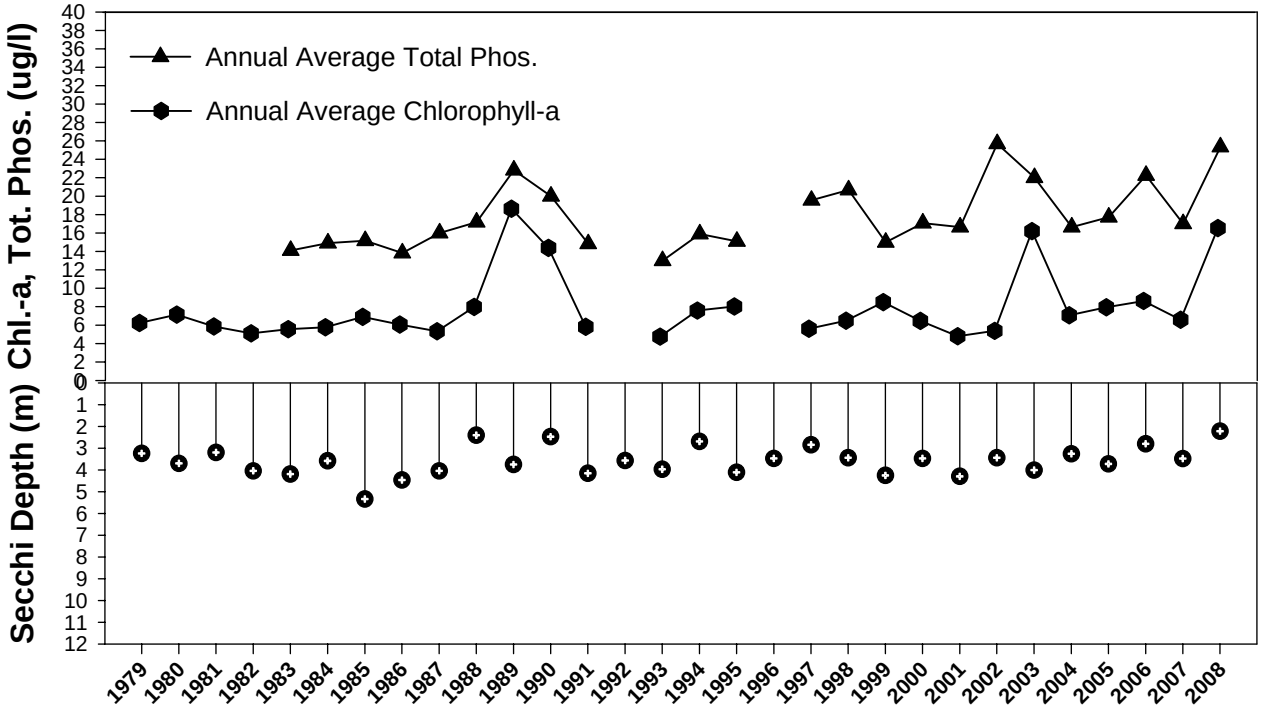
Lake Parker

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	14	1.0	2.2	3.2
Chl-a (ug/l)	14	4.3	17	35
Summer TP (ug/l)	14	17	25	39

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	18	3.2	6.3		17
1980	13	3.7	7.2		20
1981	13	3.2	5.9		21
1982	13	4.0	5.2		18
1983	13	4.2	5.6	14	15
1984	13	3.6	5.8	15	12
1985	12	5.3	6.9	15	14
1986	12	4.5	6.1	14	13
1987	12	4.0	5.4	16	13
1988	12	2.4	8.0	17	
1989	12	3.8	19	23	
1990	12	2.5	14	20	19
1991	12	4.2	5.9	15	14
1992	13	3.6			
1993	12	4.0	4.8	13	
1994	10	2.7	7.6	16	
1995	11	4.1	8.1	15	19
1996	9	3.5			
1997	9	2.8	5.7	20	16
1998	9	3.4	6.5	21	
1999	11	4.3	8.5	15	17
2000	12	3.5	6.5	17	21
2001	11	4.3	4.8	17	13
2002	10	3.4	5.4	26	18
2003	12	4.0	16	22	
2004	13	3.3	7.1	17	14
2005	11	3.7	8.0	18	16
2006	12	2.8	8.7	22	17
2007	12	3.5	6.6	17	22
2008	14	2.2	17	25	



PEACHAM POND

Peacham, VT

Lay Monitor: Vic and Lu Laprade

Former Lay Monitors:
Dennis Hendy

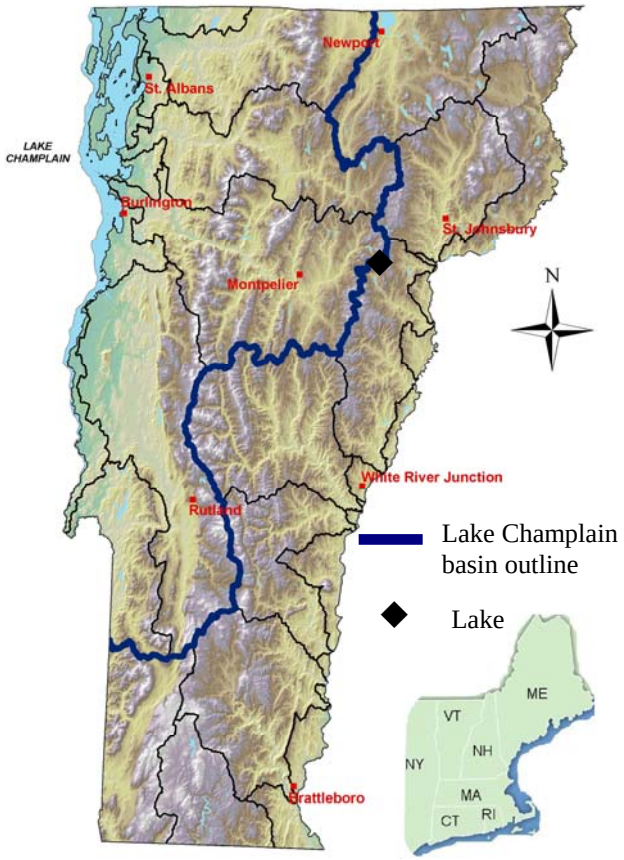
Peacham pond is a relatively large, deep lake.

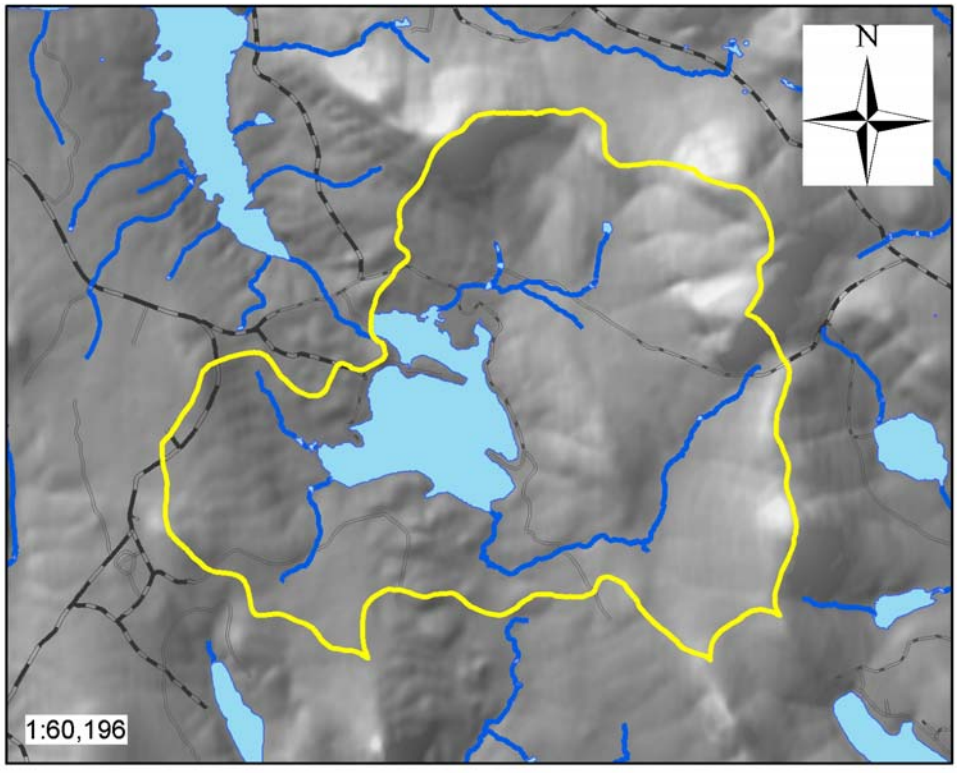
Lake Surface Area:	340	acres
Drainage Basin Area	3,750	acres
Maximum depth:	61 ft.	(18.5 m)
Average depth:	20 ft.	(6.1 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - moderate
Algal population density – moderate
Nutrient enrichment – moderate

Trophic State: Mesotrophic





Lake outlined by its watershed

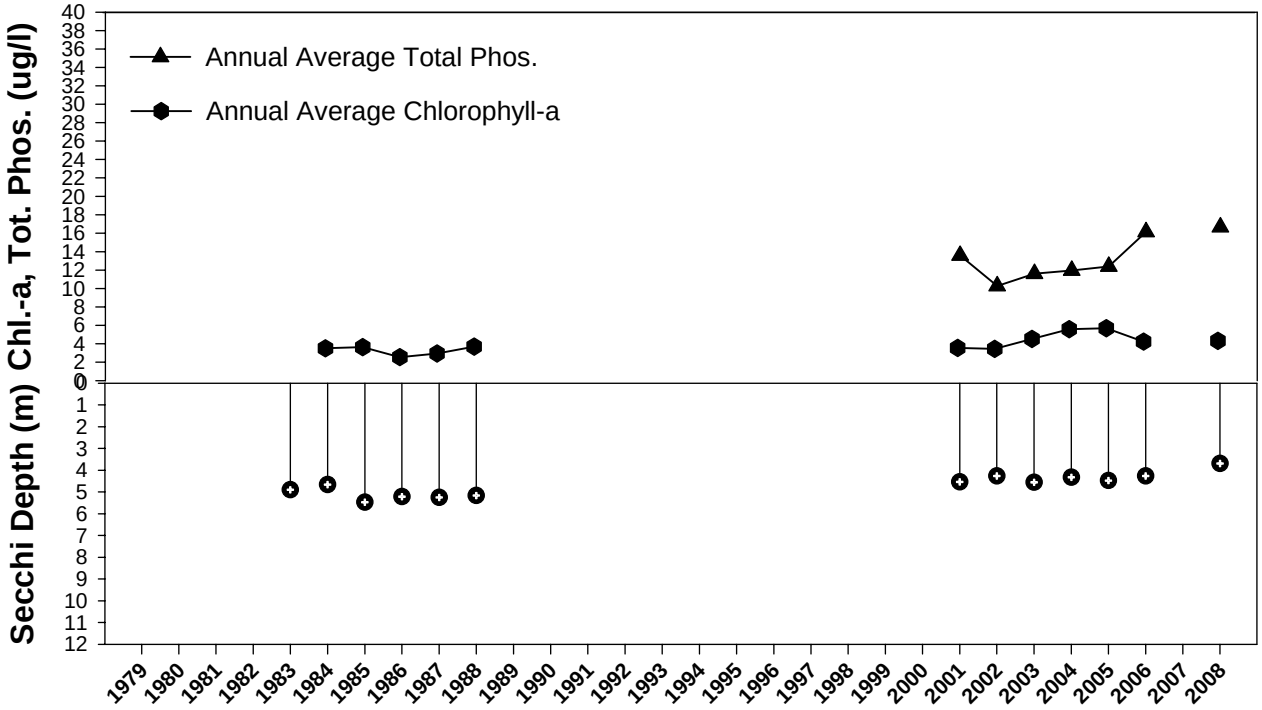
Peacham Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	8	3.0	3.7	4.1
Chl-a (ug/l)	8	2.8	4.4	7.0
Summer TP (ug/l)	8	12	17	28
Spring TP (ug/l)	1		10	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1983	10	4.9			12
1984	13	4.7	3.5		7.7
1985	11	5.5	3.7		8.3
1986	9	5.2	2.6		
1987	12	5.3	3.0		
1988	10	5.2	3.7		
2001	12	4.5	3.6	14	
2002	11	4.3	3.5	10	8.6
2003	10	4.6	4.6	12	
2004	10	4.3	5.6	12	
2005	10	4.5	5.7	12	
2006	10	4.3	4.3	16	
2008	8	3.7	4.4	17	10



RAPONDA

Wilmington, VT

Lay Monitor: Cindy Meyer

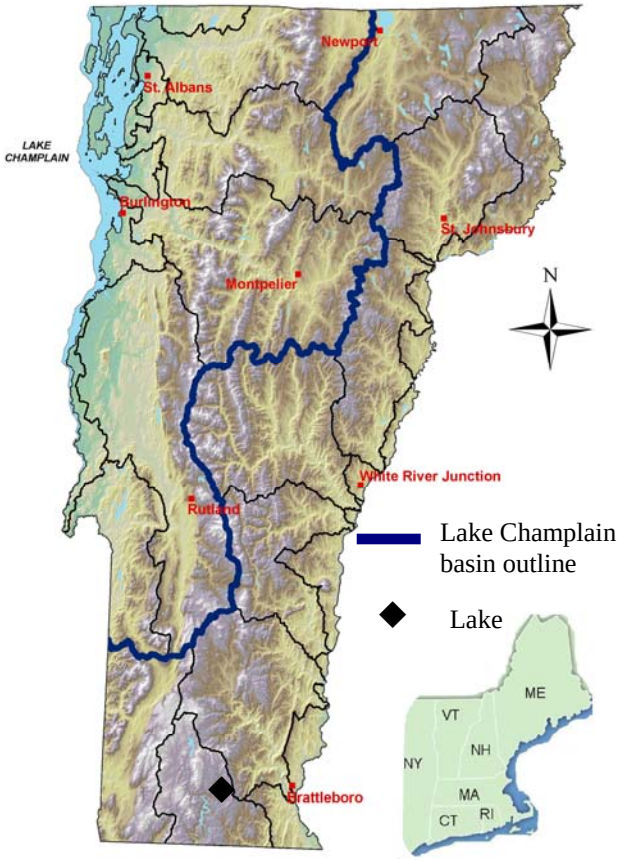
Raponda is a moderately sized, warmwater lake.

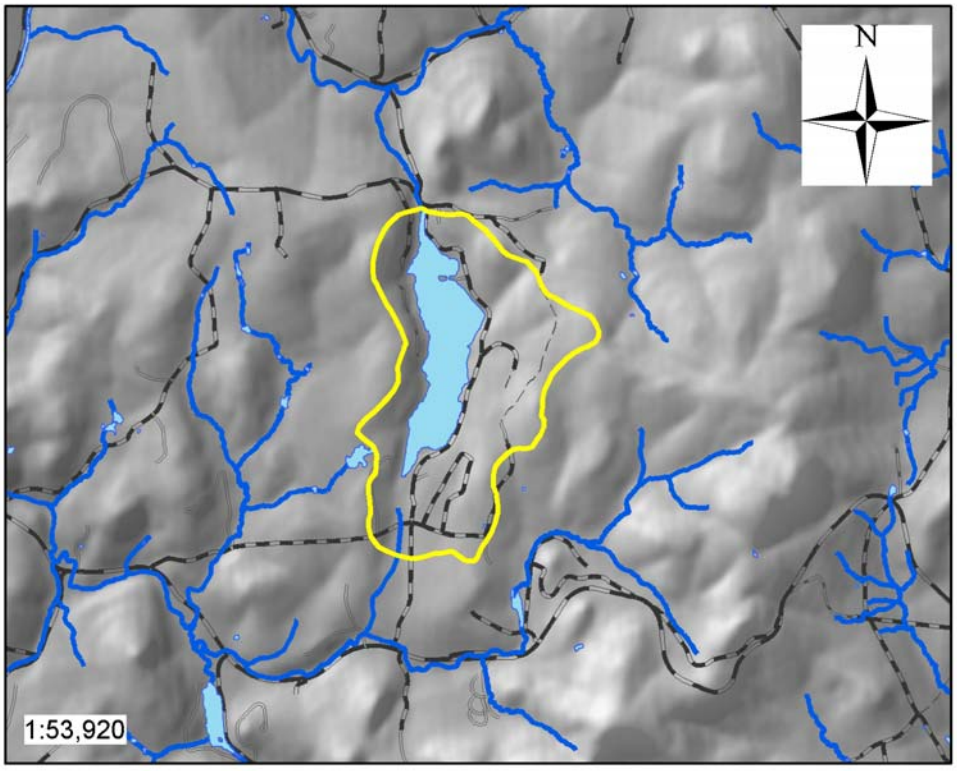
Lake Surface Area:	121	acres
Drainage Basin Area	616	acres
Maximum depth:	12 ft.	(3.7 m)
Average Depth:	8 ft.	(2.4 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – moderate
Algal population density – low
Nutrient enrichment – moderate

Trophic State: Mesotrophic





Lake outlined by its watershed

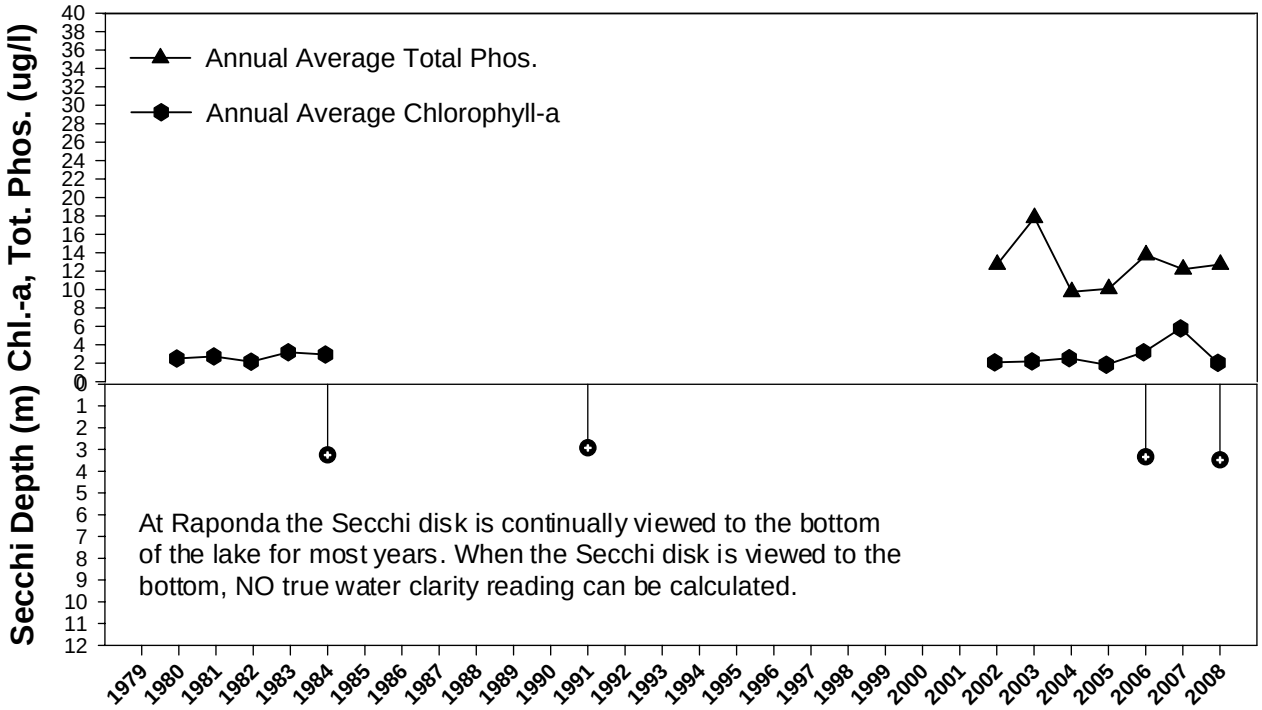
Lake Raponda

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	11	3.3	3.5	3.6
Chl-a (ug/l)	11	1.1	2.1	4.7
Summer TP (ug/l)	11	9.8	13	16

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1980	13		2.5		11
1981	13		2.8		9.3
1982	12		2.2		5.7
1983	10		3.2		7.3
1984	11	3.3	3.0		8.7
1991	12	2.9			
2002	11		2.1	13	
2003	10		2.2	18	
2004	10		2.6	9.7	
2005	9		1.9	10	
2006	10	3.3	3.2	14	11
2007	9		5.8	12	
2008	11	3.5	2.1	13	



LAKE RESCUE

Ludlow, VT

Lay Monitors: Jim and Janine Norman
David Hearne

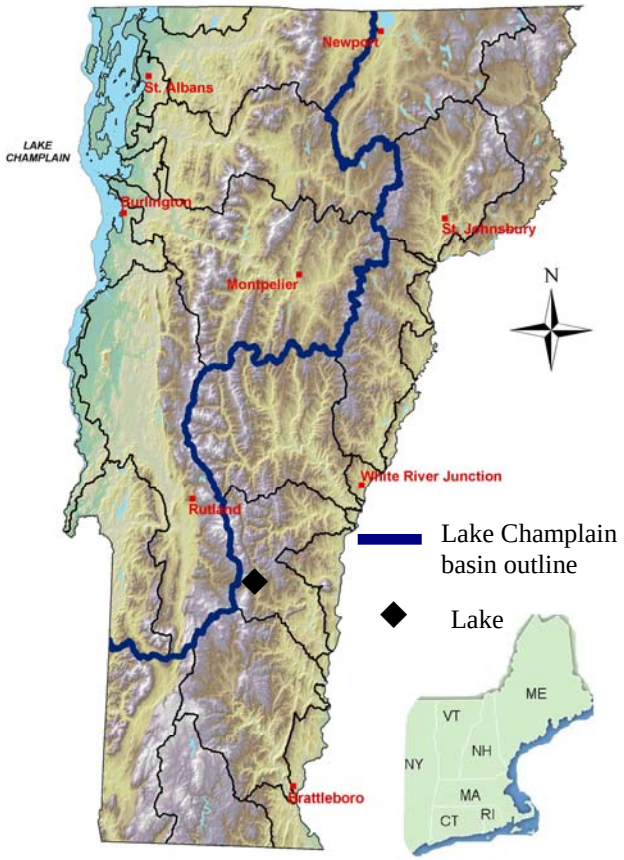
Lake Rescue is a moderately sized, natural lake.

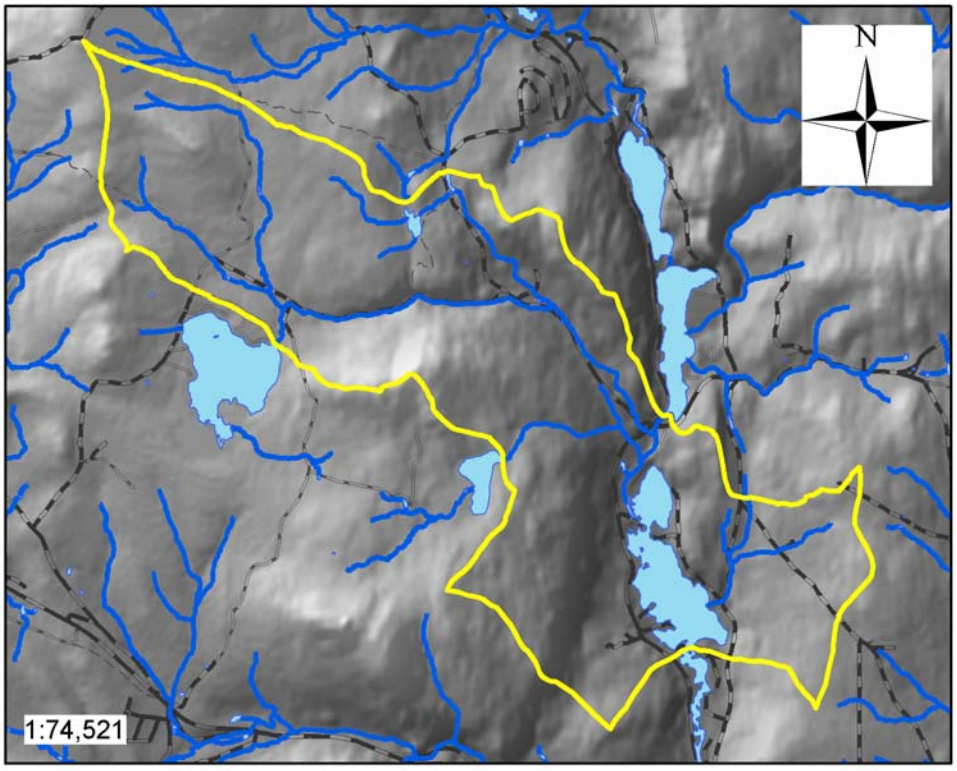
Lake Surface Area:	180	acres
Drainage Basin Area	22,859	acres
Maximum depth:	90 ft.	(27 m)
Average Depth:	40 ft.	(12 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – moderate
Algal population density – moderate
Nutrient enrichment – moderate

Trophic State: Mesotrophic





Lake outlined by its watershed

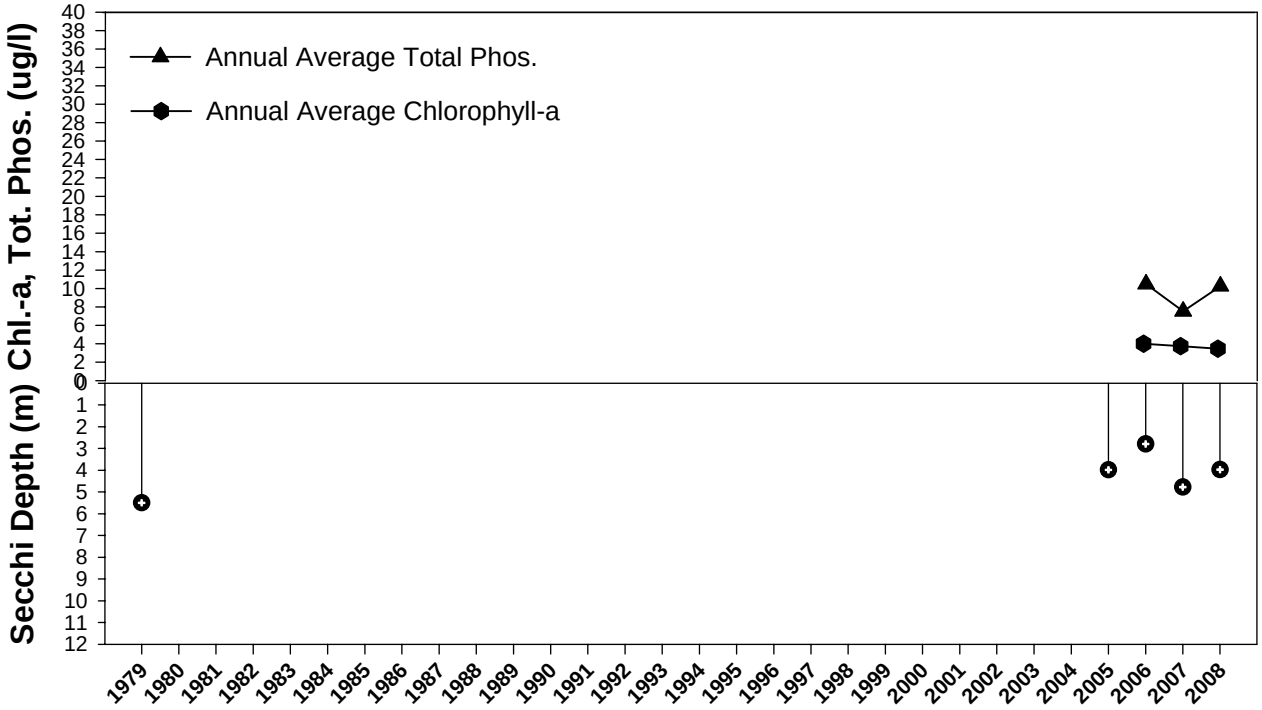
Rescue Lake

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	10	3.0	4.0	5.1
Chl-a (ug/l)	10	2.3	3.5	5.2
Summer TP (ug/l)	10	8.4	10	13
Spring TP (ug/l)	1		8.1	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	16	5.5			5.5
1980	6				6.0
2005	11	4.0			9.4
2006	11	2.8	4.0	10	
2007	11	4.8	3.8	7.5	8.6
2008	10	4.0	3.5	10	8.1



LAKE RUNNEMEDE

Windsor, VT

Lay Monitor: Andrew Robbins

Former Lay Monitors:
Micheal Quinn
Donna Ewald

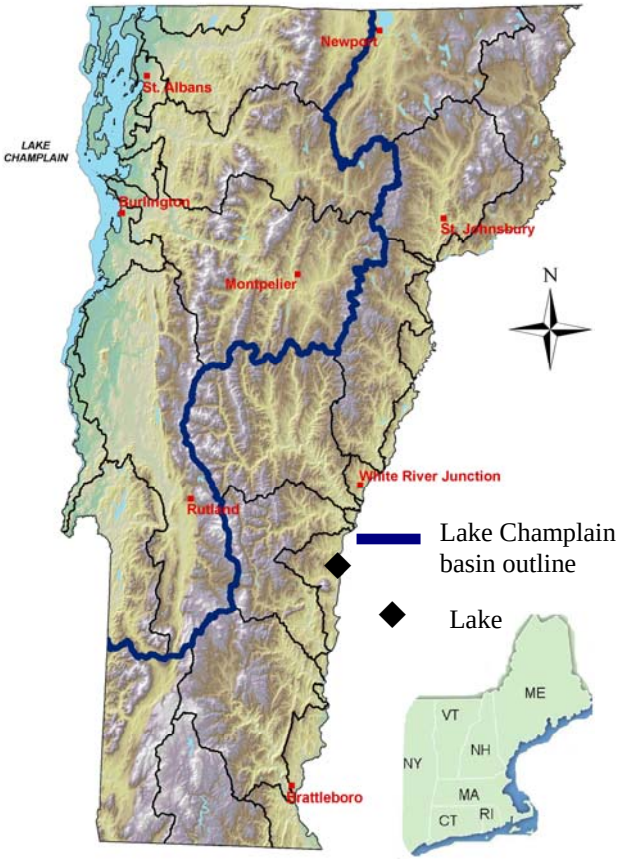
Runnemede Lake is a small, warmwater lake.

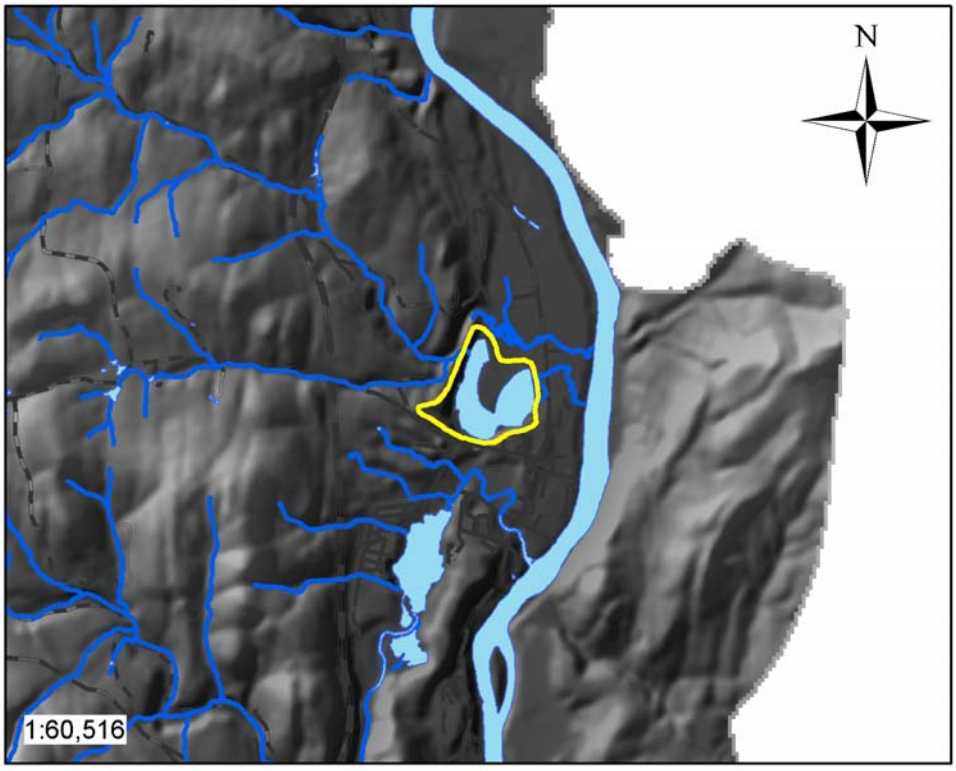
Lake Surface Area:	62	acres
Drainage Basin Area	133	acres
Maximum depth:	13 ft.	(3.9 m)
Average Depth:	13 ft.	(3.9 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – moderate
Algal population density – low
Nutrient enrichment – moderate

Trophic State: Mesotrophic





Lake outlined by its watershed

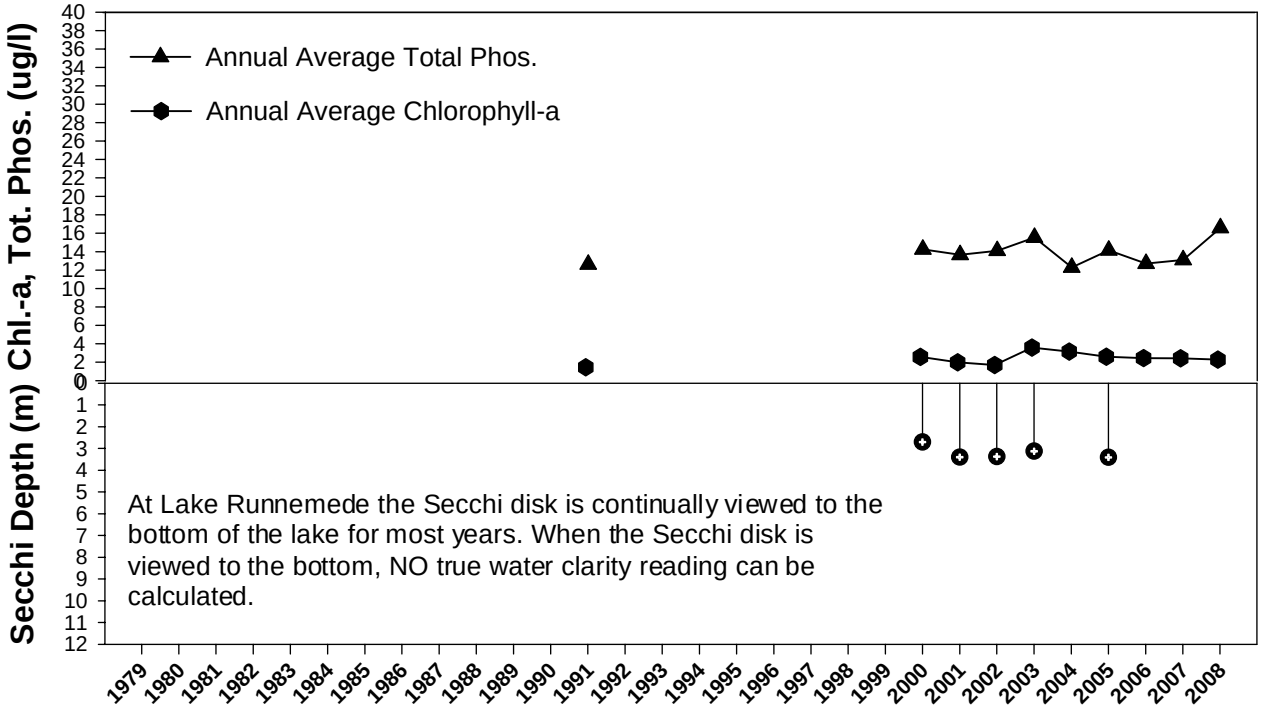
Lake Runnemede

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	17	2.5	3.1	3.3
Chl-a (ug/l)	17	1.0	2.3	4.2
Summer TP (ug/l)	17	12	17	19
Spring TP (ug/l)	1		20	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1991	8		1.5	13	
1998	6				
2000	16	2.7	2.6	14	19
2001	19	3.4	2.0	14	
2002	19	3.4	1.7	14	
2003	17	3.1	3.6	16	
2004	16		3.2	12	
2005	18	3.4	2.6	14	
2006	16		2.5	13	
2007	15		2.5	13	
2008	17		2.3	17	20

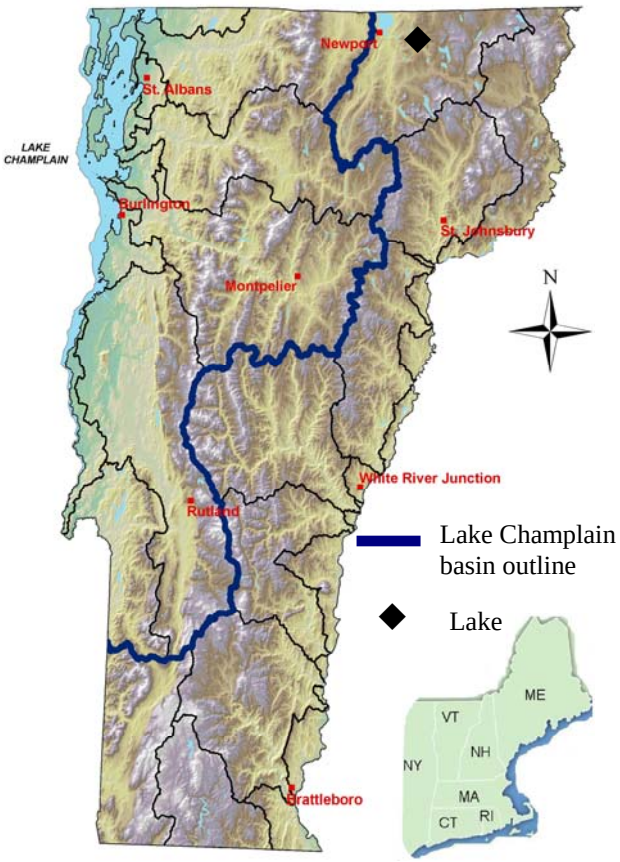


LAKE SALEM

Derby, VT

Lay Monitors: Claire Roberts
Paula Staples
David Wood

Former Lay Monitors:
Bobie Cummings
Raymond Stabb
Ted and Marni Surdy



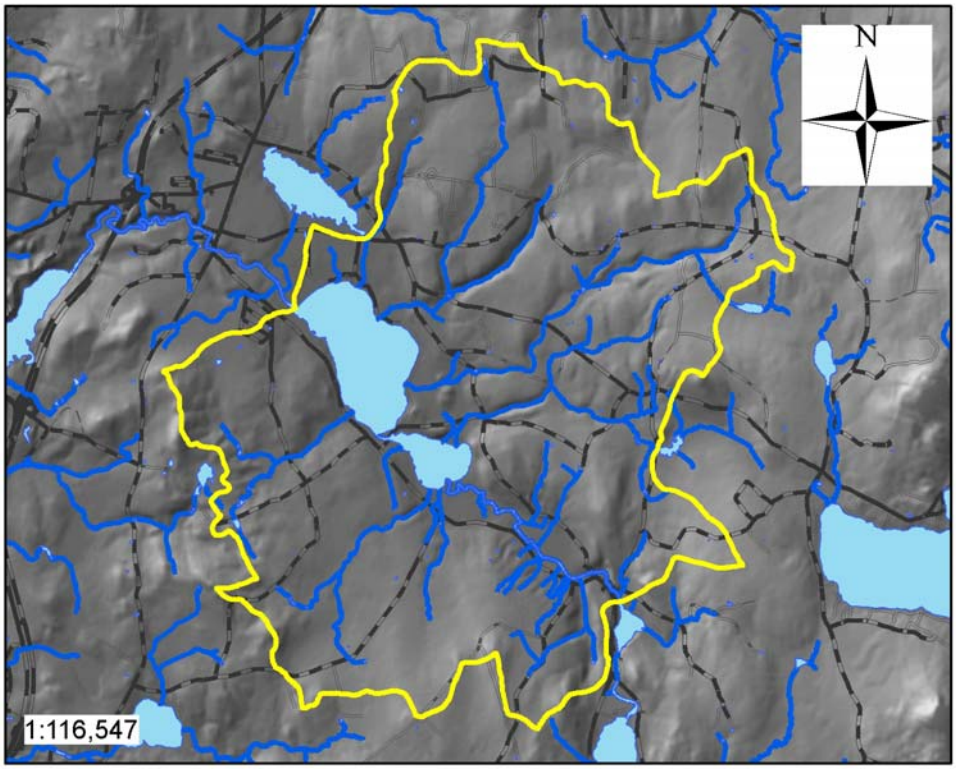
Lake Salem is a large, warmwater lake.

Lake Surface Area:	764	acres
Drainage Basin Area	84,133	acres
Maximum depth:	70 ft.	(21.3 m)
Average Depth:	20 ft.	(6.1 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - moderate
Algal population density – low
Nutrient enrichment – moderate

Trophic State: Mesotrophic



Lake outlined by its watershed

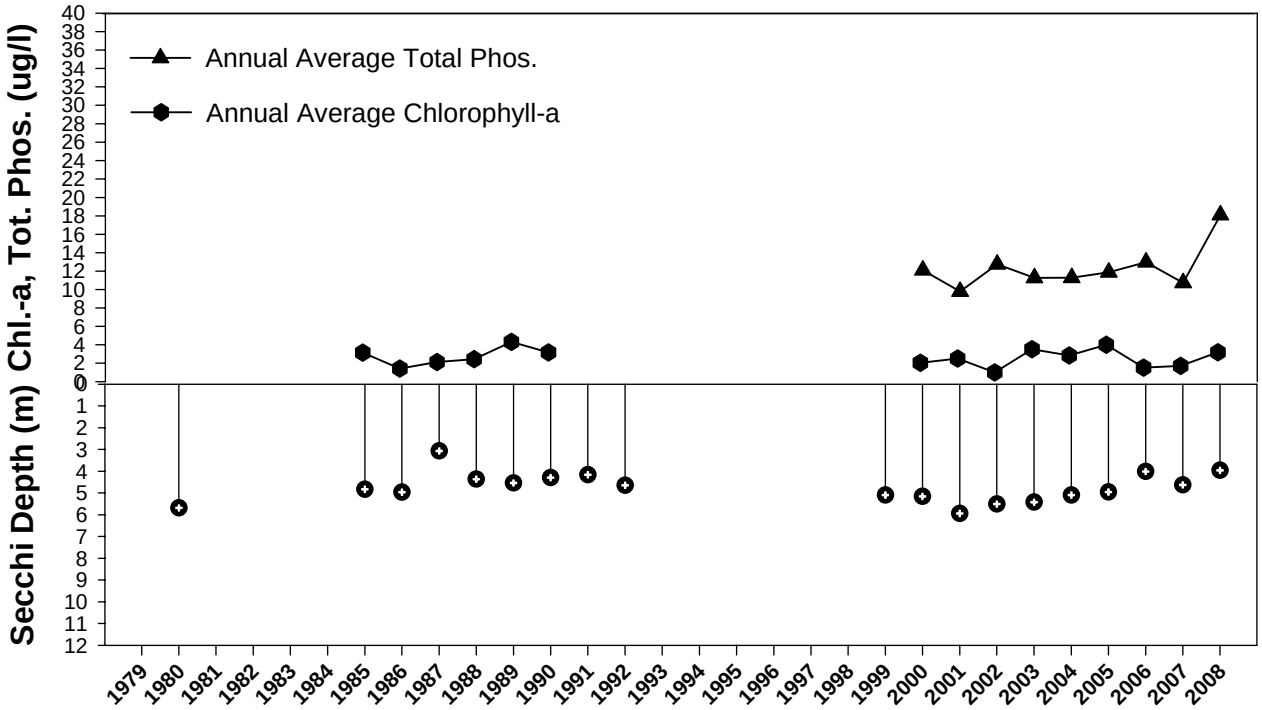
Lake Salem

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	11	3.0	4.0	5.9
Chl-a (ug/l)	11	1.3	3.2	6.7
Summer TP (ug/l)	11	13	18	22

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	7				3.0
1980	8	5.7			10
1985	13	4.8	3.2		10
1986	13	5.0	1.5		11
1987	11	3.1	2.2		13
1988	12	4.4	2.5		
1989	12	4.5	4.4		
1990	12	4.3	3.2		
1991	10	4.2			
1992	12	4.6			
1999	9	5.1			9.8
2000	9	5.2	2.1	12	11
2001	10	5.9	2.5	9.8	
2002	9	5.5	1.0	13	
2003	11	5.4	3.6	11	
2004	12	5.1	2.9	11	11
2005	11	5.0	4.0	12	
2006	12	4.0	1.6	13	
2007	10	4.6	1.8	11	13
2008	11	4.0	3.2	18	

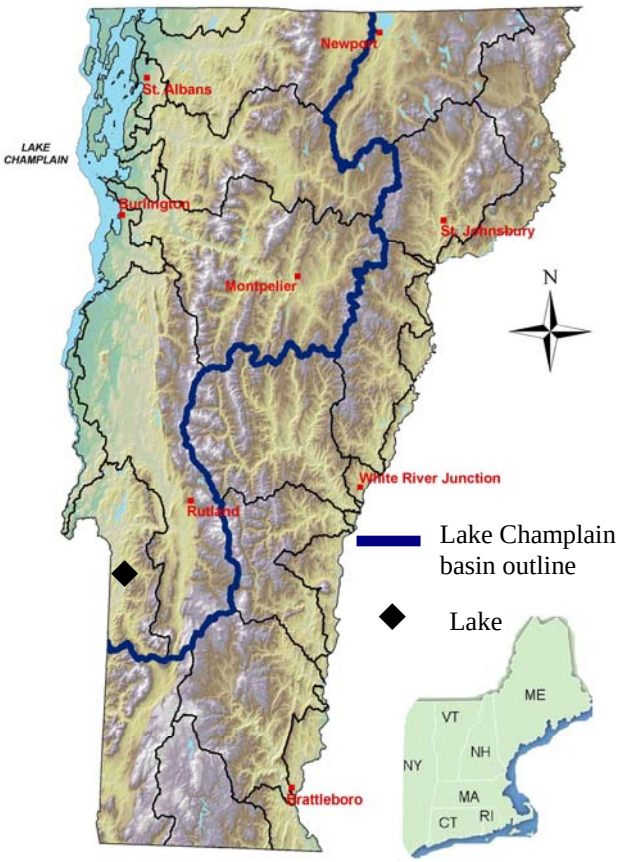


LAKE ST. CATHERINE

Poultney and Wells, VT

Lay Monitor: Mary Jo Teeter

Former Lay Monitors:
Phil Alden
Harry Spindler
Vincent Meyers



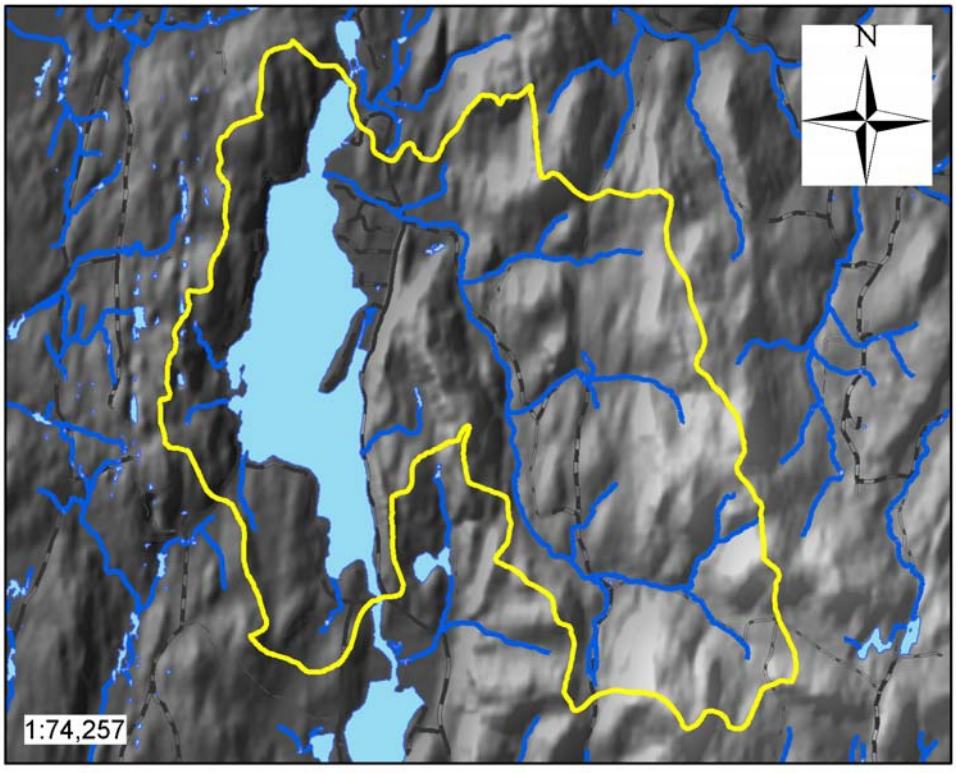
Lake St. Catherine is a large, coldwater lake.

Lake Surface Area:	904	acres
Drainage Basin Area	7,447	acres
Maximum depth:	68 ft.	(19.5 m)
Average Depth:	37 ft.	(10.7 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - moderate
Algal population density – moderate
Nutrient enrichment – high

Trophic State: Mesotrophic



Lake outlined by its watershed

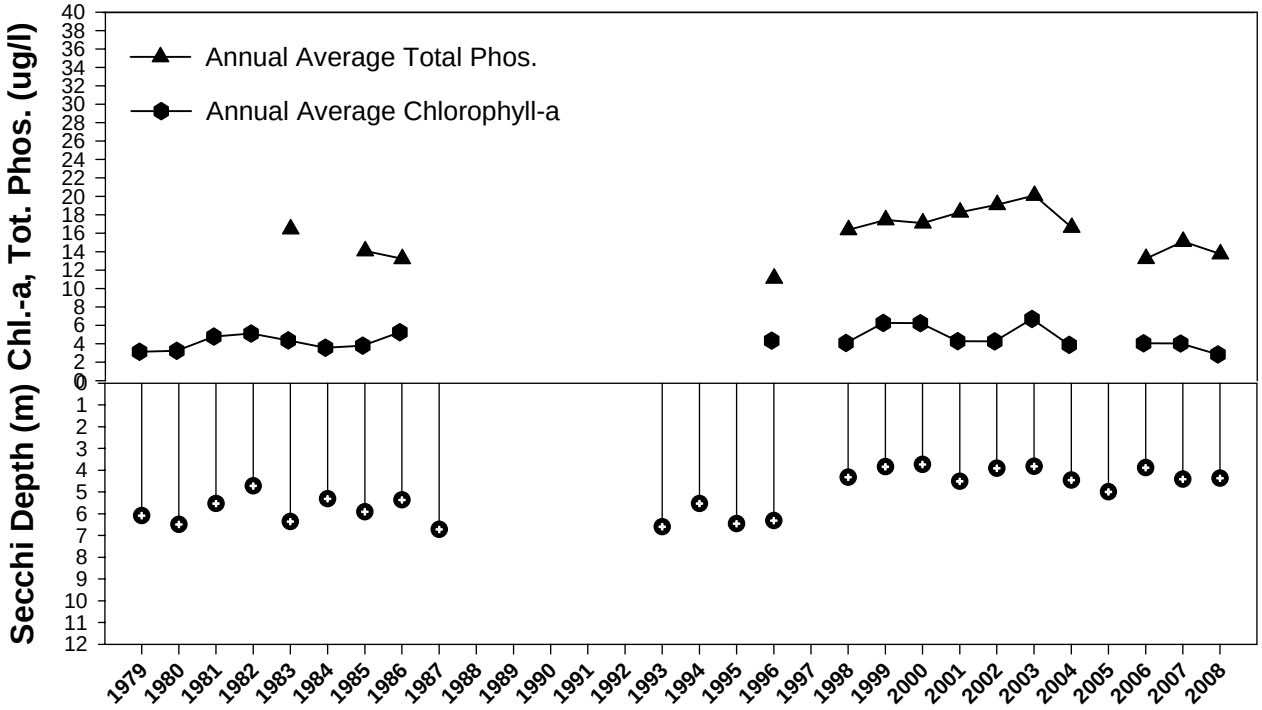
Lake St. Catherine

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	9	3.5	4.4	6.0
Chl-a (ug/l)	9	1.6	2.9	3.9
Summer TP (ug/l)	9	11	14	17
Spring TP (ug/l)	1		12	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	19	6.1	3.2		10
1980	14	6.5	3.3		12
1981	14	5.5	4.8		17
1982	13	4.7	5.1		19
1983	13	6.4	4.4	16	16
1984	13	5.3	3.6		15
1985	13	5.9	3.8	14	13
1986	13	5.4	5.3	13	12
1987	12	6.7			17
1993	13	6.6			
1994	12	5.5			10
1995	10	6.5			15
1996	13	6.3	4.4	11	16
1997	7				
1998	11	4.3	4.1	16	15
1999	12	3.9	6.3	17	15
2000	10	3.7	6.3	17	13
2001	11	4.5	4.3	18	9.8
2002	11	3.9	4.3	19	14
2003	11	3.8	6.7	20	
2004	10	4.5	3.9	17	14
2005	8	5.0			14
2006	10	3.9	4.1	13	17
2007	10	4.4	4.1	15	18
2008	9	4.4	2.9	14	12



SEYMOUR LAKE

Morgan and Charleston, VT

Lay Monitor: Tom Emery

Former Lay Monitors:
Joseph and Anna Puente
Dan Barry
Andrew Emery

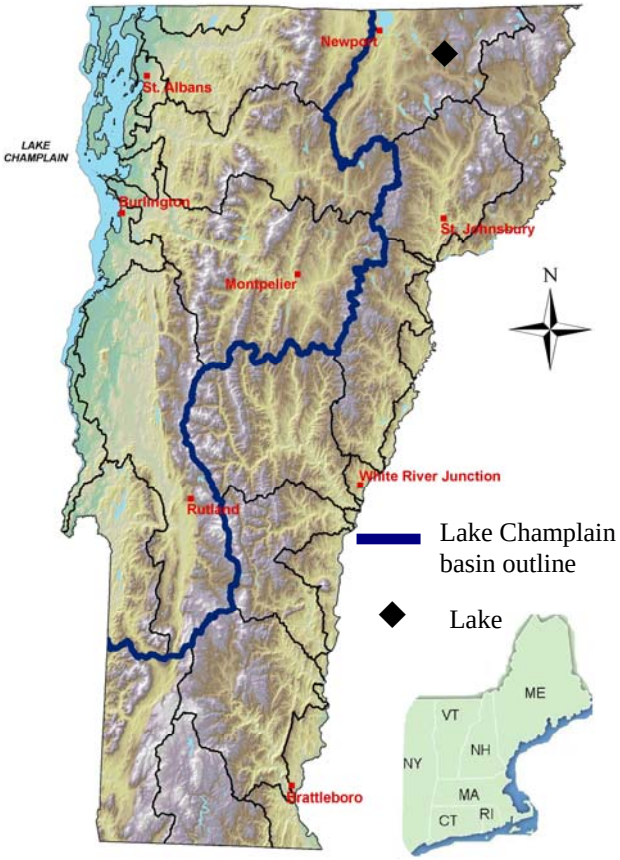
Seymour Lake is a large, deep, coldwater lake.

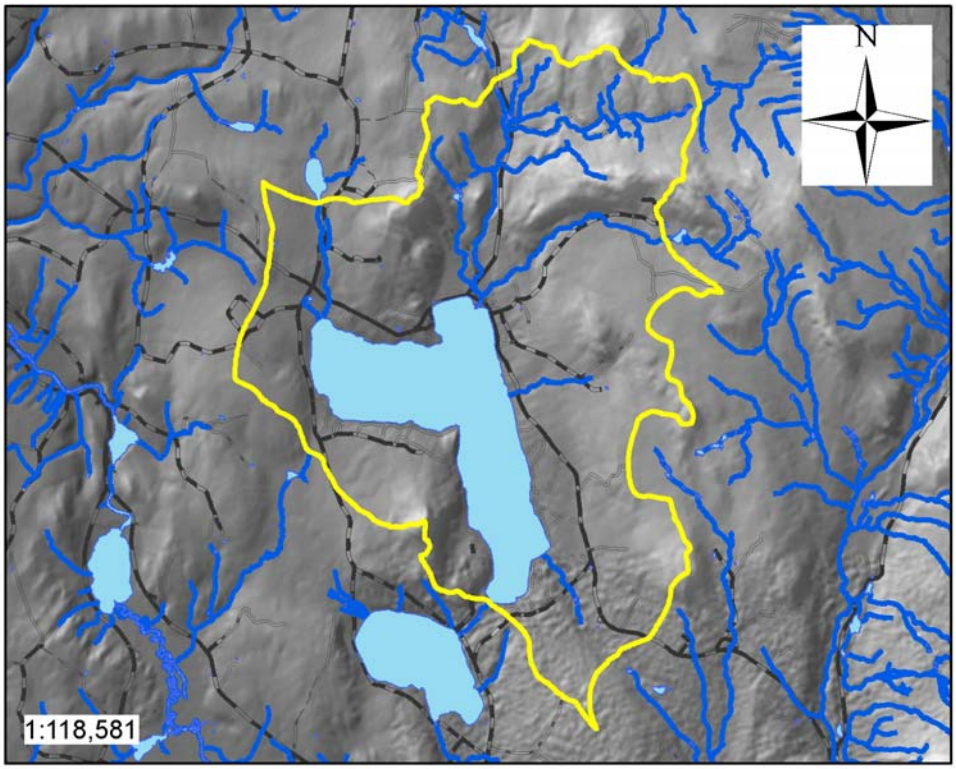
Lake Surface Area:	1,769	acres
Drainage Basin Area	12,920	acres
Maximum depth:	167 ft.	(50.9 m)
Average Depth:	70 ft.	(21.3 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - high
Algal population density – low
Nutrient enrichment – moderate

Trophic State: Oligotrophic





Lake outlined by its watershed

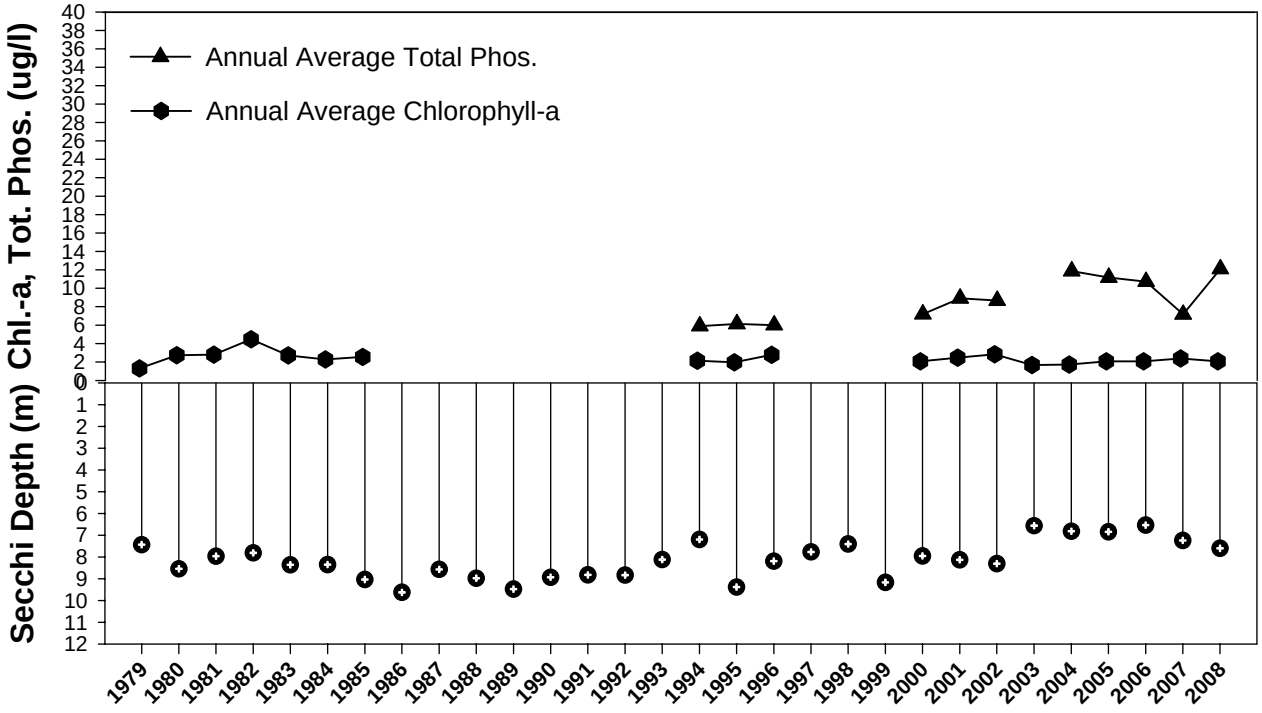
Seymour Lake

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	10	6.5	7.6	9.5
Chl-a (ug/l)	10	1.5	2.1	2.8
Summer TP (ug/l)	10	8.9	12	16
Spring TP (ug/l)	1		10	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	15	7.4	1.3		7.7
1980	13	8.5	2.8		8.7
1981	13	8.0	2.8		5.3
1982	13	7.8	4.5		10
1983	14	8.4	2.8		7.7
1984	13	8.3	2.3		8.3
1985	13	9.0	2.6		9.0
1986	12	9.6			7.7
1987	14	8.6			9.5
1988	13	9.0			
1989	12	9.5			
1990	14	8.9			
1991	13	8.8			
1992	12	8.8			
1993	13	8.1			
1994	13	7.2	2.2	5.9	6.1
1995	8	9.4	2.0	6.1	7.0
1996	8	8.2	2.8	6.0	
1997	13	7.8			
1998	11	7.4			6.0
1999	14	9.2			
2000	11	8.0	2.1	7.2	9.9
2001	12	8.1	2.5	8.9	
2002	9	8.3	2.9	8.7	
2003	8	6.6	1.7		
2004	11	6.8	1.8	12	
2005	12	6.8	2.1	11	
2006	11	6.5	2.1	11	10
2007	10	7.2	2.4	7.2	11
2008	10	7.6	2.1	12	10



SHADOW LAKE

Glover, VT

Lay Monitors: Sara and Larry Gluckman

Former Lay Monitors:
Susan Alexander
Ed and Linda Zalenski

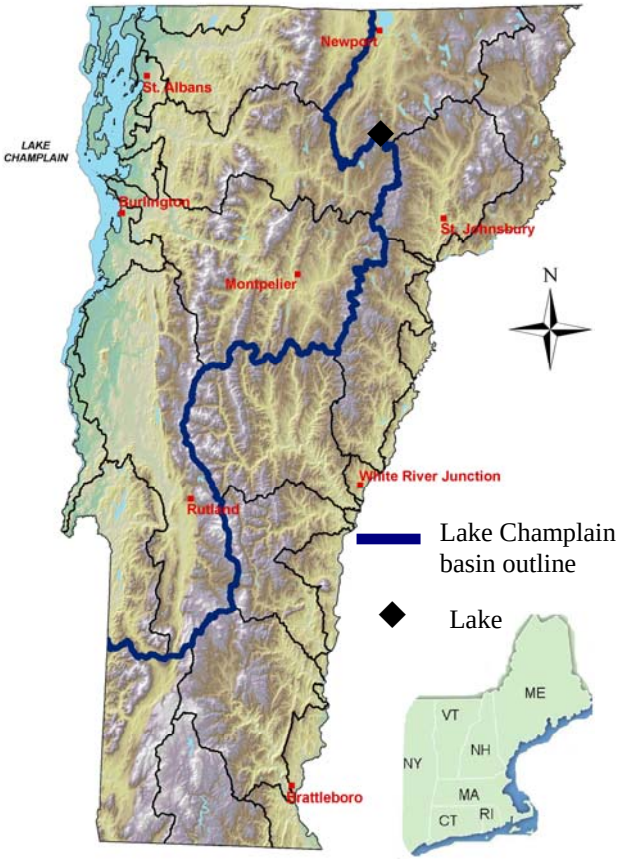
Shadow Lake is a small, deep, coldwater lake.

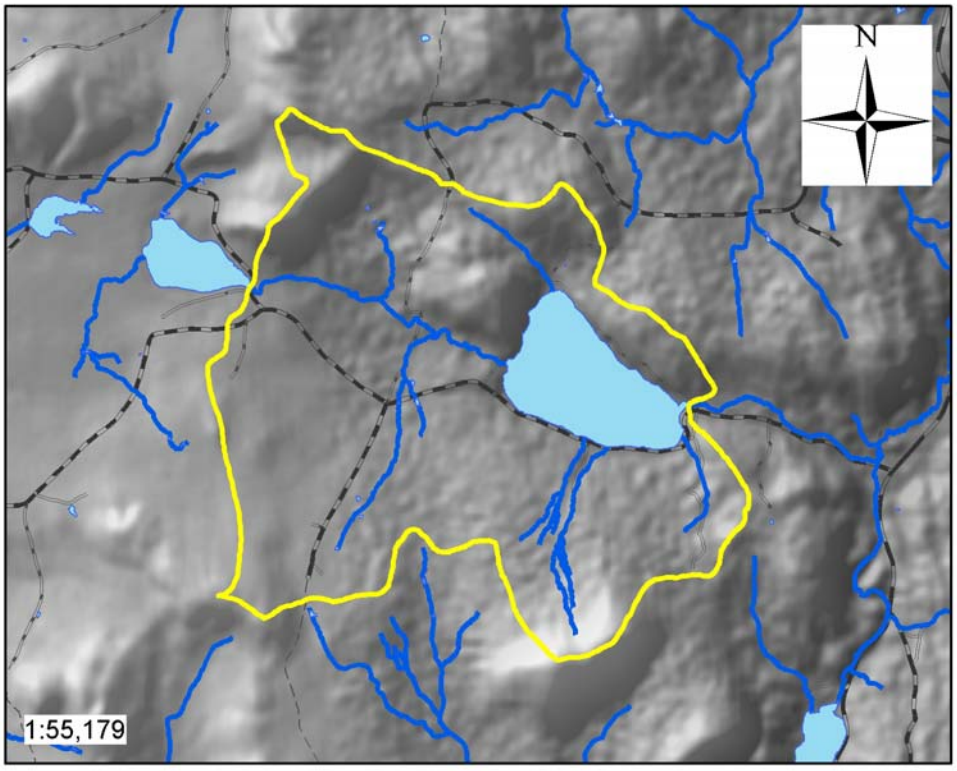
Lake Surface Area:	210	acres
Drainage Basin Area	3,575	acres
Maximum depth:	139 ft.	(42.4 m)
Average Depth:	55 ft.	(16.8 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - high
Algal population density – low
Nutrient enrichment – moderate

Trophic State: Oligotrophic





Lake outlined by its watershed

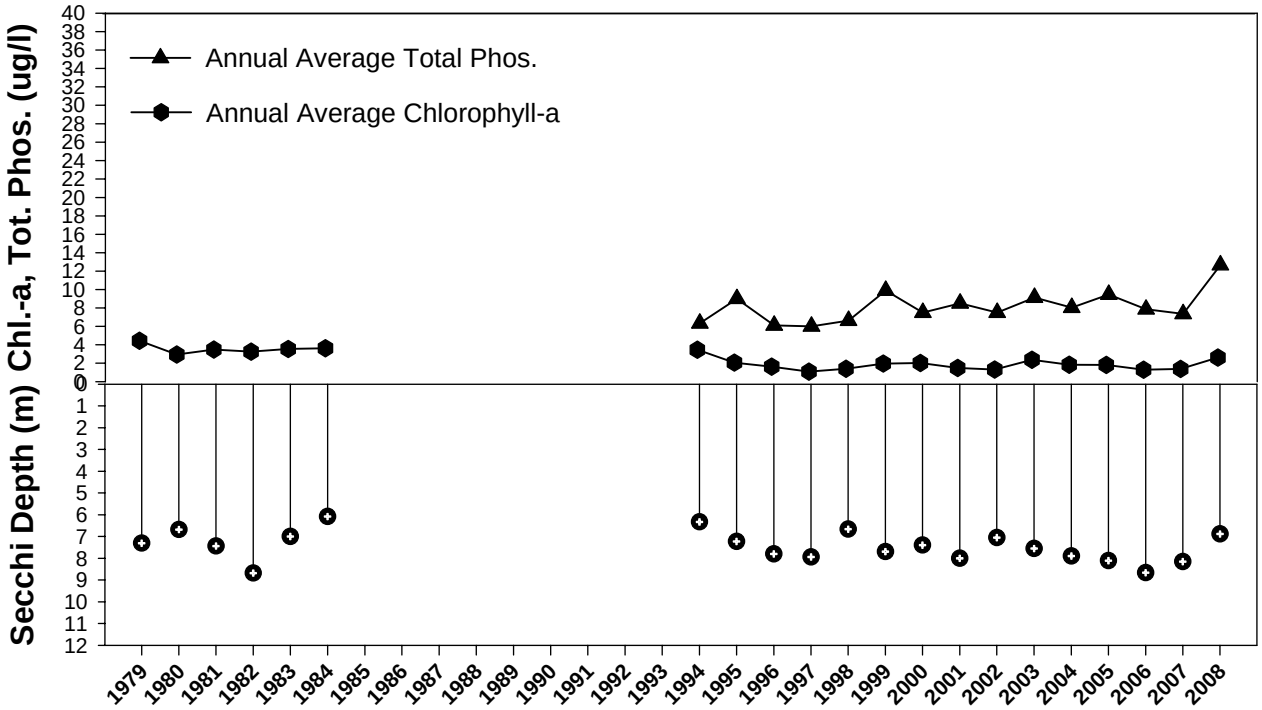
Shadow Lake

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	9	5.5	6.9	8.5
Chl-a (ug/l)	9	1.6	2.6	3.8
Summer TP (ug/l)	9	11	13	19

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	17	7.3	4.5		4.0
1980	14	6.7	3.0		5.0
1981	13	7.4	3.5		6.5
1982	13	8.7	3.3		5.5
1983	13	7.0	3.6		6.5
1984	9	6.1	3.7		5.5
1993	5				10
1994	9	6.3	3.5	6.3	
1995	10	7.2	2.1	9.0	
1996	10	7.8	1.7	6.1	
1997	9	7.9	1.1	6.0	
1998	8	6.7	1.4	6.6	
1999	10	7.7	2.0	9.9	9.4
2000	10	7.4	2.1	7.5	11
2001	10	8.0	1.5	8.5	5.5
2002	10	7.1	1.4	7.5	
2003	9	7.6	2.4	9.1	
2004	10	7.9	1.9	8.1	7.3
2005	9	8.1	1.9	9.5	
2006	9	8.7	1.3	7.9	
2007	10	8.2	1.4	7.4	11
2008	9	6.9	2.6	13	

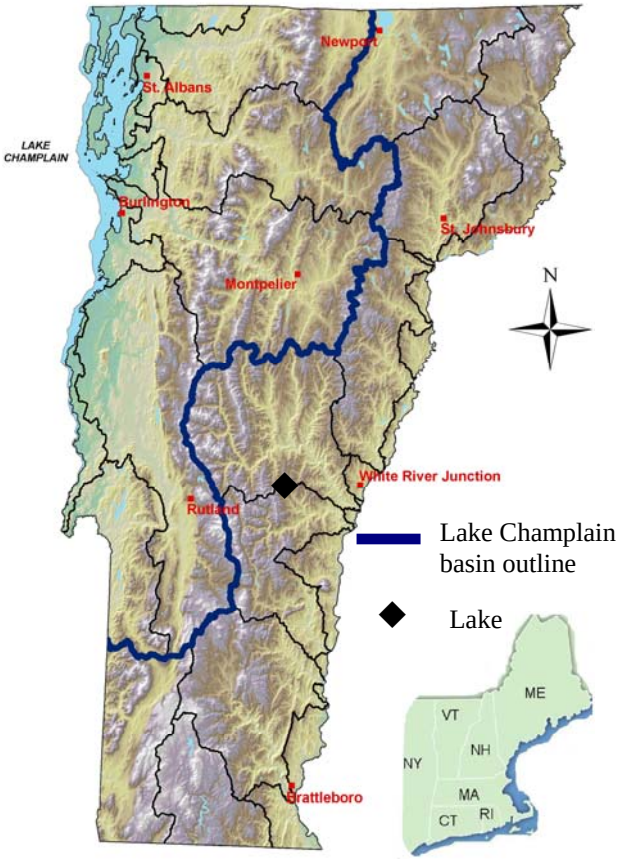


SILVER LAKE

Barnard, VT

Lay Monitors: Lloyd and Susan Randolph

Former Lay Monitors:
Don Munroe
Jack Frake
George Roy



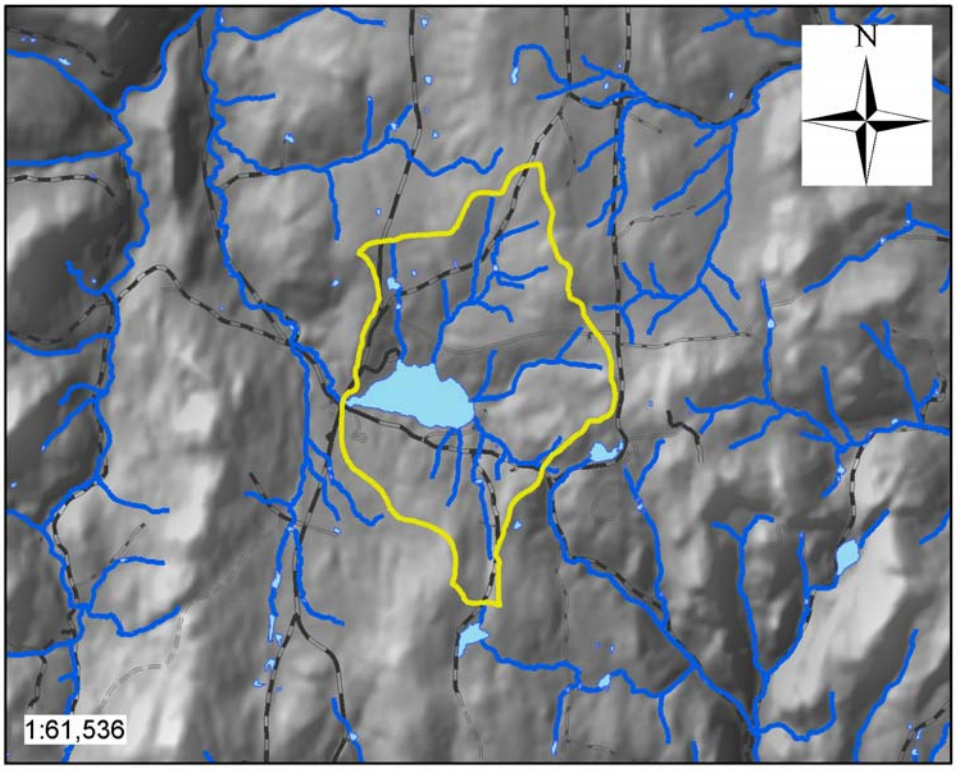
Silver Lake is a small, warmwater lake.

Lake Surface Area:	84	acres
Drainage Basin Area	1,091	acres
Maximum depth:	32 ft.	(9.8 m)
Average Depth:	16 ft.	(4.9 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - moderate
Algal population density – high
Nutrient enrichment – high

Trophic State: Mesotrophic



Lake outlined by its watershed

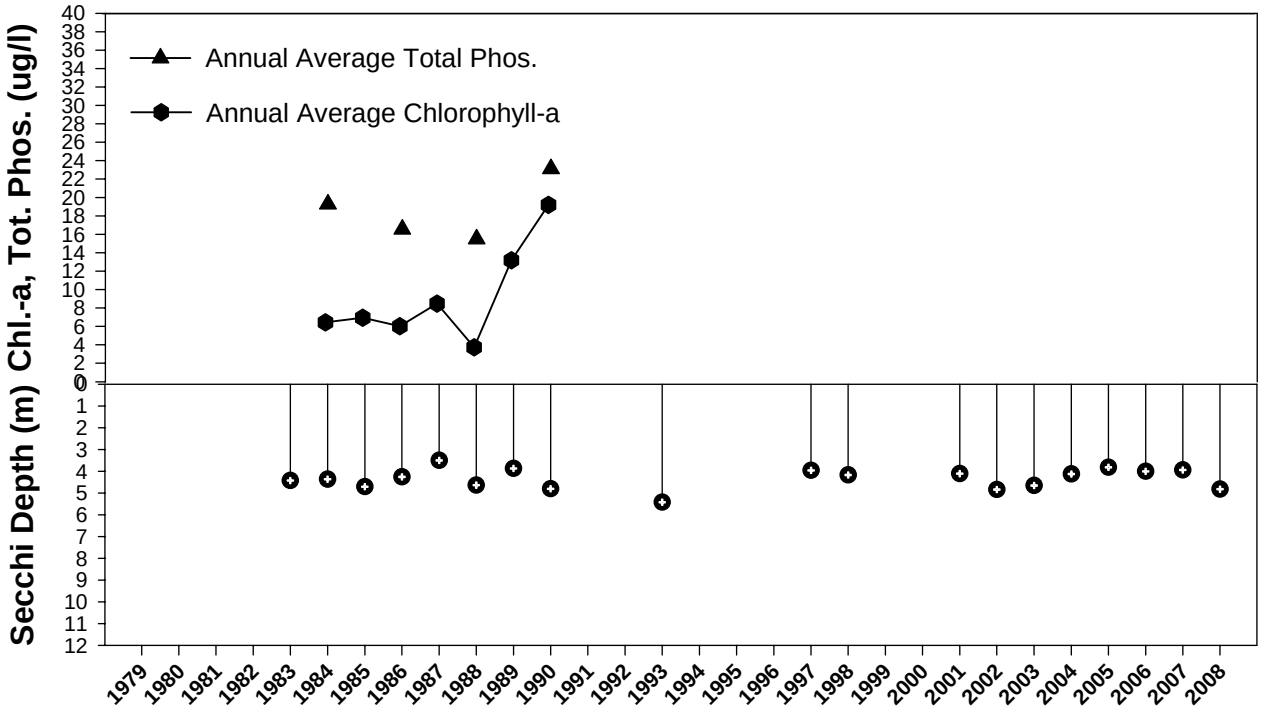
Silver Lake

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	9	4.5	4.8	5.0

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1983	10	4.4			21
1984	11	4.4	6.5	19	16
1985	9	4.7	7.0		16
1986	9	4.3	6.1	17	13
1987	10	3.5	8.5		8.0
1988	8	4.6	3.8	16	11
1989	8	3.9	13		20
1990	10	4.8	19	23	
1991	5				
1993	9	5.4			
1994	4				
1997	14	4.0			11
1998	8	4.2			
1999	5				
2000	6				
2001	9	4.1			10
2002	8	4.8			
2003	9	4.7			
2004	8	4.1			
2005	9	3.8			
2006	9	4.0			17
2007	10	3.9			
2008	9	4.8			



SOUTH POND

Eden, VT

Lay Monitors: Chandler and Madonna Parker

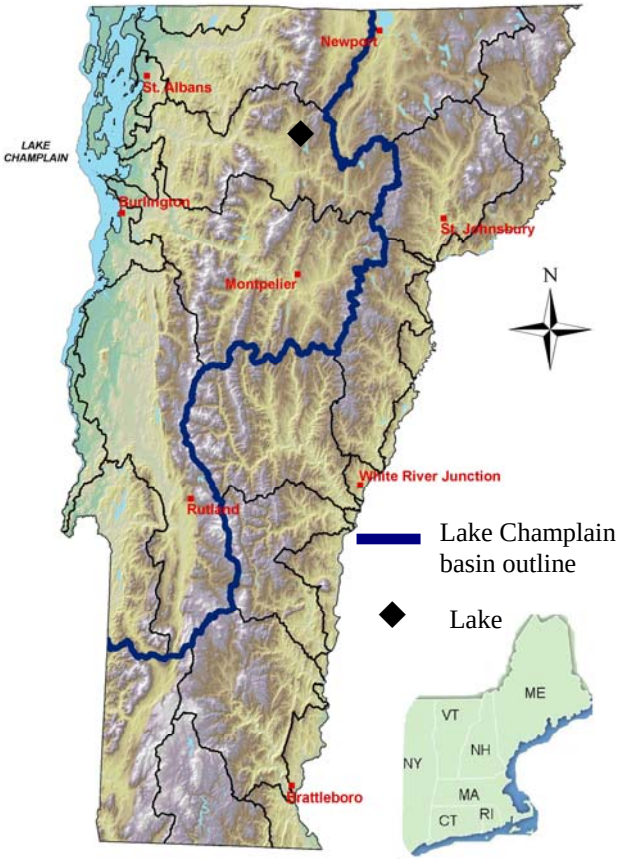
South Pond is a moderately sized, warmwater lake.

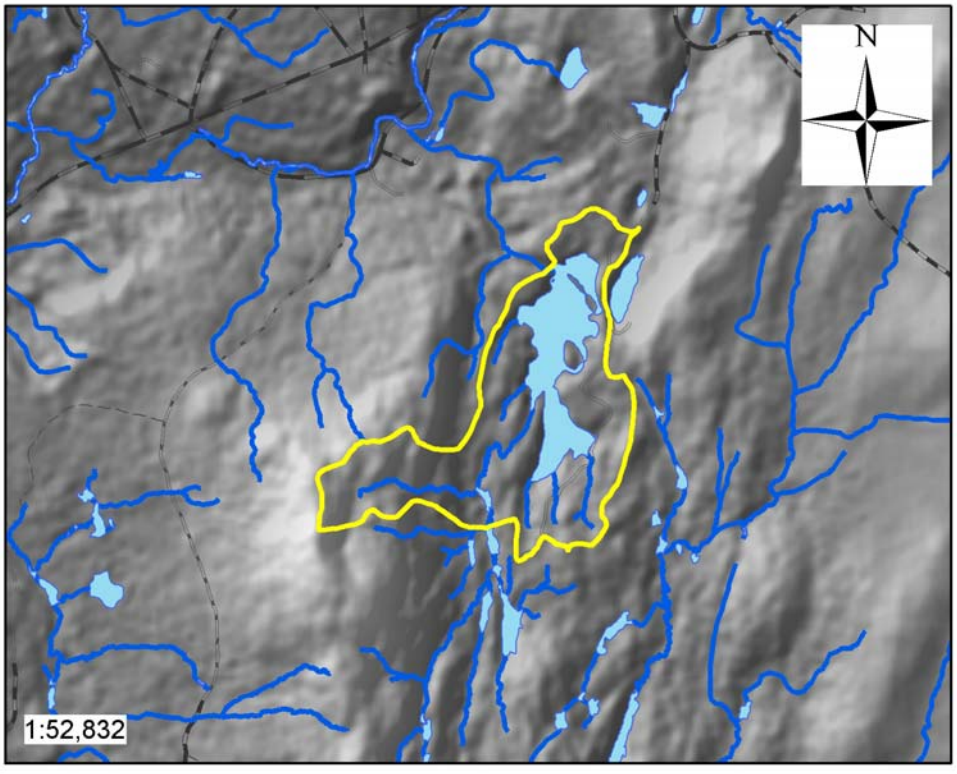
Lake Surface Area:	103	acres
Drainage Basin Area	1,382	acres
Maximum depth:	66 ft.	(20.1 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - moderate
Algal population density – moderate
Nutrient enrichment – moderate

Trophic State: Mesotrophic





Lake outlined by its watershed

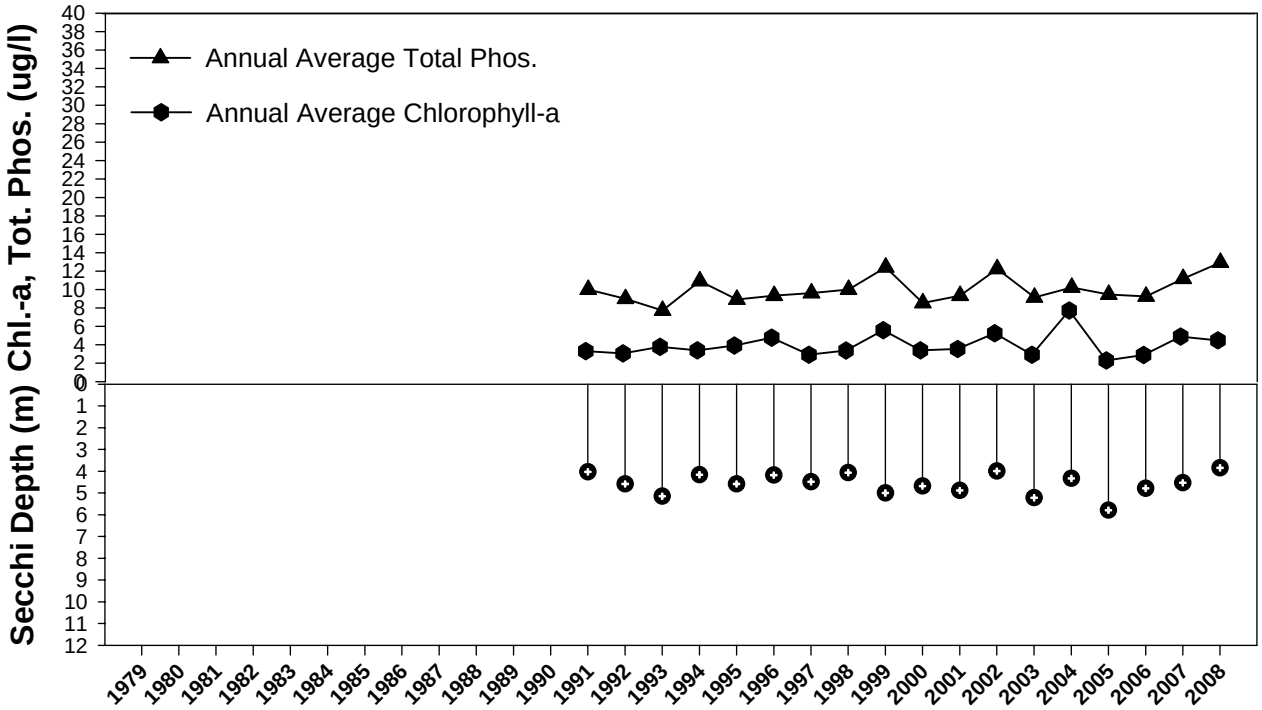
South Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	12	3.0	3.8	5.0
Chl-a (ug/l)	12	3.1	4.5	7.0
Summer TP (ug/l)	12	9.2	13	18

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1991	11	4.0	3.4	10	
1992	13	4.6	3.1	9.0	
1993	13	5.2	3.8	7.7	
1994	13	4.2	3.4	11	
1995	13	4.6	4.0	8.9	
1996	12	4.2	4.8	9.3	
1997	13	4.5	3.0	9.6	
1998	11	4.1	3.4	10	6.7
1999	12	5.0	5.6	12	8.7
2000	13	4.7	3.4	8.5	8.4
2001	12	4.9	3.6	9.3	
2002	12	4.0	5.3	12	
2003	13	5.2	3.0	9.2	
2004	12	4.3	7.8	10	
2005	11	5.8	2.3	9.5	
2006	11	4.8	2.9	9.2	
2007	12	4.5	4.9	11	13
2008	12	3.8	4.5	13	



SUNRISE LAKE

Benson and Orwell, VT

Lay Monitors: Dolores and Nick Mobilio

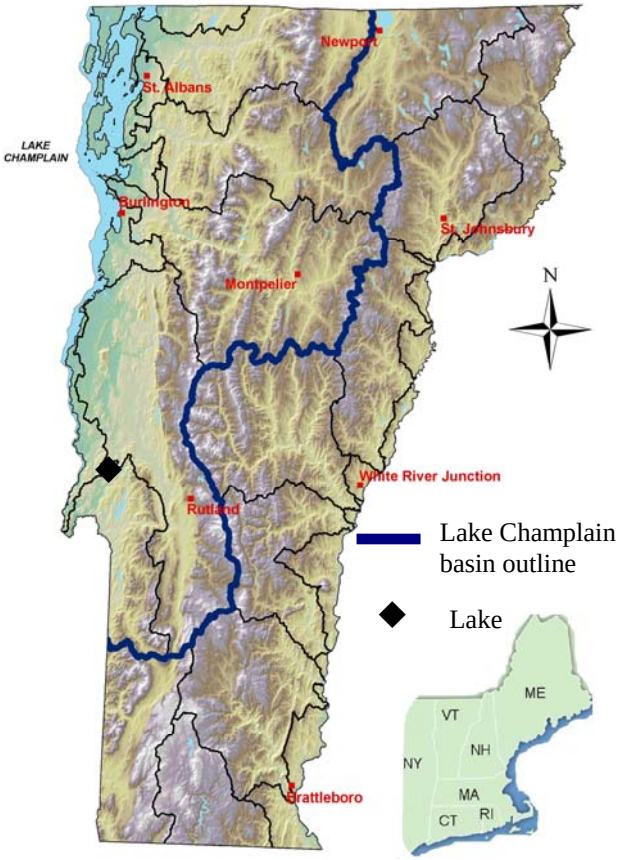
Sunrise Lake is a small, warmwater lake.

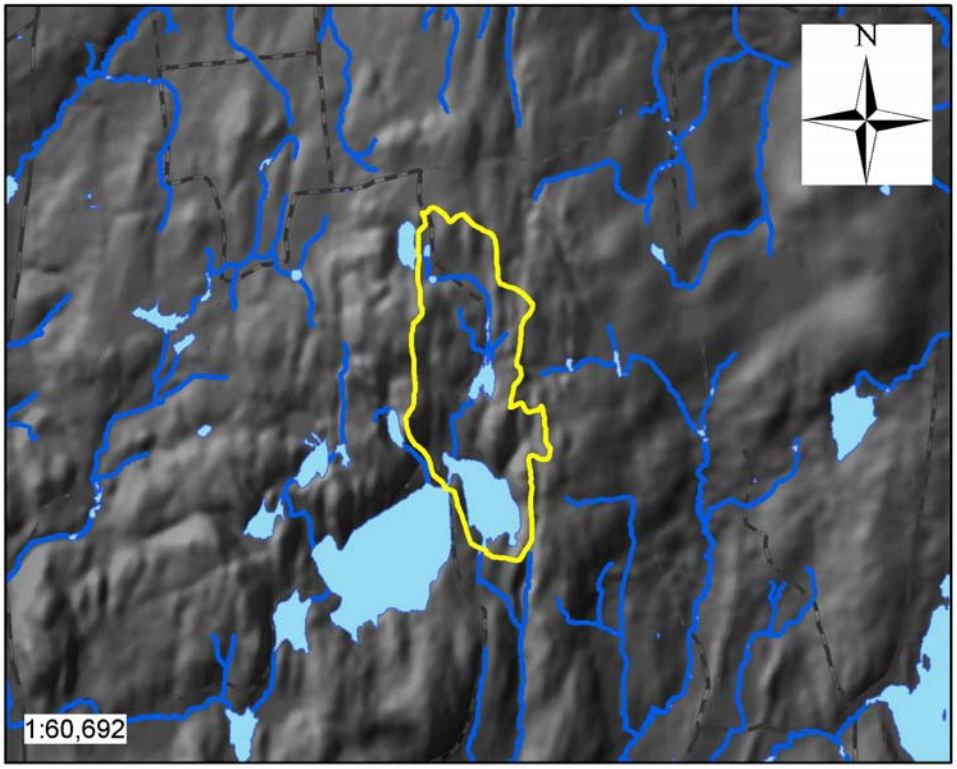
Lake Surface Area:	57	acres
Drainage Basin Area	1,775	acres
Maximum depth:	43 ft.	(13.1 m)
Average Depth:	26 ft.	(7.9 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - high
Algal population density – low
Nutrient enrichment – not sampled

Trophic State: Mesotrophic





Lake outlined by its watershed

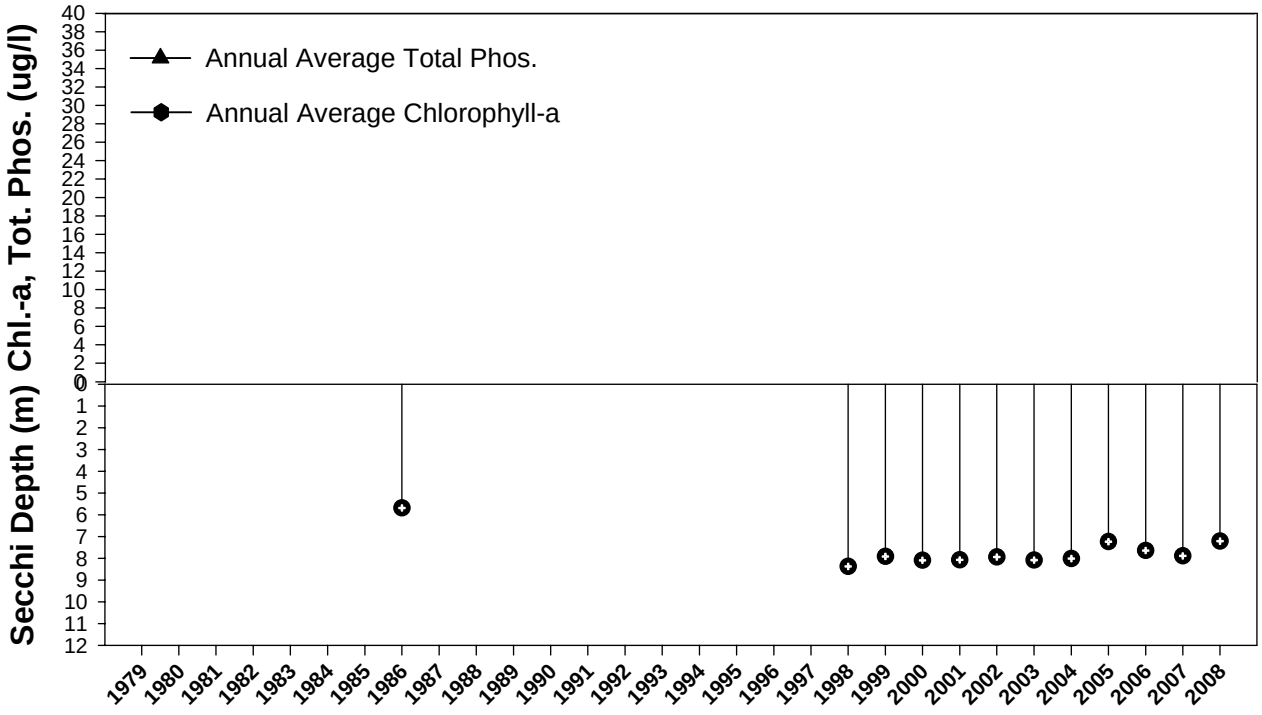
Sunrise Lake

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	10	5.8	7.2	8.4

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1986	9	5.7			14
1998	12	8.4			12
1999	12	7.9			
2000	11	8.1			
2001	14	8.1			
2002	12	7.9			11
2003	10	8.1			
2004	10	8.0			14
2005	10	7.2			
2006	11	7.6			14
2007	10	7.9			
2008	10	7.2			



SUNSET LAKE

Brookfield, VT

Lay Monitors: Ed Koren

Former Lay Monitors:
Rachel Brownstein
Jack Russel

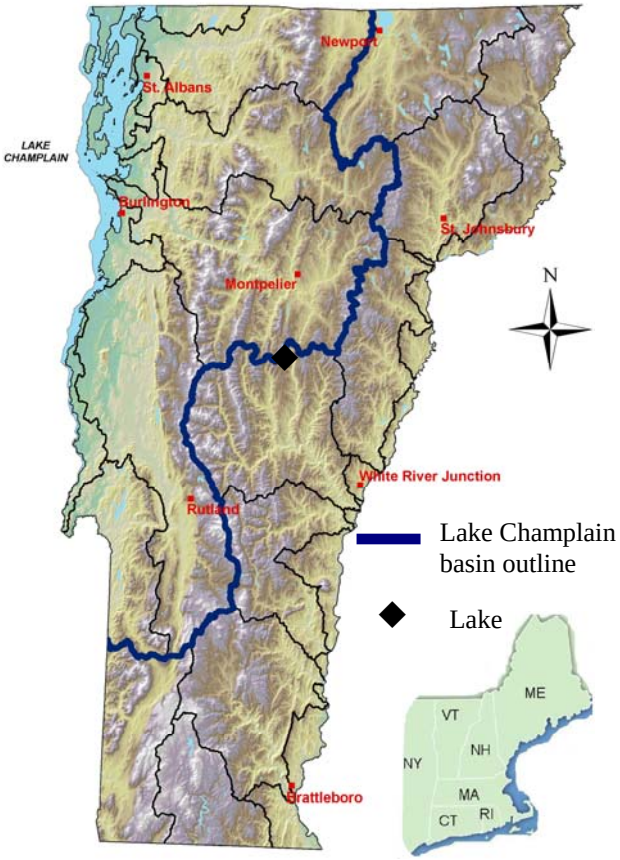
Sunset Lake is a small, narrow lake.

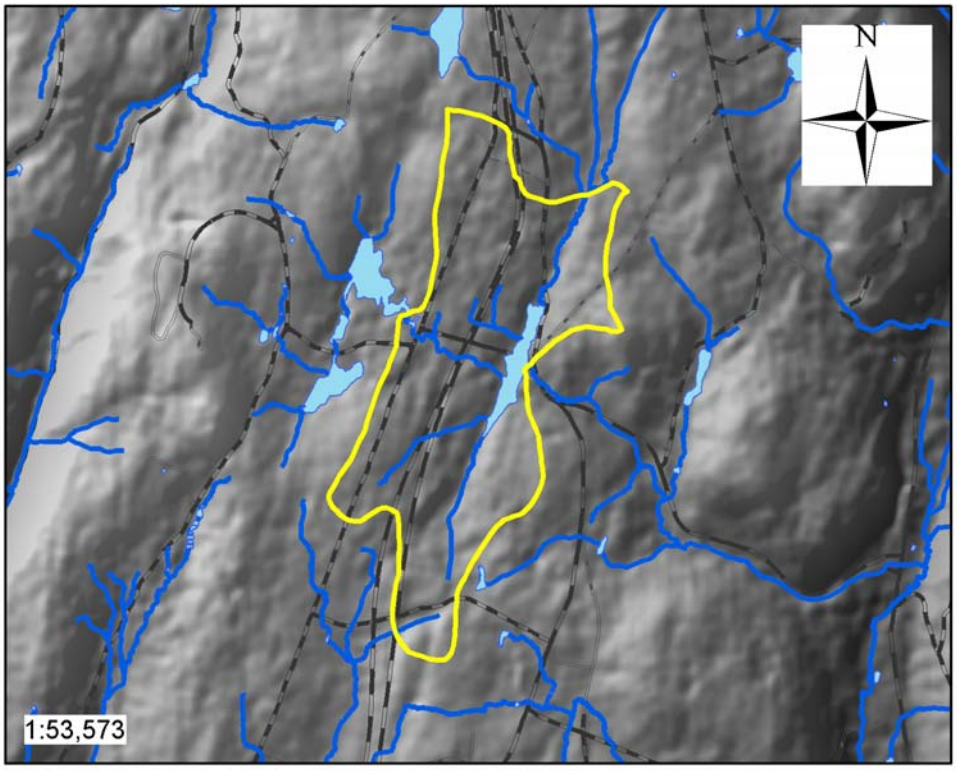
Lake Surface Area:	25	acres
Drainage Basin Area	2,664	acres
Maximum depth:	32 ft.	(9.8 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - moderate
Algal population density – high
Nutrient enrichment – high

Trophic State: Mesotrophic





Lake outlined by its watershed

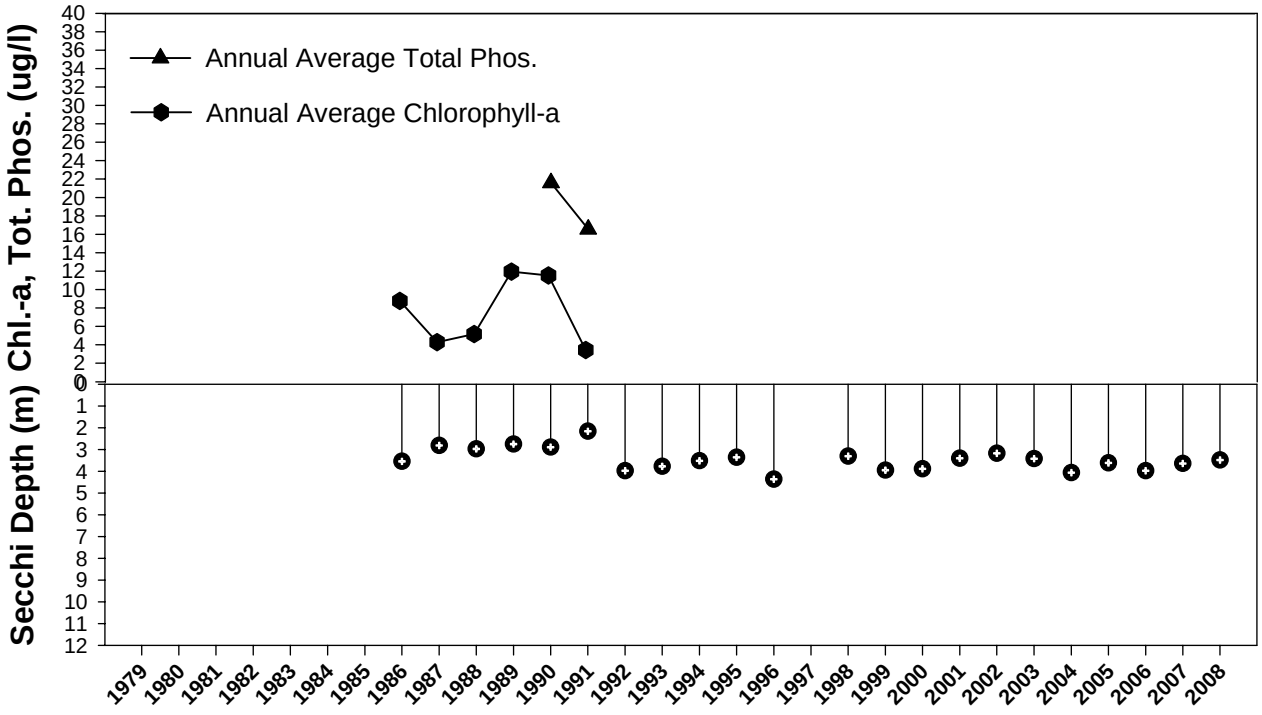
Sunset Lake

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	12	2.2	3.5	4.5

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1986	9	3.5	8.8		
1987	9	2.8	4.3		8.5
1988	8	3.0	5.2		
1989	8	2.7	12		13
1990	10	2.9	12	22	8.5
1991	9	2.2	3.5	17	8.5
1992	8	4.0			
1993	14	3.8			
1994	13	3.5			
1995	12	3.4			
1996	9	4.4			
1997	7				
1998	11	3.3			5.8
1999	9	4.0			
2000	12	3.9			
2001	11	3.4			8.2
2002	12	3.2			
2003	13	3.4			
2004	11	4.1			
2005	12	3.6			
2006	13	4.0			14
2007	13	3.6			
2008	12	3.5			



SUNSET LAKE

Benson and Orwell, VT

Lay Monitor: Harry Saxon
Jamie Longtin

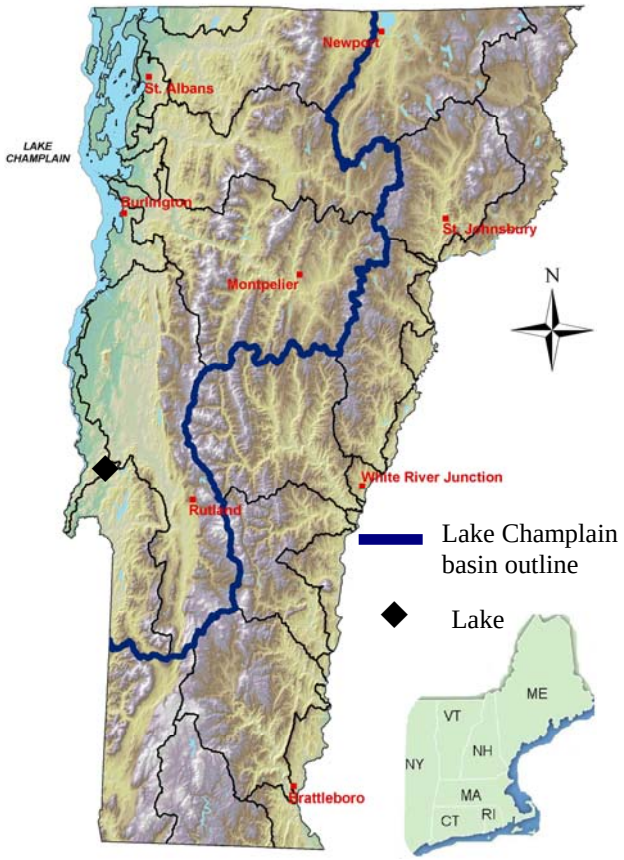
Sunset Lake is a small, deep, coldwater lake.

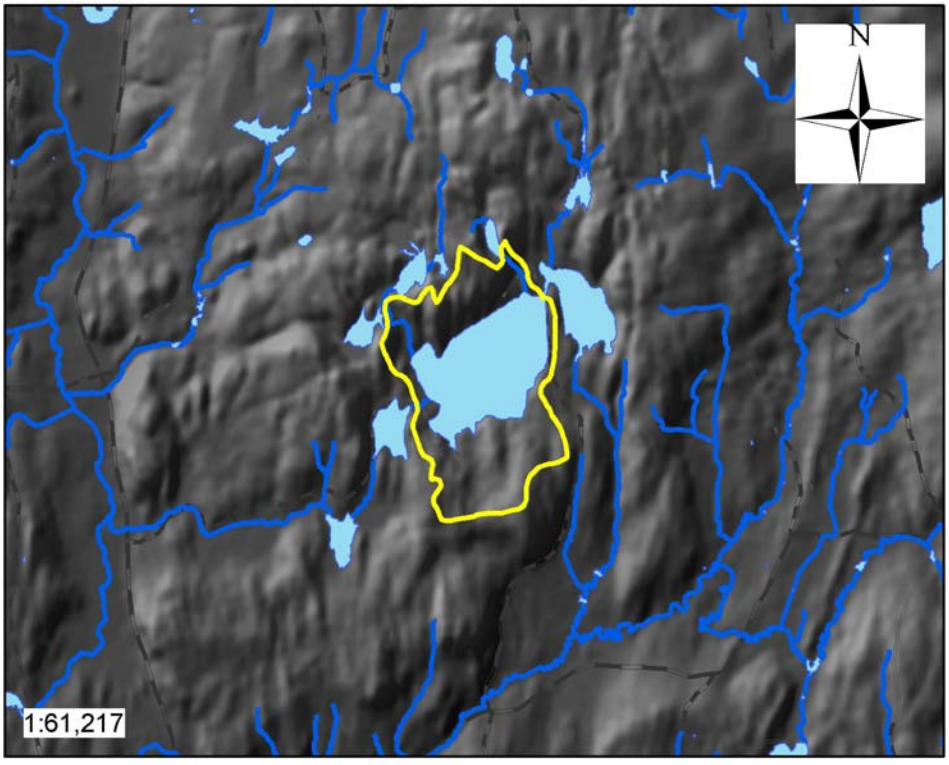
Lake Surface Area:	202	acres
Drainage Basin Area	1,192	acres
Maximum depth:	118 ft.	(36 m)
Average depth:	50 ft.	(15.0 m)

Compared to other lakes, 2008 summer means indicate:

Water clarity - high
Algal population density – low
Nutrient enrichment – not sampled

Trophic State: Oligotrophic





Lake outlined by its watershed

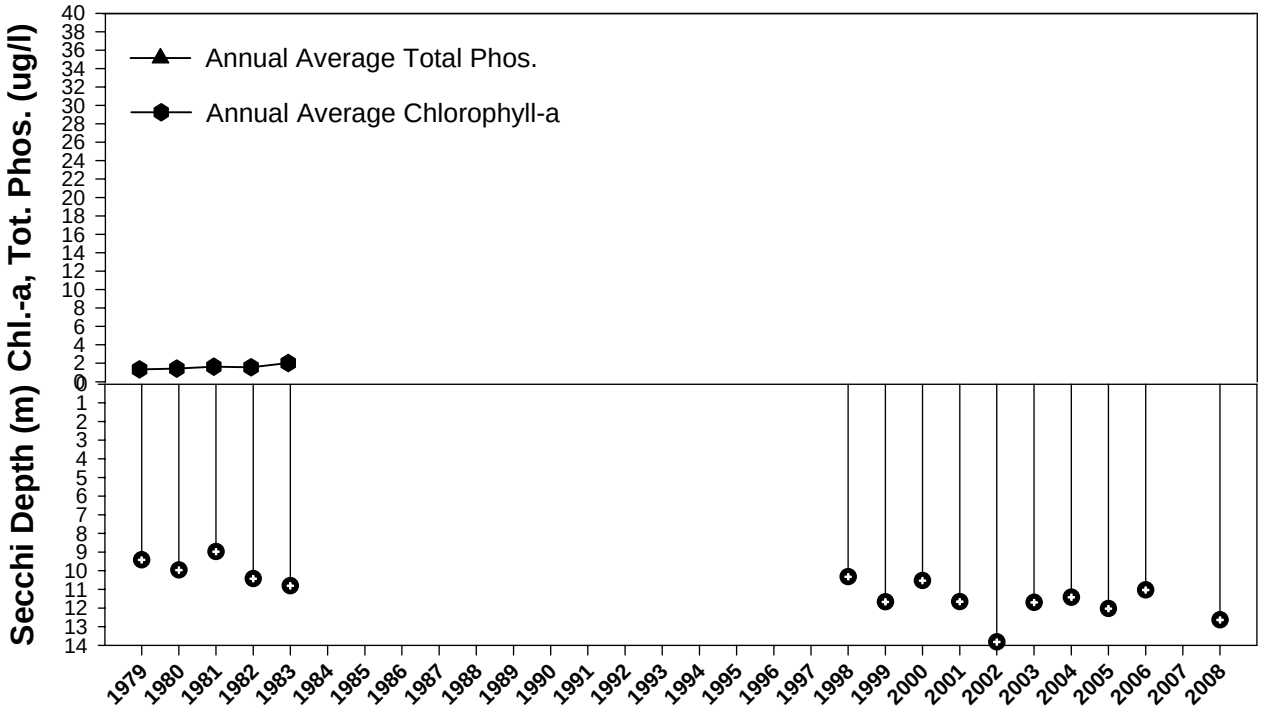
Sunset Lake

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	11	10	13	15

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	19	9.4	1.4		8.0
1980	16	10.0	1.5		7.0
1981	13	9.0	1.7		8.0
1982	13	10	1.6		10
1983	14	11	2.1		4.5
1998	11	10			9.5
1999	13	12			
2000	13	11			
2001	13	12			
2002	11	14			
2003	11	12			
2004	13	11			7.3
2005	13	12			
2006	12	11			6.1
2008	11	13			



TICKLENAKED POND

Ryegate, VT

Lay Monitors: Polly and Chuck Hebble

Former Lay Monitors:
Kristine Elder

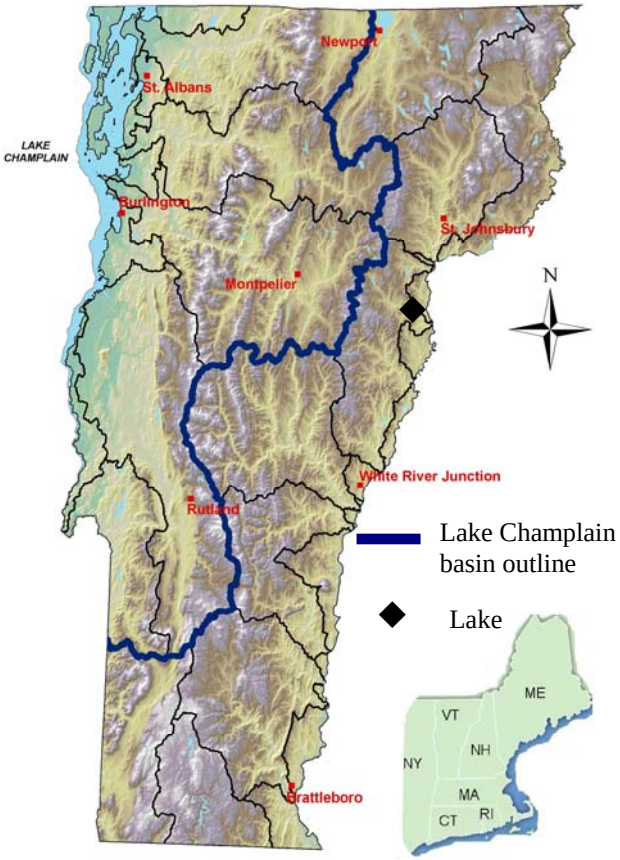
Ticklenaked is a small, warm water pond.

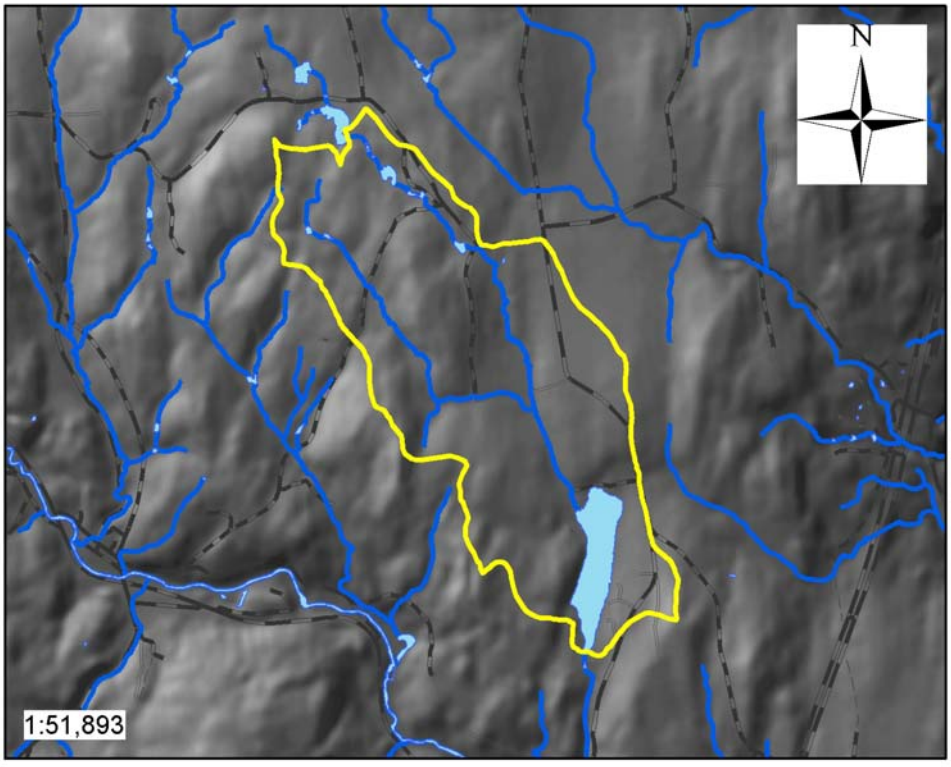
Lake Surface Area:	54	acres
Drainage Basin Area	1,444	acres
Maximum depth:	51 ft.	(15.5 m)
Average depth:	16 ft.	(4.9 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - low
Algal population density – high
Nutrient enrichment – high

Trophic State: Eutrophic





Lake outlined by its watershed

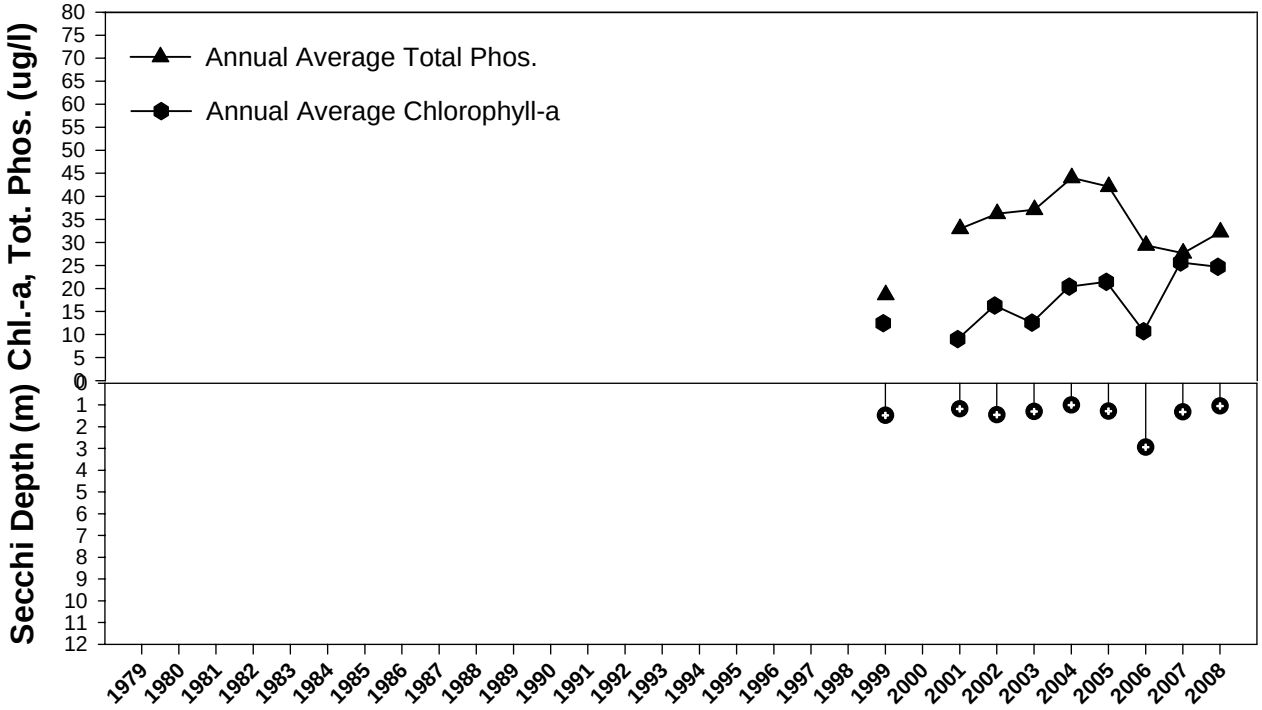
Ticklenaked Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	10	0.8	1.1	1.5
Chl-a (ug/l)	10	10	25	45
Summer TP (ug/l)	10	25	32	44
Spring TP (ug/l)	1		30	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1999	8	1.5	13	19	54
2000	7				43
2001	9	1.2	9.1	33	77
2002	9	1.5	16	36	52
2003	9	1.3	13	37	42
2004	9	1.0	20	44	42
2005	9	1.3	22	42	67
2006	10	2.9	11	29	39
2007	9	1.3	26	28	36
2008	10	1.1	25	32	30

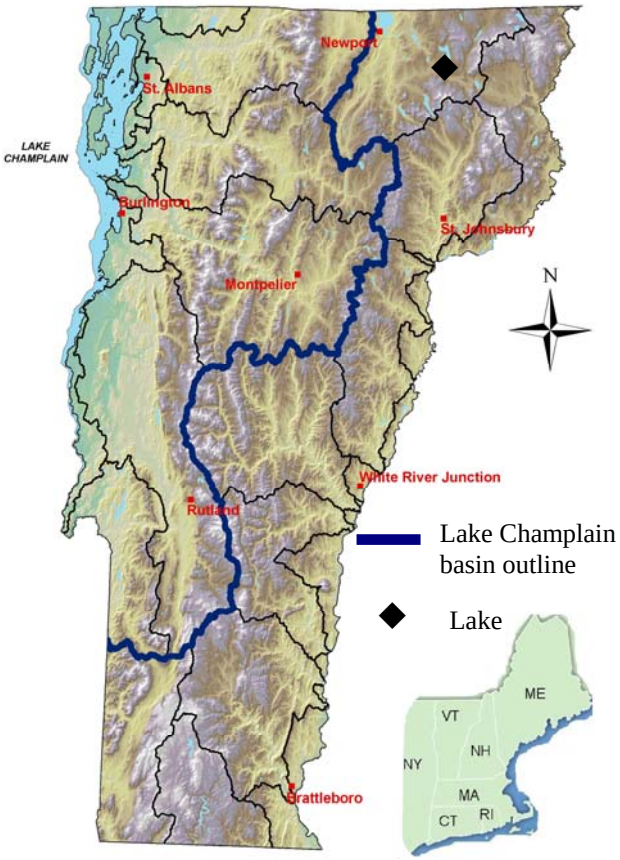


LAKE WILLOUGHBY

Westmore, VT

Lay Monitor: John Alexander
Stephen Andersen

Former Lay Monitors:
Roy Hill
Ethan Swift

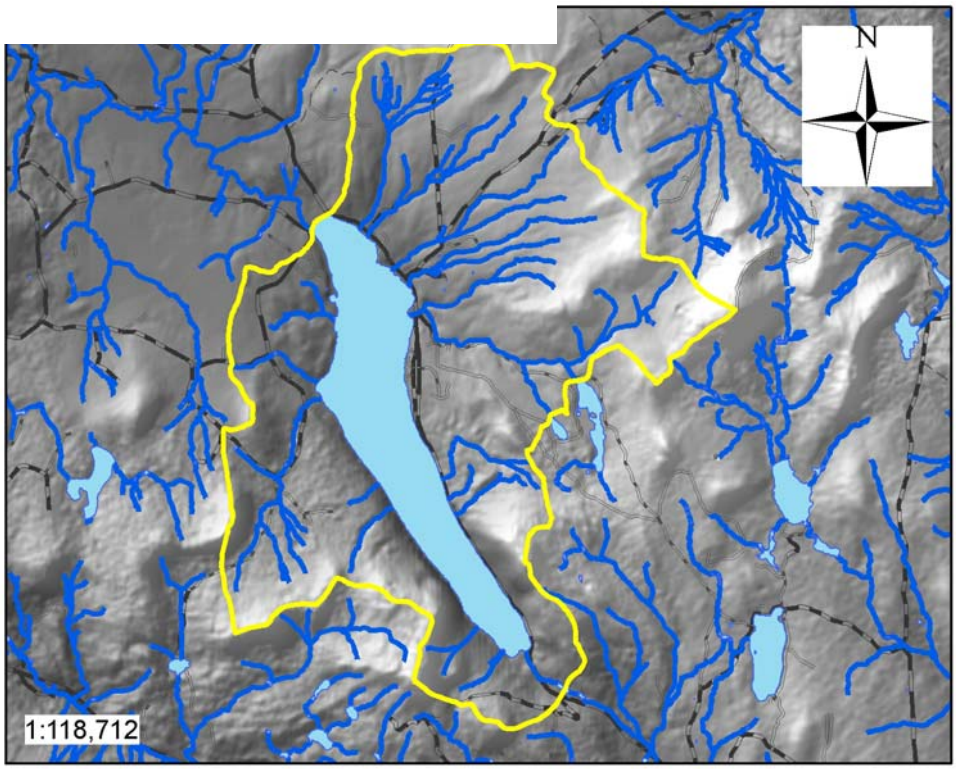


Lake Willoughby is a large, deep, cold water lake

Lake Surface Area:	1,687	acres
Drainage Basin Area	12,256	acres
Maximum depth:	308 ft.	(93.3 m)
Average depth:	140 ft.	(42.7 m)

Compared to other lakes, long-term summer means indicate:
:
Water clarity - high
Algal population density – low
Nutrient enrichment – moderate

Trophic State: Oligotrophic



Lake outlined by its watershed

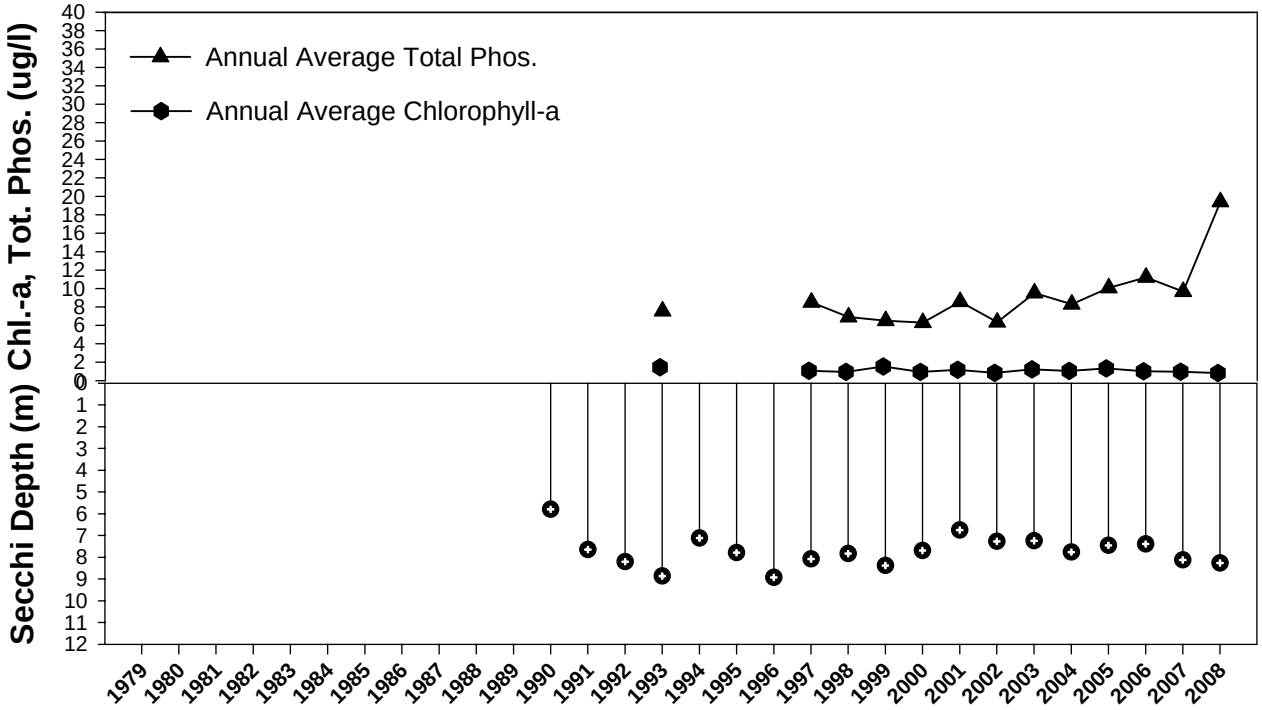
Lake Willoughby

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	11	3.5	8.3	11
Chl-a (ug/l)	11	0.5	0.9	1.8
Summer TP (ug/l)	9	12	18	29
Spring TP (ug/l)	1		6.2	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1980	13	8.1	1.9		3.0
1981	11	8.4			4.7
1983	11	11			5.0
1990	10	5.8			
1991	12	7.6			
1992	13	8.2			5.0
1993	12	8.9	1.5	7.5	
1994	12	7.1			
1995	12	7.8			
1996	15	8.9			
1997	16	8.1	1.1	8.5	3.7
1998	18	7.8	1.0	6.9	3.3
1999	10	8.4	1.6	6.5	
2000	10	7.7	1.0	6.3	
2001	9	6.8	1.2	8.6	
2002	11	7.3	0.9	6.3	
2003	10	7.3	1.3	9.5	4.7
2004	15	7.8	1.1	8.3	5.7
2005	12	7.5	1.4	10	
2006	10	7.4	1.1	11	7.4
2007	13	8.1	1.0	9.7	9.0
2008	11	8.3	0.9	18	6.2



WOODBURY LAKE

Woodbury, VT

Lay Monitor: Bob, Susan and Oscar Martin

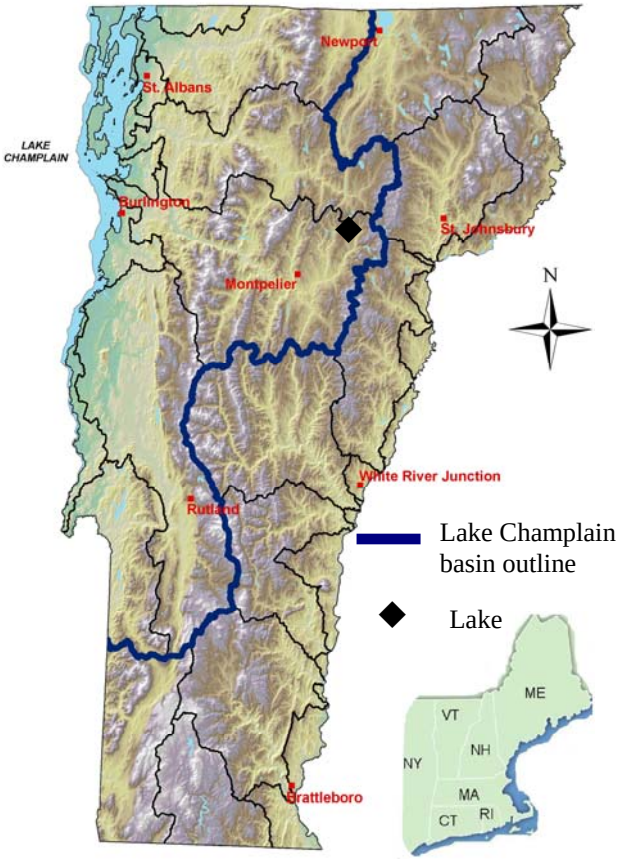
Woodbury Lake is a moderately sized, warm water lake composed of three basins separated by shallow channels. It is also called Sabin Pond.

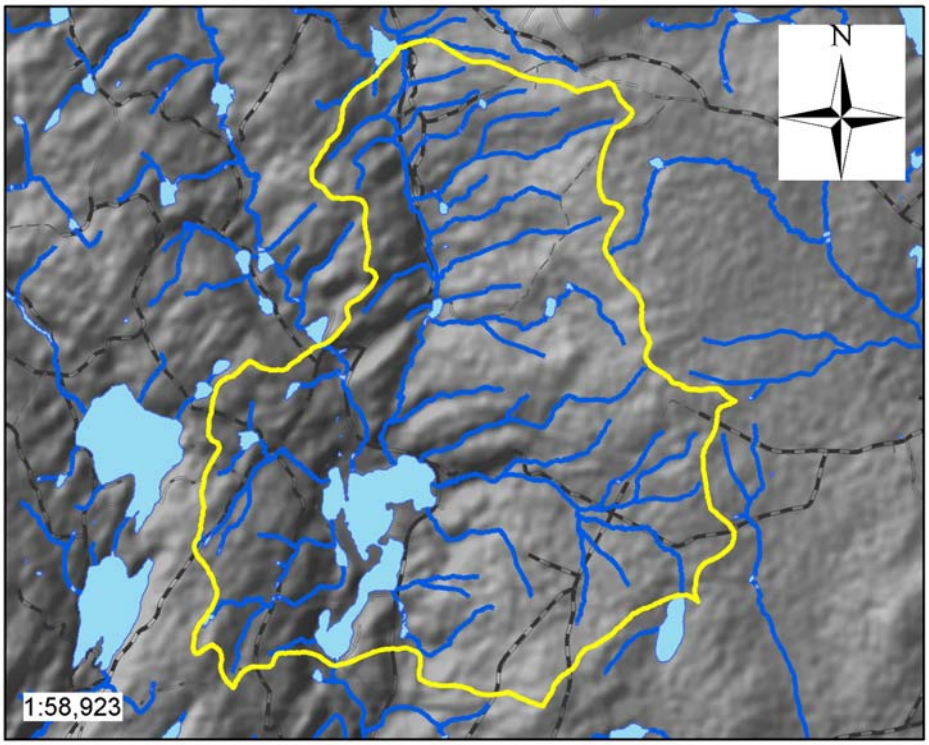
Lake Surface Area:	142	acres
Drainage Basin Area:	9,014	acres
Maximum depth:	58 ft.	(17.6 m)
Average depth:	18 ft.	(5.5 m)

Compared to other lakes, long-term summer means indicate:

Water clarity - moderate
Algal population density - moderate
Nutrient enrichment - moderate

Trophic State: Mesotrophic





Lake outlined by its watershed

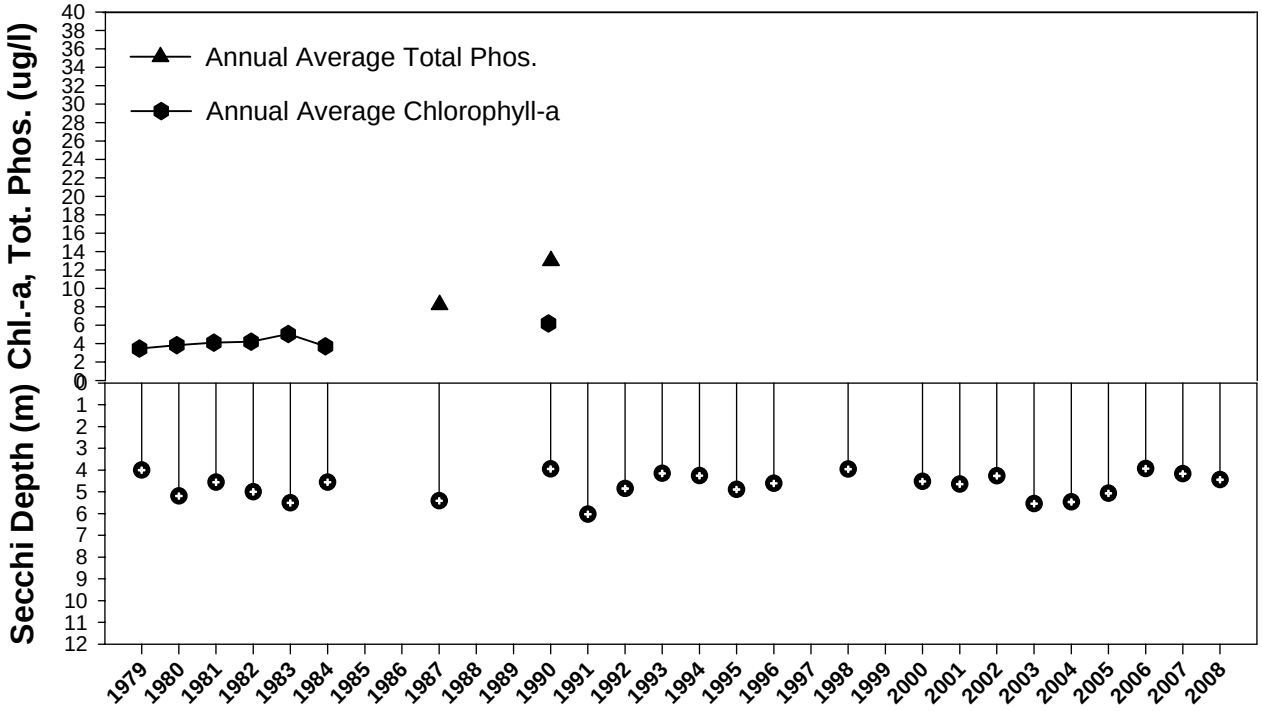
Woodbury Lake

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	9	3.0	4.4	5.9
Spring TP (ug/l)	1		11	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1979	16	4.0	3.5		6.7
1980	11	5.2	3.9		5.7
1981	8	4.6	4.1		8.0
1982	10	5.0	4.3		8.7
1983	9	5.5	5.1		10
1984	9	4.6	3.8		8.7
1985	3				9.7
1986	6				9.3
1987	10	5.4		8.2	12
1988	6				
1989	7				
1990	10	4.0	6.2	13	
1991	10	6.0			
1992	11	4.9			
1993	10	4.1			
1994	9	4.3			
1995	10	4.9			
1996	9	4.6			11
1998	8	4.0			
2000	10	4.5			
2001	9	4.6			
2002	10	4.3			11
2003	11	5.5			
2004	9	5.5			11
2005	10	5.1			9.5
2006	11	3.9			13
2007	10	4.2			12
2008	9	4.4			11



WOODFORD LAKE

Woodford, VT
Woodford Lake is also called Big Pond

Lay Monitor: Dorothea, Scott, Shane Cleary

Former Lay Monitors: Anita Capella

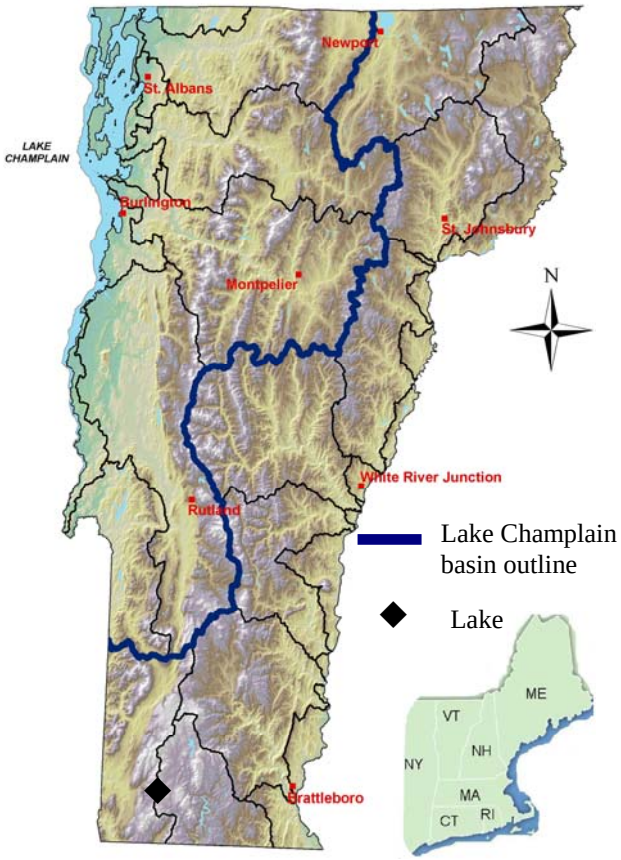
Big Pond is a small, warmwater lake.

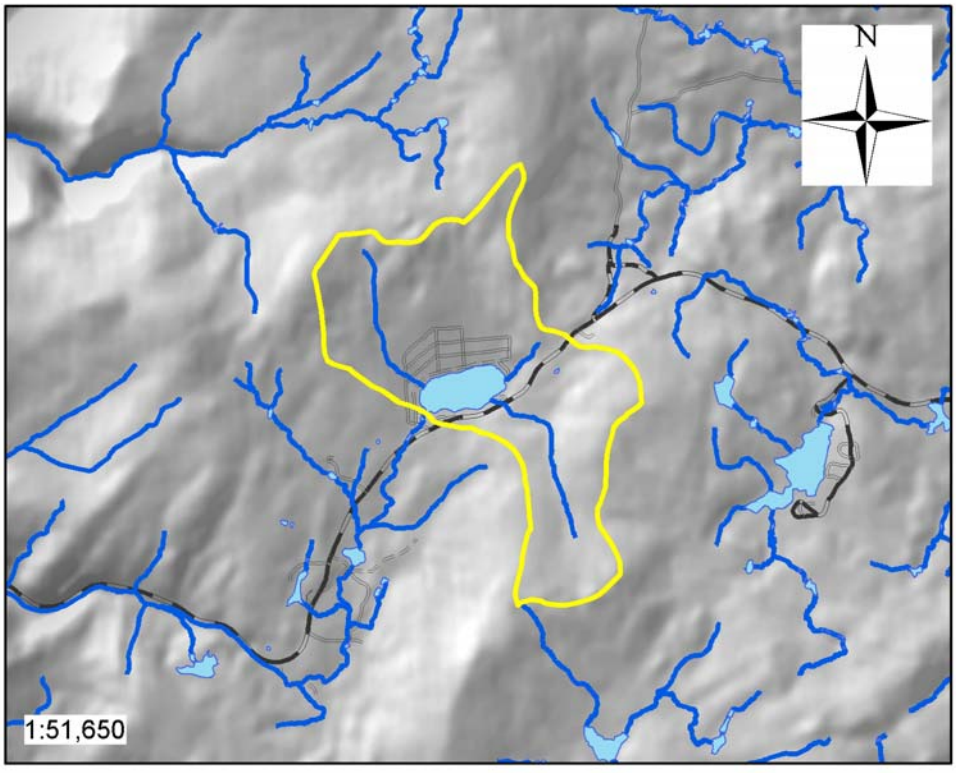
Lake Surface Area:	31	acres
Drainage Basin Area	715	acres
Maximum depth:	28 ft.	(8.5 m)
Average depth:	13 ft.	(4.0 m)

Compared to other lakes, long-term summer means indicate:

Water clarity – moderate
Algal population density – moderate
Nutrient enrichment – moderate

Trophic State: Mesotrophic





Lake outlined by its watershed

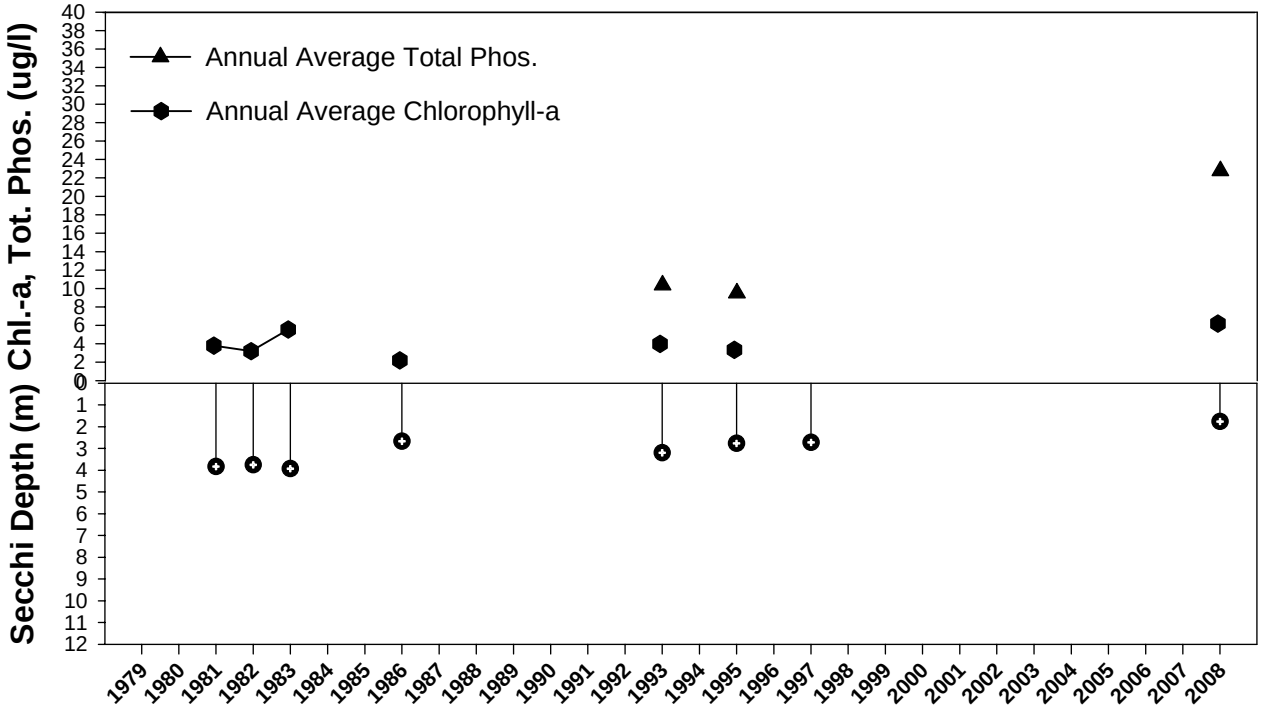
Big Pond

2008 Summary

Parameter	Days	Min	Mean	Max
Secchi (m)	8	1.0	1.8	2.5
Chl-a (ug/l)	8	2.8	6.2	10
Summer TP (ug/l)	8	19	23	27
Spring TP (ug/l)	1		9.2	

Annual Data

Year	Days Sampled	Secchi (m)	Chloro-a (ug/l)	Summer TP (ug/l)	Spring TP (ug/l)
1981	13	3.8	3.8		
1982	13	3.8	3.2		7.0
1983	10	3.9	5.6		8.5
1986	10	2.7	2.2		
1993	8	3.2	4.0	10	
1994	7				
1995	10	2.8	3.4	9.5	
1996	7				
1997	8	2.7			
2008	8	1.8	6.2	23	9.2



Appendix 1 - Participation, 1979 – 2008
Lay Monitoring Inland Lakes

Years of Participation
B= basic monitoring, Secchi water clarity only; S=supplemental monitoring, Secchi water clarity, total phosphorus and chlorophyll-a; P= partial data

Lake	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Arrowhead Mtn	-	S	S	S	S	S	S	S	S	B	S	-	-	-	-	-	-	-	-	B	-	-	-	-	-	-	-	-	-	-
Beebe	S	S	S	S	S	S	B	B	BP	B	BP	BP	BP	B	B	S	B	B	B	BP	B	B	B	B	B	B	B	B	B	BP
Bliss	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	B	S	S	S	S	S	S	-	-	-	-
Bomoseen	S	S	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Buck	-	-	-	-	-	-	-	-	-	-	-	S	S	SP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Burr	BP	B	B	B	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carmi	S	S	S	SP	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Caspian	BP	B	S	S	S	S	S	S	-	-	-	-	B	B	B	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Cedar (Monkton)	-	-	-	-	-	-	-	-	-	-	-	S	SP	S	S	SP	SP	BP	-	BP	-	-	-	-	-	-	-	-	-	-
Chipman	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	S	S	S	S	S	S	S	S	S	S	S	S
Colchester		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	SP	-	-	-	-	-
Cole	-	S	S	S	S	-	S	-	-	S	S	S	S	B	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Coles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S
Crystal	-	-	-	-	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Curtis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	B	S	S	S	S	S	S	S	S	S	S	S
Danby	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
Derby	-	-	-	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dunmore	B	B	-	S	-	S	S	S	S	-	-	-	-	-	B	B	B	B	S	S	S	S	S	S	S	S	S	S	S	S
East Long	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	B	B	B	B	-	-	-	-	-	-	-	-	-
Echo (Charleston)	B	S	S	B	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	S	S	S	S
Echo	-	-	-	-	-	-	-	-	-	-	S	S	BP	BP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lake	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Eden	-	-	-	-	-	-	-	-	-	-	S	SP	S	S	S	S	S	S	S	SP	B	B	B	B	-	B	B	S	S	S
Elfin	-	-	-	-	B	S	S	S	S	S	B	BP	B	B	B	B	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Elligo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SP	S	S	S	-	-	-	-	-	-	-	-
Elmore	S	S	SP	S	S	S	S	B	B	-	-	-	-	-	-	-	S	S	S	-	-	-	-	-	-	-	-	-	-	-
Fairfield	-	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	B	B	B	S	S	S	SP	S	S	-	-	S	S	S
Fairlee	S	S	S	S	S	S	S	B	B	B	B	B	B	B	B	B	B	B	S	S	S	S	S	S	S	S	S	S	S	S
Fern	-	-	-	BP	S	-	-	-	-	-	-	-	SP	B	B	B	B	B	B	B	B	B	B	B	B	-	B	-		-
Forest (Nelson)	BP	BP	-	-	-	-	-	-	-	-	-	S	SP	S	-	-	-	-	-	-	-	S	S	S	S	S	S	S	S	S
Fosters																											B	S	S	S
Glen	-	-	-	B	B	BP	B	B	B	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-
Great Averill	B	B	B	-	-	-	-	-	-	-	S	S	SP	B	S	S	S	S	-	BP	-	-	-	-	-	-	-	-	-	-
Great Hosmer	-	-	-	-	-	S	S	S	S	S	B	B	B	B	BP	B	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Green River	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	S	S	S	S	S	S
Greenwood	B	-	-	-	-	-	-	-	-	-	-	S	SP	SP	SP	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S
Groton	BP	B	B	S	SP	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	B	B	B	B	B	B	S	S	S	S
Halls	B	S	S	S	S	S	S	B	S	S	S	S	S	B	B	B	B	B	B	B	B	B	S	S	S	S	S	S	S	S
Harvey's	S	S	S	S	S	S	SP	S	SP	-	-	-	B	B	B	B	B	B	S	S	S	S	SP	S	S	S	S	S	S	S
Holland															S	S	SP	S	S	S	S	B	B	B	B	B	B	B	B	B
Hortonia	S	S	S	S	S	S	B	-	B	B	B	B	BP	B	B	B	B	B	B	B	-	-	-	-	-	-	-	-	-	-
Iroquois	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	B	B	B	B	B	B	B	B	B	B	-	B	S
Island Pond	BP	S	S	S	S	S	S	B	B	B	B	B	-	B	B	B	B	B	-	-	-	BP	B	B	B	B	B	B	B	B
Joes	B	BP	SP	B	SP	S	S	S	S	S	BP	-	-	-	B	B	B	-	-	-	-	B	B	B	B	S	S	S	S	S
Long	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	B	B	-	-	-	-	-
Lowell	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	S	SP	SP	-	-	-	-	-
Lower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S
Lyford	-	-	-	-	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	B	B	S	S	S	S	S	-	S	-	-

Lake	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Maidstone	B	B	B	-	-	-	-	-	-	-	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Martins	-	SP	S	S	S	SP	S	SP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Memphremagog	-	-	-	-	-	-	S	S	S	S	S	S	S	-	S	S	S	S	S	-	-	-	-	-	-	S	S	S	S	S
Memphremagog South Bay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	SP	S	S
Metcalf	-	-	S	S	S	S	S	S	-	-	-	-	-	-	-	S	S	S	-	S	S	S	S	-	-	-	-	-	-	-
Miles	-	-	-	-	-	-	S	S	S	S	SP	SP	SP	BP	B	-	-	-	-	-	-	-	-	-	-	-	-	-	S	SP
Mirror	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	S	-	-	-
Morey	S	S	S	S	SP	S	S	S	S	S	S	S	S	SP	S	S	S	B	S	S	S	S	S	S	S	S	S	S	S	S
Newark	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	-	-	-	-	-	-
Nichols	-	-	-	-	-	-	-	-	-	-	-	S	S	-	S	S	S	-	B	S	S	S	S	S	S	S	S	S	S	S
Ninevah	-	-	S	SP	SP	S	S	S	S	B	BP	B	B	B	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Montpelier	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	-	-	-	S	S	S	S
Paran	-	S	SP	S	SP	SP	SP	SP	S	S	S	-	B	B	B	B	-	-	-	-	-	-	-	-	-	S	SP	S	-	-
Parker	S	S	S	S	S	S	S	S	S	S	S	S	S	B	S	S	S	B	S	S	S	S	S	S	S	S	S	S	S	S
Peacham	-	-	-	-	B	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	-	S
Pensioner	-	-	-	-	-	-	-	-	-	-	-	-	S	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perch	-	-	-	-	B	BP	-	S	S	S	S	-	-	-	-	-	-	-	-	B	B	B	-	-	B	B	B	-	-	-
Pinneo	-	-	-	SP	S	S	S	S	S	SP	B	B	BP	B	B	B	B	BP	B	BP	-	-	-	-	-	-	-	-	-	-
Raponda	-	S	S	S	S	S	-	-	-	-	-	-	B	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	S
Rescue	B	BP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	S	S	S
Runnemede	-	-	-	-	-	-	-	-	-	-	-	-	S	-	-	-	-	-	-	SP	-	S	S	S	S	S	S	S	S	S
St. Catherine	S	S	S	S	S	S	S	S	B	-	-	-	-	-	B	B	B	S	SP	S	S	S	S	S	S	S	B	S	S	S
Salem	B	B	-	-	-	-	S	S	S	S	S	S	B	B	-	-	-	-	-	-	B	S	S	S	S	S	S	S	S	S
Seymour	S	S	S	S	S	S	S	B	B	B	B	B	B	B	B	S	S	S	B	B	B	S	S	S	S	S	S	S	S	S
Shadow	S	S	S	S	S	S	-	-	-	-	-	-	-	-	BP	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S

Lake	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Shelburne	-	-	-	-	-	-	-	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	-	-	-	-	B	S	S	S	S	S	S	S	SP	-	B	BP	-	-	B	B	BP	BP	B	B	B	B	B	B	B	B
South	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Spring	-	-	-	-	-	-	-	S	S	S	S	S	S	B	B	B	S	S	S	S	S	S	-	-	-	-	-	-	-	-
Star	S	SP	-	-	-	-	-	S	S	S	SP	-	-	-	BP	-	-	-	-	-	B	-	-	-	-	-	-	-	-	-
Stratton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	-	S	S	S	S	-	-
Sunrise	-	-	-	-	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	B	B	B	B	B	B	B	B	B	B	B
Sunset	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	B	B	B	B	B	B	B	B	-	B
Sunset	-	-	-	-	-	-	-	S	S	S	S	S	S	SP	B	B	B	B	BP	B	B	B	B	B	B	B	B	B	B	B
Ticklenaked	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	SP	S	S	S	S	S	S	S	S
Valley	-	S	S	S	S	S	B	B	BP	B	B	-	SP	-	-	-	-	-	-	BP	B	-	-	-	-	-	-	-	-	-
Wapanacki	-	-	-	-	S	S	S	S	S	S	B	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Willoughby	-	S	S	-	S	S	S	S	B	BP	-	B	B	B	S	B	B	S	S	S	S	S	S	S	S	S	S	S	S	S
Winona															S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S
Woodbury	S	S	S	S	S	S	BP	BP	S	BP	SP	S	B	B	B	B	B	B	-	B	-	B	B	B	B	B	B	B	B	B
Woodford	-	-	S	S	S	-	-	S	-	-	-	-	-	-	S	SP	S	SP	B	-	-	-	-	-	-	-	-	-	-	S
Woodward	-	-	S	SP	S	S	S	S	B	BP	BP	-	BP	-	B	BP	-	BP	-	-	B	B	-	-	-	-	-	-	-	-

Lay Monitoring Lake Champlain Stations

(Individual Lake Champlain station data is available in the "Lake Champlain Lay Monitoring Report")

Years of Participation
(S = supplemental sampling, P = partial data)

Lake Champlain Stations	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
#1 - Whitehall	S	S	S	S	-	-	-	-	SP	SP	S	-	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#2 - Larrabee's Point	S	S	S	S	S	S	S	S	S	S	S	SP	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-	S
#3 - Crown Point	S	S	S	S	S	S	-	-	-	S	S	-	S	SP	SP	S	S	S	S	S	-	-	-	-	-	-	-	S	S	S
#4 - Button Bay-Broad Lake	-	S	-	-	S	SP	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	SP
#5 - Thompson's Point	S	S	S	S	S	S	SP	-	SP	S	-	-	S	S	-	-	S	S	S	SP	S	S	S	S	S	SP	S	S	S	S
#6 - Shelburne Bay	S	S	S	S	-	-	S	S	SP	S	S	S	S	S	S	S	S	S	S	S	-	S	S	S	S	S	S	S	S	S
#7 - Burlington-Broad Lake	S	S	S	S	-	S	SP	-	S	S	-	SP	S	S	-	S	S	SP	S	S	-	SP	S	S	-	S	S	S	S	S
#8 - Willsboro Point	S	S	S	S	S	SP	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#9 - Colchester Shoals	SP	-	S	-	SP	-	S	-	-	SP	-	-	-	S	-	-	SP	S	S	S	S	S	S	S	S	S	S	S	S	S
#10 - Outer Malletts Bay	S	S	S	-	-	S	S	-	SP	-	SP	SP	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
#11 - Inner Malletts Bay	S	S	S	-	S	S	S	-	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
#12 - Fish Bladder Island	B	B	-	-	S	SP	SP	-	SP	-	-	S	S	S	S	S	S	-	-	S	S	S	S	S	S	S	S	SP	S	SP
#13 - Cumberland Bay	-	SP	-	SP	-	S	S	S	SP	SP	-	-	-	-	SP	SP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#14 - Treadwell Bay-Broad Lake	S	S	S	S	S	S	S	-	SP	SP	-	-	-	-	S	S	S	S	-	-	-	S	-	-	-	-	-	-	-	-
#15 - The Gut	B	B	B	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	S	S	S
#16 - Ball Island	BP	S	S	-	S	S	S	S	SP	-	-	SP	SP	SP	SP	-	SP	-	-	-	-	SP	S	SP	SP	SP	SP	S	-	S

Appendix 1 (continued)

Lake Champlain Stations	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
#17 - St. Albans Bay	S	S	S	S	S	S	S	S	S	S	S	S	S	SP	S	S	S	S	S	S	-	S	S	S	S	S P	S P	-	-	S
#18 - Butler Island	S	S	S	S	S	S	S	S	S	S	-	S	S	S	S	S	SP	-	-	-	-	-		-	-	-	-	-	-	-
#19 - Point Au Fer	S	S	S	S	S	S	S	S	S	-	-	S	S	S	S	SP	S	SP	S	S	S	SP	-S	S	S	S	-	S	S	-
#20 - Missisquoi Bay	S	-	S	-	S	S	SP	-	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-	S
#21 - Keeler Bay	B	B	BP	B	B	B	S	S	S	S	S	S	SP	S	S	S	-	S	S	S	SP	-	-	-	-	-	-	-	-	-
#22 - Maquam Bay	-	-	B	B	BP	BP	BP	-	BP	BP	-	SP	S	SP	S	S	S	S	S	S	S	S	S	S	-	-	-	-	-	S
#23 - Alburg Passage	-	-	-	BP	-	-	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#24 - Inner Missisquoi Bay	-	-	-	S	SP	SP	S	S	-	-	-	-	SP	S	S	-	S	SP	-	-	-	-	-	-	-	-	-	-	-	-
#25 - Pelots Point	-	-	-	S	SP	-	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#26 - Kellogg Bay	-	-	-	S	S	S	SP	-	S	-	S	SP	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#29 - Carry Bay	-	-	-	S	S	-	S	S	S	S	S	S	SP	-	S	S	-	-	-	-	-	-	-	-	S	S	-	-	S	-
#30 - Alburg Bridge	-	-	-	-	S	S	SP	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	SP	S	S	S	-	S
#31 - Sandbar	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	-	-	S	S	S	SP	S	S	S	S	S P	S	S P
#32 - Valcour Island	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	SP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#33 - Burlington Bay	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	SP	S	S	SP	S	S	S	S	S	S	S	S	S	S	S
#34 - Potash Point	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	-	-	-	-	-	-	-	SP	SP	-	-	-	-	-	-
#35 – Dresden	-	-	-	-	-	-	-	-	-	-	-	-	-	SP	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#36 - West Haven	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	-	S	S	-	-	-	-	S	-	-		-	-
#37 – Outer Carry Bay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	-	-	S	-
#38 – Town Farm Bay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S
#39 – Inner Thompson Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S

Appendix 2
Nuisance Exotic Species

Vermont Invasive Species!

Water chestnut
Trapa natans
This is a glossy, green, triangular-leaved plant that can easily choke the waterbodies it invades, out-compete native plants, and reduce oxygen levels which can increase the potential for fish kills. Dense, nearly impenetrable water chestnut growth can make fishing, hunting, swimming, boating, and other recreational activities nearly impossible

Hydrilla
Hydrilla verticillatat
This is a submersed rooted perennial, and highly adaptable to a wide range of environmental conditions. Hydrilla has leaves in whorls of 3 to 8 joined directly to the stem, visible toothed leaf margins and small potato-like tubers at the end of the underground stems. This species is considered one of the most problematic aquatic plant invaders. Preventing its introduction into Vermont waters is imperative.

Eurasian watermilfoil
Myriophyllum spicatum
This is a stringy, submerged plant that quickly proliferates. It is known for its delicate, feathery appearance and has whorls of leaves around the stem, 4 are common, but often 3 to 6 can be found. The leaves are divided into pairs of thread like segments, typically 12 or more. Sometimes tops of the plant exhibit a reddish color.

Variable-leaved watermilfoil
(Myriophyllum heterophyllum)
This is a rooted, submerged perennial species, first confirmed in a Vermont water in 2008. It has densely packed whorls of 4 to 6 underwater leaves around the stem, each underwater leaf has 7 to 11 pairs of segments, thick, robust, reddish stems and mature plants show blade-like leaves above water surface with serrated edges.

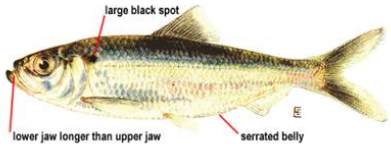
Purple loosestrife
Lythrum salicaria
A wetland perennial plant that is highly successful and able to outcompete native vegetation due to it's high germination rate, and its abundant and easily transported seed. Dense growth can eliminate food and shelter for wildlife including shallow water fish spawning grounds.

Didymo
(Didymosphenia geminata) A non-native algae (diatom) species capable of forming thick nuisance mats on river and stream bottoms with potentially significant impacts to fisheries and other habitat.

Spiny waterflea
Bythotrephes longimanus
The spiny waterflea is a small (5-15 mm) predaceous crustacean that threatens aquatic ecosystems by competing with native fish for food. Anglers often discover new infestations. The flea collects on fishing lines and cables in gelatin like clumps. They can spread to other lakes when fishing gear is contaminated. Females die out of water, but eggs can remain viable and can establish a new population. Eradicating established infestations is impossible.

Zebra mussel
Dreissena polymorpha
Zebra mussels are small barnacle-like mollusks. They have caused some very serious economic and environmental problems in many areas. They are highly prolific and able to form dense colonies out-competing native species. Zebra mussels feed by filtering plankton out of the water which impacts water clarity and alters the food web.

Rusty crayfish
Orconectes rusticus
Rusty crayfish can be identified by their robust claws with black bands on the tips, and dark, rusty spots on each side of their carapace (body). They can out-compete native species, forcing native crayfish from daytime hiding areas and destroying aquatic plant beds. They have likely been spread into numerous waterbodies in Vermont by anglers using them for bait.



Alewife *Alosa pseudoharengus*
Alewife is a marine fish from the herring family capable of surviving in freshwater. They reproduce quickly and can soon become the most dominant fish species in a lake. They are very efficient feeders and consume huge quantities of zooplankton which enable them to out-compete other species.

Glossary

ALGAE - Simple aquatic plants which are usually microscopic in size. Algae can grow suspended in the water or attached to plants or the lake bottom. Algae do not have true roots, flowers, and leaves.
ANAEROBIC - (also **anoxic**) - Environment in which oxygen is absent.

BACTERIA - Microscopic single cell organisms that are similar to plants but lacking in chlorophyll.

BLOOM - A very large algal population that may cause a green coloration of the water or form large floating mats. Such a large population may be stimulated by high nutrient levels, warm-water temperatures and long periods of sunlight. Seasonal spring and fall algal blooms usually are part of the normal cycle of a productive lake.

CHLOROPHYLL - The photosynthetic, green pigment contained in all green plants.

CULTURAL EUTROPHICATION - The acceleration by human activities of the natural aging process in a lake evidenced by increasing nutrient concentrations.

DRAINAGE BASIN - (also **watershed**) - The land area draining into a body of water. The surface area of the lake is included in the calculation of the drainage basin surface area.

ECOLOGY - The study of the relationships between organisms and their environment.

EROSION - The loosening and subsequent transport of soil away from its native site. In Vermont, erosion typically results from the removal of vegetation, which is a soil stabilizer.

EUTROPHIC - A general classification of lakes which have a high level of nutrients. Eutrophic lakes are often shallow, warm, seasonally deficient in oxygen in the lower depths of the lake, and supportive of large algal and/or aquatic plant populations.

EUPHOTIC ZONE - The layer of lake water where light penetrates through the water and is useable by plants and algae.

EUTROPHICATION - The natural aging process of a lake whereby nutrients and sediments increase in the lake over time, increasing its productivity and eventually turning it into a marsh. If the process is accelerated by human-made influences, it is referred to as "cultural eutrophication."

FECAL COLIFORM BACTERIA - Bacteria found in the feces of warm-blooded animals. Fecal coliform bacteria are used as indicators of recent sewage contamination. Fecal coliform bacteria are not harmful themselves, rather they indicate the potential presence of other disease-causing organisms.

GROUNDWATER - Water that lies beneath the earth's surface in water-filled layers of sand, gravel, clay or cracked rock.

LAKE BASIN - A depression in the surface of the land that forms a lake when full of water. Lakes may be composed of more than one basin.

LIMITING NUTRIENT - The nutrient whose demand exceeds its supply such that growth is restricted until more is available.

LIMNOLOGY - The study of the physical, biological, and chemical aspects of inland ponds (generally freshwater), lakes, and streams.

MACROPHYTES - Rooted aquatic plants which grow in or on the water. They have true roots, flowers, and leaves.

MEAN - (also **average**) - Calculated by adding the values of all the data points and dividing this sum by the number of data points.

MESOTROPHIC - A general classification of lakes between the levels of oligotrophic and eutrophic. Mesotrophic lakes have a moderate level of nutrients and are somewhat productive (supportive of moderate growths of algae and aquatic plants).

METER - A measure of length in the metric system, approximately equivalent to 3.25 feet. One meter (m) equals 39.37 inches or 1.0936 yards.

MICROGRAM - (Φg) - The unit of measurement used to express one part per million (ppm).

NON-POINT SOURCE POLLUTION - Pollution that comes from a diffuse area, as opposed to a discharge pipe, and that enters lakes or streams via runoff, groundwater, or tributary streams. Examples are soil erosion, septic system pollution, and manure runoff.

NUTRIENT - A chemical required for growth, development or maintenance by a plant or animal. Examples are nitrogen and phosphorus.

OLIGOTROPHIC - A general classification of lakes which have a low level of nutrients. Oligotrophic lakes are usually deep and cold. They usually have a sufficient amount of oxygen at all depths and they support little algal and aquatic plant growth.

ORGANIC COMPOUND - A chemical compound containing carbon as the base element. Some kinds of organic compounds can be toxic to plant and animal life.

OVERTURN - The thorough mixing of the water in a lake during the spring and during the fall when the water is uniform in temperature and density.

PHOSPHORUS - A nutrient required by plants, including algae, for growth. In lakes, phosphorus is usually the nutrient in shortest supply relative to other nutrients. The addition of phosphorus to a lake will stimulate plant and algal growth.

PHOTOSYNTHESIS - Production of organic compounds using light by chlorophyll-containing cells.

PHOTIC ZONE - The lighted region of a lake where photosynthesis takes place.

PHYTOPLANKTON - Small plants, usually microscopic, suspended in the water, that drift in the water with waves or currents.

POINT SOURCE POLLUTION - Pollution from discharge pipes or outfalls from sources, such as wastewater treatment plants or industrial facilities.

RIPARIAN - A term used to describe the shoreland area of lakes, ponds and streams.

SECCHI DISK - A white and black disk 8 inches (20 cm) in diameter used to measure transparency of water.

SEDIMENT - Bottom material in a lake that has been deposited after the formation of a lake basin. Sediment results from the accumulation of decomposing remains of aquatic organisms, chemical precipitation of dissolved minerals, and erosion of surrounding lands. Sediment particles may also be suspended in the water.

SEDIMENTATION - The sinking of silt, algae, and other particles through the lake water column and their deposition on the lake bottom (where they form sediment). Sedimentation is an important process in the life of a lake, transferring nutrients throughout the lake's layers and providing a critical link between surface plankton and bottom-dwelling organisms.

STRATIFICATION - The formation of thermal zones in deep lakes during the summer. These zones are referred to as the epilimnion (warm upper region), hypolimnion (cold lower region), and metalimnion (thin boundary between the other two layers).

TRIBUTARY - Stream or river that flows into another body of water.

TROPHIC LEVEL - A relative level of productivity. Three trophic levels of Vermont lakes are eutrophic, mesotrophic and oligotrophic.

TURBIDITY - A measurement of water clarity. High turbidity (low water clarity) is caused by suspended particles such as silt, soil or algae which reduce light penetration.

WATER TABLE - The upper surface of groundwater; below this point the soil is saturated with water.

WATERSHED - (also **drainage basin**) - The land area draining into a body of water. The surface area of the lake is included in the calculation of the drainage basin surface area.

WETLAND - An area that is inundated by surface or ground water with a frequency sufficient to support significant vegetation or aquatic life dependent on saturated or seasonally saturated soil conditions for growth and reproduction.

ZOOPLANKTON - Small aquatic animals which are often microscopic in size, and usually capable of mobility.