



LAKE: WESSERUNSETT L (VLMP 25 )  
 TOWN: MADISON  
 COUNTY: SOMERSET

MIDAS: 70  
 \*TRUE BASIN: 1  
 \*SAMPLE STATION: 1

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

YEAR	MEAN	MEAN	MEAN	MEAN	TOTAL PHOS. MEANS (ppb)				SECCHI DISK (m.)				CHLOROPHYLL A(ppb)			TROPHIC STATE INDICES			
	COLOR	pH	ALK	COND.	EPI	SURF	BOT.	PRO.	MIN.	MEAN	MAX.	N	MIN.	MEAN	MAX.	EPI PHOS		SEC	CHL
	(SPU)		(mg/l)	(uS	/cm)	CORE	GRAB	GRAB	GRAB								C	G	
1990	-	-	-	-	-	-	-	-	5.0	6.7*	7.5*	6	-	-	-	-	-	-	-
1991	19	7.13	25.0	60	7	-	-	-	3.7	6.2*	7.3*	5	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-	4.4	6.5*	7.5*	6	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-	4.2	6.0*	7.2*	5	-	-	-	-	-	-	-
1994	-	-	-	-	-	-	-	-	2.8	5.3*	7.3*	7	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	4.8	6.3*	7.1	7	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	4.3	5.5	6.4	6	-	-	-	-	-	43	-
1997	19	7.41	18.0	66	7	-	-	-	3.9	6.0*	7.2*	6	3.2	3.2	3.2	-	-	-	-
1998	14	-	-	-	-	-	-	-	4.5	5.6*	7.3*	6	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	3.9	5.5*	7.2*	6	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	4.4*	5.9*	7.4*	7	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	4.8	5.9	7.0	6	-	-	-	-	-	40	-
2002	18	-	19.0	73	7	-	-	-	5.2	6.0	7.1	6	3.8	3.8	3.8	-	-	39	-
2003	-	-	-	-	-	6	-	-	4.4	6.1*	7.3*	5	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	4.6	5.8	7.1	5	-	-	-	-	-	41	-
2005	22	-	-	-	7	6	-	-	4.1	5.7	6.8	5	-	-	-	-	-	42	-
2006	23	-	-	-	-	8	-	-	4.3	5.7	7.1	6	-	-	-	-	-	42	-
2007	15	7.54	16.3	60	-	7	-	-	6.0	6.6*	7.2*	6	-	-	-	-	-	-	-
2008	23	-	-	-	-	7	-	-	4.1	5.5*	7.3*	5	-	-	-	-	-	-	-
2009	-	-	-	-	-	7	-	-	4.6*	6.1*	7.3*	5	-	-	-	-	-	-	-
SUMMARY:	19	7.22	17.3	60	7	8	6	-	2.8*	5.8*	7.5*35		2.2	3.3	4.1	-	-	42	-

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

DEPTH	SAMPLE DATE															
	09/25/06		08/01/07		08/16/07		08/13/08		08/28/08		09/08/08		09/22/08		08/20/09	
	m	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C
0.0	18.2	8.1	28.6	8.2	22.9	7.1	21.7	9.0	21.4	8.1	21.9	8.0	17.4	8.4	26.4	7.7
1.0	18.2	8.1	27.1	8.4	22.9	7.1	21.5	9.0	21.4	8.1	21.9	8.0	17.5	8.4	26.3	7.7
2.0	18.1	8.0	26.5	8.5	22.8	7.1	21.5	8.9	21.4	8.1	21.8	8.0	17.5	8.4	26.3	7.8
3.0	18.0	8.0	26.1	8.6	22.8	7.0	21.4	8.7	21.3	8.0	21.8	8.0	17.5	8.4	26.2	7.8
4.0	17.9	8.1	23.7	8.9	22.8	7.0	21.4	8.6	21.3	8.0	21.8	8.0	17.5	8.4	23.8	8.1
5.0	17.9	8.0	22.7	8.2	22.8	7.0	21.2	8.1	21.3	8.0	21.8	8.0	17.5	8.4	22.4	5.1
6.0	17.8	7.9	21.6	3.5	22.8	7.0	20.6	6.0	20.7	7.3	21.7	7.9	17.5	8.4	21.6	2.3
7.0	17.8	7.7	21.0	0.9	22.8	7.0	19.6	1.7	20.5	7.2	21.7	7.9	17.5	8.4	20.8	0.5

## WATER QUALITY SUMMARY

**WESSERUNSETT Lake**, Madison (Somerset County)

Midas: 0070, Station: 01 - Primary

Introduction: The Maine Department of Environmental Protection (Maine DEP) and the Volunteer Lake Monitoring Program (Maine VLMP) have collaborated in the collection of lake data to evaluate water quality, track algal blooms, and determine historical water quality trends. This dataset does not include bacteria, mercury, or nutrients other than total phosphorus (TP).

Water quality monitoring datasets for Wesserunsett Lake have been collected since 1970. During this period, 7 years of basic chemical information was collected along with 32 years of Secchi disk transparency (SDT) measures. In summary, the water quality of Wesserunsett Lake is considered to be average, based on measures of SDT, total phosphorus, and chlorophyll-a (Chla). The potential for nuisance algal blooms on Wesserunsett Lake is low.

Water quality measures: Wesserunsett Lake is a non-colored lake (average color 19 SPU) with an average SDT of 5.8 meters (19 feet). The range of upper water column TP for Wesserunsett Lake is 6-10 parts per billion (ppb) with an average of 7 ppb, while Chla ranges from 2.2-4.1 ppb with an average of 3.3 ppb. Recent dissolved oxygen (DO) profiles show low DO depletion in deep areas of the lake. The potential for TP to leave the bottom sediments and become available to algae in the water column (internal loading) is low. Oxygen levels below 5 parts per million can stress certain cold water fish, and a persistent loss of oxygen may eliminate or reduce habitat for sensitive cold water species.

Further information: See the Maine DEP *Explanation of Lake Water Quality Monitoring Report* for measured variable explanations. Additional lake information can be obtained by contacting Maine DEP at 207-287-3901 or Maine VLMP at 207-783-7733, or on the Internet at <http://www.pearl.maine.edu> or <http://www.maine.gov/dep/blwq/lake.htm>.

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