

*Appendix B*

*Crystal and Keller Lakes 2002 In-Lake Water Quality Data*

2002 Water Quality Data

**Crystal Lake (Main Basin)--- Water Quality Data**

Date	Max. Depth (M)	Secchi Disc (M)	Sample Depth (M)	Chl. A (ug/L)	Turbidity (NTU's)	D.O. (mg/L)	Temp. (Celsius)	Specific Cond. (umho/cm @ 25 C)	Total P (mg/L)	pH (Std. Units)
05/01/02	8.5	2.5	0-2	1.3	2.5	--	--	--	0.021	8.4
			0.0			11.7	10.4	457	--	--
			1.0			11.7	10.3	457	--	--
			2.0			11.7	10.3	458	--	--
			3.0			11.6	10.2	458	0.025	8.5
			4.0			11.5	9.9	459	0.024	8.5
			5.0			11.1	9.7	459	0.025	8.4
			6.0			11.1	9.7	459	0.023	8.4
			7.0			10.8	9.6	459	0.024	8.3
			8.0			9.8	9.4	459	0.022	8.3
05/20/02	8.5	3.3	0-2	1.3	1.5	--	--	--	0.018	8.8
			0.0			10.4	14.5	350	--	--
			1.0			10.4	14.4	348	--	--
			2.0			10.5	14.3	437	--	--
			3.0			10.4	14.0	437	0.020	8.9
			4.0			10.6	13.8	436	0.017	8.9
			5.0			10.2	12.9	444	0.017	8.9
			6.0			9.2	11.6	447	0.018	8.9
			7.0			6.6	11.2	452	0.022	8.8
			8.0			4.5	10.8	456	0.023	8.8

2002 Water Quality Data

**Crystal Lake (Main Basin)--- Water Quality Data**

Date	Max. Depth (M)	Secchi	Sample	Chl. A (ug/L)	Turbidity (NTU's)	D.O. (mg/L)	Temp. (Celsius)	Specific Cond. (umho/cm @ 25 C)	Total P (mg/L)	pH (Std. Units)
		Disc (M)	Depth (M)							
06/06/02	8.5	3.9	0-2	2.7	1.3	--	--	--	0.019	8.8
			0.0			9.1	18.9	416	--	--
			1.0			9.0	18.8	416	--	--
			2.0			8.9	18.8	417	--	--
			3.0			9.0	18.8	417	0.022	8.3
			4.0			6.6	17.4	419	0.021	8.7
			5.0			7.8	15.7	441	0.022	8.7
			6.0			6.7	13.8	451	0.021	8.5
			7.0			2.8	12.5	458	0.020	8.5
			8.0			0.4	11.8	463	0.020	8.4
06/24/02	8.5	1.7	0-2	48.0	5.5	--	--	--	0.053	8.3
			0.0			8.1	24.5	428	--	--
			1.0			8.0	24.5	428	--	--
			2.0			6.0	22.5	425	--	--
			3.0			5.7	22.0	424	0.037	8.4
			4.0			4.2	21.6	428	0.035	8.3
			5.0			1.5	17.8	441	0.030	8.2
			6.0			2.0	15.3	451	0.036	8.1
			7.0			0.0	13.1	465	0.040	8.0
			8.0			0.0	12.1	472	0.034	7.9

2002 Water Quality Data

**Crystal Lake (Main Basin)--- Water Quality Data**

Date	Max. Depth (M)	Secchi	Sample	Chl. A (ug/L)	Turbidity (NTU's)	D.O. (mg/L)	Temp. (Celsius)	Specific Cond. (umho/cm @ 25 C)	Total P (mg/L)	pH (Std. Units)
		Disc (M)	Depth (M)							
07/10/02	8.5	0.8	0-2	59.0	9.0	--	--	--	0.059	8.7
			0.0			11.0	27.4	435	--	--
			1.0			11.0	27.5	435	--	--
			2.0			10.6	27.5	435	--	--
			3.0			10.5	27.5	435	0.058	8.8
			4.0			1.5	25.3	437	0.056	8.9
			5.0			0.05	18.3	445	0.059	8.8
			6.0			0.0	14.9	455	0.060	8.6
			7.0			0.0	12.9	474	0.056	8.5
			8.0			0.0	12.0	490	0.060	8.2
07/24/02	8.5	1.5	0-2	11.0	2.8	--	--	--	0.036	8.0
			0.0			5.2	26.2	444	--	--
			1.0			5.2	26.3	444	--	--
			2.0			5.2	26.3	444	--	--
			3.0			4.6	26.3	444	0.038	8.4
			4.0			0.06	24.8	448	0.037	7.9
			5.0			0.0	18.9	453	0.039	7.9
			6.0			0.0	14.8	465	0.047	8.0
			7.0			0.0	13.0	482	0.071	8.1
			8.0			0.0	12.6	488	0.101	7.6

2002 Water Quality Data

**Crystal Lake (Main Basin)--- Water Quality Data**

Date	Max. Depth (M)	Secchi	Sample	Chl. A (ug/L)	Turbidity (NTU's)	D.O. (mg/L)	Temp. (Celsius)	Specific Cond. (umho/cm @ 25 C)	Total P (mg/L)	pH (Std. Units)		
		Disc (M)	Depth (M)									
08/06/02	8.5	1.0	0-2	22.0	6.5	--	--	--	0.035	8.2		
			0.0			8.8	24.3	440			--	--
			1.0			8.8	24.4	440			--	--
			2.0			8.8	24.4	434			--	--
			3.0			8.7	24.4	434			0.038	8.3
			4.0			8.3	24.4	438			0.037	8.3
			5.0			3.5	23.3	439			0.035	8.3
			6.0			0.0	16.8	466			0.035	8.3
			7.0			0.0	14.3	481			0.061	7.9
			8.0			0.0	13.0	495			0.154	7.8
08/20/02	8.5	1.3	0-2	33.0	5.0	--	--	--	0.041	9.4		
			0.0			12.3	22.8	424			--	--
			1.0			11.8	22.7	424			--	--
			2.0			11.2	22.6	427			--	--
			3.0			10.8	22.4	427			0.045	8.6
			4.0			9.0	21.9	433			0.044	8.6
			5.0			5.0	21.3	433			0.041	8.6
			6.0			0.2	20.1	446			0.035	8.5
			7.0			0.0	14.7	490			0.038	8.3
			8.0			0.0	13.1	510			0.071	8.0

2002 Water Quality Data

**Crystal Lake (Main Basin)--- Water Quality Data**

Date	Max. Depth (M)	Secchi Disc (M)	Sample Depth (M)	Chl. A (ug/L)	Turbidity (NTU's)	D.O. (mg/L)	Temp. (Celsius)	Specific Cond. (umho/cm @ 25 C)	Total P (mg/L)	pH (Std. Units)		
09/10/02	8.5	1.0	0-2	52.0	9.0	--	--	--	0.048	8.8		
			0.0			8.6	24.6	392			--	--
			1.0			8.5	24.6	393			--	--
			2.0			7.3	24.3	395			--	--
			3.0			2.9	23.9	400			0.044	8.7
			4.0			1.3	23.3	401			0.043	8.4
			5.0			0.0	21.2	429			0.035	8.3
			6.0			0.0	19.1	452			0.026	8.0
			7.0			0.0	17.6	476			0.035	7.9
			8.0			0.0	15.2	510			0.101	7.7
09/24/02	8.5	0.8	0-2	24.0	5.8	--	--	--	0.068	7.3		
			0.0			4.8	17.7	411			--	--
			1.0			3.4	17.7	411			--	--
			2.0			2.9	17.7	412			--	--
			3.0			2.7	17.7	412			0.074	7.8
			4.0			2.6	17.7	412			0.076	7.7
			5.0			3.6	17.7	411			0.074	7.7
			6.0			4.2	17.5	414			0.075	7.6
			7.0			4.2	17.3	420			0.071	7.7
			8.0			1.0	17.0	451			0.091	7.6

2002 Water Quality Data

**Bluebill Bay-- Water Quality Data**

Date	Max. Depth (M)	Secchi		Sample Depth (M)	Chl. A (ug/L)	Turbidity (NTU's)	D.O. (mg/L)	Temp. (Celsius)	Specific Cond. (umho/cm @ 25 C)	Total P (mg/L)	pH (Std. Units)						
		Disc (M)	Depth (M)														
05/01/02	3.0	2.3	0-2	0.9	2.5	--	--	--	--	0.017	--						
												0.0	14.1	11.0	443	--	8.9
												1.0	14.3	11.0	443	--	--
												2.0	15.0	10.7	443	--	--
												2.5	15.5	9.4	435	0.019	9.0
5/20/02	3.0	1.4	0-2	1.1	2.3	--	--	--	--	0.018	--						
												0.0	12.6	16.6	392	--	9.9
												1.0	12.6	16.1	392	--	--
												2.0	11.5	14.3	398	--	--
												2.5	4.4	11.8	455	0.032	9.9
6/6/02	3.0	1.7	0-2	2.7	2.3	--	--	--	--	0.036	--						
												0.0	7.3	19.7	403	--	8.5
												1.0	7.3	19.7	403	--	--
												2.0	7.0	17.9	411	--	--
												2.5	1.3	15.0	445	0.038	8.5
6/24/02	3.0	1.4	0-2	24.0	5.5	--	--	--	--	0.039	--						
												0.0	7.0	24.2	424	--	8.0
												1.0	7.0	24.3	424	--	--
												2.0	6.2	24.2	426	--	--
												2.5	4.1	23.8	424	0.041	8.1
7/10/02	3.0	0.9	0-2	36.0	8.0	--	--	--	--	0.076	--						
												0.0	5.3	26.5	445	--	7.6
												1.0	5.3	26.6	445	--	--
												2.0	5.2	26.7	459	--	--
												2.5	5.2	26.7	460	0.091	7.5

secchi disc reading taken at top of weed bed.

2002 Water Quality Data

**Bluebill Bay-- Water Quality Data**

Date	Max. Depth (M)	Secchi Disc (M)	Sample Depth (M)	Chl. A (ug/L)	Turbidity (NTU's)	D.O. (mg/L)	Temp. (Celsius)	Specific Cond. (umho/cm @ 25 C)	Total P (mg/L)	pH (Std. Units)
07/24/02	3.0	1.2	0-2	18.0	3.8	--	--	--	0.051	--
			0.0			5.0	25.7	448	--	7.9
			1.0			5.1	25.7	446	--	--
			2.0			5.0	25.7	446	--	--
			2.5			5.0	25.8	446	0.055	7.6
8/6/02	3.0	1.0	0-2	25.0	7.5	--	--	--	0.046	--
			0.0			8.6	24.1	422	--	8.1
			1.0			8.2	23.8	421	--	--
			2.0			7.6	23.7	421	--	--
			2.5			7.6	23.6	421	0.048	8.2
8/20/02	3.0	1.2	0-2	31.0	5.5	--	--	--	0.039	--
			0.0			9.6	23.0	426	--	8.3
			1.0			7.8	22.7	430	--	--
			2.0			5.4	21.6	431	--	--
			2.5			5.4	21.6	431	0.040	8.2
9/10/02	3.0	1.0	0-2	36.0	9.2	--	--	--	0.042	--
			0.0			8.1	24.7	388	--	8.8
			1.0			8.1	25.0	388	--	--
			2.0			7.8	25.0	388	--	--
			2.5			7.8	25.0	388	0.046	8.7
9/24/02	3.0	1.3	0-2	29.0	4.4	--	--	--	0.039	--
			0.0			7.2	16.2	406	--	7.9
			1.0			7.2	16.3	406	--	--
			2.0			6.0	15.8	412	--	--
			2.5			5.9	15.7	412	0.044	8.0

secchi disc reading taken at top of weed bed.

2002 Water Quality Data

**Buckhill Bay--- Water Quality Data**

Date	Max. Depth (M)	Secchi		Sample Depth (M)	Chl. A (ug/L)	Turbidity (NTU's)	D.O. (mg/L)	Temp. (Celsius)	Specific Cond. (umho/cm @ 25 C)	Total P (mg/L)	pH (Std. Units)
		Disc (M)	Sample								
05/01/02	2.4	2.1		0-2	0.5	3.0	--	--	--	0.018	--
				0.0			12.6	10.4	460	--	8.5
				1.0			12.5	10.4	461	--	--
				2.0			11.6	9.9	455	0.021	8.6
05/20/02	2.1	2.1		0-1.5	1.1	1.5	--	--	--	0.016	--
				0.0			12.2	14.8	430	--	9.1
				1.0			13.4	14.6	427	--	--
				1.5			13.4	14.4	426	0.015	9.1
06/06/02	2.4	2.3		0-2	0.7	2.0	--	--	--	0.017	--
				0.0			11.6	19.3	406	--	9.2
				1.0			10.0	18.9	410	--	--
				2.0			4.7	17.9	429	0.017	9.3
06/24/02	2.4	2.1		0-2	24.0	5.0	--	--	--	0.052	--
				0.0			8.0	24.8	424	--	8.6
				1.0			8.0	24.8	424	--	--
				2.0			4.7	22.8	418	0.061	8.6
07/10/02	2.4	1.0		0-2	51.0	7.0	--	--	--	0.051	--
				0.0			6.6	26.0	438	--	8.0
				1.0			6.6	26.2	438	--	--
				2.0			6.2	26.3	438	0.054	8.0

secchi disc on the bottom.

secchi disc reading taken at top of weed bed.

2002 Water Quality Data

**Buckhill Bay--- Water Quality Data**

Date	Max. Depth (M)	Secchi	Sample	Chl. A (ug/L)	Turbidity (NTU's)	D.O. (mg/L)	Temp. (Celsius)	Specific Cond. (umho/cm @ 25 C)	Total P (mg/L)	pH (Std. Units)
		Disc (M)	Depth (M)							
07/24/02	2.4	1.2	0-2	6.9	4.0	--	--	--	0.030	--
			0.0			4.6	25.4	445	--	7.7
			1.0			4.6	25.5	445	--	--
			2.0			2.8	25.3	452	0.031	7.3
08/06/02	2.4	1.1	0-2	20.0	5.0	--	--	--	0.047	--
			0.0			7.0	23.8	444	--	7.7
			1.0			6.5	23.5	440	--	--
			2.0			5.9	23.4	441	0.043	7.7
08/20/02	2.4	1.4	0-2	27.0	5.0	--	--	--	0.038	--
			0.0			9.8	22.1	432	--	8.1
			1.0			9.4	21.9	431	--	--
			2.0			8.9	21.7	431	0.039	8.3
09/10/02	2.4	1.1	0-2	36.0	6.4	--	--	--	0.039	--
			0.0			7.0	24.2	397	--	8.3
			1.0			7.0	24.3	397	--	--
			2.0			0.1	23.7	409	0.040	8.3
09/24/02	2.4	2.0	0-2	10.0	2.4	--	--	--	0.028	--
			0.0			5.4	16.6	408	--	7.7
			1.0			5.0	16.6	408	--	--
			2.0			5.0	16.6	408	0.030	7.8

secchi disc reading at top of weed bed

2002 Water Quality Data

**Maple Island Bay--- Water Quality Data**

Date	Max. Depth (M)	Secchi	Sample	Chl. A (ug/L)	Turbidity (NTU's)	D.O. (mg/L)	Temp. (Celsius)	Specific Cond. (umho/cm @ 25 C)	Total P (mg/L)	pH (Std. Units)
		Disc (M)	Depth (M)							
05/01/02	1.8	1.5	0-2	2.0	4.5	--	--	--	0.027	--
			0.0			13.0	11.7	512	--	8.3
			1.0			13.5	11.5	513	--	--
			1.5			13.5	10.8	507	0.029	8.4
05/20/02	1.8	1.2	0-2	2.7	5.5	--	--	--	0.040	--
			0.0			9.0	18.0	517	--	8.1
			1.0			8.3	15.9	519	--	--
			1.5			7.9	15.5	523	0.049	8.4
06/06/02	1.8	1.0	0-2	5.9	4.5	--	--	--	0.050	--
			0.0			7.0	19.5	507	--	7.9
			1.0			7.0	19.0	494	--	--
			1.5			1.0	17.8	509	0.050	7.9
06/24/02	1.8	1.5	0-2	88.0	6.0	--	--	--	0.062	--
			0.0			9.4	24.4	451	--	8.4
			1.0			7.6	24.0	454	--	--
			1.5			4.3	23.1	460	0.082	8.5
07/10/02	1.8	0.8	0-2	66.0	10.0	--	--	--	0.128	--
			0.0			5.2	26.5	483	--	7.6
			1.0			5.2	26.6	484	--	--
			1.5			5.1	26.7	484	0.137	7.6

**Maple Island Bay--- Water Quality Data**

Date	Max. Depth (M)	Secchi		Sample Depth (M)	Chl. A (ug/L)	Turbidity (NTU's)	D.O. (mg/L)	Temp. (Celsius)	Specific Cond. (umho/cm @ 25 C)	Total P (mg/L)	pH (Std. Units)
		Disc (M)	Sample								
07/24/02	1.8	0.8	0-2	34.0	8.0	--	--	--	0.116	--	
			0.0			3.6	25.3	482	--	7.6	
			1.0			3.5	25.4	482	--	--	
			1.5			3.2	25.4	482	0.113	7.7	
08/06/02	1.8	0.6	0-2	35.0	12.0	--	--	--	0.111	--	
			0.0			9.4	23.9	443	--	7.7	
			1.0			9.6	23.4	444	--	--	
			1.5			9.0	23.3	447	0.104	7.7	
08/20/02	1.8	1.1	0-2	18.0	6.0	--	--	--	0.064	--	
			0.0			8.3	22.7	456	--	7.7	
			1.0			5.9	21.5	456	--	--	
			1.5			4.8	21.3	456	0.070	7.7	
09/10/02	1.8	1.0	0-2	29.0	8.0	--	--	--	0.101	--	
			0.0			5.8	24.5	434	--	7.8	
			1.0			1.8	24.0	440	--	--	
			1.5			0.1	23.3	448	0.104	7.8	
09/24/02	1.8	1.0	0-2	29.0	6.0	--	--	--	0.081	--	
			0.0			5.5	15.3	445	--	7.5	
			1.0			5.6	15.1	446	--	--	
			1.5			5.2	15.0	448	0.075	7.6	

2002 Water Quality Data

**Mystic Bay-- Water Quality Data**

Date	Max. Depth (M)	Secchi Disc (M)	Sample Depth (M)	Chl. A (ug/L)	Turbidity (NTU's)	D.O. (mg/L)	Temp. (Celsius)	Specific Cond. (umho/cm @ 25 C)	Total P (mg/L)	pH (Std. Units)
05/01/02	1.8	1.8	0-1.5	1.1	2.6	--	--	--	0.022	--
			0.0			14.8	11.5	476	--	8.8
			1.0			15.0	11.1	470	--	--
			1.5			15.0	11.1	470	0.024	8.9
5/20/02	2.1	2.0	0-1.5	2.7	3.0	--	--	--	0.021	--
			0.0			13.5	17.4	447	--	9.6
			1.0			15.8	16.0	438	--	--
			1.5			17.5	15.9	428	0.023	9.7
6/6/02	2.1	1.3	0-1.5	1.1	2.3	--	--	--	0.039	--
			0.0			7.2	19.2	502	--	8.3
			1.0			6.4	18.8	480	--	--
			1.5			7.3	17.8	481	0.039	8.3
6/24/02	2.1	1.4	0-1.5	29.0	5.5	--	--	--	0.069	--
			0.0			7.3	23.8	422	--	8.1
			1.0			7.0	23.9	427	--	--
			1.5			1.9	23.5	459	0.107	8.2
7/10/02	2.1	1.6	0-1.5	140.0	15.0	--	--	--	0.103	--
			0.0			4.3	25.7	467	--	7.4
			1.0			3.2	25.8	465	--	--
			1.5			2.8	25.8	466	0.136	7.4

secchi disc on the bottom.

secchi disc reading taken at top of weed bed.

2002 Water Quality Data

**Mystic Bay-- Water Quality Data**

Date	Max. Depth (M)	Secchi Disc (M)	Sample Depth (M)	Chl. A (ug/L)	Turbidity (NTU's)	D.O. (mg/L)	Temp. (Celsius)	Specific Cond. (umho/cm @ 25 C)	Total P (mg/L)	pH (Std. Units)
07/24/02	2.1	1.5	0-1.5	8.0	2.8	--	--	--	0.044	--
			0.0			3.3	24.7	485	--	7.7
			1.0			3.3	24.8	485	--	--
			1.5			3.0	24.8	485	0.045	7.7
8/6/02	2.1	1.1	0-1.5	22.0	5.5	--	--	--	0.055	--
			0.0			6.1	22.8	386	--	7.6
			1.0			6.0	22.8	387	--	--
			1.5			3.7	22.5	374	0.059	7.6
8/20/02	2.1	1.8	0-1.5	6.0	2.4	--	--	--	0.037	--
			0.0			13.0	22.6	370	--	8.3
			1.0			11.8	21.6	390	--	--
			1.5			2.8	20.7	370	0.035	8.3
9/10/02	2.1	1.1	0-1.5	20.0	5.8	--	--	--	0.053	--
			0.0			6.9	23.9	368	--	8.1
			1.0			6.9	23.9	362	--	--
			1.5			0.4	22.6	390	0.053	8.2
9/24/02	2.1	1.4	0-1.5	4.7	1.1	--	--	--	0.036	--
			0.0			7.0	14.6	438	--	7.5
			1.0			7.4	14.5	442	--	--
			1.5			8.0	14.5	442	0.027	7.6

secchi disc on the bottom.

secchi disc reading taken at top of weed bed.

2002 Water Quality Data

**Keller Lake Water Quality Data**

Date	Max. Depth (M)	Secchi Disc (M)	Sample Depth (M)	Chl. A (ug/L)	Turbidity (NTU's)	D.O. (mg/L)	Temp. (Celsius)	Specific Cond. (umho/cm @ 25 C)	Total P (mg/L)	pH (Std. Units)
05/01/02	2.1	1.5	0-1.5	2.1	3.0	--	--	--	0.059	9.5
			0.0			12.0	10.6	527	--	--
			1.0			11.8	10.6	527	--	--
			1.5			11.4	10.0	529	0.061	9.5
05/20/02	2.1	1.8	0-1.5	6.9	2.3	--	--	--	0.029	10.7
			0.0			12.0	15.3	528	--	--
			1.0			11.3	14.8	522	--	--
			1.5			10.5	14.5	519	0.039	10.7
06/06/02	2.1	1.3	0-1.5	9.6	5.0	--	--	--	0.065	10.1
			0.0			9.6	19.2	479	--	--
			1.0			11.7	17.7	409	--	--
			1.5			9.2	17.0	376	0.092	10.2
06/24/02	2.4	1.1	0-2	36.0	6.0	--	--	--	0.084	10.1
			0.0			9.9	24.8	357	--	--
			1.0			10.0	24.6	352	--	--
			2.0			1.8	20.6	228	0.084	10.1
07/10/02	2.1	1.6	0-1.5	5.3	2.0	--	--	--	0.041	9.0
			0.0			4.2	26.5	325	--	--
			1.0			4.1	26.7	325	--	--
			1.5			1.3	25.5	320	0.040	9.0

2002 Water Quality Data

**Keller Lake Water Quality Data**

Date	Max. Depth (M)	Secchi	Sample	Chl. A (ug/L)	Turbidity (NTU's)	D.O. (mg/L)	Temp. (Celsius)	Specific Cond. (umho/cm @ 25 C)	Total P (mg/L)	pH (Std. Units)
		Disc (M)	Depth (M)							
07/24/02	2.1	1.6	0-1.5	11.0	5.0	--	--	--	0.065	7.6
			0.0			3.5	25.6	287	--	--
			1.0			3.4	25.6	287	--	--
			1.5			3.5	25.6	286	0.079	7.6
08/06/02	2.1	0.9	0-1.5	29.0	6.5	--	--	--	0.085	7.3
			0.0			7.5	23.7	222	--	--
			1.0			6.7	23.7	220	--	--
			1.5			5.6	23.6	218	0.092	7.3
08/20/02	2.1	0.8	0-1.5	25.0	8.0	--	--	--	0.074	9.4
			0.0			12.3	22.6	197	--	--
			1.0			9.9	21.5	194	--	--
			1.5			5.3	21.1	194	0.076	9.4
09/10/02	2.1	0.7	0-2	29.0	9.0	--	--	--	0.076	9.3
			0.0			14.6	24.6	152	--	--
			1.0			14.4	24.7	152	--	--
			1.5			14.4	24.7	152	0.076	9.3
09/24/02	2.1	0.6	0-1.5	62.0	17.0	--	--	--	0.080	7.0
			0.0			8.0	15.2	149	--	--
			1.0			7.8	15.1	149	--	--
			1.5			7.5	14.9	149	0.092	7.0