

APPENDIX 8-B SUNWATER GLEBE WEIR WATER QUALITY DATA

**Glebe Weir WQ Data 2001-2008**

Site - 130338A HW

Date	pH	Cond (µS/cm)	DO (mg/L)	Temp (Degrees C)	Depth (m)	TN (mg/L)	TP (mg/L)	Turb (NTU)	Comment	SS (mg/L)	Chl a (µg/L)
May-08	7.6	241	7.5	17	averaged over 6m				No stratification		
Apr-08	8.1	230	8.5 8.3 4.8 3.1 2.3 2.1 2.1	22	surface 1m 2 3 4 5 6m			132	DO stratification with very low DO below 3m		
Mar-08	7.5	208		24	averaged over 7m	1.2	0.20	160	No stratification		
Feb-08	7.4	188		25	averaged over 5m	1.0	0.40		No stratification		
Jan-08	7.7	125	5.1	26	surface	1.4	0.48	478			
Dec-07	7.8	85	5.9	24	surface	1.0	0.28	863			
Nov-07	7.6	245	6.8	30	surface	0.8	0.37	506			
Oct-07	7.8	268	8.9	28	surface	0.8	0.17	328	Blue green algae present.		
Sep-07	7.3	248	9.2	19	surface	0.5	0.14	111	Blue green algae present.		

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Aug-07	8.7	171	10.1	16	surface	0.5	0.25	355	Blue green algae present. Possible supersaturation
Jul-07	8.1	162	10.6	12	surface	0.9	0.26	438	Blue green algae present. Possible supersaturation
Jun-07	8.1	155	12.4	14	surface	1.0	0.31	565	Blue green algae present. Possible supersaturation
May-07	8.1	171	8.1	23	surface	1.5	0.55	359	Blue green algae present.
Apr-07	7.5	135	2.5	24	surface	1.7	0.56	850	No stratification. Very low DO for full depth of water column
			2.2		1m				
			2		2				
			2		3				
			2.1		4				
			2.1		5				
			2.1		6m				
Mar-07	7.3	155	2.5	26	surface	1.5	0.61	1150	No stratification. Very low DO for full depth of water column
			1.7		1m				
			1.6		2				
			1.5		3				
			1.7		4				
			1.9		5				
			1.9		6m				
Feb-07	7.8	158	6.5	29	surface	1.6	0.82		
Jan-07	8.7	318	8.3	28	surface	1.2	0.27	125	

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Dec-06	7.9	200	8.3	26	surface	1.8	0.93	1236	
Nov-06	7.8	186	5.8	30	surface	1.1	0.31	938	
Oct-06	8.8	352	9.8	22	surface	1.4	0.33	217	
Sep-06	8.2	282	9.9	25	surface	1.0	0.21	249	
Aug-06	7.7	181	9.3	15	surface	0.3	0.09	400	DO reduction with depth
			8.5		1m				
			6.9		2				
			6.5		3				
			6.4		4m				
Jul-06	7.5	437	15.5	15	surface	0.9	0.24	415	Potential supersaturation
			14.8		1m				
			14.7		2				
			14.6		3m				
Jun-06	7.3	428	8.6	14	surface	0.8	0.27	420	DO reduction with depth
			7.7		1m				
			7.6		2				
			7.3		3				
			7.1		4				
			7		5m				
May-06	7.4	344	9.1	18	surface	1.2	0.32	475	DO reduction with depth
			7.7		1m				
			7.3		2				
			7		3				
			7		4m				

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Apr-06	7.2	311	4.8 3.2 3.2 3.1 3	22	surface 1m 2 3 4m	0.6	0.24	520	Low DO for full depth of water column. DO reduction with depth
Mar-06	6.6	276	4.6 2.8 2.7 2.9 2.2 0.32 1.5	24	surface 1m 2 3 4 5 6m	1.4	0.38	570	Very low DO for full depth of water column. DO reduction with depth
Feb-06	7.9	216	3.1 1.4 1.2 0.4 0.2 0.2	27	surface 1m 2 3 4 5	1.0	0.33	250	Very low DO for full depth of water column

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			0.1		6m					
Jan-06	7.8	194	8.2	27	surface	1.2	0.47	440	Very strong DO stratification in two layers.	
			5.7		1m					
			5.5		2					
			5.3		3					
			5.2		4					
			1		5					
			0.25		6m					
Dec-05	7.7	180	1.6	28	surface	1.3	0.35	850	Very low DO for full depth of water column	
			0.9		1m					
			0.8		2					
			1		3					
			0.5		4					
			0.3		5m					
Nov-05	7.4	210	5.5	24	surface	1.5	0.30	400	Strong DO stratification. Very low DO for almost full depth of water column	
			3.6		1m					
			3		2					
			2.1		3					
			1.7		4					
			0.8		5					
			0.4		6m					
Oct-05	8.4	150	3.4	22	surface	2.0	0.89	728	Very low surface DO	

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Sep-05	7.8	282	8.8	18	surface	0.9	0.32	1206	
Aug-05	7.9	233	7.9	17	surface	0.9	0.15	425	DO reduction with depth
			7.5		1m				
			7.3		2				
			6.9		3				
			6.5		4m				
Jul-05	8	219	9.2	15	surface	0.9	0.15	270	DO reduction with depth
			8.3		1m				
			8.1		2				
			7.9		3				
			7.7		4m				
Jun-05	7.9	226	7.3	16	surface	0.9	0.19	310	DO reduction with depth
			6.3		1m				
			6		2				
			5.5		3				
			5.3		4				
			4.7		5m				
May-05	8	233	7.7	17	surface	0.8	0.24	288	DO reduction with depth
			6.8		1m				
			6.7		2				
			6.6		3m				
Apr-05	7.9	257	3.7	22	surface	1.0	0.27	290	Low DO for full depth of water column
			3.5		1m				
			3.5		2				
			3.3		3				

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			2.4		4								
			2.3		5m								
Mar-05	7.9	244	11.1	25	surface	1.2	0.31	330	Potential supersaturation at surface. Low DO for rest of water column				
			4.4		1m								
			4.4		2								
			4.4		3								
			4.4		4								
			4.4		5m								
Feb-05	7.5	195	7.5	25	surface	1.1	0.36		Strong DO stratification. Very low DO for almost full depth of water column				
			3.2		1m								
			3.2		2								
			2.7		3								
			1.7		4								
			0.35		5m								
Jan-05	7.4	184	5.2	26	surface	1.3	0.49						
Dec-04	7	140	5	30	surface	1.3	0.41	447					
Nov-04	7.4	126	2.7	26	surface	1.6	0.85	860	Very low surface DO				
Oct-04	8.8	391	6.2	21	surface	1.5	0.19	121					
Sep-04	7.1	411	4.4	19	surface	1.6	0.38	511			280	24	
Jun-04	8.2	8	9.4	21	surface	1.0	0.20	4	Surface measurements questionable?		340		
	9	157	5.5	14	1m			514					

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	8.1	156	5	14	2			531			
	7.9	157	4.9	14	3			538			
	7.8	156	4.8	14	4			502			
	7.7	157	4.8	14	5			591			
	7.6	157	4.6	14	6m			584			
Mar-04	7.3	156	8.6	24	surface	1.7	0.47	770	Significant stratification in DO and turbidity. Very low DO	610	2
			3	26	1m			784			
			2.9	26	2			783			
			2.9	26	3			812			
			1.5	27	4			1291			
			1.2	27	5			1290			
			1.2	27	6m			1289			
Dec-03	8.3	329	15.8	31	surface	1.6	0.33	196	Potential supersaturation	120	22
Sep-03	8.8	238	7.2	20	surface	1.3	0.42	628		3	
Jun-03	7.7	146	7.8	16	surface	1.7	0.33	880	DO reduction with depth	420	1
			6.2		1m						
			6		2						
			5.9		3						
			5.8		4						
			5.6		5						
			5.4		6m						
Mar-03	7.1	168		25	surface	1.0	0.11			62	
Dec-02	8.3	275	3.7	30	surface	4.2	0.90	1400	Very low surface DO	1400	7
Sep-02	7.9	224	8.3	23	surface	1.5	0.35	535		250	0
	7.1		6.3	19	1m						



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	7.0		6.0	19	1.5m							
Jun-02	6.8	12	14.2	17	surface	1.0	0.33	115	Potential supersaturation at surface. Questionable surface measurements?	270	1	
	8.0	145	8.3	18	0.3m			798				
	7.9	142	7.5	17	1			726				
	7.8	142	7.3	17	2			693				
	7.8	142	7.1	16	4			722				
	7.7	143	6.6	16	5			705				
	7.7	144	6.4	16	5.5m			721				
Mar-02	8.5	105	4.5	26	surface	1.1	0.25	600	Very low DO	291	0	
	8.0	105	4.3	25	1m							
	7.7	104	3.9	25	2							
	7.6	104	3.8	25	3							
	7.5	101	3.0	25	4							
	6.9	241	0.4	25	4.7m							
Dec-01	7	0	8.5	28	surface	1.2	0.32	2	Significant stratification in DO. Very low DO below 2m.	580	3	
	7.7	159	3.7	27	1m			1058				
	7.7	159	3.5	27	2			1035				
	7.4	157	1.1	27	3			769				
	7.3	156	0.7	25	4			767				
	7.2	156	0.5	24	5			861				
	7.2	157	0.5	24	5.5m	1.9	0.41	1582		460	20	
Sep-01	8.9	231	8.4	22				5				
	8	229	6.3	20				60				

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	7.9	229	5.7	20				100			
	7.8	229	5.8	20				308			
<b>Number</b>	85	83	192	91		55	55	78	Sample size for SS and Chl a is very small	13	10
<b>Minimum</b>	6.6	0	0.1	12		0.3	0.09	2		3	0
<b>Maximum</b>	9.0	437	15.8	31		4.2	0.93	1582		1400	24
<b>Median</b>	7.8	180	5.0	24		1.2	0.32	526	Median DO is not as relevant as supersaturation and low DOs	291	2

**Glebe Weir WQ Data 2001-2008**  
**Site - 130345A TW (Tail Water)**

Date	pH	Cond (µS/cm)	DO (mg/L)	Temp (Degrees C)	Depth (m)	TN (mg/L)	TP (mg/L)	Turb (NTU)	Comment	SS (mg/L)	Chl a (µg/L)
May-08	7.7	242	8.0	17	surface				Possible supersaturation		
Apr-08	8.2	241	12.8	26	surface			134			
Mar-08	7.9	219		25	surface	0.7	0.21	155			
Feb-08	7.9	190		26	surface	1.0	0.32				
Jan-08	7.7	120	7.7	26	surface	1.2	0.49	541			
Dec-07	6.9	77	7.8	24	surface	0.9	0.35	1077			
Nov-07	7.5	247	8.1	26	surface	0.8	0.35	514			
Oct-07	8	233	6.7	25	surface	0.5	0.10	44			
Sep-07	7.3	248	9.2	19	surface	0.5	0.14	111			
Sep-04	7.6	325	4.9	19	surface	1.2	0.14	215		120	4
Jun-04	8.2	161	5.7	11	surface	1.2	0.24	428		300	1
Mar-04	7.3	155	6.7	26	surface	1.2	0.43	1293		540	4
Sep-03	8	225	6.7	19	surface	0.9	0.30	500		170	
Jun-03	8.2	146	8.7	15	surface	1.7	0.34	907		350	1
Mar-03	7.3	169		26	surface	0.5	0.06			72	1
Sep-02	7.3	224	6.3	20	surface	1.1	0.32	500		270	1
Jun-02					surface	1.1	0.31			290	6
Mar-02	7.1	103	8.7	25	surface	1.0	0.24	605		293	0
Dec-01	7.9	159	7.8	27	surface	1.2	0.32	1060		700	3
<b>Number</b>	18	18	15	18		17	17	15	Sample size is small	10	9
<b>Minimum</b>	6.9	77	4.9	11		0.5	0.06	44		72	0
<b>Maximum</b>	8.2	325	12.8	27		1.7	0.49	1293		700	6
<b>Median</b>	7.7	205	7.8	25		1.0	0.31	500		292	1

## Glebe Weir WQ Data 2007-2008

### Site - Inflow

Date	pH	Cond ( $\mu$ S/cm)	DO (mg/L)	Temp (Degrees C)	Depth (m)	TN (mg/L)	TP (mg/L)	Turb (NTU)	Comment
May-08	7.9	449	9.2	15	surface				
Apr-08	8.1	345	8.9	22	surface			38	
Mar-08	8.4	246		24	surface	1.0	0.17	125	
Feb-08	7.9			24	surface	0.6	0.27		
Jan-08	7.6	117	5.2	26	surface	1.2	0.39	561	
Dec-07	7.2	111	5.4	24	surface	0.8	0.33	745	
Nov-07	7.3	396	6.9	25	surface	0.6	0.29	292	
Oct-07	7.4	393	5.0	19	surface	0.3	0.08	52	
<b>Number</b>	8	7	6	8		6	6	6	Sample size is very small
<b>Minimum</b>	7.2	111	5.0	15		0.28	0.08	38	
<b>Maximum</b>	8.4	449	9.2	26		1.20	0.39	745	
<b>Median</b>	7.8	345	6.2	24		0.71	0.28	209	