

Verso Paper/NewPage Corporation
2006 Gulf Island Pond Water Quality Study
Dissolved Oxygen and Temperature Profiles

Week 9 AM: 8/1/2006

River Flow (Jay, Maine): 4,248 cfs

Weather: Fog, rain early AM; cloudy mid-late AM

Air Temperature: 70 deg. F (21 deg. C)

Comments: Diffuser not running at full capacity. Pond very calm. Bubbles rising to surface
 Algae particles at very low density in column at Deep Hole, GIP 4. Algae particles at low density on surface at Upper Narrows.

AM Meter Verification: Before Sampling

Model	Use	Time	DO(mg/L)	Temp. (°C)	Calibrated
YSI 85	Primary	5:20	7.1	23.8	Y
YSI 55	Comparison	5:20	7.2	23.7	Y

Depth (m)	Twin Bridges		Turner Bridge		Upper Narrows	
	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)
0	7.1	23.7	5.8	23.7	6.1	26.1
1			5.8	23.7	6.2	26.0
2			6.0	23.7	6.1	25.1
3			6.0	23.7	6.1	24.7
4			6.1	23.7	6.2	24.5
5			6.0	23.7	6.1	24.4
6			6.0	23.7	5.9	24.4
7			6.0	23.7	5.9	24.3
8			6.0	23.7	5.6	24.3
9			6.0	23.6	3.9	24.3
10			5.9	23.6	3.5	24.3
11			5.9	23.6		
12						
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14						
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2006 Gulf Island Pond Water Quality Study
Dissolved Oxygen and Temperature Profiles

Week 9 PM: 8/1/2006

River Flow (Jay, Maine): 4,248 cfs

Weather: P. sunny, hazy, humid

Air Temperature: 85 deg. F (29 deg. C)

Comments: Diffuser running at medium capacity. Pond very calm. Bubbles rising to surface
 Algae Particles at very low density in column at Deep Hole, GIP 4. Algae Particles at low den

PM Meter Verification (Before Sampling)

Model	Use	Time	DO(mg/L)	Temp. (°C)	Calibrated
YSI 85	Primary	10:57	7.1	25.0	Y
YSI 55	Comparison	10:57	6.9	25.0	Y

Depth (m)	Twin Bridges		Turner Bridge		Dup-Turner Bridge	
	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)
0	7.0	24.4	6.2	24.8	6.2	24.7
1			6.1	24.5	6.1	24.5
2			6.1	24.4	6.2	24.3
3			6.1	24.3	6.1	24.3
4			6.1	24.3	6.2	24.3
5			6.0	24.3	6.2	24.2
6			6.0	24.2	6.1	24.2
7			6.0	24.2	6.0	24.2
8			5.8	24.2	6.0	24.2
9			6.0	24.2	5.9	24.2
10			5.9	24.2	5.8	24.2
11			5.8	24.2	5.7	24.2
12						
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all over pond. Slight green tint in top meter of water column at all sites.
 asity in column at Upper Narrows. Algae particles at medium-low density in column and :

AM Meter Verification: After Sampling

Model	Use	Time	DO(mg/L)	Temp. (°C)	Calibrated
YSI 85	Primary	8:45	6.8	23.7	Y
YSI 55	Comparison	8:45	6.9	23.5	Y

Lower Narrows		GIP 4		Deep Hole	
DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)
6.0	26.2	6.0	26.2	6.2	25.7
5.6	26.2	5.8	26.2	6.0	25.7
5.6	26.2	5.9	26.1	5.6	25.7
5.6	26.0	5.2	25.5	5.4	25.5
5.6	25.7	5.3	25.4	5.2	25.4
5.5	25.4	5.3	25.3	5.2	25.4
5.8	25.0	5.4	25.2	5.2	25.3
6.0	24.8	5.3	25.0	5.3	25.2
6.0	24.5	5.4	24.8	5.0	25.1
6.0	24.4	5.5	24.6	4.9	25.1
6.0	24.3	5.4	24.5	5.1	25.0
5.9	24.3	5.3	24.4	5.0	25.0
5.8	24.3	5.4	24.4	5.0	24.9
5.8	24.3	5.4	24.4	5.1	24.8
5.8	24.3	5.3	24.3	5.2	24.7
5.8	24.2	5.4	24.3	5.2	24.7
5.5	24.2	5.3	24.3	5.2	24.7
0.1	24.2	0.1	24.2	5.2	24.7
				5.2	24.6
				5.3	24.5
				5.2	24.3
				5.0	24.3
				4.8	24.2
				0.1	19.8

0.1	19.0
0.1	18.8

are all over pond. Slight green tint in top meter of water column at all sites. Turbidity in column at Upper Narrows. Algae Particles at medium-low density in column and :

PM Meter Verification (After Sampling)

Model	Use	Time	DO(mg/L)	Temp. (°C)	Calibrated
YSI 85	Primary	17:00	8.3	24.2	Y
YSI 55	Comparison	17:00	8.5	24.0	Y

Upper Narrows		Lower Narrows		GIP 4		Deep Hole	
DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)
7.3	27.4	6.9	27.6	6.6	27.7	7.2	28.0
6.8	27.3	6.3	26.8	6.6	26.5	6.8	26.5
6.3	25.5	5.8	26.3	6.0	26.2	5.9	26.0
6.3	24.7	5.9	26.1	5.5	25.7	5.5	25.8
6.2	24.6	5.9	25.7	5.5	25.5	5.5	25.5
6.1	24.4	6.2	25.2	5.5	25.4	5.4	25.3
6.1	24.3	6.1	25.0	5.2	25.1	5.3	25.3
5.9	24.3	6.2	24.8	5.6	25.0	5.3	25.2
0.1	24.3	6.2	24.7	5.6	24.8	5.5	24.8
0.0	24.3	6.0	24.6	5.7	24.7	5.8	24.7
		5.7	24.5	5.6	24.5	5.6	24.6
		5.9	24.5	5.6	24.4	5.6	24.6
		6.0	24.4	5.4	24.4	5.7	24.6
		6.0	24.4	5.4	24.4	5.6	24.6
		6.0	24.4	5.3	24.4	5.5	24.6
		5.9	24.4	5.2	24.4	5.5	24.6
		5.8	24.4	5.0	24.3	5.5	24.6
		4.9	24.4	0.1	24.3	5.5	24.6
						5.8	24.5
						5.6	24.4
						5.5	24.4

5.4	24.4
5.5	24.4
4.5	23.9
0.1	19.4
0.1	18.8

