

**2007 Gulf Island Pond Water Quality Study
Dissolved Oxygen and Temperature Profiles**

Week 12 AM: 08/21/2007

River Flow (Jay, Maine): 2,201 cfs

Weather: Thick fog early AM; sun and NW breeze late AM

Air Temperature: 50 deg. F (10 deg. C)

Comments: Bryozoan colony noted on buoy rope at Deep Hole. Diffuser running full strength.

AM Meter Verification: Before Sampling					
Model	Use	Time	DO(mg/L)	Temp. (°C)	Calibrated
YSI 550A	Primary	5:30	6.0	19.1	y
YSI 51B	Comparison	5:30	6.0	19.0	alt. adjusted
YSI 55	Comparison	5:30	6.0	19.1	y - 2x

Model
YSI 550A
YSI 51B
YSI 55

Depth (m)	Twin Bridges		Turner Bridge		Upper Narrows		Lower Narrows
	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)
0	6.0	19.0	6.8	20.3	6.8	21.2	6.6
1			6.8	20.4	6.9	21.2	6.4
2			6.9	20.4	6.5	21.2	6.3
3			7.0	20.4	6.5	21.2	6.3
4			6.9	20.4	6.8	21.0	6.3
5			7.0	20.4	6.8	21.0	6.3
6			6.8	20.4	6.8	21.0	6.5
7			6.6	20.4	6.5	21.0	6.4
8			6.6	20.4	6.5	21.0	6.5
9			6.2	20.4			6.5
10			6.2	20.4			6.7
11			6.1	20.4			6.6
12			6.2	20.4			6.6
13							6.5
14							6.4
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25			6.6	20.4	6.7	21.1	6.5

**2007 Gulf Island Pond Water Quality Study
Dissolved Oxygen and Temperature Profiles**

Week 12 PM: 08/21/07

River Flow (Jay, Maine): 2,201 cfs

Weather: Sunny with a slight breeze

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

Comments: Wind changed from a NW breeze to a SW breeze. Diffuser running full strength

PM Meter Verification: Before Sampling					
Model	Use	Time	DO(mg/L)	Temp. (°C)	Calibrated
YSI 550A	Primary	10:55	7.0	21.3	n
YSI 85	Comparison	10:55	7.2	21.3	n
YSI 55	Comparison	10:55	7.2	21.4	n

Model
YSI 550A
YSI 85

Depth (m)	Twin Bridges		Turner Bridge		Upper Narrows		Lower Narrows
	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)
0	7.4	19.9	7.2	22.8	7.3	24.0	7.2
1			7.0	20.9	7.7	21.8	6.8
2			7.0	20.7	7.6	21.2	6.6
3			6.9	20.6	7.7	21.1	6.9
4			6.8	20.5	7.4	21.0	6.9
5			6.9	20.5	7.7	21.0	6.9
6			6.8	20.4	7.8	20.9	6.7
7			5.6	20.4	7.6	20.9	6.7
8			5.3	20.4	1.0	20.9	6.8
9			5.2	20.4			6.9
10			5.1	20.4			7.0
11			5.2	20.4			7.1
12			5.0	20.4			7.1
13							7.2
14							7.0
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25			6.2	20.7	6.9	21.4	6.9

AM Meter Verification: After Sampling

Use	Time	DO(mg/L)	Temp. (°C)	Calibrated
Primary	8:30	6.9	20.5	n
Comparison	8:30	6.8	20.5	n
Comparison	8:30	7.0	20.4	n

Narrows	GIP 4		Deep Hole	
	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)
21.9	5.9	22.1	5.7	22.4
21.9	5.8	22.3	5.9	22.4
21.9	5.8	22.3	5.9	22.4
21.9	5.8	22.3	5.9	22.5
22.0	6.0	22.3	5.6	22.5
22.0	6.1	22.4	5.6	22.5
22.0	5.8	22.3	5.7	22.5
21.9	5.6	22.3	5.8	22.4
21.9	5.7	22.2	5.8	22.4
21.8	5.9	22.1	5.7	22.3
21.8	6.1	22.0	5.7	22.3
21.7	6.1	21.9	5.7	22.3
21.6	6.1	21.9	5.7	22.2
21.6	6.1	21.8	5.8	22.1
21.6	6.1	21.8	5.9	22.1
	6.2	21.8	5.9	22.1
	6.2	21.8	6.0	22.0
	6.2	21.8	6.0	22.0
			6.0	22.0
			6.0	22.0
			5.8	21.9
			5.9	21.8
			2.7	20.8
			0.2	14.4
			0.1	14.0
21.8	6.0	22.1	5.2	21.5

PM Meter Verification: After Sampling

Use	Time	DO(mg/L)	Temp. (°C)	Calibrated
Primary	14:55	7.1	22.9	n
Comparison	14:55	7.2	23.0	n

Narrows	GIP-4		Deep Hole	
	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)
24.4	6.5	24.4	6.5	23.8
22.7	6.3	22.6	6.5	22.7
22.1	6.2	22.5	6.0	22.5
22.0	6.0	22.4	6.1	22.4
21.9	5.8	22.4	6.2	22.4
21.9	5.7	22.4	5.9	22.4
21.8	5.7	22.3	5.9	22.4
21.7	5.6	22.3	5.9	22.3
21.7	5.5	22.2	5.9	22.3
21.7	5.8	22.0	5.8	22.2
21.6	6.2	22.0	5.9	22.2
21.5	6.5	21.9	5.9	22.2
21.5	6.5	21.8	6.0	22.1
21.5	6.5	21.8	5.7	22.1
21.5	6.7	21.7	5.7	22.1
	6.7	21.7	5.8	22.0
	6.5	21.7	6.1	22.0
	6.4	21.7	6.2	22.0
			6.0	21.8
			6.3	21.8
			5.8	21.8
			5.9	21.7
			0.6	18.9
			0.1	14.1
			0.0	13.8
22.0	6.2	22.2	5.3	21.4