

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

**Week 9 AM: 7/31/2007**

**River Flow (Jay, Maine):** 2,380 cfs

**Weather:** Sunny with fog early in AM

**Air Temperature:** 70-75 deg. F (21-24 deg. C)

**Comments:** Pond level down 1-2 meters. Low density particles on surface/in column at Turner Br at medium density at Lower Narrows. Particles on surface at medium density on surface and at m Particles on surface/in column at medium density at Deep Hole.

AM Meter Verification: Before Sampling					
Model	Use	Time	DO(mg/L)	Temp. (°C)	Calibrated
YSI 550A	Primary	5:20	6.7	25.9	y
YSI 51B	Comparison	5:20	6.7	25.9	n
YSI 55	Twin Bridges	5:20	6.8	25.7	n

Model
YSI 550A
YSI 51B
YSI 55

Depth (m)	Twin Bridges		Turner Bridge		Upper Narrows		Lower N
	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)
0	6.7	25.9	5.8	26.8	6.7	26.5	6.7
1			5.9	26.7	6.6	26.5	6.5
2			5.9	26.7	6.7	26.5	6.6
3			5.9	26.7	6.9	26.5	6.5
4			5.9	26.7	6.8	26.4	6.7
5			5.8	26.6	6.3	26.3	6.9
6			5.6	26.6	6.2	26.2	6.7
7			5.1	26.3	5.2	25.4	6.2
8			3.0	25.7	0.2	25.1	5.4
9			2.7	25.4			4.8
10			2.5	25.2			3.8
11			2.5	25.1			2.5
12							1.8
13							1.3
14							0.1
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25			4.7	26.2	5.7	26.2	4.8

## Dissolved Oxygen and Temperature Profiles

**Week 9 PM:** 7/31/2007

**River Flow (Jay, Maine):** 2,380 cfs

**Weather:** Sunny, very hot

**Air Temperature:** 85-90 deg. F (30-32 deg. C)

**Comments:** Pond extremely calm. Slight NW breeze early PM switching to SW late PM.

Pond level down 1-2 meters. Low density particles on surface/in column at Turner Bridge and Upper Narrows. Particles on surface at medium density on surface and at medium density in column at Deep Hole.

Particulates on surface/in column at medium density at Deep Hole.

PM Meter Verification (Before Sampling)					
Model	Use	Time	DO(mg/L)	Temp. (°C)	Calibrated
YSI 550A	Primary	10:55	6.2	27.4	n
YSI 51B	Comparison	10:55	6.2	27.5	n
YSI 55	Twin Bridges	10:55	6.3	27.4	n

Model
YSI 550A
YSI 51B

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	6.7	26.3	6.7	29.1	7.1	28.8	7.4
1			6.6	27.2	7.1	27.5	6.9
2			6.2	26.9	7.4	26.6	6.9
3			6.1	26.7	7.4	26.4	6.9
4			6.0	26.6	7.1	26.3	6.9
5			5.9	26.6	6.9	26.3	6.6
6			5.8	26.5	6.4	26.1	6.7
7			5.0	26.3	4.7	25.6	6.5
8			4.2	26.1			5.6
9			4.1	26.1			5.4
10			4.0	26.1			4.4
11			4.0	26.2			2.2
12							1.7
13							0.0
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

5.4

26.7

6.8

26.7

5.3

idge and Upper Narrows. Particles on surface/in column  
 edium-high density in the column at GIP-4.

<b>AM Meter Verification: After Sampling</b>				
<b>Use</b>	<b>Time</b>	<b>DO(mg/L)</b>	<b>Temp. (°C)</b>	<b>Calibrated</b>
Primary	8:20	5.9	26.8	n
Comparison	8:20	5.9	26.8	n
Twin Bridges	8:20	6.1	26.6	n

<b>Narrows</b>	<b>GIP 4</b>		<b>Deep Hole</b>	
	<b>Temp. (°C)</b>	<b>DO (mg/L)</b>	<b>Temp. (°C)</b>	<b>DO (mg/L)</b>
26.5	6.8	26.7	6.9	26.4
26.6	6.6	26.7	6.8	26.5
26.6	6.7	26.7	6.9	26.5
26.6	6.7	26.7	7.0	26.5
26.5	6.3	26.2	6.6	26.1
26.3	6.0	26.0	5.9	26.0
26.0	6.0	25.7	5.9	25.8
25.7	6.1	25.5	5.6	25.5
25.2	6.0	25.3	5.7	25.2
24.5	6.0	24.8	5.7	24.8
23.8	5.6	24.2	5.4	24.4
23.5	5.6	23.8	5.6	23.8
22.6	4.9	23.6	5.4	23.5
22.3	4.8	23.2	5.3	23.2
22.1	4.3	22.8	5.0	23.1
	3.7	22.6	4.5	22.8
	3.1	22.4	3.7	22.5
	1.6	22.2	2.8	22.3
	0.1	21.5	2.2	22.0
			0.1	21.2
			0.0	19.1
			0.0	16.8
			0.0	15.1
			0.0	14.4
			0.0	14.1
25.0	5.1	24.6	4.1	22.7

per Narrows. Particles on surface/in column  
medium-high density in the column at GIP-4.

<b>PM Meter Verification (After Sampling)</b>				
<b>Use</b>	<b>Time</b>	<b>DO(mg/L)</b>	<b>Temp. (°C)</b>	<b>Calibrated</b>
Primary	15:50	6.9	29.1	n
Comparison	15:50	7.0	29.0	n

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<b>Narrows</b>	<b>GIP 4</b>		<b>Deep Hole</b>	
<b>Temp. (°C)</b>	<b>DO (mg/L)</b>	<b>Temp. (°C)</b>	<b>DO (mg/L)</b>	<b>Temp. (°C)</b>
28.8	7.0	28.9	7.2	28.7
27.6	7.5	27.4	7.2	27.7
26.9	7.0	26.7	7.0	26.6
26.5	6.7	26.4	6.6	26.4
26.4	6.5	26.2	6.6	26.3
26.1	6.7	26.0	6.7	26.6
25.8	7.0	25.8	6.6	25.9
25.6	6.8	25.6	6.4	25.8
24.7	6.4	25.3	5.9	25.5
24.4	6.0	24.8	5.9	25.1
24.0	5.9	24.1	6.1	24.4
23.2	5.7	23.7	5.4	23.8
22.4	4.6	23.3	5.4	23.4
22.1	4.6	23.0	5.2	23.2
	4.3	22.8	4.7	22.9
	3.5	22.5	4.1	22.7
	2.2	22.2	3.1	22.2
	2.1	21.5	2.3	22.0
	0.0	21.3	2.0	21.8
			0.0	21.1
			0.0	18.2
			0.0	15.9
			0.0	14.6
			0.0	14.0
			0.0	13.9

25.3

5.3

24.6

4.2

22.7