

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

Week 14 AM: 9/4/07

River Flow (Jay, Maine): 2,082 cfs

Weather: Sunny, Windy

Air Temperature: 60 deg F (15 deg C)

Comments: NW wind quite strong downstream; less strong at Narrows and upstream. Diffuser ru

| AM Meter Verification: Before Sampling | | | | | |
|--|------------|------|----------|------------|------------|
| Model | Use | Time | DO(mg/L) | Temp. (°C) | Calibrated |
| YSI 550A | Primary | 6:00 | 7.8 | 21.0 | n |
| YSI 51B | Comparison | 6:00 | 7.5 | 21.0 | n |
| YSI 55 | Comparison | 6:00 | 7.6 | 21.0 | n |

| 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) | |
| 0 | 7.8 | 21.0 | 7.5 | 21.8 | 7.8 | 22.4 | 7.4 |
| 1 | | | 7.5 | 21.9 | 7.9 | 22.4 | 7.5 |
| 2 | | | 7.4 | 21.9 | 7.9 | 22.5 | 7.4 |
| 3 | | | 7.5 | 21.9 | 8.0 | 22.5 | 7.3 |
| 4 | | | 7.5 | 21.9 | 8.0 | 22.5 | 7.2 |
| 5 | | | 7.3 | 21.9 | 8.3 | 22.4 | 7.4 |
| 6 | | | 7.3 | 21.9 | 8.3 | 22.4 | 7.2 |
| 7 | | | 6.8 | 21.8 | 8.0 | 22.4 | 7.2 |
| 8 | | | 6.3 | 21.8 | 6.8 | 22.4 | 7.0 |
| 9 | | | 6.3 | 21.8 | | | 7.0 |
| 10 | | | | | | | 6.9 |
| 11 | | | | | | | 6.8 |
| 12 | | | | | | | 6.8 |
| 13 | | | | | | | 6.7 |
| 14 | | | | | | | |
| 15 | | | | | | | |
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| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |
| 23 | | | | | | | |
| 24 | | | | | | | |
| 25 | | | 7.1 | 21.9 | 7.9 | 22.4 | 7.1 |

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

Week 14 PM: 9/4/07

River Flow (Jay, Maine): 1,750 cfs

Weather: Sunny and windy

Air Temperature: 65 deg F (18 deg C)

Comments: Incredibly strong NW wind; pond very choppy, esp. from GIP-4 downstream. Diffus

DNS- did not sample due to excessively high winds.

| PM Meter Verification: Before Sampling | | | | | |
|--|------------|-------|----------|------------|------------|
| Model | Use | Time | DO(mg/L) | Temp. (°C) | Calibrated |
| YSI 550A | Primary | 11:00 | 7.2 | 22.0 | n |
| YSI 51B | Comparison | 11:00 | 7.2 | 22.0 | n |
| YSI 55 | Comparison | 11:00 | 7.4 | 22.0 | n |

| Model |
|----------|
| YSI 550A |
| YSI 51B |

| 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 | 7.3 | 21.3 | 7.3 | 20.3 | 7.6 | 22.7 | 7.2 |
| 1 | | | 7.1 | 20.3 | 7.6 | 22.7 | 7.2 |
| 2 | | | 7.1 | 22.2 | 7.5 | 22.7 | 7.1 |
| 3 | | | 7.0 | 22.0 | 7.6 | 22.7 | 7.0 |
| 4 | | | 6.9 | 21.9 | 7.6 | 22.7 | 7.0 |
| 5 | | | 7.1 | 21.9 | 7.5 | 22.7 | 7.0 |
| 6 | | | 7.1 | 21.9 | 7.5 | 22.6 | 6.9 |
| 7 | | | 6.9 | 21.8 | 7.5 | 22.6 | 6.8 |
| 8 | | | | | | | 6.9 |
| 9 | | | | | | | 6.5 |
| 10 | | | | | | | 6.0 |
| 11 | | | | | | | 6.0 |
| 12 | | | | | | | 6.0 |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |
| 23 | | | | | | | |
| 24 | | | | | | | |
| 25 | | | 7.1 | 21.5 | 7.6 | 22.7 | 6.7 |

inning at full strength

| AM Meter Verification: After Sampling | | | | |
|---------------------------------------|------|----------|------------|------------|
| Use | Time | DO(mg/L) | Temp. (°C) | Calibrated |
| Primary | 8:45 | 7.2 | 21.9 | n |
| Comparison | 8:45 | 7.0 | 22.0 | n |
| Comparison | 8:45 | 7.0 | 21.9 | n |

| Narrows | GIP 4 | | Deep Hole | |
|---------|------------|-----------|------------|-----------|
| | Temp. (°C) | DO (mg/L) | Temp. (°C) | DO (mg/L) |
| 22.6 | 7.1 | 22.3 | 7.0 | 22.5 |
| 22.7 | 7.0 | 22.4 | 7.1 | 22.5 |
| 22.7 | 7.0 | 22.4 | 7.1 | 22.5 |
| 22.7 | 7.1 | 22.4 | 7.2 | 22.5 |
| 22.7 | 7.1 | 22.4 | 7.1 | 22.5 |
| 22.7 | 7.1 | 22.4 | 7.0 | 22.5 |
| 22.4 | 7.0 | 22.4 | 7.0 | 22.5 |
| 22.4 | 7.1 | 22.4 | 6.9 | 22.5 |
| 22.3 | 7.1 | 22.4 | 6.7 | 22.4 |
| 22.3 | 7.1 | 22.4 | 6.8 | 22.3 |
| 22.3 | 7.1 | 22.4 | 6.7 | 22.3 |
| 22.3 | 7.1 | 22.4 | 6.7 | 22.3 |
| 22.2 | 7.1 | 22.4 | 6.5 | 22.3 |
| 22.2 | 7.1 | 22.4 | 6.6 | 22.3 |
| | 7.1 | 22.4 | 6.6 | 22.3 |
| | 7.1 | 22.4 | 6.5 | 22.2 |
| | 7.1 | 22.4 | 6.5 | 22.1 |
| | 7.1 | 22.4 | 6.2 | 22.0 |
| | | | 4.8 | 21.8 |
| | | | 3.4 | 21.2 |
| | | | 2.4 | 21.0 |
| | | | 0.3 | 20.6 |
| | | | 0.1 | 20.4 |
| | | | 0.0 | 19.8 |
| | | | 0.0 | 18.0 |
| 22.5 | 7.1 | 22.4 | 5.3 | 21.8 |

ser running full strengt

| PM Meter Verification: After Sampling | | | | |
|---------------------------------------|-------|----------|------------|------------|
| Use | Time | DO(mg/L) | Temp. (°C) | Calibrated |
| Primary | 14:45 | 7.3 | 22.3 | n |
| Comparison | 14:45 | 7.2 | 22.5 | n |

| Narrows | GIP 4 | | Deep Hole | | Dup-Turner Bridge | |
|---------|------------|-----------|------------|-----------|-------------------|-----------|
| | Temp. (°C) | DO (mg/L) | Temp. (°C) | DO (mg/L) | Temp. (°C) | DO (mg/L) |
| 22.9 | DNS | DNS | 6.7 | 22.4 | 7.1 | 22.3 |
| 22.8 | DNS | DNS | 6.8 | 22.4 | 7.1 | 22.3 |
| 22.8 | DNS | DNS | 6.7 | 22.4 | 7.2 | 22.1 |
| 22.7 | DNS | DNS | 6.7 | 22.4 | 7.1 | 21.9 |
| 22.7 | DNS | DNS | 6.7 | 22.4 | 7.1 | 21.9 |
| 22.6 | DNS | DNS | 6.7 | 22.4 | 7.0 | 21.9 |
| 22.6 | DNS | DNS | 6.7 | 22.3 | 6.8 | 21.8 |
| 22.6 | DNS | DNS | 6.7 | 22.3 | 6.6 | 21.8 |
| 22.6 | DNS | DNS | 6.6 | 22.3 | | |
| 22.4 | DNS | DNS | 6.6 | 22.3 | | |
| 22.2 | DNS | DNS | 6.6 | 22.3 | | |
| 22.2 | DNS | DNS | 6.6 | 22.3 | | |
| 22.2 | DNS | DNS | 6.5 | 22.3 | | |
| | DNS | DNS | 6.4 | 22.2 | | |
| | DNS | DNS | 6.3 | 22.2 | | |
| | DNS | DNS | 6.2 | 22.1 | | |
| | DNS | DNS | 6.2 | 22.1 | | |
| | | | 6.0 | 22.0 | | |
| | | | 3.1 | 21.2 | | |
| | | | 1.1 | 20.7 | | |
| | | | 0.4 | 20.5 | | |
| | | | 0.1 | 20.3 | | |
| | | | 0.0 | 19.6 | | |
| | | | 0.0 | 16.8 | | |
| | | | 0.0 | 15.3 | | |
| 22.6 | #DIV/0! | #DIV/0! | 4.9 | 21.4 | | |

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

Week 15 AM: 9/11/07

River Flow (Jay, Maine): 2,797 cfs

Weather: Cool, calm, cloudy, misty

Air Temperature: 60 deg F (15 deg C)

Comments: Water down 1-2 meters; Diffuser running at full strengt

| AM Meter Verification: Before Sampling | | | | | | Model |
|--|------------|------|----------|------------|--------------------------|----------|
| Model | Use | Time | DO(mg/L) | Temp. (°C) | Calibrated | Model |
| YSI 550A | Primary | 6:00 | 7.8 | 19.9 | n | YSI 550A |
| YSI 51B | Comparison | 6:00 | 7.6 | 20.0 | alt adj, zero, fullscale | YSI 51B |
| YSI 55 | Comparison | 6:00 | 7.6 | 20.0 | n | 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 | 7.8 | 19.9 | 7.5 | 20.0 | 7.7 | 20.6 | 7.1 |
| 1 | | | 7.5 | 20.0 | 7.7 | 20.6 | 7.2 |
| 2 | | | 7.5 | 20.0 | 7.7 | 20.6 | 7.0 |
| 3 | | | 7.5 | 20.0 | 7.7 | 20.6 | 7.1 |
| 4 | | | 7.5 | 20.0 | 7.8 | 20.6 | 7.2 |
| 5 | | | 7.5 | 20.0 | 7.9 | 20.6 | 7.0 |
| 6 | | | 7.6 | 20.0 | 8.3 | 20.6 | 7.1 |
| 7 | | | 7.4 | 20.0 | | | 7.1 |
| 8 | | | 7.3 | 20.0 | | | 7.1 |
| 9 | | | | | | | 7.1 |
| 10 | | | | | | | 6.4 |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
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| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |
| 23 | | | | | | | |
| 24 | | | | | | | |
| 25 | | | 7.5 | 20.0 | 7.8 | 20.6 | 7.0 |

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

Week 15 PM: 9/11/07

River Flow (Jay, Maine): 2,797 cfs

Weather: Mist and clouds; late PM rain

Air Temperature: 60 deg F (15 deg C)

Comments: Diffuser not running

| PM Meter Verification: Before Sampling | | | | | | Model |
|--|------------|-------|----------|------------|--------------------------|----------|
| Model | Use | Time | DO(mg/L) | Temp. (°C) | Calibrated | Model |
| YSI 550A | Primary | 11:05 | 7.5 | 19.9 | n | YSI 550A |
| YSI 51B | Comparison | 11:05 | 7.4 | 20.0 | alt adj, zero, fullscale | YSI 51B |
| YSI 55 | Comparison | 11:05 | 7.2 | 19.9 | y | |

| 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 | 7.6 | 20.0 | 7.5 | 19.9 | 8.3 | 20.6 | 6.6 |
| 1 | | | 7.6 | 19.9 | 8.2 | 20.6 | 7.0 |
| 2 | | | 7.6 | 19.9 | 8.2 | 20.6 | 7.0 |
| 3 | | | 7.6 | 19.9 | 8.3 | 20.6 | 7.0 |
| 4 | | | 7.5 | 19.9 | 8.2 | 20.6 | 6.9 |
| 5 | | | 7.5 | 19.9 | 8.1 | 20.6 | 7.2 |
| 6 | | | 7.4 | 19.9 | 8.1 | 20.6 | 6.7 |
| 7 | | | | | | | 6.9 |
| 8 | | | | | | | 6.9 |
| 9 | | | | | | | 6.9 |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
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| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |
| 23 | | | | | | | |
| 24 | | | | | | | |
| 25 | | | 7.5 | 19.9 | 8.2 | 20.6 | 6.9 |

AM Meter Verification: After Sampling

| Use | Time | DO(mg/L) | Temp. (°C) | Calibrated |
|------------|------|----------|------------|--------------------------|
| Primary | 8:50 | 7.4 | 20.0 | n |
| Comparison | 8:50 | 7.3 | 20.0 | alt. adj zero, fullscale |
| Comparison | 8:50 | 7.1 | 20.0 | n |

| Narrows | GIP 4 | | Deep Hole | |
|---------|------------|-----------|------------|-----------|
| | Temp. (°C) | DO (mg/L) | Temp. (°C) | DO (mg/L) |
| 21.1 | 6.6 | 21.2 | 6.6 | 21.1 |
| 21.1 | 6.6 | 21.2 | 6.7 | 21.2 |
| 21.1 | 6.5 | 21.2 | 6.6 | 21.2 |
| 21.1 | 6.6 | 21.3 | 6.4 | 21.2 |
| 21.1 | 6.6 | 21.3 | 6.2 | 21.2 |
| 21.1 | 6.5 | 21.3 | 6.4 | 21.2 |
| 21.1 | 6.7 | 21.3 | 6.0 | 21.2 |
| 21.1 | 6.7 | 21.3 | 6.1 | 21.3 |
| 21.1 | 6.6 | 21.3 | 6.2 | 21.3 |
| 21.1 | 6.6 | 21.2 | 6.1 | 21.3 |
| 21.0 | 6.3 | 21.1 | 6.2 | 21.2 |
| | 6.3 | 21.1 | 6.1 | 21.2 |
| | 6.1 | 21.1 | 5.9 | 21.1 |
| | 6.1 | 21.0 | 6.1 | 21.1 |
| | 5.9 | 21.0 | 6.1 | 21.1 |
| | 5.9 | 21.0 | 6.2 | 21.0 |
| | 6.0 | 21.0 | 5.9 | 21.0 |
| | 5.7 | 21.0 | 6.4 | 21.0 |
| | | | 6.3 | 21.0 |
| | | | 6.1 | 21.0 |
| | | | 5.6 | 21.0 |
| | | | 5.5 | 21.0 |
| | | | 5.5 | 20.9 |
| | | | 1.0 | 20.7 |

21.1 6.4 21.2 5.9 21.1

| PM Meter Verification: After Sampling | | | | |
|---------------------------------------|-------|----------|------------|------------|
| Use | Time | DO(mg/L) | Temp. (°C) | Calibrated |
| Primary | 14:35 | 7.5 | 19.9 | n |
| Comparison | 14:35 | 7.8 | 19.9 | n |

| Narrows | GIP-4 | | Deep Hole | | Dup-Upper Narrows | |
|---------|------------|-----------|------------|-----------|-------------------|-----------|
| | Temp. (°C) | DO (mg/L) | Temp. (°C) | DO (mg/L) | Temp. (°C) | DO (mg/L) |
| 20.9 | 6.8 | 21.2 | 6.7 | 21.2 | 8.1 | 20.6 |
| 21.0 | 6.8 | 21.2 | 6.7 | 21.2 | 8.2 | 20.6 |
| 21.0 | 7.0 | 21.2 | 6.7 | 21.2 | 8.3 | 20.6 |
| 21.0 | 6.9 | 21.2 | 6.7 | 21.2 | 8.1 | 20.6 |
| 21.0 | 6.9 | 21.2 | 6.6 | 21.2 | 8.2 | 20.6 |
| 20.9 | 6.8 | 21.2 | 6.5 | 21.2 | 8.0 | 20.6 |
| 20.9 | 6.9 | 21.2 | 6.4 | 21.2 | 8.0 | 20.6 |
| 20.9 | 6.9 | 21.2 | 6.7 | 21.2 | | |
| 20.9 | 6.9 | 21.2 | 6.6 | 21.2 | | |
| 20.9 | 6.7 | 21.2 | 6.5 | 21.2 | | |
| | 6.9 | 21.0 | 6.5 | 21.1 | | |
| | 6.7 | 21.0 | 6.5 | 21.1 | | |
| | 6.7 | 21.0 | 6.6 | 21.1 | | |
| | 6.7 | 20.9 | 6.5 | 21.1 | | |
| | 6.7 | 20.9 | 6.5 | 21.1 | | |
| | 6.6 | 20.9 | 6.4 | 21.0 | | |
| | 5.9 | 20.9 | 6.2 | 21.0 | | |
| | | | 6.2 | 21.0 | | |
| | | | 6.2 | 21.0 | | |
| | | | 6.0 | 21.0 | | |
| | | | 5.8 | 21.0 | | |
| | | | 5.5 | 20.9 | | |
| | | | 5.5 | 20.9 | | |

20.9 6.8 21.1 6.4 21.1

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

Week 16 AM: 9/18/07

River Flow (Jay, Maine): 2,797 cfs

Weather: Thick fog early AM, sun by 8AM

Air Temperature: 50-60 deg F (9- 15 deg C)

Comments: Thick fog delayed profiling, sunny by 8AM. Water very calm , slight NW breeze. Di

| AM Meter Verification: Before Sampling | | | | | |
|--|------------|------|----------|------------|------------|
| Model | Use | Time | DO(mg/L) | Temp. (°C) | Calibrated |
| YSI 550A | Primary | 6:15 | 8.9 | 15.1 | n |
| YSI 51B | Comparison | 6:15 | 8.8 | 15.0 | n |
| YSI 55 | Comparison | 6:15 | 8.8 | 15.2 | n |

| Model |
|----------|
| YSI 550A |
| YSI 51B |
| YSI 55 |

| Depth (m) | Twin Bridges | | Turner Bridge | | Upper Narrows | | Lower N |
|-----------|--------------|------------|---------------|------------|---------------|------------|-----------|
| | DO (mg/L) | Temp. (oC) | DO (mg/L) | Temp. (oC) | DO (mg/L) | Temp. (oC) | DO (mg/L) |
| 0 | 8.9 | 15.1 | 8.3 | 17.2 | 7.6 | 18.2 | 7.3 |
| 1 | | | 8.5 | 17.0 | 7.5 | 18.2 | 7.2 |
| 2 | | | 8.5 | 17.0 | 7.7 | 17.9 | 7.1 |
| 3 | | | 8.6 | 17.0 | 8.2 | 17.6 | 7.3 |
| 4 | | | 8.5 | 17.0 | 8.0 | 17.4 | 7.5 |
| 5 | | | 8.5 | 17.0 | 7.9 | 17.2 | 7.5 |
| 6 | | | 8.6 | 17.0 | 8.0 | 17.2 | 7.6 |
| 7 | | | 8.6 | 17.0 | 7.9 | 17.2 | 7.0 |
| 8 | | | | | | | 7.3 |
| 9 | | | | | | | 7.5 |
| 10 | | | | | | | 7.6 |
| 11 | | | | | | | 7.4 |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |
| 23 | | | | | | | |
| 24 | | | | | | | |
| 25 | | | 8.5 | 17.0 | 7.9 | 17.6 | 7.4 |

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

Week 16 PM: 9/18/07

River Flow (Jay, Maine): 2,797 cfs

Weather: Sunny, calm

Air Temperature: 70 deg F (20 deg C)

Comments: Pond calm. Diffuser not running

| PM Meter Verification: Before Sampling | | | | | |
|--|------------|-------|----------|------------|------------|
| Model | Use | Time | DO(mg/L) | Temp. (°C) | Calibrated |
| YSI 550A | Primary | 13:15 | 8.7 | 19.9 | n |
| YSI 51B | Comparison | 13:15 | 8.6 | 20.0 | n |
| YSI 55 | Comparison | 13:15 | 8.6 | 19.9 | 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 | 9.2 | 17.3 | 8.7 | 19.0 | 8.1 | 21.0 | 7.7 |
| 1 | | | 8.8 | 17.5 | 7.9 | 19.3 | 7.6 |
| 2 | | | 8.7 | 17.1 | 8.2 | 18.4 | 7.7 |
| 3 | | | 8.7 | 16.9 | 8.3 | 17.8 | 7.7 |
| 4 | | | 8.6 | 16.9 | 8.5 | 17.2 | 7.7 |
| 5 | | | 8.5 | 16.9 | 8.5 | 17.0 | 7.9 |
| 6 | | | 8.5 | 16.9 | 8.3 | 17.0 | 7.8 |
| 7 | | | 8.5 | 16.9 | 8.4 | 17.0 | 7.5 |
| 8 | | | 8.0 | 16.9 | | | 7.4 |
| 9 | | | 7.0 | 16.9 | | | 7.6 |
| 10 | | | | | | | 7.6 |
| 11 | | | | | | | 7.5 |
| 12 | | | | | | | 7.5 |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |
| 23 | | | | | | | |
| 24 | | | | | | | |
| 25 | | | 8.4 | 17.2 | 8.3 | 18.1 | 7.6 |

iffuser not runnir

| AM Meter Verification: After Samplin | | | | |
|---|-------------|-----------------|-------------------|-------------------|
| Use | Time | DO(mg/L) | Temp. (°C) | Calibrated |
| Primary | 9:45 | 8.7 | 17.3 | n |
| Comparison | 9:45 | 8.4 | 17.2 | n |
| Comparison | 9:45 | 8.6 | 17.2 | n |

| Narrows | GIP 4 | | Deep Hole | |
|-------------------|------------------|-------------------|------------------|-------------------|
| Temp. (oC) | DO (mg/L) | Temp. (oC) | DO (mg/L) | Temp. (oC) |
| 18.9 | 7.1 | 18.9 | 6.7 | 18.9 |
| 18.9 | 7.0 | 19.0 | 6.7 | 19.0 |
| 18.9 | 7.0 | 19.0 | 6.9 | 19.0 |
| 18.7 | 6.8 | 19.0 | 6.8 | 19.1 |
| 18.7 | 7.0 | 19.0 | 6.9 | 19.1 |
| 18.7 | 7.0 | 19.0 | 6.8 | 19.1 |
| 18.4 | 6.9 | 19.0 | 6.8 | 19.1 |
| 18.4 | 7.0 | 18.9 | 6.7 | 19.0 |
| 18.2 | 7.1 | 18.6 | 6.8 | 18.9 |
| 18.1 | 7.2 | 18.5 | 6.8 | 18.8 |
| 17.9 | 7.3 | 18.3 | 7.0 | 18.7 |
| 17.8 | 7.3 | 18.3 | 6.8 | 18.5 |
| | 7.4 | 18.1 | 7.2 | 18.5 |
| | 7.5 | 18.1 | 7.0 | 18.5 |
| | 7.5 | 18.1 | 7.0 | 18.4 |
| | 7.4 | 18.2 | 7.1 | 18.3 |
| | 7.4 | 18.0 | 7.1 | 18.4 |
| | 7.4 | 18.1 | 7.2 | 18.4 |
| | | | 7.1 | 18.4 |
| | | | 7.0 | 18.4 |
| | | | 7.1 | 18.4 |
| | | | 7.0 | 18.4 |
| | | | 7.3 | 18.3 |
| | | | 7.2 | 18.3 |

18.5 7.2 18.6 7.0 18.7

| PM Meter Verification: After Sampling | | | | |
|---------------------------------------|-------|----------|------------|---------------|
| Use | Time | DO(mg/L) | Temp. (°C) | Calibrated |
| Primary | 15:25 | 8.7 | 18.5 | n |
| Comparison | 15:25 | 8.5 | 18.7 | alt.-adjusted |

| Narrows | GIP-4 | | Deep Hole | |
|---------|------------|-----------|------------|-----------|
| | Temp. (°C) | DO (mg/L) | Temp. (°C) | DO (mg/L) |
| 21.4 | 7.3 | 21.5 | 7.2 | 21.8 |
| 19.6 | 7.1 | 19.5 | 7.1 | 19.8 |
| 19.1 | 7.2 | 19.2 | 6.9 | 19.3 |
| 18.7 | 6.9 | 19.1 | 6.8 | 19.2 |
| 18.6 | 7.1 | 19.1 | 6.8 | 19.1 |
| 18.5 | 7.1 | 19.1 | 6.8 | 19.0 |
| 28.4 | 7.0 | 19.0 | 6.8 | 18.9 |
| 18.1 | 7.0 | 18.8 | 6.9 | 18.9 |
| 18.0 | 7.3 | 18.6 | 7.1 | 18.8 |
| 17.9 | 7.5 | 18.3 | 7.2 | 18.7 |
| 17.7 | 7.6 | 18.2 | 7.2 | 18.7 |
| 17.5 | 7.8 | 18.0 | 7.2 | 18.6 |
| 17.5 | 7.8 | 18.0 | 7.3 | 18.4 |
| | 7.8 | 17.9 | 7.3 | 18.3 |
| | 7.8 | 17.9 | 7.2 | 18.3 |
| | 7.8 | 17.9 | 7.4 | 18.3 |
| | 7.8 | 17.9 | 7.3 | 18.3 |
| | 7.4 | 17.9 | 7.3 | 18.3 |
| | | | 7.1 | 18.3 |
| | | | 7.3 | 18.3 |
| | | | 7.3 | 18.3 |
| | | | 7.2 | 18.3 |
| | | | 7.4 | 18.2 |

19.3 7.4 18.7 7.1 18.8

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

Week 17 AM: 9/25/07

River Flow (Jay, Maine): 2,416 cfs

Weather: Sunny, clear

Air Temperature: 50-55 °F (10-12 °C)

Comments: No green tint to water, however many individual green particles were present at Dee Diffuser not running

| AM Meter Verification: Before Sampling | | | | | |
|--|------------|------|----------|------------|------------|
| Model | Use | Time | DO(mg/L) | Temp. (°C) | Calibrated |
| YSI 550A | Primary | 6:15 | 8.3 | 17.6 | n |
| YSI 51B | Comparison | 6:15 | 8.5 | 17.5 | alt.adj. |
| YSI 55 | Comparison | 6:15 | 8.4 | 17.5 | n |

| 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) | |
| 0 | 8.3 | 17.6 | 8.3 | 18.4 | 7.8 | 18.4 | 8.1 |
| 1 | | | 8.4 | 18.4 | 8.1 | 18.4 | 8.1 |
| 2 | | | 8.4 | 18.4 | 8.2 | 18.4 | 8.2 |
| 3 | | | 8.4 | 18.4 | 8.0 | 18.4 | 8.2 |
| 4 | | | 8.4 | 18.4 | 7.9 | 18.4 | 8.2 |
| 5 | | | 8.4 | 18.4 | 7.8 | 18.4 | 8.2 |
| 6 | | | 8.4 | 18.4 | 7.8 | 18.4 | 8.1 |
| 7 | | | 8.0 | 18.4 | 7.7 | 18.3 | 8.1 |
| 8 | | | 7.8 | 18.4 | | | 7.7 |
| 9 | | | 7.7 | 18.4 | | | 7.5 |
| 10 | | | 7.6 | 18.4 | | | 7.3 |
| 11 | | | 7.5 | 18.4 | | | 6.8 |
| 12 | | | | | | | 6.8 |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |
| 23 | | | | | | | |
| 24 | | | | | | | |
| 25 | | | 8.1 | 18.4 | 7.9 | 18.4 | 7.8 |

Dissolved Oxygen and Temperature Profiles

Week 17 PM: 9/25/07

River Flow (Jay, Maine): 2,416 cfs

Weather: Sunny, Clear with a slight SW breeze

Air Temperature: 80 °F (26 °C)

Comments: Diffuser not running

| PM Meter Verification: Before Sampling | | | | | |
|--|------------|-------|----------|------------|-----------------|
| Model | Use | Time | DO(mg/L) | Temp. (°C) | Calibrated |
| YSI 550A | Primary | 11:20 | 8.4 | 19.4 | n |
| YSI 51B | Comparison | 11:20 | 6.6 | 19.5 | Alt-malfunction |
| YSI 55 | Comparison | 11:20 | 8.2 | 19.4 | 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 | 8.4 | 18.6 | 8.7 | 20.6 | 8.7 | 20.2 | 8.5 |
| 1 | | | 8.7 | 19.9 | 8.5 | 20.0 | 8.6 |
| 2 | | | 8.6 | 18.7 | 8.5 | 19.1 | 8.6 |
| 3 | | | 8.6 | 18.6 | 8.4 | 18.4 | 8.5 |
| 4 | | | 8.6 | 18.6 | 8.3 | 18.4 | 8.3 |
| 5 | | | 8.6 | 18.6 | 8.0 | 18.4 | 8.3 |
| 6 | | | 8.5 | 18.5 | 8.1 | 18.4 | 8.4 |
| 7 | | | 8.3 | 18.5 | 8.0 | 18.3 | 8.3 |
| 8 | | | | | | | 8.2 |
| 9 | | | | | | | 8.0 |
| 10 | | | | | | | 7.8 |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |
| 23 | | | | | | | |
| 24 | | | | | | | |
| 25 | | | 8.6 | 19.0 | 8.3 | 18.9 | 8.3 |

p Hole and in a lower density at GIP-4, Lower Narrows, and Upper Narrows.

| AM Meter Verification: After Sampling | | | | |
|---------------------------------------|------|----------|------------|------------|
| Use | Time | DO(mg/L) | Temp. (°C) | Calibrated |
| Primary | 8:50 | 8.3 | 18.5 | n |
| Comparison | 8:50 | 8.3 | 18.5 | alt.adj |
| Comparison | 8:50 | 8.0 | 18.4 | n |

| Narrows | GIP 4 | | Deep Hole | |
|---------|------------|-----------|------------|-----------|
| | Temp. (°C) | DO (mg/L) | Temp. (°C) | DO (mg/L) |
| 18.6 | 7.5 | 18.8 | 7.6 | 18.7 |
| 18.6 | 7.4 | 18.8 | 7.4 | 18.7 |
| 18.6 | 7.3 | 18.8 | 7.3 | 18.8 |
| 18.6 | 7.4 | 18.8 | 7.4 | 18.8 |
| 18.6 | 7.6 | 18.8 | 7.4 | 18.8 |
| 18.6 | 7.5 | 18.7 | 7.3 | 18.8 |
| 18.5 | 7.1 | 18.7 | 7.3 | 18.8 |
| 18.5 | 7.2 | 18.6 | 7.2 | 18.7 |
| 18.4 | 7.4 | 18.5 | 7.3 | 18.6 |
| 18.3 | 6.8 | 18.4 | 7.4 | 18.5 |
| 18.3 | 7.1 | 18.3 | 7.5 | 18.3 |
| 18.1 | 7.4 | 18.1 | 7.3 | 18.2 |
| 17.8 | 7.4 | 18.0 | 6.9 | 18.1 |
| | 7.3 | 18.0 | 7.1 | 18.0 |
| | 7.3 | 17.8 | 7.3 | 17.9 |
| | 7.2 | 17.7 | 7.0 | 17.7 |
| | 7.0 | 17.6 | 6.8 | 17.6 |
| | | | 6.8 | 17.6 |
| | | | 6.7 | 17.6 |
| | | | 6.3 | 17.5 |
| | | | 6.1 | 17.5 |
| | | | 6.1 | 17.5 |
| | | | 6.0 | 17.4 |
| | | | 5.4 | 17.4 |

18.4 7.3 18.4 7.0 18.1

* NC - Not Conducted due to meter malfunction*

PM Meter Verification: After Sampling

| Use | Time | DO(mg/L) | Temp. (°C) | Calibrated |
|------------|------|----------|------------|------------|
| Primary | NC | NC | NC | NC |
| Comparison | NC | NC | NC | NC |

| Narrows | GIP 4 | | Deep Hole | | Dup.-Turner Bridge | |
|---------|------------|-----------|------------|-----------|--------------------|-----------|
| | Temp. (°C) | DO (mg/L) | Temp. (°C) | DO (mg/L) | Temp. (°C) | DO (mg/L) |
| | 20.4 | 8.1 | 20.0 | 8.5 | 20.6 | 8.5 |
| | 19.7 | 8.3 | 19.9 | 8.4 | 20.2 | 8.6 |
| | 18.8 | 7.9 | 18.9 | 8.2 | 19.2 | 8.6 |
| | 18.7 | 7.7 | 18.8 | 8.1 | 18.9 | 8.5 |
| | 18.6 | 7.7 | 18.8 | 8.0 | 18.8 | 8.6 |
| | 18.5 | 7.9 | 18.7 | 7.9 | 18.7 | 8.5 |
| | 18.5 | 7.5 | 18.7 | 7.9 | 18.7 | 8.4 |
| | 18.5 | 7.9 | 18.6 | 7.7 | 18.6 | |
| | 18.4 | 7.6 | 18.5 | 7.7 | 18.5 | |
| | 18.3 | 7.4 | 18.4 | 7.7 | 18.4 | |
| | 18.3 | 6.9 | 18.2 | 7.6 | 18.3 | |
| | | 7.1 | 18.2 | 7.3 | 18.2 | |
| | | 7.4 | 18.0 | 7.3 | 18.0 | |
| | | 7.1 | 17.8 | 7.5 | 18.0 | |
| | | 7.0 | 17.7 | 7.5 | 17.8 | |
| | | 6.8 | 17.7 | 7.1 | 17.7 | |
| | | 6.8 | 17.6 | 6.6 | 17.6 | |
| | | 6.1 | 17.6 | 6.7 | 17.6 | |
| | | | | 6.4 | 17.6 | |
| | | | | 6.3 | 17.5 | |
| | | | | 6.2 | 17.5 | |
| | | | | 5.8 | 17.4 | |
| | | | | 5.4 | 17.4 | |
| | | | | 5.2 | 17.4 | |

18.8 7.4 18.5 7.2 18.3