

## Halifax Harbour Water Quality Monitoring Project Weekly Summary #15

**Survey Date:** 28 Sep 04  
**Nature of Survey:** Complete Survey  
**Report File (this document):**

HHWQMP\_report015\_040928.doc  
**Data File:** HHWQMP\_data015\_040928.xls

**Data Return:**

Profile: 103%  
 Bacteria: 100%  
 Chemical: 100%  
**Overall: 101%**

**Sample Notes:**

Additional CTD at optional site B1

**QA/QC samples:**

**Chemical Analysis**

Detectable Parameter	units	G2-1m	
		reference sample	QA/QC
Ammonia (as N)	mg/L	<0.05	0.06
Total Suspended Solids	mg/L	1.6	2.6
Boron	ug/L	4000	4100
Lithium	ug/L	180	180
Strontium	ug/L	6600	6500
Titanium	ug/L	69	71
Uranium	ug/L	2.8	2.8

**Fecal Coliform (CFU/100ml)**

Site	C6-1m	DYC-10m	E2-1m	EE1-10m	D1-10m	G2-1m
Reference	3200	210	500	610	270	1200
QA/QC	4200	0	300	200	200	400

**Regulated parameters with all samples below EQL  
(non-detectable):**

Parameter	EQL(µg/L)	Parameter	EQL(µg/L)	Parameter	EQL(mg/L)
Cadmium	3	Nickel	20	Oil and Grease	5
Chromium	20			CBOD <sub>5</sub>	5
Copper	20				

**Detectable non-regulated metals**

Metal	EQL (µg/L)	Number >EQL	Mean (µg/L)	Range (µg/L)
Boron	500	15	4070	3700-4300
Lithium	20	15	184	170-200
Strontium	50	15	6630	6400-6900
Titanium	20	15	69	63-74
Uranium	1	15	3.1	2.6-4.0

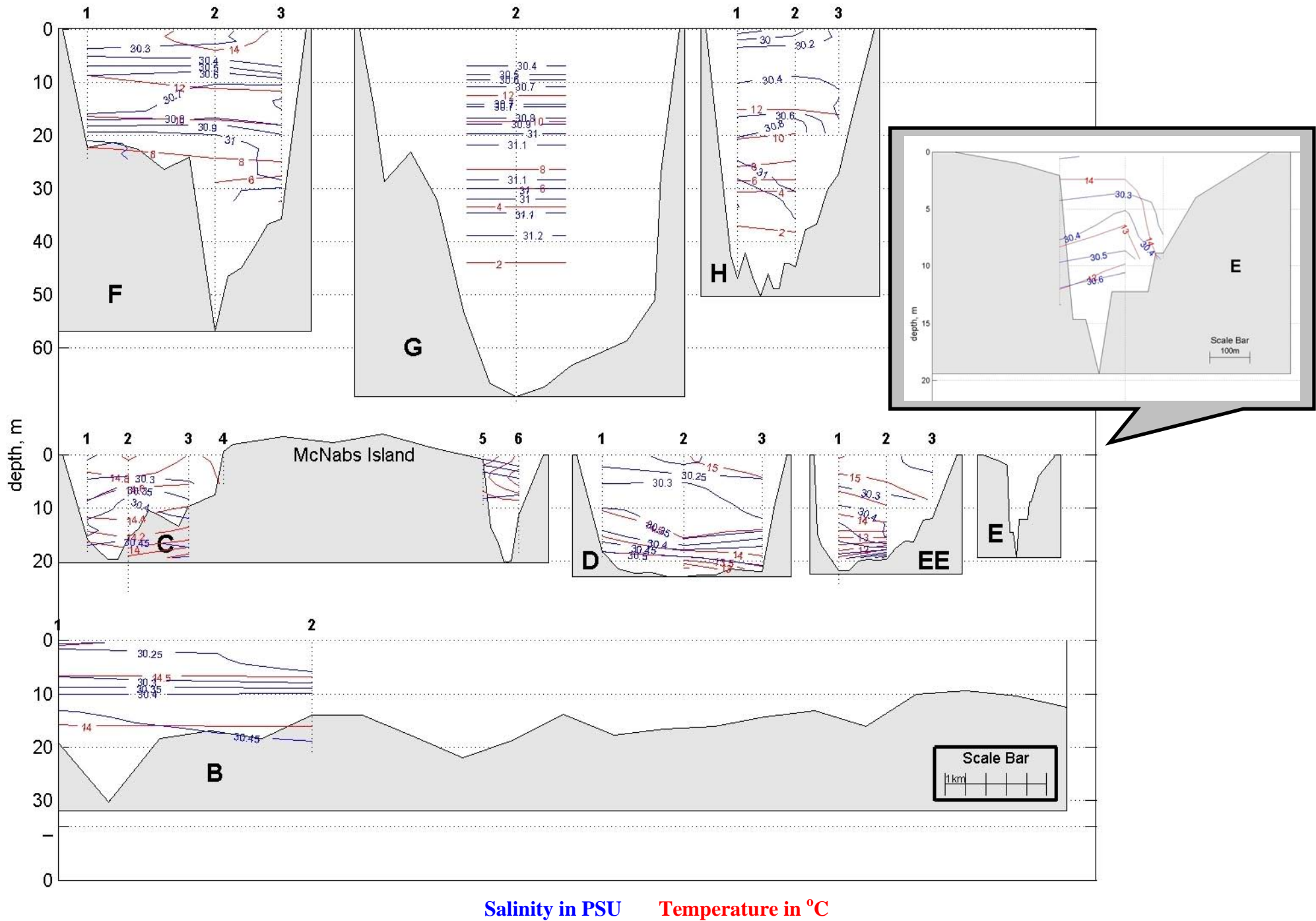
**Comments:**

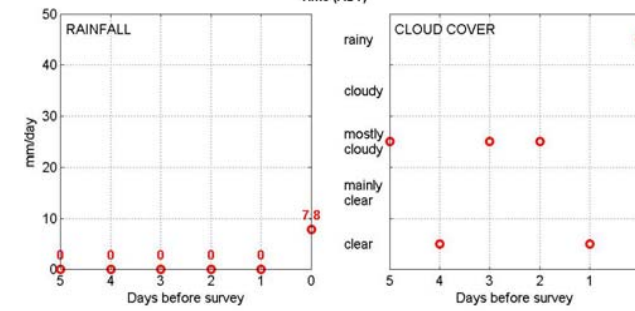
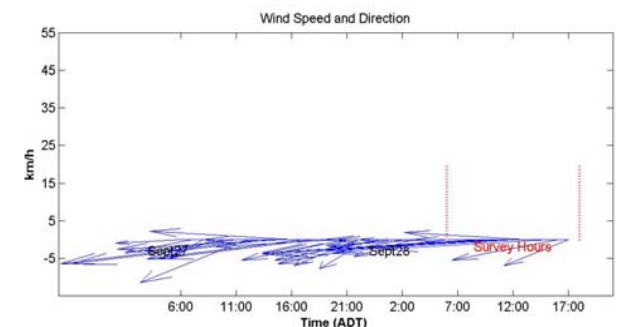
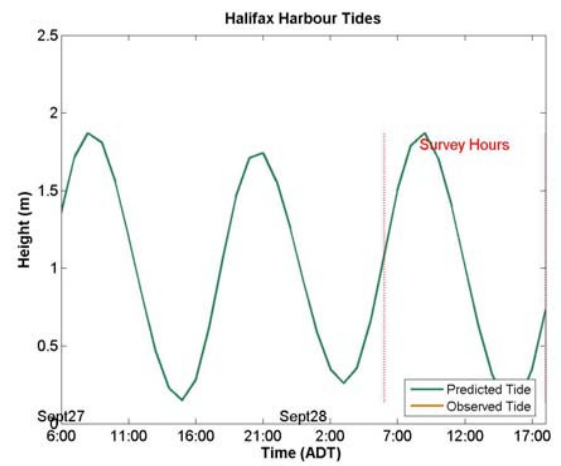
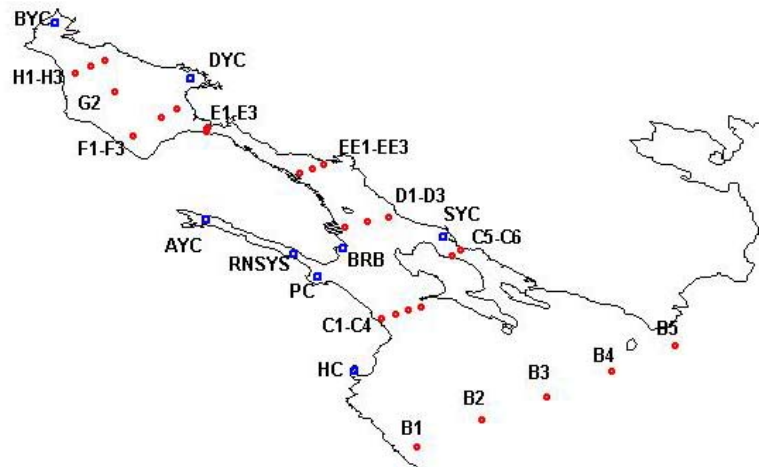
Lead: One sample (D2-10m, 5.2 µg/L ) had a detectable value of lead. Guideline = 5.6 µg/L.

Manganese: Two samples (B2-10m, 70 µg/l and F2-10m, 33 µg/l) had detectable levels of manganese. Guideline = 100 µg/L.

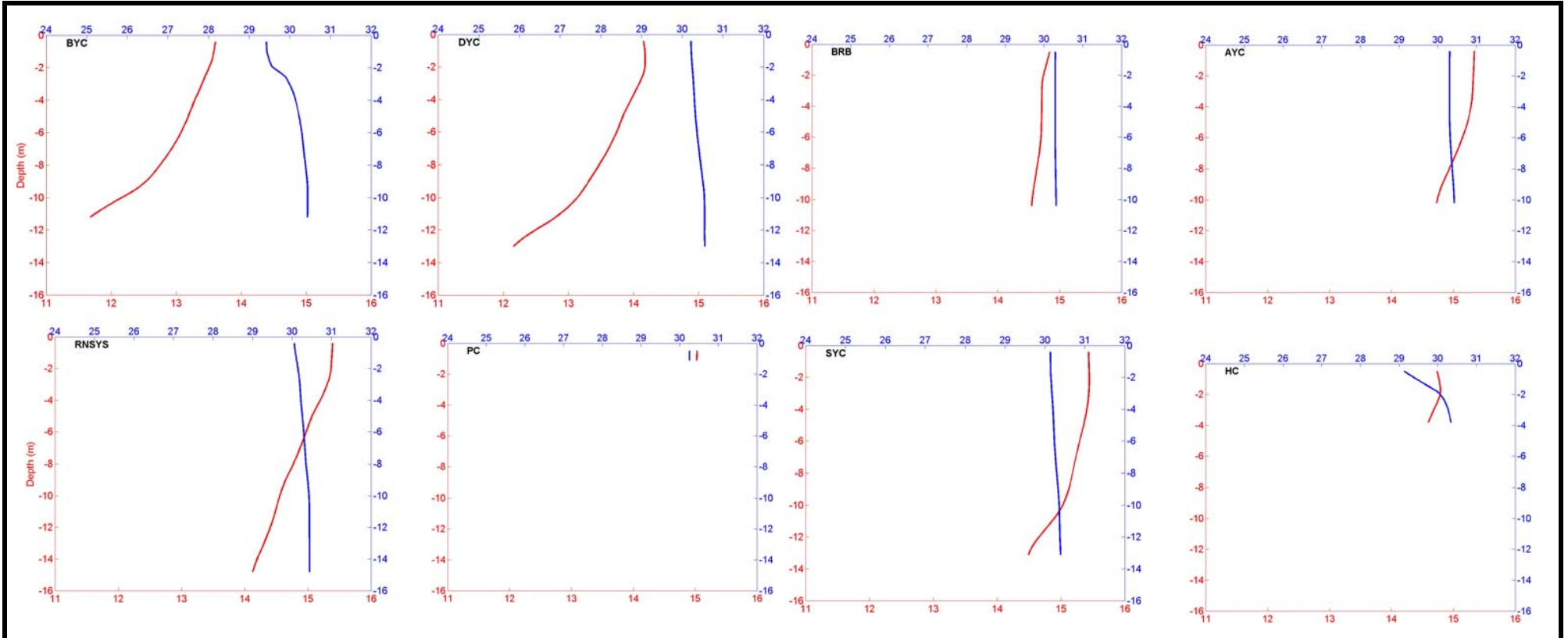
Zinc: Two samples (B2-10m, 56 µg/l and F2-10m, 60 µg/l) had detectable levels of Zinc. Guideline = 86 µg/L.

Dissolved Oxygen: The apparent lower oxygen values at the surface are likely the result of flow problems in the sensor (See report #12). The dissolved oxygen continues to drop (2.9 mg/L) in the bottom of Bedford Basin. In addition to this the SA criteria (8 mg/l) is violated at stations B1 and B2 (max values about 7.4 mg/l)

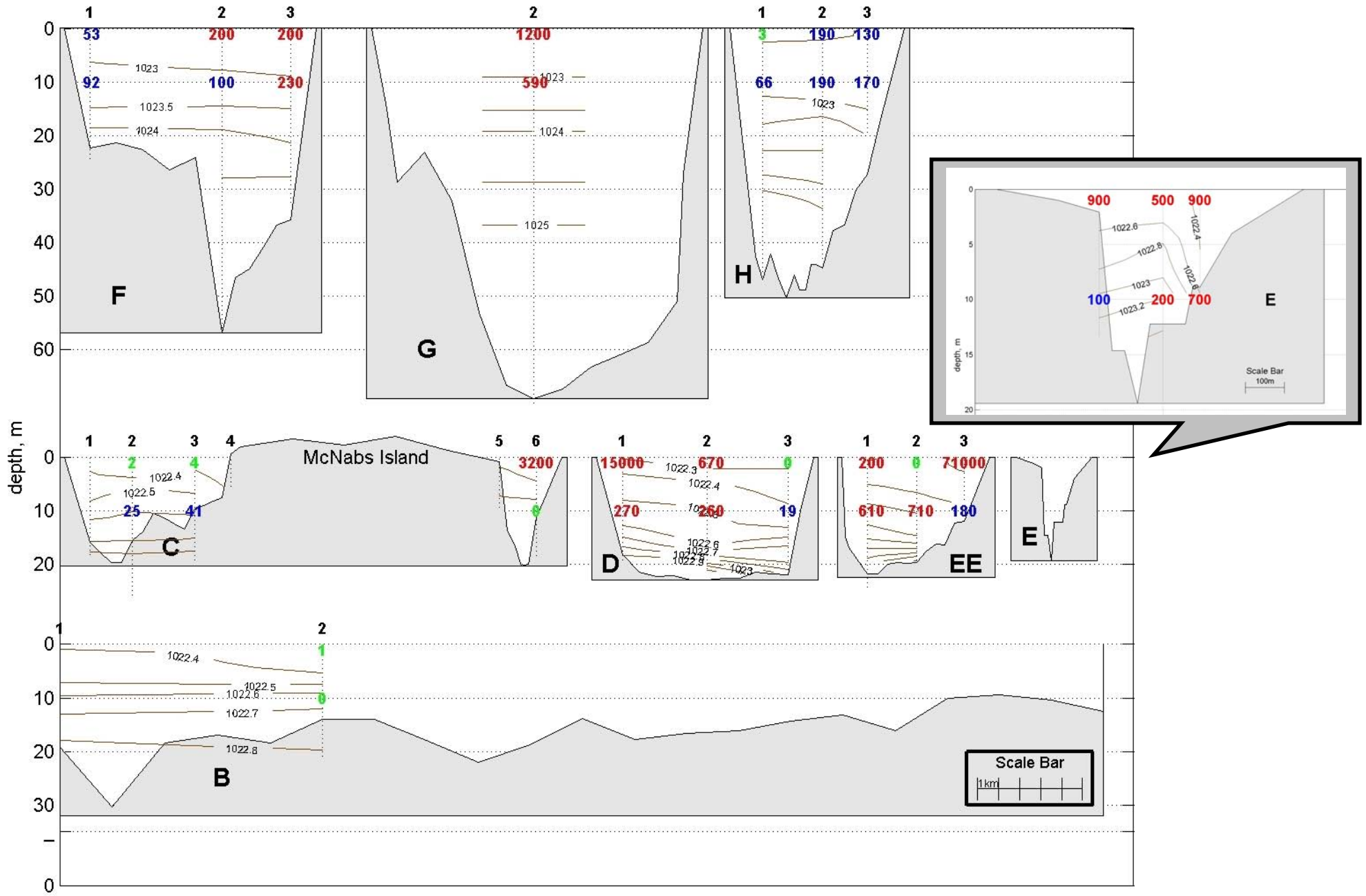




**Yacht Clubs**



Salinity in PSU      Temperature in °C

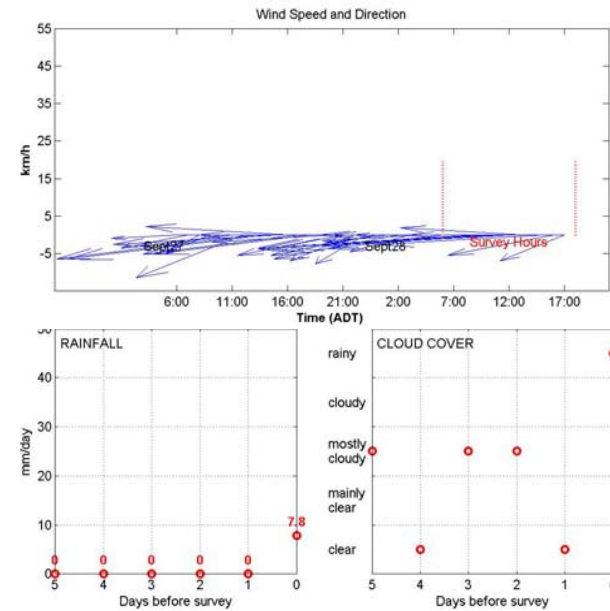
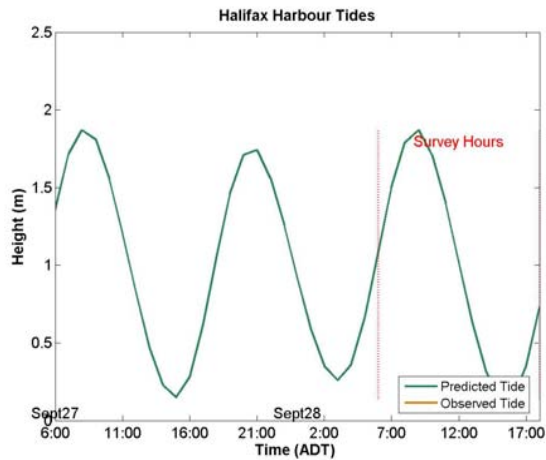
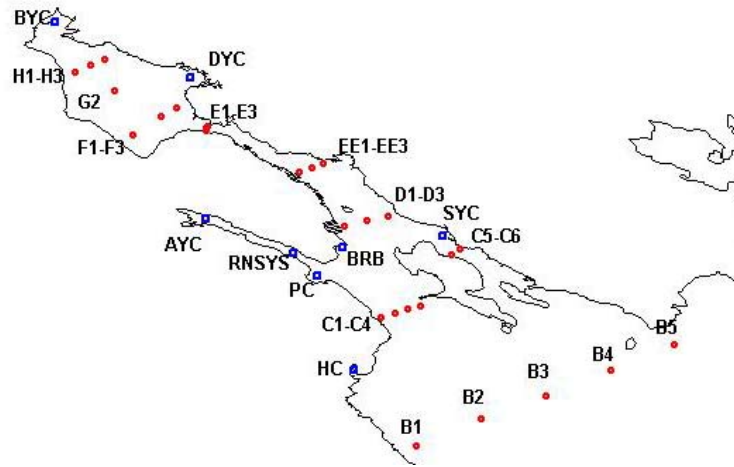


Density in kg/m<sup>3</sup>

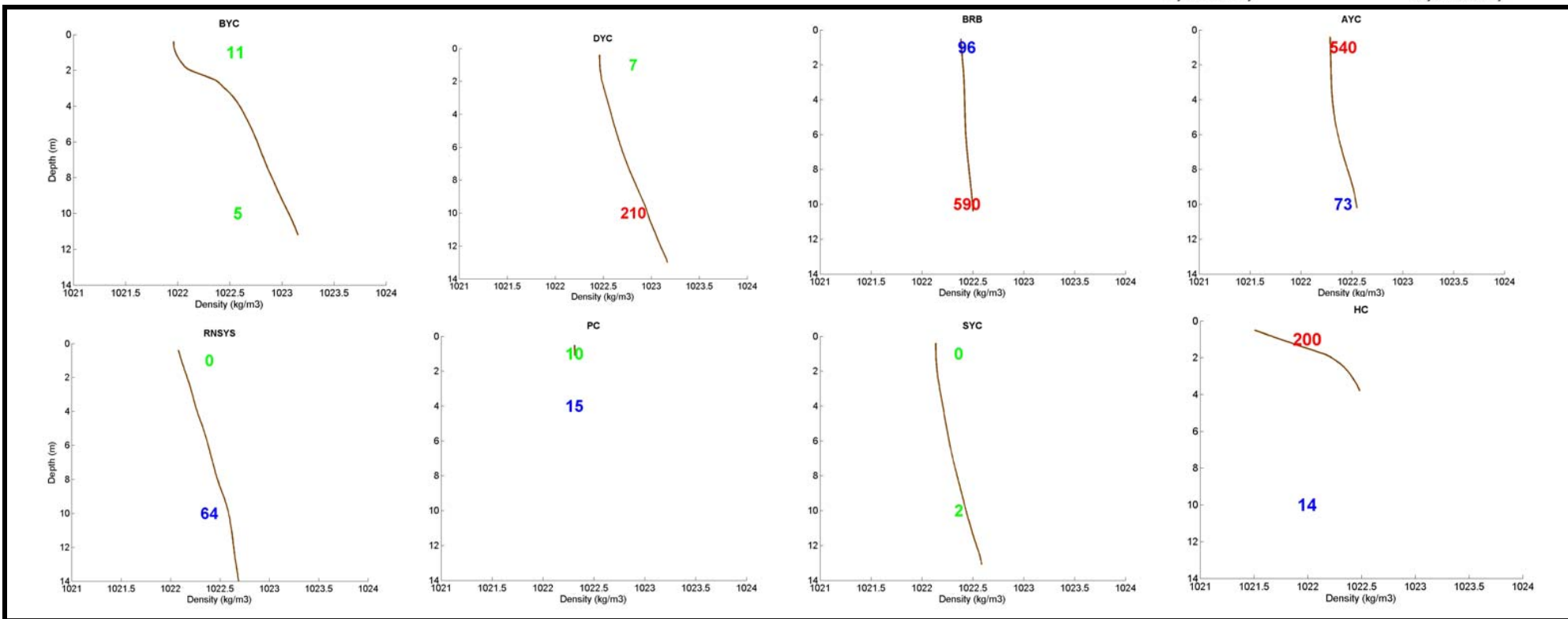
Fecal coliform: below limits

above shellfish limit (14 cfu/100mL)

above swimming limit (200 cfu/100mL)



**Yacht Clubs**

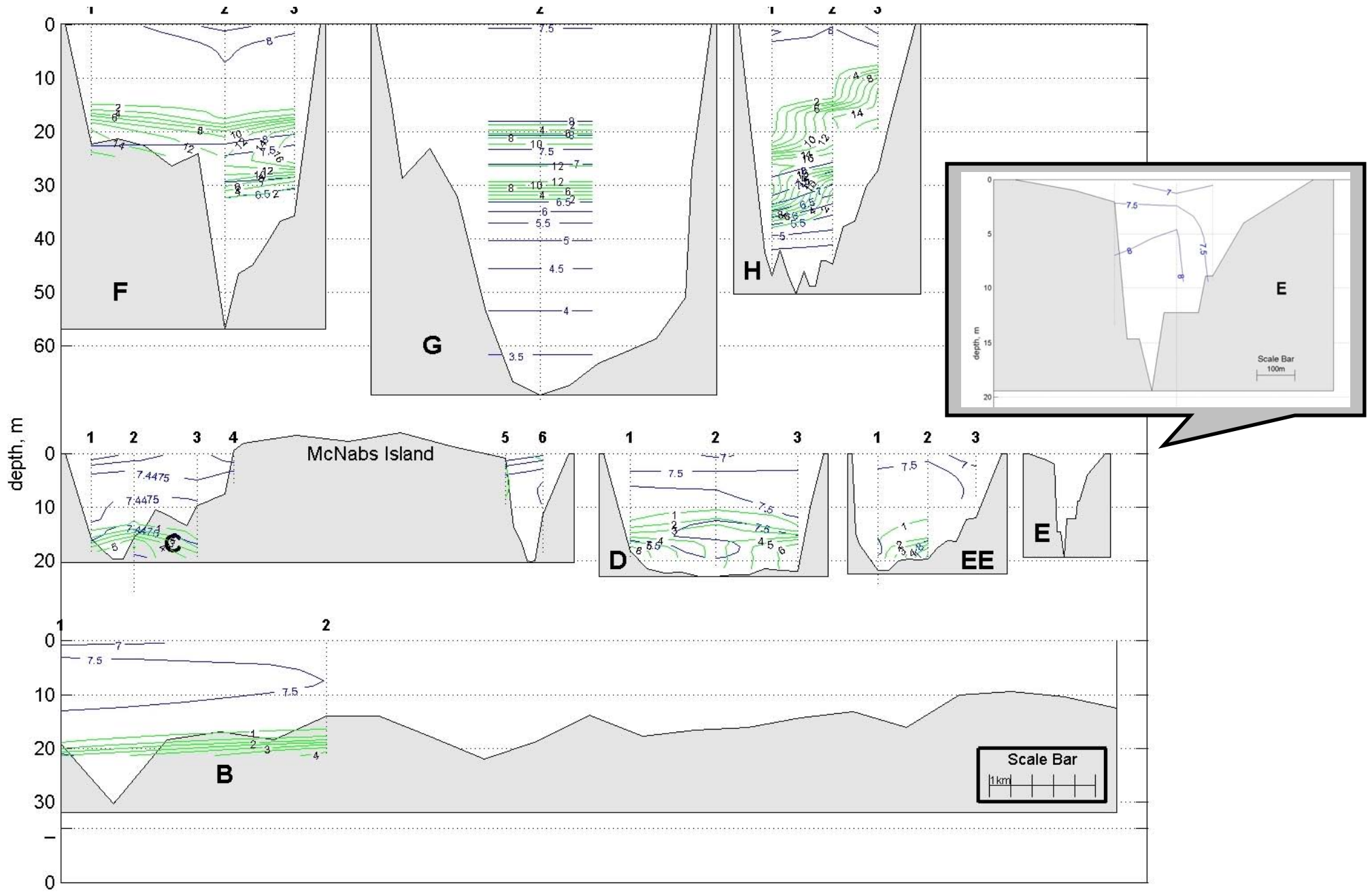


**Density in kg/m<sup>3</sup>**

**Fecal coliform: below limits**

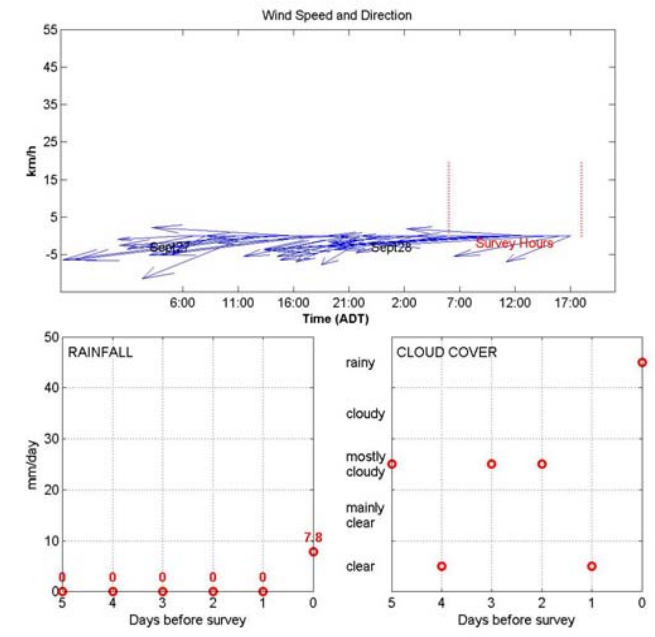
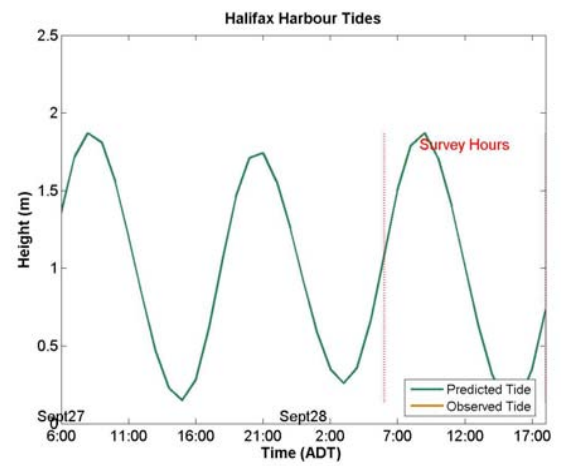
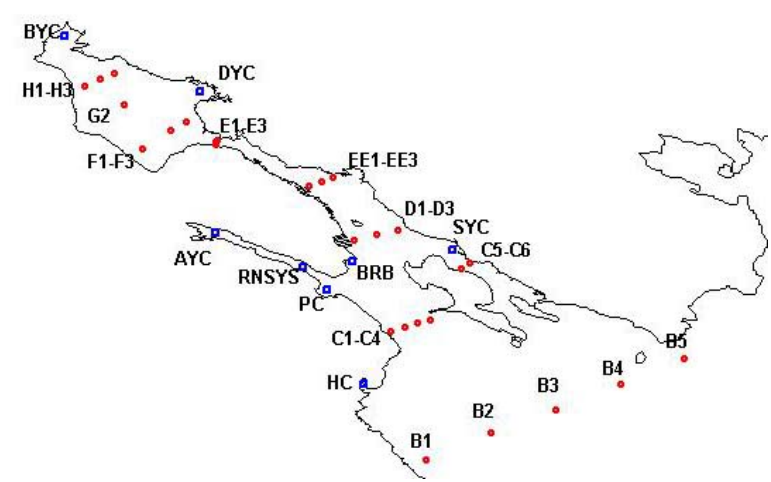
**above shellfish limit (14 cfu/100mL)**

**above swimming limit (200 cfu/100mL)**

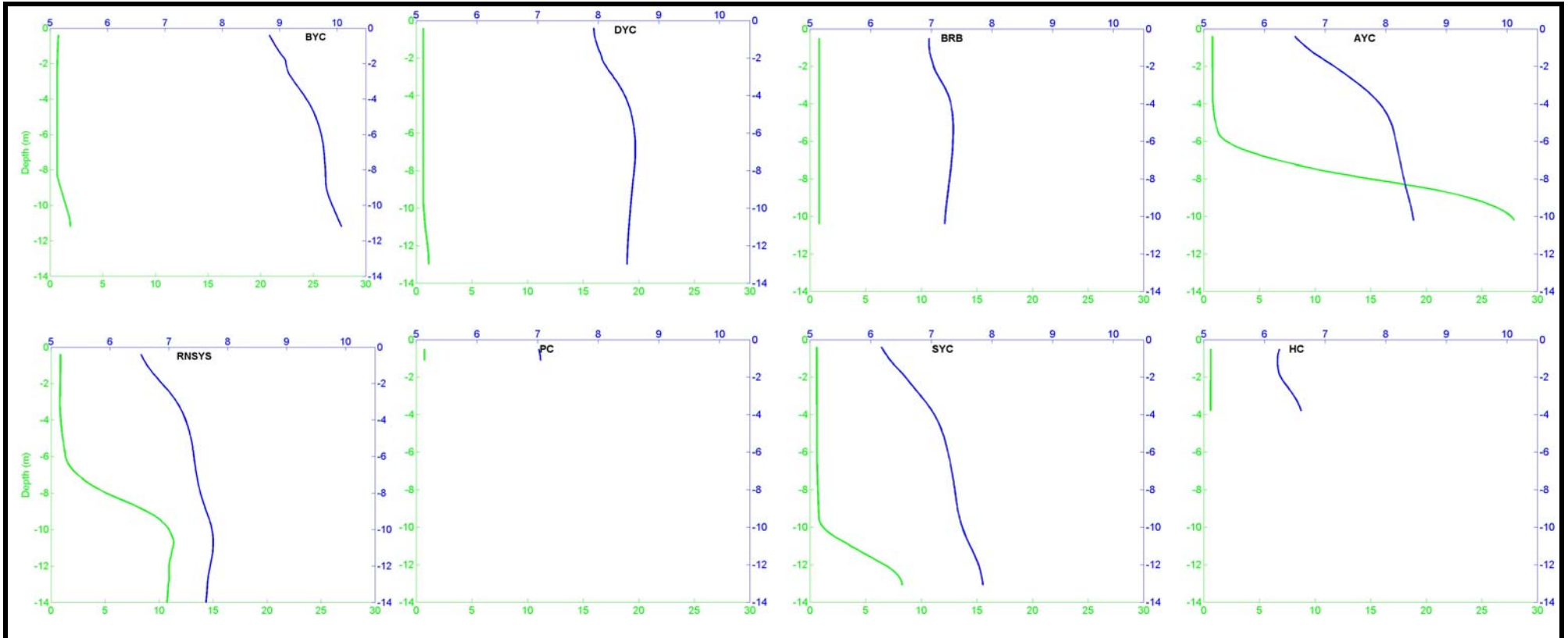


DO in mg/L

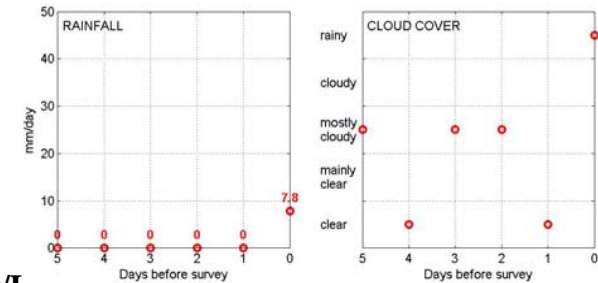
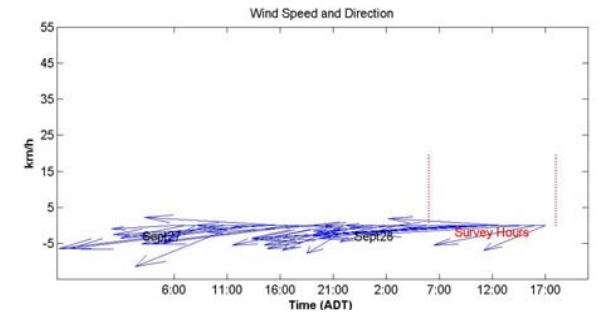
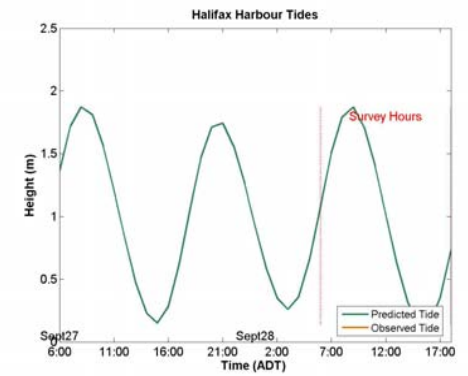
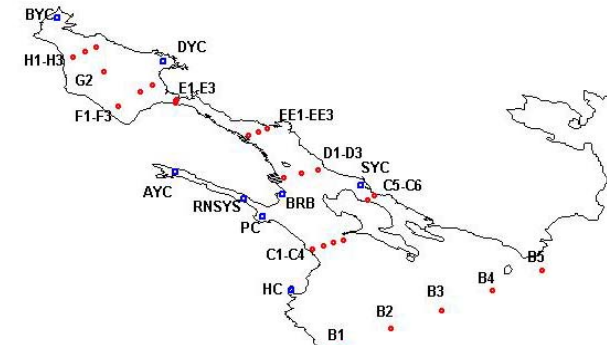
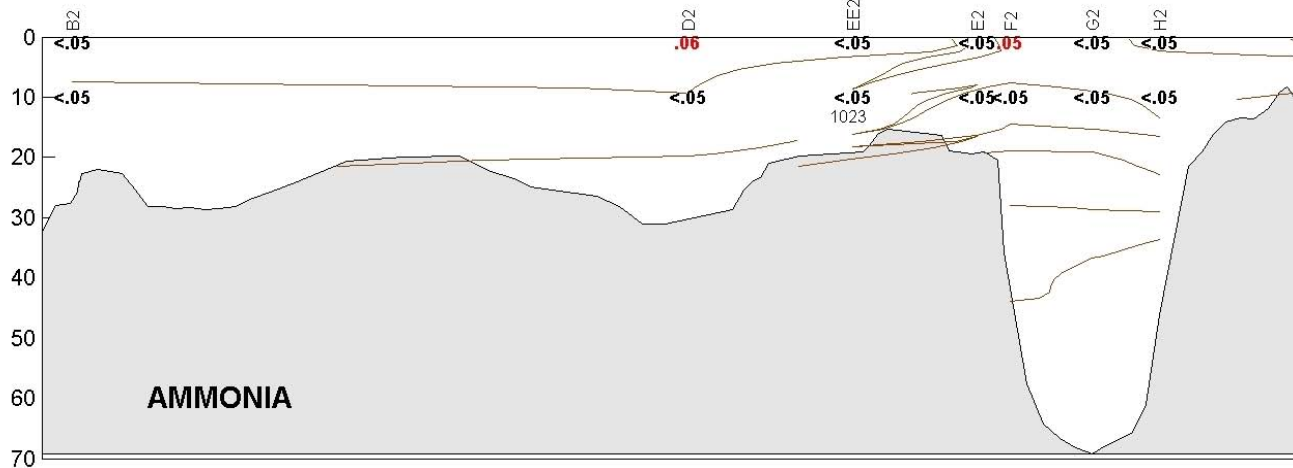
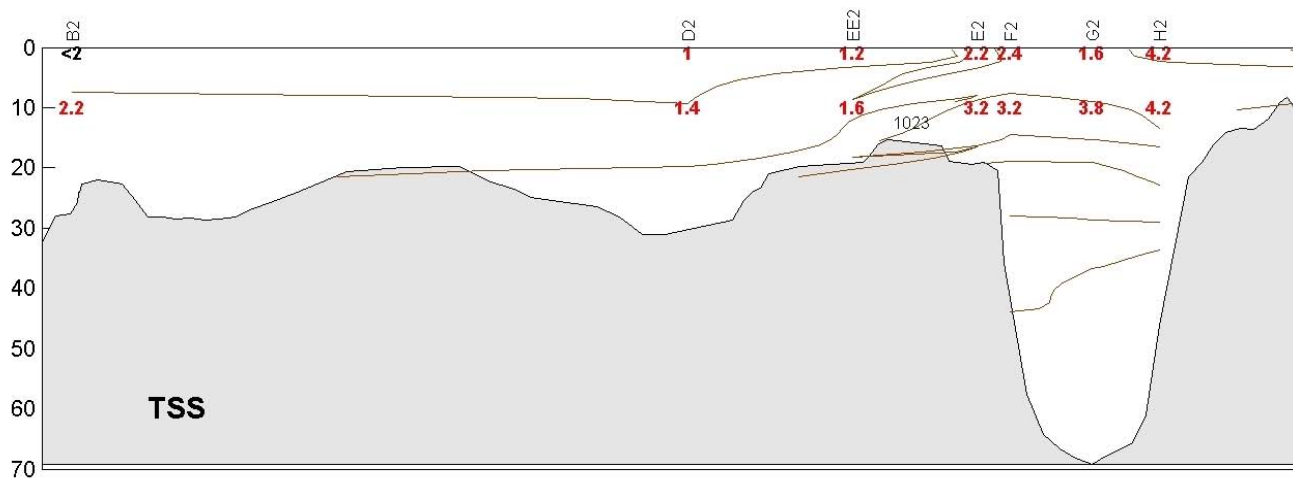
Chlorophyll in mg/m<sup>3</sup>



**Yacht Clubs**



DO in mg/L      Chlorophyll in mg/m<sup>3</sup>



Density in kg/m<sup>3</sup>

Ammonia in mg/L

TSS in mg/L