# Halifax Harbour Water Quality Monitoring Project Weekly Summary #9

Survey Date: 18 August 04
Nature of Survey: Complete Survey

**Report File (this document):** 

HHWQMP report009 040818.doc

**Data File:** HHWQMP\_data009\_040818.xls

Data Return:

 Profile:
 103%

 Bacteria:
 100%

 Chemical:
 100%

 Overall:
 101%

#### **Data Notes:**

- Data set includes profile data at "optional site" B1

- QAQC sample reference site missing – attempting to resolve.

## QA/QC samples:

				H2- 10m	
Parameter	units	reference sample	QA/QC	reference sample	Dup
Fecal Coliform	CFU/ml	•	n/a	0	n/a
Ammonia (as N)	mg/L		0.06	0.09	0.08
Total Suspended Solids	mg/L		2.8	1.4	n/a
Boron	ug/L		4200	4600	4800
Lithium	ug/L		170	200	200
Strontium	ug/L		6500	6900	6800
Titanium	ug/L		88	110	98
Uranium	ug/L		2.7	2.9	2.8

#### Fecal Coliform (CFU/ml)

Site	C2-10m	AYC-1m	F1-10m	E3-1m	D3-1m
Reference	2	1	1	7	0
QA/QC	1	6	0	13	0

# Regulated parameters with all samples below EQL (non-detectible):

Parameter	EQL(µg/L)	Parameter	EQL(μg/L)	Parameter	EQL(mg/L)
Cadmium	3	Nickel	20	Oil and Grease	5
Chromium	20	Zinc	50	CBOD <sub>5</sub>	5
Copper	20				
Lead	5				

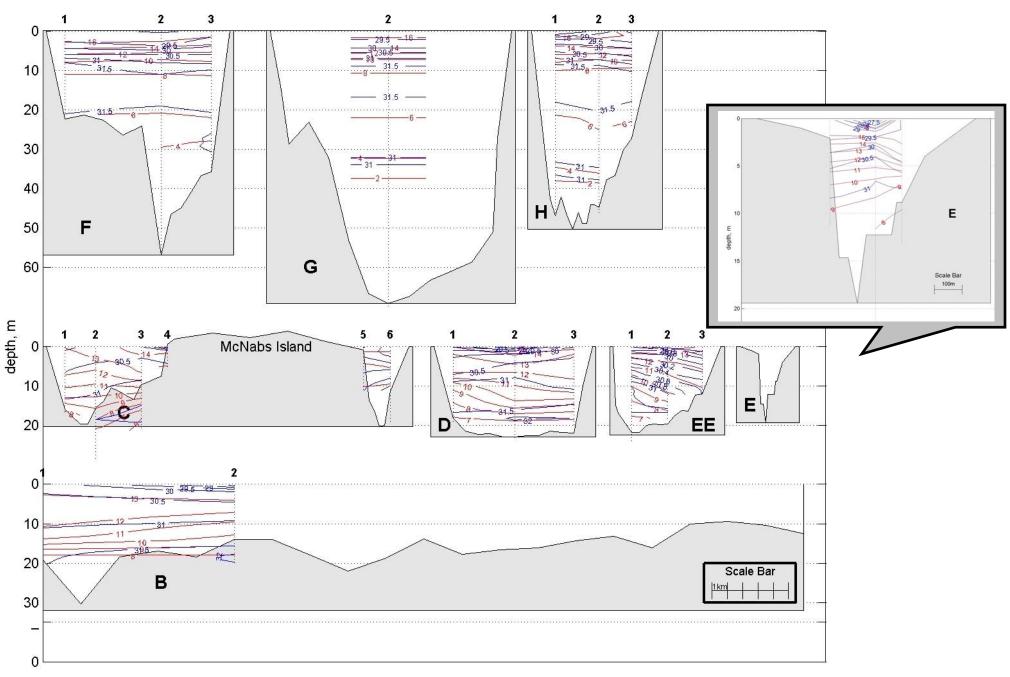
## **Detectible non regulated metals**

Metal	EQL (µg/L)	Number >EQL	Mean (µg/L)	Range (µg/L)
Boron	500	14	4400	4200-4800
Lithium	20	14	186	170-200
Strontium	50	14	6630	6400-7000
Titanium	20	14	91	81-110
Uranium	1	14	3	2.6-3.4

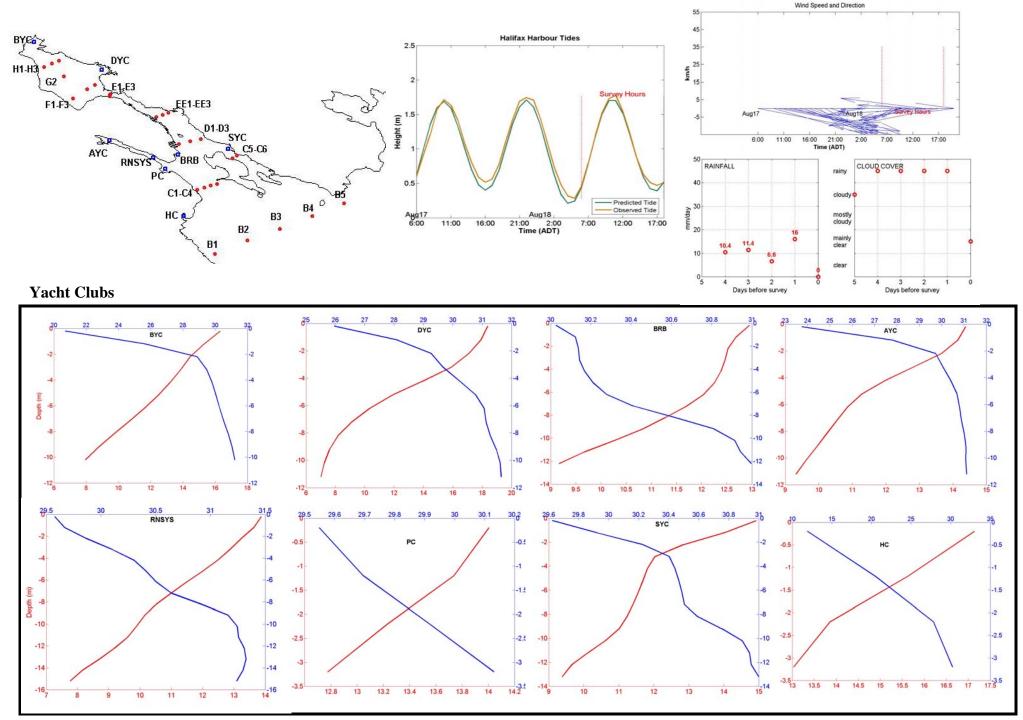
#### **Comments:**

Manganese concentration at site EE2-10m (21  $\mu$ g/L ) and G2-10m (21  $\mu$ g/L ) are above EQL (20  $\mu$ g/L ), but below guidelines (100  $\mu$ g/L ).

Dissolved Oxygen: The class SB criterion (7 mg/l) is violated in the deep water (>35 m) of Bedford Basin. In addition the Class SA criterion (8 mg/l) is violated in the surface water (top 2-4 m) at sites B1 and B2, with minimum concentrations of approximately 6.5 mg/l



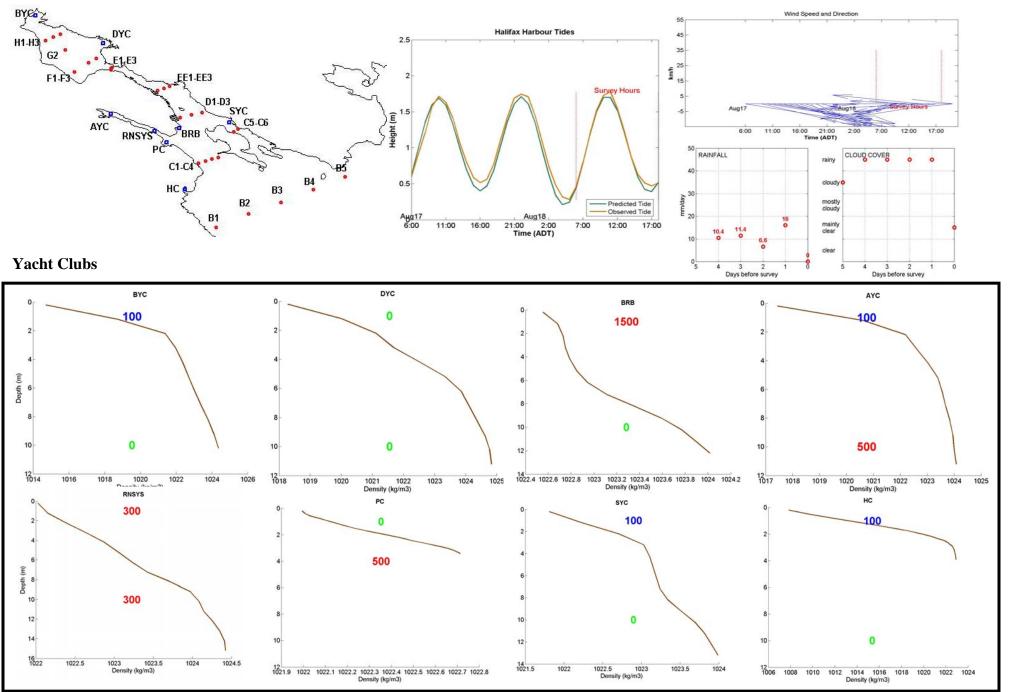
Salinity in PSU Temperature in °C



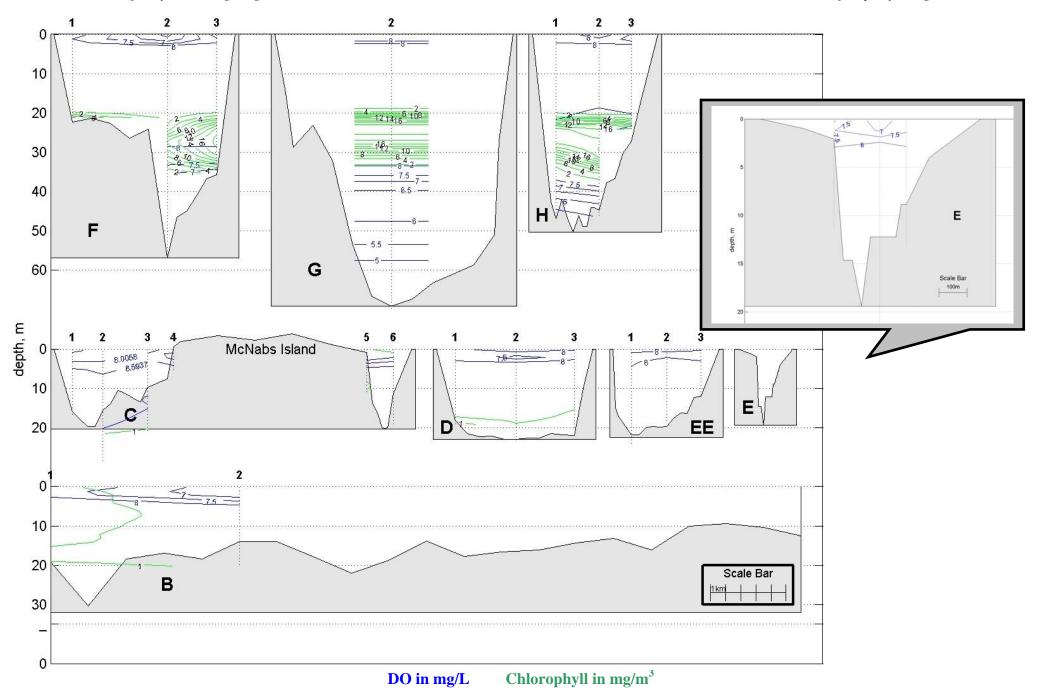
Salinity in PSU Temperature in °C

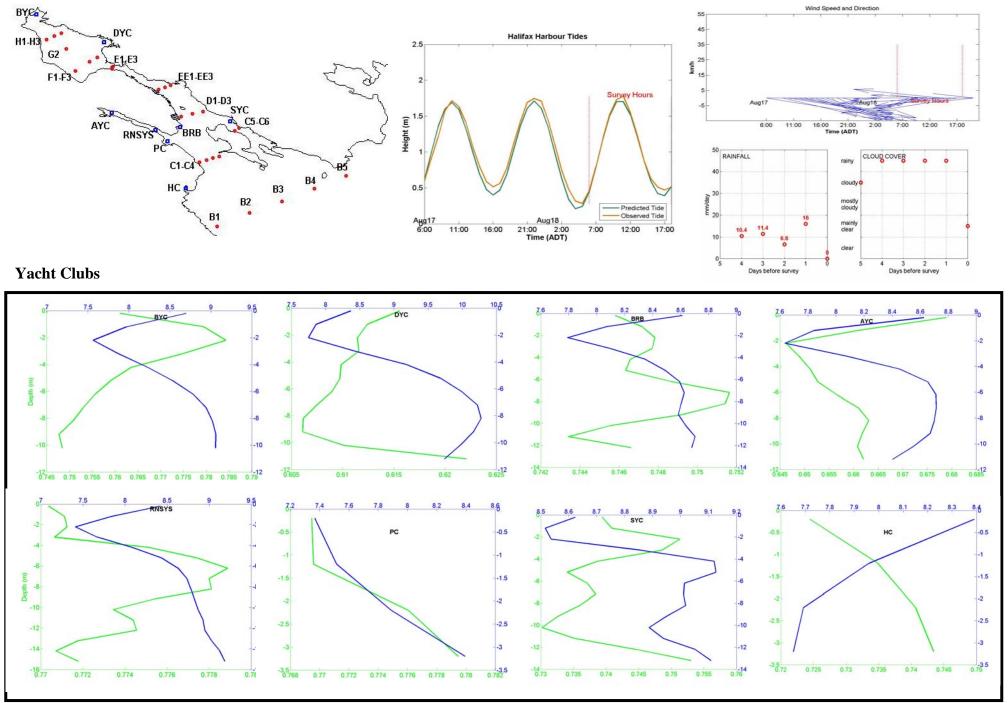
0

Density in kg/m<sup>5</sup> Fecal coliform: below limits
above shellfish limit (14 cfu/100mL)
above swimming limit (200 cfu/100mL)

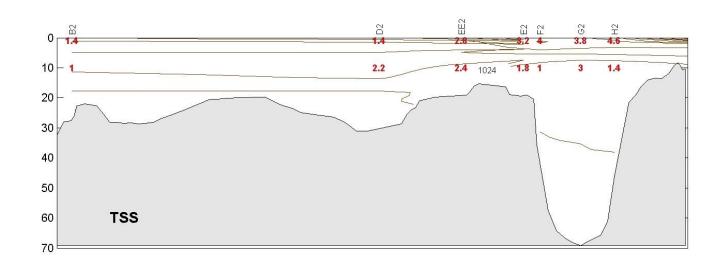


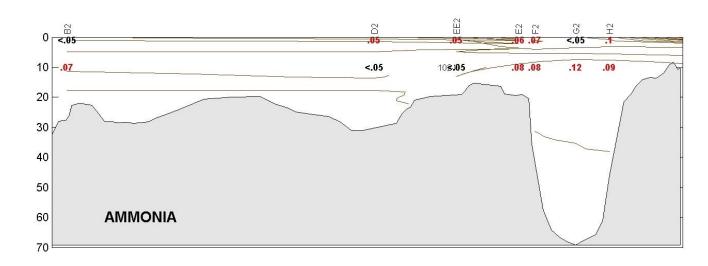
Density in kg/m<sup>3</sup> Fecal coliform: below limits
above shellfish limit (14 cfu/100mL)
above swimming limit (200 cfu/100mL)

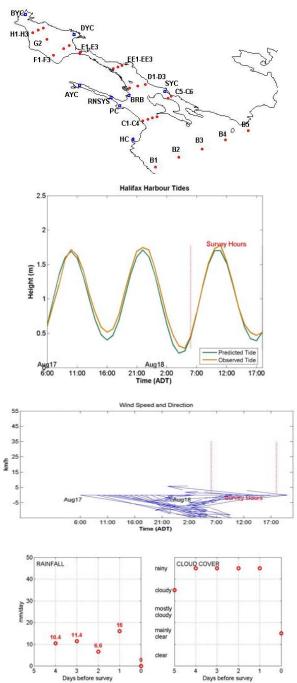




**DO in mg/L** Chlorophyll in mg/m<sup>3</sup>







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