# Halifax Harbour Water Quality Monitoring Project Weekly Summary #58

Survey Date: 26 July 2005 Nature of Survey: Coliform Survey

**Report File (this document):** 

HHWQMP report058 050726.doc

**Data File:** HHWQMP\_data058\_050726.xls

**Data Return:** 

Profile: 90%
Bacteria: 89%
Chemical: na
Overall: 90%

## **Sample Notes:**

Sites B2 and HC not sampled due to heavy fog and swell.

Site F1 not sampled due to moored vessel and diving operations.

## QA/QC samples:

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

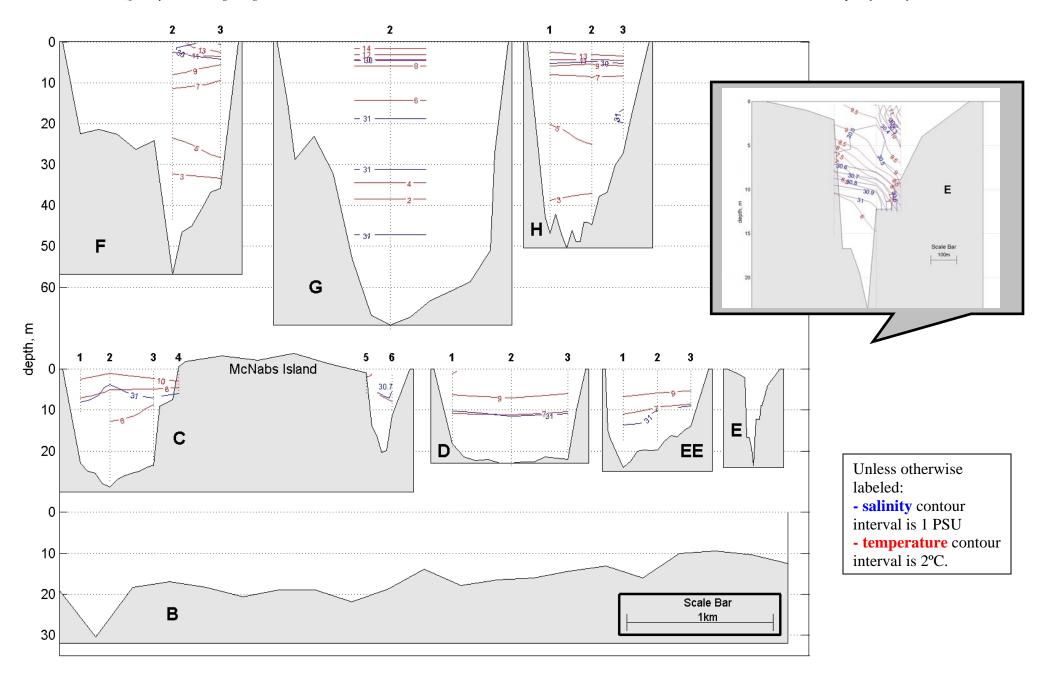
Site	EE3-10m	DYC-1m	D2-1m
Reference	2300	14	53
QA/QC	3200	280	38

### **Comments:**

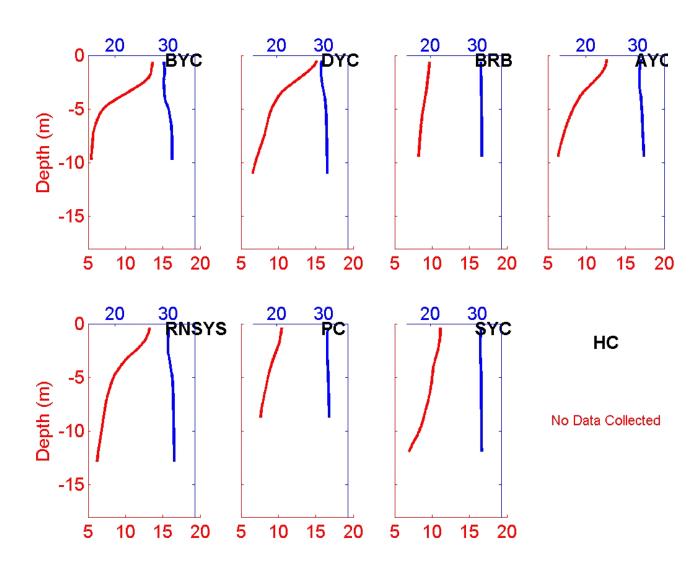
Dissolved Oxygen: The deeper water of Bedford Basin (>40m) has dissolved oxygen (DO) values below the applicable class SB guideline of 7.0 mg/L. The deep water minimum is about 5.2 mg/L. Outside the basin the DO is generally between 8 and 9 mg/L with slightly lower values at the surface.

Chlorophyll: There is a fluorescence maximum of about 5-7 mg/m³ at a depth of between 10-15 m throughout the Inner Harbour and Basin. This continues in Eastern Passage but is reduced west of McNabs Island. Here the maximum is lower in value and occurs deeper in the water column.

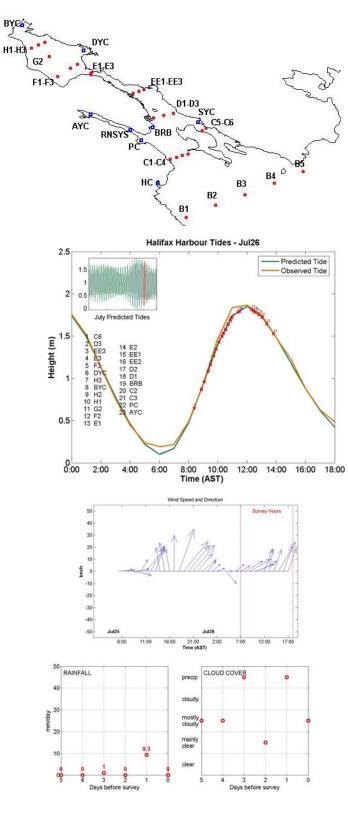
General: The Harbour salinity is very uniform at a value near 31 PSU with water < 30 PSU only evident in the Basin. The surface water temperature has dropped several degrees since last week and the bottom water has warmed. This implies a relative lack of new freshwater input and significant wind mixing. The bacteria distribution reflects this condition with high values in both 1 m and 10 m samples. The distribution seems to be displaced to the north and along the eastern side of the Harbour. This is consistent with the generally south and southwest winds occurring before and during sampling.



# **Yacht Clubs**



Salinity in PSU Temperature in °C



10

20

30

В

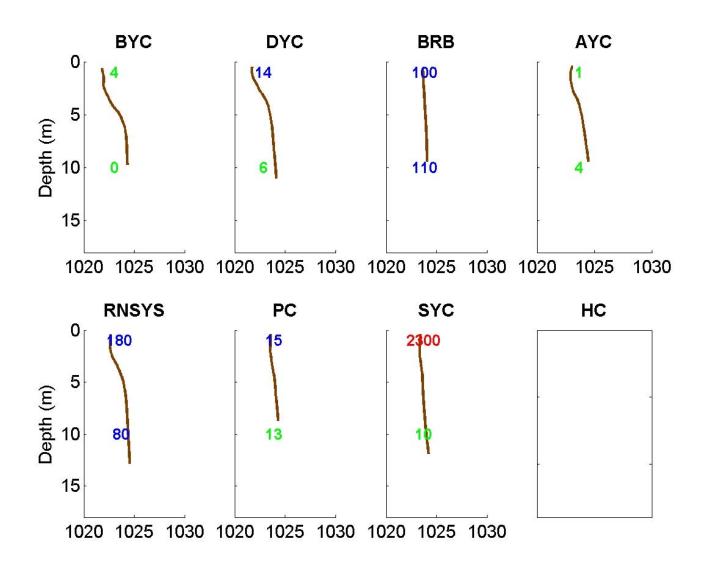
- density contour

Scale Bar

1km

interval is 0.5 kg/m<sup>3</sup>

# **Yacht Clubs**



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

