

# Halifax Harbour Water Quality Monitoring Project

## Weekly Summary #109

**Survey Date:** 01 August 2006  
**Nature of Survey:** Complete Survey  
**Report File (this document):** HHWQMP\_report109\_060801.doc  
**Data File:** HHWQMP\_data109\_060801.xls

### Data Return:

Profile:	58%
Bacteria:	64%
<u>Chemical:</u>	<u>100%</u>
<b>Overall:</b>	<b>67%</b>

### Sample Notes:

Sites DYC, SYC, PC, RNSYS, AYC, C3-C6, D3, E3, EE3 and F3 were not sampled due to boat breakdown. The D1-1m fecal coliform results were not reported from the Lab.

### QA/QC samples:

Only one QA/QC sample (fc) was taken before sampling was terminated. The location of this QA/QC sample was not recorded in field notes.

### Comments:

**General:** There has been no rainfall in the previous 5 days except light rainfall (5.6 mm) on day of survey. The near surface fresher layer evident two weeks ago has mixed somewhat deeper and has spread down harbour.

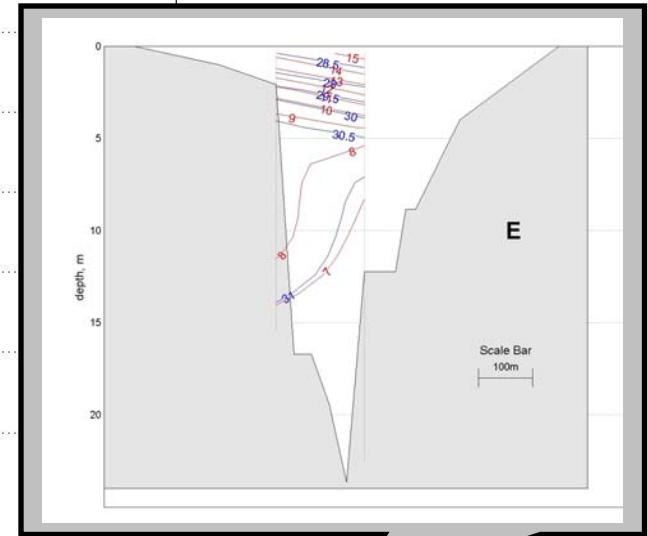
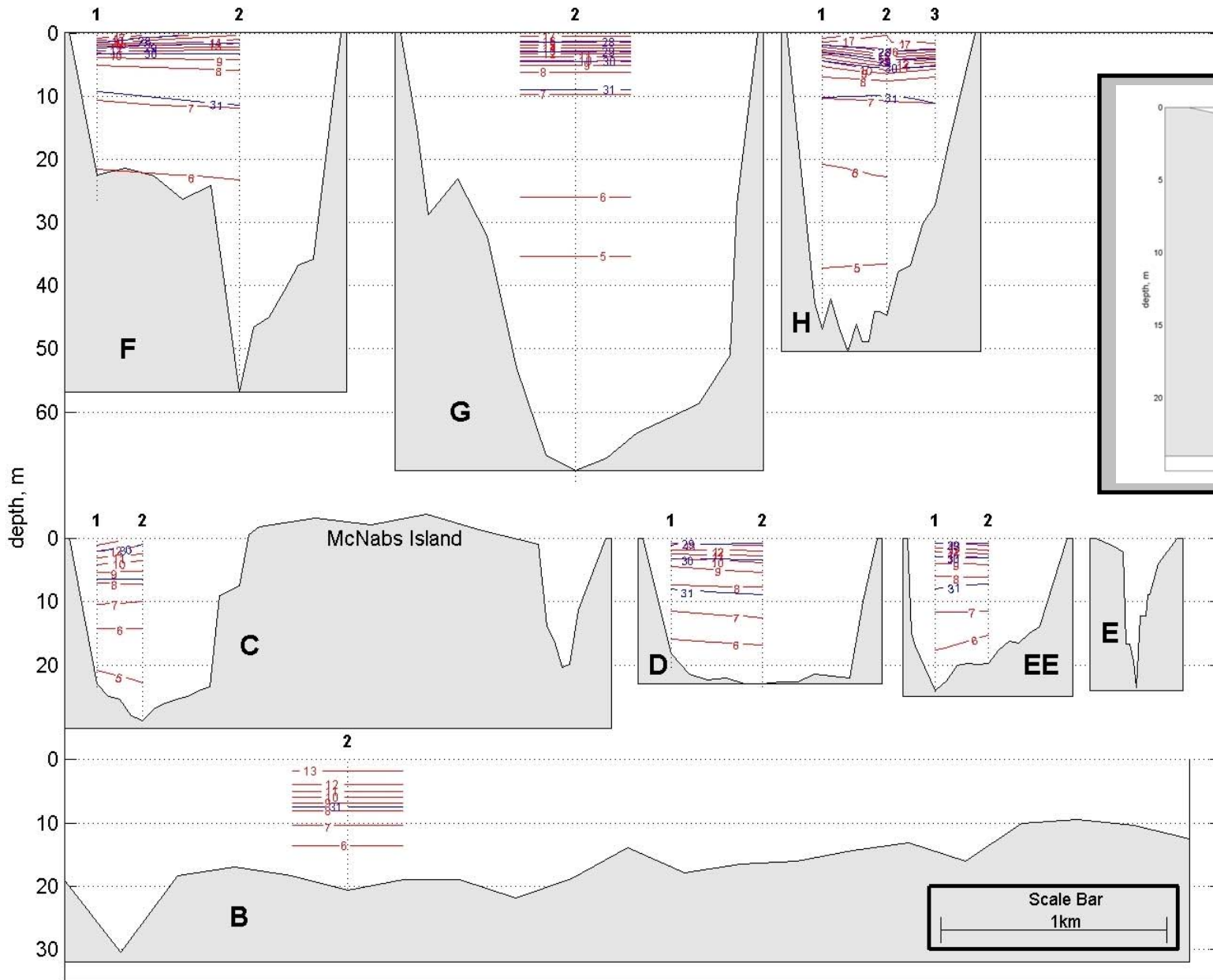
The fecal coliform (fc) values are not particularly high. The distribution is centered on the Inner Harbour. That is, the values in the Basin and Outer Harbour are generally very low. However, the effect of sewage diversion to the Fairview Cove CSO is obvious in the higher fc values observed in the Southeastern Basin at sites F1 and F2. Additionally, and somewhat counter to this general pattern is the relatively high value in the 1m sample at BRB and in the 10 m sample at C2. There are also relatively high values in the bottom sample in HC, possibly from the Hospital Point outfall.

**Fluorescence:** Fluorescence levels are similar to those from two weeks ago. Profile maximums are in the mid teens at 8-10m in the Basin. The values decrease through the Inner Harbour to values of 2-3 mg/m<sup>3</sup> in the Outer Harbour.

**Dissolved Oxygen:** The available data indicate that the bottom water in the Basin are below the applicable class SB guideline (7.0 mg/L). The DO data is not ground-truthed and absolute values are questionable (see DO discussion in QR#1).check B2

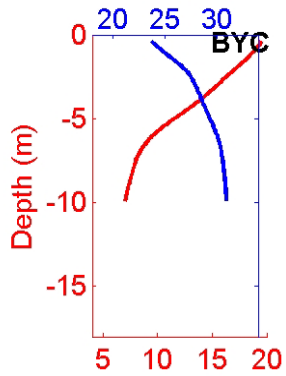
**TSS:** The TSS values vary from 2-6 mg/L which are relatively typical. The highest near-surface value is in the Narrows, however, there does not appear to be a distinct pattern.

**Ammonia:** The ammonia nitrogen values are low. All, but three values are below detection (0.05 mg/L). The remaining values are only slightly above the detection limit.



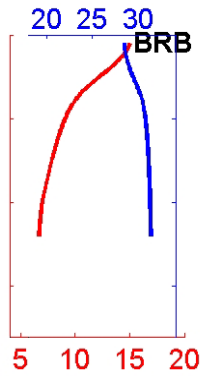
Unless otherwise labeled:  
- salinity contour interval is 1 PSU  
- temperature contour interval is 1°C.

# Yacht Clubs



DYC

No Data Collected



AYC

No Data Collected

RNSYS

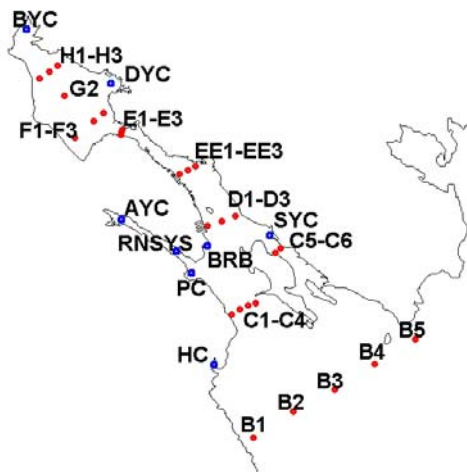
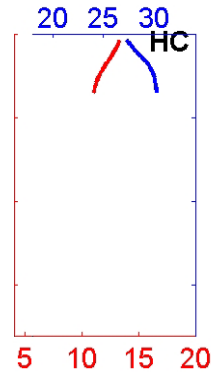
No Data Collected

PC

No Data Collected

SYC

No Data Collected

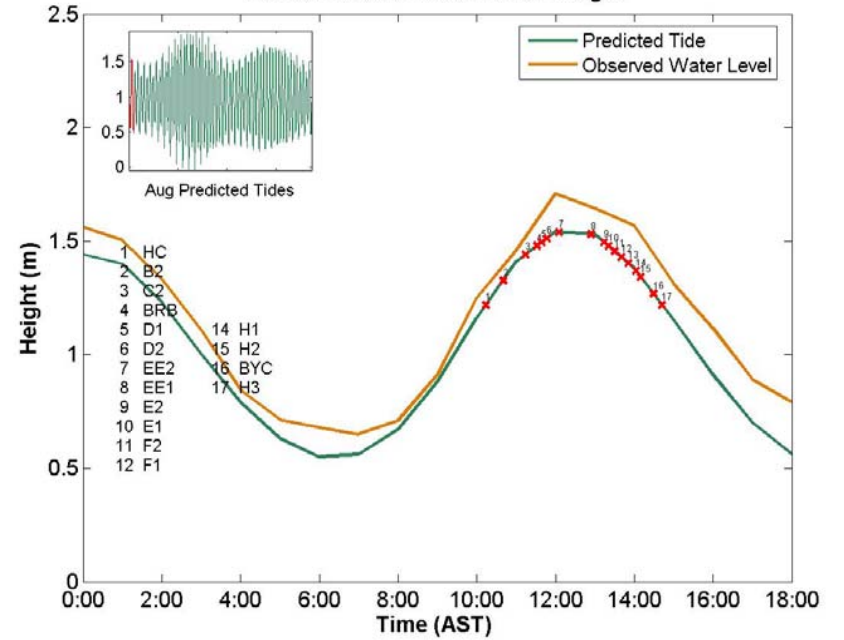


Rainfall and temperature data collected at Shearwater Autoport.

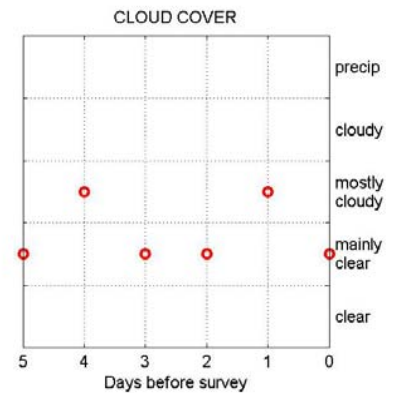
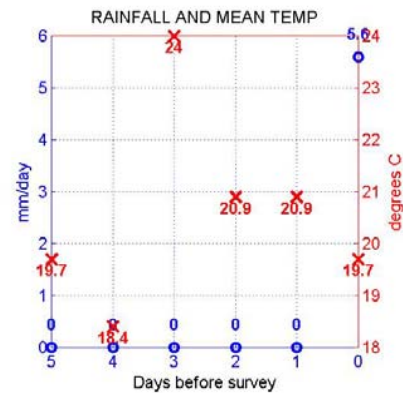
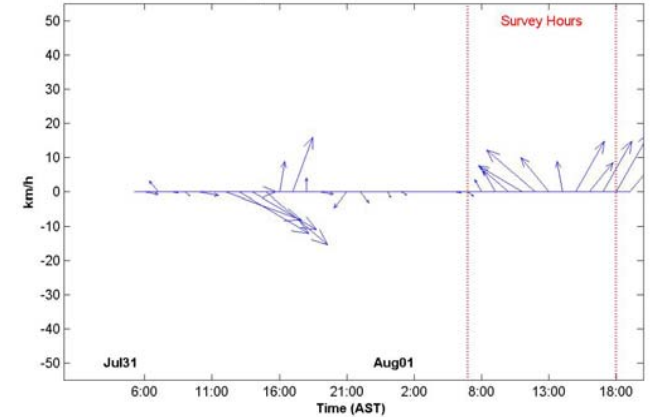
Salinity in PSU

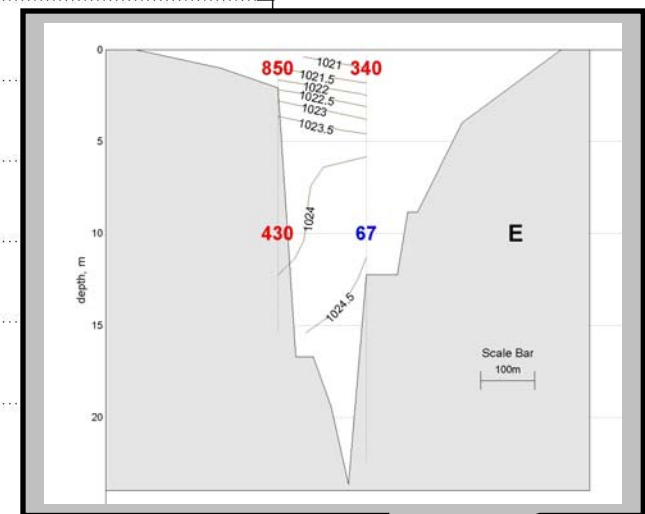
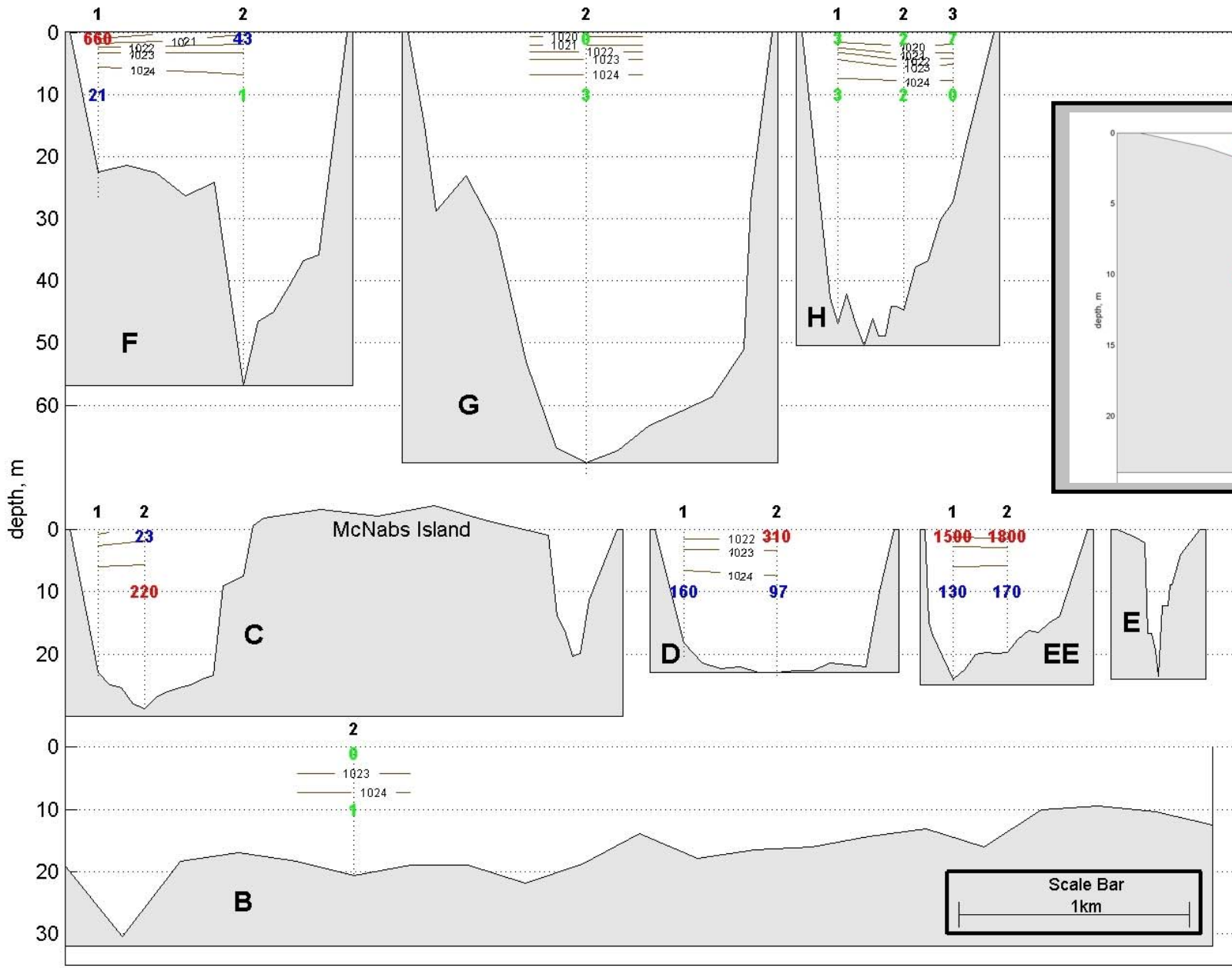
Temperature in °C

## Halifax Harbour Water Level - Aug01



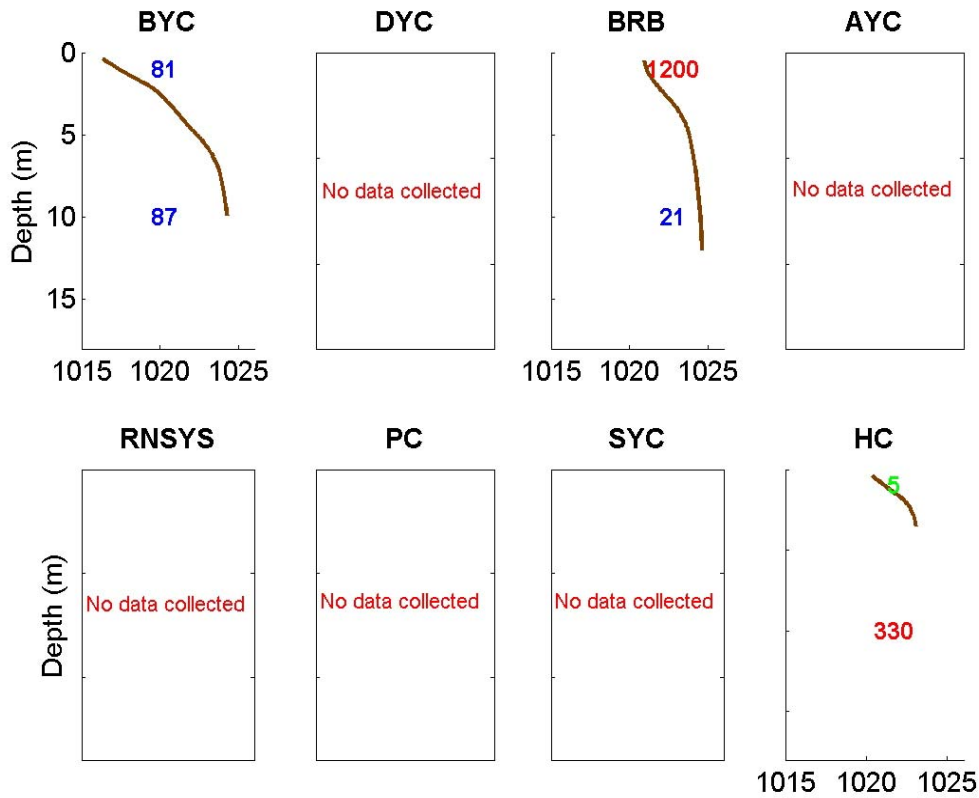
## Wind Speed and Direction at Shearwater Jetty



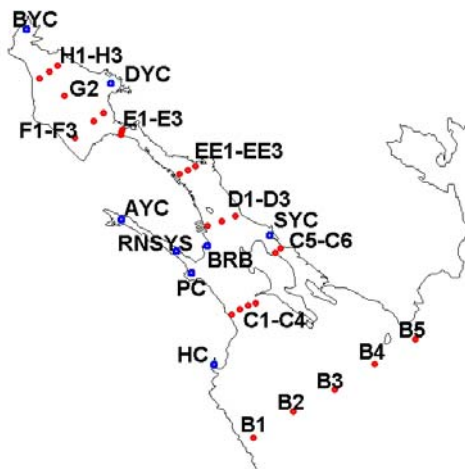
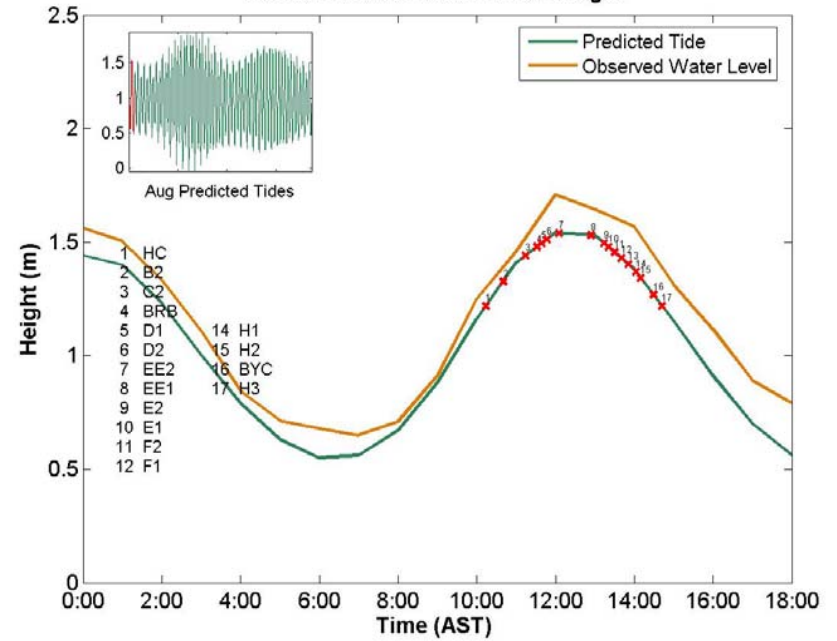


Unless otherwise labeled:  
 - **density** contour interval is 1 kg/m<sup>3</sup>

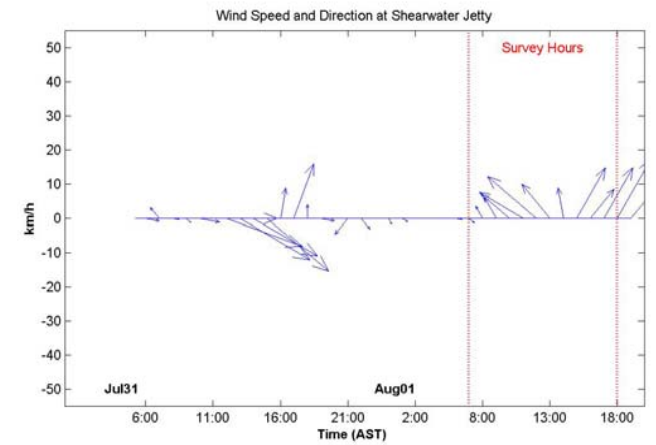
# Yacht Clubs



# Halifax Harbour Water Level - Aug01

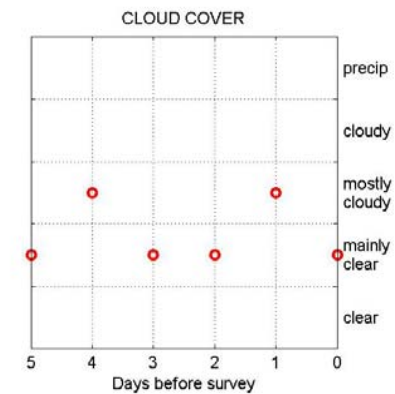
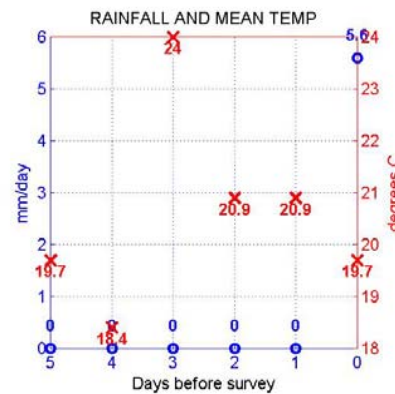


Rainfall and temperature data collected at Shearwater Autoport.

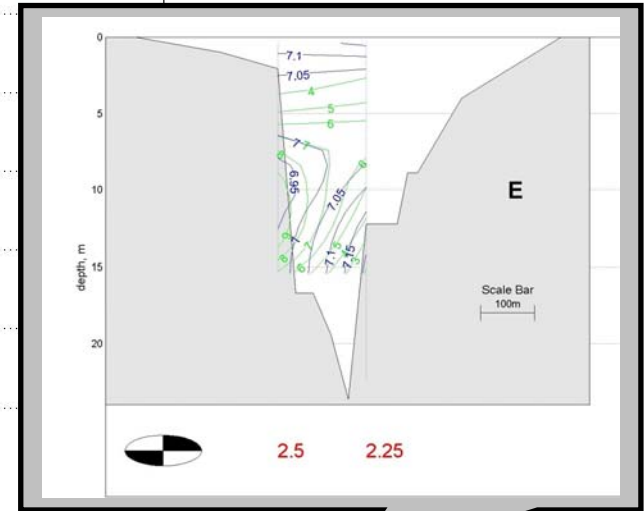
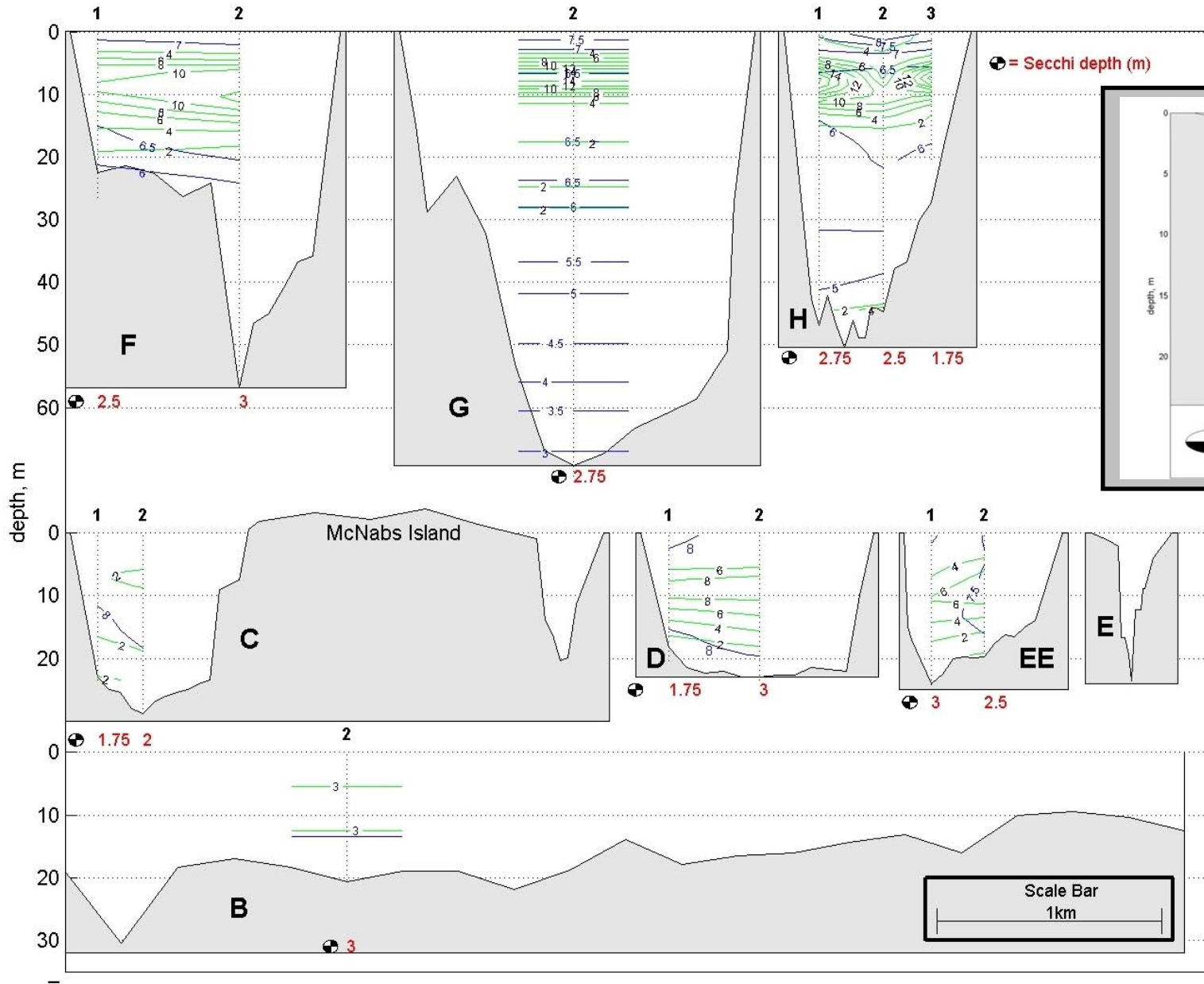


Potential Density in  $\text{kg/m}^3$

Fecal coliform: above swimming limit (200 cfu/100mL)  
 above shellfish limit (14 cfu/100mL)  
 below limits

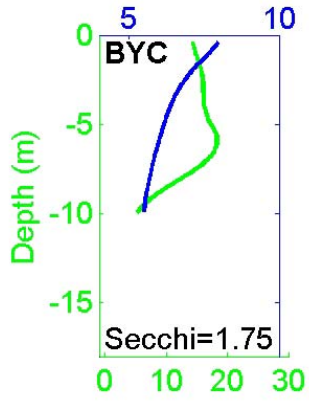






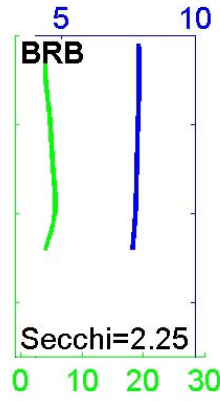
Unless otherwise labeled:  
 - **dissolved oxygen** contour interval is 0.5 mg/L  
 - **chlorophyll** contour interval is 2 mg/m<sup>3</sup>.

# Yacht Clubs



BYC

No Data Collected



BYC

No Data Collected

RNSYS

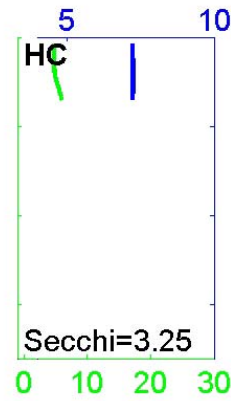
No Data Collected

PC

No Data Collected

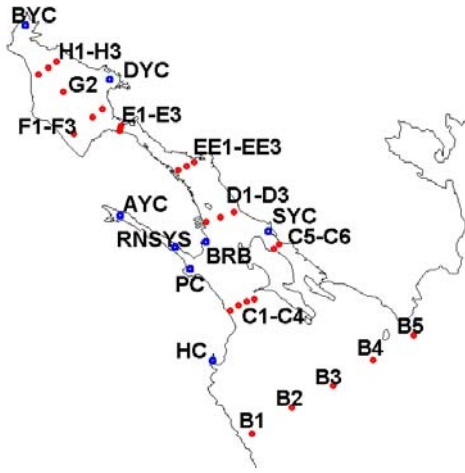
SYC

No Data Collected



HC

Secchi=3.25

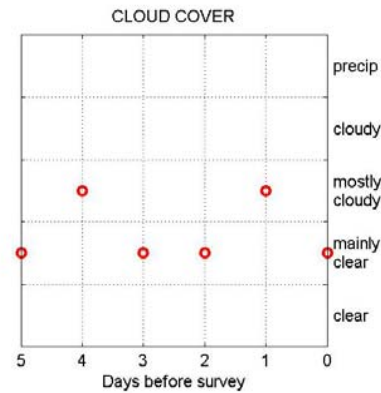
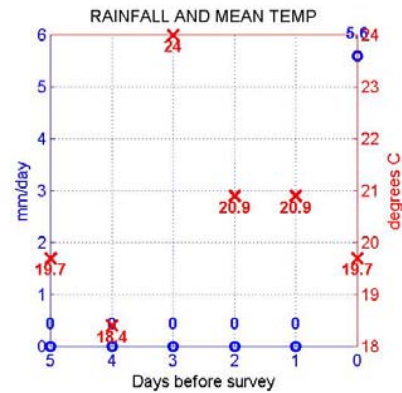
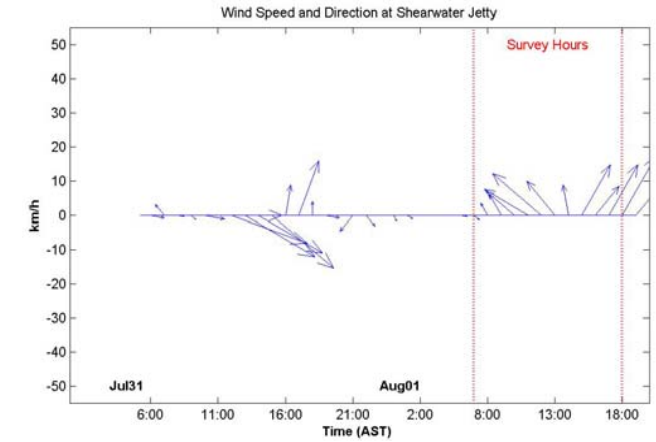
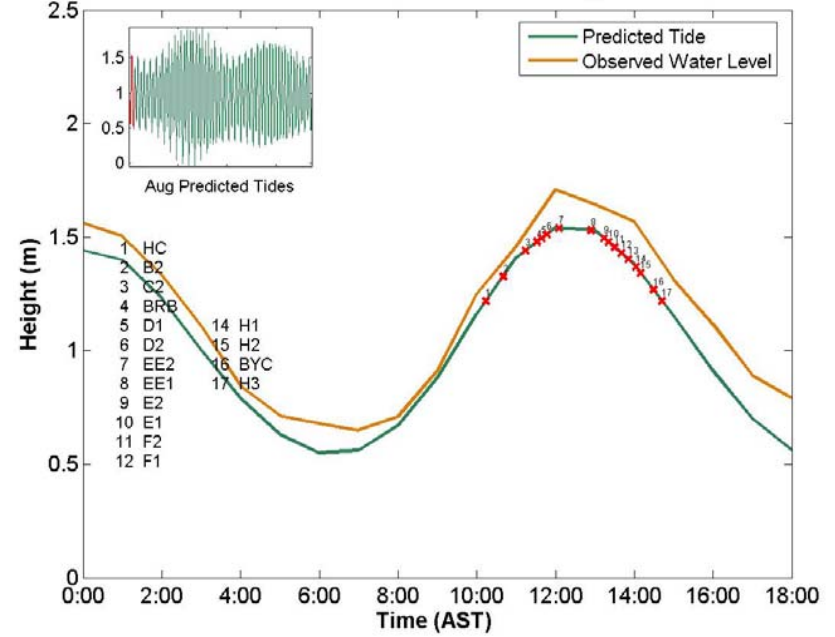


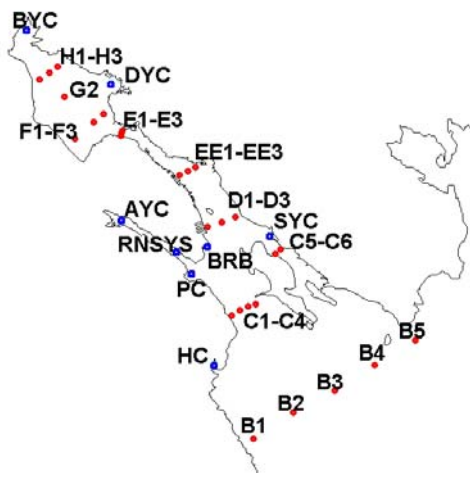
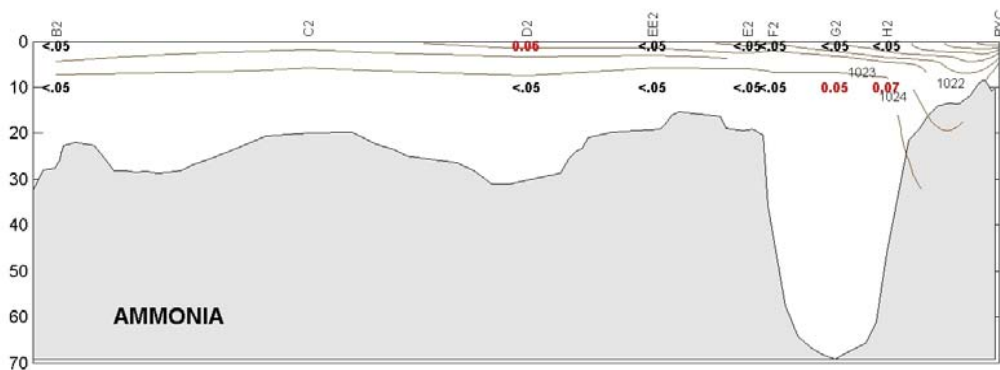
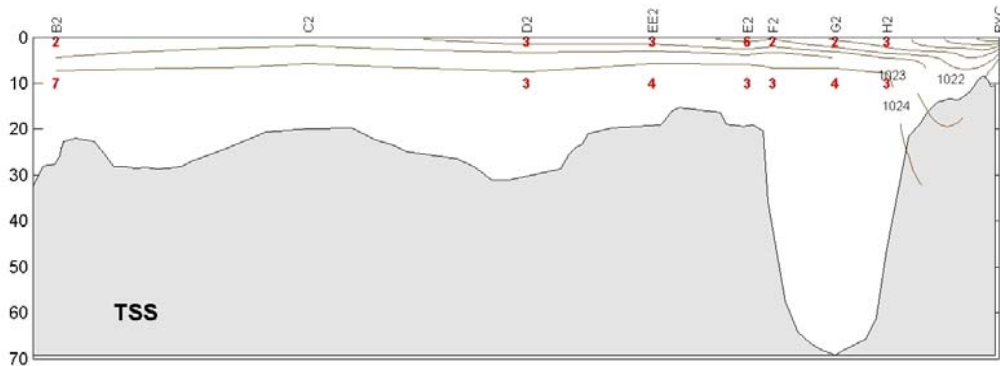
Rainfall and temperature data collected at Shearwater Autoport.

DO in mg/L

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

# Halifax Harbour Water Level - Aug01





Rainfall and temperature data collected at Shearwater Autoport.

Potential Density in  $kg/m^3$

Ammonia in mg/L

TSS in mg/L

Halifax Harbour Water Level - Aug01

