

Halifax Harbour Water Quality Monitoring Project Weekly Summary #55

Survey Date: 05 July 2005
Nature of Survey: Complete Survey
Report File (this document): HHWQMP_report055_050705.doc
Data File: HHWQMP_data055_050705.xls

Data Return:

Profile: 100%
 Bacteria: 100%
 Chemical: 100%
Overall: 100%

Sample Notes:

N/A

QA/QC samples:

Chemical Analysis		H2-1m	
Detectable Parameter	units	reference sample	QA/QC
Ammonia (as N)	mg/L	0.06	0.08
Total Suspended Solids	mg/L	12	15
Boron	ug/L	2800	2800
Lithium	ug/L	140	130
Strontium	ug/L	6200	5900
Titanium	ug/L	44	44
Uranium	ug/L	3.1	3.1

Fecal Coliform (CFU/100ml)

Site	F3-10m	BYC-1m	EE1-1m	H2-1m
Reference	5	0	380	0
QA/QC	11	0	1000	4

Regulated parameters with all samples below detection (<EQL)

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

Detectable non regulated metals

Metal	EQL (µg/L)	Number >EQL	Mean (µg/L)	Range (µg/L)
Boron	500	15	2920	2600-3300
Lithium	20	15	140	130-150
Strontium	50	15	6467	5900-7000
Titanium	20	15	50	44-58
Uranium	1	15	3.4	3.1-3.7

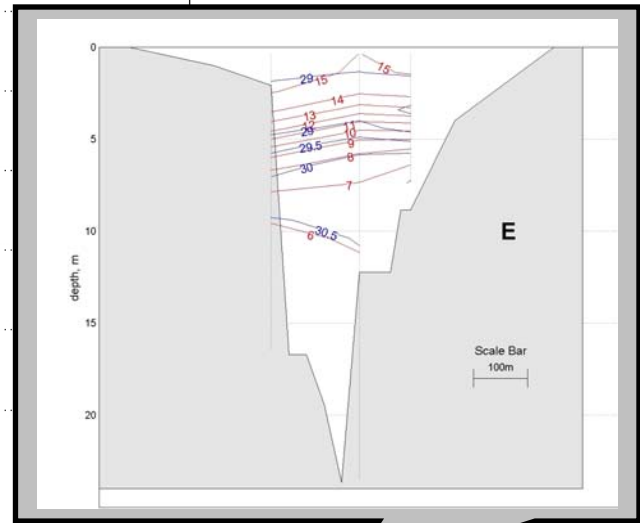
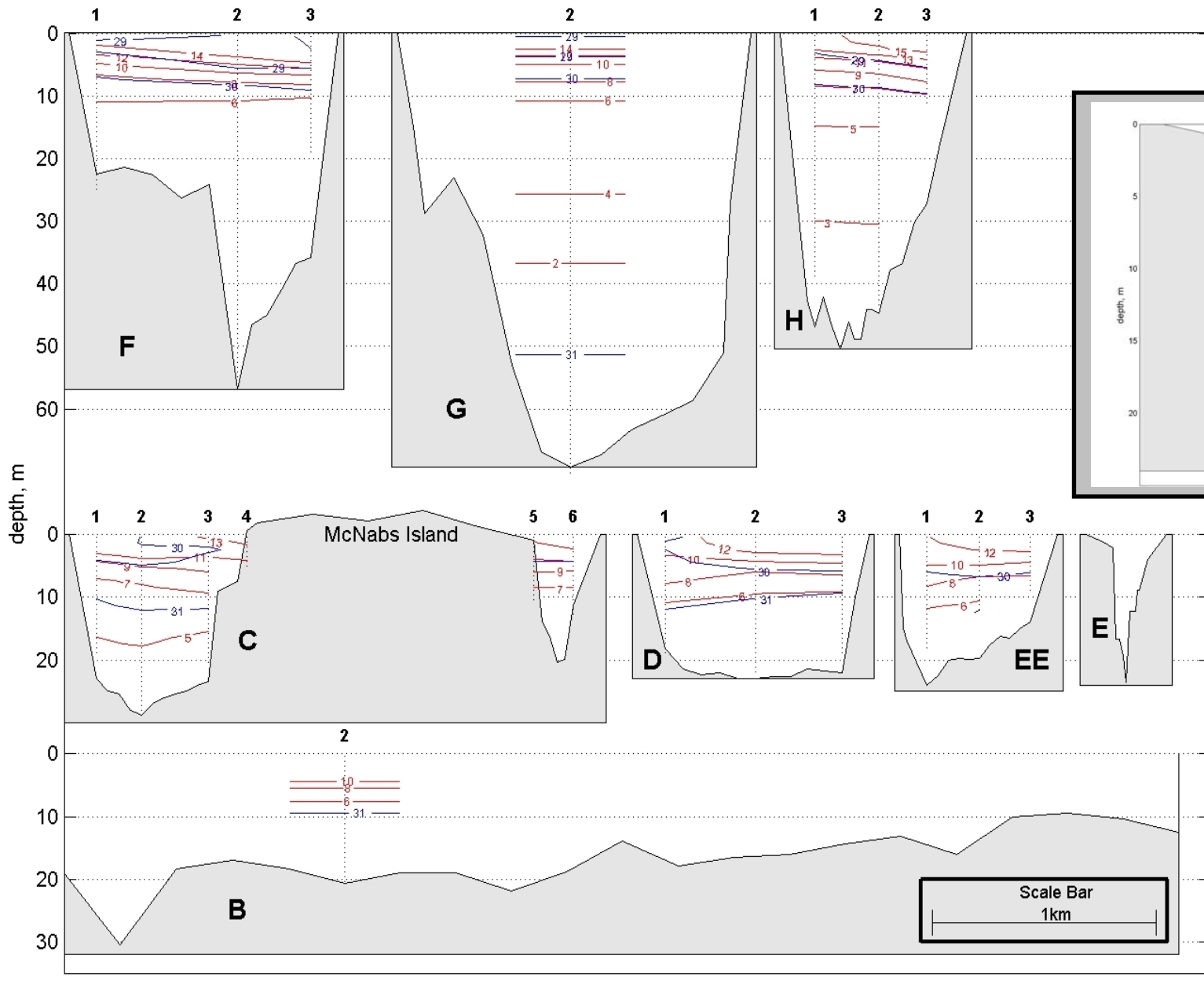
Comments:

Manganese: One sample (F2-1m, 32 ug/L) had detectable levels of manganese. This level does not exceed the guideline level of 100 ug/L.

Dissolved Oxygen: The only dissolved oxygen values below applicable guidelines are the typical depressed values in the bottom water of Bedford Basin.. The 7.0 mg/L delineation is at approximately 40-50m with minimum values currently about 5.5 mg/L at the deepest point. Elsewhere the dissolved oxygen in the surface water (<20 m) is quite uniform with values in the Basin of approximately 8 mg/L and a trend toward slightly higher values (8 – 9 mg/L) further out of the Harbour at sections B and C.

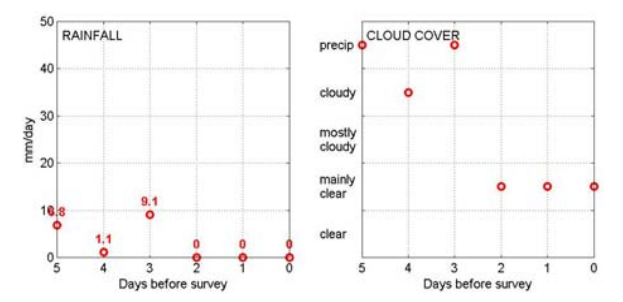
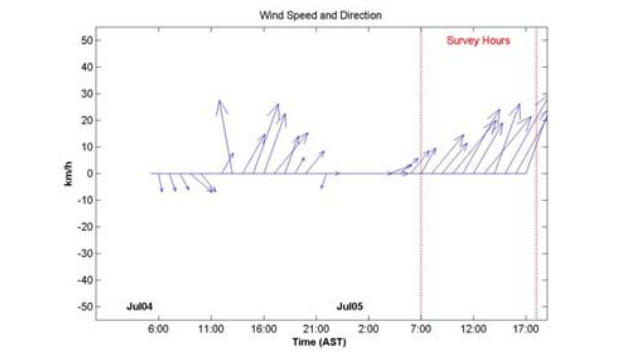
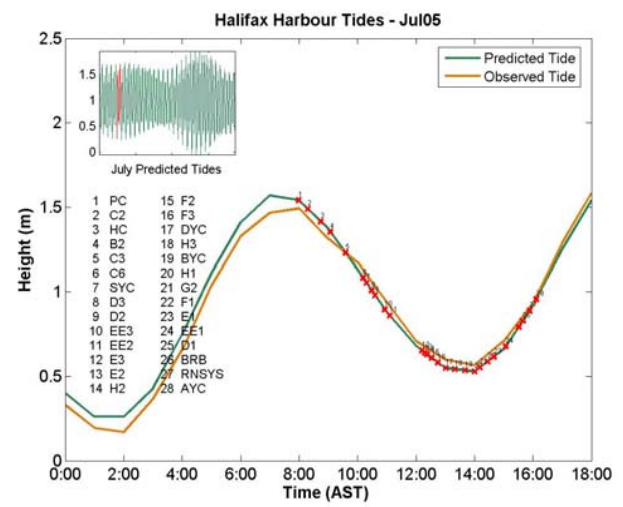
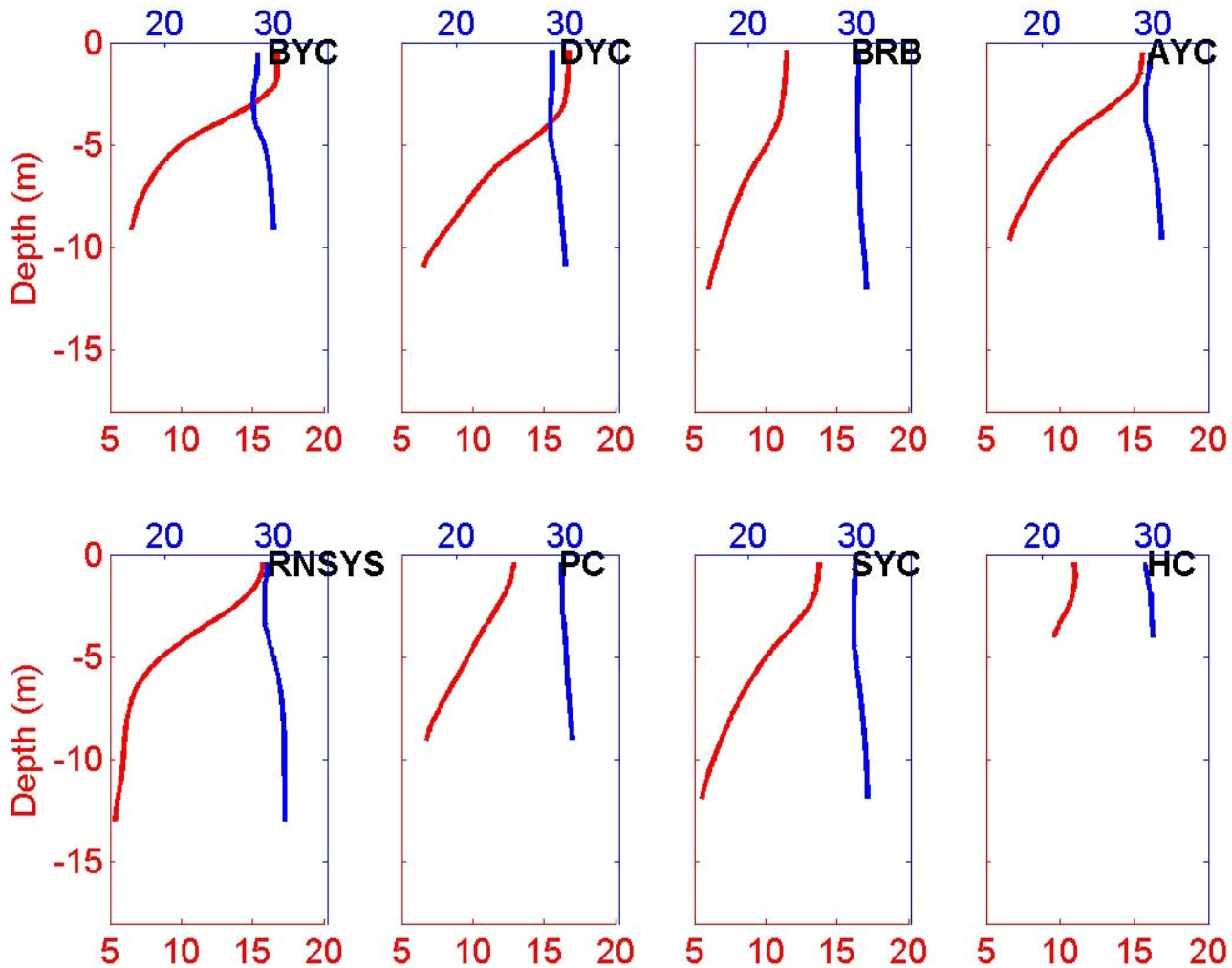
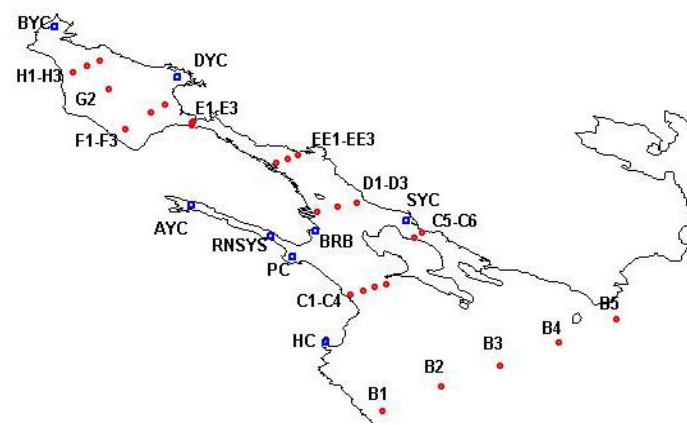
Chlorophyll: The fluorescence values are quite low and uniform throughout the Harbour with values between 2 and 4 mg/m³.

General: The Harbour is slightly more stratified this week than last. This appears to be due to the presence of more fresh water as a result of moderate rainfall 3-5 days before the survey. The water temperature has changed little. The fecal coliform values are again relatively low with only four samples in the Inner Harbour (sections D and EE) exceeding the swimming level guidelines. The low values are likely due to the long hours of daylight and mainly clear weather in the previous two days.

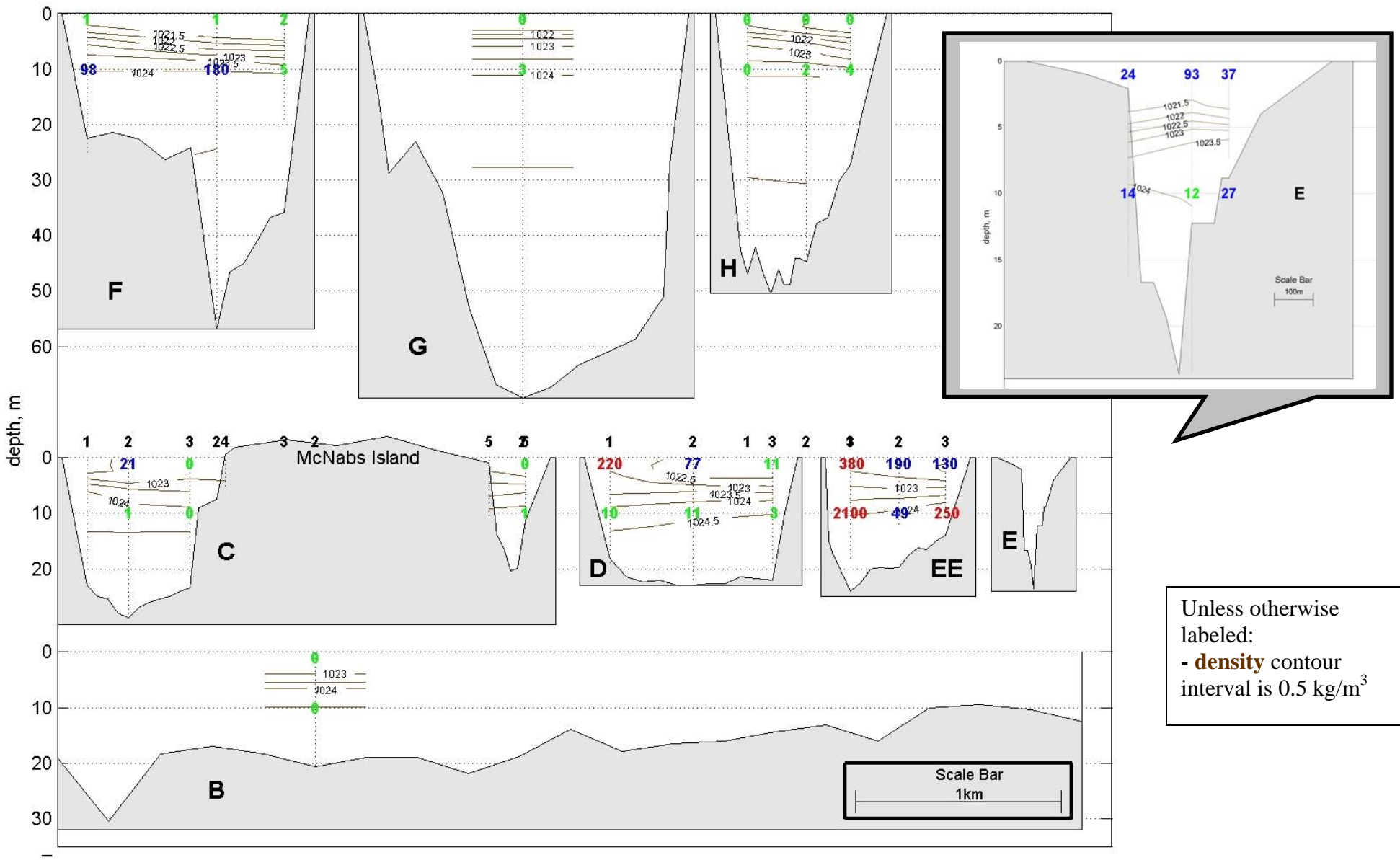


Unless otherwise labeled:
 - salinity contour interval is 1 PSU
 - temperature contour interval is 2°C.

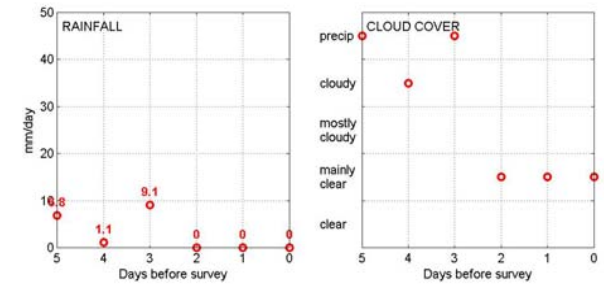
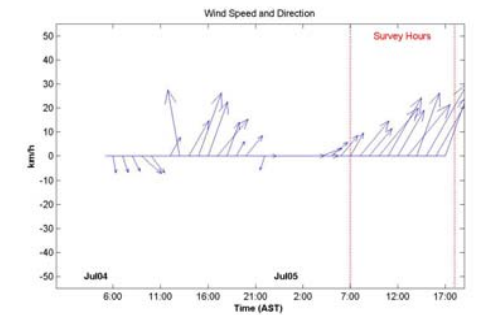
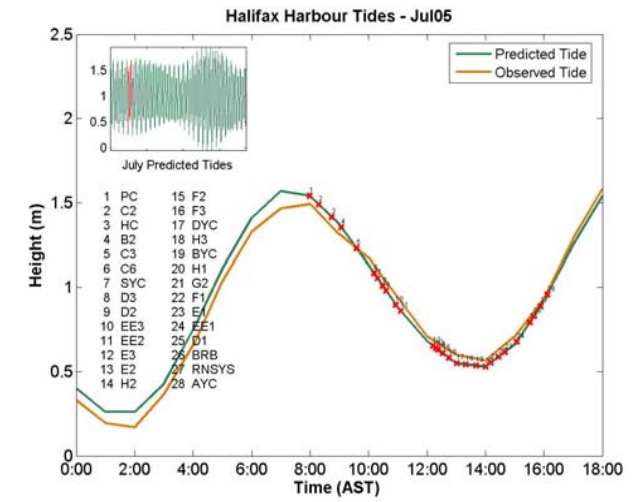
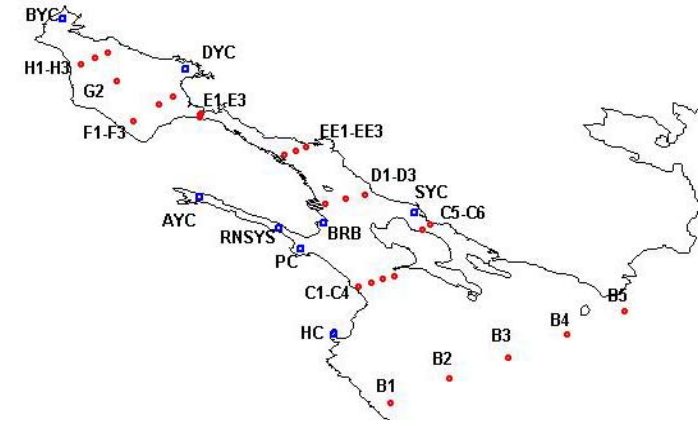
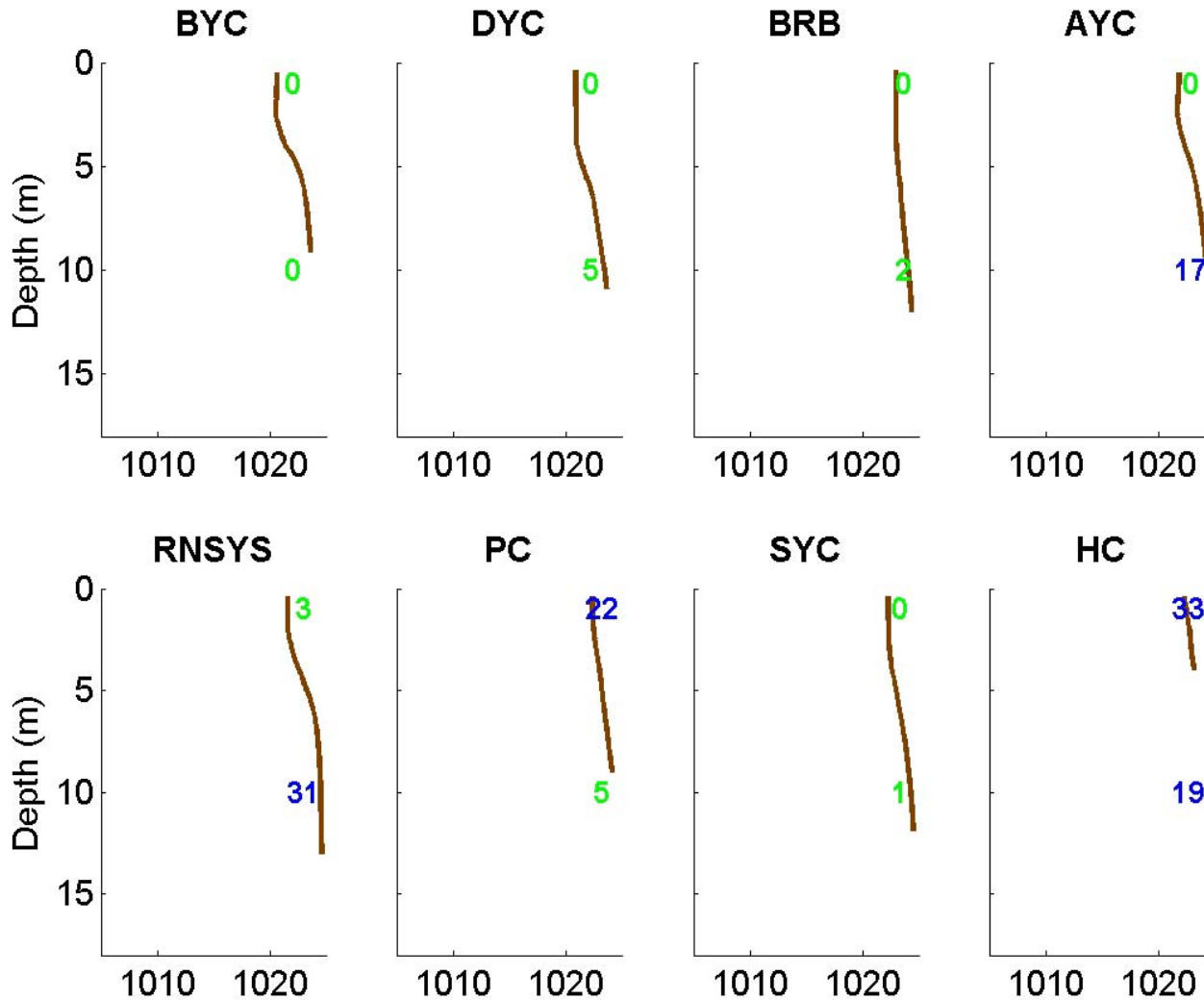
Yacht Clubs



Salinity in PSU Temperature in °C

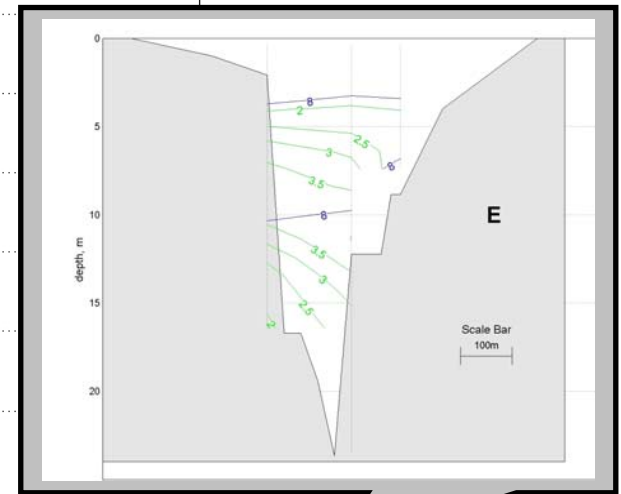
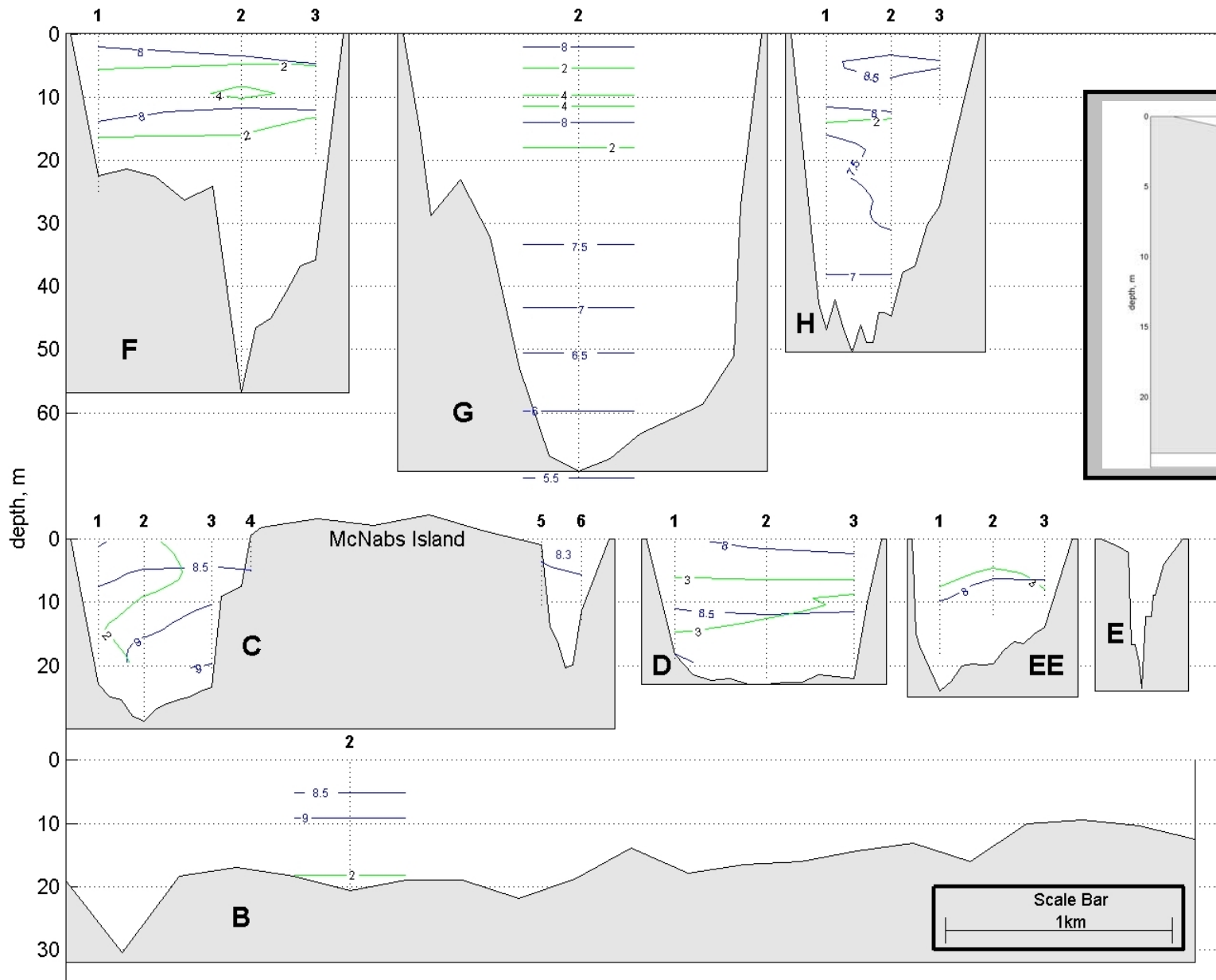


Yacht Clubs



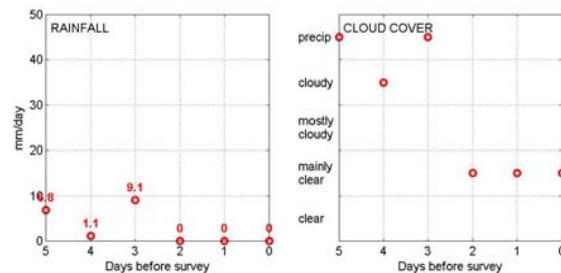
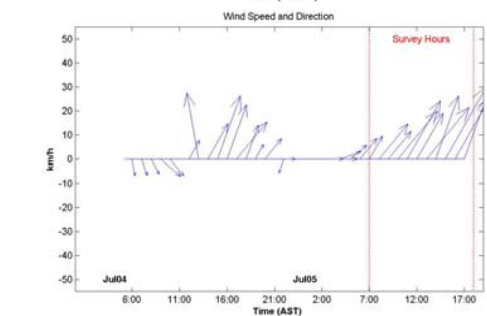
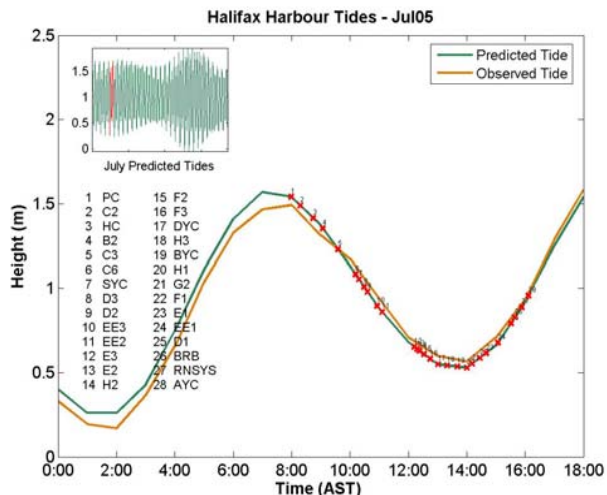
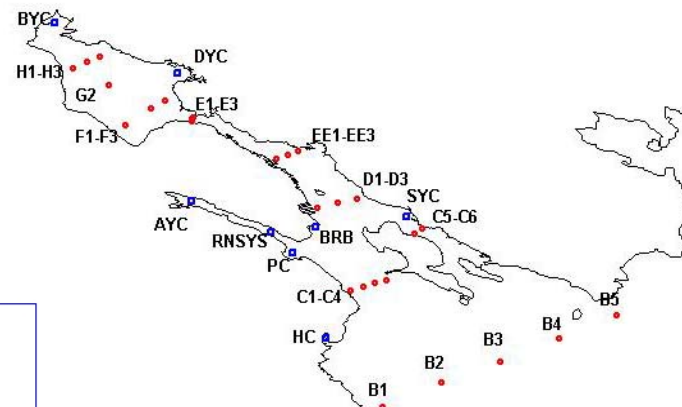
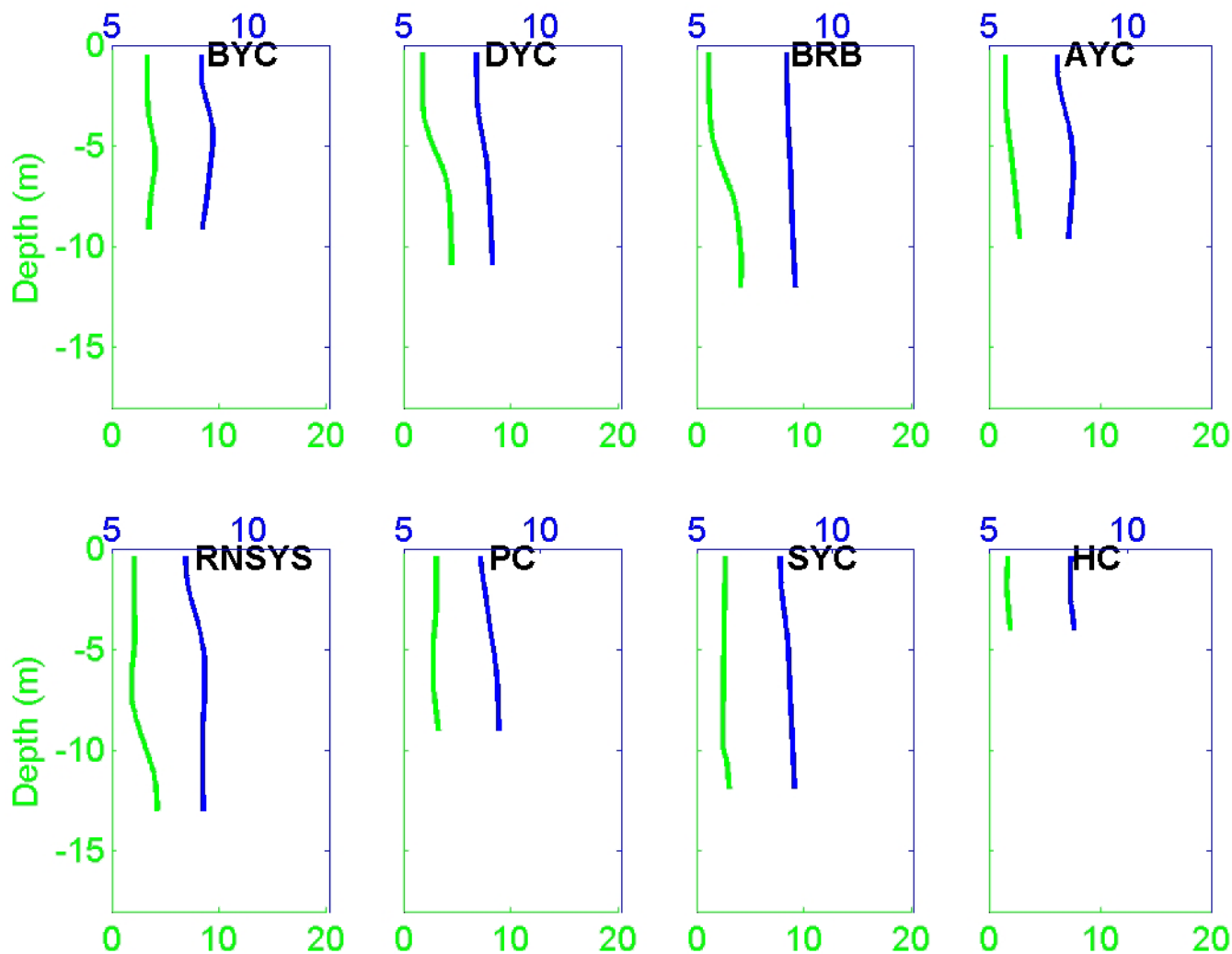
Potential Density in kg/m³

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

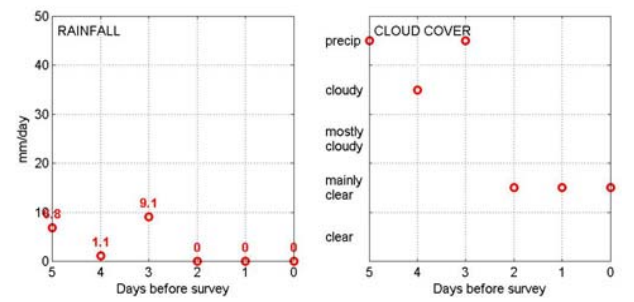
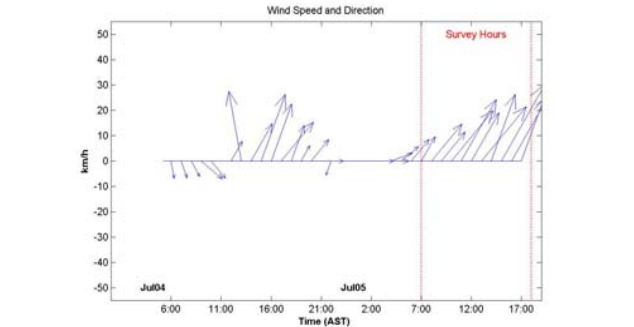
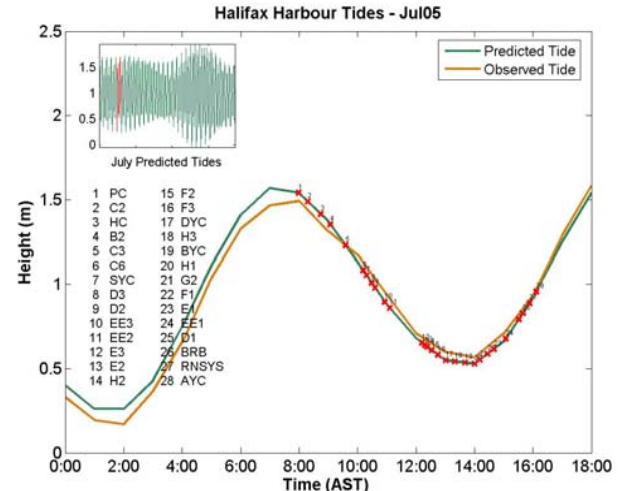
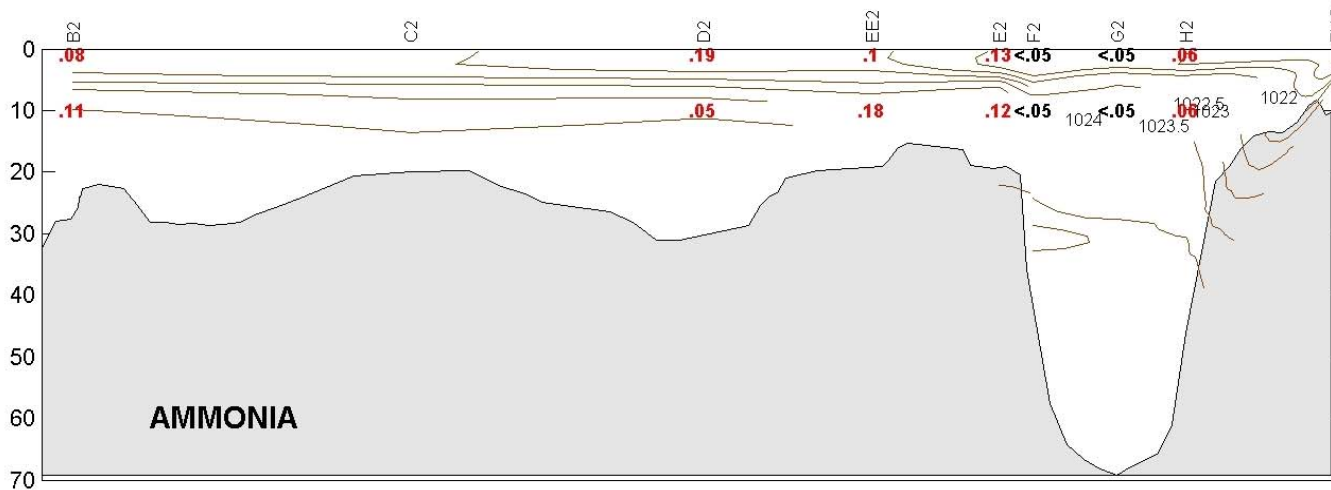
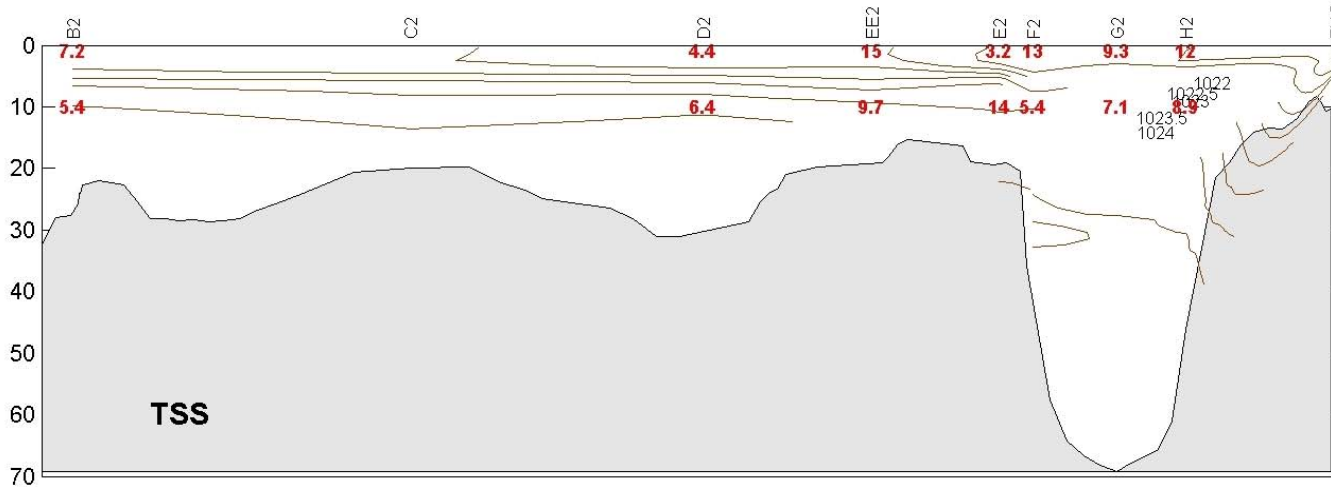
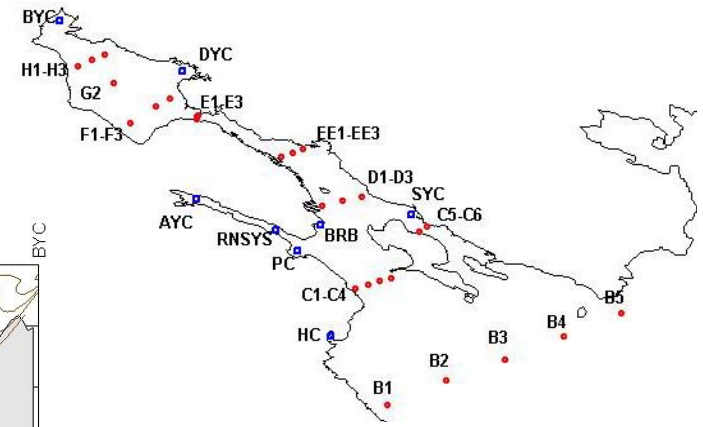


Unless otherwise labeled:
 - **dissolved oxygen** contour interval is 0.5 mg/L
 - **chlorophyll** contour interval is 2 mg/m³.

Yacht Clubs



CHEMISTRY



Potential Density in kg/m^3

Ammonia in mg/L

TSS in mg/L