Government of Newfoundland and Labrador

Real Time Water Quality Monthly Report
Lower Humber River at Humber Village Bridge
September – October 2005

General

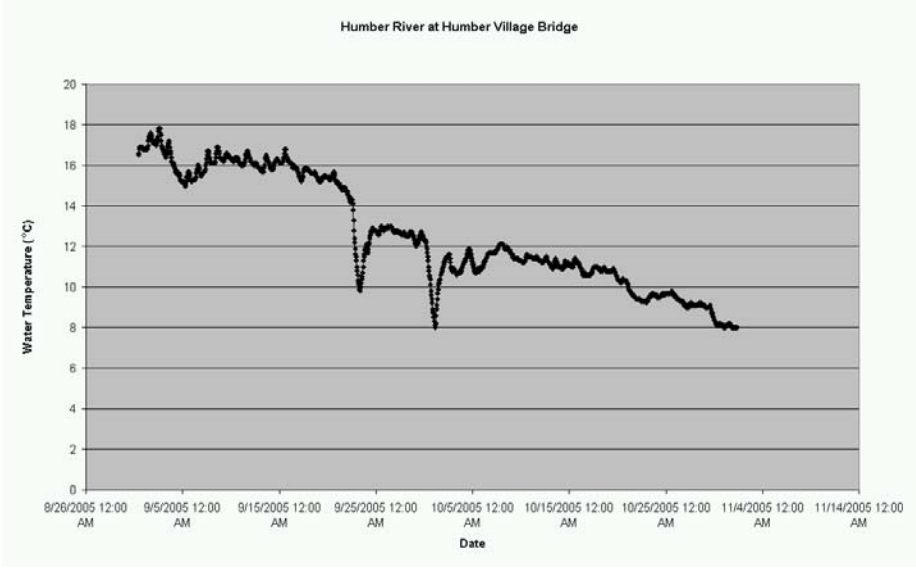
- The Water Resources Management Division staff analyses the real-time web page on a daily basis.

Maintenance and Calibration of Instrumentation

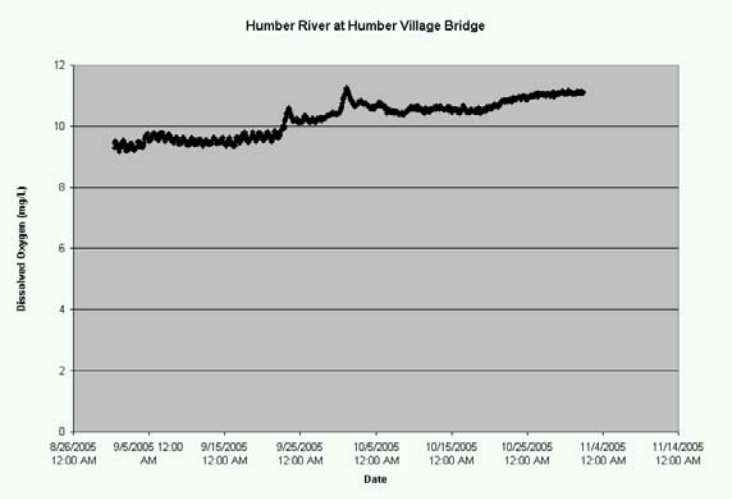
- All sensors calibrated with no problem.
- Comparative water quality readings were taken with a Minisonde during the reinstallation of the Datasonde to ensure readings were correct. This procedure was also required as part of the QA/QC protocol. The Minisonde was calibrated before use.
- A water sample was taken for laboratory analysis as part of QA/QC procedures upon reinstallation.

Data Interpretation

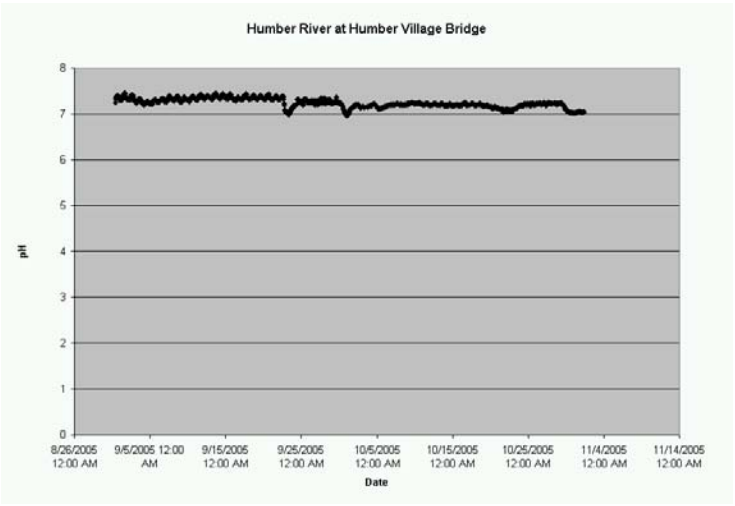
- During the period of Aug. 31, 2005 to Nov.1, 2005 the water quality remained relatively stable with the exception of some fluctuations in turbidity.
- Temperature decreased during the two-month time period as is expected during the fall months.



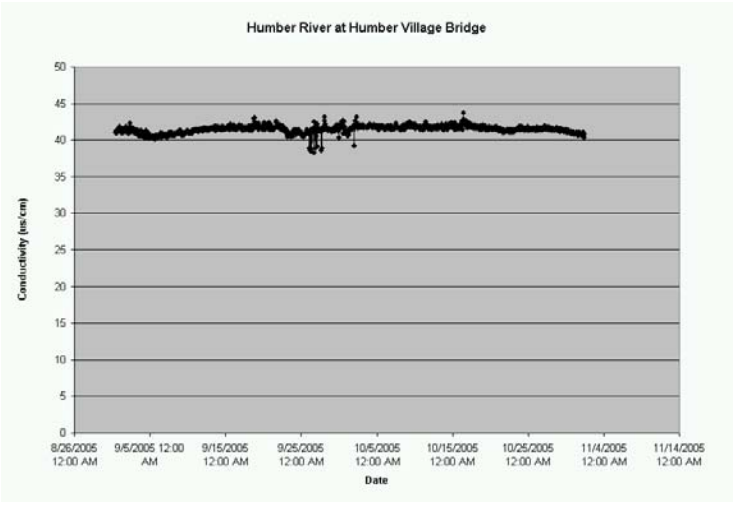
- The dissolved oxygen of Humber River increased throughout the two-month time period. This is consistent with the decrease in temperature that normally occurs simultaneously.



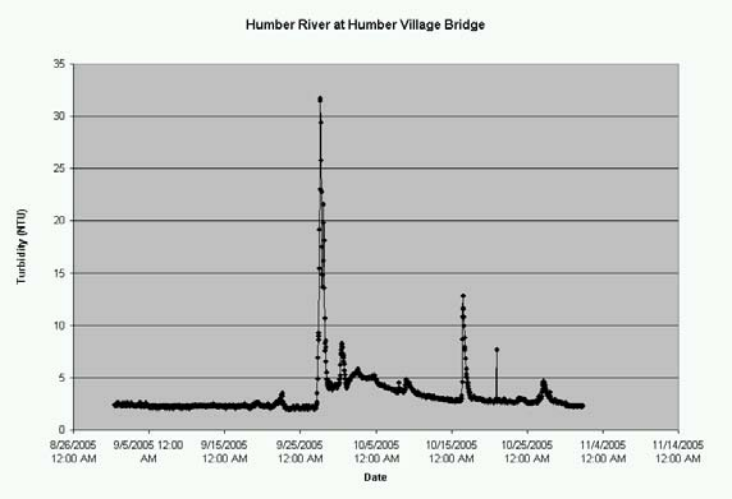
- pH remained relatively stable for Humber River throughout September and October. pH values slightly above 7.0 units are normal for this station.



- Conductivity remained stable in Humber River throughout the two-month time period with the exception of slight fluctuations seen on September 26-27, 2005.



- The turbidity values were stable until September 27, 2005. Fluctuations occurred after this date with a maximum value of 31.7 NTU on September 27, 2005. Turbidity continued to fluctuate slight after this date with values remaining below 13 NTU.



Additional Information:

- For the most part, with the exception of turbidity, water quality in Humber River behaved normally.
- The following table provides summary statistics on water quality parameters of the Humber River for this time period of August 31 to November 1, 2005.

	Temp-Water (^{o}C)	pH	Conductance (uS/cm)	Diss-Solids (g/L)	% Saturation	Dissolved Oxygen (mg/L)	Turbidity (NTU)
Max	17.8	7.46	43.7	0.0280	100.4	11.26	31.7
Min	8.0	6.96	38.3	0.0245	91.8	9.17	1.9
Average	12.6	7.23	41.5	0.0266	96.3	10.25	3.3
Standard Deviation	2.8	0.10	0.5	0.0003	1.2	0.58	2.3

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