

Real Time Water Quality Monthly Report Lower Humber River at Humber Village Bridge May 2006

General

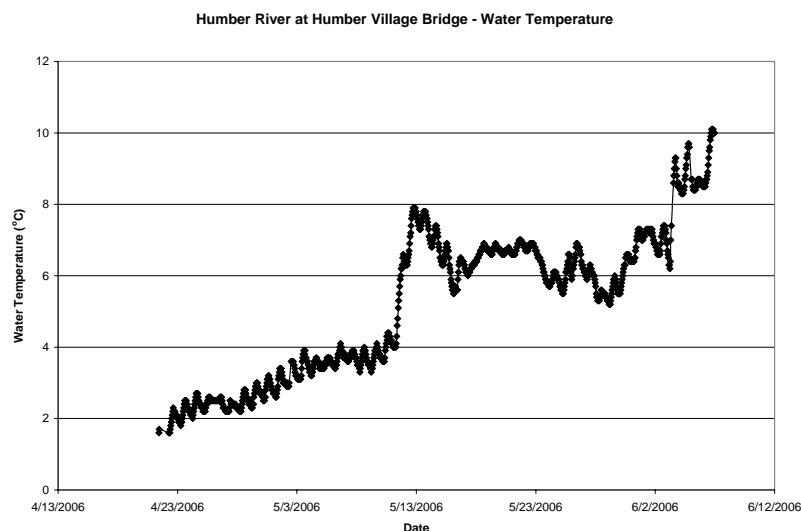
- The Water Resources Management Division staff analyses the real-time web page on a daily basis.

Maintenance and Calibration of Instrumentation

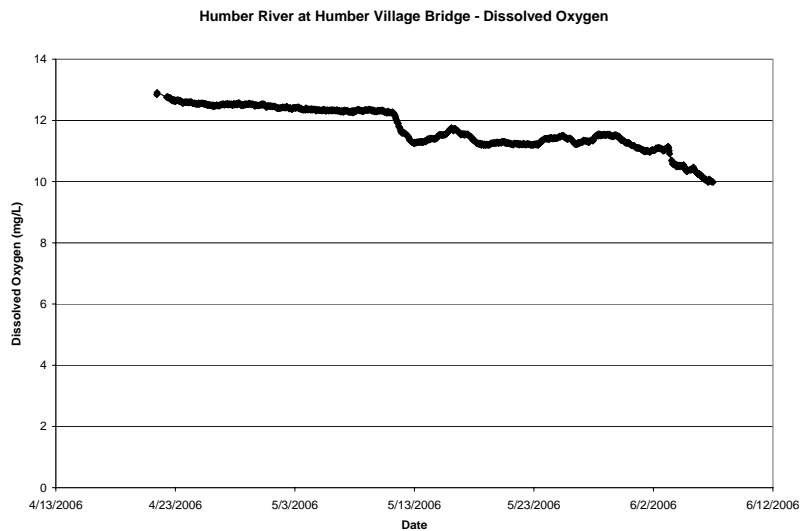
- All sensors calibrated with no problem.
- Comparative water quality readings were taken with a Minisonde during the reinstallation of the Datasonde to ensure readings were correct. This procedure was also required as part of the QA/QC protocol. The Minisonde was calibrated before use.
- A water sample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

Data Interpretation

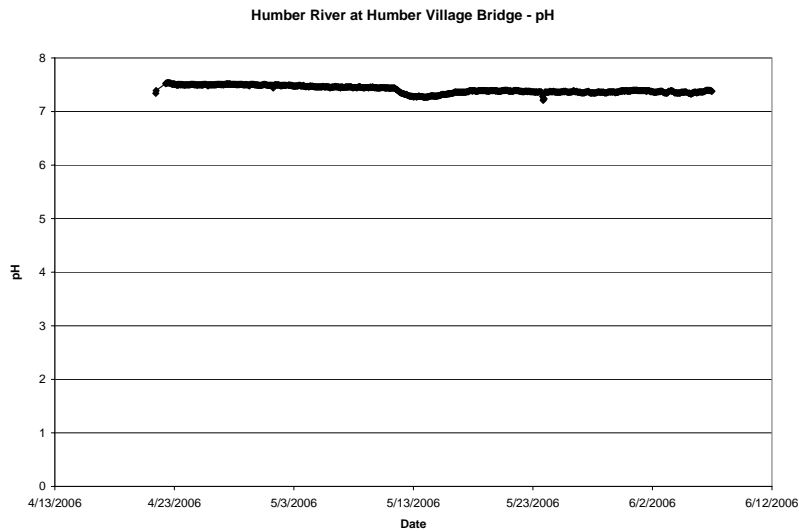
- During the period of April 21 to June 6, 2006 the water quality remained relatively stable.
- Temperature increased during this time period as is expected during the summer months. There was some fluctuation in water temperature during the month of May but generally continued to increase throughout the month.



- Dissolved oxygen decreased during the month of May which is expected during the summer months. This decrease corresponds to the increase in water temperature as oxygen levels are affected by temperature.

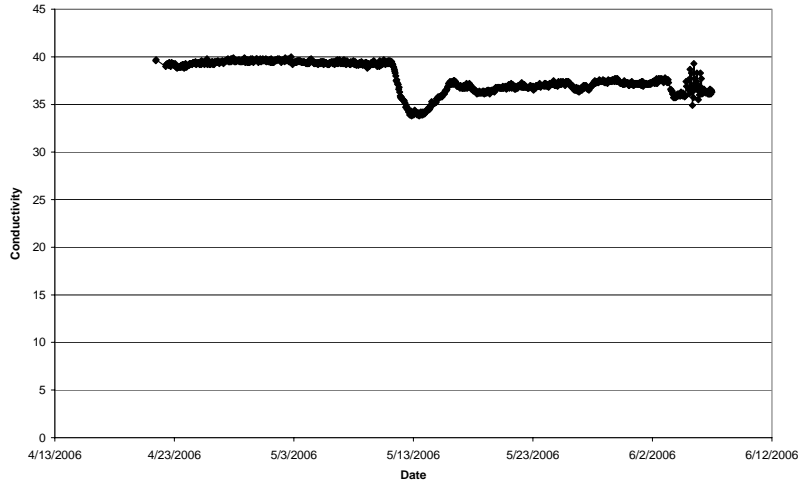


- pH remained relatively stable with values approximately 7.5 units as is normal for this station. There was a slight decrease in pH during the period of May 11 to May 16 but still remained above 7.0 pH units.

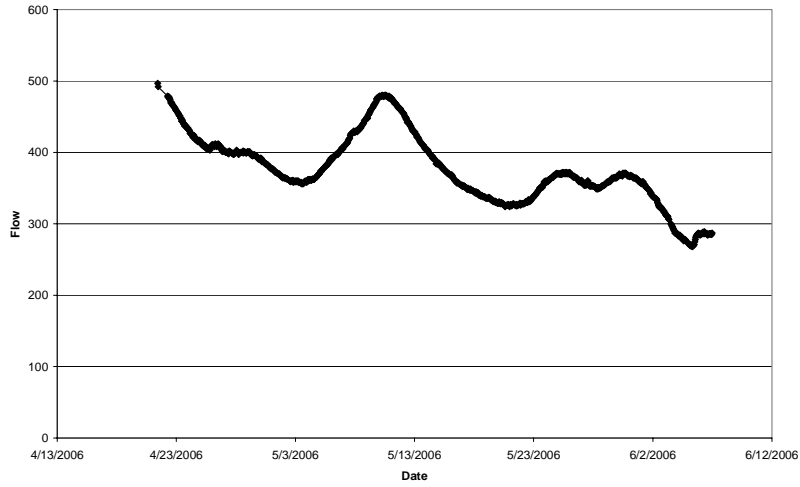


- Conductivity remained between 35 and 40 uS/cm during the month of May which is typical for the Humber River station. There was a slight drop in conductivity for the period between May 11 and May 16 to approximately 34 uS/cm. pH was also slightly affected during this time period. There was a continual decrease in flow during this time which could have slightly affected pH and conductivity values.

Humber River at Humber Village Bridge - Conductivity

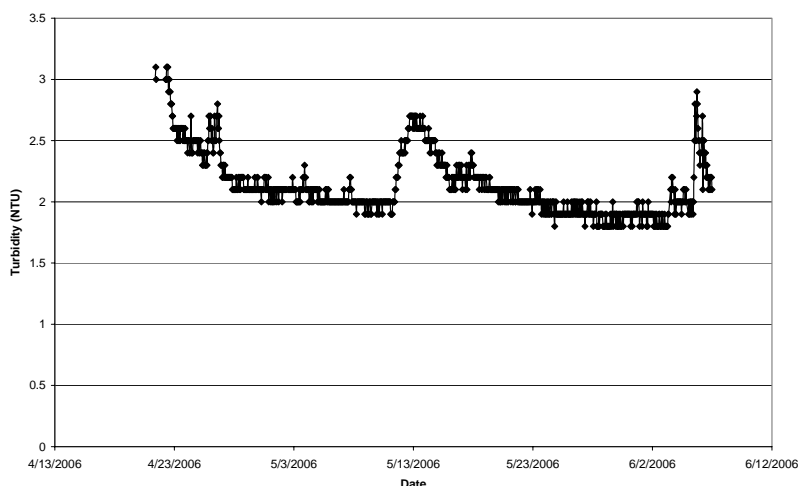


Humber River at Humber Village Bridge - Flow



- The turbidity values generally remained below 3 NTU. There were slight fluctuations that occurred during the month of May but appear to correspond to the patterns seen in the flow during the same time period. This reaction is typical at the Humber River station.

Humber River at Humber Village Bridge - Turbidity



Additional Information:

- For the most part, water quality in Humber River behaved normally for the period of April 21 to June 6, 2006.
- The following table provides summary statistics on water quality parameters of the Humber River for this time period between April 21 and June 6, 2006.
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	Temp- Water (°C)	pH	Conductance (uS/cm)	Diss- Solids (g/L)	% Saturation	Dissolved Oxygen (mg/L)	Turbidity (NTU)
Max	11.0	7.68	39.7	0.0254	103.9	12.91	3.1
Min	1.6	7.34	31.0	0.0199	95.6	9.98	1.8
Average	5.4	7.55	35.7	0.0229	100.5	11.81	2.1
Standard Deviation	2.2	0.06	2.5	0.0016	1.5	0.67	0.2

- The following table provides summary statistics on water quality parameters for the Humber River RTWQ station going back to December 2003.

	Temp- Water (°C)	pH	Conductance (uS/cm)	Diss- Solids (g/L)	% Saturation	Dissolved Oxygen (mg/L)	Turbidity (NTU)
Max	20.7	7.68	44.9	0.0287	148.1	20.01	955.0
Min	-0.1	5.44	31.0	0.0199	87.7	8.50	0.0
Average	6.9	6.81	37.4	0.0240	99.8	12.24	2.7
Standard Deviation	5.6	0.32	2.7	0.0017	8.7	2.02	7.5

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