

Real Time Water Quality Monthly Report: Lower Humber River @ Humber Village Bridge May-June 2004

General

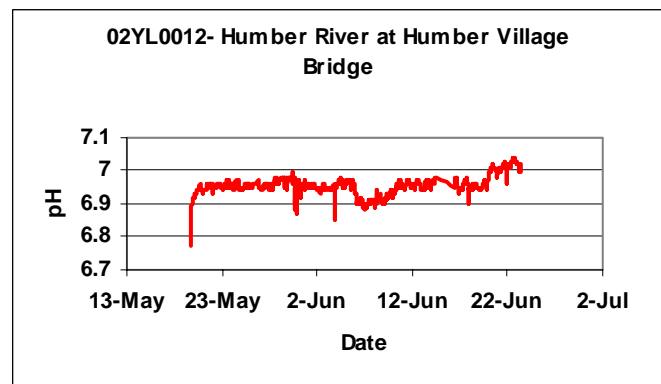
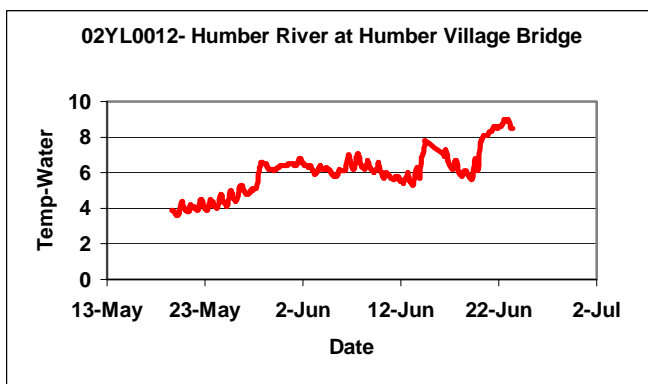
- The Water Resources Management Division staff monitor the real-time web page on a daily basis.

Maintenance and Calibration of Instrumentation

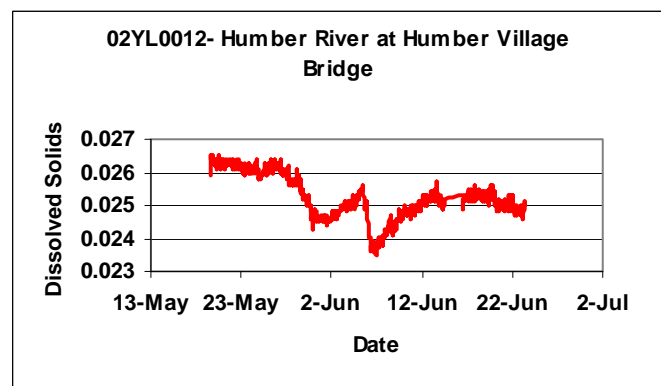
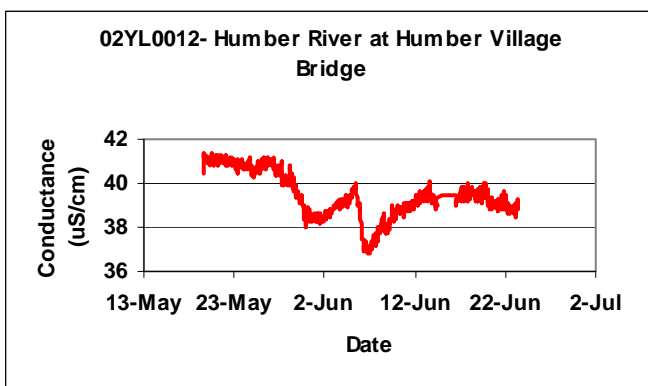
- All sensors calibrated without problems.
- Comparative water quality readings were taken with a Minisonde during the reinstallation of the Datasonde to ensure readings were correct. This procedure is also required as part of the QA/QC protocol. The Minisonde was calibrated before use.
- A water sample was taken for laboratory analysis as part of QA/QC procedures for the first time.

Data Interpretation

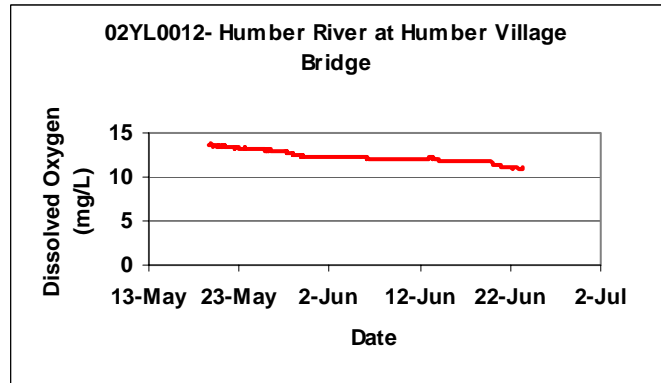
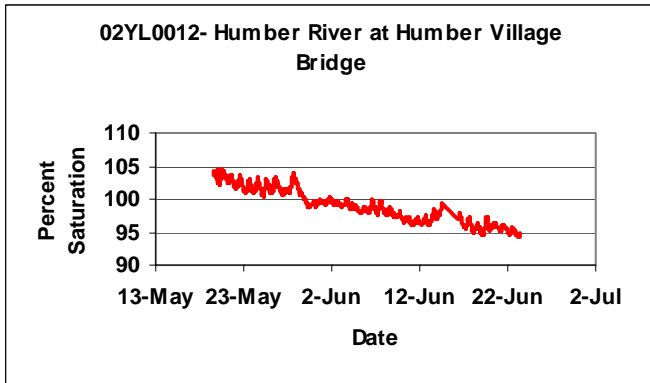
- During the period from May 19th, 2004 to June 23rd, 2004 parameters displayed normal behaviour. Water temperature continued to increase as ambient air temperature increased. pH displayed normal fluctuations in range with typical pH values for the Humber River.



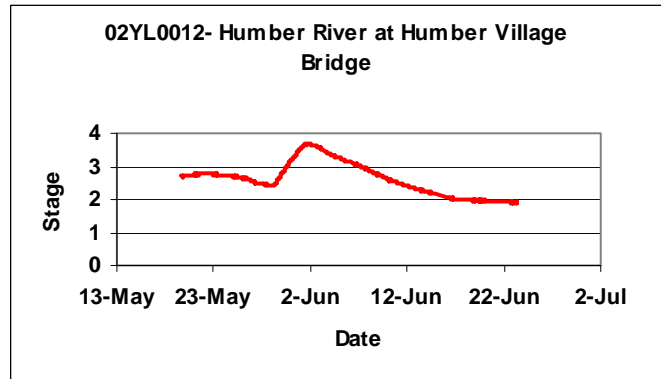
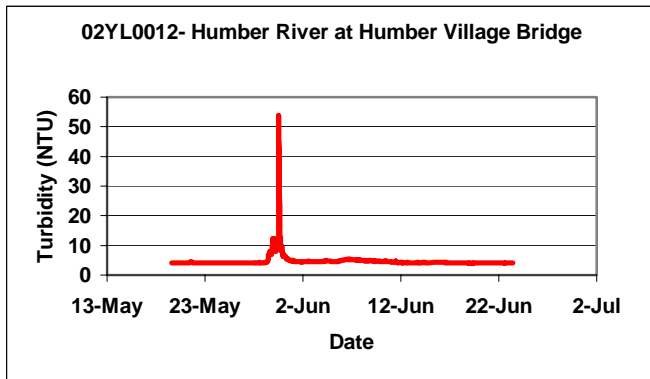
- Conductance values for this period fell within normal range for the Humber River. A dip in conductance at the beginning of June corresponds with a peak in stage or streamflow. Dissolved solids tend to become more dilute with increased runoff. Runoff from snowmelt is mostly over by this point in time.



- Oxygen levels decreased over this period corresponding to the steady increase in water temperature.



- Background turbidity levels were again slightly above 0 NTU during this period. A large spike in turbidity occurred in early June corresponding to the rising leg in stage or streamflow. The heavy rainfall event in early June and corresponding runoff from the watershed can account for the sharp peak in turbidity. This spike was particularly noticeable as many farms in the Humber Valley region were preparing fields for planting.



Additional Information

- For the first time, the resulting batch of data from the real time water quality monitoring site on the Humber River at the Humber Village Bridge had no problems. There were no issues with malfunctioning sensors, improper programming of the datalogger, or missed calibration windows. Activities in the watershed now appear to be having more of an impact on water quality than just seasonal variation.

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