

**Real Time Water Quality Monthly Report  
Minipi River  
July - October 2007**

**General**

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

**Maintenance and Calibration of Instrumentation**

- The instrument at Minipi River was installed on July 19<sup>th</sup>, 2007. The results from comparing the Minisonde values to the Datasonde values during the installation can be seen in **Table 1**.

**Table 1: QA/QC Data Comparison Rankings upon initial installation on June 30<sup>th</sup>, 2007**

Station	Date	Action	Minisonde vs. Datasonde Comparison Ranking			
			Temperature	pH	Conductivity	Dissolved Oxygen
<b>Minipi River</b>	July 19 <sup>th</sup> , 2007	Installation	Excellent	Excellent	Poor	NA*

\* Dissolved oxygen probe on the Minisonde not functioning properly.

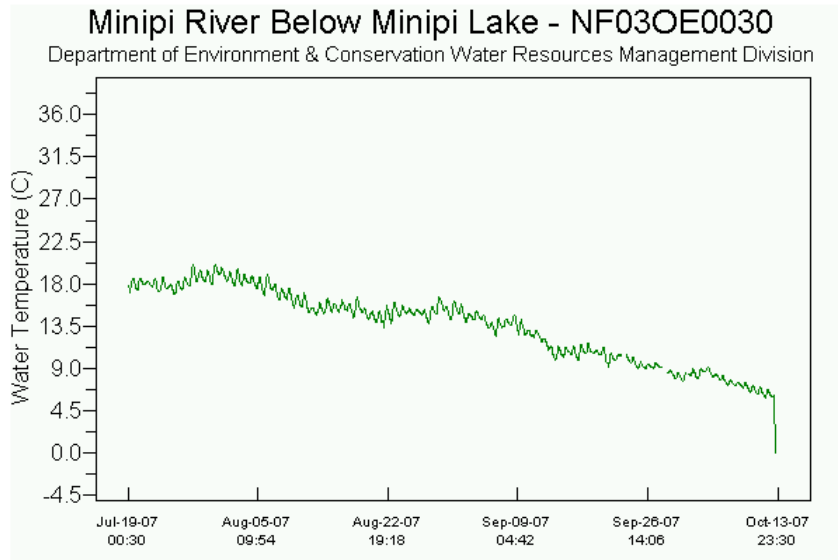
- Upon removal, Minisonde readings were taken for QA/QC purposes. The results from comparing the Minisonde values to the Datasonde values can be seen in **Table 2**.

**Table 2: QA/QC Data Comparison Rankings upon removal and reinstallation on Oct. 13<sup>th</sup>, 2007**

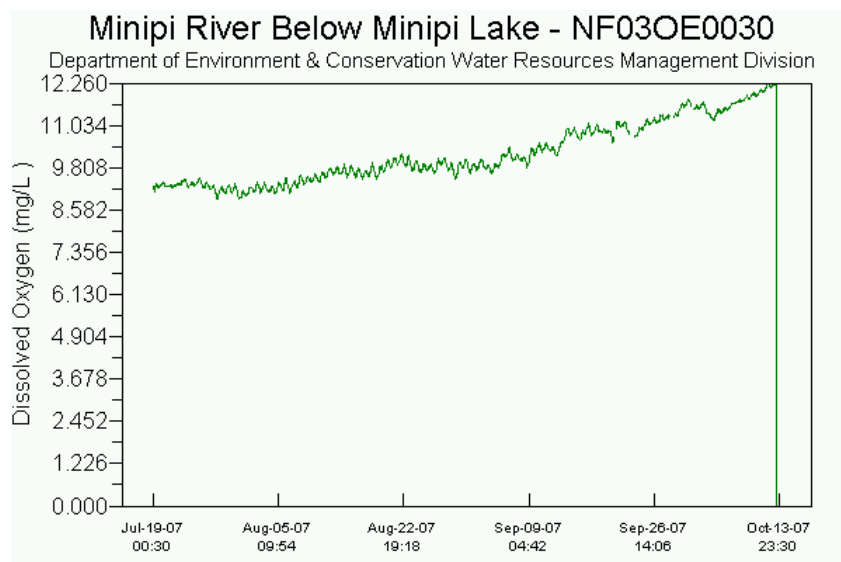
Station	Date	Action	Minisonde vs. Datasonde Comparison Ranking			
			Temperature	pH	Conductivity	Dissolved Oxygen
<b>Minipi River</b>	Oct. 13 <sup>th</sup> , 2007	Removal	Excellent	Good	Poor	Poor

## Data Interpretation

- This monthly report interprets the data from the Minipi River station for the period of July 19<sup>th</sup> – October 13<sup>th</sup>, 2007.
- The water temperature (**Figure 1**) showed an decrease throughout the deployment period which is expected as this time of the year. The dissolved oxygen (**Figure 2**) showed a corresponding increase in values. The dissolved oxygen values fall within the majority of the recommended CCME Protection of Aquatic Life guidelines for dissolved oxygen (cold water/other life stages – above 6.5; warm water/other life stages – above 5.5; warm water/early life stages – above 6; cold water/early life stages – 9.5 mg/L).

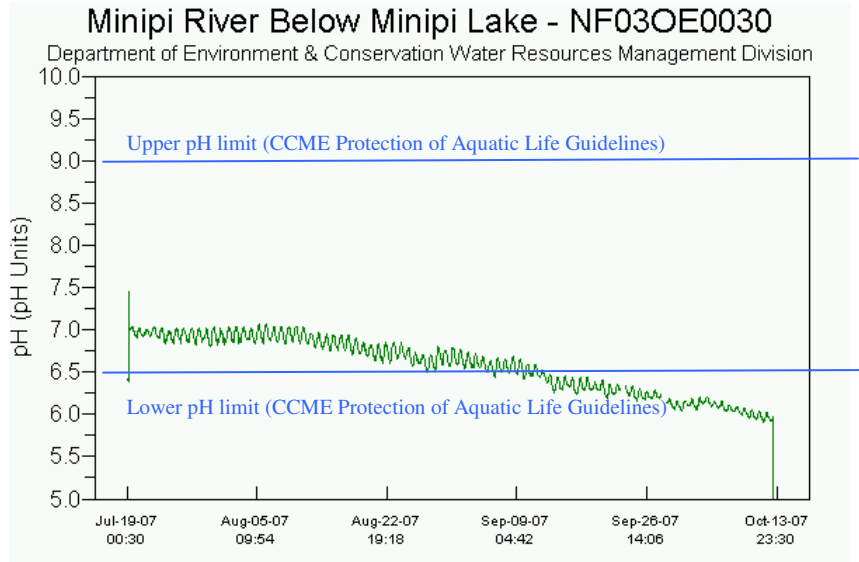


**Figure 1**



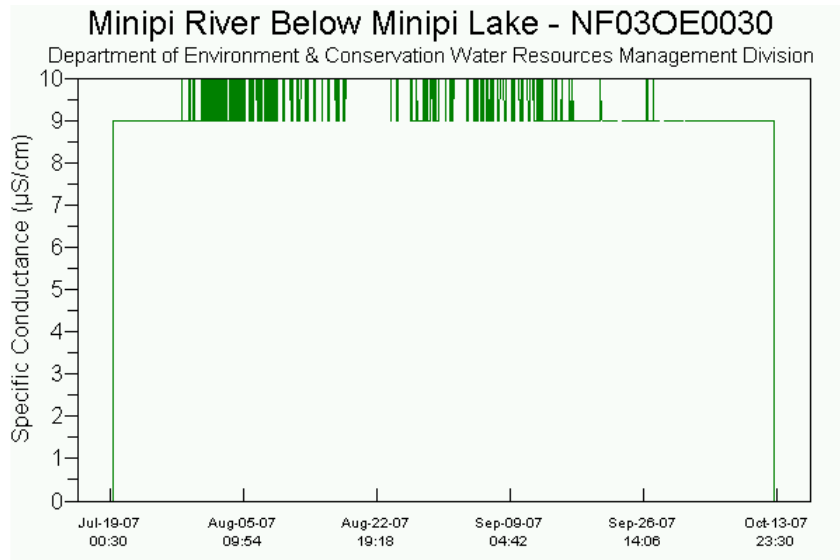
**Figure 2**

- The pH values (**Figure 3**) for Minipi River station remained fairly consistent throughout the months of July and August. There was a drop in pH values starting in early September which could be attributed the extended deployment period and a consequent loss of calibration. The QA/QC results however indicate a good ranking between Minisonde and Datasonde readings which indicates that this may be a natural occurrence. This will be reviewed to see if this pattern will follow in the next year of deployment.



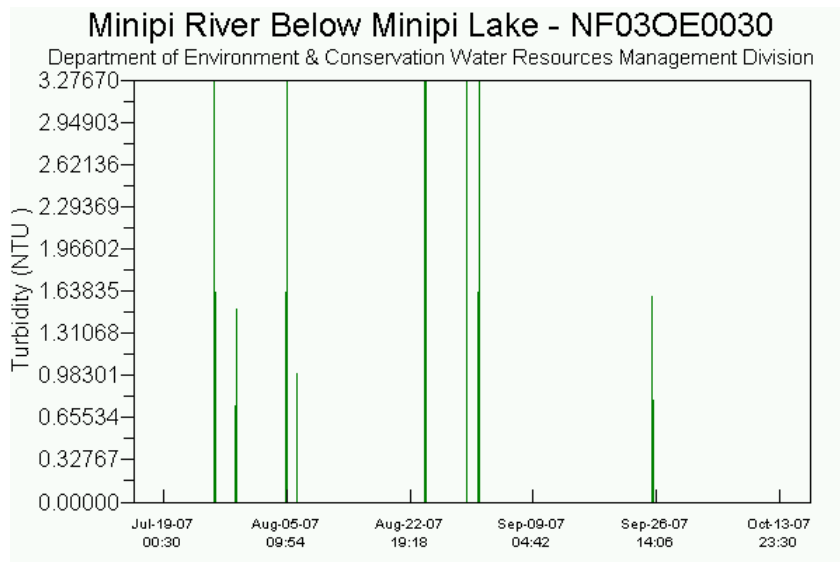
**Figure 3**

- The specific conductivity (**Figure 4**) values remained very consistent throughout the deployment period.



**Figure 4**

- The turbidity values (**Figure 5**) remained consistent around 0 NTU throughout the deployment period.



**Figure 5**

**Prepared by:** Annette Tobin  
Environmental Scientist  
Department of Environment and Conservation  
PH: (709) 637-2431  
FX: (709) 637-2541  
[annettetobin@gov.nl.ca](mailto:annettetobin@gov.nl.ca)