

## Real Time Water Quality Monthly Report Minipi River June - July 2007

### General

- The RTWQ station at Minipi River was installed after the winter months on June 30<sup>th</sup>, 2007.

### Maintenance and Calibration of Instrumentation

- The instrument at Minipi River was installed on June 30<sup>th</sup>, 2007. The results from comparing the Minisonde values to the Datasonde values during the initial installation on June 30<sup>th</sup> 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
Minipi River	June 30 <sup>th</sup> , 2007	Installation	Poor	Excellent	NA*	Fair

\*Conductivity probe on the Datasonde was not functioning.

- Upon removal and redeployment, 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 July 19<sup>th</sup>, 2007**

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

\*Conductivity probe on the Datasonde was not functioning.

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

## Data Interpretation

- This monthly report interprets the data from the Minipi River station for the period of June 30<sup>th</sup> – July 19<sup>th</sup>, 2007.
- The water temperature (**Figure 1**) showed an increase throughout the deployment period which is expected as this time of the year. The dissolved oxygen (**Figure 2**) showed a corresponding decrease 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).

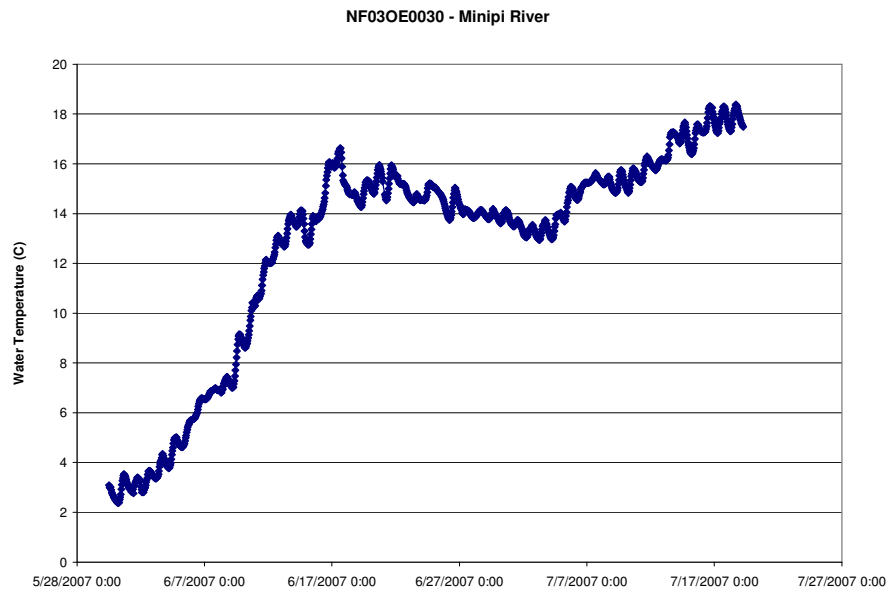


Figure 1

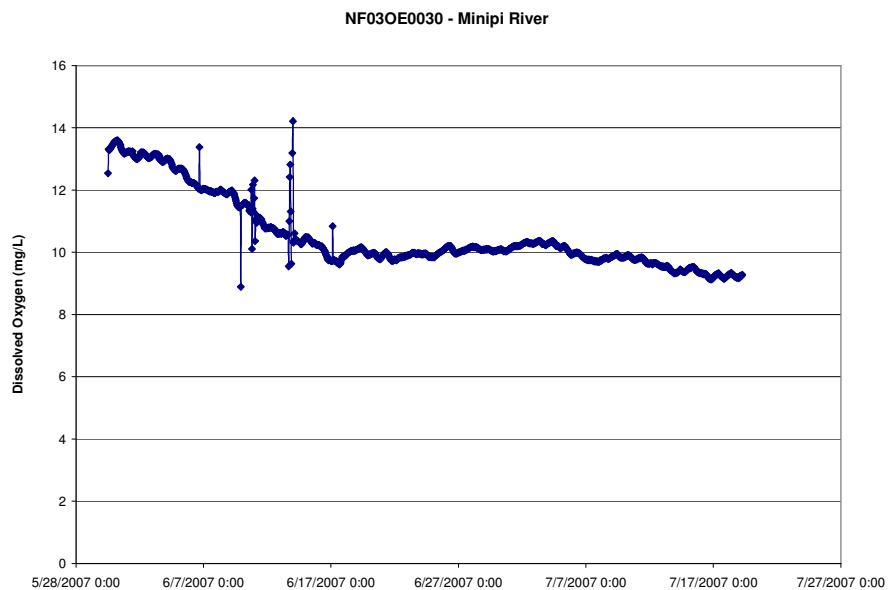
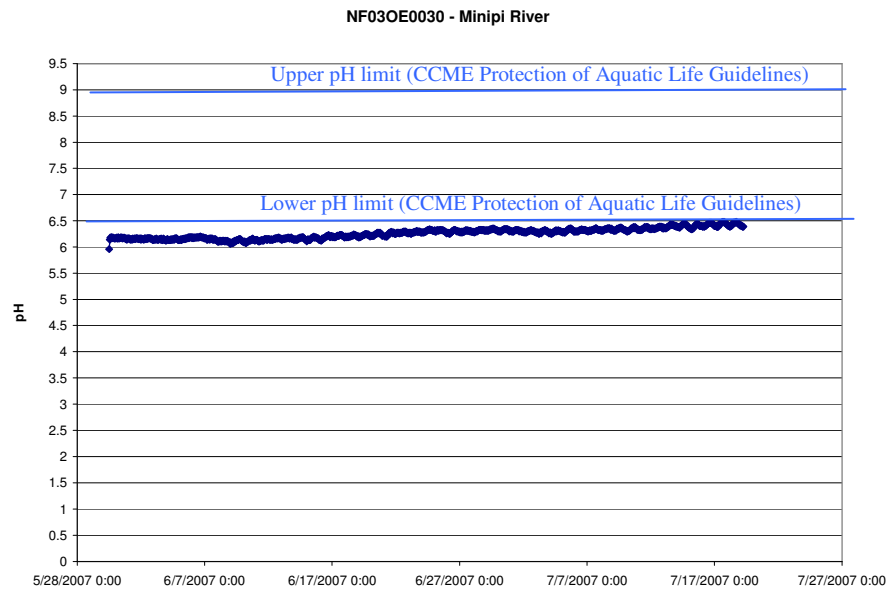


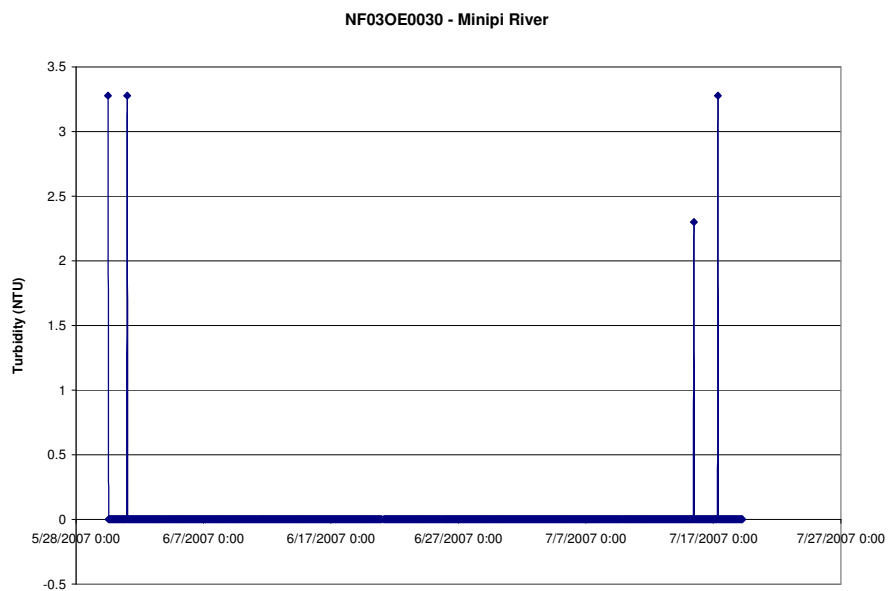
Figure 2

- The pH values (**Figure 3**) for Minipi River station remained fairly consistent throughout the deployment period. The pH values ranged from 5.96 – 6.48 with all values falling outside the recommended range (6.5 – 9.0) for the CCME Protection of Aquatic Life Guidelines. Due to the remote location of this station it is likely that the low pH values are due to natural causes.



**Figure 3**

- The specific conductivity probe on the Datasonde was not functioning during the deployment period.
- The turbidity values (**Figure 4**) remained consistent around 0 NTU throughout the deployment period. There were only four small turbidity spikes that all remained below 3.5 NTU.



**Figure 4**

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