Real Time Water Quality Monthly Report
Main River
August - September 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 Main River was reinstalled on August 2nd, 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 August 2nd, 2007

Station	Date	Action	Minisonde vs. Datasonde Comparison Ranking			
			Temperature	pH	Conductivity	Dissolved Oxygen
Main River	August 2nd, 2007	Removal	Good	Good	Poor	Fair

- 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 Sept. 26th, 2007

Station	Date	Action	Minisonde vs. Datasonde Comparison Ranking			
			Temperature	pH	Conductivity	Dissolved Oxygen
Main River	Sept. 26th, 2007	Installation	Excellent	Good	Good	Excellent
	Sept. 26th, 2007	Removal	Excellent	Good	Poor	NA*

* Dissolved oxygen probe on Minisonde not functioning properly.

Data Interpretation

- This monthly report interprets the data from the Main River station for the period of August 2nd – September 26th, 2007.

- The water temperature (**Figure 1**) showed a slight decrease throughout the deployment period which is expected as this time of the year. This was a strong diurnal pattern detected in the data throughout the months of August and September. The dissolved oxygen (**Figure 2**) showed a corresponding increase 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).

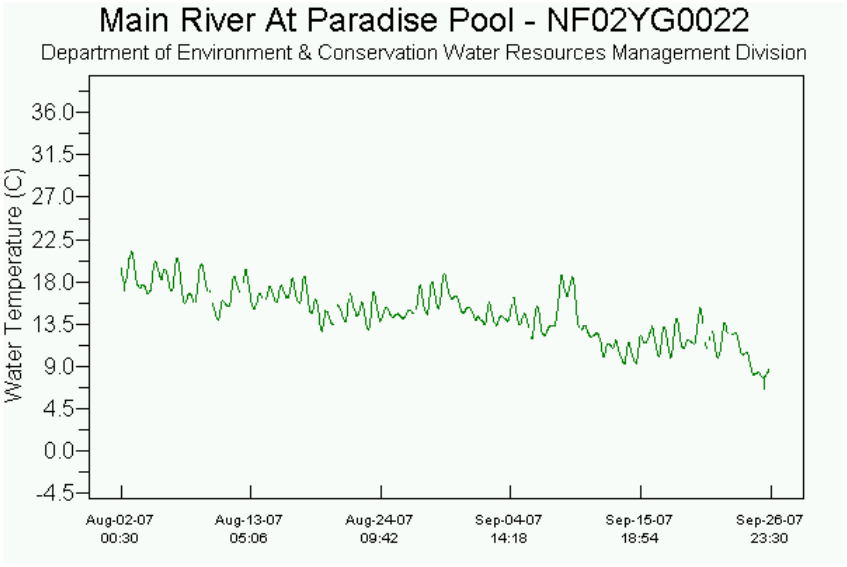

Figure 1

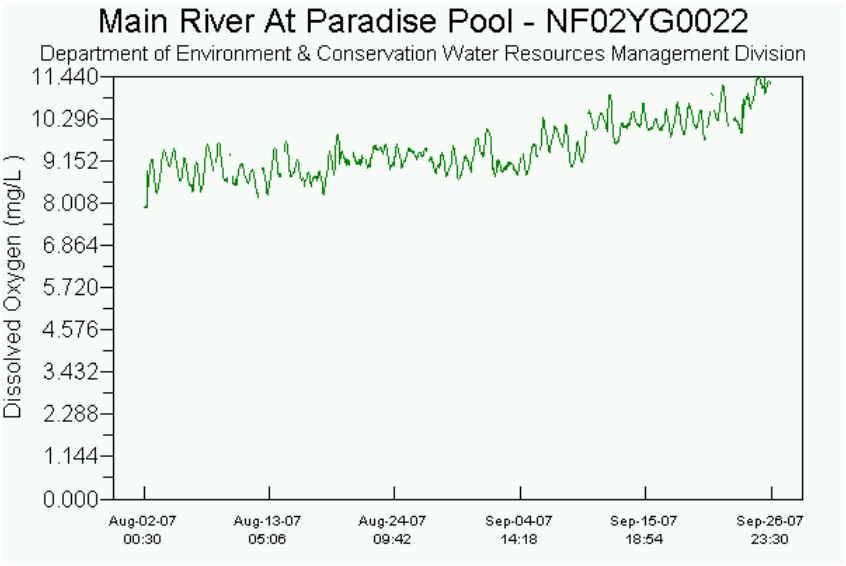

Figure 2

- The pH values **(Figure 3)** for Main River station remained fairly consistent throughout the deployment period. All pH values fall 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.

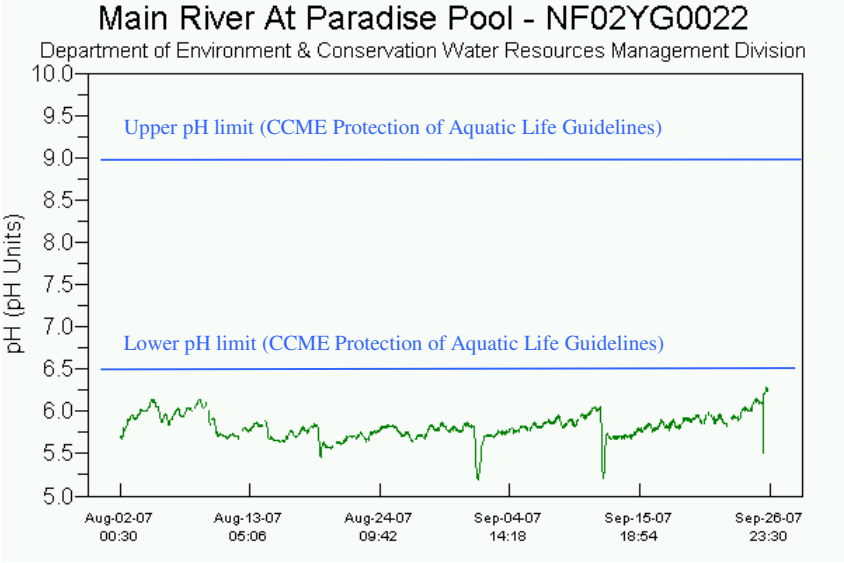

Figure 3

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

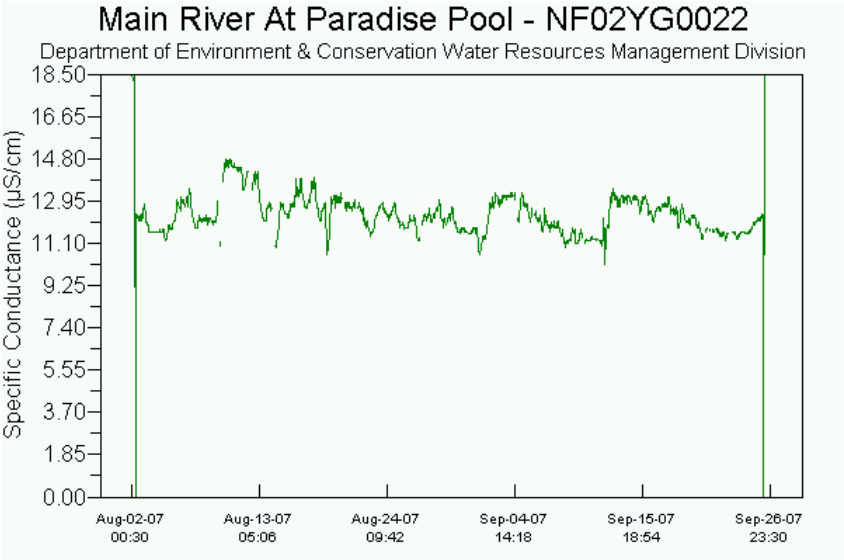

Figure 4

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

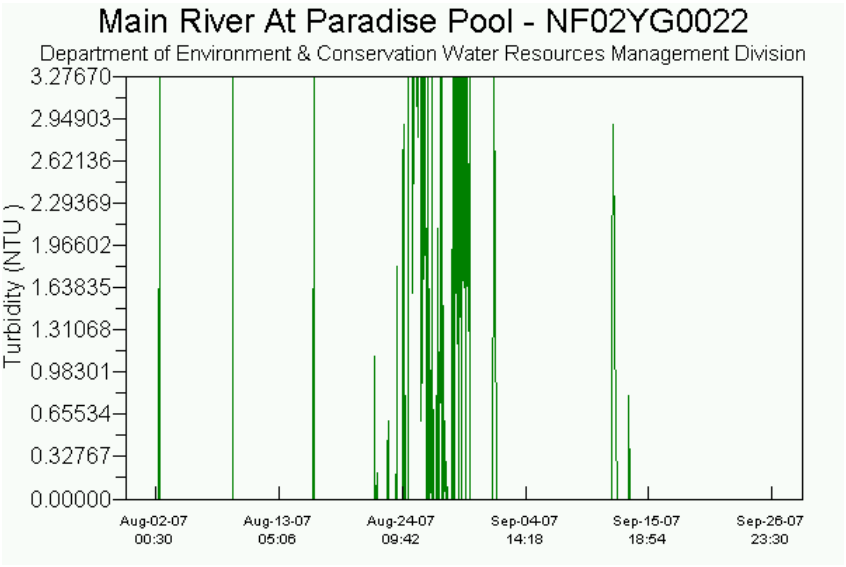

Figure 5

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