Water quality follow-up in the Rupert and Nemiscau rivers

DID YOU KNOW?

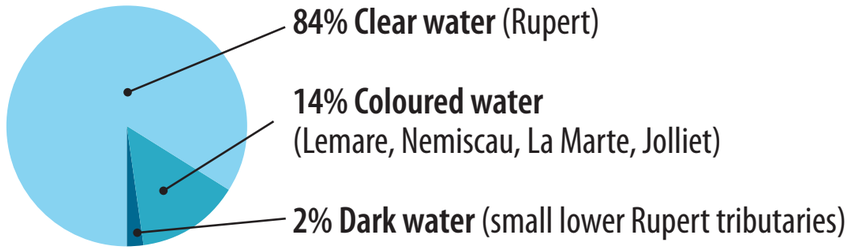
This water quality follow-up is associated with the appeareance of the water. Parameters monitored: suspended solids, turbidity and true colour.

This water quality follow-up program focusses on uses other than drinking water.

Results of the study show that, as predicted in the Environmental Impact Assessment, the waters of the lower part of the Rupert river are slightly more coloured than before the partial diversion. This is due to the fact that there is less clear water coming from the Rupert upstream to dilute the coloured water of the tributaries.

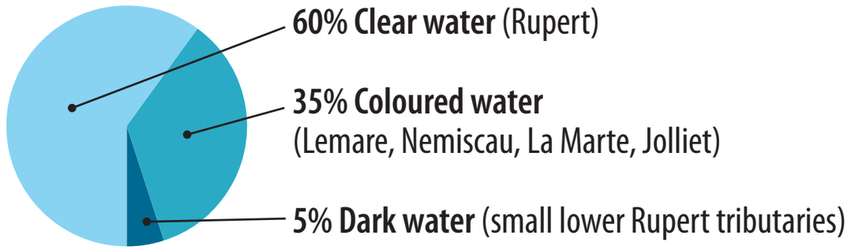
BEFORE PARTIAL DIVERSION

Composition of Rupert water at Waskaganish



AFTER PARTIAL DIVERSION

Composition of Rupert water at Waskaganish



The water is darker than before diversion as predicted by the Environment Impact Assessment.

Since diversion, water from the Rupert and Nemiscau rivers maintain their quality and can still be used for domestic purposes such as personal hygiene, washing dishes and laundry, meal preparation, washing of fish and swimming.

Important reminder: Always refer to the Cree Health Board recommendations for all issues related to water consumption.

Hydro Québec

BEFORE PARTIAL DIVERSION — (Pre-diversion baseline, 2008 & 2009)

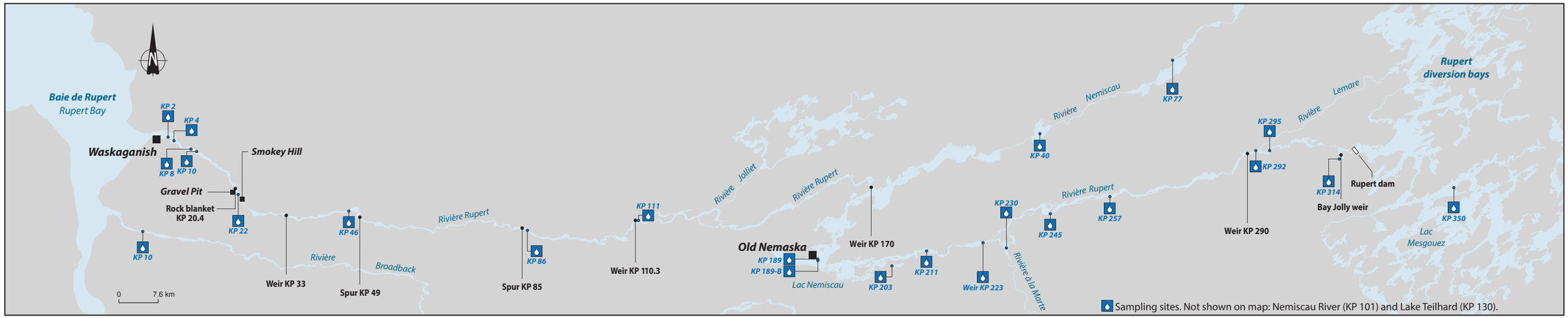
Broadback River – *KP 10*
Coloured water
SS: 8.6 TR: 10 TC: 78

Lower Rupert River
SS: 4.0 TR: 3.0 TC: 34

Nemiscau River
Coloured water
SS: 1.8 TR: 1.4 TC: 40

Upper Rupert River
SS:1.5 TR: 1.1 TC: 29

Mesgouez Lake
Clear water
SS: 0.9 TR: 0.9 TC: 25



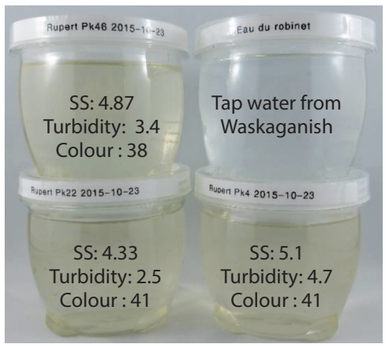
AFTER PARTIAL DIVERSION — (Post-diversion, 2010, 2012 & 2015)

Lower Rupert River
SS: 5.4 TR: 4.2 TC: 39

Nemiscau River
Coloured water
SS: 1.7 TR: 0.9 TC: 31

Upper Rupert River
SS: 1.4 TR: 0.9 TC: 33

Mesgouez Lake
Clear water
SS: 1.2 TR: 0.7 TC: 25



Lower Rupert river samples
October 2015

Nemiscau river samples
October 2015

Upper Rupert river samples
October 2015

SS: Suspended Solids **TR:** Turbidity **TC:** True Color

SUSPENDED SOLIDS (mg/L): Suspended solids are composed of particles from soil (clay, silt), organic particles (decaying plants). The water is filtered and the particles remaining on the filter were measured.

TURBIDITY (UTN): The turbidity is caused by suspended solids comprised of clay, silt, organic particles, plankton and various other microscopic organisms. This parameter is measured directly on the water sample
by using equipment or measuring the scattering of light by the sample caused by the particles in the water.

TRUE COLOUR (UCV): The natural colour of the water can be caused by the presence of natural minerals such as iron, living organisms such as algae, or the products of the decomposition of vegetation.
True colour is measured by using equipment after centrifuging the sample.