

## WOODEN'S RIVER REPORT

On May the 23, 2007, Beth McGee and Jim Law met with Dr. Cathy Conrad and Oliver Woods of St. Mary's University, Halifax. The purpose was to clearly define our objectives, to be briefed on what Oliver had done on the river while writing his thesis and to see what support SMU could provide to us.

We all agreed our proposed project was worthwhile and we would initially monitor five water parameters at a number of sites on the river, in the lakes and in some of the tributaries that form part of the watershed. SMU agreed to loan us the equipment necessary to do continuous (every fifteen minutes) water temperature monitoring at up to seven sites and a specialized piece of portable equipment that measures the pH, temperature, dissolved oxygen, conductivity and total dissolved solids. In addition, SMU agreed to input the readings we obtain into a data bank. The data bank will be maintained for future reference and to enable us to identify trends or changes. Hopefully this stored information will allow FBWHT to be more pro-active in responding to water quality problems. As a starting point and to familiarize ourselves with the equipment offered, we agreed to start off by using the thirteen sample stations used by Oliver when he was writing his thesis.

On the 30<sup>th</sup> of May, Oliver Woods, Dr, Cathy Conrad and Jodie ?, from SMU, joined Jim Law and Carroll Mason to identify the location of the thirteen water sample stations used in Oliver's thesis and to do this year's initial water sampling at each one. Oliver demonstrated how to position and install the ongoing water temperature sensors (referred to as HOBOS) and the proper way to measure pH, temperature, dissolved oxygen, conductivity and total dissolved solids using a YSI 650 MDS piece of test/monitoring equipment. The location of each sample station was recorded using FBWHT's GPS receiver (UTM z20T NAD83). Custody of the seven HOBOS was turned over to FBWHT. The YSI 650 MDS was returned to SMU and it will be made available to FBHWT's representative on an as required basis. Since a number of groups may require this piece of equipment, it will only be available for short term loans and must be returned to SMU on an agreed upon time

On the 9<sup>th</sup> of June, Jim Law installed four of the HOBOS in the same locations that Oliver Woods had placed them in 2006. The reinstalled units remained at those sites until the fall 2007. The remaining two devices were installed at new sites (one at the inlet to the lower Mink Hole and one in a stream that feeds into Long Lake). These devices were installed in brooks that fed Hubley Lake last year. It was felt that it would be more beneficial if they were installed at sites below Hubley Lake.

On the 22<sup>nd</sup> of April, Ken Nickerson and Jim Law took surface water samples at 13 sites, using bottles provided by Inland Fisheries. Unfortunately there was a mix-up in communications and DNR, in Waverly, initially refused to forward the bottles to Inland fisheries because it had not been prearranged. The time lapse caused by this delay may have made the samples less than ideal for taking pH measurements.

On the 10<sup>th</sup> of July, Ken Nickerson and Jim Law borrowed the YSI 650 MDS monitoring equipment from SMU and took water parameter measurements at 26 sites on the system. This first effort was a good start to setting up a monitoring system on the watershed. It identified the need to obtain information regarding topography of the lake bottoms to allow measurements at various depths. It also identified the need to request assistance from camp owners on the lakes, to gain access and where possible to get their assistance and/or use their boating equipment.

When it came time to retrieve the HOBO's, in September, only five of the HOBO's could be located and retrieved. Heavy rains had raised the water level; the flow in the river was extremely fast with limited visibility. The HOBO that Oliver installed and one of the ones Jim installed could not be located. After three tries on different days it was necessary to leave them there for the winter. An attempt will be made to retrieve them when the water levels recede this spring.

FBWHT intends to continue water quality testing on the Woodens River watershed, provided SMU is willing to loan us the YSI 650 MDS monitoring equipment. Organizations and individuals will be contacted in the near future to solicit their participation in planning and conducting the ongoing testing.