2007 Lake Water Levels

From the chart on our Web site, you can see the results of our first season of water level measurements from Lake Wahwashkesh. There are some interesting things to note from the data.

When the water level logger was first placed into the Lake on April 4th, the lake was covered with ice, with open water next to shore. The Lake temperature was steady around 2 - 3 degrees Celsius (35 – 37 degrees Fahrenheit). But once the lake ice melted around April 18th, the lake temperature began to rise. The temperature of the Lake peaked at 27 degrees Celsius (80 degrees Fahrenheit) at the end of July.

On April 8th the water level was 0.88 metres (2.9 feet) above the concrete deck of Bennett's store dock and 1.97 metres (6.1 feet) above the crest of our concrete dam. The decrease in the Lake water level occurred slowly as rainfalls created 5 temporary increases in Lake level until the Lake level stopped dropping in mid August and stayed at that level until mid September. Reports from people who visited the dam during that period commented that the flow was only occurring through the "V" notch. **While other lakes suffered low levels, ours was stable**!

Our water level data was referenced to Bennett's store concrete deck, which had been surveyed in 2001 by Douglas E. Magee, Ontario Land Surveyor. Our water level data suggested that the elevation level number assigned to the crest of the dam appeared to be different by 0.33 metres (~1 foot). After a site visit, the MNR acknowledged this difference when they wrote to the Association on Nov 26, 2007 saying … "We have checked our records and it does appear that there are some discrepancies regarding the geodetic elevation benchmarks in various locations around Wahwashkesh Lake, with a potential discrepancy between benchmarks in the order of 0.33 metres."

The obvious question is … "Is the new dam at the same elevation as the old dam?"

<u>The simple answer is yes!</u>

The new dam was built to the same height as the old dam! The consulting engineer who designed the dam and supervised its construction verified this. MNR's engineering department also provided additional supervision during construction and also verified that the new dam was built to the same height as the old dam!

The real issue here is that the original Benchmark that had been established long ago near the dam, appears to be in error by 0.33 metres. It was this old benchmark that had been used to establish the level of the old dam.

The correct elevation of the old and new dam is likely 225.0 metres above sea level. Until an Ontario Land Surveyor carries out a new survey, a more definitive statement cannot be made.

In Dec 2007, the Municipality of Whitestone asked John Jackson, town planner, if this discrepancy in benchmarks would impact the Official Plan and theoretical flood elevation of 229.57 metres for Lake Wahwashkesh. He replied no, because the Official Plan was based on the other known and reputable benchmarks on the Lake.

… **Andy Vurma**