

**STAFF REPORT:           Engineering & Public Works Department**



**REPORT TO:           Engineering & Public Works Committee**  
**MEETING DATE:     February 12, 2008**  
**REPORT NO.:         EPW.08.17**  
**SUBJECT:            Beaver River Ice Conditions Status Report**  
**PREPARED BY:       Jim McCannell, Manager of Roads & Drainage Division**

**A. Recommendation**

THAT Council receives Report EPW.08.17 entitled "Beaver River Ice Conditions Status Report" for their information.

**B. Background**

As a result of the November 1, 2007, Beaver River Ice Management Meeting, Town Staff have been directed to have a contractor available to provide equipment and labour to assist with the removal and management of the ice on the Beaver River. A tender was awarded to Harold Sutherland that in the event that frazil ice and slush became a problem in the River, and Town Staff were authorized to use contract services to manage the ice to a maximum of \$39,000.00. The details are within Report EPW.07.115 which was presented to Committee at its December 11, 2007 meeting.

Staff monitored the ice conditions on the Beaver River over the weekend of January 19 and 20, 2008. During the week of January 20th, 2008, cold weather and high winds started to create slush and frazil ice in the Beaver River. As a result, the following events transpired:

Monday, January 21

Harold Sutherland's crews were put on notice that the Town may require their services. Through conversations with Don Hutchinson and Ralph Fisher, it was decided that a long reach excavator would be moved on site Tuesday, January 22, in the afternoon. During that day, the ice and water continued to rise.

Tuesday January 22

Water levels at the end of the access point at the end of Jubilee Street in Clarksburg were 1.5m to 1.8m (approximately 5 to 6 feet) above normal. The leading edge of the ice advanced from 25m below the access point to 25m above that point during the day. An Operator was requested on site and slush removal operations began on Tuesday January 22 at 2:00 pm and continued until 9:30 pm that evening. The Operator was scheduled to return on Wednesday, January 23 in the morning. (Billable time, 8.5 hours)

Wednesday January 23

Operations began at 7:00 am and continued around the clock to Thursday, January 24 in the morning. During the day, the edge of the ice continued to advance further up the River

towards Clarksburg. A second excavator was floated to the site and placed on "Stand-by" in the event it was needed. The second excavator arrived in Clarksburg at 5:00 pm on Wednesday, January 24. (Billable time, 22 hours)

Thursday January 24

Operations continued with the long reach excavator only. Frazil ice continued to flow in the River. Most the ice was captured at the Jubilee Street access point and removed from the River. Operations continued until midnight. The second machine was still on "Stand-by". (Billable time, 16 hours).

Friday, January 24

Slush and ice had collected in the River over night and water levels rose 30cm (one foot) over night. Operations began at 6:30 am and continued until 5:00 pm. During the day, water levels dropped as the main portion of the River had opened up. Ice and slush was still forming in the River and collecting at the end of the access point. The excavator was able to remove ice as fast as it was collecting. The decision was made to stop for the evening and return on Saturday morning. (Billable time, 10 hours)

Saturday, January 26

The slush and ice had once again clogged the main channel. The slush at the end of the Jubilee Street access was 1.5m deep. The Operator was able to clear the River and remained on site for 4 hours. Water levels remained constant (Billable time, 4 hours)

Sunday, January 27

The Operator returned to clear the slush that had collected. Again 1.5m of slush had collected at the end of the Jubilee Street access and was removed. (Billable, 3 hours)

Monday, January 28

The Operator was not scheduled to return to the site. Water levels continued to drop during the day.

The long reach excavator was placed on "Stand-by". Harold Sutherland was directed to take the second excavator off "Stand-by" and remove it from site.

Town Staff will continue to monitor the weather and the River conditions to determine if additional action is required. Doug Hill from the GSCA was made aware of these operations and was on site to check on the works.

### **C. The Blue Mountains' Strategic Plan**

Although not specifically addressed in the Strategic Plan, preventing over bank flooding of the Beaver River in Clarksburg protects the property and homes of Town residents.

#### D. Budget Impact

Estimated costs to January 31, 2008:  
(no invoices have been received from Harold Sutherland)

##### Billable Hours

Jan 22	8.5 hr	
Jan 23	22.0 hr	
Jan 24	16.0 hr	
Jan 25	10.0 hr	
Jan 26	4.0 hr	
Jan 27	3.0 hr	
	63.5 billable hours	at \$115 = \$7,302.50

Two float charges 2x \$300	+ \$	600.00
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Stand-by days 9 x \$50/day	+ \$	450.00
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Total cost to date	= \$ 8,352.50	plus GST
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There is \$45,000 within the Draft 2008 Operations Budget allocated for this work. 50% of these costs are recoverable from the MNR through the GSCA.

#### E. Attached

None.

Respectfully submitted,

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Jim McCannell  
Manager of Roads & Drainage Division

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Reg Russwurm  
Director, Engineering & Public Works