

# BC HYDRO OPERATIONS - ICE OBSERVATION REPORT #26

**Flight: Thursday, April 7, 2011**

**Report: Friday, April 8, 2011**

**Report by Kerry Paslawski, Martin Jasek, and Tim Blair**

The responsibility for ice observations on the Peace River passes to BC Hydro from Alberta Environment (AENV) when the ice front is upstream of Dunvegan. That responsibility was transferred on January 17, 2010. The numbering of reports is a continuation of the Alberta Environment reports.

## **Flight Observations** by Martin Jasek

A flight observation was conducted out of the Fort St. John Airport on Thursday, April 7, 2011. Air temperature at the Clayhurst Bridge was +1 °C and at Dunvegan it was -3 °C. The weather was sunny

## **Ice Observations**

Location of the Ice Front: The ice front had receded 58 km downstream since the last observation on Mar 31 and was located at **km 279.3 on Apr 7, 2011 11:08 MDT**. This was approximately 117 km upstream of the Town of Peace River, 16 km upstream of Dunvegan, and about 115 km downstream of the Clayhurst Bridge near the BC/AB border. The rate of recession since the last observation on Mar 31 was 8.3 km/day. On the return flight from the Smoky River, the ice front was located at **km 280.3 on Apr 7, 2011 13:30 MDT**.

### Detailed Observations:

km 265	- upstream end of significant shore ice
km 265 - 277	- broken off shore ice pieces flowing at with about 1-2% concentration
km 278	- 5% concentration
km 279.0	- upstream end of brash ice (at 11:08 MDT)
km 279.3	- ice front at 11:08 MDT
km 279.3 - 280.5	- ice is slightly deteriorated, open leads etc.
km 284	- open lead
km 287	- old open lead
km 291.3	- Ksituan River open
km 294.5	- Hines Creek covered
km 294	- ice cover is mostly the same as noted on the previous flight downstream of this location

## **Observation on the Smoky and Little Smoky Rivers**

The Smoky River was flown from the confluence of the Peace River (km 0) to the confluence of the Little Smoky River (km 75). The ice was intact, white and competent looking with some snow cover and with only occasional short reaches with water flowing on top of the ice. The ice cover on the Smoky River upstream of the Little Smoky confluence appeared more competent with no evidence of overflow.

The Little Smoky had consistent overflow from its confluence with the Wabitanisk Creek (km 43.5) and the confluence with the Smoky (km 0). Upstream of Wabitanisk Creek the ice cover on the Little Smoky looked intact and white.



Ice front and brash ice at km 279 (11:08 MDT). Flow is right to left.



Looking downstream at the ice front and open leads



Looking upstream at the ice front and open leads at 11:08 MDT.



Peace River looking upstream at ice front at 13:30 MDT.



Smoky River looking upstream from km 42.



Smoky River looking upstream at Watino.



Confluence of Little Smoky (bottom) with the Smoky (top: flowing left to right).



Looking downstream at Little Smoky above confluence with the Smoky.



Looking downstream at Little Smoky above Wabatanisk confluence.

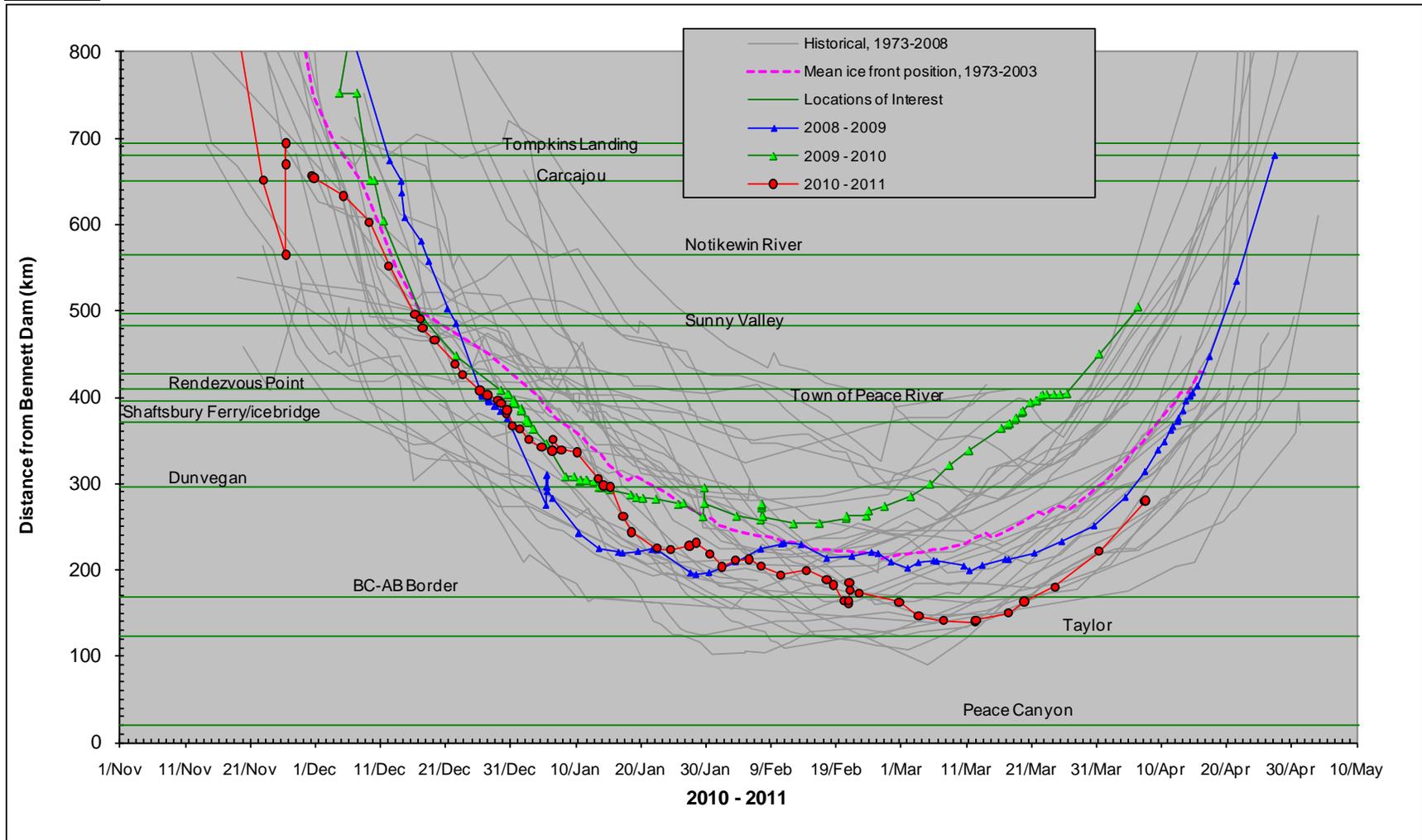


Wabatanisk Creek (bottom) entering Little Smoky (top: flowing right to left). Water was flowing on top of ice on Little Smoky downstream of this tributary but not upstream.

Environment Canada Temperatures ( °C )			
		Fort St. John	Town of Peace River
Observed:		Max/Min	Max/Min
Wed	30-Mar-11	7.8 / -0.3	7.3 / -5.6
Thr	31-Mar-11	7.8 / -0.2	7 / -5.1
Fri	1-Apr-11	8.3 / -1	4.3 / -1.4
Sat	2-Apr-11	6.7 / -4.7	6.2 / -5
Sun	3-Apr-11	7.4 / -4.9	5.7 / -7.5
Mon	4-Apr-11	6.7 / 0	5.9 / 0
Tue	5-Apr-11	5.3 / -2.1	3.9 / -4.3
Wed	6-Apr-11	6.7 / -2.7	5.3 / -3.8
Thr	7-Apr-11	5.7 / -5.3	5.3 / -3.7
Environment Canada Temperatures ( °C )			
Forecast:			
Fri	8-Apr-11	8 / 2	6 / -4
Sat	9-Apr-11	9 / -1	9 / -4
Sun	10-Apr-11	5 / -5	7 / -5
Mon	11-Apr-11	5 / -2	5 / -1
Tue	12-Apr-11	7 / -5	6 / -7
Wed	13-Apr-11	7 / -4	10 / -5
Thr	14-Apr-11	5 / -3	7 / -4
<b>Normal Max/Min</b>		<b>9 / -4</b>	<b>9 / -3</b>

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# Ice Front



**The next ice observation flight is scheduled for Monday, April 11, 2011.**