

BC HYDRO OPERATIONS - ICE OBSERVATION REPORT #11

Flight: Wednesday January 2, 2013

Report: January 2, 2013

Report by Kerry Paslawski and Martin Jasek

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 December 27, 2012. The numbering of reports is a continuation of the Alberta Environment reports.

Flight Observations by Kerry Paslawski

A flight observation was conducted out of the Dawson Creek Airport on Wednesday January 2, 2013. Air temperature at the Clayhurst Bridge was -10 °C. The skies were partly cloudy.

Ice Observations

Location of the Ice Front: The ice front had advanced 31.4 km since the last flight observation by Alberta Environment on December 27 and was located at **km 245.6 on Jan 2, 2013 12:11 MST**. This was approximately 50 km upstream of Dunvegan and about 82 km downstream of the Clayhurst Bridge near the BC/AB border. The rate of advance since the last flight observation on Dec 27 was 5.2 km/day. However, the rate has slowed considerably over this time due to milder weather. There were also two satellite images obtained by Alberta Environment that indicated that the ice front was located at:

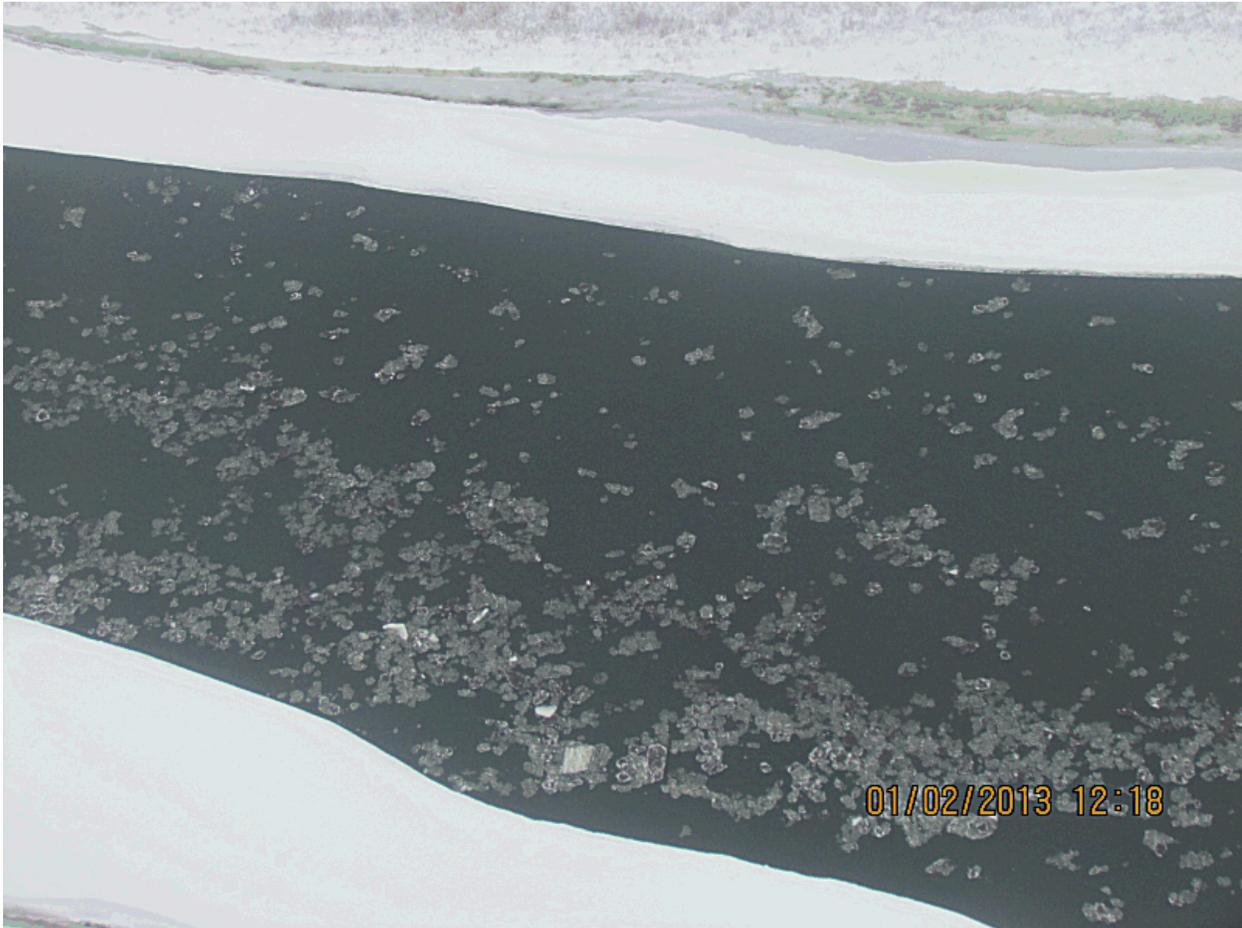
km 258 Dec 29, 2012 18:24 MST
km 248 Jan 1, 2013 18:37 MST

From the last ice front position obtained by satellite to today's ice observation by aircraft, the ice front has been advancing at 3.3 km/day.

Detailed Observations:

km 232	- ice floes mostly consisting of released anchor ice at 5% concentration
km 238.5	- ice floes mostly consisting of released anchor ice at 10% concentration
km 244	- ice floes mostly consisting of released anchor ice at 7-10% concentration
km 245.6	- ice front at 12:11 MST
km 246.5 to 247.5	- juxtaposed brash ice and anchor ice and border ice pieces
km 249	- ice cover is slightly consolidated
km 252.5	- ice cover is juxtaposed
km 255	- toe of a small consolidation
km 257.5	- ice cover is juxtaposed
km 260.5	- ice cover is juxtaposed
km 262.5	- toe of a small consolidation
km 268.5	- toe of a small consolidation
km 271	- toe of a small consolidation with border ice pieces downstream
km 272.6 to 276.9	- a 300 m long open lead
km 275	- lots of small open leads
km 277	- slightly consolidated
km 278.3	- tension tear in the ice cover
km 280	- toe of a small consolidation

- km 283.5 - toe of a small consolidation
- km 284.5 - pressure ridges in the ice cover
- km 286 - small open leads
- km 287.5 - toe of a small consolidation
- km 289 to 283.5 - ice cover is slightly consolidated
- km 283.5 - toe of a small consolidation
- km 295 - ice cover is juxtaposed upstream of the Dunvegan Bridge



Anchor ice floes at km 237. Flow direction is left to right.



Looking upstream at the ice front at km 245.6 on January 2, 2013 11:12 MST.



Looking downstream at the ice front at km 245.6 on January 2, 2013 11:12 MST.



Looking upstream at large border ice piece at km 246.5 and ice front in the distance.



Loosely juxtaposed ice cover with numerous open leads at km 274. Flow direction is left to right.



Toe of a small consolidation at km 282. Flow direction is left to right.

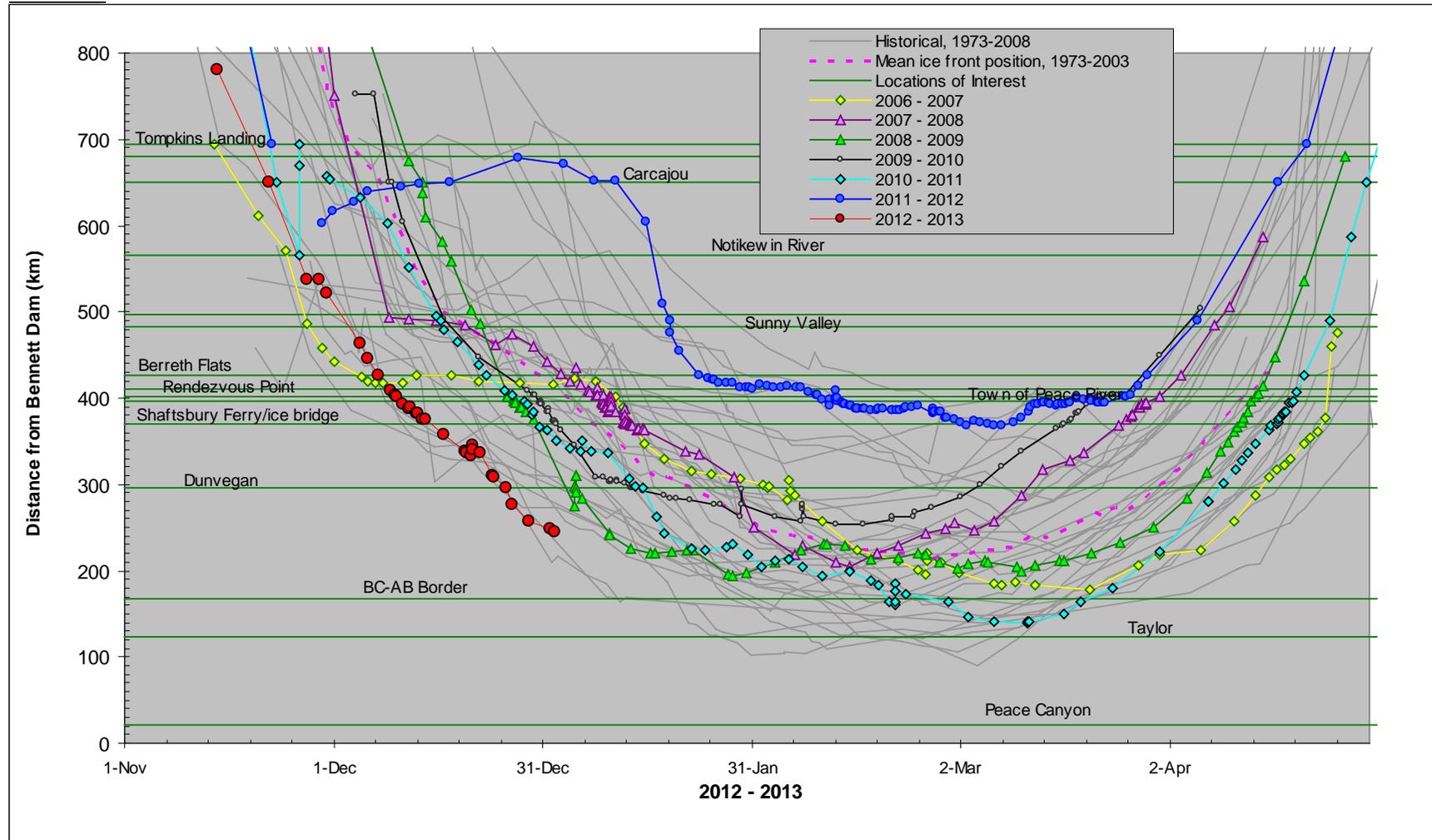


Ice cover just upstream of Dunvegan Bridge is juxtaposed. Flow direction is left to right.

Environment Canada Temperatures (°C)			
		Fort St. John	Town of Peace River
Observed:		Max/Min	Max/Min
Mon	24-Dec-12	-20.7 / -24	-27.5 / -24.6
Tue	25-Dec-12	-23.5 / -30.2	-32.6 / -28.2
Wed	26-Dec-12	-27.4 / -31.7	-31.6 / -27.9
Thr	27-Dec-12	-28 / -33.7	-29.2 / -27.3
Fri	28-Dec-12	-2.1 / -28.2	-31.2 / -23.1
Sat	29-Dec-12	-3.5 / -13.1	-17.1 / -9.7
Sun	30-Dec-12	-3.1 / -14.9	-19.8 / -13
Mon	31-Dec-12	0.7 / -4.2	-17 / -8.3
Tue	01-Jan-13	0 / -4.2	-10.1 / -5.2
Environment Canada Temperatures (°C)			
Forecast:			
Wed	02-Jan-13	4 / -7	-4 / -12
Thr	03-Jan-13	3 / -2	-6 / -4
Fri	04-Jan-13	-3 / -8	-7 / -10
Sat	05-Jan-13	-3 / -9	-4 / -10
Sun	06-Jan-13	-2 / -6	-3 / -8
Mon	07-Jan-13	-4 / -6	-5 / -8
Tue	08-Jan-13	-7 / -8	-6 / -9
Normal Max/Min		-10 / -18	-12 / -22

Continued on the next page.

Ice Front



The next ice observation flight is scheduled for Monday, January 7, 2013.