

## 2014 – 2015 Peace River Report No. 27

An aerial observation flight on March 20 located the ice front near Elk Island Park (km 335, 61 km upstream of the Highway 2 bridge in the Town of Peace River) at 09:05 MST. Despite recent more seasonal temperatures, the ice cover has continued to melt and deteriorate, and the ice front has continued to recede downstream. Since Monday, March 16, the ice front has been receding at a rate between 6 and 8 km/day. This suggests that given similar temperatures and conditions, the ice front could recede through the Town of Peace River in 7 to 10 days.

Given the above seasonal temperatures this spring, the breakup of the ice covers on the Peace and Smoky River is occurring approximately 2 weeks ahead of average.

Ground observations on the Little Smoky River and Smoky River show that thermal deterioration of the ice covers is well underway, and that ice covers are melting in place. Water levels remain low, and there is minimal snow left to generate runoff and force ice movement.

The ice cover on the North Heart River broke up and jammed through the Town of Peace River on Sunday, March 15. Water levels rose quickly but temporarily, and have since fallen.

Alberta Environment and Sustainable Resource Development, and BC Hydro are in contact regarding river ice conditions and operation of the BC Hydro Peace River facilities.

### Observation Details

- March 16, 2015 – Ground observations

#### Smoky and Little Smoky Rivers

- Observations at the Hwy 49 bridge over the Smoky River at Watino (km 65) showed some ice pieces pushed up onto the existing ice cover, and open leads present. Remaining ice appear to be intact and water levels remain low.
- Observations at the Hwy 744 (km 24.5) over the Little Smoky River showed a localized breakup of the ice cover, with deteriorated brash ice melting in place. Remaining ice was dark in color.
- Observations at the Hwy 49 bridge (km 60.5) over the Little Smoky Rivers showed a deteriorated ice cover, with water ponded on the ice surface. Open leads present.

#### North Heart Rivers

- The ice cover on the North Heart River was reported to have broken up over the evening of March 15. An ice jam formed at the confluence with the Peace River, and water levels in the area rose quickly. Some water and ice was pushed onto the Twelve Foot Davis Ball Park. Although the ice jam remained largely in place, water levels fell near dusk that evening.

### Media inquiries may be directed to:

Alberta Environment and Sustainable Resource Development,  
Communications Division

780-427-8636

For toll-free access outside Edmonton, please dial 780-310-0000.

- March 17, 2015
  - Ground observations located the Peace River ice front at km 309.5 (near the Fairview Intake) at 08:30 MST.
- March 19, 2015
  - Observation flight was postponed due to poor flying conditions.
- March 20, 2015

#### Peace River

- km 335 - Ice front location at 09:05 MST.
- Km 335 to 396 – Ice cover intact with few open leads. Where tributaries are open and have run onto the ice cover, there is very little ponded water and very few open leads.
- Km 396 to 413 – Intact ice cover with few open leads present.
- Km 413 to 425 – Long open lead present by DMI.
- Km 425 – End of observation flight. As a note, the majority of snow cover in the surrounding agricultural fields has melted.

#### Smoky River

- km 0 to 5 – Intact ice cover.
- Km 5 to 30 – Evidence of intermittent movement of the ice cover. Small open leads are present and accumulations of deteriorated brash ice have formed in river bends. The majority of the channel appears open.
- Km 30 to 45 – Ice cover does not appear as deteriorated as further downstream, and appears to be melting in place.
- Km 45 to 75 – Ice cover is intermittent and partially broken up. Small open leads are present and accumulations of deteriorated brash ice have formed in river bends. The majority of the channel appears open. As a note, water levels in the river and its tributaries appear low, and there is very little snow in the surrounding agricultural land.

#### Little Smoky River

- km 0 to 60 – Channel is mostly open, with accumulations of deteriorated brash ice in river bends. The majority of the channel appears open. As a note, water levels in the river and its tributaries appear low, and there is very little snow in the surrounding agricultural land.

Many thanks to Julie Hepburn and Greg Poirier with AEMERA, for their contributed observations.

**Photo #1: The Hwy 2 and rail bridges over the Peace River in the Town of Peace River (km 396). Direction of flow is from right to left. March 20, 2015.**



**Photo #2: Intact ice cover at confluence of the Peace (right) and Smoky (left) Rivers. The direction of flow is from top to bottom. March 20, 2015.**



**Photo #3: Deteriorated ice cover at the Hwy 49 bridge crossing over the Smoky River at Watino. Direction of flow is from top to bottom. March 20, 2015.**



**Photo #4: Confluence of the Little Smoky (left) and Smoky (right) Rivers. Direction of flow is from left and top, respectively. March 20, 2015.**



## Temperature Forecast

The following table contains Environment Canada's observed and forecasted daily maximum and minimum temperatures through to Thursday, March 26<sup>th</sup>.

Day	Date	Location		
		High Level	Peace River	Fort St. John
Yesterday	19 March	-5/-16.0	-1.0/-5.5	3.6/-3.1
Today	20 March	-3	1	-4
Saturday	21 March	-5/-15	-3/-5	-5/-7
Sunday	22 March	0/-11	1/-7	-2/-12
Monday	23 March	1/-13	4/-9	0/-11
Tuesday	24 March	2/-11	2/-6	1/-8
Wednesday	25 March	5/-12	8/-7	6/-7
Thursday	26 March	8/-9	12/-3	12/-1
Average Max/Min for 20 March		0 / -14	2 / -10	2 / -7

The next observation report is expected to be posted on or before March 24<sup>th</sup>.

## Observed Peace River Ice Front Locations 2014-2015

