

## 2014 Athabasca River at Fort McMurray

### Report No. 02

On Thursday, April 10, 2014, an observation flight of the Athabasca River was conducted by Alberta Environment and Sustainable Resource Development. The flight covered an approximately 160 km reach of the Athabasca River from Grand Rapids to Stoney Island, downstream of Fort McMurray.

The Athabasca River ice cover remains intact and early signs of ice cover deterioration were observed during the flight. The occasional small open lead was observed to be developing in the ice cover and the rapids sections are opening up. Water is starting to pond along the hinge lines, parallel to shore, and on the ice cover in some places. In some reaches the hinge lines were open and flow was observed. Flow over ice was noted in the tributary streams and rivers, but there was not sufficient volume for the flow to spill out onto the Athabasca River ice cover.

Snow coverage during the flight was variable. In the open muskeg areas there was minimal snow cover, while the forested areas had a coverage that was approximately 90%, but appeared to be thin.

### Observation Details

#### Athabasca River:

- Grand Rapids to Crooked Rapids – The ice cover at Grand Rapids has opened up to approximately 40% of the rapids area. Downstream from the rapids a series of open leads extends for approximately 4 km. Brule, Boiler, Middle and Long Rapids are at various stages of opening up. Boiler Rapids is the most advanced of the group with approximately 70% of the river width open. Open leads at the rapids vary from approximately  $\frac{1}{2}$  to 2 river widths in length. The hinge lines in this reach show either ponded water or are open to flow.
- Crooked Rapids to the Clearwater River Confluence – Crooked, Rock, Little Cascade, Cascade and Mountain Rapids are beginning to open up. Open leads of  $\frac{1}{2}$  to  $\frac{3}{4}$  river widths in length were observed at the rapids. The ice cover is intact over Moberly Rapids and through to the confluence of the Clearwater River. Water is ponding at several locations on the ice cover downstream of the bridges. The open lead that regularly develops along the right bank downstream of the Clearwater River is not visible yet.
- Clearwater River Confluence to Willow Island – The ice cover is intact, but starting to deteriorate. This reach appears to be further long in that respect compared to the reaches upstream of the bridges. An open lead extends downstream, along the left bank, from the waste water treatment facility for approximately 5 km.

#### Clearwater River:

- The ice cover is intact from the confluence and upstream towards the Christina River. Water has begun to pond along the hinge lines and around some of the islands and bars in the lower reach of the river.

The most current information with interactive maps and photos is posted on the Alberta Environment web site at <http://www.environment.alberta.ca/forecasting/RiverIce/index.html>

#### 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.