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## **2012 Athabasca River at Fort McMurray Report No. 10**

On Friday, April 20, 2012, an observation flight of the Athabasca River basin was conducted by Alberta Environment and Water. The flight covered the Athabasca River from Grand Rapids, (approximately 130 km upstream of Fort McMurray) to Stony Island (approximately 17 km downstream of Fort McMurray). The observation flight also covered an approximate 30 km reach of the Clearwater River from its confluence with the Athabasca River to the Christina River.

Alternating sections of open water and intact ice are present from Grand Rapids to Crooked Rapids. Many more sections of open water were observed downstream of Crooked Rapids as previously intact sections of the ice cover were observed shifting downstream. The ice cover is still intact from upstream of the Grant McEwan Bridge to the Clearwater River Confluence, but open leads are continuing to develop in the ice cover as it weakens at this location.

### **Observation Details**

#### **Athabasca River:**

- Grand Rapids to Crooked Rapids – Small sections of intact ice cover are separated by open water throughout this reach. Ice accumulations are present at the upstream end of the intact sections of ice.
- Crooked Rapids to the Clearwater River Confluence – Approximately 10 km of open water leads to an ice jam located at Rock Rapids. The ice jam has increased in size since the previous observation flight. Water continues to spill onto the ice cover downstream of the jam. Movement of the ice cover was observed at several locations between Crooked Rapids and Fort McMurray. The intact ice cover that extends past the Grant McEwan Bridge to the confluence of the Clearwater River continues to thermally deteriorate.
- Clearwater River Confluence to Stony Island – More open water was observed downstream of the Clearwater River confluence as the sheets of the ice cover break and shift downstream. A small ice accumulation is in place near the north end of Grant Island. An open lead along the left bank has opened to the entire width of the channel downstream of Poplar Island.

#### **Clearwater River:**

- More movement of the ice cover was noted along the Clearwater River. Small intact sheets of ice have shifted and drifted downstream leaving small open sections of water. The river is open for approximately 2 km downstream of the Christina River confluence. This section of open water ends in a small ice accumulation approximately 28 km upstream of the mouth of the Clearwater River. Intact ice cover still remains along much of the observed reach, though many signs of thermal deterioration were apparent.

The next observation flight is scheduled for the afternoon of Saturday, April 21.

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