
2011 Athabasca River at Fort McMurray Report No. 07

On Friday, April 22, 2011, an observation flight of the Athabasca River basin was conducted by Alberta Environment. 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.

Three small ice jams are present on the Athabasca River between Grand Rapids and Fort McMurray; a 5 km jam near KM 400, a 2 km jam at Long Rapids (KM 346), and a 5 km jam at Moberly Rapids just upstream of the Grant McEwan Bridge in Fort McMurray. All three of these ice jams have accumulated against small segments of intact ice. Less than 8 km of intact ice remains in this reach. Although downstream of Grand Rapids, the Athabasca River is predominantly open (free of ice), large stretches of intact ice remain in the upper basin.

There is open water at the confluence of the Clearwater River and the Athabasca River, extending downstream to Stony Island. There is some sheet ice accumulated between islands, but it is not blocking the channels or holding back any water. The Clearwater River is predominantly open, with ice sheets shifting downstream, and some segments of intact ice remaining in place.

Observation Details

Athabasca River:

- Grand Rapids to Crooked Rapids –The river downstream of Grand Rapids was open for 30 km. A 5 km ice jam formed against approximately 2 km of intact ice near KM 400. The small section of intact ice and small ice jam that was located near KM 380 had released and joined the jam at Long Rapids (KM 346). The remainder of this reach was open water, with shore fast ice narrowing the channel in several locations.
- Crooked Rapids to the Clearwater River Confluence – Open water extended through this reach, with the exception of the ice jam located at Moberly Rapids. This jam formed against less than 1 km of intact ice adjacent to the Grant McEwan Bridge. Open leads extended throughout this segment of ice, showing signs of thermal deterioration. Between the bridge and the confluence of the Clearwater several sheets of ice have accumulated, however an open channel was present along the right bank.
- Clearwater River Confluence to Stony Island – Although several ice sheets have accumulated between the islands in this reach, there are clear channels of open water through the islands.

Clearwater River:

- The ice cover continued to shift downstream. There was approximately 3 km of open water extending upstream from the mouth of the Clearwater River. Ice sheets were observed accumulating in several bends of the river. A small ice accumulation has formed just downstream of the confluence of the Christina River.

The next observation flight is scheduled for Saturday, April 23.

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>