

MEMO TO: Dave Schafer CENAE-EOC, John Hasselman CENAN-OP-EM
SUBJECT: Ice conditions on central Maine rivers
DATE: 23 March 2005

On 22 March 2005, Andy Tuthill checked ice conditions by air on the following rivers:

Androscoggin River: Rumford downstream past Lewiston-Auburn, ME
Sandy River: Farmington, ME to Kennebec confluence
Kennebec River: Bingham, ME to Merrymeeting Bay
Saco River: Fryeburg, ME, Conway NH
Pemigewasset River: Plymouth, NH and upstream

With the gradual but steady melting of the past ten days, the ice jam potential on central Maine rivers has decreased substantially. Snow on the ice covers has consolidated in many places to gray slush and open water prevails in the faster flowing reaches.

The *Androscoggin River* is now open from below Rumford past Canton and Jay (Fig. 1) to the vicinity of Turner. From here, deteriorating sheet ice extends for about 12 miles south to the Gulf Island Dam above Lewiston. The river is open through Lewiston, then sheet ice-covered for a stretch upstream of Lisbon Falls.

The *Sandy River* ice cover is still nearly complete at Farmington, but the snow on the ice has consolidated and starting saturate which will speed melting. Open leads are beginning to appear.

The *Kennebec River* is now open from Madison to a point several miles upstream of Noridgewock. From here, a 20-mile-long sheet ice cover extends past Scowhegan to the Shawmut Dam with the ice thickness decreasing downstream direction (Fig. 2). With the exception of a short stretch of decaying ice behind the second Waterville Dam (Fig. 4), the Kennebec is now open to Augusta where it tapers to a wide lead that follows the western side of the river nearly to Hallowell (Fig 5). The channel is open at the location of the ice motion detector upstream of the Memorial Bridge (Fig. 6), but the sensor has not yet triggered, as a result of the gradual melt-out.

From Hallowell to Gardiner, the Kennebec sheet ice-covered to below the Gardiner Bridge. At the time of the flight (1400 hrs Tuesday) two USCG ice vessels had just broken a 300-ft wide track from Merrymeeting Bay up to the Gardiner Bridge (Fig.7). Fig. 8 shows the ships breaking ice around an island below Gardiner, where ice jams historically form.

On the return flight to Lebanon, I inspected the *Saco River*, which is open from North Conway downstream past Conway. The river is sheet ice covered through Fryeburg then mostly open downstream of the Fryeburg airport. The *Bearcamp River* is open in the vicinity of Tamworth, NH. *Pemigewasset River* is at least half-open upstream of Plymouth NH and ice covered below.

Conclusions

Through the weekend, the forecast in northern New England calls for partly to mostly cloudy, with highs in the 40's and nighttime lows in the 20's. A 40-50% chance of snow and/or rain exists for Sunday and Monday. Similar weather is expected for northern Maine except about 5 degrees colder with no rain expected. The ice jam flood threat for the Kennebec at Augusta is almost zero at this point. Under the expected weather conditions, the ice covers on the more northerly rivers will continue melt and open up further decreasing the ice jam flood threat.

Respectfully Submitted,

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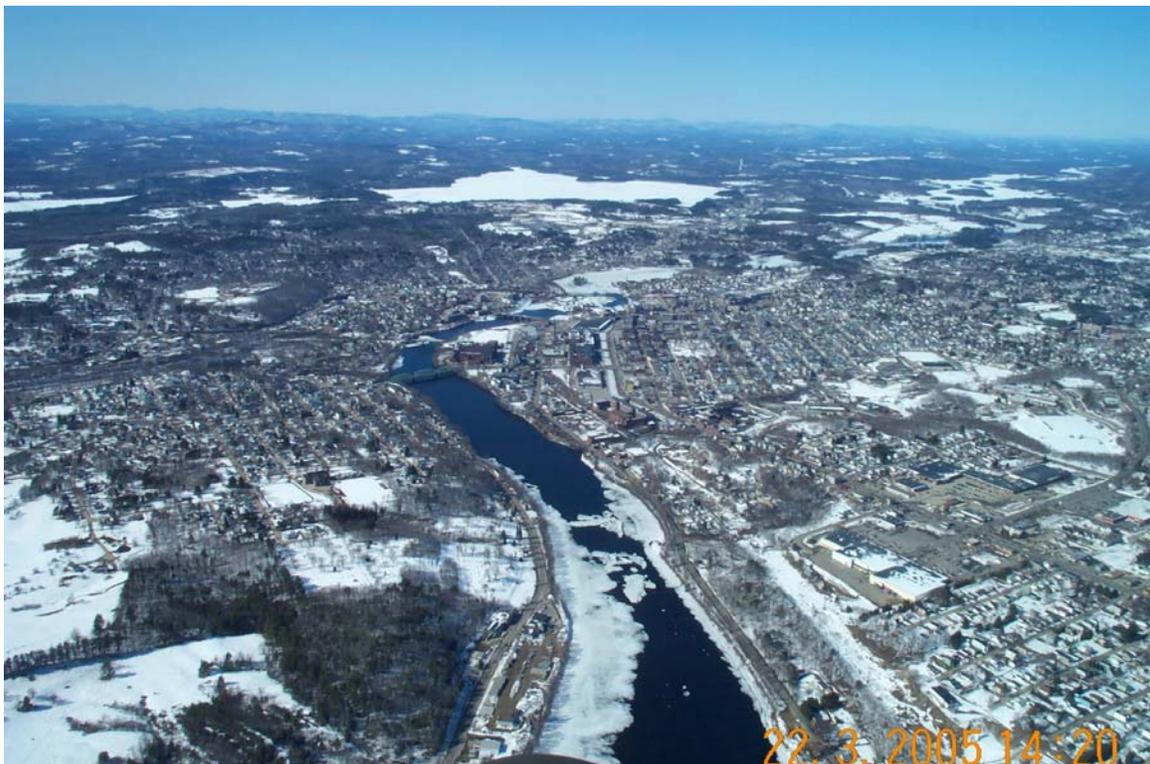


Fig. 1. Androskoggin River at Lewiston-Auburn, ME



Fig. 2. Androscoggin River at Canton looking downstream towards Jay, ME.



Fig. 3. Decaying ice cover on the Kennebec River upstream of the Shawmut Dam.



Fig. 4. Kennebec and Sebasticook Rivers at Waterville.



Fig. 5. Kennebec River looking upstream from Augusta.



Fig. 6. Kennebec River at Augusta showing open lead at ice motion detector site.



Fig. 7. Kennebec River showing broken ice below Gardiner.



Fig. 8. Ice breakers at work below Gardiner.