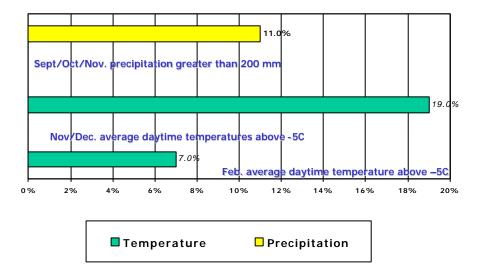
6.0 **RELIABILITY CONSTRAINTS**

Reoccurrence of Unusually Mild Winters must be anticipated. Analysis of available historical temperatures and precipitation data for the Berens River, Island Lake, Cross Lake, and Gillam areas suggests that the warm 1997-98 climatic event could be expected to occur in 5 to 15 percent of the years.

Consequently, global warming cannot be directly cited for the 1997-1998 event. However, global warming, as it is frequently interpreted for Manitoba, would increase winter temperatures and precipitation. Hence, winter roads will become impassable on a more frequent basis.

The reliability of winter roads will therefore be compromised relatively frequently. As seen on the following figure, a coincidence of high fall precipitation (11 percent probability) and high November to December temperatures (19 percent probability) could severely reduce the available time for winter road traffic. A warm February event (7 percent probability) could wipe out the winter road on its own.

Winter Road Reliability – Probability (%) Historical Weather Conditions similar or worse than 1997-98



Other weather reliability issues which can seriously disrupt the overall area transportation are:

- Lower winter road safety standards.
- Lake and river ice thickness.
- Blizzard conditions.
- Fog and thunderstorms/forest fires.
- Shortened shipping seasons.

The following photographs illustrate many of these problems.

Executive Summary



Travel Difficulties Relating to Air Traffic



Travel Difficulties Relating to Winter Road Travel



Travel Difficulties Relating to Winter Road Travel



Travel Difficulties Relating to Winter Road Travel - Burn off of Fuel Spill

Dillon Consulting Limited

Executive Summary



Travel Difficulties Relating to Winter Road Travel Overturned Fuel Tankers



Travel Difficulties Relating to Winter Road Travel



Travel Difficulties Relating to Winter Road Travel



Crack in Lake Winnipeg Ice at Pine Dock Crossing

Dillon Consulting Limited