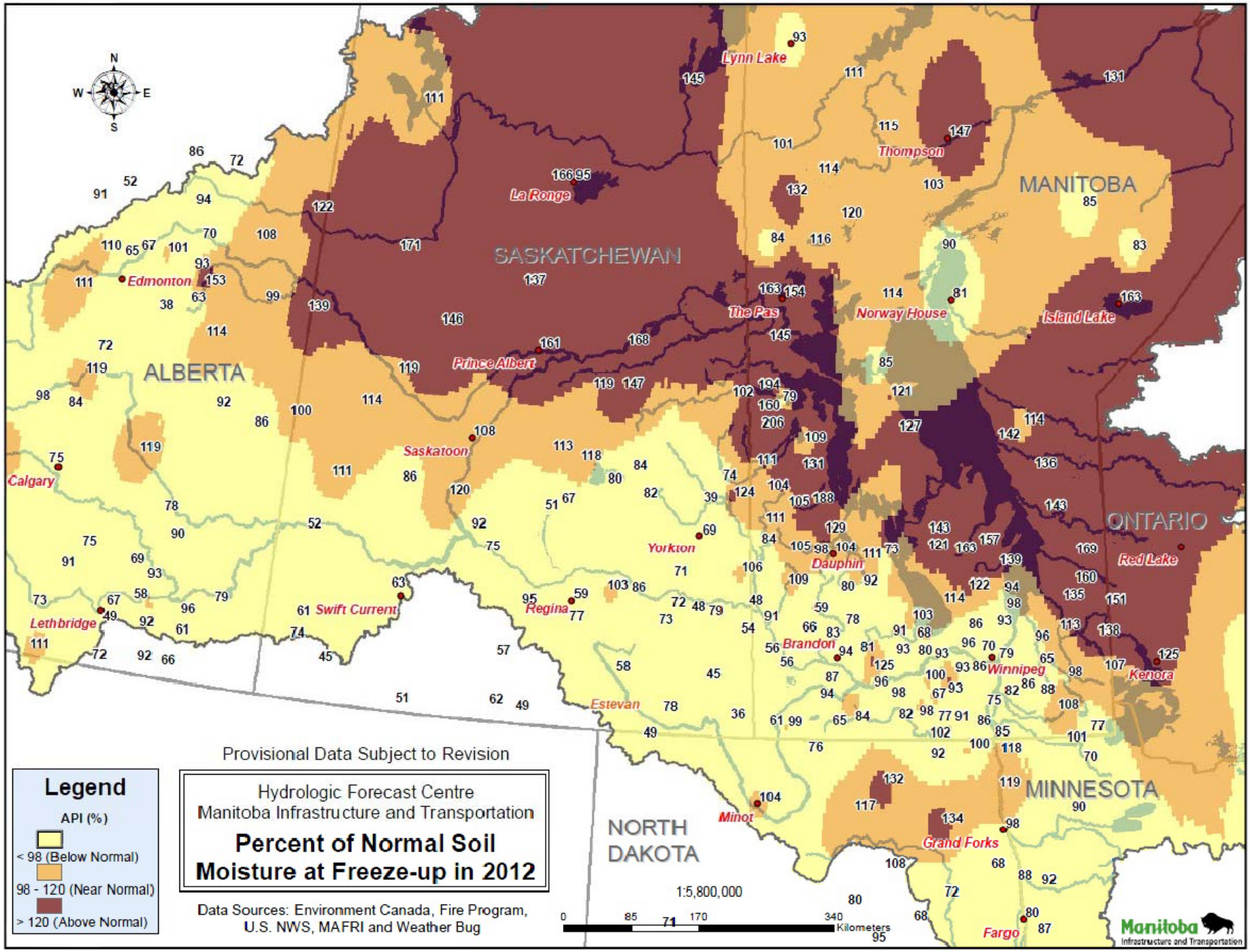
2013 Spring Flood Outlook

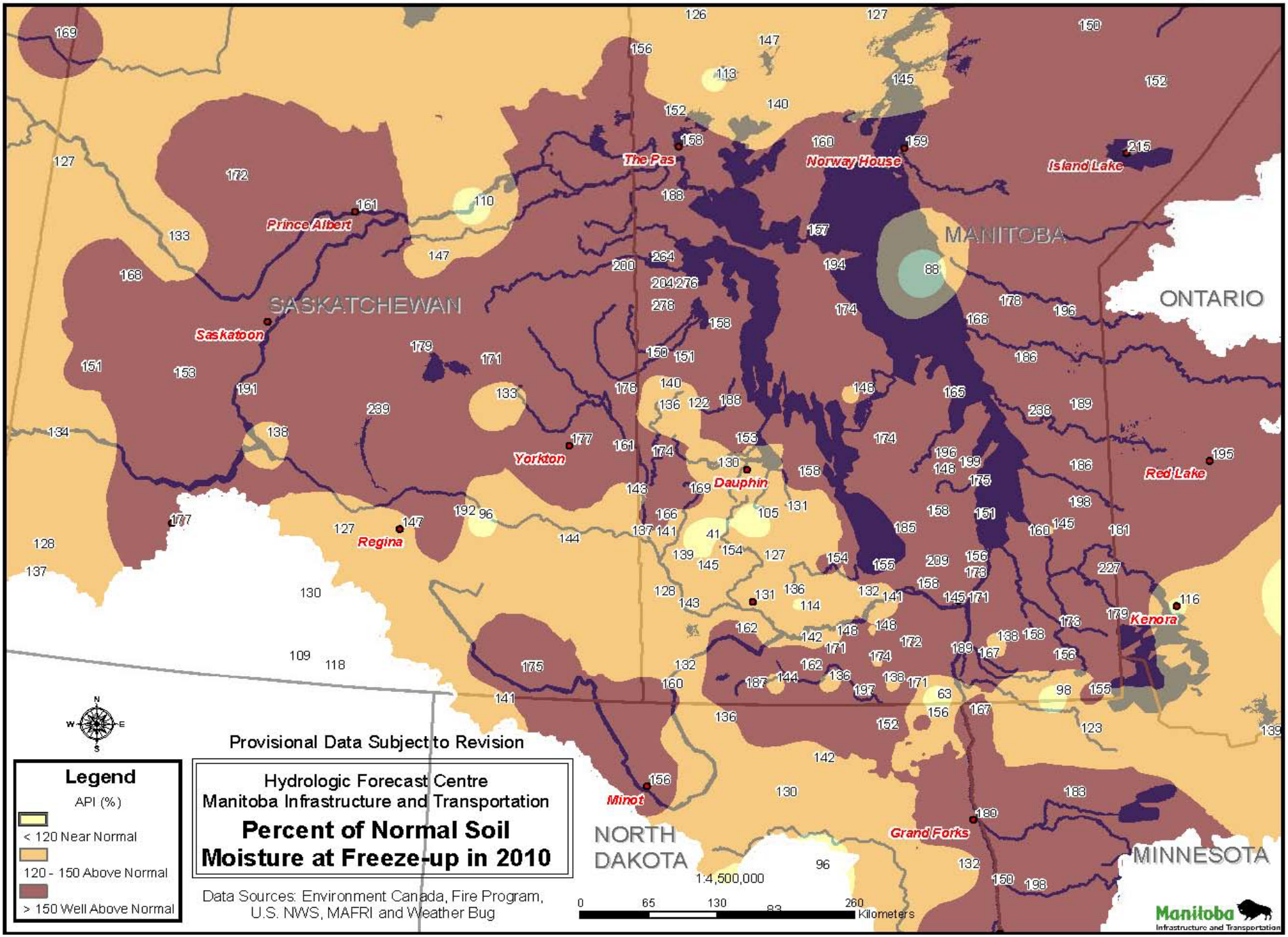
Manitoba Infrastructure & Transportation

Hydrologic Forecast Centre

February 27, 2013

Manitoba


Provisional Data Subject to Revision
Hydrologic Forecast Centre
Manitoba Infrastructure and Transportation
Percent of Normal Soil Moisture at Freeze-up in 2012
Data Sources: Environment Canada, Fire Program, U.S. NWS, MAFRI and Weather Bug
Legend
API (%)
< 98 (Below Normal)
98 - 120 (Near Normal)
> 120 (Above Normal)
1:5,800,000
0 85 170 340 Kilometers
ALBERTA
SASKATCHEWAN
MANITOBA
ONTARIO
NORTH DAKOTA
MINNESOTA
Edmonton
Calgary
Lethbridge
Saskatoon
Prince Albert
La Ronge
Lynn Lake
Thompson
The Pas
Norway House
Island Lake
Yorkton
Swift Current
Regina
Estevan
Dauphin
Brandon
Winnipeg
Red Lake
Kenora
Minot
Grand Forks
Fargo
Manitoba
Infrastructure and Transportation


Provisional Data Subject to Revision
Hydrologic Forecast Centre
Manitoba Infrastructure and Transportation
Percent of Normal Soil Moisture at Freeze-up in 2010
Legend
API (%)
< 120 Near Normal
120 - 150 Above Normal
> 150 Well Above Normal
Data Sources: Environment Canada, Fire Program, U.S. NWS, MAFRI and Weather Bug
1:4,500,000
0 65 130 260 Kilometers
SASKATCHEWAN
MANITOBA
ONTARIO
NORTH DAKOTA
MINNESOTA
Saskatoon
Prince Albert
The Pas
Norway House
Island Lake
Yorkton
Dauphin
Regina
Red Lake
Kenora
Minot
Grand Forks
Manitoba
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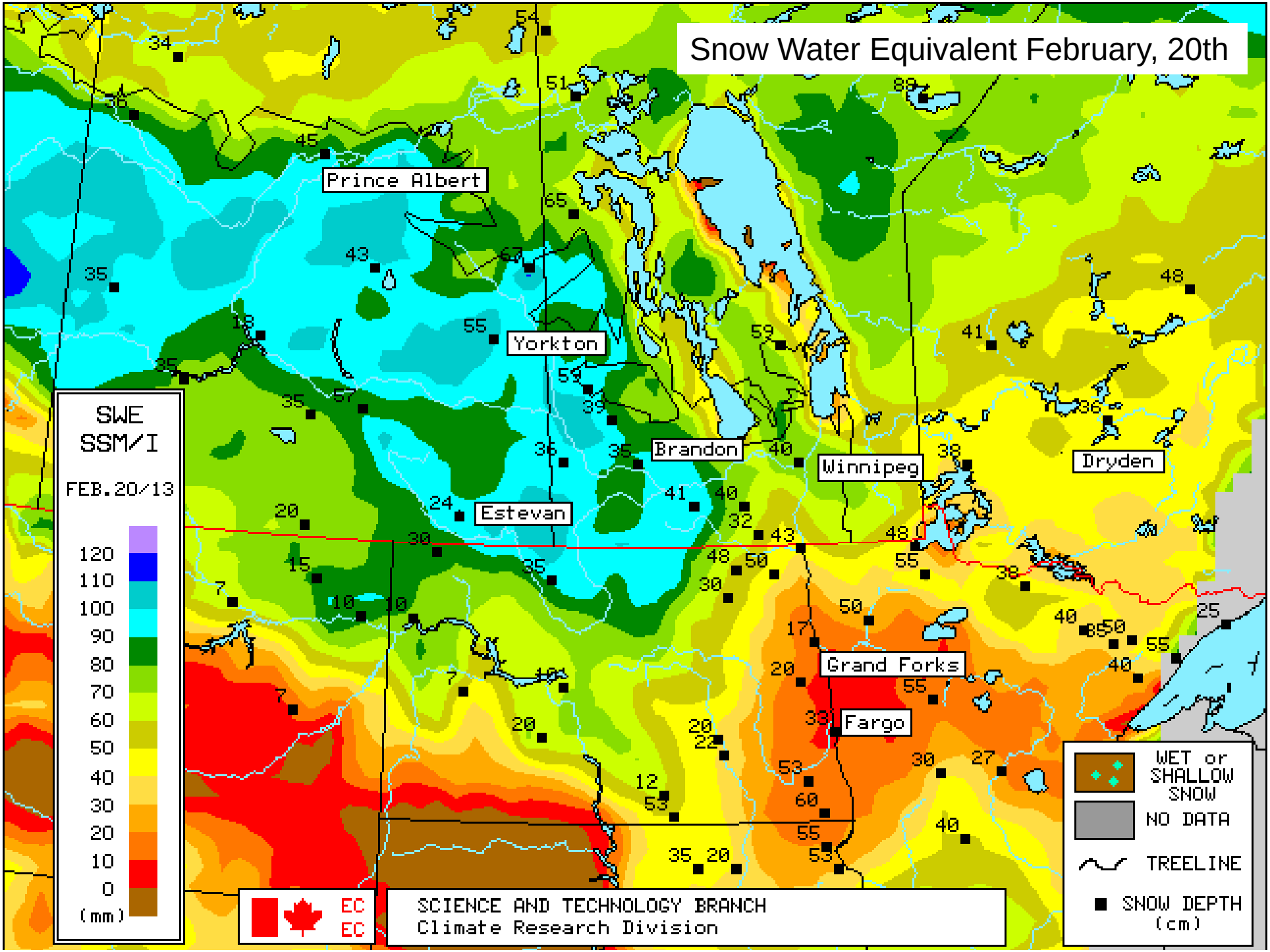
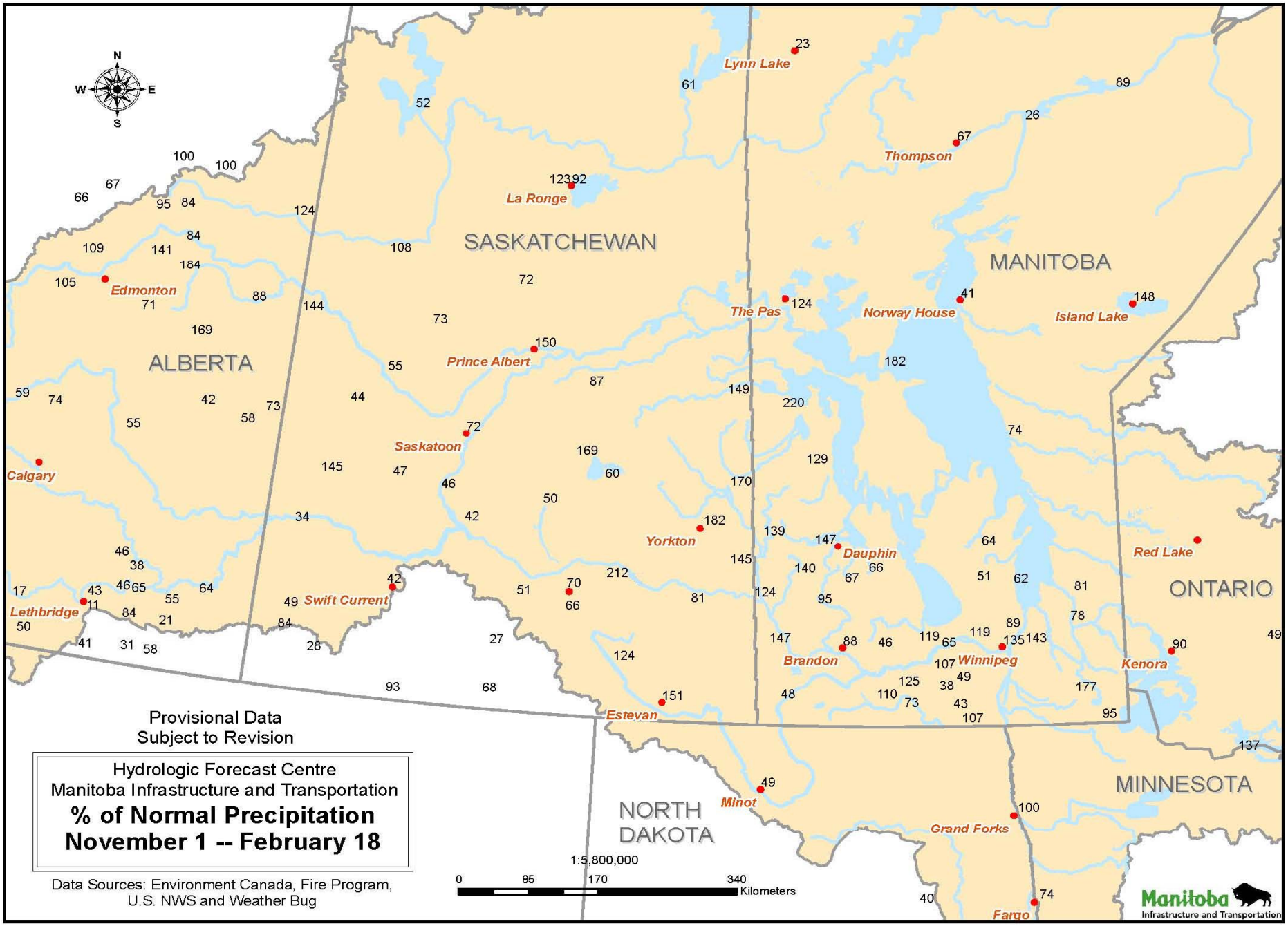

Snow Water Equivalent February, 20th
Prince Albert
Yorkton
Brandon
Estevan
Winnipeg
Dryden
Grand Forks
Fargo
SWE
SSM/I
FEB.20/13
120
110
100
90
80
70
60
50
40
30
20
10
0
(mm)
WET or SHALLOW SNOW
NO DATA
TREELINE
SNOW DEPTH (cm)
EC
EC
SCIENCE AND TECHNOLOGY BRANCH
Climate Research Division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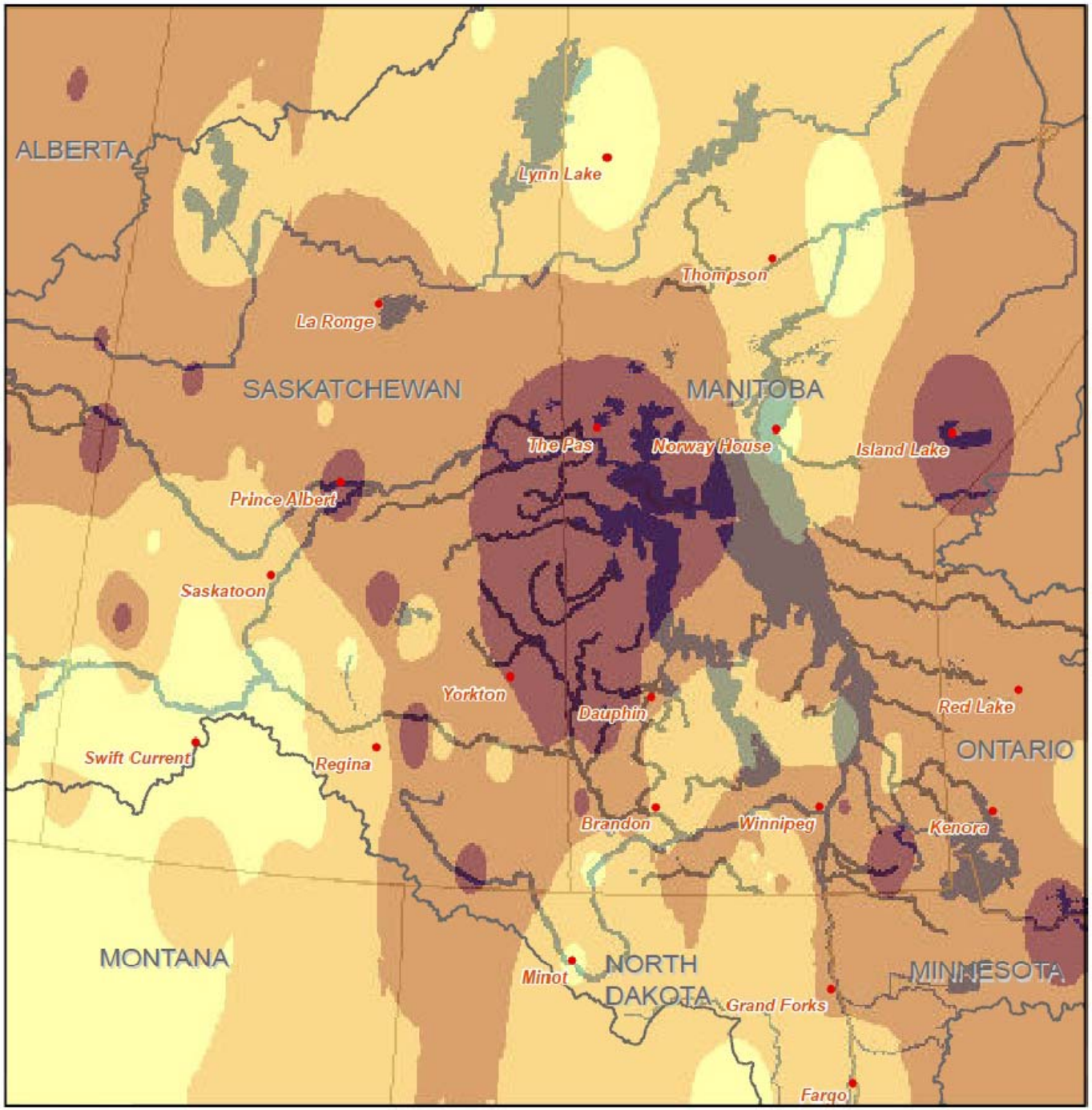
W
E
S
SASKATCHEWAN
MANITOBA
ALBERTA
ONTARIO
NORTH DAKOTA
MINNESOTA
Lynn Lake
Thompson
La Ronge
Edmonton
The Pas
Norway House
Island Lake
Prince Albert
Saskatoon
Calgary
Yorkton
Dauphin
Red Lake
Lethbridge
Swift Current
Brandon
Winnipeg
Kenora
Estevan
Minot
Grand Forks
Fargo
Provisional Data
Subject to Revision
Hydrologic Forecast Centre
Manitoba Infrastructure and Transportation
% of Normal Precipitation
November 1 -- February 18
Data Sources: Environment Canada, Fire Program,
U.S. NWS and Weather Bug
1:5,800,000
0 85 170 340 Kilometers
Manitoba
Infrastructure and Transportation



Percent of Potential Runoff Index (PRI) until February 18th of 2013

Provisional Data Subject to Revision

Hydrologic Forecast Centre
Manitoba Infrastructure and Transportation

Data Sources: Environment Canada, Fire Program, U.S. NWS, MAFRI and Weather Bug

Legend

PRI (%)

- 20 - 55 Well Below Normal
- 55 - 80 Below Normal
- 80 - 110 Near Normal
- 110 - 180 Above Normal

N W E S

1:6,400,000

0 75 150 300 km

Manitoba
Infrastructure and Transportation

SUMMARY OF EXPECTED RIVER CONDITIONS

Minor Flooding

- Minor flooding occurs when water reaches a height at which some property along the edge of the water might be damaged or at risk. In order to qualify as minor flooding, there must be some potential danger to the public.

Moderate Flooding

- Moderate flooding includes flooding of low-lying roads and structures. At this stage, it might be necessary to move some people and their belongings to higher ground.

Definitions

Major Flooding

- At the major flooding stage, the water causes extensive flooding of the surrounding areas and roadways. At this stage, there will be significant property damage and a large number of evacuations of both people and belongings.

Record Flooding

- Record flooding occurs when the water rises to a point equal to or higher than any previous measurement. At this stage, large areas and roadways are under water, and there is major damage to property. There is widespread evacuation of people and property.

River Forecast Summary

Basins	Lower Decile	Median	Upper Decile
Red River	No flooding	Minor	Minor to Moderate (2011)
Assiniboine River	No flooding	Minor	Moderate (2006)
Souris River	Minor	Minor to Moderate	Moderate (2009)
Roseau Rivers	No flooding	Minor	Minor to moderate (2011)
Pembina Rivers	No flooding	Minor	Minor to moderate (2005)
Interlake & Eastern Regions	No flooding	Minor	Moderate
Northern MB and The Pas Regions	No flooding	Minor	Moderate