

# 2011 Spring Flood Outlook

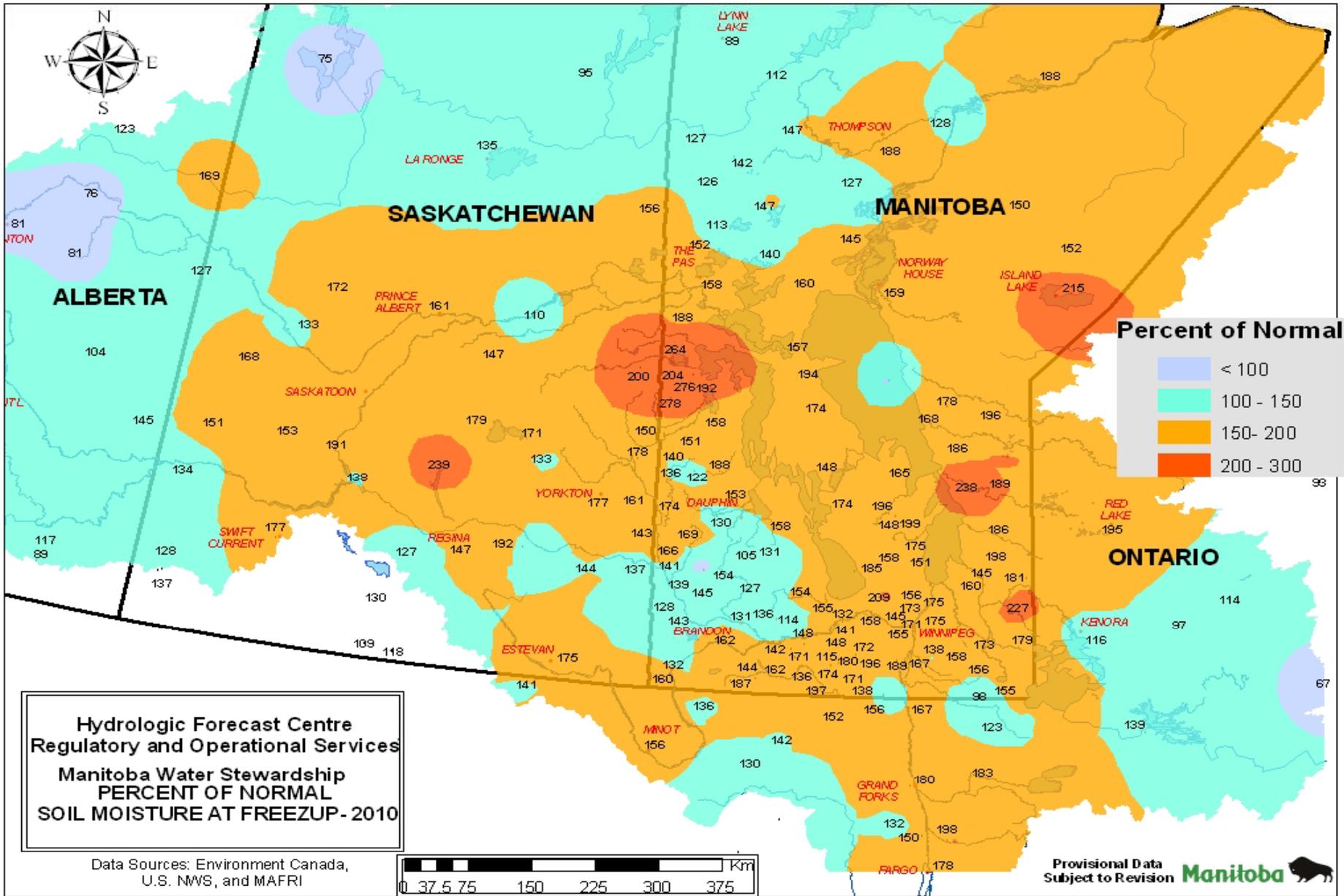
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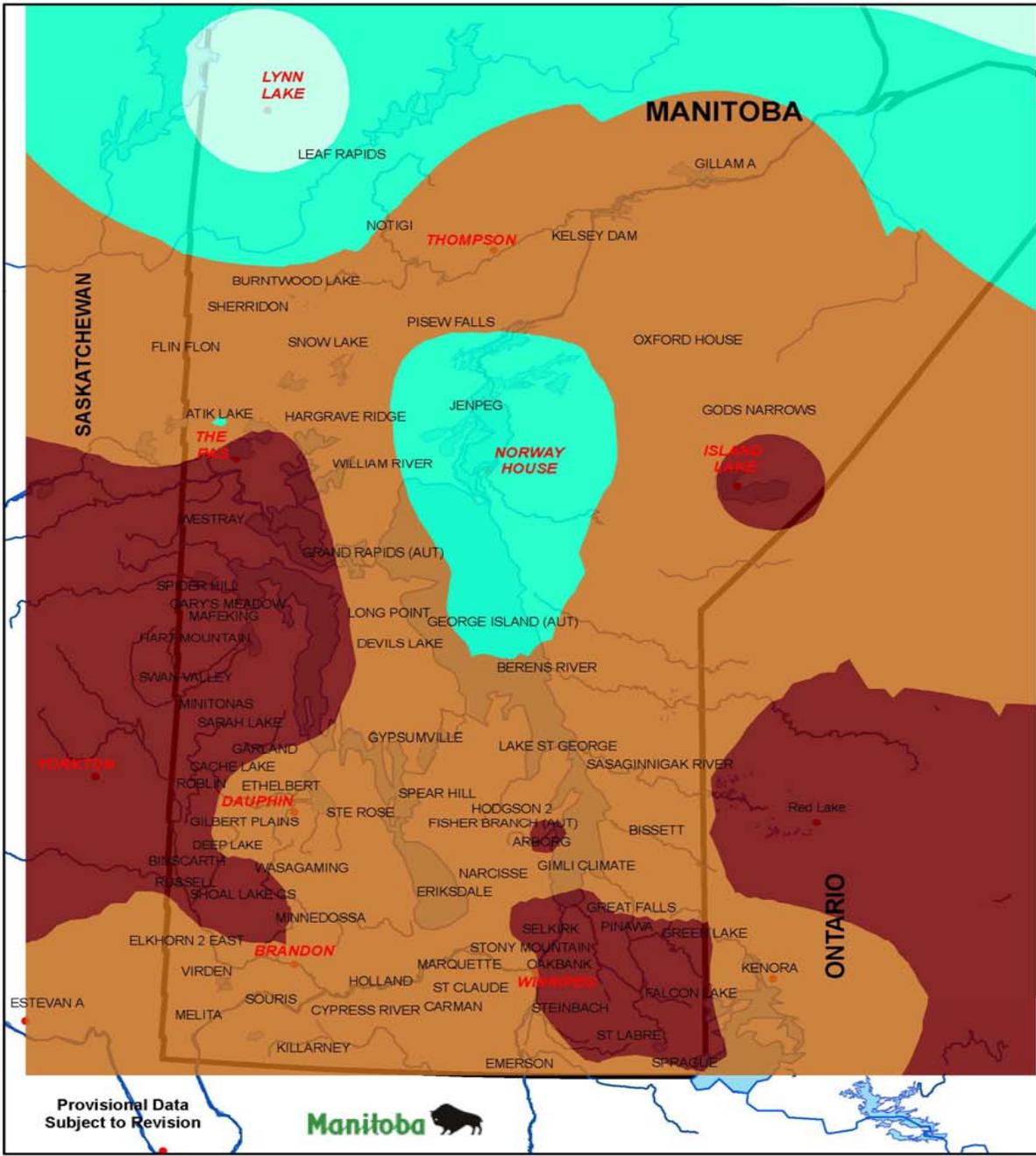
Manitoba Water Stewardship

**Jan 24, 2011**

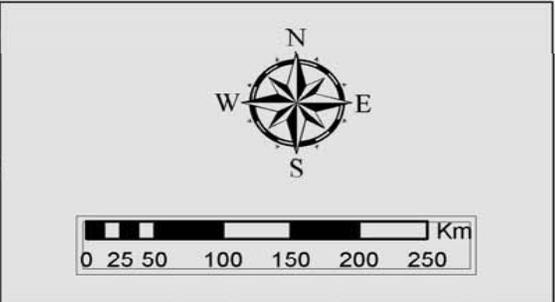
Hydrologic Forecast Centre

**Manitoba** 





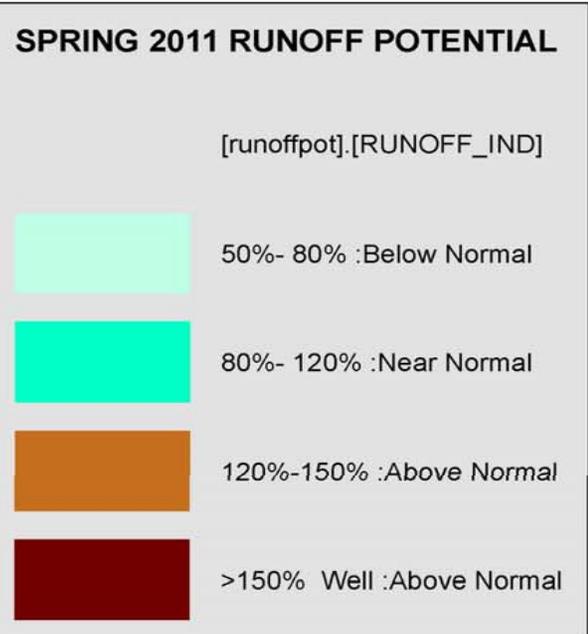
Provisional Data  
Subject to Revision



Hydrologic Forecast Centre  
Regulatory and Operational Services

**Manitoba Water Stewardship**

Data Sources: Environment Canada,  
U.S. NWS, MAFRI, Weatherbug,  
Manitoba Fire Program



### Red River Comparison of 2011 and 1997 Conditions

	2011	1997
Soil Moisture Index	Extreme: 2 <sup>nd</sup> Highest Since 1948	Moderate: Slightly Above Average
Snow Cover as of Mid January	70 – 100 mm: Heaviest in USA	80 -120 mm: Heaviest in USA
Expected SWE in Early April	125 mm – Median 165 mm – Upper Decile	175 -225 mm
Soil Frost	Moderate	Moderate
Jan 22 Flow @ Emerson	4,000 cfs	900 cfs
Jan 22 Flow @ Headingly	3,000 cfs	460 cfs
Jan 22 Level @ James Av	5.9 feet	2.1 feet
River Ice Thickness (Sparse Data)	1.5 – 2.0 feet	1.5 – 2.0 feet
Melt Conditions	Unknown	Initial Melt in March; Rapid melt mid April
Shellmouth Reservoir; Jan 22 <sup>nd</sup>	1398.80 feet	1395.32 feet
Spring Weather Conditions	Unknown	Blizzard

## Red River Forecast Summary

Favourable weather conditions:

Flood similar to 2001

Average weather conditions:

Flood similar to 2009

Unfavourable weather conditions:

Flood similar to 1997

## Pembina River Forecast Summary

Favourable weather conditions:

Minor flooding

Average weather conditions:

Flood similar to 1979

Unfavourable weather conditions:

Flood higher than 2009

## Roseau River Forecast Summary

Favourable weather conditions:

Minor flooding

Average weather conditions:

Flood similar to 2009

Unfavourable weather conditions:

Flood similar to 2002

## Assiniboine River Forecast Summary

Favourable weather conditions:

Minor flooding

Average weather conditions:

Flooding from  
Millwood to Portage

Unfavourable weather conditions:

Flooding from  
Shellmouth to Brandon  
similar to 1976 level or higher

## Souris River Forecast Summary

Favourable weather conditions:

Flooding similar to 2009

Average weather conditions:

Flooding similar to 1974

Unfavourable weather conditions:

Flooding greater than  
1974 but less than record  
flood of 1976

## Interlake and Eastern Manitoba

Favourable weather conditions:

Minor flooding in many areas

Average weather conditions:

Overland flooding in most areas

Flooding on Fisher River close to 2006

Some flooding on Brokenhead, Whitemud, and Icelandic Rivers

Record high levels on Shoal Lakes

Unfavourable weather conditions:

Flooding in most areas

Fisher River similar to 1986 flood  
Serious Shoal Lake flooding

**Westlake, Dauphin, The Pas Regions**

Favourable weather conditions:

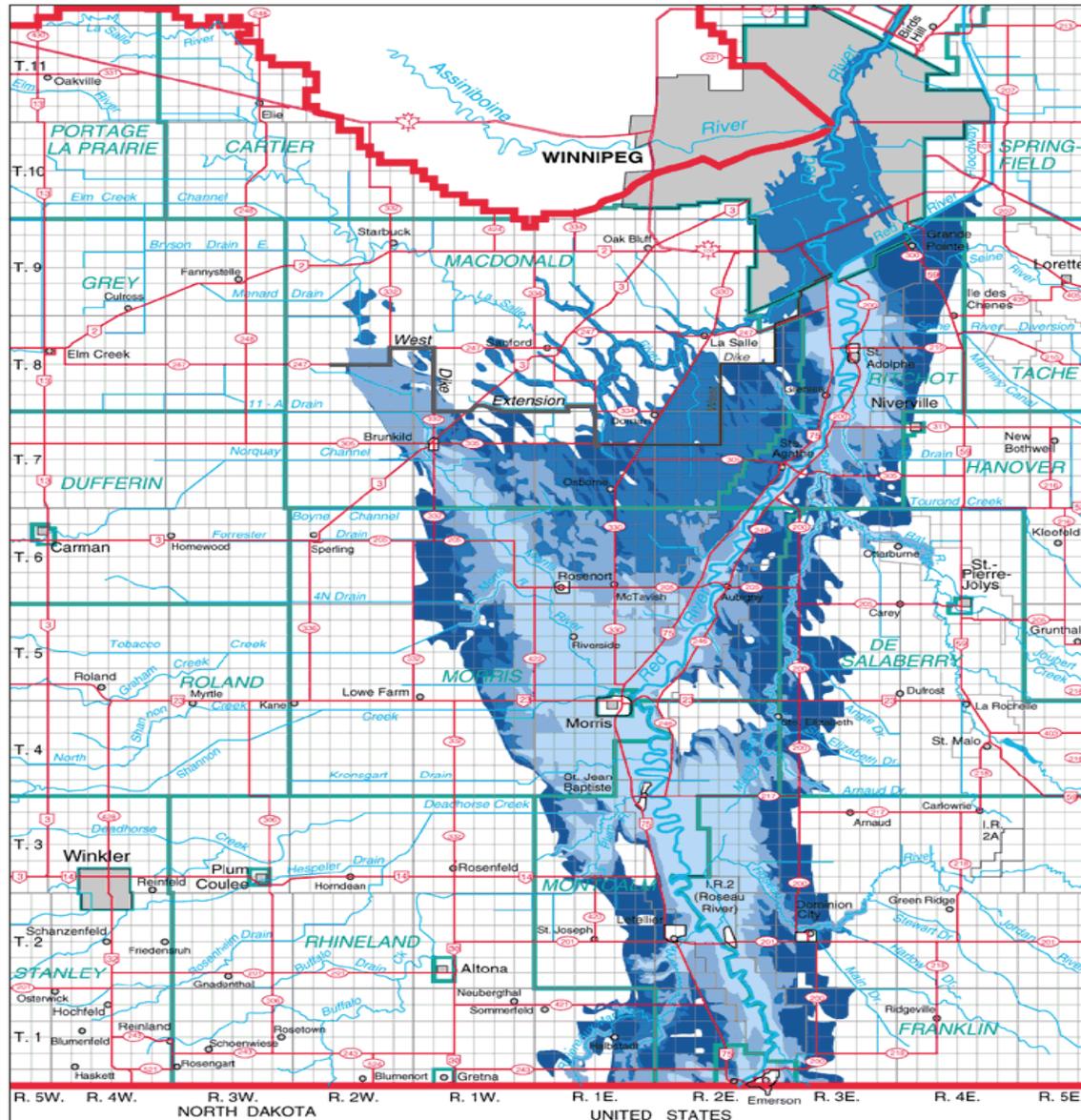
Minor flooding in most low-lying areas

Average weather conditions:

Flooding possible on many streams such as Whitemud, Turtle, Swan and Carrot Rivers as well Saskatchewan River at The Pas

Unfavourable weather conditions:

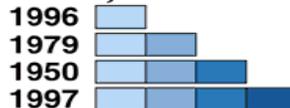
Flooding likely on many streams with near record flows and levels – 1974 or larger flood could occur at The Pas



# RED RIVER VALLEY

## AREAS FLOODED BY THE RED RIVER IN 1950, 1979, 1996 AND 1997

Note:  
The Red River Floodway and the  
West Dike were built after the  
1950 flood event.



July 15, 1997

Manitoba  
Natural Resources  
Water Resources



Detailed forecast (Text and Charts)  
available on the Manitoba Water  
Stewardship website:

<http://www.gov.mb.ca/waterstewardship/floodinfo/index.html>