

WATER AVAILABILITY AND DROUGHT CONDITIONS REPORT Manitoba

October 17, 2011

Synopsis/Overview

Moderate drought conditions (meteorological) are prevailing in areas from the Bloodvein River south to the international border in eastern Manitoba and west to Winnipeg and Portage la Prairie and their surroundings areas. The remaining areas of southern Manitoba including the Westman and Interlake regions are experiencing mild dry conditions due to below normal precipitation over the past three months.

Flows are below median for a number of rivers and streams across the province. On-farm water supply is adequate except in areas surrounding Winnipeg, Portage la Prairie and Carman where some water shortages may exist due to low dugout water levels.

Outlook

For the next 3 months (October, November and December 2011) Environment Canada's seasonal forecast is for normal temperatures for most parts of Manitoba except below normal for western and north-western Manitoba. Above normal precipitation is forecast for southern, central, eastern and western Manitoba. Normal precipitation is forecast for northern Manitoba except below normal for the very far north (Attachment 4).

Precipitation

Over the last 30 days, below average precipitation was received in all regions of Manitoba except for the Red River basin where precipitation was average to above average. Over the last 90 days, above average precipitation was received in northern Manitoba and parts of western Manitoba. Below average precipitation was received in southern, central and eastern Manitoba. Well below average precipitation was received in areas from the Bloodvein River south to the international border in eastern Manitoba and in Winnipeg and Portage la Prairie and their surroundings areas (Table 1 and Attachment 1).

On-farm Water Supplies

On-farm water supplies are adequate except in some areas surrounding Winnipeg, Portage la Prairie and Carman where some water shortages are anticipated due to low dugout water levels (Attachment 5).

Stream and River Flows

For September, flows were below median for a number of rivers and streams across the province (Table 1 and Attachment 2).

Northern Lake Levels

For September, water levels were above median for all lakes in northern Manitoba except below median for Russell Lake near Herriot and Egar Lake near Tod Lake (Attachment 3).

Potential Impacts

Meteorological drought can contribute to low flows in rivers and streams. The potential for forest and grass fires will likely remain due to relatively dry conditions. Shortages in onfarm water supplies may exist in the areas surrounding Winnipeg and Portage la Prairie and Carman due to low dugout water levels.

| Basin | Indicators | | | |
|---------------------------------------|---|--|--|---|
| | 1 month Precipitation (September 34 – October 2, 2011) | 3 month Precipitation (July 5 – October 2, 2011) | Major River Flow Conditions (Figure 2) | Lake Levels (Figure 3) |
| Red River | Average to above average depending on area of watershed | Below average | Above median except below median for some small eastern tributaries | - |
| Winnipeg River | Below average | Below average | Mainstem median with below median on tributaries | Below Media |
| Assiniboine River- Souris River | Below average | Below average | Above median except below median for Little Saskatchewan River | - |
| Lake Manitoba | Below average | Below to above average depending on area of watershed | Above median except below median for some tributaries | Above media |
| Lake Winnipeg | Below average | Below average | Above median except below median for eastern tributaries | Above media |
| Saskatchewan River | Below average | Above average | Above median | - |
| Nelson River | Below average | Above average | Below to above median depending on area of watershed | Above media |
| Hayes River | Below average | Above average | Below median | - |
| Churchill River | Below average | Above average | Above median except below median for Cochrane River near Brochet and Deer River north of Belcher | Above media except belo median for Russell Lak and Egar Lak |
| Seal River | Below average | Above average | Below median | _ |

Acknowledgements

This report was prepared with information from the following sources which are gratefully acknowledged:

 Agriculture and Agri-food Canada (Drought watch); North America Drought Monitor:

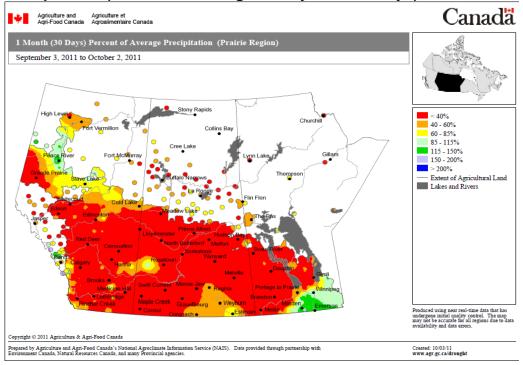
http://www.agr.gc.ca/pfra/drought/mapscc_e.htm
http://www.agr.gc.ca/pfra/drought/pr_e.htm

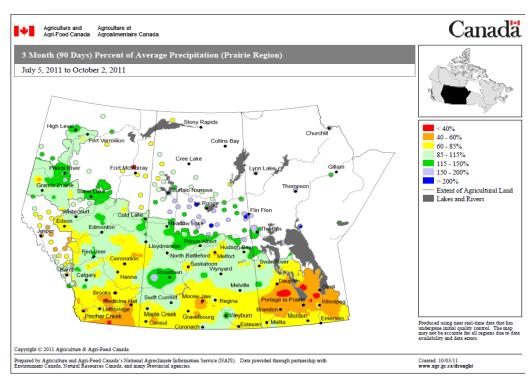
- Regional site: <u>30 and 90 precipitation</u>
- National Site: Palmer Drought and Standard Precipitation Indices
- Manitoba Water Stewardship: Flow and Precipitation information:
 http://www.gov.mb.ca/waterstewardship/floodinfo/forecasts/river_report2008-18-12.html.); http://www.gov.mb.ca/waterstewardship/floodinfo/forecasts/Weekly_Flows_2011.pdf). http://www.gov.mb.ca/waterstewardship/floodinfo/maps.html
- Fire Hazard: http://www.gov.mb.ca/conservation/fire/
- Environment Canada 3 month climatic outlook: http://weatheroffice.gc.ca/saisons/index_e.html
- Manitoba Conservation Fire Program

For further information, please contact: Abul Kashem, Surface Water Management Section, Manitoba Water Stewardship, 945-6397

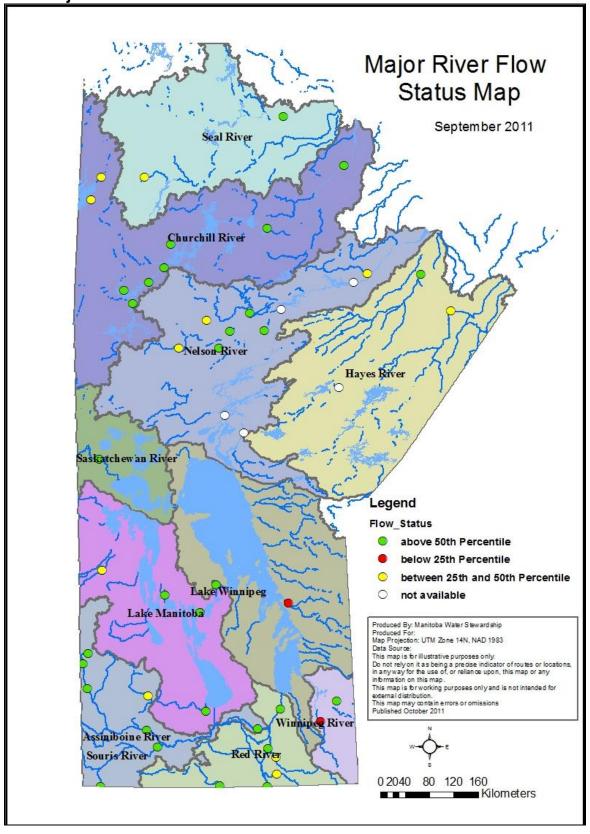
Attachments

1. Precipitation (Percent of average:30 days and 90 days)

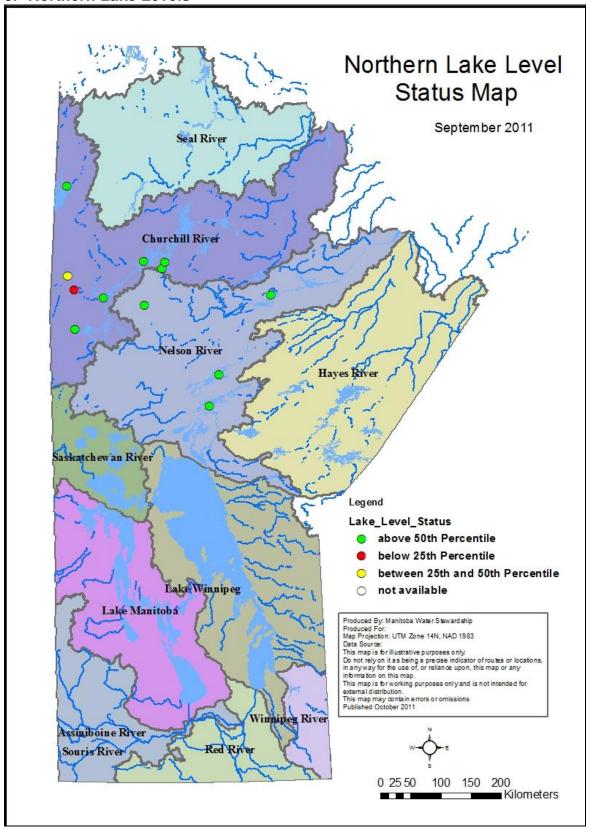




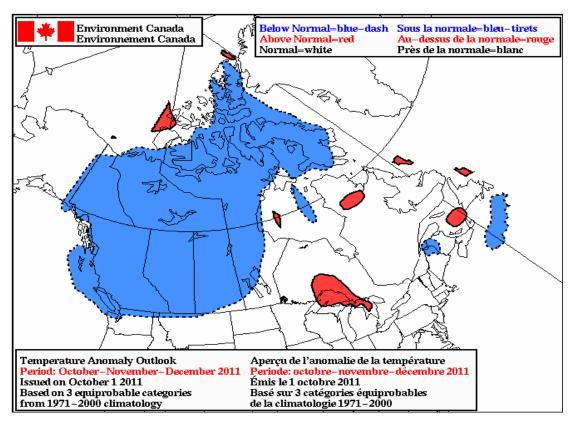
2. Major River Flow Status

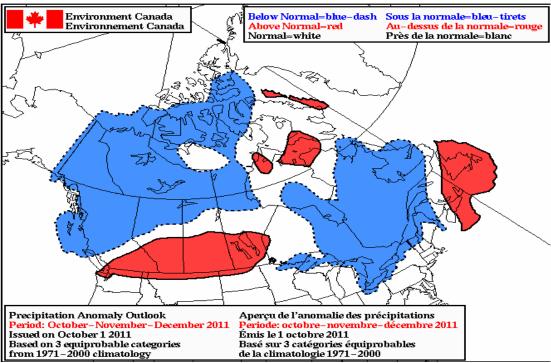


3. Northern Lake Levels

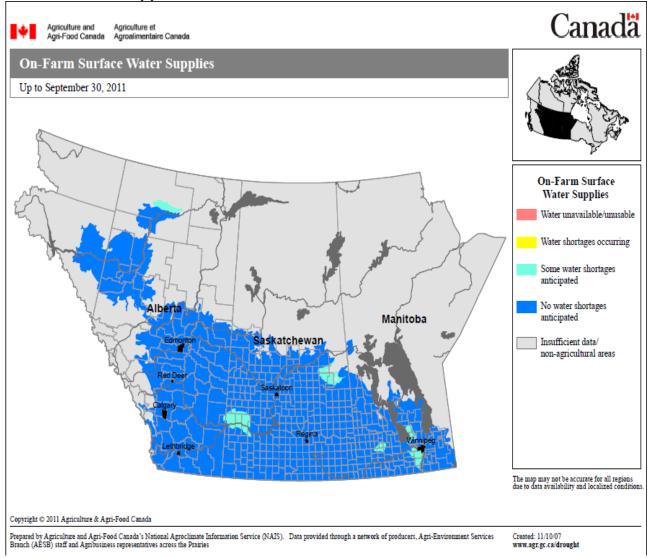


4. Environment Canada 3 Months Outlook





5. On-farm Water Supplies



6. Major River Basins

