

**WATER AVAILABILITY AND DROUGHT CONDITIONS REPORT  
Manitoba**

September 2, 2011

**Synopsis/Overview**

Moderate drought conditions (meteorological leading to agricultural) are prevailing in areas from Pine Falls south to the international border in south eastern Manitoba and west to Winnipeg and Portage la Prairie and their surroundings areas in southern Manitoba. Southern and a parts of central Manitoba are experiencing mild dry conditions due to below precipitation over the past two months. Winnipeg received only 10mm of rainfall in July which is the lowest amount of rainfall on record.

Rainfall over northern Manitoba during the last two month has resulted in a return to normal conditions.

**Outlook**

Drought indices demonstrate moderately dry conditions in areas from Pine Falls south to the international border in south eastern Manitoba and in Winnipeg and Portage la Prairie and their surroundings areas in southern Manitoba. Drought indices also demonstrate mild dry conditions for southern and a part of central Manitoba.

Environment Canada's seasonal forecast is for above normal temperatures for the entire province and below normal precipitation for most parts of Manitoba for the next 3 months (September, October and November 2011).

**Precipitation**

Over the last 30 days, above average precipitation was received in northern and western Manitoba but below average precipitation was received in southern, central and eastern Manitoba. Well below average precipitation was received in much of southern and eastern Manitoba.

Over the last 90 days, above average precipitation was received in northern and western Manitoba but below average precipitation was received in much of southern and eastern Manitoba. Well below average precipitation was received in areas from Pine Falls south to the international border in south eastern Manitoba and in Winnipeg and Portage la Prairie and their surroundings areas (Table 1 and Attachment 1).

**Stream and River Flows**

For August, flows are above average for most rivers and streams across the province. Flows are below the median for the Winnipeg River, for a few eastern tributaries to the Red River and for the Cochrane River near Brochet (Table 1 and Attachment 2).

## Northern Lake Levels

For July, water levels are above average for almost all lakes in northern Manitoba (Attachment 3).

**Environment Canada's Three Month Outlook** (September, October and November, 2011)

The three month Environment Canada forecast is for above normal temperatures for the entire province and below normal precipitation for most of Manitoba (Attachment 4).

## Potential Impacts

There is a potential for low river flows in the Winnipeg River basin and in tributaries of the Red River.

**Table 1: Detail by Drainage Basin (Attachments: 1, 2, 3, 4 and 5)**

| Basin                           | Indicators  |   |  |                        |
|---------------------------------|---|---|--|------------------------|
|                                 | 1 month Precipitation (August 1 – August 30, 2011)    | 3 month Precipitation (June 2 – August 30, 2011)      | Major River Flow Conditions (Figure 2)             | Lake Levels (Figure 3) |
| Red River                       | Below average   | Below average   | Above median except some small eastern tributaries | -                      |
| Winnipeg River                  | Below average   | Below average   | Below median                                       | -                      |
| Assiniboine River- Souris River | Below average   | Below to above average depending on area of watershed | Above median                                       | -                      |
| Lake Manitoba                   | Below to above average depending on area of watershed | Below to above average depending on area of watershed | Above median                                       | Above median           |
| Lake Winnipeg                   | Below to above average depending on area of watershed | Below to above average depending on area of watershed | Above median                                       | Above median           |
| Saskatchewan River              | Above average   | Above average   | Above median                                       | -                      |

|                 |               |               |   |  |
|-----------------|---------------|---------------|---|--|
| Nelson River    | Above average | Above average | Above median  | Above median   |
| Hayes River     | Above average | Above average | -   | -  |
| Churchill River | Above average | Above average | Above median except <u>above below</u> median for Cochrane River near Brochet | Above median bur below median for Russel Lake near Herriot |
| Seal River      | Above average | Above average | Above median  | -  |

**Note: Median is 50<sup>th</sup> percentile.**

### **Acknowledgements**

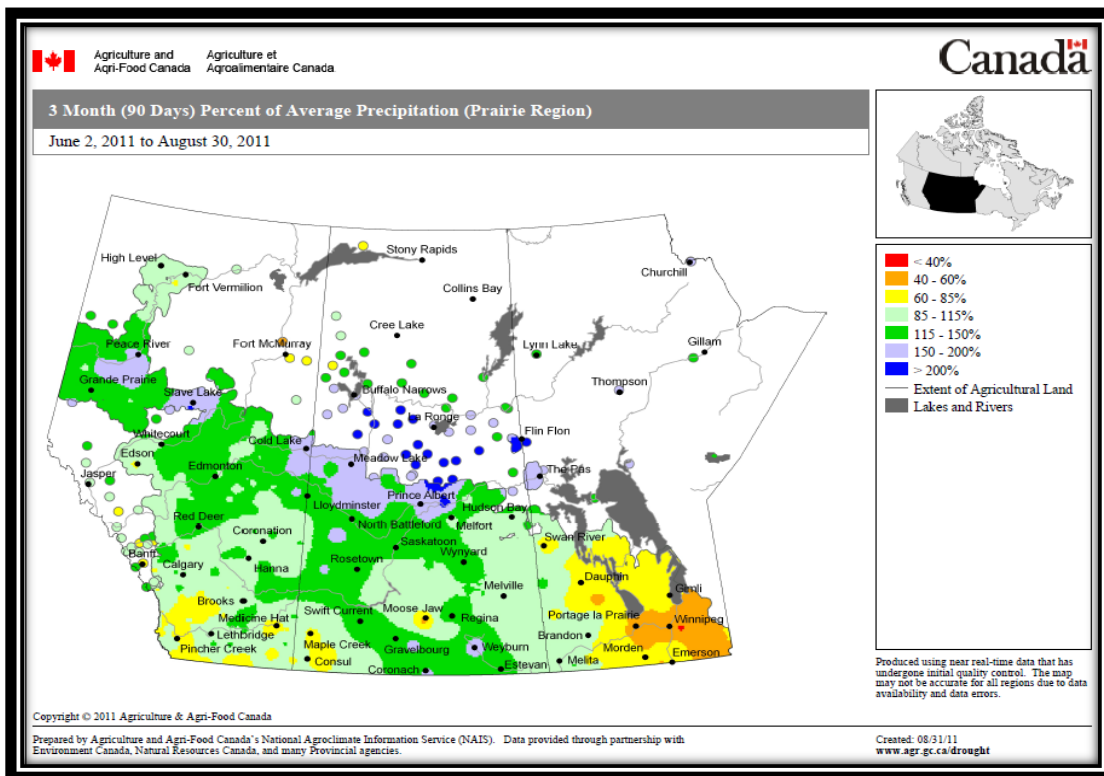
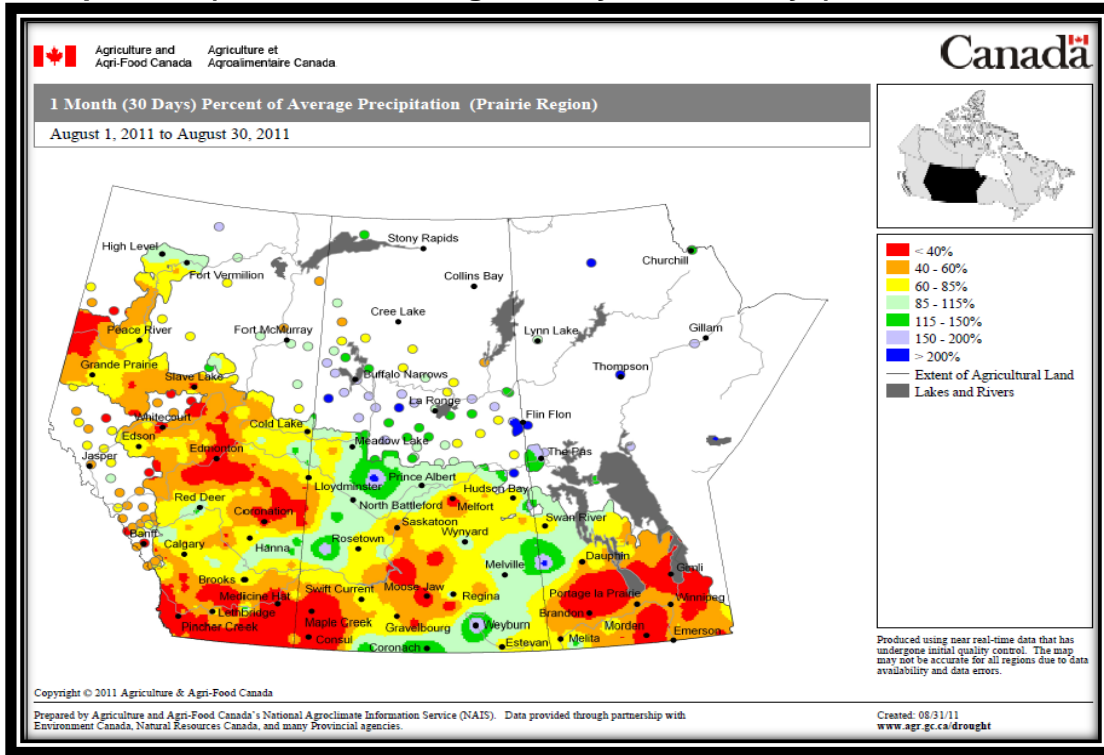
This report was prepared with information from the following sources which are gratefully acknowledged:

- Agriculture and Agri-food Canada (Drought watch); North America Drought Monitor:  
[http://www.agr.gc.ca/pfra/drought/mapsc\\_e.htm](http://www.agr.gc.ca/pfra/drought/mapsc_e.htm)  
[http://www.agr.gc.ca/pfra/drought/pr\\_e.htm](http://www.agr.gc.ca/pfra/drought/pr_e.htm)
  - Regional site: [30 and 90 precipitation](#)
  - 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/river_report2008-18-12.html));  
[http://www.gov.mb.ca/waterstewardship/floodinfo/forecasts/Weekly\\_Flows\\_2011.pdf](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](http://weatheroffice.gc.ca/saisons/index_e.html)
- Manitoba Conservation Fire Program

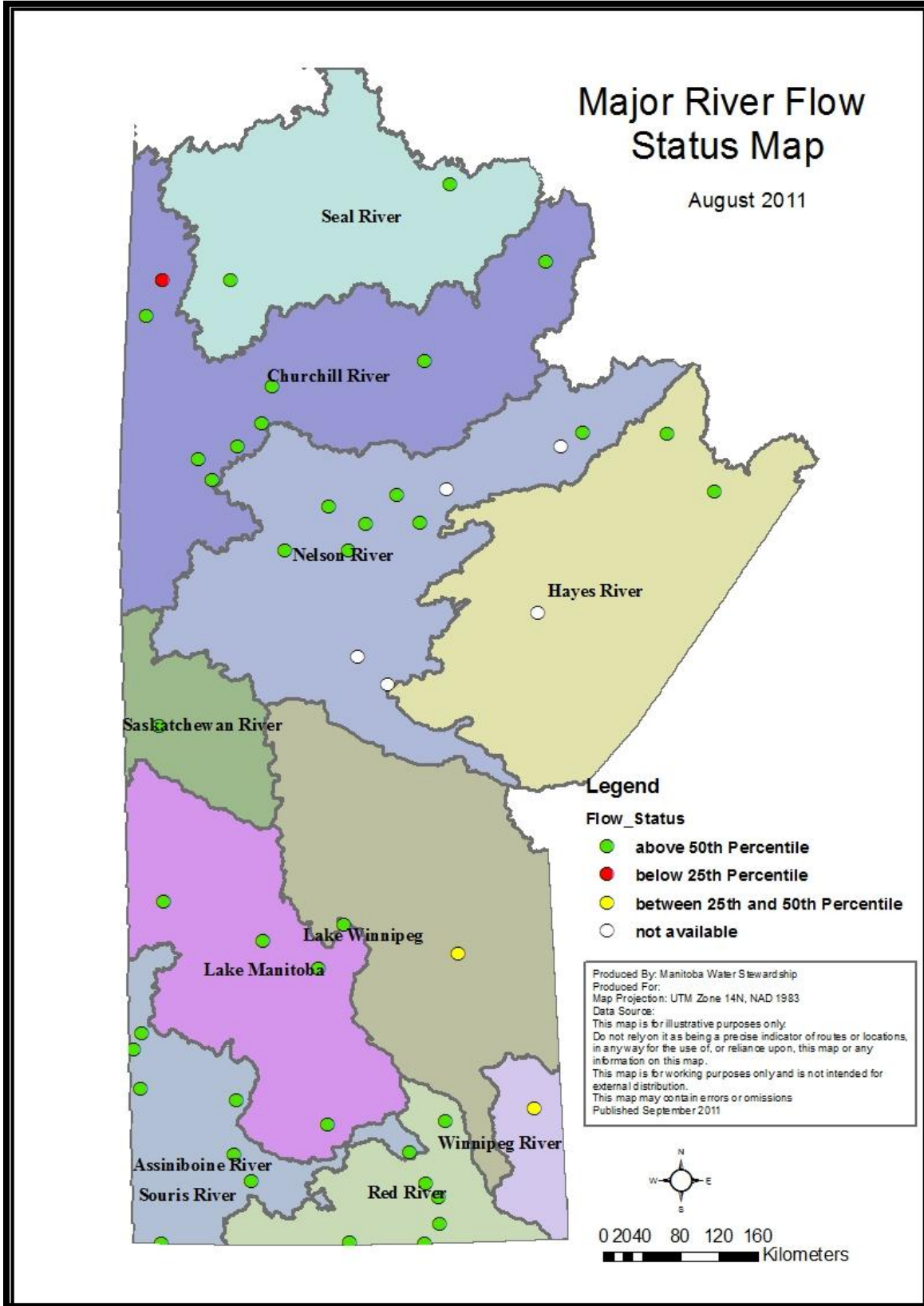
**For further information, please contact:** Abul Kashem, Surface Water Management Section, Manitoba Water Stewardship, 945-6397

# Attachments

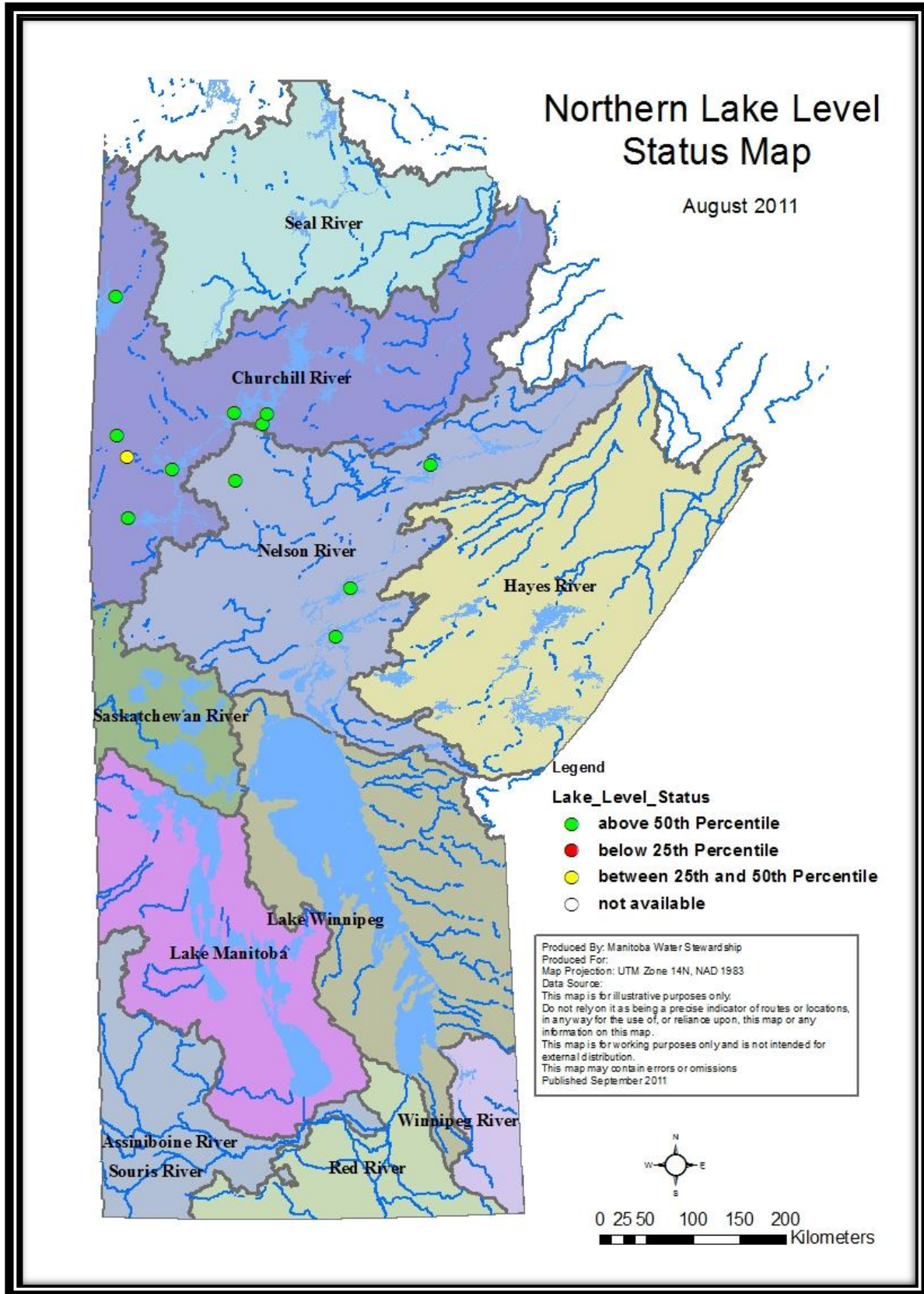
## 1. Precipitation (Percent of average:30 days and 90 days)



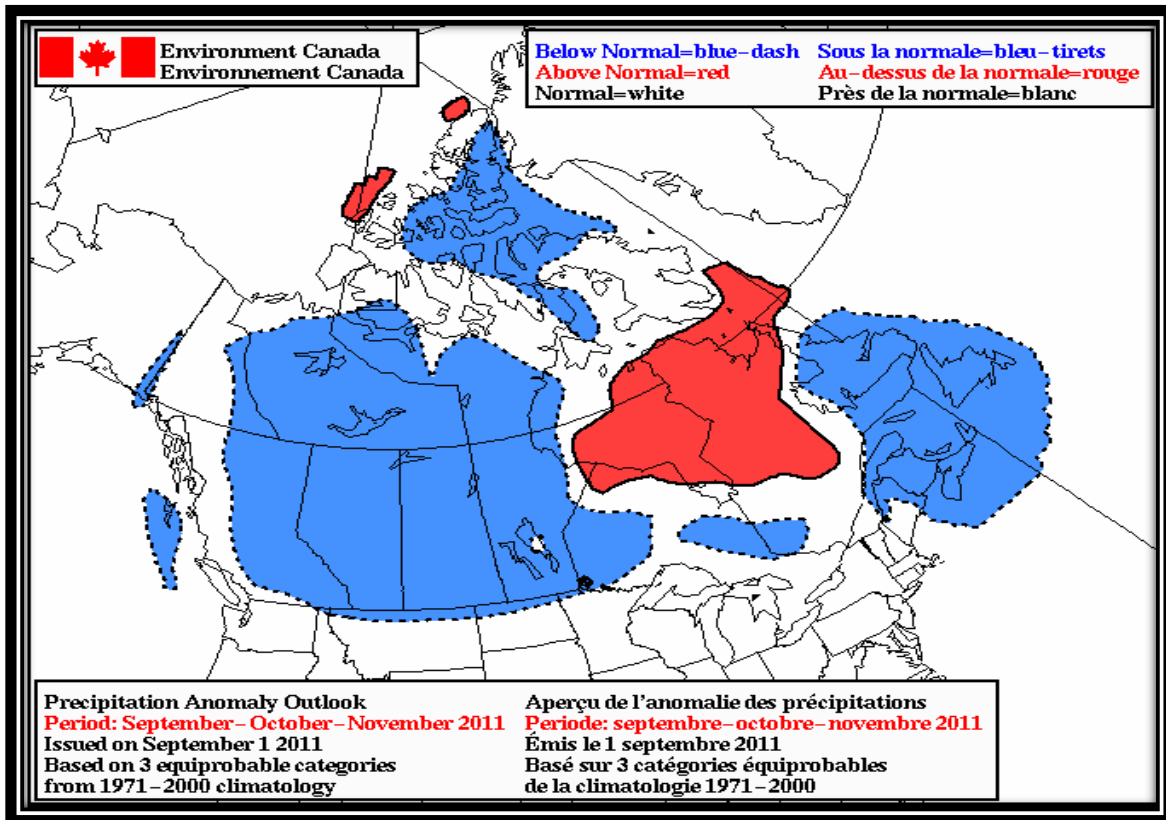
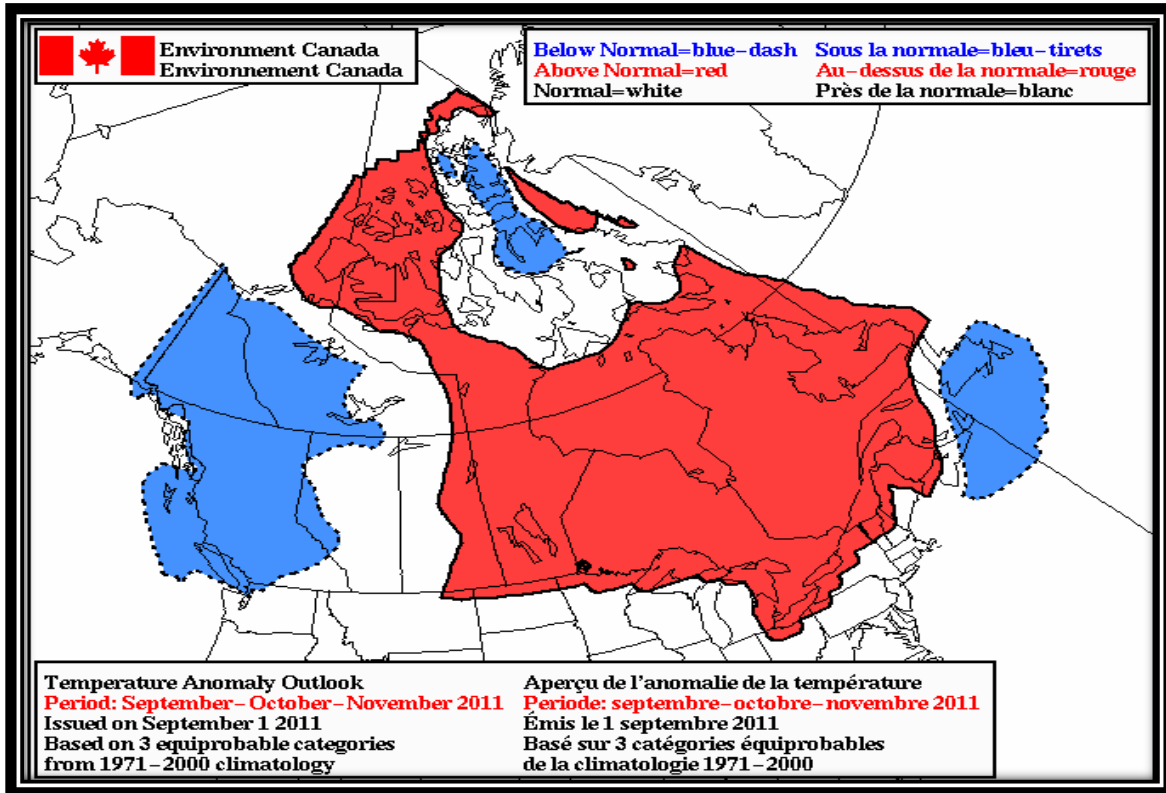
## 2. Major River Flow Status



### 3. Northern Lake Levels



#### 4. Environment Canada 3 Month Outlook



## 5. Major River Basins

