

FLOOD REPORT FOR MANITOBA

July 17, 2014 – 09:00

Moderate west winds are forecasted for today and tomorrow on Lake Winnipeg, Lake Manitoba, Dauphin Lake, and Lake Winnipegosis (see attached maps for illustration of forecasted wind effect on lakes).

Flood Warning*:

- Assiniboine River
- Qu'Appelle River
- Souris River
- Lake Manitoba
- Lake St. Martin
- Dauphin Lake

Flood Watch*:

- Lake Winnipeg

High Water Advisory*:

- Red River
- Saskatchewan River
- Little Saskatchewan River
- Plum Creek

Summary

- The Assiniboine River at the Portage Reservoir crested at 3:15 am on July 15, at a flow of 51,480 cfs, slightly less than the earlier summer crest. As expected, the second crest was relatively flat, meaning that flows remained high for an extended period of time, which makes it more difficult to pinpoint the exact time and magnitude of the crest. This morning, flow on the Assiniboine River upstream of the Portage Diversion was 49,090 cfs, flow on the Portage Diversion was 31,090 cfs and flow on the Assiniboine River downstream of the diversion was 18,000 cfs.
- As inflows to the Portage Reservoir begin to decline, the benefit of reduced flows will be shared between the lower Assiniboine River and the Portage Diversion. The operational plan is for flows on the lower Assiniboine River to be reduced by 500 cfs/day until the flow reaches 15,000 cfs. The Portage Diversion will also see a reduction in flow as Portage Reservoir inflow is declining well in excess of 500 cfs per day.
- Given the significant declines in flow on the Assiniboine River, the temporary flood protection works in the inundation zone of the Hoop Holler controlled breach will be removed.
- Moderate west winds are forecasted for today on Lake Winnipeg, Lake Manitoba, Lake Winnipegosis and Dauphin Lake. Winds are expected to increase tomorrow (see attached maps for illustration of forecasted wind effect on lakes).
 - For Today:

- Low lake wind effect warning for the eastern shorelines of Lake Manitoba and Lake Winnipeg, the southern shoreline of Lake Winnipegosis, and the northern shoreline of Lake Manitoba.
- For Tomorrow:
 - Moderate lake wind warning for the eastern and northern shoreline of Lake Manitoba.

Weather

- A mix of sunny to cloudy conditions are forecast for southern and northwestern Manitoba today and tomorrow with forecasted high temperatures of 27-29° C, and the possibility of showers in western Manitoba later in the day.
- A similar mix of sunny to cloudy conditions is expected tomorrow with a higher chance of showers or thunderstorms. Gusty winds out of the west are expected in southern and northwestern Manitoba as a cold front moves into Manitoba from Saskatchewan.
- Strong wind warnings have been issued for Lake Manitoba, Lake Winnipeg, Lake Winnipegosis and Lake of the Woods for today, tonight and Friday. The lakes marine forecasts can be viewed at: http://weather.gc.ca/marine/region_e.html?mapID=04

Red River

- Flow into the Red River Floodway has stopped and the gates at the Floodway Inlet Control Structure will be lowered to the fully bedded position over the next few days. The gates are lowered slowly to minimize slumping of the river banks upstream of the floodway inlet. The Red River above the Floodway Inlet was at a water level of 746.4 feet and a flow of 16,800 cfs.
- Levels in Winnipeg decreased to 13.8 feet James Avenue datum, with flows on the Red River at 35,200 cfs. Water levels in Winnipeg are expected to continue declining.

Assiniboine River

- Overbank flooding is occurring in the Assiniboine River valley between the Shellmouth Dam and Brandon. The Assiniboine River has crested and is dropping at St. Lazare, Miniota, Virden, Griswold, and Brandon.
- The Assiniboine River at the Portage Reservoir crested at 3:15 am on July 15, at a flow of 51,480 cfs, slightly less than the earlier summer crest. As expected, the second crest was relatively flat, meaning that flows remained high for an extended period of time, which makes it more difficult to pinpoint the exact time and magnitude of the crest. This morning, flow on the Assiniboine River upstream of the Portage Diversion was 49,090 cfs, flow on the Portage Diversion was 31,090 cfs and flow on the Assiniboine River downstream of the diversion was 18,000 cfs.
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- The Portage Diversion, Assiniboine River dikes, and temporary flood protection measures downstream are holding up well, and their condition is being monitored regularly. Crews are on call to respond to trouble spots.
- Given the significant declines in flow on the Assiniboine River, the temporary flood protection works in the inundation zone of the Hoop Holler controlled breach will be removed.
- The water level on the Shellmouth Reservoir declined to 1,413.9 feet; the summer target level is 1402.5 feet and the crest of the spillway is at 1408.5 feet. Shellmouth Dam inflow, reservoir level, and outflow have crested and are declining. Inflows to the reservoir are approximately 8,730 cfs today; outflows from the reservoir are approximately 10,330 cfs. Outflows include 1,090 cfs of conduit flow and 9,230 cfs of spillway flow.
- The flow on the Qu'Appelle River at Welby this morning decreased to 5,270 cfs. The flow on the Assiniboine River near Russell decreased to 10,440 cfs.
- Residents in Winnipeg are advised that while the water level at James is declining, the Assiniboine River west of Route 90 is expected to remain at a water level similar to the 2011 peak water level.

Souris River

- Oak Lake and the Plum Lakes are at high levels resulting in high flows on the Plum Creek, which flows into the Souris River at the Town of Souris. The Plum Creek has crested and flow this morning decreased to 2,240 cfs.
- Whitewater Lake is stable at a water level of 1633.3 feet. The lake is normally a closed basin with no outflow but the water level is high enough to spill naturally into Medora Creek.

Parkland Region

- The gauge on Dauphin Lake is reporting a water level of 859.5 feet. The lake appears to be near crest as inflows have decreased. Flood stage on Dauphin Lake is 858 feet and the summer target level is 855 feet. The peak water level in 2011 was 861.14 feet.

Manitoba Lakes

- The Lake Manitoba water level this morning was at 814.1 feet at the Steeprock gauge, while the water level at the Westbourne gauge was 814.5 feet. These water levels are still affected by the recent strong winds on the lake. The forecasted peak wind-eliminated water level on Lake Manitoba is 814.8 feet in early August.
- The Fairford River Water Control Structure is being operated for maximum possible discharge; outflow from Lake Manitoba is approximately 13,890 cfs. The estimated natural outflow from Lake Manitoba at the current lake level, if the Fairford River Water Control Structure and associated channel improvements hadn't been constructed, is approximately 5,750 cfs. The forecasted peak outflow, which will occur when Lake Manitoba reaches its peak water level, is approximately 15,800 cfs.
- Lake Manitoba is currently approximately 1.3 feet below unregulated levels (the levels that would have occurred in the absence of all provincial water control infrastructure) because of the high outflows from the Lake through the Fairford River Water Control Structure.

- The Lake St. Martin gauge is registering a real-time water level reading of 803.1 feet. Outflow from Lake St. Martin through the Dauphin River was 11,900 cfs this morning. Outflow through the Lake St. Martin Emergency Outlet Channel is estimated at approximately 4,500 cfs. The lake is dropping due to the additional outflow through the Lake St. Martin Emergency Outlet Channel.
- Operation of the Lake St. Martin Emergency Outlet Channel increases total outflow from Lake St. Martin, directly lowering levels, and will allow the Fairford River Water Control Structure to remain at maximum discharge through the winter, thus allowing for higher outflows from Lake Manitoba. The Lake St. Martin Emergency Outlet Channel is expected to stay open until the spring of 2015 and will help bring the Lake St. Martin water level to approximately 802 feet by late November, 2014.
- Lake Winnipeg is at a wind-eliminated water level of 716.2 feet and Manitoba Hydro's latest forecast indicates that the lake will rise to 716.4 feet by late July. The lake is not expected to drop below 715 feet until mid-October. The water level regulation range for Lake Winnipeg is between 711 and 715 feet. Manitoba Hydro is operating its structures at the outlet of Lake Winnipeg to allow for maximum possible outflow from the lake and forecasts that the maximum outflow from Lake Winnipeg will be approximately 170,000 cfs when the lake reaches its peak level.

Eastern Region

- Flows on the Winnipeg River system remain high, however, water levels have stabilized and are beginning to decline throughout the basin. Flow at Slave Falls generating station was 90,860 cfs on July 16, 2014.
- Manitoba Hydro's latest forecast from July 14, is that the lakes on the Winnipeg River will remain stable in the near term and then drop by the following amounts by August 3, 2014:
 - Nutimik Lake is at 908.0 feet today; levels will remain stable and then drop by 0.4 feet.
 - Dorothy Lake will remain stable and then drop by 0.3 feet.
 - Margaret/Eleanor Lake will remain stable and then drop by 0.3 feet.
 - Sylvia Lake will remain stable and then drop by 0.15 feet.
- Natalie Lake, at Seven Sisters is being maintained at 896 feet to provide further relief from high water conditions upstream. This is a foot lower than normal high water operating procedures and 3.5 feet lower than normal water operating procedures. Flow at Seven Sisters was 97,040 cfs on July 16, 2014.
- Manitoba Hydro reports that water levels at Lac du Bonnet will be managed between 835.3 and 836 feet, measured at the forebay of McArthur Falls.
- Many other lakes in Whiteshell Provincial Park, such as Falcon, West Hawk, and Caddy, are higher than the desirable range but below the peak water level experienced earlier this spring. Where water control structures are present, they are being operated to provide maximum flood relief.
- Water level information for the lakes in the Whiteshell Provincial Park is available at: http://www.gov.mb.ca/mit/floodinfo/floodoutlook/forecast_centre/lakes/lake_levels/2010/whiteshell_lakes_2012-2014.pdf

The Pas and Northern Manitoba

- The Saskatchewan River at The Pas is declining slowly. This morning, the river was at a water level of 85.9 feet and a flow of 68,510 cfs.
- The flow on the Carrot River at Turnberry has crested and is declining, with a flow 5,000 cfs, and a water level that dropped 0.1 feet. The Carrot River near The Pas dropped 0.1 feet to 856.5 feet today.

***Definitions**

Flood Warning: A flood warning is issued when river or lake levels are exceeding or are expected to be exceeding flood stage within the next 24 hours.

Flood Watch: A flood watch is issued when river or lake levels are approaching and likely to reach flood stage, but likely not within the next 24 hours.

High Water Advisory: A high water advisory is issued when a heavy storm or high flows are expected and may cause water levels to rise, but not necessarily reach flood stage. A high water advisory can be an early indicator for conditions that may develop into a flood watch or flood warning.

Manitoba Lake Wind Effect Forecast for July 17 PM, 2014



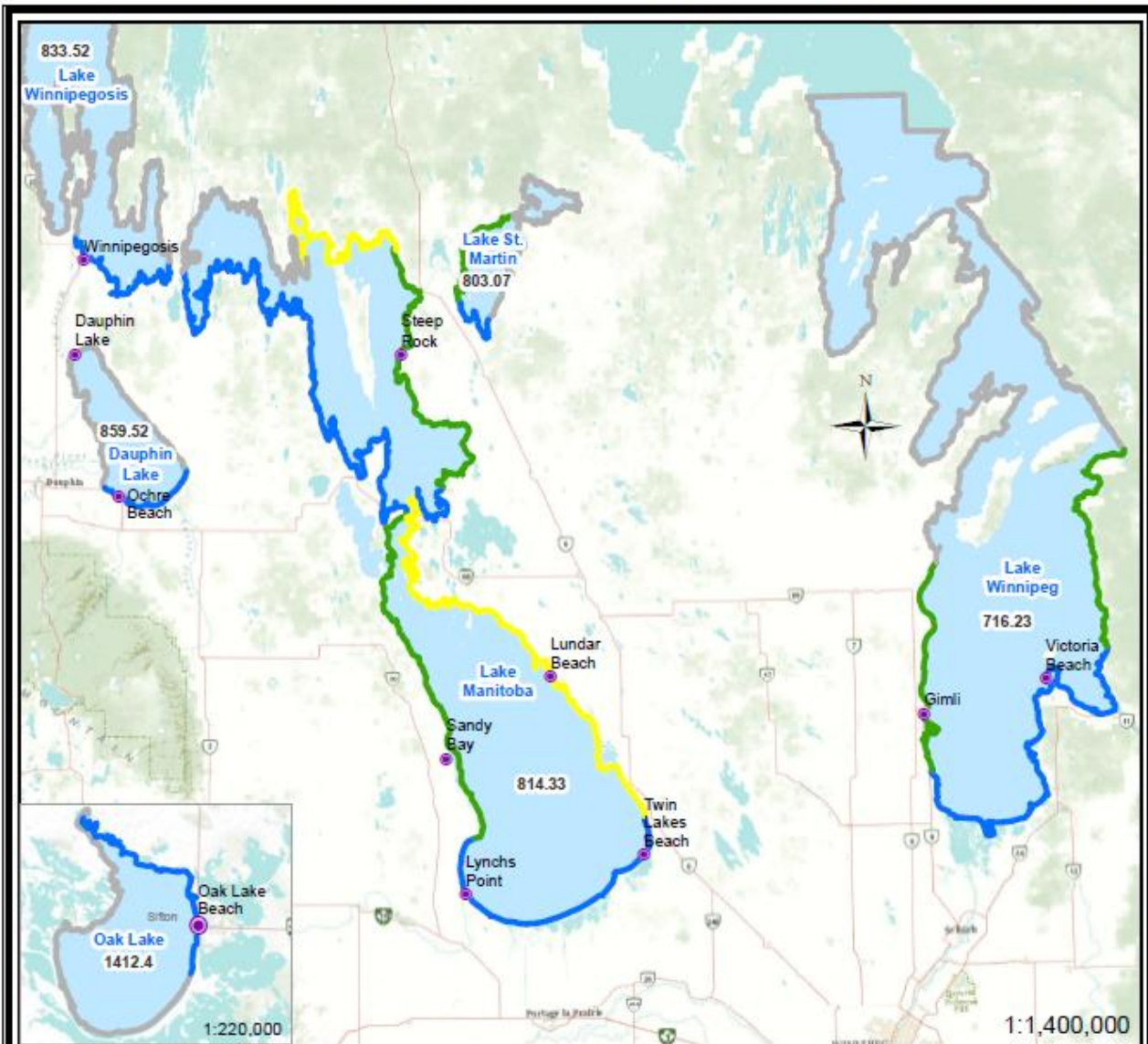
Site	Feet	Date
Twin Lakes	814.45	2014-07-15
Lake Francis	814.05	2014-07-15
Vogar	814.84	2014-07-15
Dog Lake	814.84	2014-07-15
Narrows	814.32	2014-07-15
Dolly Bay	813.87	2014-07-15
Silver Bay	813.94	2014-07-15
Watchorn	813.99	2014-07-15
Prov. Park		
Daytons Bay (Willow Bay)	813.99	2014-07-15

Wind Effect Alert Categories	
Severe	Crest level increase will be greater than 5 feet; Wave action will be very significant and forceful.
High	Crest level increase will be between 3 and 5 feet; Wave action will be significant.
Moderate-High	Crest level increase will be between 2 and 3 feet; Wave action will be considerable.
Moderate	Crest level increase will be between 1 and 2 feet; Wave action will be moderate.
Low	Crest level increase will be less than 1 foot; Wave action will be low.
No Alert	Wind set-up and wave action are predicted to be light.
No Data	Wind effect data not available.

Hydrologic Forecasting and Water Management
Manitoba Infrastructure & Transportation

Note: All levels are current values provided in feet

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