FLOOD REPORT FOR MANITOBA

July 3, 2014 – 09:00

Significant overland flooding is occurring in the Parklands region and Southwest region of Manitoba.

Flood Warning*:  
- Assiniboine River, from Shellmouth Dam to Brandon  
- All points along the Winnipeg River System, including Nutimik Lake  
- Qu’Appelle River  
- Streams and drains in the Parkland region  
- Streams and drains in the Souris River Basin  
- Streams and drains in the Assiniboine Basin, from Holland upstream  
- Lake St. Martin  
- Dauphin Lake

Flood Watch*:  
- Souris River  
- Lake Manitoba  
- Lake Winnipeg

High Water Advisory*:  
- Red River  
- Saskatchewan River  
- Swan River  
- Red Deer River  
- Red Deer Lake

Summary

- Significant overland flooding is occurring in the Parklands and Southwest regions of Manitoba. High flows are being reported on small streams and tributaries in these areas, as well as on larger rivers such as Assiniboine, Qu’Appelle, and Souris Rivers.

- Many of Manitoba’s large lakes, including Lake Winnipeg, Lake Manitoba, Lake Winnipegosis, and Dauphin Lake are either above flood stage or above their desirable levels.

- The forecast for the Souris River has been updated this morning based on additional information; as a result the forecast for the Assiniboine River at Portage is being updated to incorporate the new forecasted Souris River flows.
Weather

- Warm temperatures and sunny conditions are forecasted for much of southern and northwestern Manitoba today. There is a possibility of localized thundershowers tomorrow and over the weekend in many locations.

- Light winds are forecast for today and tomorrow.

Red River

- The Red River is rising at all points in Manitoba but is declining upstream in the U.S.A. portion of the basin.

- The Red River Floodway continues to operate as per established operating protocols. The water level above the Floodway inlet this morning was at 752.5 feet; the computed natural level is 753.2 feet. Flow in the floodway channel is approximately 2,900 cfs. Flow upstream of the Floodway inlet is 40,660 cfs. The Red River Floodway is being operated under Rule 1, which means that water levels on the river upstream of the Floodway inlet remain below natural levels.

- Levels in Winnipeg decreased slightly to 17.5 feet James Avenue datum, with flows on the Red River at 51,440 cfs. The combined operation of the Portage Diversion and the Red River Floodway is providing a 1.65 foot reduction in water levels at James Avenue. Levels and flows in Winnipeg are forecasted to remain relatively stable over the next few days and then increase slightly due to high flows on the Assiniboine River.

Assiniboine River

- There is overbank flooding in the Assiniboine River valley in all reaches between the Shellmouth Dam and Brandon. High flows continue on the Assiniboine River tributaries. Flows on most tributaries are beginning to decline, however, flow on some tributaries, such as the Little Saskatchewan, Cypress, and Rolling Rivers increased today.

- The water level on the Shellmouth Reservoir has increased to 1,412 feet; the summer target level is 1402.5 feet and the crest of the spillway is at 1408.5 feet. Inflows to the reservoir are approximately 8,750 cfs today; outflows from the reservoir are approximately 5,650 cfs. Outflows include 1,070 cfs of conduit flow and 4,580 cfs of spillway flow. Shellmouth Dam is forecasted to receive peak inflow of 11,000 to 12,000 cfs on July 6-8, 2014, the reservoir level is forecasted to peak at approximately 1414 feet on July 8-11, 2014.

- The Qu’Appelle River flows are declining but remain high.

- The Assiniboine River at Brandon is forecasted to peak at 34,000 to 37,000 cfs on or around July 11, 2014. The peak water flow at Brandon during the 2011 flood was 36,730 cfs. The permanent flood protection dikes that were built following the 2011 flood provide adequate flood protection for the forecasted levels.
The Assiniboine River at the Portage Reservoir is forecasted to peak at 45,000 to 47,000 cfs on approximately July 13, 2014. The forecast for the Assiniboine River at Portage is being updated to incorporate the new forecasted Souris River flows.

- The Lower Assiniboine River from Portage downstream is expected to experience flows of 15,000 cfs for an extended period of time.
- Manitoba is working with municipalities to assist residential, commercial, and agricultural landowners on the lower Assiniboine River, between Portage and Headingley, to make necessary preparations for these higher flows. This could include closing off gated culverts, temporary flood protection works, and putting pumps in place to provide drainage for runoff from precipitation and dike seepage.

The Portage Diversion is in operation to limit flows on the lower Assiniboine River. Flow on the Assiniboine River upstream of the Portage Diversion is 23,490 cfs, flow on the Portage Diversion is 12,990 cfs and flow on the Assiniboine River downstream of the diversion is 10,500 cfs.

Souris River

- The Souris River basin received a significant amount of precipitation from the recent storm. This has resulted in overland flooding in many areas and high flows on streams and drains as well as the Souris River.
- The forecast for the Souris River has been updated. The Souris River at Melita is near peak today, the forecasted peak at the Town of Souris is 15,000-16,000 cfs and a water level of 1356.8-1357.5 feet on July 4-5, the forecasted peak at Wawanesa is 16,200-17,800 cfs and a water level of 1155.8-1156.6 feet on July 5-6.
- Upstream in North Dakota, outflow from Lake Darling Dam is being increased. The increased flow is expected to have a minimal effect in the Manitoba portion of the Souris River as the flow is attenuated by a wetland complex on the river in the U.S.A. portion of the basin.
- Whitewater Lake is at a historic high of 1633.4 feet and is forecasted to peak at a wind-eliminated water level of approximately 1633.5 feet. The lake is high enough to spill naturally into the Medora Creek and it has been reported that a nearby road was overtopped, resulting in flooding of agricultural land.

Parkland Region

- Flows on many of the rivers and streams in the Parkland Region reached record levels due to the recent precipitation event. Flows on most streams in the region remain high but are dropping quickly across the region.
- Water levels on the Swan River at the Town of Swan River and upstream are increasing. Water levels at the Town of Swan River are expected to peak at levels similar to what was experienced in 2006. The situation is being monitored and updates will be provided as more information becomes available.
Flows on tributaries to Dauphin Lake remain high due to the recent precipitation. The water level gauge on Dauphin Lake is reporting a water level of 859.5 feet. The forecasted peak water level on Dauphin Lake is 860.0-860.4 feet, due to the effects of the recent precipitation event. 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 approximately 813.6 feet at the Steeprock gauge, while the water level at the Westbourne gauge was 813.9 feet. These water levels are still affected by the recent strong winds. The forecasted peak water level on Lake Manitoba is 814.6 feet, to account for the effects of the recent precipitation event.

- The Fairford River Water Control Structure is being operated for maximum possible discharge; outflow from Lake Manitoba is approximately 12,790 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 5,500 cfs.

- Lake Manitoba is currently approximately 1.5 feet below unregulated levels (the levels that would have occurred in the absence of all provincial water control infrastructure) because of the high outflows out of the Lake through the Fairford River Water Control Structure. The actual outflows have been higher than what the natural outflows would have been for all of 2014, and also in previous years.

- The water level on Lake St. Martin is at 803.6 feet, this water level reading is still affected by the recent strong winds. The water level on Lake St. Martin will begin dropping once the Lake St. Martin Emergency Outlet Channel is in operation.

- Work to initiate the re-opening of the Lake St. Martin Emergency Outlet Channel has started. Flows through the channel are expected to begin by tomorrow morning and the channel is expected to be fully open by Saturday with flows of approximately 5,600 cfs.

- Operation of the Lake St. Martin Emergency Outlet Channel will increase outflow from Lake St. Martin, directly lowering levels, and allow the Fairford River Water Control Structure to remain at maximum discharge longer, thus allowing for higher outflows from Lake Manitoba later in the year. 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 below 801 feet by October 31, 2014.

- Lake Winnipeg is at a wind-eliminated water level of 715.8 feet, and Manitoba Hydro’s latest forecasts are that it will rise to 716.1 feet by late July. 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.
Eastern Region

- The Winnipeg River system is experiencing very high flows due to significantly higher than normal precipitation in eastern Manitoba and northern-western Ontario. The forecasted flow at Slave Falls Generating Station is 95,600 cfs, approaching the record high flow set in 1954.

- Natalie Lake, at Pointe du Bois is being maintained at 897 feet.

- Nutimik Lake, which is part of the Winnipeg River system, is stable at 908.4 feet. Dorothy, Margaret, and Eleanor Lakes, which are downstream from Nutimik Lake, are also experiencing high water levels and overland flooding. Some boat houses are being flooded and temporary flood protection works are being deployed to protect some properties. Depending on future precipitation, Manitoba Hydro forecast that the lakes on the Winnipeg River could rise to peak as follows:
  - Nutimik Lake – 0.6 feet
  - Dorothy Lake – 0.6 feet
  - Margaret/Eleanor Lake – 0.5 feet
  - Sylvia Lake – 0.3 feet

- Many lakes in Whiteshell Provincial Park 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.


The Pas and Northern Manitoba

- The flow on the Saskatchewan River at The Pas today is 65,860 cfs and the water level is at 854.4 feet. The peak on the Saskatchewan River is forecasted at approximately 67,000 cfs, or a water level of 854.66 feet, from July 7-12.

- The flow on the Carrot River at Turnberry is at 2,660 cfs, and the water level increased by 1.2 feet. The Carrot River near The Pas is at 855.6 feet today, and is forecasted to peak at 856.3 feet from July 7-12.

- Cormorant Lake is at 844.6 feet this morning. The forecasted peak water is being re-evaluated to take into account the recent precipitation event.

*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.