



**Forecasting and Flood Response Coordination
Regulatory and Operational Services,
Manitoba Water Stewardship**

**Flood Report for Manitoba
April 30, 2009**

Weather Conditions:

- Precipitation from the present storm system ranged from 25-40 mm over the Souris River and 15-30 mm over the Pembina River watersheds. Amounts over the over the Manitoba portion of the Red River watershed ranged from 5 to 10 mm while the U.S. portion received 10-20 mm. Little additional precipitation is expected for the next five days.
- Winds over the Red River Valley north 30-50 km/hr today, becoming north 20 tonight.

City of Winnipeg:

- The Red River level at James Avenue in Winnipeg this morning was 18.76 feet, a decline of 0.16 feet from yesterday morning. The computed natural level for this morning (without flood control works) is 29.3 feet which is one foot below the 1950 recorded crest.
- The decline of river levels in Winnipeg will be gradual for the rest of this week even with favourable weather due to the need to gradually lower the gates on the floodway control structure at St. Norbert. The gates must be lowered gradually since natural river levels at the floodway inlet will be declining slowly and controlled levels must remain just below the natural levels.
- The river level at James Avenue in downtown Winnipeg is expected to decline to 18 feet by May 4. Levels after that will continue to decline slowly despite a gradual increase in Assiniboine River flows resulting from Portage Diversion operations. If rainfall should increase river flows in the weeks to come, the Portage Diversion will be operated within operation guidelines to maintain levels at James Avenue at 18 feet or less if possible.
- Rainfall from the present storm system was only about 5 mm in the City area and is not presenting any problems. No significant rain is expected for the next five days.

Emerson to St. Adolphe:

- Rainfall from the present storm system will slightly reduce the rate of the Red River. However the rate of decline is still expected to gradually increase from that observed during the past 3-4 days.

- The river level declined about one-quarter of a foot on average at the main monitoring sites at valley towns during the 24 hour period ending this morning although the decline varied due to wind effects. Some areas may have experienced a temporary rise due to the change in wind conditions.
- The level at Morris is still expected to decline to the PTH 75 elevation of 775 feet by mid May unless significant rainstorms develop. Opening of the highway would occur following a road condition inspection.
- Wave action can erode dikes and closures. Vigilance should be increased on days with strong winds.

Floodway Inlet:

- The floodway gates will continue to be operated to maintain levels somewhat below natural levels upstream at the floodway inlet. A gradual lowering of the control gates will continue.
- After the water level immediately upstream of the floodway control structure is below 760 feet above sea level and if there is a significant risk of an intense rainfall event over the City of Winnipeg, Manitoba Water Stewardship will consider emergency operation of the floodway in accordance with Rule 4 of the floodway rules, to prevent widespread basement flooding and resulting risk to health and damage to property within Winnipeg. The level of 760 feet is very significant for residents from the floodway inlet to Morris since this is the elevation at which flooding is below prairie level and roads are open to traffic. Rule 4 requires that the Department not operate the floodway to raise the water level immediately upstream of the control structure above 760 feet.
- The water level upstream of the Floodway Inlet this morning was 765.06 feet, a decline of 0.17 feet since yesterday morning. The flow into the Red River Floodway this morning was 35,000 cubic feet per second (cfs) of a total 88,300 cfs upstream of the Floodway Inlet.
- The level at the Floodway Inlet was expected to decline to 760 feet by about May 14 based on favourable weather.

Lockport to Breezy Point:

- Levels in this portion will continue to decline slowly for the rest of this week. The level declined 0.2 feet at Lockport and 0.1 feet at Selkirk since yesterday.

Assiniboine River:

- Flow into Portage Reservoir declined from 10365 cfs yesterday morning to 9930 cfs this morning. Flows will continue to decline very slowly or hold steady next week as increased flow from the Souris River will offset declines at Brandon. The flow in the Portage Diversion this morning was 9395 cfs and the flow in the river downstream was 535 cfs. River flows toward Winnipeg will be gradually increased once levels at James Avenue in Winnipeg are below the flood stage of 18 feet.

- Assiniboine River levels from Portage la Prairie to Winnipeg could rise gradually by up to seven feet during the second and third weeks of May due to Portage Diversion operation but will remain well below flood stage.
- The river level at 1st Street in Brandon fell 0.17 feet since yesterday and has declined more than four feet during the past seven days. The Assiniboine River is below flood stage at all points.
- The outflow from Shellmouth Reservoir remains at 50 cfs. The reservoir water level rose 0.34 feet since yesterday morning and stood at 1401.77 feet this morning, a total rise of 12.8 feet so far this spring. Today's level may be somewhat affected by wind. The level is expected to reach 1403.5 feet by mid May, which is an ideal level heading into the summer. The outflow may be increased somewhat about one week from now.

Souris River:

- Predicted crests for the Souris River have been raised by 0.3 to 0.5 feet due to the 25-40 mm of rain which fell yesterday. Crests from Coulter to Melita will be only one-third of a foot below 1999 crests, whereas crests from Hartney to Wawanesa will be 0.5 to 0.7 feet below 1999 crests.
- The Souris River rose only one-tenth of a foot to 1408.9 feet at Melita since yesterday morning and the level at Coulter declined 0.2 feet due to strong north winds. Levels will resume a moderate rise by tomorrow as winds decrease.
- The river rose 0.48 feet at Hartney and between 0.3 and 0.45 feet from Souris to Wawanesa since yesterday morning.
- The crest is now expected a little later. It should be at Coulter on May 3, Melita on May 5 and Wawanesa on May 10.
- Significant overbank flooding is underway from the U.S. boundary to just south of Melita. There are also some overbank flows from just north of Melita to the town of Souris.
- A newly constructed dike will protect buildings in a low area in the southern outskirts of Melita. Flooding of homes is not expected along the Souris River.
- The duration of flooding in the Coulter area should be much shorter than in 1999 unless unusually heavy rain develops as in 1999. Flooding that year extended into June.

Pembina River:

- Flooding of the Pembina Valley continues from Rock Lake to Near Windygates. The decline in levels has been halted at many locations due to yesterday's rain but no significant rises are expected in the Manitoba portion.
- Rock Lake rose slightly to 1336.09 feet this morning due to the rain. While the level remains high, there is no serious shoreline flooding at this time. The normal summer level is near 1330 feet.

- The level of Pelican Lake was measured at 1352.75 feet yesterday afternoon. Yesterday's rain will reduce the rate of decline of the lake for a few days. The outlet control works continue to be operated at the maximum outflow possible (about 400 cfs today) in order to reduce the lake to its desirable level of 1351.7 feet.
- The Pembina River rose at Walhalla due to the rainfall but no rise is expected at Neche where the level fell 0.4 feet from yesterday.
- **Other Rivers:**
- Both the Fisher River and the Icelandic River crested a week ago and levels have decline by about four feet since that time. Flooding along these rivers has now ended.

Overland Flooding:

- Overland flooding continues in low lying portions of the Interlake region but is generally subsiding. The Interlake received has only a few millimeters of rain from the present storm.
- Overland flooding (flooding due to overload of the drainage system or due to lack of drainage) had essentially ended in most portions of southern Manitoba. Rainfall in the Red River Valley from the present storm has been minimal and not enough to cause a resurgence of overland flooding.
- While heavy rain fell in the Souris River watershed, it will not produce any significant overland flooding due to the nature of the terrain and soils in this region.

Lakes:

- Many lakes such as Lake Winnipeg, Lake Manitoba and Dauphin Lake are still ice covered. Some smaller lakes such as Pelican Lake are partially ice covered. Ice is expected to break up in the near future. Strong winds may cause ice to push up the shoreline in areas of shallow ground slopes such as at beaches as early as tomorrow. Those who have experienced difficulties due to ice before are advised to take whatever precautions may be feasible, such as moving valuables to higher ground.
- The level of Lake Winnipeg is presently near 714.65 feet. The level is presently difficult to estimate due to winds. The lake is regulated within the range of 711 to 715 feet.
- The level of Lake Manitoba is presently near 812.35 feet but is difficult to estimate due to strong winds. The lake is regulated within the range of 810.5 to 812.5 feet.
- Lakes in the Whiteshell area are well above their summer target levels at this time, which is not unusual during spring runoff. Logs have been removed from Brereton, White and Jessica lakes to reduce lake levels.

- Further details are provided below and specific forecasted crest stages are shown on the daily flood sheets issued by Manitoba Water Stewardship. This information may be viewed at <http://www.gov.mb.ca/waterstewardship/floodinfo/floodsheet.html>