



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

**Flood Report for Manitoba
April 29, 2009**

Weather Conditions:

- A storm over Montana and Wyoming will move slowly eastward across the Dakotas during the next few days. Precipitation amounts are expected to range from 25-35 mm over the Souris River and Pembina River watersheds and 15-20 mm over the Manitoba portion of the Red River watershed. Amounts over the U.S. portion of the Red River watershed should be less than 10 mm.
- Winds over the Red River Valley easterly 30-40 km/hr today, shifting gradually to northerly 30-50 tomorrow morning

City of Winnipeg:

- The Red River level at James Avenue in Winnipeg this morning was 18.92 feet, a decline of 0.31 feet from yesterday morning. The computed natural level for this morning (without flood control works) is 29.76 feet.
- 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 based on favourable weather conditions. 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, the Portage Diversion will be operated within operation guidelines to maintain levels at James Avenue at 18 feet or less.
- The weather forecast indicates that up to 20 mm of rain could fall over the City from tonight to noon Thursday. The rainfall is expected to be of relatively low intensity and is unlikely to result in sewer backup unless a power outage develops tomorrow.

Emerson to St. Adolphe:

- The river level declined less than one-quarter of a foot at the main monitoring sites at valley towns during the 24 hour period ending this morning. Levels at St. Adolphe and Ste. Agathe remained unchanged due to wind effects. Local variations in levels could be significant due to wind effects. It is possible that

levels on some areas have risen or fallen half a foot due to winds, depending on exposure.

- The imminent rainstorm will slow down the decline of river levels somewhat but is unlikely to cause any rises of the Red River other than temporary rises due to wind effects. The rate of decline in river levels from that observed in recent days should increase by early next week
- The level at Morris is still expected to decline to the PTH 75 elevation of 775 feet by mid May unless significant additional rainstorms develop. Opening of the highway would occur following a road condition inspection.
- Wave action can erode dikes and closures. Vigilance should be increased during the next few days since fairly strong winds are predicted.
- The Red River at Grand Forks declined 0.46 feet since yesterday and the level at Drayton declined only 0.2 feet.

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.
- It is possible that the gates would be raised temporarily in the event that a heavy rainstorm in the City is imminent and would otherwise cause significant sewer backup.
- The water level upstream of the Floodway Inlet this morning was 765.23 feet, a decline of 0.22 feet since yesterday morning. The flow into the Red River Floodway this morning was 36,000 cubic feet per second (cfs) of a total 89,800 cfs upstream of the Floodway Inlet.
- The level at the Floodway Inlet was expected to decline to 760 feet by May 10 but this may occur somewhat later due to the expected rainstorm.

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 at Selkirk since yesterday.

Assiniboine River:

- Flow into Portage Reservoir declined from 11,016 cfs yesterday morning to 10,365 cfs this morning. Flows will decline even more slowly and may even 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 9820 cfs and the flow in the river downstream was 545 cfs. River flows toward Winnipeg will be gradually increased once levels at James Avenue in Winnipeg are below the flood stage of 18 feet.
- Continued high flows in the Portage Diversion have resulted in considerable flooding of farmland west of the Portage Diversion due to overtopping of the

failsafe. The function of the failsafe is to localize damage on the diversion embankments to a relatively small area.

- Assiniboine River levels from Portage la Prairie to Winnipeg will change very little until Assiniboine River flows downstream of the Portage Diversion at Portage la Prairie are increased. Levels in this portion could rise by up to seven feet by the third week of May, but will remain well below flood stage.
- The river level at 1st Street in Brandon fell 0.44 feet since yesterday and has decline 3.9 feet during the past six 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 0.38 feet since yesterday morning and stood at 1401.43 feet this morning, a total rise of 12.4 feet so far this spring. The somewhat higher rise this morning is in part due to 10 cm of snow which fell in the area early yesterday. 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 10 days from now.

Souris River:

- The Souris River rose another quarter foot to 1408.6 feet at Melita since yesterday morning and is now within one foot of the 1999 crest. A further rise of half a foot is expected but this could change depending on how much rain falls tonight. The forecast will be updated tomorrow based on actual rainfall amounts.
- The river rose 0.38 feet at Hartney since yesterday morning.
- Crests on the Souris River from Coulter to Napinka should be half a foot below those of 1999 and portions from Hartney to Wawanesa should have crests about one foot lower than in 1999. Crests may be somewhat higher if tomorrow's rainfall exceeds 15 mm.
- The crest is expected at Coulter on May 2, Melita on May 4 and Wawanesa on May 9.
- Significant overbank flooding is underway from the U.S. boundary to just south of Melita. Satellite imagery also shows that there is also some overbank flooding 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 but is subsiding at all points. It is possible that minor rises could occur later this week if tonight's rainfall exceeds 20 mm.

- Rock Lake had declined to 1336.06 feet as of this morning, a decline of 0.12 feet from yesterday morning. 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 is near 1352.8 feet. It is possible that the level will rise slightly if tonight's rain is as predicted. 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 at Neche declined half a foot since yesterday morning and will continue to decline slowly unless rainfall is heavier than expected. There is no longer a concern about boundary overflows or flooding at Gretna or Halbstadt.

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. Flooding could be prolonged if significant precipitation were to develop during the next few weeks. Little or no rain is expected for in the Interlake for the rest of this week.
- 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. There may be a brief resurgence of overland flooding in areas of the Red River valley, outside of the area flooded by the Red River, if more than 15 mm of rain falls by tomorrow afternoon.

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 at 714.65 feet. The lake is regulated within the range of 711 to 715 feet.
- The level of Lake Manitoba is presently near 812.30 feet. The level is difficult to estimate today due to wind effects. 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>