

Manitoba Basins Summer Conditions Report

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EXECUTIVE SUMMARY

The Summer Conditions Report describes the hydrologic conditions of Manitoba basins after the spring runoff period and heading into the summer months. The observed winter and spring precipitation as well as the current soil moisture conditions are very important factors for the summer conditions. Summer flows and levels are impacted by precipitation and temperatures observed throughout the summer months, with the effect of strong winds having a significant impact on the observed levels of the major lakes. This report will provide a very high level overview of the current basin conditions, the forecasted summer precipitation and temperatures and the expected flows and levels for Manitoba's major rivers and lakes.

Winter and Spring Precipitation and Soil Moisture

Precipitation records throughout the winter and spring periods were above normal to well above normal across most of southern and central Manitoba, with some areas in the south and southeast portion of the province receiving record amounts of precipitation. This well above normal precipitation created major flooding across much of the southern and central Manitoba basins in the spring, with some lakes still remaining well above their normal ranges for this time of the year.

The continued significant precipitation in the winter and spring periods also created very wet basin conditions for much of southern and central Manitoba. However, some areas in the south-western part of the province show near normal soil moisture conditions. These wet basin conditions will contribute to increased surface runoff, if heavy summer precipitation develops.

River Flows and Lake Levels

Though most major rivers have been steadily declining from their extreme high levels recorded in the spring, levels in most Manitoba rivers will continue to be above their seasonal levels throughout the summer. Most Manitoba lakes, including Lake Winnipeg, will continue to be above their normal ranges with some lakes, such as Dauphin Lake and the Whiteshell Lakes, continuing to remain with flood warnings in place. Levels could recede to near normal conditions if dry weather and above normal temperatures occur during the summer months.

Wind Effects

With many Manitoba lakes remaining high throughout the summer, the effects of wind set up and wave uprush will continue to pose a risk to shoreline properties and communities. Wind effects are difficult to

forecast with significant early warning, so potentially impacted Manitobans are encouraged to regularly check the Wind Effect Alert Maps on the Lakes Information tab of the Water Information and Flood Conditions webpage: <https://www.gov.mb.ca/mit/floodinfo/index.html>

Long-term Precipitation Outlook

Although long-term weather forecasts contain significant uncertainty, they provide an indication of potential future rainfall trends. Climate models indicate a potential for normal to wetter than normal precipitation for July, August and September, with temperatures forecasted to be near normal to warmer than normal for most Manitoba basins. The National Weather Service (NWS) Climate Prediction Center's outlook indicates below normal precipitation and near normal temperature within the U.S. portion of the Red River and the Souris River basins from July to September.

Forecasted Summer Flows and Levels

The Red and Assiniboine Rivers are forecasted to remain at or above normal flows throughout the summer and fall until freeze-up. Flows and levels on the Assiniboine River are affected partly by the operation of the Shellmouth Reservoir, which will be operated to keep levels within the summer target levels while controlling releases from the Dam so as not to adversely impact levels in the downstream Assiniboine River. With normal to above normal levels on the Red and Assiniboine Rivers, it is unlikely that water supply for communities along the rivers will be a concern throughout the summer. Flows on the Waterhen, Fairford, and Dauphin Rivers will remain near normal throughout the summer.

Lake Manitoba, Lake Winnipegosis and Lake St. Martin are expected to be back within their operating ranges this summer, and Lake Winnipeg is expected to remain above the operating range for the remainder of the summer period.

The Hydrologic Forecast Centre (HFC) works in collaboration with Environment and Climate Change Canada, the National Weather Service (NWS), and flood forecasters in neighbouring jurisdictions to regularly monitor basin conditions and provide updates as needed throughout the summer.

Emergency Management

Manitoba Emergency Measures Organization continues to work with municipalities and local authorities on flood preparedness, response and recovery as water levels continue to remain high. A Disaster Financial Assistance (DFA) program was announced on May 9, 2022 in order to assist Manitobans with recovery from the 2022 spring flood.

BACKGROUND

River and Lake levels throughout the summer are generally dependent on:

1. Spring flood levels and base flows heading into the summer period;
2. Soil moisture in late spring and early summer; and
3. Summer precipitation and temperature.

The above factors combine to determine the lake and river levels throughout the summer as well as the flood potential for any summer flooding or drought.

SPRING FLOOD LEVELS AND BASE FLOWS HEADING TO THE SUMMER MONTHS

Spring Flood Levels

Most Manitoba watersheds received above normal precipitation between September and June with some parts of the Red River basin and eastern Manitoba receiving near record precipitation over that period. Most areas of Manitoba experienced very high amounts of snowfall this winter, with some parts of the province seeing upwards of 156.6 cm of snow – the third highest amount since 1872. After a fairly slow melt in most basins, from April 1 to June 19, nearly all of southern Manitoba received near record precipitation (Figures 1-3) that resulted in a prolonged spring flood period. Much of the Red River basin received in excess of 330 mm of rain, which is over 200% of normal during that period.

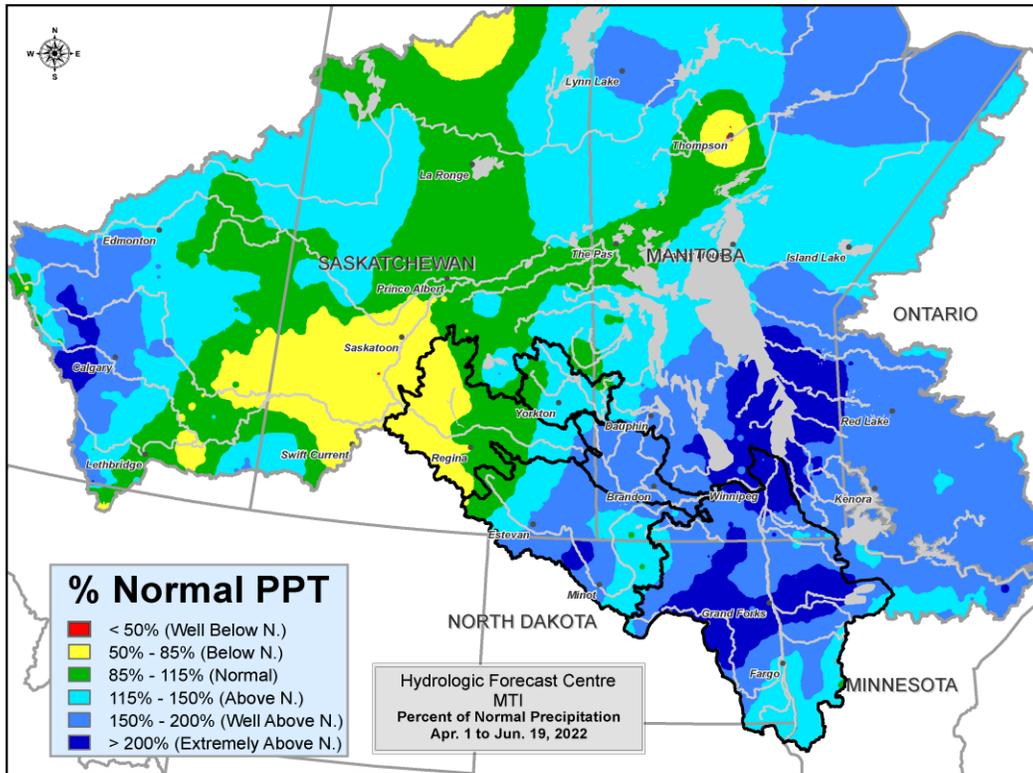


Figure 1 - Percent of normal precipitation (%) from Apr 1 to Jun 19, 2022.

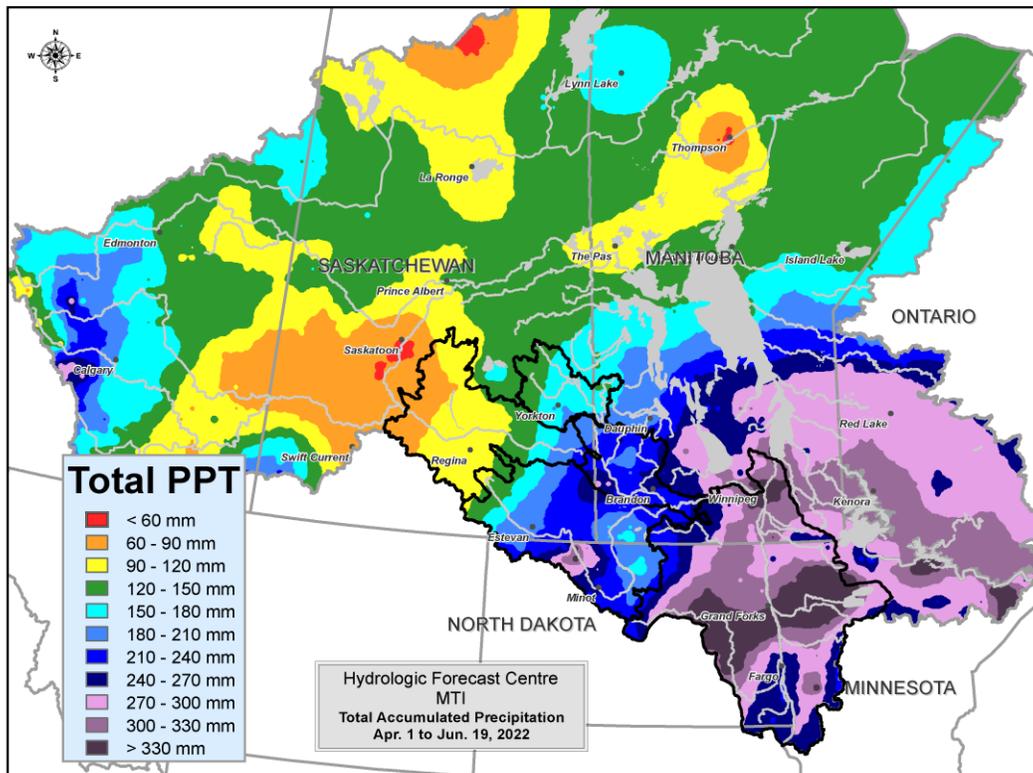


Figure 2 - Total precipitation (mm) from Apr 1 to Jun 19, 2022.

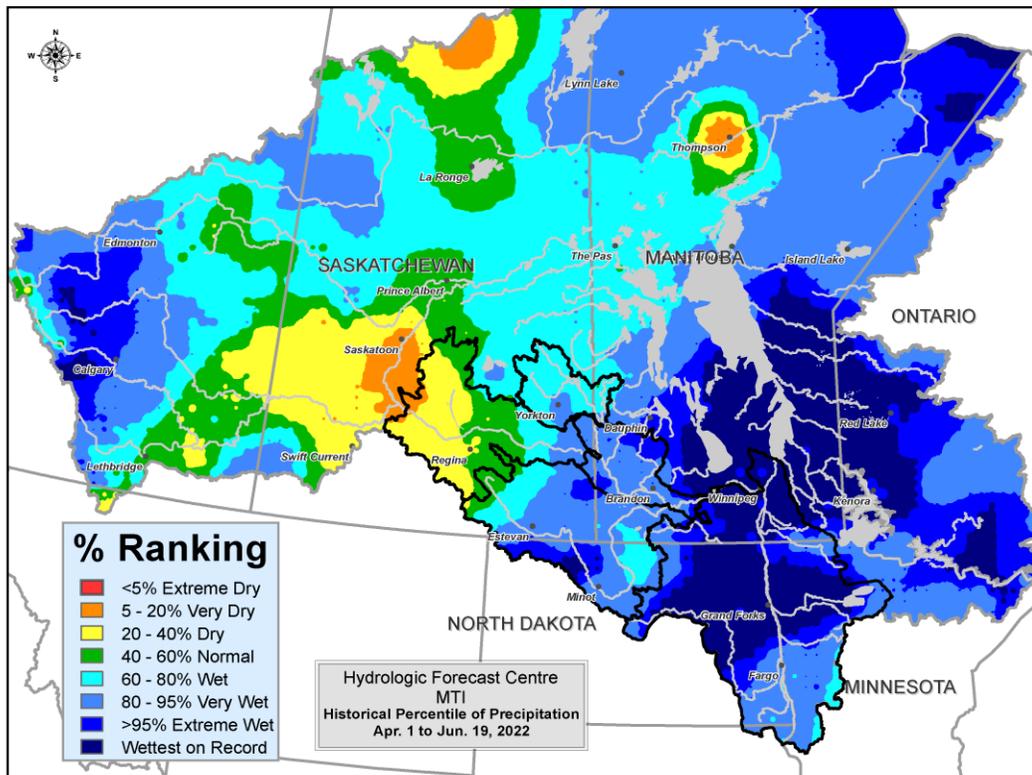


Figure 3 - Percent ranking precipitation (%) for Apr 1 to Jun 19, 2022.

In April and May, Manitoba experienced six Colorado Low weather systems with high precipitation and strong winds, leading to major flooding across the province. A major Colorado Low that occurred in late April on top of frozen ground with substantial snow cover created major flooding in much of southern and central Manitoba. The fourth largest flood in history was recorded on the Red River while record flooding was observed on the Winnipeg River system, the Whiteshell Lakes, and Fisher River. Record flooding was also observed in the Parklands Region and along the tributaries of the Red River. The Assiniboine River saw moderate flooding this spring.

In response to high flows on the Red River and recurring significant precipitation events both the Red River Floodway and Portage Diversion were utilized to manage river levels in the City of Winnipeg. The Floodway was operated for a total of 61 days this spring, the longest spring operation since its construction in 1968. The Portage Diversion was operated for a total of 71 days, initially to manage ice but later to limit flows on the Lower Assiniboine to approximately 10,000 cfs. The Portage Diversion was also used to temporarily reduce Lower Assiniboine flows below 10,000 cfs when significant precipitation threatened to raise the level in the City of Winnipeg above 19.0 ft. Through the operation of these

structures, MTI was successful in limiting the water level in the City of Winnipeg to 19.0 ft at James Avenue.

Unprecedented rains on top of very saturated soils resulted in significant and widespread overland flooding across the province, resulting in multiple road closures and damages to infrastructure including crossing and road infrastructure. Several communities and municipalities were impacted by the flooding, forcing evacuations and Local States of Emergency.

River Levels

Base flow is the portion of stream flow that is not from surface runoff; it is water from the ground, flowing into the river channel over a period of time. Though flooding has receded in most rivers and streams, most are still tracking above normal base flows and levels heading to the summer period. Base flows and levels are much above normal for most central and southern Manitoba rivers. Base flows and levels are normal to above normal in northern Manitoba rivers. Figure 4 shows current base flows in comparison with historic records. Hydrographs for the major rivers are shown in Figures 5 to 16. These figures show the recorded or estimated flows on the rivers as of June 21, 2022. The Red, Assiniboine, Qu'Appelle, Souris, Pembina, and Roseau Rivers are all above normal levels for this time of the year. Levels are near normal for the Saskatchewan, Waterhen, Dauphin, and Fairford Rivers. Current flows for main rivers at selected locations are listed in Table 1.

North America WaterWatch

Map of real-time streamflow compared to historical streamflow for the day of year

(Choose a region and then click "GO" to view a regional map)

(Warning: It may take several minutes to process)

United States: Water Res. Region: Neighbor: 
Canada: 05 Nelson River Drainage: Go:

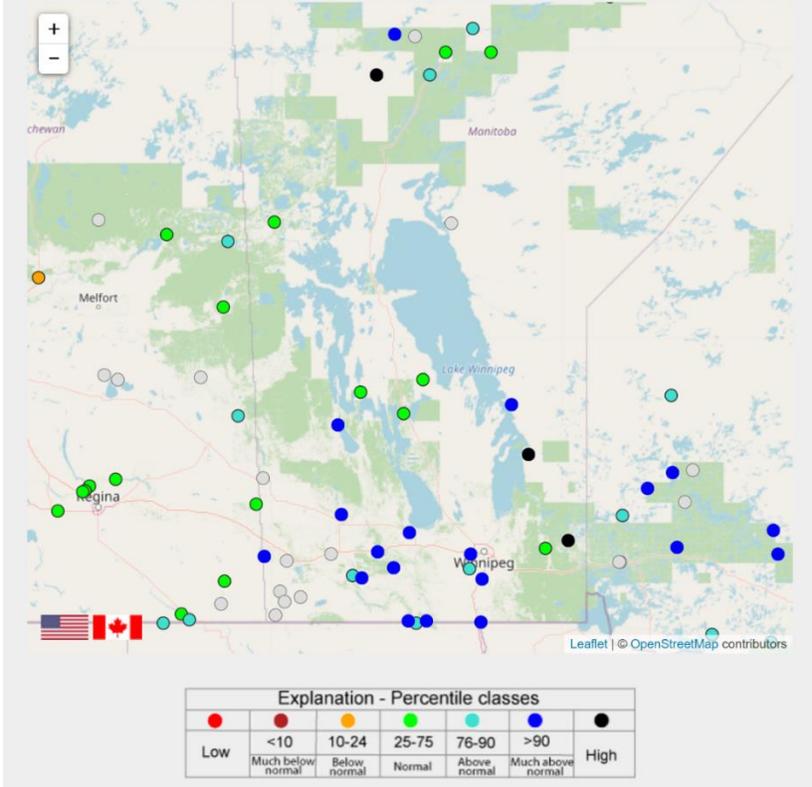


Figure 4 - Base flows and level conditions as of June 21.

Hydrologic Forecast Centre - Manitoba Transportation and Infrastructure
Red River at James Avenue (Datum 727.57 ft)
 Jun 21, 2022 : 14.61 feet

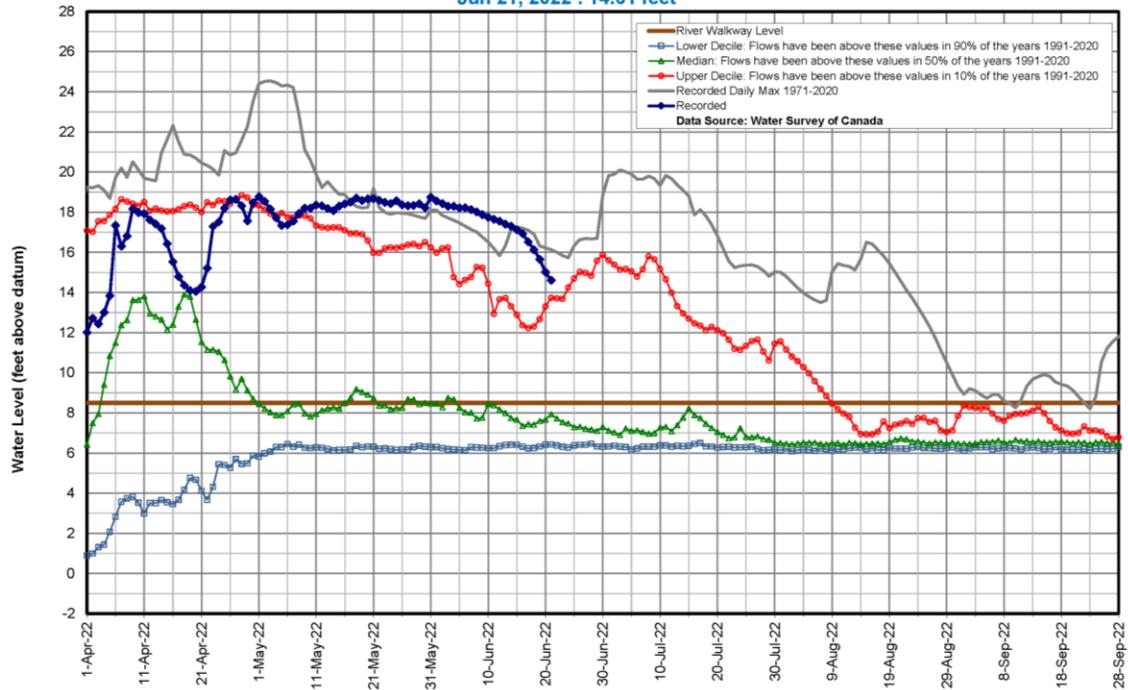


Figure 5 – Red River water levels at James Avenue

Hydrologic Forecast Centre - Manitoba Transportation and Infrastructure
Red River at Emerson
 Jun 21, 2022 : 20,007 cfs

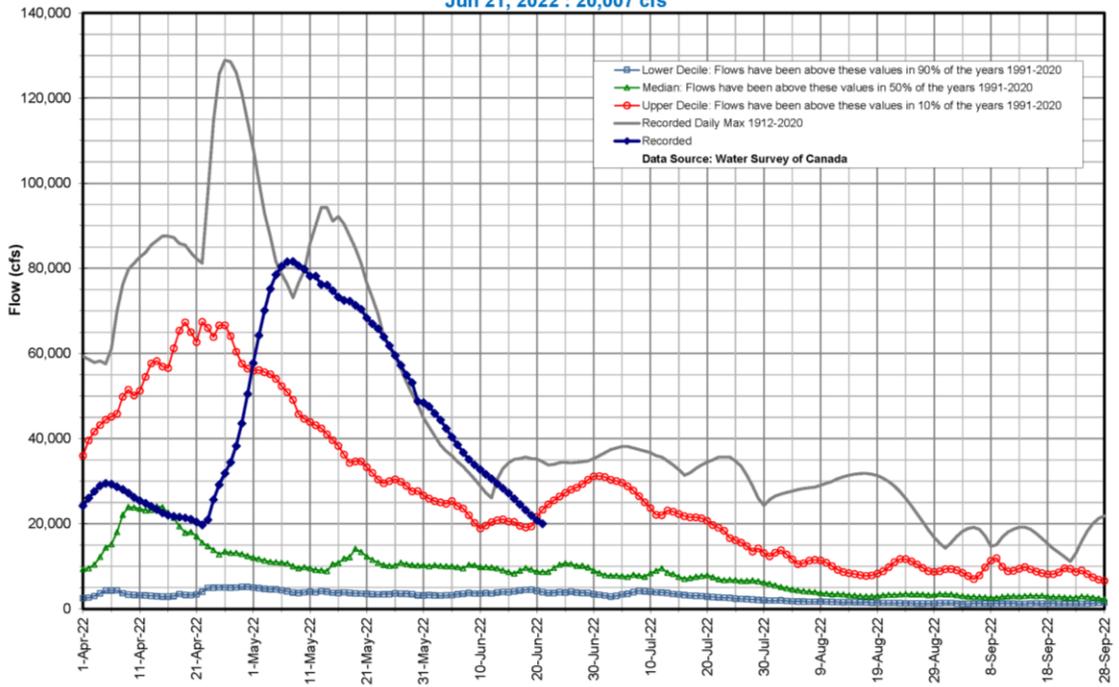


Figure 6 – Red River flows near Emerson

Red River near Ste. Agathe

Jun 21, 2022 : 28,866 cfs

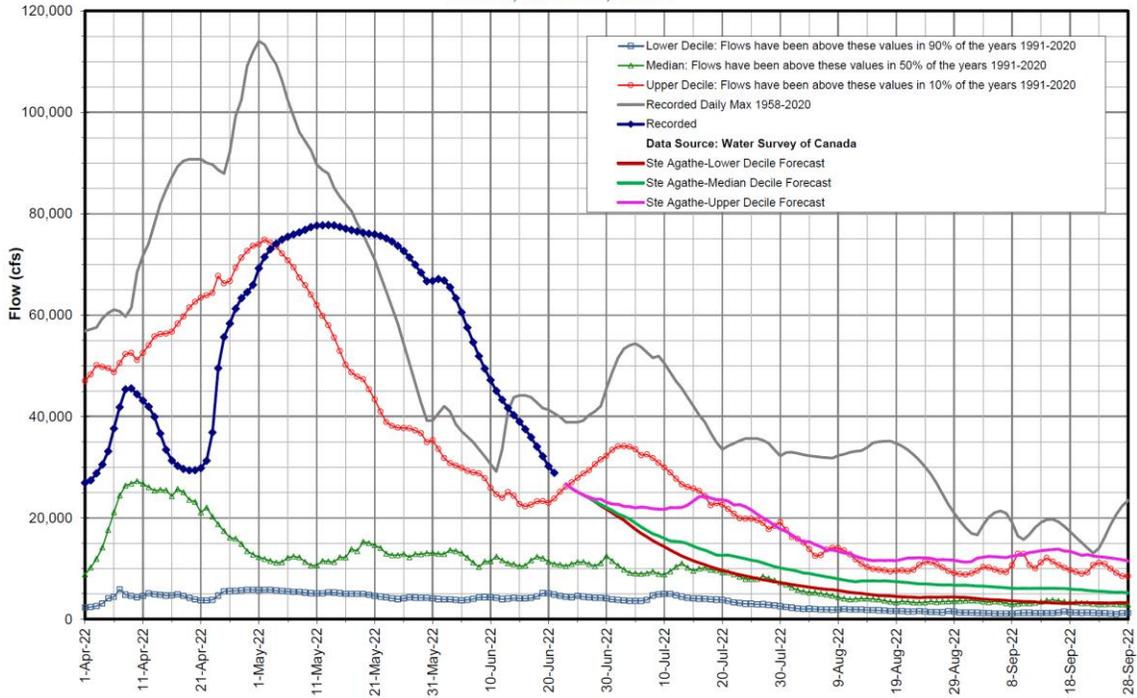


Figure 7 - Red River flows near Ste. Agathe

Souris River at Wawanesa

Jun 21, 2022 : 2,053 cfs

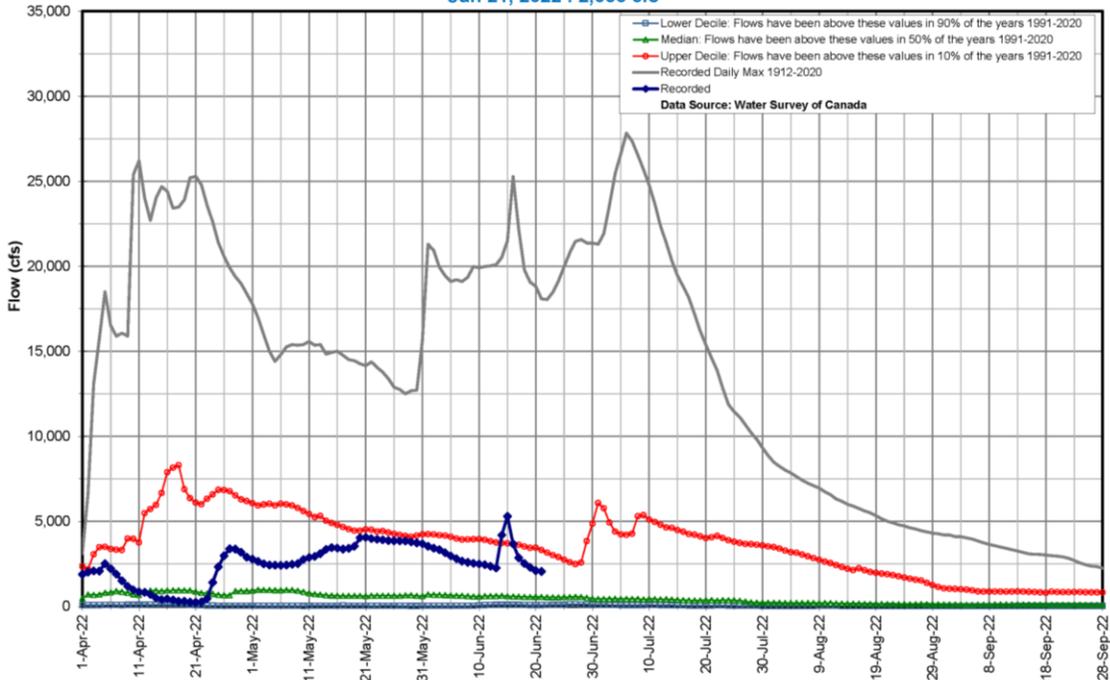


Figure 8 - Souris River flows at Wawanesa

Qu'Appelle River near Welby

Jun 23, 2022 : 1,675 cfs

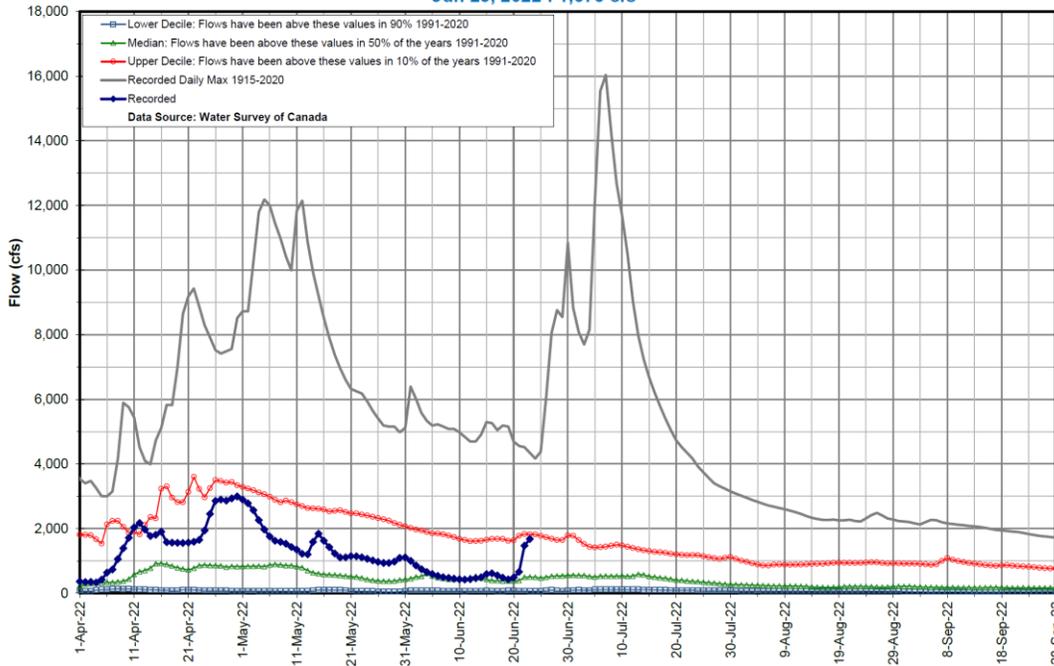


Figure 9 - Qu'Appelle River flows near Welby

Assiniboine River near Russell

Jun 21, 2022 : 1,522 cfs

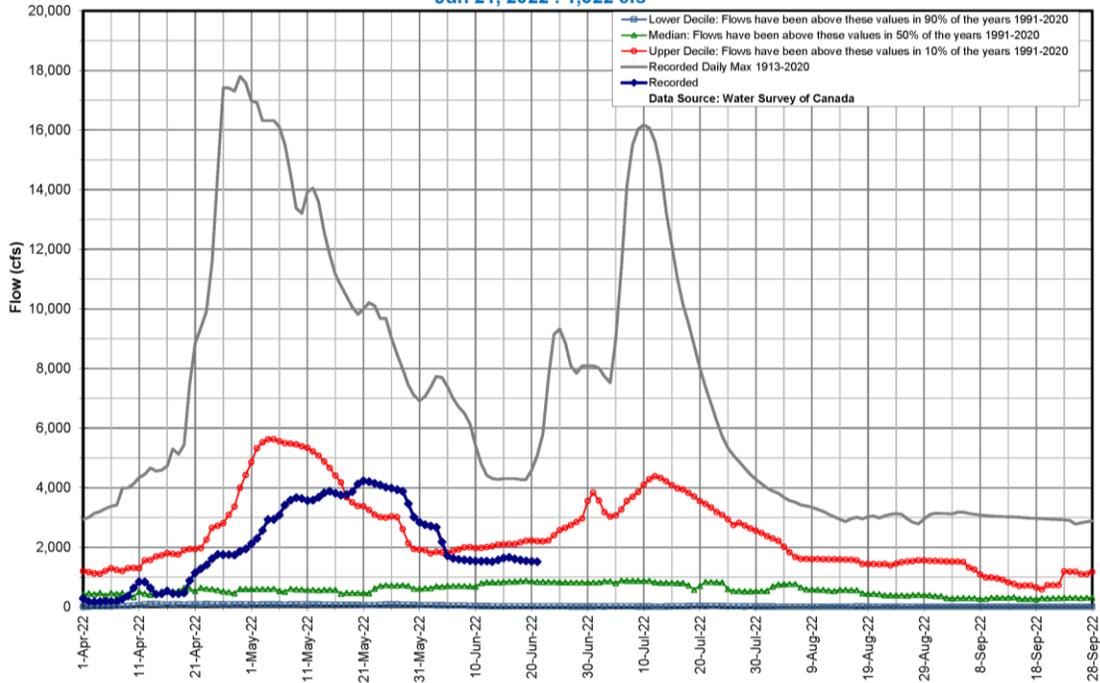


Figure 10 - Assiniboine River flows near Russell

Assiniboine River at Brandon

Jun 21, 2022 : 7,624 cfs

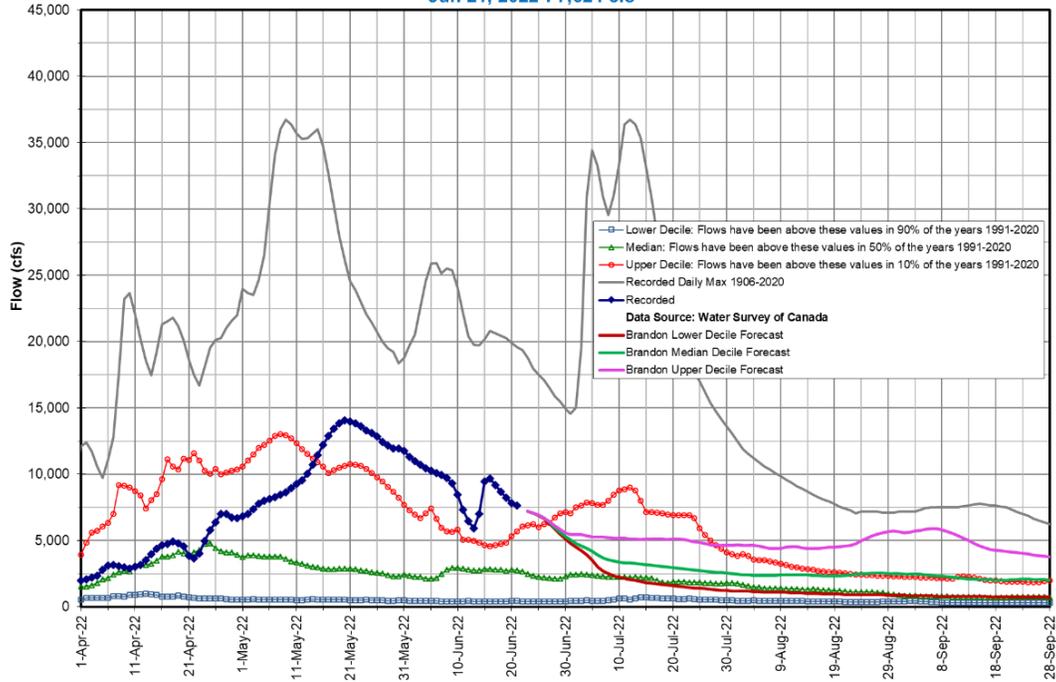


Figure 11 - Assiniboine River flows at Brandon

Assiniboine River near Holland

Jun 21, 2022 : 11,201 cfs

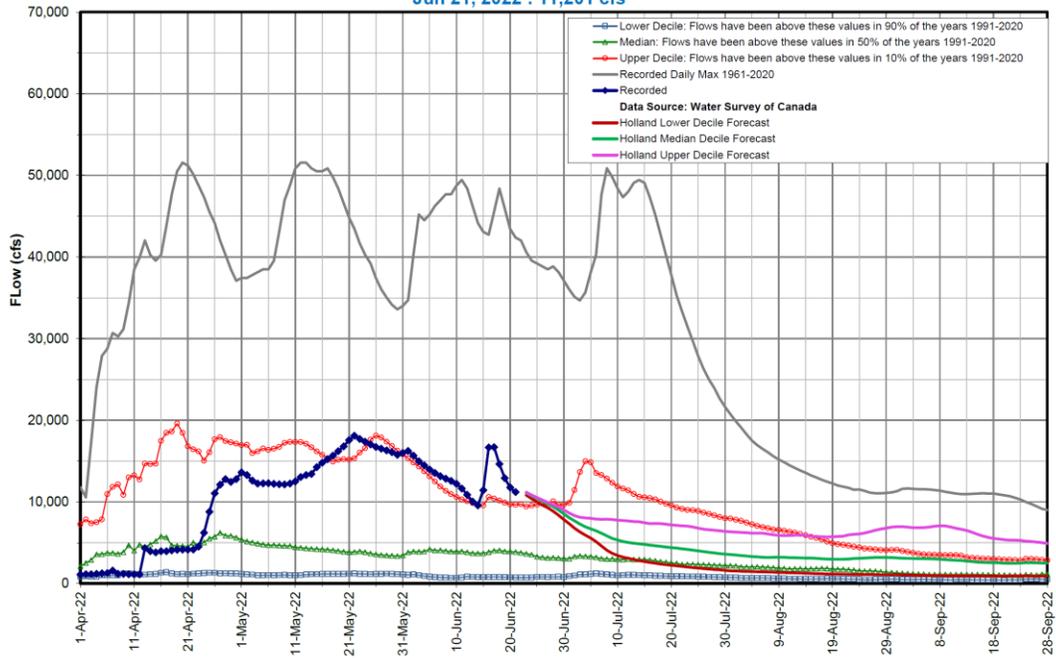


Figure 12 - Assiniboine River flows at Holland

Waterhen River near Waterhen

Jun 21, 2022 : 5,319 cfs

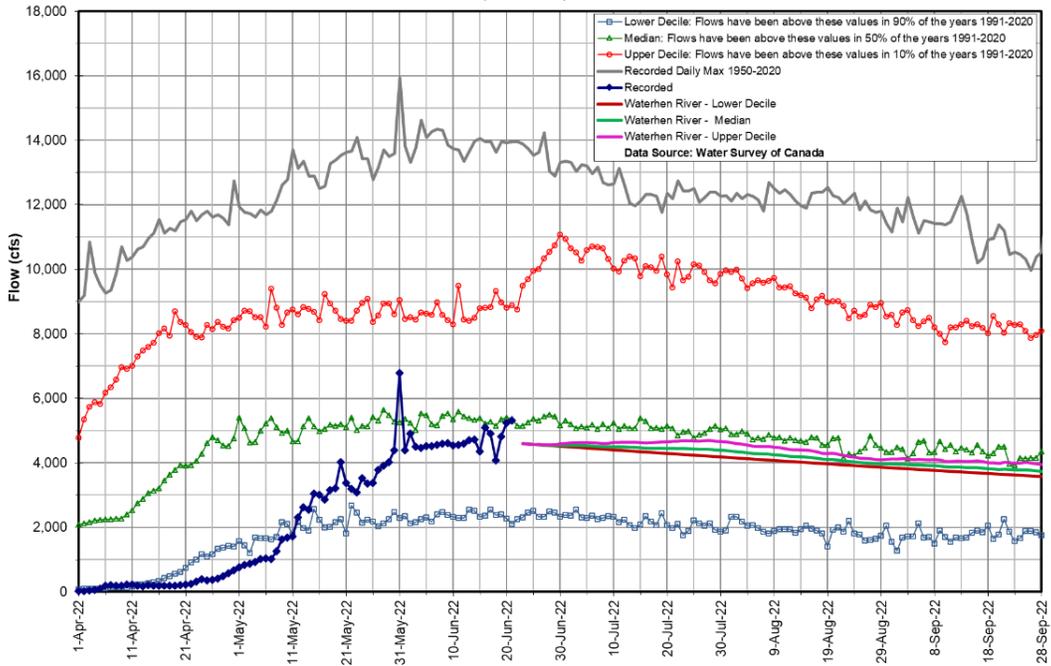


Figure 13 - Waterhen River flows near Waterhen

Fairford River near Fairford

Jun 21, 2022 : 7,037 cfs

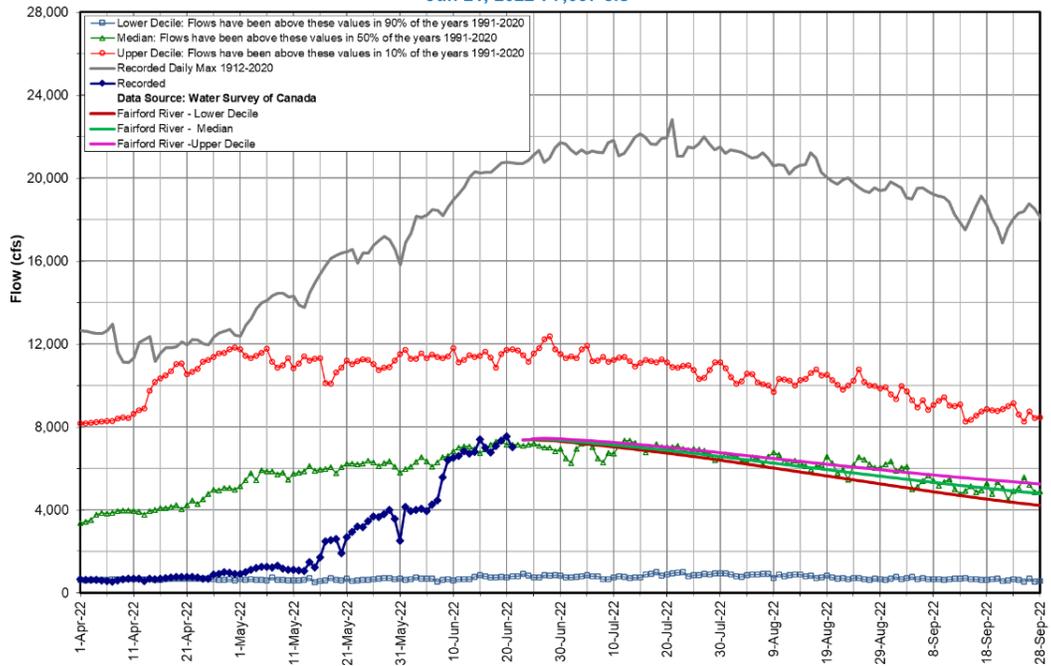


Figure 14 - Fairford River flows near Fairford

Dauphin River near Dauphin River

Jun 21, 2022 : 5,747 cfs

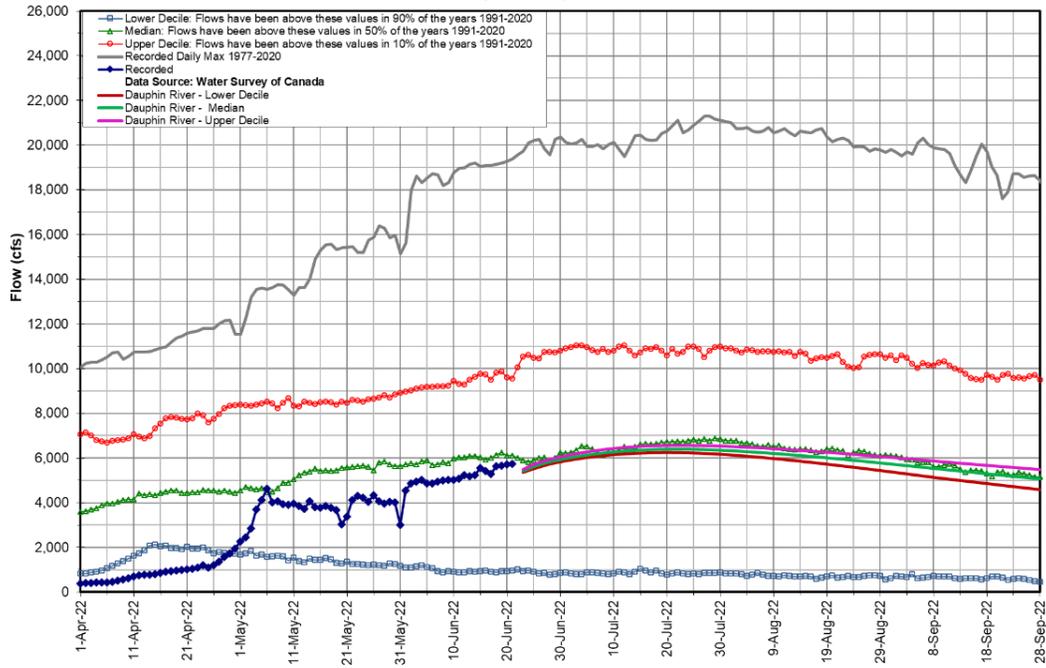


Figure 15 - Dauphin River flows near Dauphin River

Saskatchewan River at the Pas

Jun 21, 2022 : 26,299 cfs

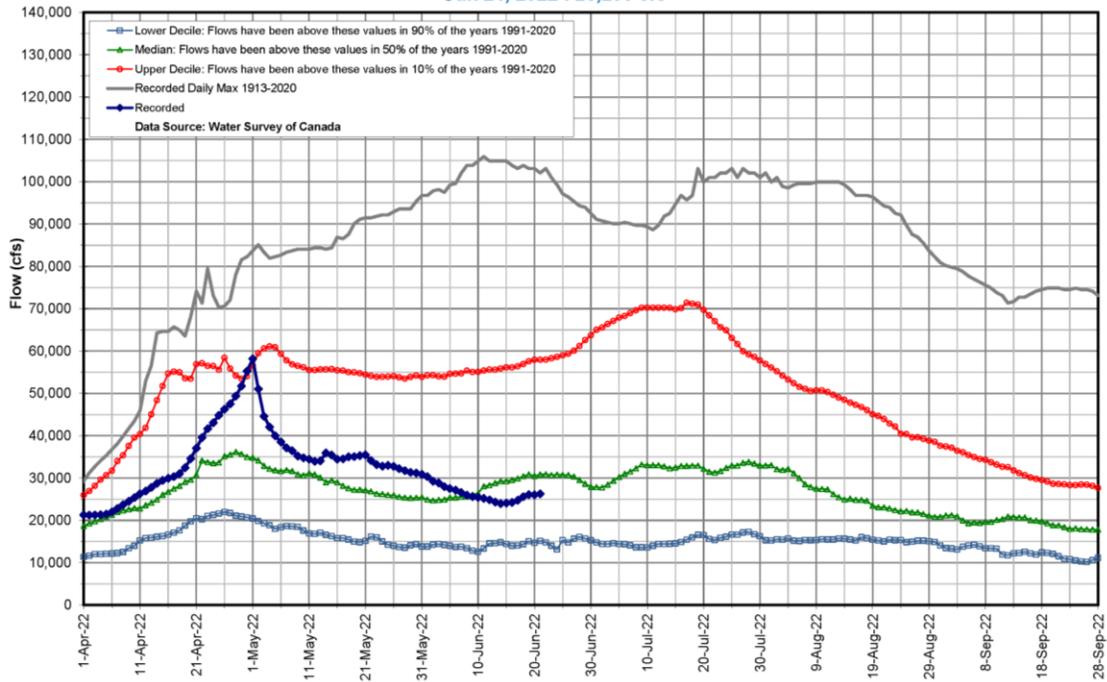


Figure 16 - Saskatchewan River flows at The Pas

Table 1. Flows for main rivers at selected locations as of June 21, 2022.

*Note – The Assiniboine River flows and levels are regulated by the operation of Shellmouth Dam.

** Note – The Red River Level at James Avenue is measured in relative to the long term mean winter ice level at James avenue, which is 727.57 feet geodetic or 0 ft James.

Rivers	Location	Most Recent Flow/Level (Jun 20)	Minimum Flows/Levels	10 th Percentile	Normal flows/Levels	90 th Percentile	Maximum Flow/Level	Period of Record
Red River	Emerson	20,000 cfs	162 cfs (1934)	1,000 cfs	6,900 cfs	16,900 cfs	34,600 cfs (2002)	108 years
	Ste. Agathe	28,900 cfs	620 cfs (1977)	2,100 cfs	10,400 cfs	22,600 cfs	40,600 cfs (2002)	60 years
	James Avenue Level **	14.6 ft	6.0 ft	6.3 ft	8.1 ft	12.0 ft	16.1 ft	49 years
Assiniboine River*	Russell	1,522 cfs	22 cfs (1981)	65 cfs	848 cfs	1,769 cfs	5,085 cfs (2012)	108 years
	Brandon	7,600 cfs	120 cfs (1961)	350 cfs	2,200 cfs	4,700 cfs	19,600 cfs (2011)	108 years
	Holland	11,201 cfs	232 cfs (1961)	546 cfs	4,071 cfs	8,878 cfs	42,378 cfs (2011)	60 years
	Headingley	9,700 cfs	310 cfs (1961)	590 cfs	3,300 cfs	8,200 cfs	18,100 cfs (2011)	108 years
Shellmouth Dam Release	Shellmouth	1,613 cfs	28 cfs (1982)	34 cfs	859 cfs	1,822 cfs	5,693 cfs (2012)	52 years
Souris River	Wawanesa	2,053 cfs	1 cfs (1940)	12 cfs	945 cfs	2,638 cfs	18,081 cfs (2011)	108 years
Qu'Appelle River	Welby	538 cfs	6 cfs (1989)	54 cfs	651 cfs	1,825 cfs	4,556 cfs (2011)	78 years
Fairford River	Fairford	7,037 cfs	66 cfs (1962)	662 cfs	5,253 cfs	10,457 cfs	20,730 cfs (2011)	66 years
Waterhen River	Waterhen	5,319 cfs	381 cfs (1963)	2,549 cfs	5,172 cfs	8,454 cfs	13,949 cfs (2011)	70 years
Dauphin River	Dauphin	5,747 cfs	742 cfs (1977)	954 cfs	5,069 cfs	9,002 cfs	19,388 cfs (2011)	44 years
Saskatchewan River	The Pas	26,299 cfs	7,169 cfs (1988)	17,188 cfs	38,720 cfs	62,154 cfs	102,060 cfs (1948)	108 years

Lake Levels

Most major Manitoba lakes (with the exception of Lake St. Martin and Lake Winnipegosis) continue to be above normal levels or flood stages. With the exception of Lake Winnipeg, which will continue to rise until late June, most lakes have either peaked or are near peak. The risk of lake flooding continues to remain high as heavy winds in the summer could cause lake levels to rise significantly.

Lake Manitoba is at 812.9 ft, which is above its operating range of 810.5 ft – 812.5 ft and slightly above normal levels for this time of the year (Table 2). Lake Winnipeg is also above its operating range at 716.9 ft (operating range is 711 ft – 715 ft). Lake Winnipegosis and Lake St. Martin are tracking near normal for this time of the year (both lakes are tracking near the median levels of the last thirty years, and Lake St. Martin is above the upper end of its desired operating range of 797.0 ft – 800 ft) while Dauphin Lake is well above normal. Currently, Lake St. Martin is at 800.7 ft, and Lake Winnipegosis is at 832.2 ft at Winnipegosis. Water level hydrographs for these lakes are shown in Figures 17 to 21. Whiteshell Lakes are well above normal for this time of the year. Inflow into Lake of the Prairies (Shellmouth Reservoir) is above normal inflow condition for this time of the year.

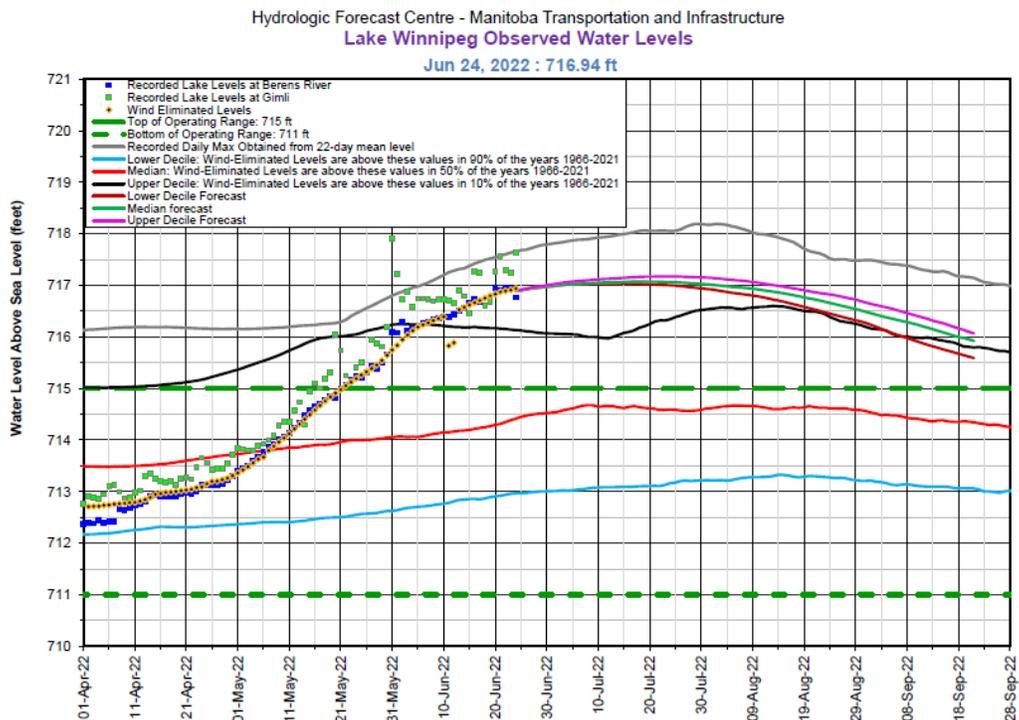


Figure 17 - Lake Winnipeg water levels

Dauphin Lake Observed Water Level

Jun 21, 2022 : 859.55 ft

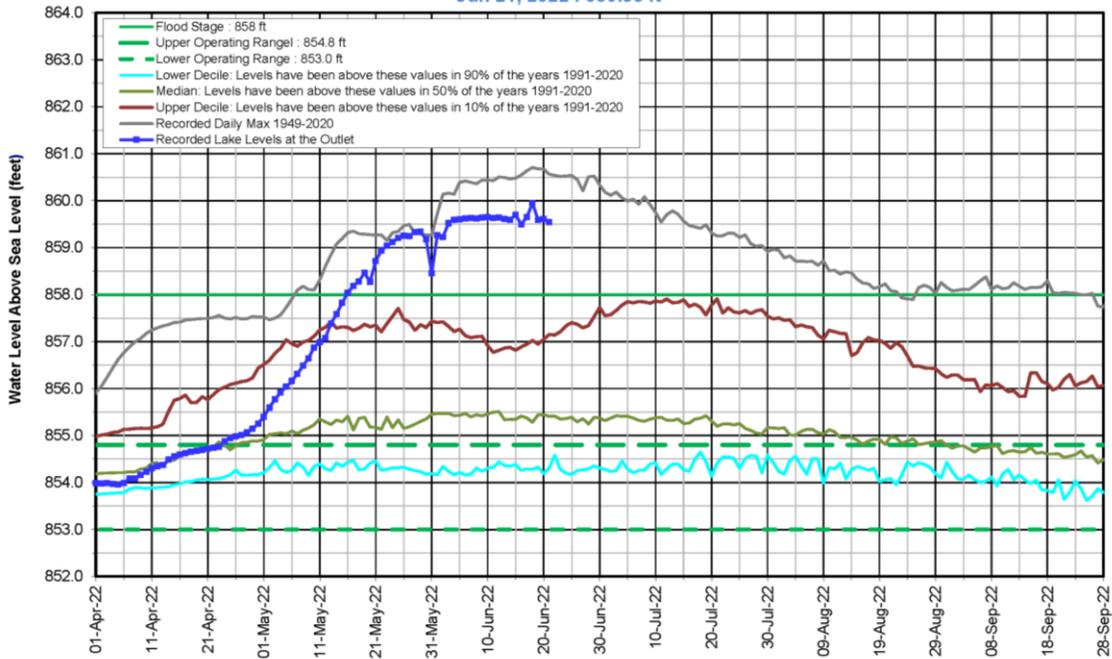


Figure 18 - Dauphin Lake water levels

Lake Manitoba Observed Water Levels

Jun 21, 2022 : 812.85 ft

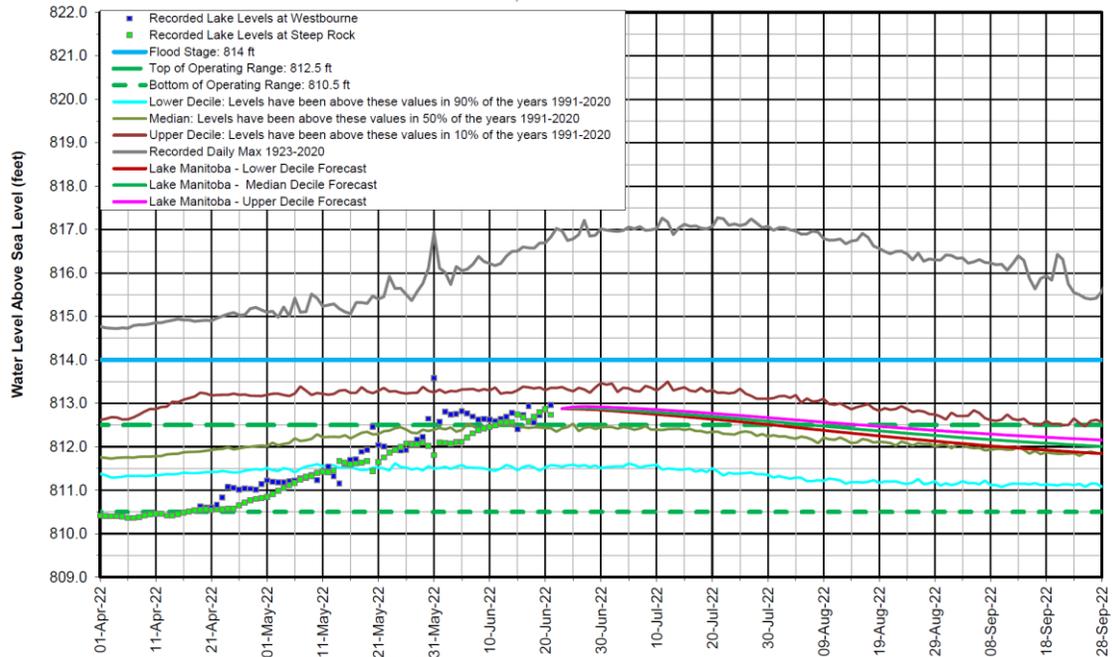


Figure 19 - Lake Manitoba water levels

Hydrologic Forecast Centre - Manitoba Transportation and Infrastructure
Lake Winnipegosis Observed Water Levels
 Jun 21, 2022 : 832.08 ft

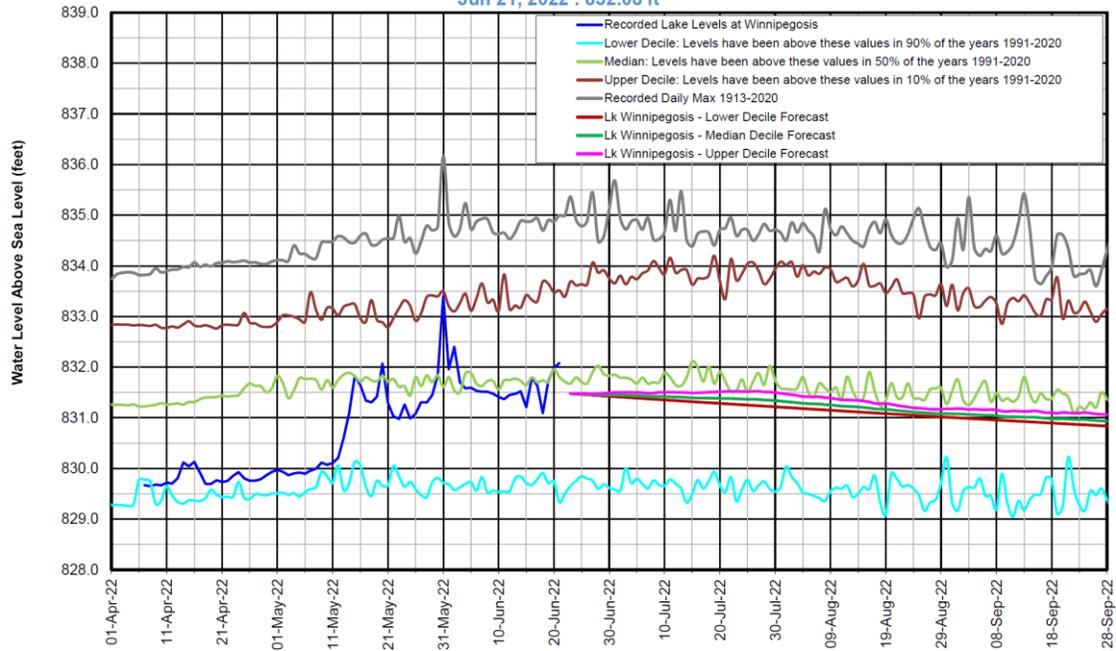


Figure 20 – Lake Winnipegosis water levels

Hydrologic Forecast Centre - Manitoba Transportation and Infrastructure
Lake St. Martin Observed Water Levels
 Jun 21, 2022 : 800.28 ft

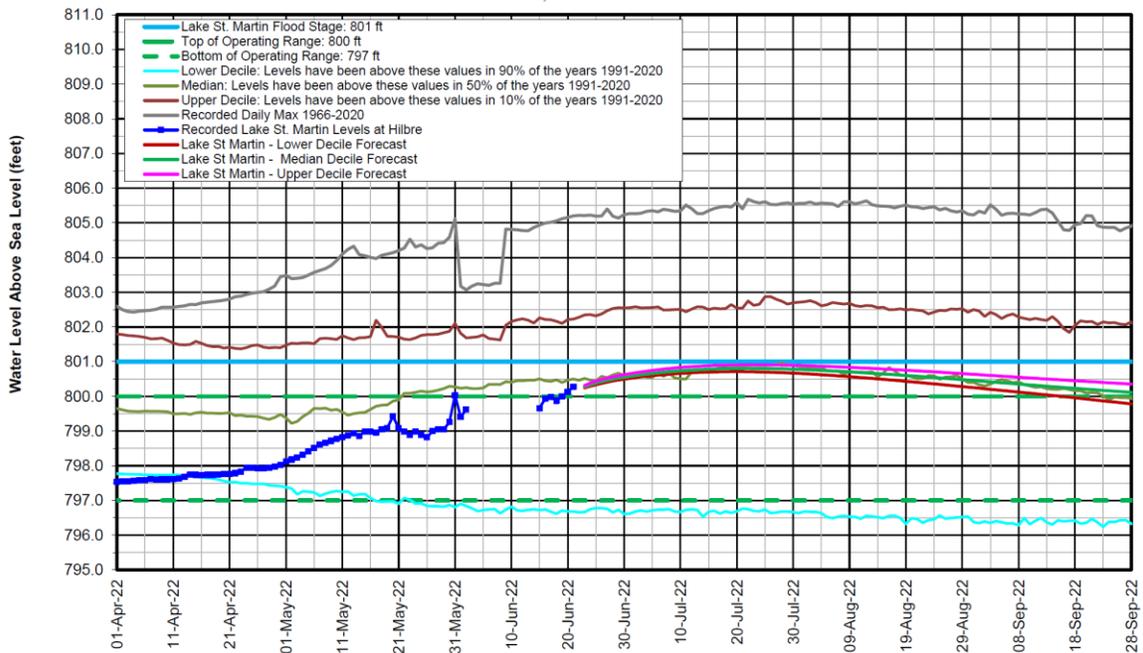


Figure 21 – Lake St. Martin water levels

Shellmouth Dam is being operated in consultation with the Shellmouth Reservoir Regulation Liaison Committee (SLC). Though the Shellmouth Reservoir received a significant amount of inflow volume in the spring (the 7th highest spring inflow volume since the dam was constructed), operations were able to significantly reduce downstream flooding while maintaining levels within reservoir capacity. The lake level as of June 21 was 1406.5 ft. The operating guidelines recommend a summer lake level between 1400 ft and 1404 ft. The lake level in the summer months will depend on the amount of summer precipitation and summer temperatures that affect evaporation. Figure 22 shows the observed and forecasted lake levels, reservoir inflow, and reservoir outflow until September 30, 2022. The outflow and level forecasts were made for the median future inflow conditions. As conditions on the ground change, a revised inflow forecast will be issued and the outflow from the reservoir will be adjusted accordingly.

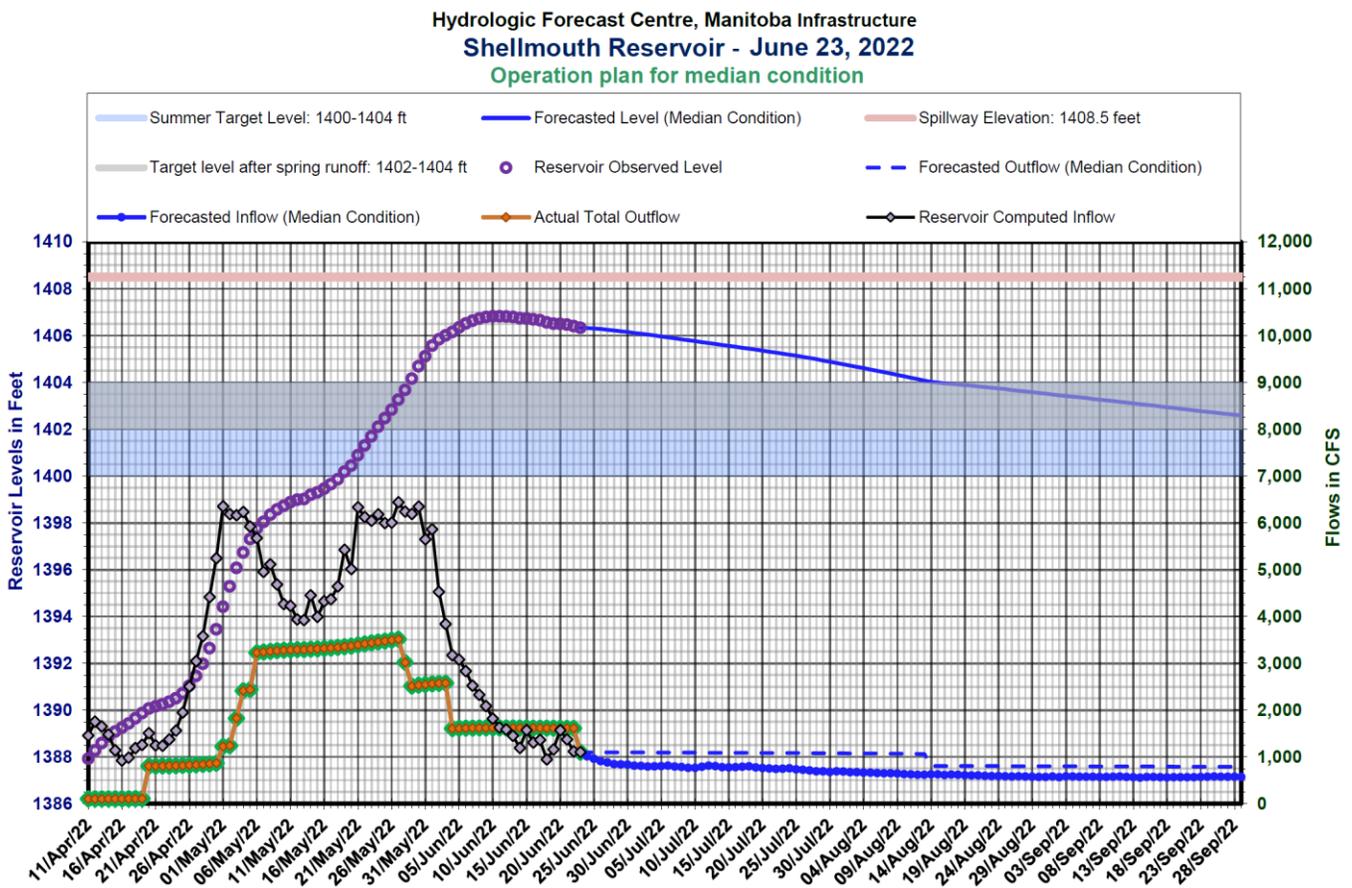


Figure 22 - Lake of the Prairies (Shellmouth Reservoir) water levels and flows

Expected Levels in the Summer Months

Due to wetter than normal conditions heading into the summer, flows and levels are expected to remain above normal for much of central and southern Manitoba rivers and lakes. The Assiniboine River is forecasted to remain above normal flows and levels until freeze-up (Figures 11 and 12). Flows and levels on the Assiniboine River are affected partly by the operation of the Shellmouth Reservoir, which will be operated to keep levels within the summer target levels while ensuring that releases from the Dam do not adversely impact levels in the downstream Assiniboine River. Flows and levels on the Red River are also expected to remain above normal until freeze-up (Figure 7). Flows on the Waterhen River, Fairford River, and Dauphin River will remain near normal throughout the summer.

The level on Lake Manitoba is expected to decline and be within the desired operating range by mid-August. Lake St. Martin is expected to continue to rise for a few more weeks to near 800.8 ft before returning within the desired range later on this summer. Lake Winnipeg is expected to remain above its operating range for the remainder of the summer. Depending on inflows, Lake Winnipegosis may rise slightly before declining for the remainder of the summer. Recorded lake levels (as of June 21, 2022) and expected levels up to the end of summer are given in Table 2.

The flooding on Manitoba lakes is all the more remarkable considering that many lakes were subject to drought conditions last summer. This means that the volume of water in spring 2022 has been sufficient to raise many lakes from very low levels to very high levels in the space of a year.

Table 2. June 21 lake levels and expected levels by September 30, 2022.

**Levels on these lakes are managed by operation of dam structures.*

Lakes	Current level, June 21 (ft)	Operating range or long term avg. (ft)	Normal level for June 21 (ft)	Last time level was equal or higher than the current level	Forecasted Peak (ft) (Wind Eliminated Daily Average)	Historical comparison
Lake Manitoba*	812.9	810.5 - 812.5	812.4	813.4 (2017)	812.9 – 813.0 June 24 – June 28	<i>Historic water level for this time of year is above the current level 28% of the time</i>
Lake Winnipeg*	717.1	711 - 715	714.0	717.9 (1974)	717.0 – 717.2 July 16 – July 25	<i>Historic water level for this time of year is above the current level 1% of the time</i>
Lake St. Martin*	800.3	797 - 800	799.6	803.2 (2017)	800.7 – 800.9 July 17 – July 20	<i>Historic water level for this time of year is above the current level 47% of the time</i>
Lake Winnipegosis	832.1	831.1	831.1	832.4 (2018)	831.4 – 831.5 June 23 – July 20	<i>Historic water level for this time of year is above the current level 26% of the time</i>
Dauphin Lake*	859.6	853.0 - 854.8	855.3	860.6 (2011)	Near Peak	<i>Historic water level for this time of year is above the current level 2% of the time</i>
Shellmouth Reservoir*	1406.5	1400 - 1404	1404.4	1409.5 (2014)	Peaked on June 11, 1406.82 ft	<i>Historic water level for this time of year is above the current level 26% of the time</i>
Lake Wahtopannah near Rivers*	1539.6	1535.5	1536.8	1540.2 (2011)	Peaked on May 18, 1541.69 ft	<i>Historic water level for this time of year is above the current level 2% of the time</i>
Lake Minnewasta	1082.2	1081.2	1081.2	1082.2 (2011)	Peaked on April 30, 1086.02 ft	<i>Historic water level for this time of year is above the current level 3% of the time</i>

Evaporation significantly affects lake levels in summer. For Lake Manitoba, outflow due to evaporation is equivalent to approximately 7,500 cfs to 8,500 cfs in the summer months, between June and August.

Strong sustained winds impact lakes by temporarily raising water levels at the downwind shore while driving down levels at upwind locations. They also create waves which can push further inland aided by their momentum and onshore wind action. These effects can be significant, raising the water level by several feet above the static water level. They are also site specific, with impacts varying greatly at different locations, even for similar wind conditions. With many Manitoba lakes remaining high throughout the summer, the effects of wind set up and wave uprush will continue to pose a risk to shoreline properties and communities if high wind conditions develop. Wind effects are difficult to forecast with significant early warning, so potentially impacted Manitobans are encouraged to regularly check the Manitoba Lake

Wind Effect Alert maps on the Lakes Information tab of the Water Information and Flood Conditions webpage: <https://www.gov.mb.ca/mit/floodinfo/index.html>

The Wind Effect Forecasts are published daily, and provide a categorized risk assessment of impacts in the AM and PM. The categories range from No Alert, which indicates negligible wind impact, to Severe, which indicates a rise of greater than 1.5 meters (5 feet) with very significant and forceful wave action. A sample of the Wind Effects Forecast map is shown in Figure 23.

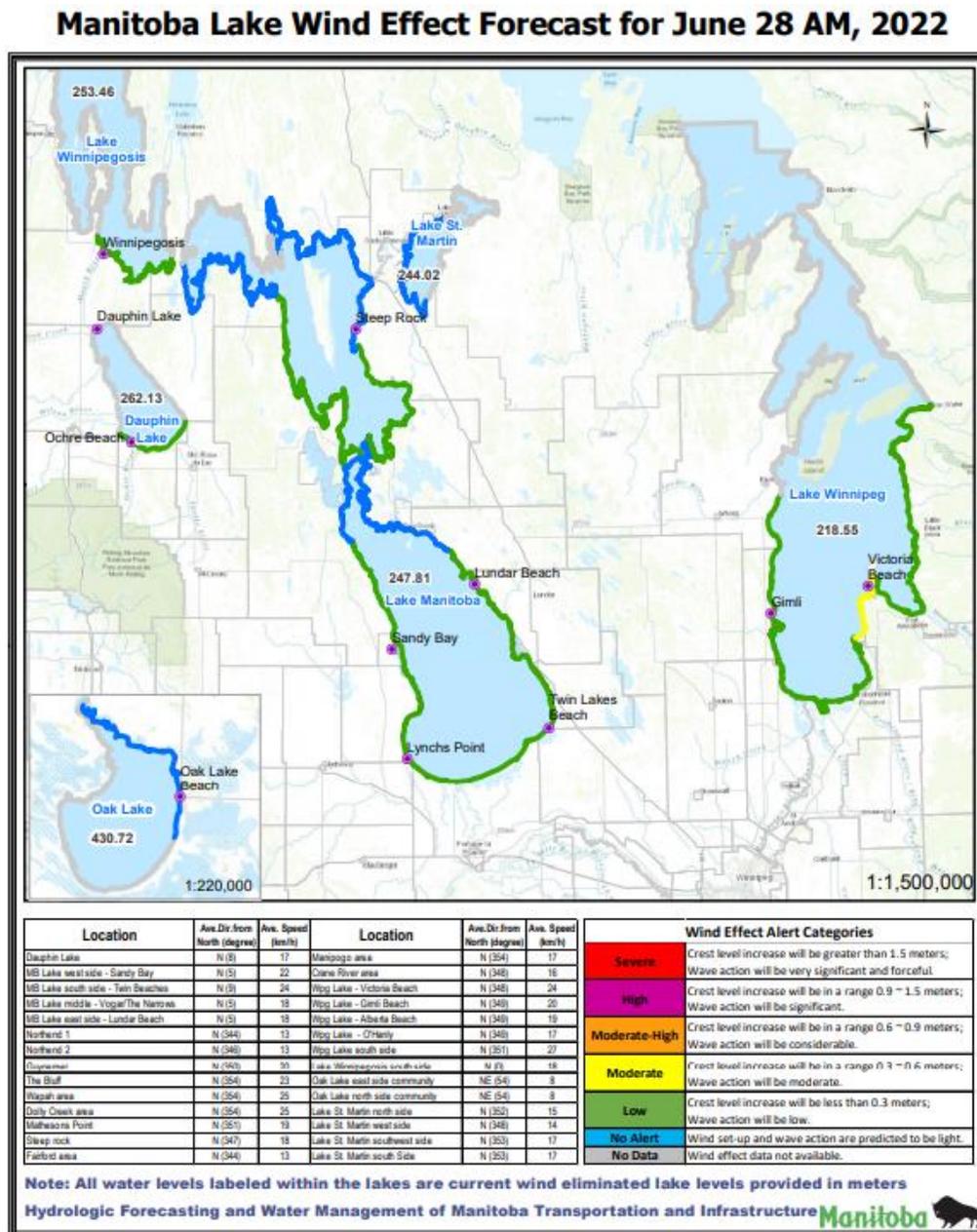


Figure 23 – Wind Effect Alerts Map for June 28 AM

When High or Severe wind effects are forecast, a media bulletin or alert is published to notify residents to a significant hazard condition. Under this system, locations along the shoreline of major lakes in the Moderate–High category, or a 0.6 meter to 0.9 meter (2 foot to 3 foot) rise in lake level due to wind effects, would not trigger a media bulletin publication or an alert.

SOIL MOISTURE CONDITIONS

The modeled soil moisture using the Antecedent Precipitation Index (API) shows soil moisture ranges from normal to well above normal for Manitoba basins. Southern and central Manitoba basins, including areas along the Interlake region, south, southeast, southwest and the United States portion of the Red River basin have above normal to well above normal soil moisture (Figure 24).

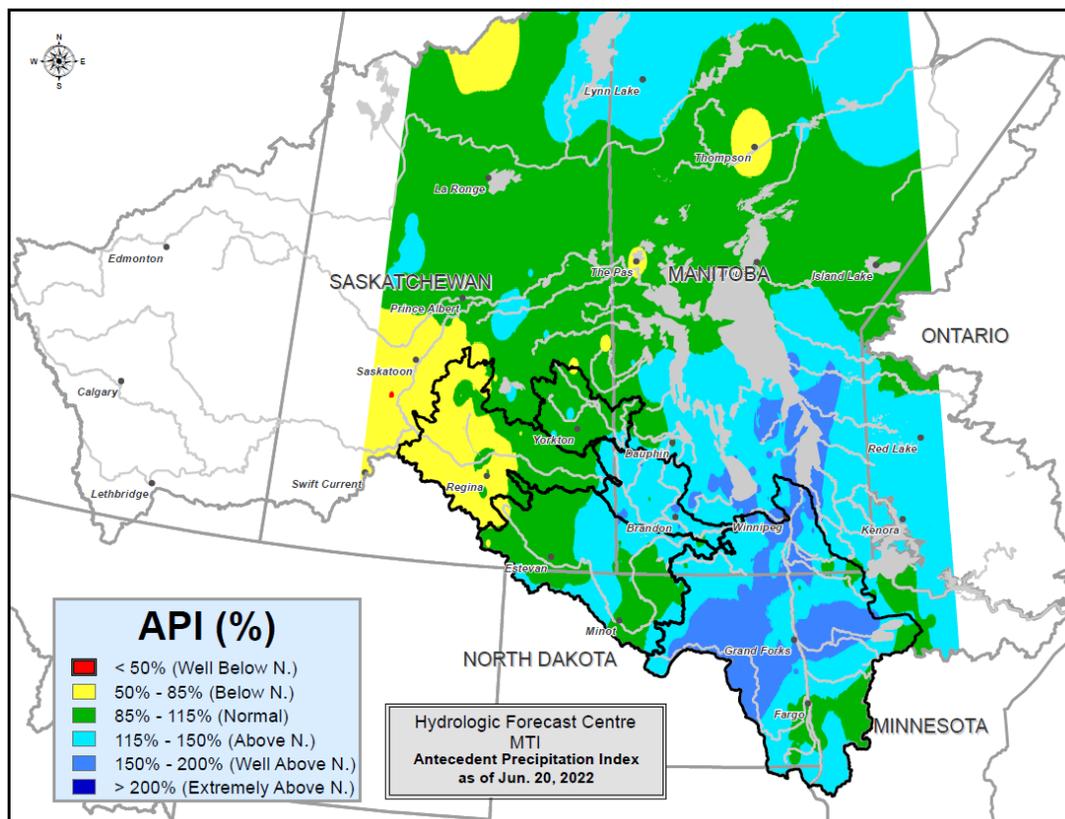


Figure 24 - Antecedent Precipitation Index (API) (%) for 2022

Manitoba Agriculture also collects soil moisture measurements in the top 30 cm of the soil through its automatic weather monitoring stations located at various locations across the province. These results, which indicate the moisture condition of the soil, are shown in Figure 25. Soil moisture measurements collected in the top 30 cm through monitoring sensors indicate the soil moisture is optimal to very wet

throughout most of southern and central Manitoba. There are not many weather stations in Northern MB to measure the soil moisture.

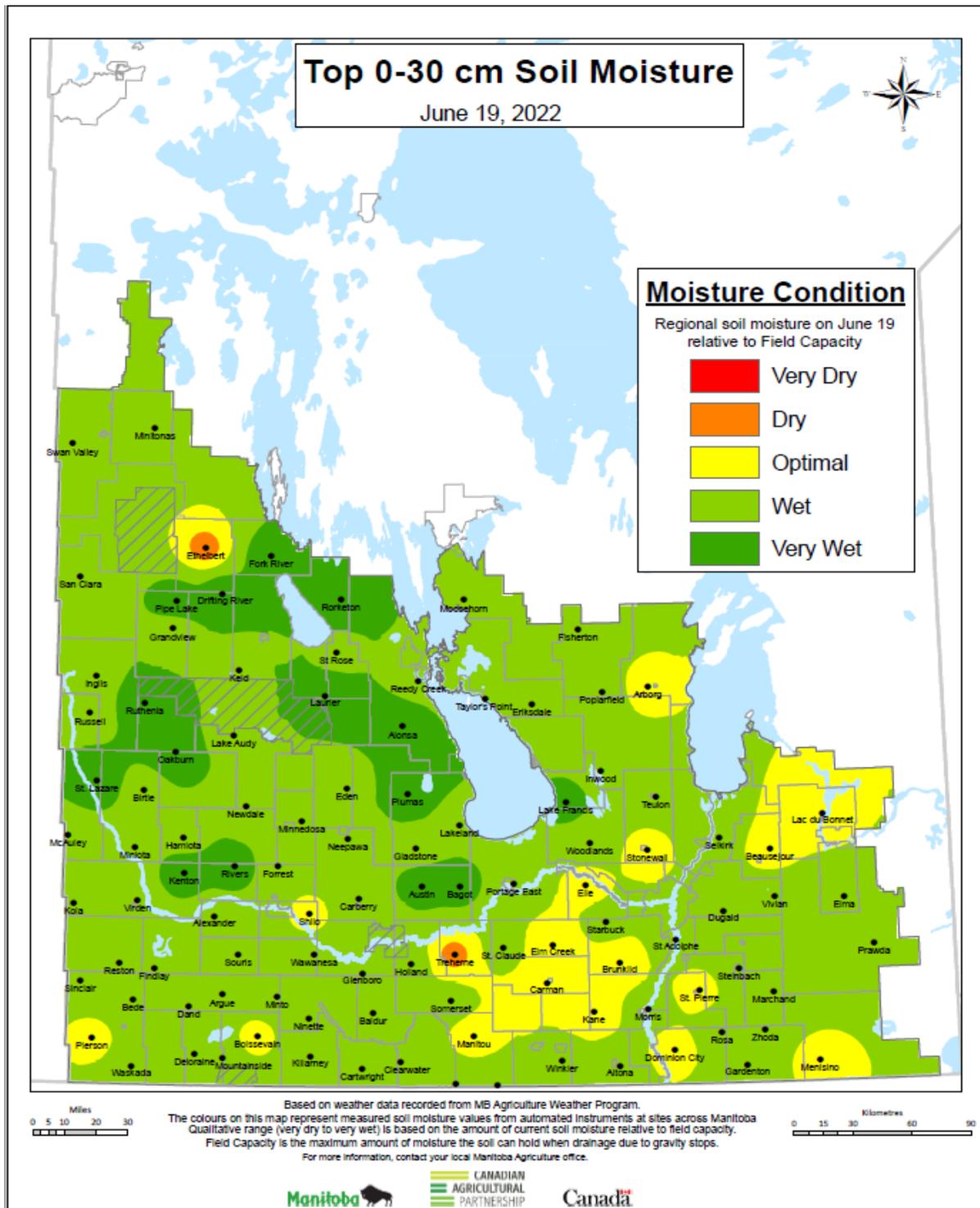


Figure 25 - Soil moisture in top zone (0 to 30 cm) based on field measurements (June 19, 2022)

The National Weather Service (NWS) Climate Prediction Center, through its soil moisture monitoring and modelling works, indicates above normal soil moisture for the U.S. portions of the Souris and Red River basins (Figure 26).

In summary, soil moisture in most Manitoba basins is normal to above normal, with some areas indicating well above normal soil moisture conditions.

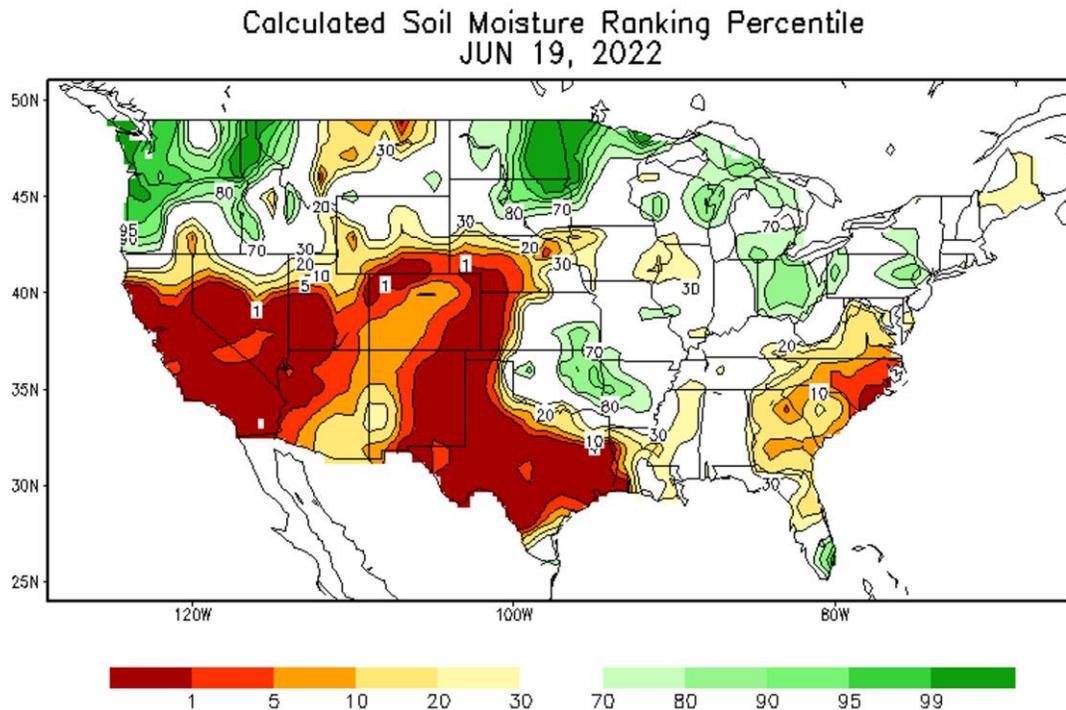


Figure 26 - Calculated soil moisture ranking percentile as of June 19, 2022, from the NWS

SUMMER PRECIPITATION AND TEMPERATURE (LONG TERM CLIMATE OUTLOOK)

Climate projections issued by the International Research Institute (IRI) at Columbia University indicate chances for normal to above normal precipitation and temperatures for most of Manitoba basins for July, August and September (Figures 27 and 28). Southern and northern Manitoba basins could see above normal precipitation while central and western Manitoba basins could see near normal precipitation conditions in the summer. The U.S. National Weather Service (NWS) Climate Prediction Center's outlook

issued on June 16, 2022 indicates below normal precipitation within the U.S. portion of the Red and Souris River basins between July and September and near normal temperatures.

Experience indicates that long term precipitation outlooks are more accurate for the first month of the forecast time frame and forecast modelling results start to deviate the further they are into the future. Generally, long term weather forecasts are not as reliable as short term forecasts.

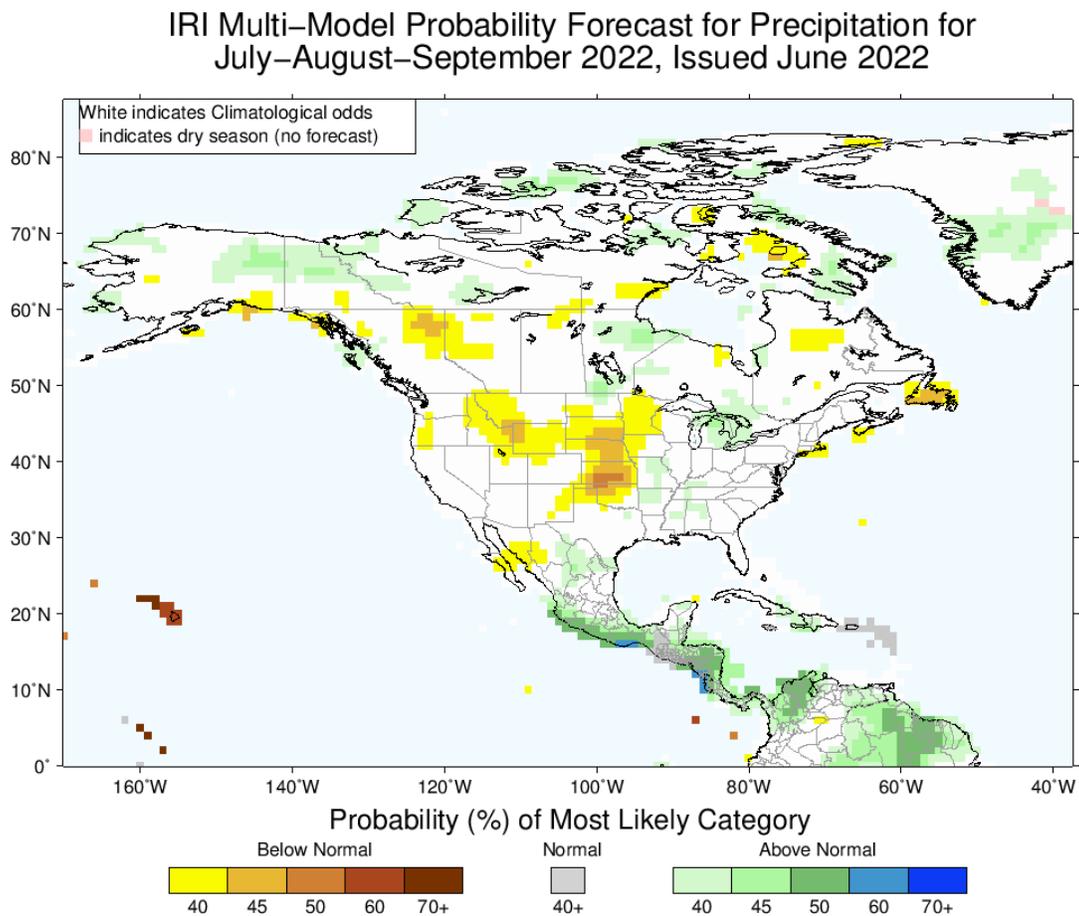


Figure 27 - IRI Multi-Model Probability Forecast for Precipitation Jul-Aug-Sep 2022

IRI Multi-Model Probability Forecast for Temperature for July-August-September 2022, Issued June 2022

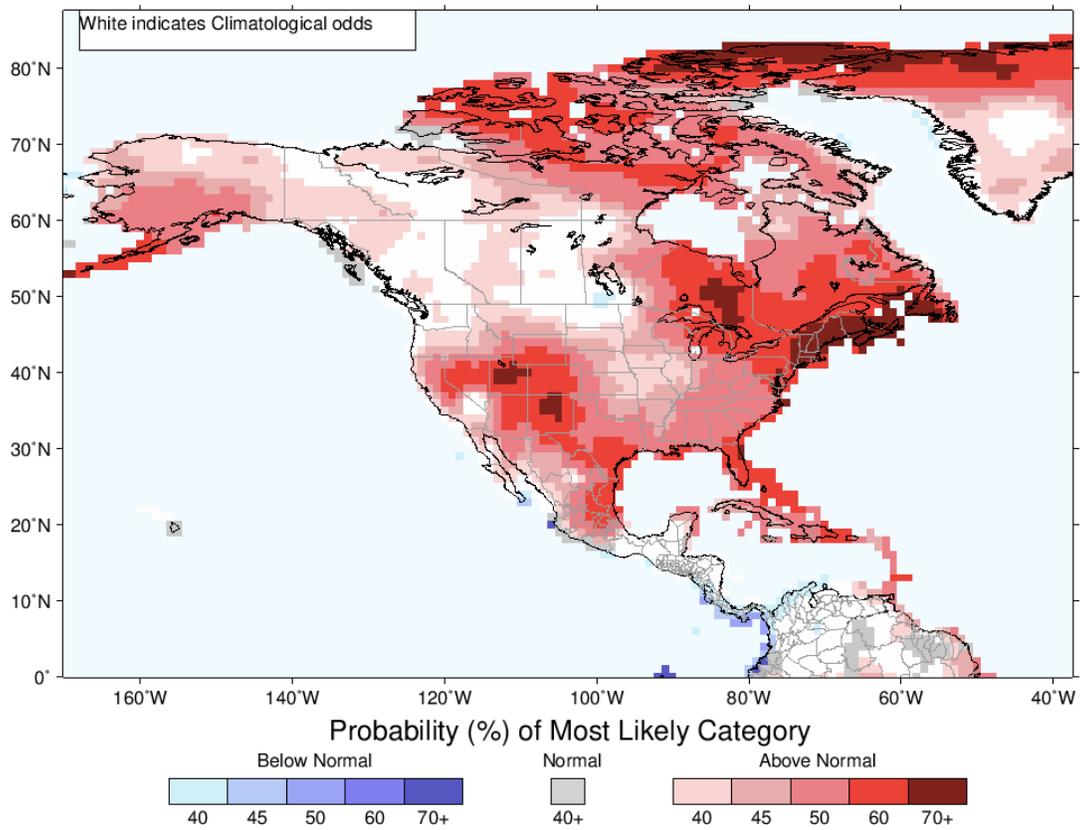


Figure 28 - IRI Multi-Model Probability Forecast for Temperature Jul-Aug-Sep 2022

EMERGENCY MANAGEMENT

Preparedness and Response

Manitoba Emergency Measures Organization (EMO) continues to work with all local authorities and emergency management partners to provide guidance and support for preparedness, response and recovery activities and to coordinate flood resources as required. Several communities throughout the province continue to be impacted by high water levels, heavy rainfall and overland flooding.

The 2022 spring flood season saw a total of 45 Local Authorities, 1 Provincial Park, 11 Northern Affairs Communities, and 9 First Nations declare States of Local Emergency. As of June 28, there are a 20 Local Authorities, 1 Provincial Park, 7 Northern Affairs Communities, and 9 First Nations with States of Local Emergency in effect.

If flooding persists, the Manitoba Emergency Coordination Centre will:

- host conference calls with local authorities and emergency management partners;
- provide continuous coordination and collaboration with emergency management stakeholders;
- maintain overall situational awareness by disseminating relevant up to date information;
- work closely with Indigenous Services Canada (ISC) and Indigenous Reconciliation and Northern Relations (IRNR) on ISC and IRNR-led response activities for First Nation and Northern Affairs Communities;
- provide guidance and support to local authorities and emergency management partners throughout the province on response and recovery related activities;
- act as the liaison to ensure flood protection materials are coordinated and supplied to mitigate high water concerns; and
- issue emergency alerts as required.

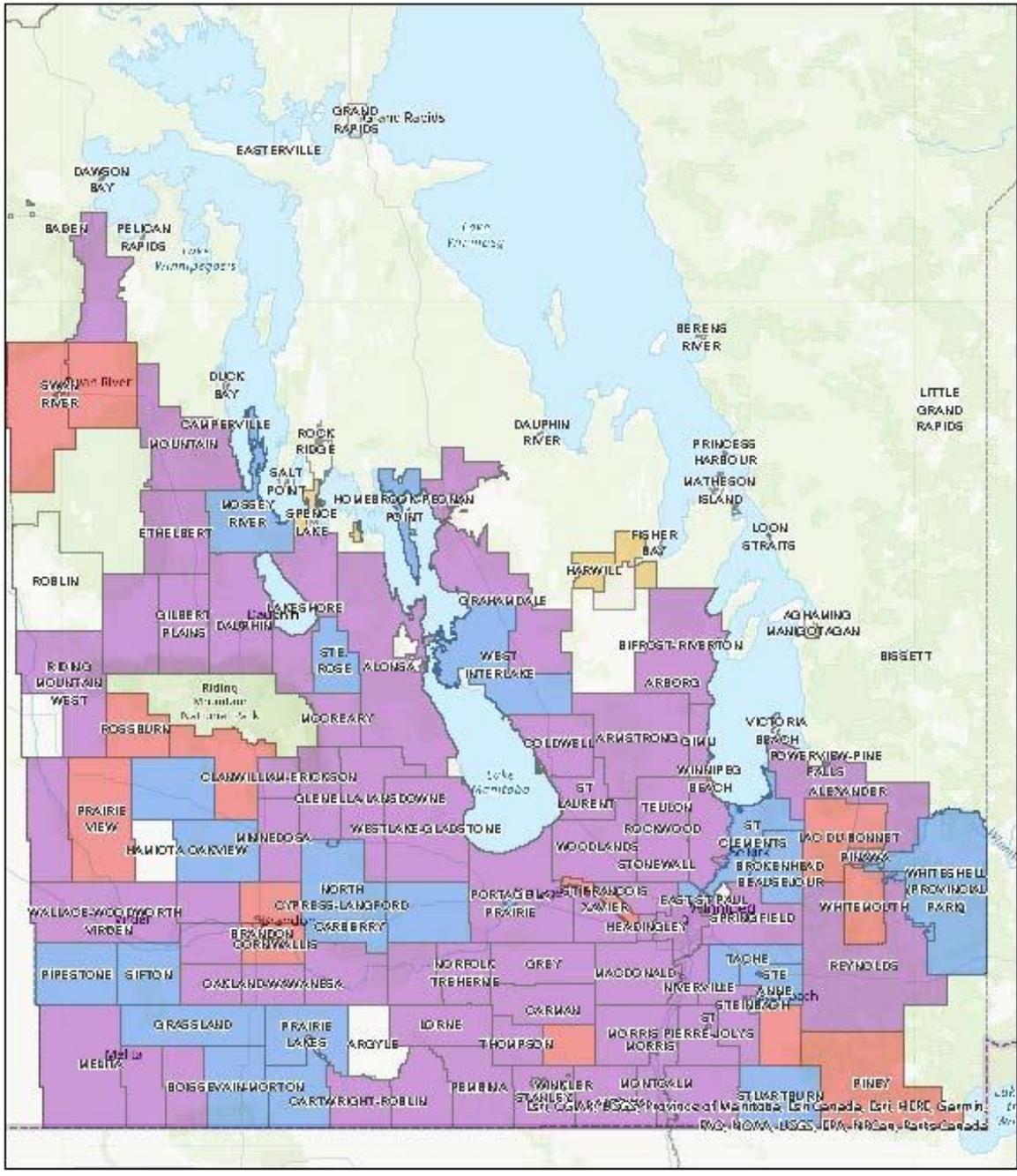
Disaster Financial Assistance

On May 9, 2022, the Manitoba government announced a Disaster Financial Assistance (DFA) program for individuals and municipalities experiencing damages to infrastructure, private residences, farms or small businesses due to spring flooding. See Figure 29. The application deadline is August 8, 2022.

As of June 24, 2022, Manitoba EMO has received a total of:

- 92 municipal applications
 - These applications list approximately 5,700 damage sites
 - 63 of municipal applications have included estimated damage costs totalling \$62.5M in damages
- 800 private sector applications
 - 419 private residences
 - 317 farms
 - 52 small businesses
 - 12 Non-Profit Organizations

Manitoba EMO continues to work with other provincial departments to assess damages resulting from spring flooding. Manitoba Environment, Climate and Parks and Manitoba Indigenous Reconciliation and Northern Relations also have significant damages to their infrastructure.



DFA Applications as of June 24, 2022

Figure 29 - DFA Applications as of June 24, 2022