



By Lynne Bereza and Lindsay Thomson, AMM

The summer THAT WASN'T

Back in January 2011, Manitoba Water Stewardship issued its first spring flood outlook for the year. To no one's surprise, it indicated high spring flood potential for much of the province, and that prediction, as Manitobans are well aware, was correct.

The 2011 flooding was unprecedented, far exceeding the capacity of Manitoba's flood control infrastructure. Since then, terms such as "1 in 300 year" floods have been tossed about, various reports have been authored, committees have been formed, and work has been undertaken to avoid a similar situation in the future.

Three years later, Manitoba's spring flood outlook held steady at "near normal." For some municipalities, like the RM of Sifton in southwest Manitoba, this still means some flooding. In fact, many municipalities in that area are still fixing infrastructure damaged in 2011, 2012 and 2013. Others were part of the "1 in 300 year" group and as spring turned into summer hoped they had dodged a bullet. But summer rains battering much of southwestern Manitoba resulted in our province, once again, facing a flood of disastrous proportions.

How bad was it? All told, there were 923 evacuations from municipalities and First Nation communities in Manitoba, and 60



A rain gauge in southwest Manitoba is surrounded by floodwater. (Photo: Tim Smith/Brandon Sun)

municipalities declared a State of Local Emergency (SOLE).

The first indication that this was going to be big came on June 27, with

the forecast of an unstable low-pressure system expected to bring 40-50 millimetres of rain to southern Manitoba.

Predicted strong winds made the situation

DISASTER FINANCIAL ASSISTANCE AND OTHER RESOURCES

Applications, forms and details about the disaster financial assistance program are available through the Manitoba Emergency Measures Organization online at www.manitobaemo.ca or by calling 204-945-3050 in Winnipeg or 1-888-267-8298 (toll-free).

Changes to DFA

The Disaster Financial Assistance Program eligibility and assistance criteria have changed, and now include:

- An updated definition of a Farm and Small Business

- Private claims increase to \$240,000
- Owned equipment rate increase to 65%
- Maximum eligibility for farmland repairs is limited to land value
- Province/Municipality sliding cost sharing scale capped at five dollars per capita for municipal expenditures

Road and Flood Information

For current highway conditions, call 511, visit www.manitoba.ca, www.mb511.ca or follow the Twitter account at www.twitter.com/MBGovRoads.

Up-to-date flood information can be found at www.gov.mb.ca/flooding/, on mobile devices at www.manitoba.ca or on Twitter at www.twitter.com/MBGov.

Farmland

The Province continues to work to assist farmers that are experiencing severe challenges due to the flood and is working with producer-led organizations to assess farmers' needs for an effective recovery. The online hay listing service at <http://web6.gov.mb.ca/HayListClntExtrnl> continues to be available for producers.

even more ominous, prompting the Province to issue summer flood warnings for the Assiniboine River, the Winnipeg River, Lake St. Martin and Dauphin Lake, along with flood watches for Lake Manitoba and Lake Winnipeg.

At the time, only three municipalities – Arthur, Edward and Wallace – had declared SOLEs. By June 29, that number had increased to 24, dozens of roads were closed, and more rainfall and wind warnings were in effect.

By July 1, instead of celebrating Canada Day, 50 families in Virden were evacuated from their homes. And by July 4, Premier **Greg Selinger** had declared a province-wide state of emergency, with 50 municipalities – or 25 per cent of the province – declaring SOLEs.

It certainly wasn't how anyone had planned to spend the summer.

SCRAMBLING TO REACT

The City of Brandon had initially intended to use the summer months to enhance its dike system, consolidate the storm drainage outlets that emptied into the Assiniboine River, and build a lift station on

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the north side of the River. But, as Mayor **Shari Decter Hirst** explains, “That work had to be put on hold as we scrambled to react to the overland flooding from torrential downpours, the anticipated floodwaters coming through the Qu’Appelle Valley, and the plow wind that flattened trees, fences, and sheds in the south end of the city.”

All the regularly scheduled construction season work had to be put on hold, too, and at one point, due to floodwaters covering roads, 18th Street was the only way in or out of Brandon. This was a concern because of potential evacuation

risks, as well as funneling all traffic onto this already overcrowded street.

Further down the Trans-Canada Highway in Portage la Prairie, Reeve **Kam Blight** was preparing for an all-too-familiar situation: a possible ‘controlled breach’ of the Hoop and Holler bend. As in 2011, all eyes were on the RM of Portage since, in addition to the infamous Hoop and Holler, the area also encompasses the Portage Diversion, South Basin of Lake Manitoba, and the Assiniboine River. “All four areas were of major concern to us during the flood,” notes Blight.

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“The A dikes and diversion banks were experiencing seepage issues as well as structural concerns. Extensive work had to be done on both the A dikes and the diversion banks to prevent them from breaching and over topping. The Hoop and Holler was prepped as a possibility through both crests. Lake Manitoba rose to above flood stage, multiple homes were protected with flood mitigation and we had evacuations affecting many properties.”

BAD NEWS, INDEED

As the floodwaters made their way east, more municipalities were impacted. “The flood began for us on Wednesday, July 2,” says **Robert Poirier**, CAO for St. Francois Xavier. “We were advised that high water was coming, as much as 15,000 cubic feet per second (cfs) down the Assiniboine. To put this in perspective, high water of interest starts at 12,000 cfs and the 2011 flood occurred at a flow of 18,300 cfs.”

The initial forecast was not that bad for St. Francois. However, the situation can change very quickly during a flood. “With our 2011 experience, we knew that the forecasters were in the early stages of their work and the numbers would change. We initially anticipated a worst case of 16,500 cfs. On the evening of July 4, Council met and we changed our own worst case – the level to which we would prepare – to 18,000 cfs.”

A “CATALYST FOR COLLABORATION”

The push to create a water commission for the Assiniboine River Basin is gaining momentum following the catastrophic flooding in western Manitoba and eastern Saskatchewan this spring.

“This ongoing (flooding) event has certainly heightened awareness of the need for a basin-wide agency,” said **Wanda McFadyen**, who was hired by the Prairie Improvement Network to manage the Assiniboine River Basin Initiative (ARBI.)

Stakeholders of the cross-jurisdictional, multi-stakeholder organization have already gathered in Virden and Minot, ND and will reconvene at a Regina conference planned for November 12 to 14, 2014.

At that time they aim to formalize the organization and map out priorities. The key role of the ARB will be serving as a catalyst for collaboration.

The initiative is gaining support from municipal leaders and their respective associations.

“We look forward to that meeting in November and we’ll support that commission 100 per cent,” Plaisier said. “We feel that all the partners ... need to sit down to talk about a solution that will be satisfactory to all.”

The City of Brandon is also on Board. “The City and Brandon University are working together to look at adaptation strategies for long term climatic change and extreme weather,” said Decter Hirst. “There is a realization within the community that our 1:350 year floods are going to be more of an annual event, and we are already planning for potential spring flooding in 2015.”

Brandon City Council passed a formal motion in support of the Assiniboine River Basin Commission during its August meeting.

*Source: Lorraine Stevenson,
Manitoba Cooperator*

“When I emerged from that Council meeting, the latest material suggested that the flows would be 18,000 cfs and that experience was showing that, because

this was July, not May, and vegetation was mature by mid-summer, elevations were one foot higher for a given flow than in 2011. Bad news indeed.”

And so the emergency efforts began, with the RM obtaining sand and sandbag filling machines and activating its emergency plan. Fortunately, surveying properties against the 2011 levels was easy – they were still clearly marked on trees throughout the RM.

A HELPING HAND

However, getting sufficient bags made up and placed would be a struggle. “Never have a disaster in July,” Poirier notes. “Volunteer turnout was low. Over the next couple days we got more sandbag making equipment and thankfully, a platoon from C Company, the Second Battalion, Princess Patricia’s Canadian Light Infantry. We anticipated that we could armour all the affected homes to a level equal to 2011 plus one foot plus six inches of “freeboard” to allow for level fluctuations and wind action.”

By July 6 more soldiers had arrived, along with fire attack crews from Manitoba Conservation, which meant the

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municipality could go up even higher – to 2011 plus one foot plus 18 inches of freeboard.

In the end, levels reached 2011 and only two homes of the 40 that received bags saw water at the sandbags. “The one foot difference between forecast and actuality was a real life-saver.”

At the peak of flood fighting efforts in July, more than 330 staff from Manitoba Infrastructure and Transportation, 20 staff from other provincial departments, 115 provincial department volunteers, 120 Manitoba Hydro volunteers, and 75 redeployed forest firefighters from across the province supported flood fighting efforts. Another 500 members of the Canadian Armed Forces assisted with emergency flood mitigation efforts along the Assiniboine River.

“The Army was magnificent,” says Poirier, “both for the work done and for their friendliness and amiable relations with the local population.”

THE IMPACT

Early estimates in July indicate that flood response and repair costs will



Premier Greg Selinger (L) and RM of Portage La Prairie Reeve Kam Blight tour the Portage Diversion control structure after a press conference on July 9, 2014. (Photo: Joe Bryksa/Winnipeg Free Press)

likely exceed \$200 million. However, this doesn't include agricultural losses that continue to be assessed. This year, unfortunately, looks to be another challenging year for many producers who

have been hit hard by flooding and wet conditions over the last three, or for some up to five years.

Poirier agrees. “Thousands of acres of farmland were affected. This is class 1

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and class 2 land and very productive. Of course all the necessary inputs – seed, fertilizer, and so forth – was already applied. The loss of crops is the worst part of the impact on us. The loss of farm income is not known but will be in the many, many millions of dollars,” he says.

According to the Manitoba Agricultural Services Corporation, 985,000 acres were unseeded this year due to excess moisture, and approximately \$63 million has been paid to date on 2,400 excess moisture insurance claims.

In terms of infrastructure affected, at least 133 provincial road segments were or still are closed, and another 114 road segments were or still are in Caution status (e.g., water over road/shoulder or is soft/muddy). This doesn't include municipal roads – in some municipalities there are as many as 150 roads damaged, and assessment of bridges is ongoing.

The RM of Sifton alone had over 100 sites/ roads damaged by the two floods – spring and summer – it experienced in 2014. “We have about 50% patched or restored to pre-flood conditions due to a dedicated staff and council,” explains Reeve **Rick Plaisier**, who co-chairs the Southwest Flood Strategy Committee, representing 35 municipalities in southwestern Manitoba. Plaisier is also the AMM Western Rural Director. “Thanks to patient ratepayers we just continue to plug away at damaged areas. But the ability to improve damaged sites and still be compensated by provincial and federal levels of government would ultimately save levels of governance many dollars.”

In Brandon, not only is the City's public works schedule significantly behind, areas damaged in 2011 have been hit hard. “The green space along the riverbank corridor is utterly destroyed- again,” says Mayor Decter Hirst. “The community had put significant effort and resources into replanting trees and shrubs and repairing trails following the 2011 flood. All that effort is still underwater, and will be for some time.”

There is a very real emotional impact on citizens as well. “As a community, residents living and working along the river corridor once again had to live with the threat of evacuation,” notes Decter Hirst.

Poirier agrees. “Many homes were not challenged by surface water, but high water led to heavy infiltration into weeping tiles and therefore into basements. Most homes near the river had extras sump pumps working hard. The psychological pressure of worrying if the pumps are working was quite noticeable,” he explains.

“The psychological stress on people, following so soon on 2011, will no doubt show up and is showing up in myriad ways.”

Resources to help affected families deal with stress and anxiety that can result from crisis situations such as flooding are available at www.gov.mb.ca/flooding/managing_stress.html.

WHAT'S THE SOLUTION?

Reeve Rick Plaisier, RM of Sifton:

Quicker action to compensate private DFA applications is an immediate need. Producers need to be compensated for holding water so that damaged downstream is minimized. Rural areas need to be treated fairly and respectfully. The Assiniboine River Basin Commission needs to be set up today not tomorrow for its time for far less rhetoric and more sincere action with rural suggestions being a priority. Mitigation projects in the province need to be implemented so that ALL regions are treated equally and not bias to urban centres.

“RMs just want to be active participants in solutions, for we are the ‘Stewards of the Land.’”

Mayor Shari Decter Hirst, City of Brandon:

The Federal government must adequately fund flood mitigation, prevention, and repair adequately. Manitoba needs to compensate producers for loss of income because of flooding.

We must approach the management of the Assiniboine River watershed from a multi-jurisdictional, multi-stakeholder perspective. Saskatchewan must be at the table, local government must be at the table, the ag and oil sectors must be at the table.

Any strategy must be long-term rather than situational – being proactive rather than reactive to flooding events. We desperately need more information and I'm pleased to see additional weather stations. But we also need to get a better understanding of climate scenarios so that we can make decisions regarding expensive capital flood mitigation and prevention infrastructure. Are we talking about a 10-year wet cycle, a 50-year wet cycle, a drought next year, tornados? What are the probabilities for changing climate (and therefore changing infrastructure and economic decisions), and the probability for more extreme weather events.

Reeve Kam Blight, RM of Portage la Prairie

I want to see the people in our municipality be able to plan for what's coming ahead and not worry about the great unknown. I want them to have some certainty.

In order for that to happen, I think there needs to be better communication amongst Manitoba, Saskatchewan and Alberta and I think the federal government needs to take a stance as well. This isn't just our local water we're dealing with – all the water seems to funnel right to us. Western water needs to be controlled or at the very least slowed down before entering Manitoba. Lake Manitoba also needs a permanent channel to Lake Winnipeg to control the level of Lake Manitoba in a timely fashion.

It is time for us to stop reacting to flood events as they come and start taking proactive measures to ensure we do not see events like this in the future. I don't want to see them (the provincial and federal governments) coming in and saving the day and providing us funding and providing the army to sandbag people and to protect homes. I want protective measures in place so we don't have to do those things.



Photo by Jody Gale, emergency volunteer, along Hwy. 26 downstream of the Baie St. Paul Bridge. In early July, this house, 500 metres from the Assiniboine River, bordered a verdant field. After hours of work by army and volunteers placing 12,000 sandbags, this was the house on July 16.

STRENGTH IN ADVERSITY

Even through the stress of a flood situation, positives do emerge. “It is inspiring to see the community come together to help neighbours and strangers – whether sandbagging homes, hauling downed trees off roofs, or dropping info sheets about potential evacuation around impacted neighbourhoods,” says Decter Hirst. “Brandon is at its finest when threatened.”

Poirier also praised the government for its response this year. “We were extremely pleased with the promptness and efficiency of the provincial support we have received,” he says. “Specifically EMO, Manitoba Infrastructure and Transportation, Manitoba Conservation, and the government in general did a very good job.

Communications and the flow of information was better than in 2011, and the quality of support was high indeed.”

FLOOD MANAGEMENT INFRASTRUCTURE FOR LAKES MANITOBA AND ST. MARTIN

The Province of Manitoba is moving forward with major investments to enhance water level regulation and the floodwater management system along the lower Assiniboine River including Lake Manitoba and Lake St. Martin.

The overall strategy for Lake Manitoba and Lake St. Martin flood mitigation includes several components intended to work together:

- Additional Lake Manitoba and Lake St. Martin outlet capacity;
- Individual home, cottage and business and community flood protection at 2011 flood protection levels;
- Enhancing Assiniboine River Dikes to increase reliable flows east of Portage la Prairie;
- Shellmouth Dam enhancements; and
- Land use planning initiatives.

The Province recently released preliminary options for a permanent outlet for Lake Manitoba and Lake St. Martin and has begun consultations with the public to collect feedback. A number of other steps, including environmental and regulatory reviews, land acquisition and final design work must be completed before construction begins.