The Red River Floodway Expansion Project

- A publication by the Manitoba Floodway Authority

More Protection. More Opportunities. - SUMMER 2005

CEO's Message -"Project Receives Green Light to Proceed"

elcome to the third edition of the Manitoba Floodway Authority's (MFA) community newsletter. As we get closer to the start of construction on one of the largest public infrastructure projects in Manitoba's history, we hope this edition provides you with a timely update on this critical flood protection project.

Recently, the floodway expansion project has received the green light from the federal and provincial governments to begin construction on the project. The decision to grant environmental approval

was based on an extensive environmental assessment process that included public hearings by the Manitoba Clean Environment Commission (CEC). As part of this process, both the CEC and the Government of Canada released reports endorsing the project. Based on these reports, Manitoba Conservation issued an environmental license and the Government of

Canada provided federal authorization to allow the project to proceed. With environmental approvals now in place, construction on the project is scheduled to begin this summer.

While awaiting environmental approvals for the project and taking steps to ensure compliance with any potential federal and provincial environmental licensing conditions, the MFA has been focusing its efforts on planning for the start of construction. This includes the final design engineering, tendering of construction work, ongoing public consultation and project administration. The following pages provide updates on these and many other MFA activities.

Over the past two years, there has been significant public interest in the floodway project. Thousands of people have participated in the public consultations and over 100,000 hits have been posted on the MFA website (**www.floodwayauthority.mb.ca**).

As CEO of the MFA, I want to thank all those individuals and groups who have participated in this process. Your input has helped protect the environment and improve the floodway expansion project. We look forward to working with you in the months and years ahead.

Yours sincerely,



Ernie Gilroy Chief Executive Officer



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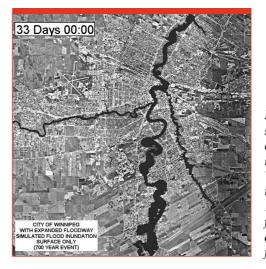
Floodway Simulation Project Now On-Line

n February, the MFA unveiled the first phase of a flood simulation project, which demonstrates the benefits of floodway expansion for residents in Winnipeg, West St. Paul and East St. Paul.

Specifically, the flood simulation demonstrates that with the existing floodway, the impact of a 1-in-700 year flood would result in basement and overland flooding for approximately two-thirds of Winnipeg. The expanded floodway, on the other hand, will dramatically reduce the amount of flooding within Winnipeg to isolated locations along the Red River inside the city.

Impact of sewer and overland flooding on Winnipeg in the event of a 1-in-700 year flood with the **existing** floodway.





Impact of sewer and overland flooding on Winnipeg in the event of a 1-in-700 year flood with an **expanded** floodway.

"The benefit of this project is that it allows people to see how Winnipeg would be impacted during a 1-in-700 year flood and how floodway expansion will protect them and their families," said Daryl Harvey, Vice-President of Operations for the MFA.

The flood simulation project is based on sophisticated computer software and is being developed in phases. Once complete, the project will assist engineers in project design, enhance emergency measures planning, and help inform the public about the floodway project.

First introduced during the Clean Environment Commission hearings, the simulation project can now be viewed at **www.floodwayauthority.mb.ca**

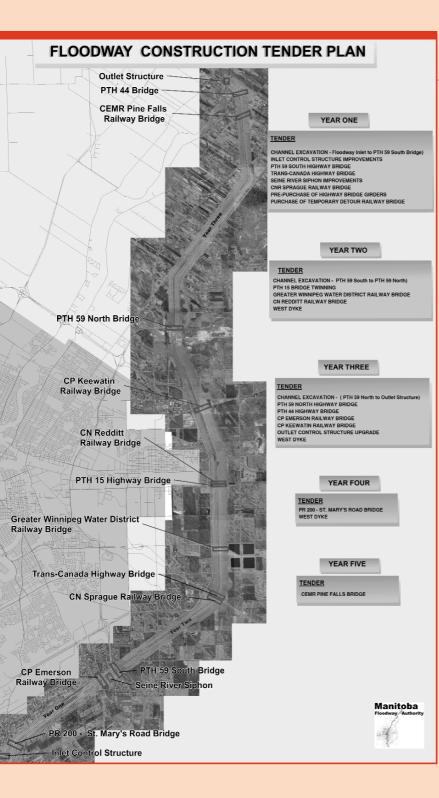
Floodway Project Receives Environmental Approvals - Construction to Start on Schedule

efore any construction on the Red River Floodway Expansion Project can begin, various environmental approvals were required from the Government of Canada and the Province of Manitoba.

In May, Canada released a Screening Report on the floodway project that confirmed the conclusion of the project's Environmental Impact Study (EIS) from August of 2004. The Screening Report concluded that, with the proposed mitigation measures and follow-up program, the project is not likely to cause significant adverse environmental effects.

The Manitoba Clean Environment Commission (CEC) has also recently released its report on the floodway project. The CEC report recommends that a licence, under the *Manitoba Environment Act*, be granted for the floodway expansion project. The CEC report was based on four weeks of public hearings that included presentations from local municipalities, non-government organizations, Aboriginal representatives and the general public.

Based on both reports, Manitoba Conservation has recently issued a license for the project and the Government of Canada has provided federal authorization to allow the project to move forward. With the environmental approval in place, construction on the project is scheduled to begin this summer.



Five-Year Construction Tender Plan Released

o help Manitobans and the construction industry better plan for construction on the Red River Floodway Expansion Project, the Manitoba Floodway Authority (MFA) unveiled its proposed Five-Year Construction Tender Plan in early May.

As part of the Five-Year Construction Tender Plan, MFA confirmed the Year-One schedule will consist of tenders for the following projects:

- Channel Excavation Floodway Inlet to Highway 59 South Bridge
- Inlet Control Structure improvements
- PTH 59 South Bridge
- · Trans-Canada Highway Bridge
- CNR Sprague Railway Bridge
- Seine River Siphon Improvement
- Pre-purchase of highway bridge girders
- · Purchase of temporary detour railway bridge

The first construction tender for the project was advertised at the end of May. It was for excavation work that will allow floodwater to enter the floodway more efficiently on the East Embankment of the Floodway Channel near Grande Pointe. The first bridge tenders will be advertised later this summer. The estimated value of the tenders to be issued in the first year of the five-year program is \$90 million.

The tender schedule for subsequent years is tentative and subject to change as the project proceeds. The timetable for construction on the project may vary depending on a variety of factors including weather, environmental licensing conditions, final design engineering and floodway operation. As a result, the construction tender schedule will be updated on a regular basis as the project moves forward.

Construction will begin in the summer of 2005 and is scheduled to occur over five years. The project is expected to provide a 1-in-700 year level of flood protection for the spring of 2009, with associated bridge and related work being completed in 2010.

5-Point Groundwater Protection Strategy Unveiled

arlier this year, the MFA unveiled a Five-Point Groundwater Protection Strategy, to help protect rural groundwater supplies in association with the expansion of the Red River Floodway.

"The Groundwater Protection Strategy is an excellent example of how the floodway expansion project is an environmental protection project," said Doug Peterson, Manager of Environmental Services for the MFA. "Floodway expansion means better environmental protection and monitoring of groundwater resources in the vicinity of the floodway. A key principle of this plan is MFA's commitment to achieve zero tolerance for any adverse groundwater impacts related to floodway expansion as we move forward."

The five-point strategy consists of the following:

- No Deepening of the Floodway Channel MFA has dramatically scaled back plans to deepen the floodway channel from initial estimates of up to two metres (six feet) to no deepening.
- Low Flow Channel Protection MFA will invest in measures to strengthen, protect and fill in erosion spots to re-establish the grade of the low flow channel. These measures will also help to improve fish habitat in the floodway channel.

- Environmental Mitigation Fund MFA has established an \$11 million environmental mitigation fund to mitigate any unanticipated, isolated environmental effects associated with the floodway expansion project including groundwater protection.
- Ongoing Monitoring In partnership with Manitoba Water Stewardship and local authorities, MFA will adopt a monitoring and adaptive management approach to identify and respond to any unpredictable adverse effects regarding groundwater.
- **Community Liaison:** MFA will establish a Community Liaison Committee to provide local residents with updates on the project and a venue to raise issues related to the expansion project, including groundwater issues. In addition, MFA will maintain a toll-free telephone line for rural residents to report groundwater concerns.

MFA will also participate in a regional groundwater study to be undertaken by Manitoba Water Stewardship and provide detailed mapping information to rural municipalities north of Winnipeg to assist in local development and land use planning.

Manitoba's Engineering Excellence Showcased on Floodway Project

n April, the MFA announced that two engineering consortiums, consisting of ten local engineering firms, were the successful bidders to undertake the final design of the Red River Floodway Expansion Project. The \$27 million award is a major financial injection into the Manitoba economy and will result in significant benefits for Manitoba's world class engineering community.



Federal Minister Reg Alcock, Manitoba Minister Steve Ashton with Cory Shangreaux from First Canadian Engineers, at final design award announcement.

The announcement was made by Manitoba Minister of Water Stewardship, Steve Ashton, and Reg Alcock, President of the Treasury Board and Member of Parliament for Winnipeg South.

The first contract, worth approximately \$16 million, is for the final design of the main floodway channel, structures and the West Dyke and was awarded to a consortium led by KGS Group that includes Acres, SNC Lavalin, UMA, Wardrop, Earth Tech, Barnes & Duncan, and First Canadian Engineers.



The second contract, worth approximately \$11 million, was for the final design of the bridges and transportation components of the project. This contract was awarded to another consortium lead by Dillon Consulting that includes Earth Tech, ND-Lea, UMA, Wardrop, Barnes & Duncan, and First Canadian Engineers.

First Canadian Engineers, an engineering firm operated by Tribal Councils Investment Group of Manitoba Ltd. and representing 55 Manitoba First Nation communities, is a partner with both consortiums and will be working on both parcels.

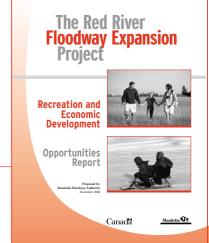
Recreation and Economic Development Opportunities Report Released

arlier this year, the MFA released a *"Recreation and Economic Development Opportunities Report"* that identifies potential future opportunities and outlines next steps associated with the floodway expansion project. The report reflected input received through the public consultation process. The main recommendations of the report include:

- establishment of a Floodway Recreation Working Group to examine issues of recreational use along the floodway including overall planning and design work process, liability issues, ongoing maintenance and financial support
- consideration of a multi-use, four-season greenway trail and designated snowmobile trails along the floodway within the project's pre-design
- initiation of a formal process that will allow Manitobans to access the excavated earth from the floodway channel
- incorporation of a four-lane crossing in the planning for the PTH 15 Bridge to meet increased future traffic flows and facilitate economic opportunities and population growth in the Rural Municipality of Springfield

- consideration of the creation of a virtual reality 3D floodway model to demonstrate the floodway's operation, recreate flood scenarios and potentially assist emergency preparedness efforts
- ongoing consultation with local municipal governments and stakeholders before proceeding with any detailed design plans
- ensuring no disruption to Springhill Winter Sports Park or the Lockport Children's Festival.

For more information or to view the "Recreation and Economic Development Opportunities Report", please visit www.floodwayauthority.mb.ca



Project Management Agreement Achieves Cost and Labour Certainty for Five-Year Project

he MFA has reached an agreement with the Manitoba Building and Construction Trades Council (MBCTC), to assist in project management of the multi-year flood protection project and to help ensure there's no delay on the project resulting from labour disruptions.

"This agreement is good news for the project, the taxpayer, workers and the construction industry," said Ernie Gilroy, CEO of the MFA. "The agreement provides a level playing field for contractors and workers who are planning to participate in the floodway project. It also helps to ensure cost and labour certainty over the five-year life of the project which allows us to better plan for construction."

The main provisions of the project management agreement are:

- No stoppage of work or work slowdown during the course of the project.
- Both union and non-union workers and contractors will be eligible to work and bid on the project.
- All contractors union and non-union will be allowed to bring current employees to the project.
- A rotational hiring provision that provides for 1/3 of new hires to be union hires; 1/3 qualified employment equity hires; and 1/3 qualified workers at large.

- Non-union workers will not be required to join a union.
- Union workers will continue to pay union dues while non-union workers will pay an equivalent fee for the services rendered by the union.
- Wages will be the same for union and non-union workers with benefits equivalent to those contained in the appropriate union benefits plan.
- Union dues and service fees will be administered by a third party administrator for MFA.
- Employee lists to be confidentially maintained by MFA.

The agreement includes provisions to facilitate meaningful employment equity hiring for certain groups that are under-represented in the Manitoba workforce including Aboriginal people, women,

visible minorities and people with disabilities.

The agreement was concluded following consultation with labour, industry, government and Aboriginal representatives. Further consultation with the construction industry was undertaken in the spring of 2005.

For further information on the project management agreement, please visit the MFA website at **www.flood-wayauthority.mb.ca**.



No Disruption to Springhill Ski Season During Floodway Construction

The MFA has confirmed that there will be no disruption to the ski season at Springhill Winter Sports Park during floodway construction over the next five years.

Originally, plans for the excavation of the floodway channel had the potential to disrupt the operations of the Springhill facility. However, after careful review of its engineering and construction plans, the MFA ensures that the ski operations will not be required to relocate or close during the expansion project.

Furthermore, the MFA is prepared to consider whether excavated earth from the floodway project would support Springhill's future plans for its ski and snowboard runs.

"We are very pleased that floodway construction will not negatively impact the use of Springhill for our clients," said Trevor Pajak, Assistant Manager at Springhill. "We believe that the expansion project and the excavated earth resulting from the project provide opportunities to enhance our facilities for the benefit of our user groups. We are very excited about our future plans for the park and we look forward to working with the Floodway Authority as we examine our potential future options."

Manitoba Tests Ice Breaker During Spring Melt

Despite the fact that the floodway expansion will have no impact on ice jams that occur north of Winnipeg, many residents raised concerns about the issue during MFA's public consultation process.

In response, the Government of Manitoba recently tested the Amphibex AE-400, a machine designed to break up ice jams on the Red River during the spring melt.

The test was part of ongoing efforts to find effective ways to prevent and remove ice jams. The machine's capabilities include breaking up solid ice sheets at places where ice jams are likely to form, as well as breaking up ice jams once they form.

Overseeing the testing was the Red River North Ice Mitigation Committee, made up of Manitoba Water Stewardship, the City of Selkirk, and the rural municipalities of St. Andrews and St. Clements.

The committee also held an ice expert workshop to better understand the issue of ice jamming.



Manitoba Tests Ice Breaker During 2005 Spring Melt

Engineering Firm Receives Award of Excellence for Work on Floodway Project

n April, the Consulting Engineers of Manitoba presented TetrES Consulting Inc. the Award of Excellence in the Environmental Category for its work on the floodway project.

"We were very pleased to receive the award for our work on the floodway project," said George Rempel. "The complexity and size of this project and its importance to the future well-being of the entire province make this a challenging undertaking. Our team is very honoured that an organization made up of our peers has recognized us for our efforts."

TetrES Consultants Inc., in association with InterGroup Consultants Limited, was retained by the Manitoba Floodway Authority (MFA) in December 2003 to conduct an independent Environmental Assessment on the proposed Red River Floodway Expansion Project. Last August, building on the independent environmental

Manitoba Floodway Authority

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In addition, the TetrES/InterGroup team helped conduct multiple rounds of public consultation including open houses, stakeholder workshops, and meetings with rural municipalities, non-governmental organizations, federal and provincial regulators, Aboriginal communities and the general public. Most recently, the TetrES/InterGroup team was involved in four weeks of public hearings about the project facilitated by the CEC.

Formed in 1978, the Consulting Engineers of Manitoba (CEM) is a non-profit organization dedicated to improving the business environment for consulting engineering firms in the province, and providing society with the highest standards of engineering and safety.



