# Proposed Red River Floodway Expansion Project Environmental Management Plan

Version 1 December 2005

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#### 1. Introduction

The following introduction provides context for this Environmental Management Plan.

#### 1.1. Background

The Manitoba Floodway Authority (MFA) was formed by the *Manitoba Floodway Authority Act* with the mandate to obtain environmental approval and construct the Red River Floodway Expansion Project (the Project). In carrying out this mandate MFA is responsible to obtain all approvals required for the Project and to co-ordinate and supervise work on the Project. The *Manitoba Floodway Authority Act* establishes a Board of Directors charged with the responsibility to direct the business and affairs of the Manitoba Floodway Authority. The MFA is responsible for the project management of the Floodway Expansion.

The Project is being funded by the Government of Canada and the Province of Manitoba. Canada and the Manitoba Floodway Authority, as an agent of the Province of Manitoba, signed the *Canada-Manitoba Canada Strategic Infrastructure Fund Agreement for the Expansion of the Manitoba Floodway* (the Agreement). The Agreement establishes the MFA as being responsible for implementing the Project within the costs and deadlines specified in the Agreement. The Agreement also establishes an Agreement Oversight Committee (AOC) with equal membership from Canada and Manitoba, to manage and implement the provisions of the Agreement. The responsibilities of the AOC include monitoring the progress of the Project and managing the financial aspects of the Project including adjustments to the components of the Project to be funded.

In view of the financial contribution by Canada to the Project and the need for federal departments to approve actions for the purpose of enabling the Project to be carried out, the expansion of the Red River Floodway is a "Project" under the *Canadian Environmental Assessment Act* (CEAA). The Floodway Expansion is also a "Development" that requires a Licence pursuant to *The Environment Act*. The MFA undertook an iterative preliminary design and environmental assessment program that involved stakeholder input to each iteration. Through this program, environmental concerns were identified, environmental effects assessed and the Project design was adjusted to mitigate adverse effects. Environmental assessment of the Project was coordinated by Canada and Manitoba through a cooperative assessment process under the provisions of *The Canada-Manitoba Agreement on Environmental Assessment Cooperation*.

The Screening Report-Red River Floodway Expansion Project (Screening Report) prepared for Infrastructure Canada and signed by the federal Responsible Authorities requires the preparation of an Overall Environmental Management Plan (EMP) that will "describe how all of the environmental commitments (including but not limited to mitigation, monitoring and follow-up) outlined in [the] screening report, the

Environmental Impact Statement, Supplemental Filings and other documents provided by the MFA will be met during all phases of the Project". Environment Act Licence No. 2691 (the Licence) requires the submission of an Environmental Management Plan that includes "plans for environmental inspections, monitoring and follow-up, plans for reporting, relevant references and a description of public input into its development".

This EMP describes the environmental management processes that the MFA will follow during the construction and operation of the Project. The goal of the EMP is to ensure that the environmental protection measures committed to by MFA and requirements of the Screening Report and Licence are undertaken in a timely and effective manner. The EMP describes the roles and responsibilities of the parties involved in implementing the Project. An adaptive management approach to continuous improvement is an integral principle of this EMP.

#### 1.2. The Red River Floodway Expansion Project

The MFA submitted the documents referenced in the Screening Report and the Licence prior to final design and the preparation of construction documents. The Project is being designed and implemented over a period of at least 4 years (2005-2009). An overall schedule for the Project components is attached as Appendix A. The details of the various elements of the Project are being finalized over the implementation period such that the detailed design takes place at the time needed to meet the Project schedule. Accordingly, the details of every aspect of the entire project will not be available prior to the award of the first construction contract. In fact, certain aspects will not be fully developed until the last year of the construction phase. The Operating Rules for the Floodway during flood events have been documented and were presented in the environmental assessment, the Screening Report and the Licence. However the detailed day-to-day maintenance and operation practices will not be available until the majority of the construction is completed. These practices will include such activities as vegetation management, debris cleanup, and equipment servicing.

Construction of the Project is a complex adaptive system involving large overall environmental measures such as the groundwater protection and monitoring program. Groundwater protection and monitoring involves work site specific considerations related to various Project elements which will be undertaken through different construction contracts, as well as consideration of the overall effects that might result from the expansion of the floodway channel as a whole. Other aspects have unique considerations specific and individual to that Project element. Still other aspects will require unique precautions that contribute to a broader environmental protection program.

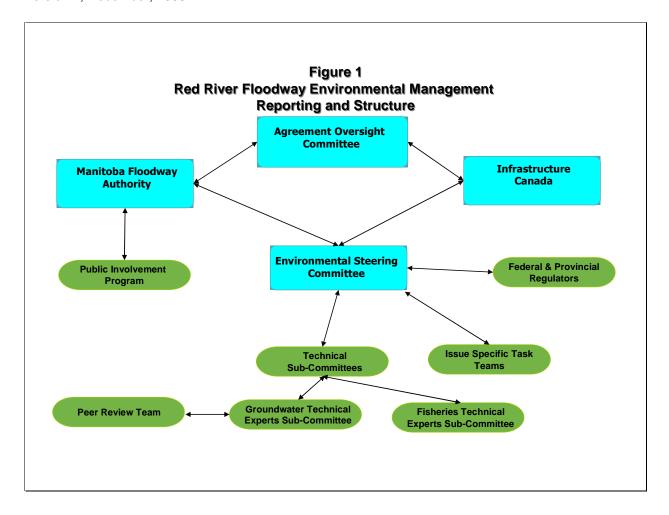
The following list contains the primary components of the Project as presented in the Screening Report:

- Floodway Channel Excavation
- Restoration/armouring of the Low Flow Channel
- Excavation of the Grande Pointe Gap
- Replacement of Bridges
- Rehabilitation of Bridges
- Enlargement and improvement of the Outlet Control Structure
- Replacement/rehabilitation of Drainage Structures that Discharge into the Floodway Channel
- Modification of City of Winnipeg Aqueducts and Deacon Drain Line
- Modification of Rural Municipality of East St. Paul Waterlines
- Modification of Seine River Syphon
- Replacement of Utility Lines
- Replacement of Oil Pipelines
- Modifications to the West Dyke
- Improvements to Floodway Inlet Structure
- Replacement of the Seine River Prairie Grove Road Crossing

The most effective and efficient manner to describe how MFA will meet its commitments and thereby achieve its environmental objectives is to provide a hierarchy of environmental plans. The EMP is a project management tool while subject specific Environmental Protection Plans describe the suite of environmental protection measures for the individual environmental areas. Specific Construction Phase Environmental Protection Plans (CPEPPs) for each contract, detail individual environmental protection actions during construction at that work site. Operational Phase Environmental Protection Plans (OPEPPs) will describe the long-term operation and maintenance procedures and environmental protection measures to be implemented after construction is completed. The EMP will not contain the same level of detail as CPEPPs or OPEPPs but will describe the management system in terms of the why, what, how, who, and when of these plans.

#### 1.3. Environmental Oversight

The MFA, as overall project manager, is responsible for implementing, monitoring and amending the environmental aspects of the Project. The implementation of the Agreement is managed by an Agreement Oversight Committee (AOC). Amongst its responsibilities the AOC is responsible for ensuring that the Project proceeds in accordance with environmental requirements identified during the environmental assessment and licensing processes. An Environmental Steering Committee (ESC) has been established which will assist the AOC with this responsibility. The purpose of the ESC is to advise the AOC, through the MFA, on the environmental activities associated with the construction of the Red River Floodway Expansion Project. Figure 1 presents a schematic representation of the relationships and reporting and information flow lines between the various environmental bodies involved in the Project.



The ESC has representation from Infrastructure Canada, MFA, Manitoba Water Stewardship and Manitoba Conservation representing the funding Responsible Authority, the two Licencees, and the provincial department responsible for enforcing the Environment Act Licence respectively. The MFA Manager of Environmental Services is the MFA representative and a co-chair of the ESC. Participation on the ESC does not preclude or in any way diminish the independent role of Manitoba Conservation to enforce the limits, terms, conditions, specifications of the Licence or Canada to enforce the conditions of any Fisheries Act Authorizations or requirements of Navigable Waters Protection Act permits. Participation by these organizations on the ESC is to receive information on the progress of the Project, the status of the environmental protection measures, and provide guidance to MFA to improve the environmental practices associated with the Project.

The following are the ESC responsibilities:

• To oversee the implementation of the EMP for the Red River Floodway Expansion Project.

- To examine environmental issues arising during the construction and operational phases of the Project.
- To establish and direct the work of standing subcommittees or task teams to undertake activities, provide peer review and technical advice regarding specific environmental issues.
- To provide status reports and make recommendations to AOC regarding environmental issues.
- To review and recommend changes to the terms of reference for the standing subcommittees and task teams.
- To implement the directions of the AOC regarding environmental issues.

#### 1.4. Purpose and Structure of the Environmental Management Plan

#### 1.4.1. Purpose

The purpose of the Environmental Management Plan is:

To describe the management system that the MFA will implement to ensure compliance with the federal and provincial requirements including the verification that all environmental commitments are implemented, monitored, evaluated for effectiveness, and that information is reported back to the Project management for adjustment if required.

#### 1.4.2. Structure and Elements of the EMP

The EMP is designed after the model produced by the International Organization for Standardization (ISO) Standard 14001 which standardizes the elements that an environmental management system should contain presented in Figure 2.

#### Step 1: Environmental Policy

The MFA has developed an Environmental Protection Policy Statement. All parties to construction contracts are expected to conduct their Project related activities in accordance with this policy. MFA, the Contract Administrators, and Contractors are required to sign the Policy to demonstrate acceptance of this commitment. The MFA Environmental Policy is attached as Appendix B.

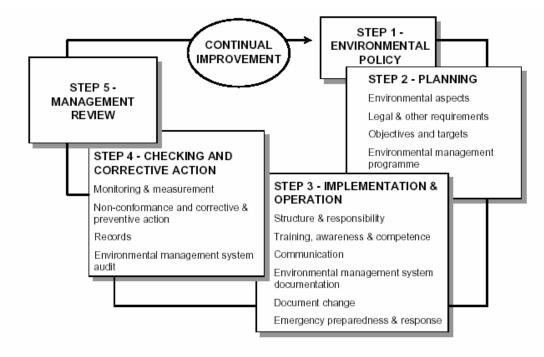


Figure 2: The 5 Steps of ISO 14001

#### Step 2: Planning

Step 2 of the model is to plan Steps 3 and 4 which are the implementation activities. Section 2 of this EMP describes the activities that MFA will undertake to comply with the environmental requirements for the Project. The EMP is a tool with which to confirm that these activities have occurred. The Screening Report prescribes the elements of the EMP is to include as follows:

- Construction Phase Environmental Protection Plans
- Operation Phase Environmental Protection Plans
- Environmental Inspection Plans
- Monitoring and Follow-up Plans
- Reporting Plans, and
- Any other conditions of the Screening Report and the Licence and other environmental approvals and related conditions as appropriate.

The Licence includes, amongst the Screening Report elements, the condition that MFA prepare and submit Environmental Protection Plans. This requirement is considered as an "other condition" under the EMP elements described in the Screening Report. These elements form the main sections of this EMP.

This EMP consists of a coordinated set of key points for each element of the EMP as follows:

- Objective of the element,
- How the objective will be achieved,
- Who has the roles and responsibilities for the element,
- What action will be taken,
- When key milestones will be reached.

#### Step 5: Management Review

The EMP embodies the adaptive management approach and allows for adjustments to the environmental protection activities as necessary and for continuous improvement of the Project. The MFA acknowledges the need to monitor the residual effects of the Project and to evaluate the effectiveness of the environmental protection measures implemented. MFA also acknowledges the possibility that adjustments to the mitigation measures may be indicated by the data collected respecting the predictions made or the success of the environmental protection measures implemented. Monitoring, reporting, and management decision making are integral to the various levels and elements of environmental protection planning. Section 9 below describes the Management Review process in place.

#### 1.5. Public Involvement

The content of this version of the EMP was based on the public comments, concerns, and issues that were expressed between July 2003 and March 2005 during the four rounds of open houses, individual stakeholder meetings, input from interested Aboriginal communities, and the Clean Environment Commission public hearing.

The MFA will continue to involve the public and stakeholders by establishing a Public Liaison Committee, holding public information sessions, and meeting with Aboriginal groups and stakeholders. The MFA is committed to considering the public input provided through these opportunities when adjusting the EMP. As well the mitigation, inspection, monitoring, follow-up, and reporting plans that comprise the EMP will be reviewed to maintain continuous improvement of the environmental management practices associated with the Project. Additional details on the reporting and consulting plans are provided in Section 7 below.

#### 2. EMP Elements

#### 2.1. Schedule and Activity Tracking

#### 2.1.1. Objective

To ensure that planning, approval, construction, studies, and environmental submittal requirements and Project commitments are anticipated and undertaken in a timely, efficient, and effective manner.

To ensure that planning, approval, construction, studies, and environmental submittal requirements of the Project are documented and reported in a timely, efficient, and effective manner.

#### 2.1.2. How:

In view of the complexity and the number of individual actions required for successful completion of the Project, the MFA will be utilizing sophisticated computer project management software (Primavera). Included in the program schedule will be critical environmental management events such as authorization submissions and reporting requirements.

The software provides the ability to schedule the key actions, give alerts when actions are due, when actions are overdue, and provides progress reports for Management Review.

#### 2.1.3. Who:

The MFA and the Project Managers for the Detailed Design Engineers and Contract Administrators will develop the computer scheduling and tracking program.

The environmental activity status reports generated by Primavera will be used by the MFA to manage the Project. The MFA senior management and contract managers will receive and review the Project progress reports. Environmental reports will also be submitted to the ESC. The ESC will prepare and provide summary reports to the AOC through the MFA.

#### 2.1.4. What:

The project management program will schedule and track administrative and environmental functions within the following guidelines:

 Primavera is the project management software being used and has been specifically developed for use on large, complex projects, in a multi-user environment.

- Primavera allows many individuals to be assigned to and focus on the management role of individual interrelated projects or project components, while at the same time Primavera provides a system of linking critical aspects of those individual projects or project components so that project managers are constantly aware of external factors or constraints which have a driving effect on their schedules.
- The Critical Path Method (CPM) is being used as the basis of developing the network logic in all schedule components.
- The individual engineering firms will input all pertinent details of the engineering design and construction phases of the Project.
- The MFA will develop the portion of the overall project schedule that contains all 3<sup>rd</sup> party input and approvals, including environmental submittals and authorizations, regulatory compliance reporting and submittals, land acquisition, utility relocations, public involvement and consultation.
- The MFA portion of the schedule will be interlinked with the engineering consultants' design schedules and with the Construction schedules using constraints (milestones for submission dates, 'must-finish-by' constraints for submission development and periodic reporting activities).
- All project managers will be kept aware of external constraints to critical aspects such as tender dates and construction start dates that others may be responsible for, the delivery of which can have significant effects on the Project.

Primavera will include identification of future authorizations required (e.g. under the *Fisheries Act* or *Navigable Waters Protection Act*) and any environmental protection measures required by those authorizations. A matrix of key commitments made by MFA, approvals required, and approval requirements for the Project is attached as Appendix C. The matrix lists the what, who, and when for each environmental activity. The matrix will provide input information to Primavera. The matrix will be used by the MFA and ESC to ensure that there is an implementation action associated with each commitment or requirement and will be used as a check list to verify that the actions have been successfully completed.

#### 2.1.5. When

The project management system has been developed and the tasks identified in Appendix C are being incorporated.

#### 2.2. Environmental Protections Plans (EPPs)

#### 2.2.1. Objective

To identify the suite of possible environmental protection measures appropriate for all project phases.

#### 2.2.2. How:

The EPPs will be developed through a review of best management practices or standard procedures available. The EPPs will document the environmental measures selected to address the appropriate environmental subjects and will be submitted to the Director, Manitoba Conservation, Environmental Assessment and Licensing Branch pursuant to the Licence.

#### 2.2.3. Who:

The MFA will review the best management practices and standard procedures available and prepare the EPPs for submission. Where necessary the engineering design team or environmental consultants will be consulted.

#### 2.2.4. What:

An EPP will be developed that will document the suite of possible environmental protection and mitigation measures considered appropriate to address each of the following environmental subjects as provided by the Licence:

- Water quality and quantity protection,
- Sediment and erosion control,
- Fish and fish habitat,
- Physical environment components including climate, air quality, noise, soils, vegetation, wildlife and wildlife habitat, and species at risk,
- Transportation infrastructure and utilities,
- Health,
- Heritage resources, and
- Accidents and malfunctions.

#### 2.2.5. When

The EPPs will be submitted for approval before the 2006 construction contracts.

#### 2.3. Construction Phase Environmental Protection Plans (CPEPPs)

#### 2.3.1. Objective:

To describe how environmental protection will be maintained during the construction of each element and component of the Project.

#### 2.3.2. How:

CPEPPs are the work site specific action plans that will be developed by selecting the appropriate environmental protection measures from the EPPs. Each CPEPP will document all of the environmental protection measures to be undertaken at the work site and the corresponding contract documents.

#### 2.3.3. Who:

The detailed design engineers are responsible to incorporate the appropriate environmental protection measures into the design of Project components. Work site specific environmental contract documents will be prepared by the detailed design engineers to be added to the standard specifications prepared by MFA that will apply to the entire component.

The MFA will review the best management practices and standard procedures available as presented in the EPPs and the environmental specifications developed by the detailed design engineers. Considering these inputs the MFA will prepare and submit the CPEPP documents to the federal and provincial regulators. When necessary the detailed design engineers or environmental consultants will be consulted on the CPEPP.

The contractor will be responsible for implementing the environmental protection measures specified in the contract documents.

#### 2.3.4. What:

The CPEPPs will document the:

- commitments made to environmental protection and sustainable development by the parties responsible to implement the plans,
- roles and responsibilities of each party in fulfilling that commitment,
- regulatory approvals required
- environmental measures that will be taken,
- protocols regarding inspection and reactions to inspections findings,

- emergency plans,
- monitoring and follow-up to be undertaken,
- reporting procedures, and
- management review, evaluation and adjustment procedures.

An example table of contents for the CPEPPs is attached as Appendix D.

#### 2.3.5. When

The CPEPPs will be prepared and submitted to federal and provincial regulators prior to or at the time that each contract tender is advertised.

#### **2.4.** Operational Phase Environmental Protection Plans (OPEPPs)

#### 2.4.1. Objective:

To describe how environmental protection will be maintained during the on-going active and in-active operation of the Red River Floodway following construction of the expansion.

#### 2.4.2. How:

The OPEPP is the long term action plan that will include the appropriate environmental protection measures adopted from the EPPs and operation and maintenance manuals.

#### 2.4.3. Who:

Manitoba Water Stewardship is the department responsible for the operation of the Red River Floodway during and after construction of the Project. The MFA is responsible for the maintenance of the works. The OPEPP will be produced and submitted jointly by the MFA and Manitoba Water Stewardship.

#### 2.4.4. What:

The overall Operational Phase Environmental Protection Plan (OPEPP) will involve both maintenance and operational aspects, including the practices and procedures of the compensation and environmental mitigation programs. The OPEPP will document the:

- commitments made to environmental protection and sustainable development by the parties responsible to implement the plans,
- roles and responsibilities of each party in fulfilling that commitment,

- environmental measures and mitigation programs that will be taken,
- monitoring and follow-up plans,
- reporting, and
- management review, evaluation, and adjustment procedures.

#### 2.4.5. When

Operating and maintenance plans for the various components of the Project will be developed as construction of the various components is completed. The OPEPP will be prepared and submitted to federal and provincial regulators on or before July 8, 2007.

#### 2.5. Environmental Inspection Plan

#### 2.5.1. Objective

To describe how MFA will ensure appropriate field inspection during construction activities of the Project.

#### 2.5.2. How:

MFA will undertake certain contract administration responsibilities and will engage outside Contract Administrators for other contract administration responsibilities. MFA's and the Contract Administrators' inspection responsibilities will be identified in the Contract Administrator Agreements and described in the CPEPPs. MFA will engage a third party consultant to conduct an environmental site assessment of the work sites prior to expiration of the contractor's agreement. The results from the inspection programs will be reported to the MFA Project Management, ESC, Public Liaison Committee, stakeholders, Aboriginal communities, and federal and provincial authorities.

#### 2.5.3. Who:

The environmental inspection plan will involve staff from the MFA, the Contract Administrator, and the contractors as follows:

#### 2.5.3.1.Manitoba Floodway Authority

The MFA environmental inspection team will consist of civil technologists and environmental scientists with environmental inspection experience. The team will be lead by a senior environmental inspector with experience in managing an environmental field inspection unit and administering contract documents.

The composition of the MFA environmental inspection team will be reviewed and evaluated at least annually. Additional staff or staff with a specific expertise will be engaged as determined necessary.

#### 2.5.3.2.Contract Administrator.

The Contract Administrator will have a Site Engineer or Inspector on the work site at all times work is being undertaken. The environmental inspector will be on site on a regular basis but not at all times.

#### 2.5.4. Contractor

The Contractor shall have staff, trained and certified in the handling of dangerous goods, present on-site whenever said dangerous goods are being utilized for the performance of the work.

#### 2.5.5. What:

The inspection activities are summarized as follows:

#### 2.5.5.1.Manitoba Floodway Authority

MFA's inspectors will inspect the site to ensure that the site is managed in accordance with the Contract Documents and the CPEPP. The inspectors will ensure that the construction and installation of environmental protection measures, such as silt fences and materials handling facilities are in accordance with the contract documents.

The inspectors will focus on the maintenance of the environmental protection measures and on the adequacy of the measures to achieve the level of environmental protection. Standardized inspection forms will be used to maintain a documented record of the site conditions and are attached as Appendix E. The MFA inspectors will bring environmental concerns to the attention of the Contract Administrator.

The third party environmental site assessor will conduct a Phase I Environmental Site Assessment of the contractor's work area.

#### 2.5.5.2.Contract Administrator.

A Contract Administration Agreement will identify the Contract Administrator's inspection responsibilities. The Contract Administrator will ensure that the environmental protection measures are constructed and that the silt fences and sediment barriers are maintained and cleaned in accordance with the contract documents. The Contract Administrator has the authority to issue a stop work order and to order additional environmental protection measures deemed necessary to ensure environmental protection.

#### 2.5.5.3.Contractor

The Contractor's inspection responsibilities are prescribed by the contract documents and reported in the CPEPPs. The Contractor's major focus is to inspect the fuel storage containers, tank vehicles, dangerous goods and hazardous wastes storage facilities and sites for releases of fuel, dangerous goods or hazardous waste. The Contractor must maintain records of the dates that inspections took place, the name of the inspector, the length of silt fence cleaned, and if releases of debris or deleterious substances are discovered, the corrective actions taken.

#### 2.5.6. When

Construction inspections will commence with the start of construction and be conducted as described in the CPEPPs. The Phase I Environmental Site Assessments will be conducted at the point of substantial completion as defined in the construction documents. Post-construction monitoring will continue for various durations appropriate to the condition being monitored.

#### 2.6. Monitoring and Follow-up Plans

#### 2.6.1. Objective

To verify environmental effects predictions made during the engineering design and environmental assessment of the Project.

To provide data with which to evaluate the effectiveness of mitigation measures undertaken.

To provide data with which to implement adaptive management measures and for improving future environmental protection activities.

#### 2.6.2. How:

The adaptive management approach will be followed whereby lessons learned during the monitoring and follow-up programs will be applied to continually improve subsequent environmental protection activities.

MFA will engage specialized environmental consultants to conduct monitoring of specific components of the environment. The results from the monitoring and follow-up programs will be provided to the ESC, Public Liaison Committee, stakeholders, Aboriginal communities, and federal and provincial authorities.

Additional monitoring or adjustments to the monitoring programs will be made in consideration of the responses from the ESC, Public Liaison Committee, stakeholders, Aboriginal communities, and federal and provincial authorities.

The Consultant and MFA will consider the results from the monitoring and follow-up programs to review the status of the environmental protection activities on an ongoing basis. If the monitoring programs identify any unforeseen environmental effects or the environmental protection measures are not performing as intended, the Manager of Environmental Services will bring such occurrences to the attention of the MFA executive committee and recommend amendments. The ESC may be consulted for advice on environmental issues that may arise. Adjustments to environmental protections measures will also be reported to the ESC.

#### 2.6.3. Who:

MFA will arrange and manage the contracts with the specialized environmental consultants. MFA will also manage the public involvement programs through which the interested parties will be provided the information and opportunities to comment on the data. As presented in the Introduction of this EMP, the MFA is the Project Manager for the Project. In this role, the MFA will make final decisions on adjustments to environmental activities.

The specialized environmental consultants will undertake monitoring and followup programs in their respective fields of expertise.

The ESC is responsible to oversee the technical review of the results from the monitoring and follow-up programs for compliance with the requirements and consider possible improvements. The ESC will provide advice and make recommendations to the MFA respecting adjustments to the monitoring programs or mitigation measures to implement those improvements.

The AOC will use the results of the monitoring and follow-up programs to make funding decisions respecting the components of the Project.

#### 2.6.4. What:

Broad Project component or environment component monitoring programs will be developed to monitor the following:

- Surface water quality,
- Low Flow Channel base flow,
- Groundwater levels,
- Groundwater quality,
- Re-vegetation management,
- Fish passage,

- Fish habitat compensation success,
- River bank stability.

Site specific monitoring will be undertaken respecting:

- Surface water quality,
- Groundwater levels,
- Groundwater quality,
- Erosion and sediment control,
- Re-vegetation management, and
- Rare and endangered species.

Each monitoring program and follow-up program will include:

- Objectives of the program,
- Methodologies,
- Analysis,
- Conclusions and recommendations and
- Reporting.

The site specific monitoring will be done in conjunction with the overall monitoring programs where appropriate. For example, overall surface water quality will be monitored upstream and downstream of the Red River Floodway. Additional monitoring locations will be included, upstream and downstream of construction sites in order to detect quality changes that could be attributed to the construction activity. River bank, water quality, fish and wildlife monitoring will be conducted to identify any effects of non-spring emergency operation.

Procedures for identifying and tracking issues and resolving conflicts or differing opinions are discussed elsewhere in this EMP. As presented in the Introduction of this EMP, the MFA is the Project Manager for the Project and the MFA is responsible for managing the Project.

#### 2.6.5. When

Baseline monitoring began during the environmental assessment phase of the Project. Construction monitoring will be conducted routinely to determine the

success of the mitigation measures implemented and to identify any unpredictable effects. Post-construction monitoring will continue for various durations appropriate to the condition being monitored.

#### 2.7. Reporting

#### 2.7.1. Objective

To provide the Responsible Authorities, Aboriginal communities, stakeholders, and the general public with timely and accurate information.

To provide the Responsible Authorities, Aboriginal communities, stakeholders, and general public with opportunities to provide comments, suggestions, and opinions on the Project, the environment protection measures, and the monitoring programs.

#### 2.7.2. How:

A component of the regulatory requirements is to report to the interested parties and to consider feedback in the on-going implementation of the environmental protection measures including the monitoring and adaptive management to continuously improve the environmental protection provided.

The ESC has been established to facilitate information exchange and Responsible Authorities' decision making related to environmental matters. Details on the ESC were provided in Section 1.3 above.

The MFA has developed a Public Involvement Plan (PIP). The purpose of the PIP is to provide opportunities for on-going involvement of and dialogue with Aboriginal communities, local governments, stakeholders, interested parties, and the general public on the Project. The Proposed Plan for On-going Public Involvement is attached as Appendix F. The proposed public involvement plan consists of 10 principle elements as follows:

- Committees The MFA will establish standing committees for the project: Public Liaison Committee, Recreation Working Group and Technical Expert Subcommittees such as the Fisheries Technical Experts Committee and the Groundwater Technical Experts Subcommittee.
- Groundwater Peer Review In partnership with Manitoba's Department of Water Stewardship, MFA is responsible to ensure that an arms-length, independent peer review team is established to review the project's groundwater monitoring and protection plans. It is anticipated that the Groundwater Technical Experts Subcommittee would be the agent that manages the establishment of the Groundwater Peer Review team on behalf of the MFA and Water Stewardship. The Groundwater Technical Experts Subcommittee has not yet been established.

- **Aboriginal Communities** MFA will continue an ongoing dialogue with local First Nations and Métis communities regarding various economic and environmental matters.
- **Municipal Governments** MFA will initiate a schedule of regular meetings with rural municipalities and the cities of Winnipeg and Selkirk.
- West Dyke Extension The MFA will work in partnership with the Rural Municipality of MacDonald regarding the final design of the West Dike extension. Community meetings will be held prior to construction.
- **Highway Bridge Construction** MFA will initiate local meetings with residents who may be impacted by individual highway bridge construction projects with a special emphasis on groundwater protection and potential traffic disruptions.
- Workplace Meetings MFA will initiate regular meetings with participating contractors and unions regarding any potential safety, human resource and administrative matters that may arise on the project.
- Communication MFA will continue to publish regular newsletters for local residents to provide project updates and progress reports. MFA is retaining its toll-free line (1-866-356-6355) for general inquiries about the Project and in addition has also established a 24-hour, 7-day toll free line (1-877-456-1201) for citizens to report well problems that may be a result of the Floodway construction activities. MFA's project web-site will also be enhanced.
- Public Information Booths MFA will continue to establish booths at local shopping centers and community places throughout the region to provide the general public with project updates, answer questions, and receive comments.
- **Drainage & Navigation** MFA will meet with stakeholders, such as the Cooks Creek Conservation District (CCCD) and Save Our Seine Inc. (SOS), to ensure MFA's final design plans enhance local drainage opportunities and support navigation safety.

Information will be reported and feedback received through the PIP and the environmental committee structure. Figure 1 is a schematic depiction of the committee and reporting structure.

The ESC will interact with a Public Liaison Committee, the environmental monitoring and study consultants, individual stakeholders, stakeholder groups, and Aboriginal and local governments through the representatives for MFA and Infrastructure Canada. The technical expert sub-committees and task teams would interact directly with the ESC but may be invited to attend public and stakeholder meetings.

#### 2.7.3. Who:

#### 2.7.3.1.Environmental Steering Committee

Co-Chairs: One to be designated by Infrastructure Canada, and one to

be designated by Manitoba Floodway Authority

representing the two funding partners.

Members: One representative, including chairpersons, from each of:

• Infrastructure Canada

• Manitoba Floodway Authority

• Manitoba Conservation

Manitoba Water Stewardship

#### 2.7.3.2.Groundwater Technical Experts Sub-committee

Co-Chairs: One to be designated by Infrastructure Canada, and one to

be designated by Manitoba Floodway Authority

Members: One representative, including chairpersons, from each of:

- Manitoba Water Stewardship (Licensing, Groundwater Monitoring, Office of Drinking Water)
- Infrastructure Canada
- Manitoba Floodway Authority
- Other members as determined by the ESC (On an issue specific basis including Peguis First Nations, Manitoba Métis Federation, academia, Health Canada, Manitoba Health, local stakeholders, private sector consultants, plus others.)

#### 2.7.3.3.Groundwater Peer Review Team

 In partnership with Manitoba's Department of Water Stewardship, MFA will establish an arms-length, independent peer review team.
 It is anticipated that the Groundwater Technical Experts Subcommittee take the lead role in selecting the Peer Review Team however the terms of reference for the Subcommittee have not been finalized.

#### 2.7.3.4. Fisheries Technical Experts Sub-committee

Co-Chairs: One to be designated by Infrastructure Canada, and one to

be designated by Manitoba Floodway Authority

Members: One representative, including chairpersons, from each of:

- Department of Fisheries and Oceans
- Manitoba Water Stewardship, Fisheries Branch
- Infrastructure Canada
- Manitoba Floodway Authority
- Other members as determined by the ESC (On an issue specific basis including Peguis First Nations, Manitoba Métis Federation, Fish Futures, academia, Conservation Districts, private sector consultants, others.)

#### 2.7.3.5. Public Liaison Committee

The MFA is charged with the responsibility to file a proposal for a Public Liaison Committee. The proposal for the committee membership and terms of reference was developed and submitted on November 8, 2005. The MFA proposed a Committee consisting of members representing the follows;

- Public citizens
- Rural Municipalities
- Assembly of Manitoba Chiefs
- Manitoba Metis Federation
- City of Winnipeg
- City of Selkirk
- Manitoba Floodway Authority

#### 2.7.4. What:

The major elements of the Public Involvement Program are to exchange information and provide opportunities for interested parties to voice their opinions, comments and suggestions. The information exchanged will include:

- Progress of the Project
- Up and coming construction activities in local areas,
- Environmental monitoring plans and results,
- Construction reports including:
  - all accidents, spills, leaks, and releases and the reporting and clean-up procedures used;
  - any reviews, improvements and adjustments to the environmental protection measures;
  - details of all training sessions, including the schedule of these sessions and the names of participants;

- a full inventory of dangerous goods brought onto the site;
- a full inventory of all hazardous wastes encountered on the site
- records of all waste hauled from the site for disposal, including the location, name and description of the disposal facility;
- records of all fuel delivered to the site:
- records of equipment inspections and maintenance;
- records of all public complaints,
- records of actions taken to remove deleterious substances and debris from watercourses,
- Reports from the technical sub-committees or task teams,
- Report on individual stakeholder, Aboriginal community or municipal community meetings,
- Issues of interest.

The purpose of the Groundwater Peer Review is provide an opportunity for persons with special expertise or experience to evaluate the work and make suggestions for improvement or validate that the work has been done in an appropriate manner. The scope of the Groundwater Peer Review Team is defined by the Licence as the review of the project's groundwater monitoring and protection plans including:

- baseline information, modeling and data and analysis gaps in connection with the Project;
- monitoring programs proposed in connection with all phases of the Project;
- health risk assessment of the Project;
- measures to prevent increased groundwater loss into the channel;
- all mitigation measures in connection with the Development, as discussed in EMP and Construction Phase Environmental Protection Plans, including measures to prevent contamination of the Birds Hill and Carbonate aquifers.

#### 2.7.5. When

The requirements for reporting to the public will vary with the program and regulatory requirements. Appendix C includes the reporting and submittal requirements.

The MFA filed a proposal for the Public Liaison Committee on November 8, 2005. MFA will schedule PIP activities as information becomes available, for example the Highway Bridge Construction local meetings will be held prior to start of construction of each bridge but will require the design details to be completed before the meetings can held.

#### 3. Management Review

#### 3.1. Objective

To maintain continuous improvement by reviewing the adequacy, suitability and effectiveness of the environmental management practices associated with the Project.

#### **3.2. How**

As described in above, the monitoring and follow-up programs will report results to the Project Managers primarily through Primavera and the Manager of Environmental Services.

The results will also be reported to the AOC through the MFA for determination of compliance with the provisions of the Agreement. The responsibilities of the ESC are provided in Section 1.3 above. The ESC will be MFA's principle means of consultation with the Responsible Authorities.

#### 3.3. Who

MFA's management review will occur on two levels. The Contract Managers and Environmental Manager will have the detailed information with which to make recommendations. The MFA executive committee and Board of Directors have the authority to make decisions about the environmental protection practices and resources allocated to those practices.

#### **3.4.** What

Management is expected to review the various elements of the EMP, the strategic approaches and resource allocations, and the environmental practices undertaken.

#### **3.5.** When

The MFA executive committee meets every Tuesday and Thursday and the MFA Board of Directors meets at least quarterly. Systems are in place to record decisions.

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## Appendix A Overall Project Schedule

200	05 Business Plan MANITOBA FLOODWAY AUTHORITY					
ID		2002 2003 2004 2005 2006 2007 2008 2009				
1	J	JJASONDJEMAMJZASONDJEMAMZASONDJEMAMZASONDJEMAMZASONDJEMAMZASONDJEMAMZASONDJEMAMZASONDJEMAMZASONDZENENENENENENENENENENENENENENENENENENE				
2		Shaded area indicates  possible floodway operation				
3	PHASE 1- PROJECT DEFINITION & ENVIRONMENTAL ASSESSEMENT	PHASE 1				
4	Project Definition & Environmental Assessment (Part 1)	├-    +   <del>                               </del>				
5	Project Definition & Environmental Assessment (Part 2)					
6	Environmental Review Process	Environmental Review Process Environmental Re				
7	Environmental License Issued (Target Date)	License Issued 🕟 Jul 12 '05				
8						
9						
10	Final Engineering Investigations & Surveys  Floodway Expansion - Land Acquisition	Final Engineering Investigations & Surveys				
12	11.1.1.1	Floodway Expansion - Land Acquisition				
13	Mitigation	Mitigation				
14	Special Programs					
15						
16	PHASE 3 - CONSTRUCTION	<del> </del>				
17	Contract Administration	Contract Administration				
18	Channels - Excavation & Erosion Protection	├				
19	Low Flow Channel	TO THE CONTROL OF THE CONTROL				
20	Main Channel Work and Revegetation	Main Channel ———————————————————————————————————				
21	Rail Bridges	Rail B				
22	CPR - Emerson Bridge CNR - Sprague Bridge					
24	CNR - Sprague Bridge  CNR - Redditt Bridge	CNR - Sprague Bridge CNR - Redditt Bridge CNR - Red				
25	Greater Winnipeg Water District Bridge	GWWD - Bridge				
26	CPR - Keewatin Bridge					
27	CEMR - Girder Prepurchase	CFMP - Girder Propurchase				
28	CEMR - Pine Falls Bridge	1   +   +   +   +   +   +   +   +   +				
29	Highway Bridges					
30	Pre-purchase highway girders	Pre-purchase highway girders				
31	St. Mary's Road Bridge PR 200	St. Mary's Road				
32		Fin 59 South				
33	Trans Canada Bridge PTH 15 Bridge	PTH 15				
35		PTH 15 PTH 15 PTH 15 PTH 15 PTH 15 PTH 15 PTH 59 North				
36						
37						
38	Utility Relocations	Other  Utility Relocations				
39		Outlet Structure				
40	West Dyke	West Dyke				
41	Aqueduct Modifications	Aqueduct Modifications				
42		Miscellaneous Structures  Miscellaneous Structures				
43						
44	Transcona Storm Sewer Outlet	Transcona Storm Sewer Outlet				
45	Floodway Inlet Structure	Floodway Inlet Structure				

## Appendix B Environmental Policy

#### Manitoba Floodway Authority Environmental Protection Policy

The Manitoba Floodway Authority, Consultants, Contract Administrators, Contractors, and agents are committed to being a positive and creative force for the protection and enhancement of the environment; having respect for the public that could be affected by our decisions and actions; and being responsible stewards of the environmental resources in our care. In recognition that our construction activities could affect the environment we are committed to a proper understanding of these potential environmental impacts and have adopted measures aimed at protecting and preserving our environment and promoting sustainable development in accordance with the following fundamental principles:

We will undertake construction activities in a manner that conserves and enhances resources, prevents pollution, reduces wastes, and promotes recycling as far as technically and economically practicable in all aspects of our construction activities.

We will comply fully with environmental laws, regulations, permits and agreements, and will incorporate our own criteria in the interests of environmental protection where no other requirements exist.

We will undertake environmental awareness and information dissemination so that all workers and the local community understand the significance of our environmental protection measures.

We will routinely monitor our environmental performance to evaluate the effectiveness of our environmental protection plan and practices and to identify areas where improvement can be made.

We will take due care and caution at all times to anticipate and prevent environmental accidents on the project, and to have in place a plan to respond if necessary, in a safe, effective, efficient, and timely manner.

We will carry out these environmental protection measures and interactions with our regulators and the neighboring community in an honourable, respectful, open, and transparent manner.

### Appendix C Commitment Matrix

Category	Commitment	Due Date	MFA	Manitoba Water Stewardship	Manitoba Conservation	Canada RA's	Other
Project							
	Submit an EMP	8-Jan-06	Sub		App	App	
	Report on the on-going progress in implementing the project and ensuring compliance with the commitments and conditions in acordance with the EMP	on-going	Sub		Rev	Rev	
	Provide a set of subject-specific EPPs	31-Dec-05	Sub		App		
	Provide notification of the intended contract start date and contractor	2 week prior to	Sub		Enf		
	Submit CPEPP for each construction contract	tender date	Sub		Арр	Арр	
	Submit OPEPP	8-Jul-07		Sub	Rev	Арр	
	Submit Monitoring and Follow-up plans (ice jamming and ecosystem cumulative effects to be discussed at ESC)	CPEPP	Sub	Sub	Rev	Арр	
	Implement montioring and follow-up plans	on-going	Imp	Imp	Enf	Enf	
	Report on water quality monitoring annually	March 31 annually	Sub	Sub	Rev	Rev	
	Dispose of construction debris at a waste disposal ground operating under provincial regulations	On-going	Imp		Enf	Ver	
	submit as constructed plans of all components of development (subject to NWPA requirements,see 87)	6 months after completion	Sub		Enf	Enf	
Summer Operations							
	Undertake a riverbank monitoring program. Provide reports pursuant to the monitoring program		Sub	Sub	Rev	Арр	
	Conduct assessment of environment prior to change in in operating rules			Sub	Rev	Rev	
	The MFA is to establish and support a Fisheries Technical Experts Committee		Imp				
	Submit a plan for ensuring coordination of the operation of the Floodway and of the St. Andrew's Lock and Dam.			Sub		Арр	
Climate, Air and Noise							
	Control dust in construction areas	on-going	Imp				
	Minimize effects of noise on neighbouring land owners	on-going	Imp				
	Identify process for handling dust or noise public complaints during construction		Sub			Арр	
Water Regime							
	supply, deliver and remove sandbags on behalf of affected municipalities to residents, farmsteads and businesses likely to be affected by artificial flooding at no cost to municipalities.	on-going		Imp	Enf		
	Monitor flow regime during operation	on-going		Sub		Арр	

Category	Commitment	Due Date	MFA	Manitoba Water Stewardship	Manitoba Conservation	Canada RA's	Other
Groundwater							
	Employ mitigation measures to protect groundwater during bridge construction	CPEPP	Imp		Enf	Ver	
	Protect against intersecting granular deposit and affecting Birds Hill aquifer	CPEPP	Imp		Enf	Ver	
	Report to RAs how MFA will address sensitive groundwater areas and the results of consultations with Rural Municipaliities	Pre-construction	Sub			Ver	
	Prevent groundwater seepage through construction dewatering, blowouts, aquifer interconnection and surface water intrusion	CPEPP	Imp		Enf		
	Prepare and implement specifications for fuel and other hazardous substances handling and storage and emergency spill response and clean-up	CPEPP	Imp		Enf	Ver	
	Consult with possible affected well owners regarding mitigation measures to be employed	on-going	Imp			Ver	
	undertake and report on baseline study of groundwater quality and quantity		Sub		Enf		
	develop on submit comprehensive groundwater monitoring program	Jan. 8, 2006	Sub	Sub	Enf	App	
	Monitor groundwater on the west side of the Floodway following a flood	on-going	Imp		Enf		
	Remediate affected domestic wells	as required	Imp			Ver	WS Enf*
	Provide a proposal to establish a public liaison committee for all phases of the development	Nov. 8, 2005	Sub		Арр		
	Submit procedures for environmental mitigation fund	Jan. 8, 2006	Sub		Rev	Rev	
	Prepare procedures for responding to and addressing complaints on groundwater issues	prior to activity	Sub		Rev	Арр	WS Enf*
	submit health risk assessment respecting groundwater	8-Jul-07	Sub		Rev		
	submit proposal for peer review team to undertake hydrogeological revews	8-Jan-06					
Erosion and Sedimentation							
	Prepare erosion and sediment control plan (ESCP) prior to construction	CPEPP	Sub			Арр	
	Re-vegetate disturbed areas as soon as final grade is achieved	On-going	Imp			Ver	
	Minimize the amount of disturbed areas at any one time	On-going	Imp				
Fish and Fish Habitat							
	Obtain required Fisheries Act Authorizations and Letters of Advice	On-going	Sub			Арр	
	The MFA will complete the Final Fish Habitat Compensation Plan in consultation with DFO and submit it along with the required applications for authorizations under the Fisheries Act.	2009	Sub			Арр	
	Submit an application for all proposed habitat compensation works for any in-water projects located in navigable bodies of water for review under the NWPA prior to commencement of construction.	2009	Sub			Арр	
	Prevent effects to spawning species from construction during May and active summer operation during July	On-going	Imp			Enf	
	Monitor natural restoration of aquatic habitat after disturbance along the low flow channel and rip rapped areas of Red River	post construction	Imp	Imp		Enf	
	Assess effects of drainage outlet configuration on fish and fish habitat	post construction	Imp			Enf	
	Conduct studies on fish passage at the Inlet Control Structure	2005 to 2007	Imp			Enf	

Category	Commitment	Due Date	MFA	Manitoba Water Stewardship	Manitoba Conservation	Canada RA's	Other
	Undertake adaptive management program to mitigate potential adverse effects of the Inlet Control Structure on fish passage	On-going	Imp	lmp		Enf	
	Maintain flows during constuction	On-going	Imp			Enf	
	Ensure that bridge de-watering does not adversely affect fish and fish habitat in adjacent low flow channel	On-going	Imp			Enf	
	Establish a Fisheries Technical Experts Committee		Imp			Ver	
Terrestrial Environment - Vegetation							
	Complete plant survey and submit results	Pre-construction	Sub			Rev	
	Relocate or collect seeds from protected species. Provide replacement habitat as required	pre-construction	Imp			Ver	
	Develop and submit procedures for addressing protected plant species should they be found during follow- up activities	On-going	Sub			Арр	
	Monitor re-vegetation along Floodway and West Dyke through construction and operation phases	On-going	Imp			Ver	
	Submits to the RAs for review and approval prior to operation of the Expanded Floodway, a Monitoring and Follow-up Plan for vegetation.	post construction	Sub			Арр	
Terrestrial Environment - Wildlife/Habitat							
	Conduct medicinal plant inventory along west bank of Red River prior to rip rapping downstream of Floodway Outlet	2006	Imp			Ver	
	MFA shall report to the RAs the results of the discussions with the Peguis First Nation and the procedures agreed upon to identify and protect medicinal plant species should they be found during the plant survey	2006	Sub			Ver	
	Develop and provide to the RAs for review and approval procedures for addressing protected species should they be found during construction activities.		Sub			Арр	
	Manage an annual maintenance plan to minimize effects of West Dyke construction	OPEPP	Imp			Ver	
	Schedule construction activities to minimize adverse effects on the Parkland Mews' peregrine falcon breeding program	2006	Imp			Ver	
	Maintain a select number of willows or alternative shrubs along the Floodway spoil bank	On-going	Imp			Ver	
	Develop and submit a plan and specific measures to minimize the impact to wildlife and wildlife habitat resulting from operations under Rule 4	On-going		Sub		Consult	
	Complete migratory bird survey along Floodway and West Dyke during 2005	2005	Imp			Ver	
Socio-economic environment							
	Manage temporary, site-specific traffic flow disruption near the Floodway and West Dyke	On-going	Imp			Ver	
	Acquire land for the Floodway project through Manitoba Land Acquisition Services	pre-construction	Imp			Ver	
	Produce regular progress reports on performance of the Master Project Agreement through the construction phase	On-going	Sub			Ver	

Category	Commitment	Due Date	MFA	Manitoba Water Stewardship	Manitoba Conservation	Canada RA's	Other
	Address labour shortages in the construction industry	On-going	Imp			Ver	
	Ensure training partnerships are accessible to First Nations, Metis, rural and employment equity groups	On-going	Imp			Ver	
Business							
	Consult with local agricultural producers to discuss disruptions caused by construction of the Floodway and associated recreational developments	On-going	Imp			Ver	
Resource Use							
	Protect traditional and cultural heritage sites - St. Peters Oldstone Church and cemetery and IR 2 grave sites	2009	Imp			Ver	
	Offer to purchase affected upstream properties and provide compensation for incremental flooding	On-going		Imp		Ver	
Infrastructure and Services							
	Prepare and implement traffic management plan - review and amend plan as required	CPEPP	Sub		Арр	Арр	
Navigation	Submit for review and approval a plan for maintaining navigation during construction and operation.	On-going	Sub			Арр	
	Obtain required Navigable Waters Protection Act permits and approvals	pre-construction	Sub			Арр	
	Implement required warning devices, signage, procedures and other measures to provide for safe navigation on navigable waters		Imp			Enf	
	Submit as built report of navigation works within 120 days of completion of the works		Sub			Ver	
Transportation							
	Limit closure of the Dunning Road to 30 days during construction	On-going	Imp			Ver	
	Except for PTH 44 bridge crossing, no temporary detours during construction	On-going	Imp			Ver	
Personal, Family and Community Life							
	The MFA develop and provide to the RAs for review and approval prior to construction its plan for on-going stakeholder involvement in construction and operation of the Project.	pre-construction	Sub			Арр	
	Inform provincial agencies about the project	On-going	Imp			Ver	
	Initiate dialogue with southern Manitoba First Nation and Metis communities regarding employment	On-going	Imp			Ver	
	Engage in stakeholder process to develop draining component of the Floodway project	pre-construction	Imp			Ver	
	Ensure that the Floodway project does not interfere with the Lockport Children's Festival site	On-going	Imp			Ver	
	Allow Manitobans to access excavated earth	2006	Imp			Ver	
	Submit report on compensation provided under Red River Floodway Act and Rule 4	2009		Sub	Audit	Ver	
	Provide financial compensation to upstream residents affected by artificial flooding	on-going		Imp	Audit	Ver	
	Identify program to buy out parties affected by non-spring operation	none		Imp		Ver	
	Establish compensation practices, procedures and protocols			Sub		Rev	
Recreation						]	

Category	Commitment	Due Date	MFA	Manitoba Water Stewardship	Manitoba Conservation	Canada RA's	Other
	Prepare opportunities report for next steps in recreational development and framework for future opportunities and partnerships		Imp			Ver	
	Submit plans to undertake recreational development to the RAs who will determine whether the screening report will require revision to reflect any changes to the Project.		Sub			Rev	
	Consider establishment of Floodway recreation working group		Imp			Ver	
	Adjust construction schedule so that Springhill ski facility will not be affected during construction	On-going	Imp			Ver	
	Incorporate any recreational components into latter stages of project construction	On-going	Imp			Ver	
	Define engineering parameters for recreation development on Floodway		Imp			Ver	
Human Health and Safety							
	The MFA shall also provide to the RAs, its plans for consultation with the Regional Health Authorities emergency service providers during all phases of the Project and specifically how it intends to consult these groups during operation of the Floodway.		Sub	Sub		Rev	
	Undertake construction activities in a manner that protects worker and public health and safety	CPEPP	Imp			Ver	
	Control access to public roadways	CPEPP	Imp			Ver	
	Limit workforce parking to designated areas	CPEPP	Imp			Ver	
	Prevent general public from entering construction areas	CPEPP	Imp			Ver	
Human Health and Safety (cont'd)							
	Submit geotechnical assessment of foundation conditions of inlet control structure	8-Jan-06	Sub		Rev		
	Submit assessment of potential for jamming of the Inlet Copntrol Structure gates	8-Jul-06	Sub			Rev	
	Develop, implement, and report on Dam Safety monitoring plan for inlet control stucture and embankments		Sub		Rev		
	Submit report on response to "Summary of Observations and Advice by Panel of Experts" regarding Inlet Control Structure and West Dyke	8-Jan-06	Sub		Rev		
	Submit report on implementation of dam safety recommendations of App. C Preliminary Engineerng Report	8-Jul-06	Sub		Rev		
	Submit Dam Safety Review	8-Jul-06	Sub		Rev		
	Report on repairs and upgrades as result of Dam Safety Review	Mar 31, annually	Sub		Rev		
Heritage Resources							
	Conduct additional heritage resource impact assessment of undisturbed areas	pre-construction	Sub			Rev	
	Re-examine crossings for potential effects on archaeological resources	pre-construction	Imp			Ver	
	Heritage resource specialist to be present during construction in areas with heritage resource potential	On-going	Imp			Ver	
	Preserve archaeological materials if discovered during construction	On-going	Imp			Ver	
Public Consultation							
	Conduct follow-up dialogue with Peguis First Nation	On-going	Imp			Ver	
	Conduct follow-up dialogue with the Manitoba Metis Federation	On-going	Imp			Ver	

Category	Commitment	Due Date	MFA	Manitoba Water Stewardship	Manitoba Conservation	Canada RA's	Other
	Report on ongoing discussions with Peguis First Nation and Manitoba Metis Federation to identify and mitigate any adverse effects on traditional resource use		Sub			Rev	
	MFA shall report to the RAs the results of the discussions with the Peguis First Nation and the procedures agreed upon to identify and protect medicinal plant species should they be found during the plant survey		Sub			Rev	
Accidents and Malfunctions							
	Develop and submit plans for monitoring contaminated or abnormal discharges into the low flow channel when the floodway is inactive	CPEPP	Sub		Арр	Арр	
Operation	File notice of alteration from operating rules where variation contemplated	prior alteration		Sub	Rev		
	Submit report in event operating rules varied under emergency conditions	1 month		Sub	Rev		
	File notice of alteration from operating rules where 2nd variation under similar emergency conditions occurs	2 month		Sub	Арр		
	Conduct a public review operating rules every five years	8-Jul-10			Imp		
	Submit report detaining the process to be followed for public review of operating rules	8-Jul-06		Sub	Rev		
	Submit 3rd party review of artificial flooding report	within 1 month		Sub	Rev		
	Review and report joint clauses of licence and identify whether MFA or MWS should be separeately responsible for any particular joint clause	8-Aug-10	Sub	Sub	Rev		

App means review and approve or disapprove
Ver means verify action occurred
Enf means enforce requirement
Imp means implement
Rev means review and comment as appropriate
Sub means develop and submit for approval
WS Enf means enforced by Water Licensing Branch

## Appendix D Example Table of Contents CPEPP

## Construction Phase Environmental Protection Plan

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# Appendix E Manitoba Floodway Authority Inspection Report Form

### Manitoba Floodway Authority

## INSPECTION FORM Red River Floodway Expansion Project

File #
--------

The Control of the Co					
Inspection Date:		Time:			
Weather:		mm of Rain in Last 24 hrs: Last week:			
Location of Area Ins	spected f	for this Report:			
Contractor:			Contract #		
STAGE OF CONS					
		Channel Widening _	Slope Roughing	Swale Installation	
		Final Grading			
INSPECTION CHI				Equipment on site	
INSI ECTION CIT	<u>ECKLI</u>	<u>51</u>			
<b>General Site</b>	NA	Deficiency Observed	Action Taken	Follow-up Required	
Conditions	1111	Deficiency Gaserveu	11000011 1011011	ronow up riequired	
Traffic Control					
Access Roads					
Sanitary Facilities					
Bulletin Board					
Dust Plume					
<b>Designated Areas</b>	NA	<b>Deficiency Observed</b>	Action Taken	Follow-up Required	
Waste Storage					
Hazardous Waste					
Fuel Storage					
Equipment Service					
Employee Parking					
7 (0.11					
Erosion/Sediment	NA	<b>Deficiency Observed</b>	<b>Action Taken</b>	Follow-up Required	
Control Devices					
Silt Fences  Depth of Sediment					
Depth of Sediment Contour Swales					
Down Swales					
Check Dams					
Signs of Erosion					
Spoil Piles					
Spoil Sediment					
Spoil Pile Erosion					
Wet Meadow Area					
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#### Manitoba

#### **INSPECTION FORM**

File#	
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Floodway Authority

#### **Red River Floodway Expansion Project**

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Appendix F
Proposed Plan
For
Public Involvement

#### MANITOBA FLOODWAY AUTHORITY PLAN FOR ON-GOING PUBLIC INVOLVEMENT

#### 1. Background

The Manitoba Floodway Authority (MFA) was formed by the *Manitoba Floodway Authority Act* with the mandate to obtain environmental approval and construct the Red River Floodway Expansion Project (the Project). The expansion is a "Project" under the *Canadian Environmental Assessment Act* (CEAA) and is a "Development" that requires a Licence pursuant to *The Environment Act*. The MFA undertook an iterative preliminary design and environmental assessment program that involved stakeholder input to each iteration. Through this program, environmental issues were identified and the Project design was adjusted to mitigate adverse effects. Environmental assessment of the Project was coordinated by Canada and Manitoba through a cooperative assessment process under the provisions of *The Canada-Manitoba Agreement on Environmental Assessment Cooperation*.

The Federal Responsible Authorities have determined, pursuant to CEAA that the Project is not likely to cause significant adverse environmental effects tanking into account the implementation of mitigation measures identified in the Screening Report. The Director responsible for the *Environment Act* issued Licence No. 2691 stipulating the limits, terms, conditions, and specifications respecting the construction and operation of the Project.

The Screening Report-Red River Floodway Expansion Project (Screening Report) prepared for Infrastructure Canada requires that "MFA develop and provide to the responsible authorities...its plan for on-going stakeholder involvement relating to the construction and operation of the Project."

This Public Involvement Plan (PIP) describes the elements of a public involvement program that the MFA will follow during the construction phase of the Project. A similar plan will be developed for the operation phase of the Project prior to the end of construction. The goal of the PIP is to meet the MFA commitment to on-going public involvement as the Project moves from the preliminary design and assessment phase to the construction phase.

#### 2. The Red River Floodway Expansion Project

The MFA submitted the documents referenced in the Screening Report and the Licence prior to final design and the preparation of construction specifications. The Project is being designed and implemented over a period of at least 4 years (2005-2009). An overall schedule for the Project components is attached as Appendix A. The details of the various elements of the Project are being finalized over the implementation period such that the detailed design takes place at the time needed to meet the project schedule. Accordingly the exact details of every minute aspect of the entire project will not be available prior to the award of the first construction contract. In fact certain aspects will not be totally fleshed out until the last year of the

construction phase. As well, the operating details will not be available until the majority of the construction is completed.

Construction of the Project is a complex adaptive system involving large overall environmental protection, inspection, monitoring, follow-up, and reporting programs.

The following lists the primary components of the Project as presented in the Screening Report:

- Floodway Channel Excavation
- Restoration/armouring of the Low Flow Channel
- Excavation of the Grande Pointe Gap
- Replacement of Bridges
- Rehabilitation of Bridges
- Enlargement and improvement of the Outlet Control Structure
- Replacement/rehabilitation of Drainage Structures that Discharge into the Floodway Channel
- Modification of City of Winnipeg Aqueducts and Deacon Drain Line
- Modification of Rural Municipality of East St. Paul Waterlines
- Modification of Seine River Syphon
- Replacement of Utility Lines
- Replacement of Oil Pipelines
- Modifications to the West Dyke
- Improvements to Floodway Inlet Structure
- Replacement of the Seine River Prairie Grove Road Crossing

#### 3. Public Involvement Plan

#### 3.1. Introduction

An adaptive management approach to continuous improvement is an integral principle of the construction phase of the Project. MFA has committed to an Environmental Policy (Attached as Appendix B). One of the MFA environmental principles is to carry out its environmental protection measures and interactions with regulators and the neighboring community in an honourable, respectful, open, and transparent manner. As indicated above, the MFA conducted an extensive public involvement program during the preliminary engineering design and environmental assessment phases of the Project and has committed to continuing public involvement opportunities during the construction phase. The *Canadian Environmental Assessment Act Screening Report* requires that the MFA submit a plan on how that commitment will be implemented.

Various agencies use very different terms that refer to the same thing, or use inappropriate names, or use names interchangeably that are not, in fact, interchangeable. In order to avoid confusion MFA's PIP is based on the following terminology.

**Public Involvement** is a generic term for all types of activities designed to engage the public during the decision-making process. The level of involvement can range from an exchange of information and opinion to delegation or sharing of the decision-making authority. The term public involvement is synonymous with the term public participation.

The terms *public* or *general public* are used to refer to the total population of people who live in the general area surrounding the Project.

The MFA uses the term *stakeholder* to refer to any individual or group who see themselves as potentially impacted by the Project. Stakeholders are a subset of the public. Stakeholders can be individuals or non-government organizations formed to represent individuals potentially impacted by in the Project.

The MFA uses *community* to refer to those members of the public in a particular geographic area. An example would be the residents in the area surrounding a specific bridge being replaced as a component of the Project.

#### 3.2. Purpose

The purpose of this PIP is to provide opportunities for on-going involvement of and dialogue with Aboriginal communities, local governments, stakeholders, and the general public on the Project through the exchange of information and the understanding of stakeholder values and opinions. MFA will exchange information and opinion with various members of the public with the expectation that local knowledge and an understanding of public concerns will improve the Project. In this PIP, final authority for the acceptability of environmental activities rests with the federal Responsible Authorities and Manitoba Conservation. The MFA will make the final decision on how it implements the Project based on consideration of the technical and public inputs.

#### 3.3. Objectives

The objectives of the PIP are:

- To provide the Federal-Provincial Project Oversight Committee, Aboriginal communities, local governments, stakeholders, and the general public with timely and accurate information.
- To provide the Aboriginal communities, local governments, stakeholders, and general public with opportunities to provide comments, suggestions, and opinions on the Project, the environmental protection measures, and the monitoring programs to MFA for consideration in decision-making.
- To comply with the reporting requirements of the Canadian Environmental Assessment Act Screening Report and the Environment Act Licence respecting public involvement during the construction phase of the project.

#### 3.4. Plan Elements

The proposed public involvement plan consists of 10 main elements as follows:

- Committees The MFA will establish standing committees for the project: Community Liaison Committee, Recreation Working Group and a Fisheries Technical Experts Committee. Other technical committees, subcommittees and task team will be established as required.
- **Groundwater Monitoring Peer Review** In partnership with Manitoba's Department of Water Stewardship, MFA will ensure an arms-length, independent peer review team is established to review the project's groundwater monitoring and protection plans.
- **Aboriginal Communities** MFA will continue an ongoing dialogue with local First Nations and Métis communities regarding various economic and environmental matters.
- **Municipal Governments** MFA will initiate a schedule of regular meetings with rural municipalities and the cities of Winnipeg and Selkirk.
- West Dyke Extension The MFA will work in partnership with the Rural Municipality of MacDonald regarding the final design of the West Dike extension. Community meetings will be held prior to construction.
- **Highway Bridge Construction** MFA will initiate local meetings with residents who may be impacted by individual highway bridge construction projects with a special emphasis on groundwater protection and potential traffic disruptions.
- Workplace Meetings MFA will initiate regular meetings with participating contractors and unions regarding any potential safety, human resource and administrative matters that may arise on the project.
- Communication MFA will continue to publish regular newsletters for local residents to provide project updates and progress reports. MFA will also maintain its toll-free line (1-866-356-6355) for rural residents to report groundwater and other concerns. MFA's project web-site will also be enhanced.
- **Public Information Booths** MFA will continue to establish booths at local shopping centers and community places throughout the region to provide the general public with project updates, answer questions, and receive comments.
- **Drainage and Navigation** MFA will meet with stakeholders, such as the Cooks Creek Conservation District (CCCD) and Save Our Seine Inc. (SOS),

to ensure MFA's final design plans enhance local drainage opportunities and support navigation safety.

The details of each of these involvement elements will be documented as each activity is developed. A public news release was made on August 9, 2005, giving public notice of the 10 elements of the MFA PIP (copy attached as Appendix C).

# Appendix C Red River Floodway Project On-going Public Involvement News Release

#### **Manitoba**



Room 200, 155 Carlton Street Winnipeg, MB R3C 3H8 Phone: (204) 945-4900

Fax: (204) 948-2462



August 9, 2004 For Immediate Release

#### <u>FLOODWAY AUTHORITY OUTLINES</u> 10-POINT PLAN FOR ONGOING PUBLIC CONSULTATION

#### Public Participation Agenda Has No Expiry Date: Gilroy

**Winnipeg, MB** – With plans and preparations underway for the start of construction on the Red River Floodway Expansion Project, the Manitoba Floodway Authority (MFA) today unveiled a 10-point plan designed to facilitate ongoing public consultation and community participation as the floodway project moves forward.

"In July, the floodway expansion project received the green light from Canada and Manitoba to proceed with this critical flood protection project," said Ernie Gilroy, CEO of the MFA. "As the project nears the start of construction, we want to reassure the public that we are committed to continue to consult on this important project. The plan outlined today reinforces our commitment to Manitobans and provides a blueprint for the months and years ahead."

#### The 10-point plan includes:

- Advisory Committees The MFA will establish three standing advisory committees to provide input to the MFA as the project proceeds: <u>Community Liaison Committee</u>, <u>Recreation Working</u> <u>Group & Fisheries Technical Experts Committee</u>.
- **Groundwater Monitoring Peer Review** In partnership with Manitoba's Department of Water Stewardship, MFA will ensure an arms-length, independent peer review team is established to review the project's groundwater monitoring and protection plans.
- **Aboriginal Communities** MFA will continue an ongoing dialogue with local First Nations and Metis communities regarding various economic and environmental opportunities.
- **Municipal Governments** MFA will initiate a schedule of regular meetings with rural municipalities and the cities of Winnipeg and Selkirk to provide updates on the project, respond to potential questions, and hear feedback on the project.
- RM of MacDonald The MFA will work in partnership with the Rural Municipality of MacDonald regarding the final design of the West Dike extension. Community meetings will be held prior to construction.
- **Highway Bridge Construction** MFA will initiate local meetings with residents who may be impacted by individual highway bridge construction projects with a special emphasis on groundwater protection and potential traffic disruptions.





- Workplace Meetings MFA will initiate regular meetings with participating contractors and unions regarding any potential safety, human resource and administrative matters that may arise on the project.
- Communication MFA will continue to publish regular newsletters for local residents to
  provide project updates and progress reports. MFA will also maintain its toll-free line for rural
  residents to report groundwater and other concerns. MFA's project web-site will also be
  enhanced.
- **Public Information Booths** MFA will continue to establish booths at local shopping centers and community places throughout the region to provide the general public with project updates and answer questions.
- **Drainage & Navigation** MFA will meet with stakeholders, such as the Cooks Creek Conservation District (CCCD) and Save Our Seine Inc. (SOS), to ensure MFA's final design plans enhance local drainage opportunities and support navigation safety.

"As the floodway project proceeds, this 10-point plan will ensure that Manitobans have input into the project over the next five years," said Gilroy. "Today's announcement reinforces our view that our public consultation process has no expiry date. We look forward to working with Manitobans in the months and years ahead as we improve flood protection and protect the environment." Gilroy noted details on these initiatives will be provided in the upcoming weeks and months as the 10 point plan is refined.

Over the last two years, the floodway expansion project has undergone an extensive environmental review process that has included an independent Environmental Assessment and the development of an Environmental Impact Statement (EIS). As part of this process, MFA conducted an extensive public consultation process that included:

- Four rounds of public consultation three of which were held prior to the filing of the EIS
- More than 300 hours of stakeholder meetings
- Approximately 20 community meetings & information sessions attended by more than 1,500 residents
- A project web-site that has received over 100,000 hits
- The distribution of approximately 100,000 newsletters and information packages
- Participation in four weeks of Manitoba Clean Environment Commission (CEC) public hearings
- \$300,000 to support the participation of seven groups at the CEC hearings including Peguis First Nation, Coalition for Flood Protection North of the Floodway, Ritchot Concerned Citizens Committee, Rivers West, CCCD, SOS and 768 Association.

In early July, the Manitoba Floodway Authority (MFA) received an environmental license from Manitoba Conservation and federal authorization from the Government of Canada to begin construction on the expansion project. Gilroy indicated that the MFA is fully committed to taking federal and provincial conditions for environmental approval fully into account in the project.

The Red River Floodway expansion project will divert more water around Winnipeg during major floods by more than doubling the capacity of the floodway channel. By improving flood protection to 1 in 700 year level of protection, floodway expansion will protect more than 450,000 Manitobans, over 140,000 homes, over 8,000 businesses and prevent more than \$12 billion in damages to the provincial economy. Canada and Manitoba have confirmed their commitment to the floodway expansion project.

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Contact: Ronuk Modha

Manitoba Floodway Authority (204) 945-4178, (204) 945-4900, or 1-866-356-6355