MANITOBA FLOODWAY AUTHORITY (MFA) GROUNDWATER INTERFERENCE COMPLAINT RESPONSE PLAN

Two components of the Red River Floodway Expansion Project are the widening of the Main Floodway Channel and construction of new rail and roadway bridges. In areas where the channel is being widened, construction precautions will be implemented to mitigate adverse effects on groundwater supply wells. During construction of the bridges it will be necessary to temporarily depressurize the bedrock aquifer so that construction can proceed safely. This plan has been developed to provide a procedure to be followed in the event a complaint is received from a local resident or business that they believe their well supply system is being adversely affected by these construction activities.

1. Invoking the Groundwater Interference Complaint Response Plan

Groundwater interference is defined as a response in the groundwater aquifer to the floodway construction activities that causes a decrease in well performance such that the supply of water to the well is interrupted or that causes an unacceptable change in water quality. The Groundwater Interference Complaint Response Plan will be invoked when an owner located adjacent to an area of floodway expansion activities makes a groundwater interference complaint to MFA. Complaints can be made by telephone to a toll free 24-hour response line at 1-877-456-1201. Any resident contacting Manitoba Conservation, Manitoba Water Stewardship or a local Rural Municipality regarding a water complaint will immediately be referred to MFA. MFA will notify local residents and Rural Municipalities of the construction activities prior to starting the work. All calls will be received by a call referral agency, who will immediately refer the call to the MFA duty officer. Note: Personnel at the 24-hour contact number will only record the name, address, telephone number and time of the complaint prior to forwarding the call to the duty officer.

2. Groundwater Interference Complaint Response Procedures

MFA will assign a duty officer to respond to complaints 24 hours per day, 7 days per week. When a MFA duty officer receives a complaint, the following two stage procedure for responding to a groundwater interference complaint will be followed:

- Preliminary telephone complaint screening and response; and
- On-site well assessment and remediation.

The initial complaint screening and response will be completed by the MFA duty officer each time a groundwater interference complaint is received. Depending on the results of the complaint screening, it may be necessary to have an approved Investigator complete a more detailed well assessment. The procedures for both types of assessment are detailed below.

Preliminary Complaint Screening

The MFA duty officer will undertake a telephone complaint screening within 1 hour of the interference complaint. The screening is to identify the nature of the well problem, if the floodway expansion activities could be the cause of the problem, and to initiate emergency water supply.

- 1) The initial telephone assessment and discussion with the well owner may conclude that no further action is required on the part of MFA.
- 2) In the event that the MFA duty officer concludes that groundwater interference may have occurred as a result of the floodway expansion activities, the following actions will be taken:
 - a. Immediately offer or provide the resident with a reasonable amount of potable water depending on the extent of the water shortage and the residents' situation. This may involve making arrangements for water delivery by a Temporary Bulk Water Supply Contractor, and
 - b. Immediately contact MFA's technical experts to undertake a Well Assessment to determine the cause of the complaint and recommend follow-up action.

All costs associated with the investigation to determine the cause of the complaint and to supply a temporary water supply will be borne entirely by MFA.

Well Assessment

The complainant will be contacted by telephone to arrange an on-site assessment by an Investigating Technical Expert. The Technical Expert will initiate a timely on-site assessment as arranged with the resident.

- 1) In the event that the Technical Expert concludes that groundwater interference did not occur.
 - a. MFA will take no further action.
 - b. The resident will be responsible to arrange for all further corrective action and bear all associated costs.
- 2) In the event that the Technical Expert concludes that a bona fide groundwater interference may have occurred, MFA will take the following actions as appropriate:
 - a. With agreement of the affected resident, continue to deliver water to the resident at no cost to the resident;
 - Institute timely modifications to the well system to mitigate the problem in consultation with the owner. These modifications may include lowering or replacing the well pump; repairing/replacing the well or increasing the domestic well capacity;
 - c. Reduce the rate and amount of construction depressurization pumping or other engineering modifications so as to alleviate the observed interference. This action may not immediately restore water to the

private well and it may be necessary to continue action a. above in the interim.

d. other

3. Documentation

The interference complaint will be summarized on the attached Incident Report that, as a minimum, documents the following:

- 1) The location of the complaint (name, address, telephone number, map);
- 2) Investigation procedures and results; and
- 3) Any actions taken to restore water supply.

4. Notification

Manitoba Water Stewardship will be notified of all well interference complaints as follows:

- MFA will notify Manitoba Water Stewardship, Water Licensing Branch and Manitoba Conservation, Regional Operations Division, by phone and e-mail immediately after the Technical Expert has confirmed that a well interference may have occurred.
- 2) The Incident Report documenting the well interference complaint will be submitted to Manitoba Water Stewardship, Water Licensing Branch; Manitoba Conservation, Regional Operation Division; Infrastructure Canada, local government, and the citizen affected within 5 working days of the complaint being resolved or water restored.

5. Continuous Groundwater Interference Complaint Response Plan

Improvements

MFA is undertaking the Floodway Expansion Project following an adaptive management strategy. Accordingly, the Groundwater Interference Complaint Response Plan may be amended to continuously improve the environmental mitigation provided. The Groundwater Interference Complaint Response Plan should be regarded as a living document that is updated whenever changes are warranted as the result of any of the contact information gathered; MFA response experience; or input from the public or the Groundwater Technical Experts Subcommittee. As a minimum, the Groundwater Interference Complaint Response Plan will be reviewed annually by the Project Management to ensure that the procedures are appropriate.

Note: All necessary contact information is provided on the attached Groundwater Interference Complaint Information Sheet.

Prepared: November 7, 2005

Approved: Date Revised: Date

MANITOBA FLOODWAY AUTHORITY (MFA) GROUNDWATER INTERFERENCE COMPLAINT INCIDENT REPORT

CONTACT INFORMATION	
Name	
Address/location	
Phone Number	
Date and time complaint registered	
NATURE OF COMPLAINT	
Including: Description of problem and Dates when the problem occurred.	
PRELIMINARY COMPLAINT SCREENING	
Assessment completed by	
Date Completed	
INVESTIGATION Including investigation procedures, observations and results.	

ACTIONS TAKEN By Owner or MFA	
SECONDARY WELL ASSESSMENT	}
Name of Company	
Contact Person	
Date Completed	
INVESTIGATION Including investigation procedures, observations and results	
ACTIONS TAKEN By Owner, Investigator, or MFA	
COMPLAINT RESOLVED	
Date Water Supply Temporarily Restored	
Date Water Supply Restored	
NOTIFICATION MANITOBA WATER STEWARDSHIP	
Contact Person notified of bona fide interference	
Date Contacted	