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**Terms of Reference for the
Follow-up Program for the
Modifications to the Petitcodiac River Causeway
Project**

Submitted to:

New Brunswick Department of the Environment
Fredericton, New Brunswick

Submitted by:

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on behalf of
New Brunswick Department of Supply and Services

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1.0 INTRODUCTION

This document is the Terms of Reference (TOR) for the Follow-up Program for the Modifications to the Petitcodiac River Causeway Project (the "Project"). The Follow-up Program is a key component of the Environmental Management Plan (EMP), and is required as per Condition of EIA Approval (4). The Conditions of Environmental Impact Assessment (EIA) Approval (5-7) provide specific details regarding the content and conduct of the Follow-up Program.

The Follow-up Program is also required under the *Canadian Environmental Assessment Act* (CEAA) as a condition of the CEAA Screening undertaken by Department of Fisheries and Oceans (DFO), and is subject to the pre-Bill C9 CEAA requirements of a Follow-up Program.

1.1 Objectives of the Follow-up Program

The objectives of the Follow-up Program are:

- to verify the environmental effects predictions, including the effectiveness of mitigation;
- to provide an early warning of undesirable change; and
- to improve understanding of environmental cause and effect relationships.

As per Condition of EIA Approval (4), the Follow-up Program will be divided into Stages that correspond with the Implementation Plan, and will be submitted to the New Brunswick Department of the Environment (NBENV) for review and approval.

As per Condition of EIA Approval (5)(iv), the Follow-up Program will, at a minimum, contain all of the components identified in Chapter 13 of the EIA Report (EIA Report, AMEC 2005a). In addition, components or factors may be added to the Follow-up Program based on the results of consultation with government regulators, recognized experts, stakeholders, or the professional opinion of the AMEC Team. The contents of these TOR are provided in Section 1.3.

1.2 Implementation of the Follow-up Program

The Follow-up Program will be implemented in three Stages, as described in the Implementation Plan (AMEC 2008). These are summarized in the following three sub-sections.

1.2.1 Stage I – Activities Required Prior to Opening the Gates

Stage I includes those activities necessary before the gates are opened in Stage II. Activities include mitigative measures such as watermain relocation, upstream dyke restoration, former Moncton Landfill protection, embankment protection, and channel bottom protection.

Before Stage II can proceed and the gates are opened during the spring runoff follow-up, as required and not already in existence, will be carried out to provide a benchmark for the verification of environmental effects assessment predictions. In this context, baseline does not refer to the 2005 baseline condition used for comparative purposes in the environmental effects

assessment in the EIA Report (AMEC, 2005a) but rather information needed in support of the Follow-up Program.

1.2.2 Stage 2 – Gate Opening

During Stage II the gates will be opened each spring commencing with the spring runoff and will be closed in the late fall to prevent ice jamming. Follow-up will be conducted over this period to verify the accuracy of the short-term hydrodynamic and sediment transport modelling predictions (e.g., change in cross-sectional area) (AMEC, 2005b). In the unlikely event that predictions are proven to be highly inaccurate (e.g., sedimentation continues and the sediment plug is not eroded), the gates can be closed and a new mitigation and/or design strategy could be developed in consultation with federal and provincial authorities, consistent with the adaptive management approach.

1.2.3 Stage 3 – Project Construction and Operation

Construction of the Project (e.g., bridge construction, removal of control structure and fishway) occurs in Stage 3, followed by operation of the bridge in perpetuity. During the construction activities (i.e., prior to establishing the final opening at the causeway), a Follow-up Program is not required, as no significant negative residual environmental effects are predicted to occur during this Stage. Standard Operating Procedures, including inspection of mitigation measures for integrity, effectiveness and compliance with EIA commitment as well as permits, laws and regulations, will be implemented to ensure mitigation measures proposed during construction are implemented effectively.

After construction, and during operation, the Follow-up Program will involve verification of the accuracy of the environmental effects assessment and long-term modelling predictions, and will also determine the effectiveness of mitigation measures implemented to mitigate potential negative environmental effects of the Project. These Follow-up activities will continue to contribute to adaptive management strategies if and where applicable.

1.3 Scope of Factors for the Follow-Up Program

Table 1.1 presents a summary of the Follow-up Program components planned for each Stage of the Project, as well as the primary scope of factors for each component.

Table 1.1 Scope of Factors for the Follow-up Program

Stage	Follow-up Program Component	Scope of Factors
Stage 1	Physical Characteristics of the River and Estuary	Channel Cross-Sections Remote Sensing
	Bioaccumulation of Metals in Fish	Concentration of heavy metals in a representative fish species
	Terrestrial and Wetlands	Wetlands
	Tourism	River-based Tidal Bore-based
	Commercial Fisheries (Labour and Economy)	Landings (Lobster, Scallops, Eel) Lobster productivity

Stage	Follow-up Program Component	Scope of Factors
		Scallop growth Sediment characteristics
	Archaeological and Heritage Resources	Areas of Potential New Erosion
	Public Health and Safety	Groundwater Quality Surface Water Quality
Stage 2	Physical Characteristics of the River and Estuary	Channel cross-sections Remote sensing
	Engineered Environmental Protection Works	Dykes and Aboiteaux Armoured (rip-rap) shorelines
	Tourism	River-based Tidal Bore-based
	Commercial Fisheries (Labour and Economy)	Landings (Lobster, Scallops, Eel) Lobster productivity Scallop growth Sediment characteristics
	Archaeological and Heritage Resources	Areas of Potential New Erosion
Stage 3	Physical Characteristics of the River and Estuary	Channel cross-sections Remote sensing
	Bioaccumulation of Metals in Fish	Concentration of heavy metals in a representative fish species
	Terrestrial and Wetlands	Wetlands, Mudflats, Migratory Birds, Wildlife and Vegetation
	Engineered Environmental Protection Works	Dykes and aboiteaux Armoured (rip-rap) shorelines
	Fish Passage	Verification of an open channel similar to pre-causeway conditions Fish communities above the causeway
	Fish Habitat	Sediment and water quality
	Tourism	River-based Tidal Bore-based
	Commercial Fisheries (Labour and Economy)	Landings (Lobster, Scallops, Eel) Lobster productivity Scallop growth Sediment characteristics
	Archaeological and Heritage Resources	Areas of Potential New Erosion
	Public Health and Safety	Non-vehicular accidents Groundwater Quality Surface Water Quality Flooding
	Recreational Trails	Trail continuity and flooding
	Navigability	River width and depth

2.0 STAGE I FOLLOW-UP PROGRAM

2.1 Physical Characteristics of the Petitcodiac River Estuary

Baseline data describing the physical characteristics of the Petitcodiac River estuary already exist (e.g., cross sections of the river in 2003 and previously) (AMEC, 2005b); however, due to the dynamic nature of the river morphology and the time elapsed since completion of the EIA, cross sections of the upstream and downstream channel will be made during Stage 1 as a benchmark for Stage 2 follow-up.

2.2 Fish and Fish Habitat

Baseline data already exists for water and sediment quality (AMEC, 2005c); additional collection will therefore not be part of the Follow-up Program in Stage 1.

2.3 Bioaccumulation of Metals in Fish Tissue

During Stage 1, a study will be designed and carried out (in consultation with Environment Canada) to gather baseline data on concentrations of metals in fish tissue.

2.4 Terrestrial and Wetland Environment

Baseline data already exist for wetlands, wildlife and vegetation, migratory birds and mudflat area (AMEC, 2005c); additional collection was not recommended to be part of the Follow-up Program in Stage I; however, due to the dynamic nature of the River morphology and the time elapsed since completion of the EIA, the distribution of wetlands will be re-established prior to Stage 2.

The fish bioaccumulation study will be used to support the bioaccumulation analysis for migratory birds and wildlife species.

2.5 Municipal Services and Infrastructure

Baseline data already exists for Municipal Services and Infrastructure (AMEC, 2005c); collection will therefore not be part of the Follow-up Program in Stage 1.

2.6 Road Transportation Network

Because no significant negative environmental effects are predicted for the Road Transportation Network during operation, the collection of baseline data are not required in Stage I.

2.7 Vessel Traffic and Navigation

Baseline data already exists (AMEC, 2005c) for Vessel Traffic and Navigation. Therefore, no Follow-up is required during Stage I.

2.8 Land Use and Value

No follow-up is required for Land Use and Value during Stage I, as baseline data already exists (AMEC, 2005c).

2.9 Current Use of Land and Resources for Traditional Purposes by Aboriginal Persons

No significant negative environmental effects are predicted for Current Use of Land and Resources for Traditional Purposes by Aboriginal Persons. Therefore, the collection of baseline data is not required in Stage 1.

2.10 Tourism

The collection of baseline Tourism data is necessary to determine the effectiveness of the Petitcodiac River as a tourist attraction after Project Option implementation, and to verify the predictions of the environmental effects assessment. The Follow-up Program will involve an annual survey, taken in the summer, of visitors to Boreview Park in downtown Moncton. The content of this survey will determine the number of visitors and the purpose of their visit to the Greater Moncton Area (GMA), the importance and role of the tidal bore, and will provide a benchmark upon which to evaluate the draw of the Petitcodiac River and the tidal bore to tourists.

2.11 Recreation

Baseline data already exists (AMEC, 2005c), therefore follow-up is not required for Recreation.

2.12 Commercial Fisheries (Labour and Economy)

The Follow-up Program for Commercial Fisheries will meet the requirements of the EIA Report, and the Condition of Approval 5(v), which states:

include the commercial lobster and scallop fisheries in the Bay of Fundy and eel fisheries in the Petitcodiac River system. As a minimum the following will need to be undertaken in this regard:

- (i) identification of areas of concern through consultations with fishers,*
- (ii) collection of baseline data on sediments within the above areas,*
- (iii) follow-up monitoring that would include both monitoring of sediment characteristics post project as well as fisheries landings,*

this portion of the Follow-up Program is to be developed in consultation with Fisheries and Oceans Canada. The Regional Manager of Environmental Assessment and Major Projects, Fisheries and Oceans Canada should be contacted for additional information;

The Commercial Fisheries Follow-up Program will include the assembly of baseline catch data for commercial lobster and scallop fisheries in the Bay of Fundy and eel fisheries in the Petitcodiac River system, to provide a benchmark for the determination of compensation (if required) for loss of landings. Included in this program are the catch statistics for the previous ten (10) years and a determination of who is fishing in the potentially affected areas (if any).

Similar information will be collected from an agreed upon control location that is distant from the area felt to be at risk by the local fishers. The Follow-up Program will include the approach used by DFO to monitor lobster fishery and populations during the trial gate openings (Lawton and Robichaud, 2000).

2.13 Heritage and Archaeological Resources

The shoreline of the headpond area will be walked over by an experienced archaeological team prior to the implementation of any of the Project Options that may result in the raising of the water levels along the shoreline of the headpond. Also, any headpond substrate that becomes exposed due to the Project Options will be walked over to the extent possible (as limited by safety concerns). If any significant archaeological sites are discovered during this walkover, an appropriate level of study and/or possibly excavation will be implemented in consultation with Archaeological Services Unit and the Fort Folly First Nation, where appropriate. This walkover will take place in sufficient time to allow any mitigation to take place, prior to the implementation of the Project Options.

2.14 Public Health and Safety

2.14.1 Vehicular Accidents

Baseline data collection is not required, as there are no significant negative environmental effects predicted for vehicular accidents as a result of the Project.

2.14.2 Non-vehicular Accidents and Unplanned Events

Baseline data already exists for non-vehicular accidents and unplanned events (AMEC, 2005c), therefore no Follow-up is required in Stage I.

2.14.3 Groundwater Quality and Quantity

Baseline data collection was not recommended as a result of the EIA, as there were no significant negative environmental effects predicted for groundwater quality and quantity and a very low likelihood of any potential negative environmental effects occurring as a result of the Project. However, due to input from potentially affected stakeholders, a groundwater quality baseline survey for wells upstream of the causeway will be undertaken prior to Stage 2.

2.14.4 Surface Water Quality

Baseline data collection was not recommended as a result of the EIA, as there were no significant negative environmental effects predicted for surface water quality; however in response to EIA condition 6, a Surface Water Follow-up component has been designed. The Objective of the Stage 1 Public Health and Safety (Surface Water Quality) Follow-up Program is the determination of baseline conditions. The baseline assessment will include the assessment of current water quality conditions upstream of the causeway to Salisbury area, and downstream of the causeway to Shepody Bay, at Hopewell Cape.

2.14.5 Contaminated Effluents and Redistribution of Contaminants

Baseline data already exist for contaminated effluents and redistribution of contaminants (AMEC, 2005c), therefore no Follow-up is required in Stage 1.

2.14.6 Human Disease Vectors

Baseline data for human disease vectors are not required as there are no significant negative environmental effects predicted as a result of the Project Options because the risk of West Nile Virus has not been realized in the GMA.

2.14.7 Flooding

Baseline data already exist for flooding (AMEC, 2005c) and the environmental effects are predicted to be positive, therefore no Follow-up measures during Stage I are required.

3.0 STAGE 2 FOLLOW-UP PROGRAM

The objective of the Follow-up Program during Stage 2 is to verify short-term hydrodynamic and sediment transport modelling predictions (e.g., change in cross-sectional area, erosion of upstream sediment plug) and determine if opening of the gates results in problems with the physical environment that need to be addressed before implementing Stage 3. In addition, the Follow-up Program for Stage 2 will verify the effectiveness of the mitigation and construction activities implemented in Stage 1 (e.g., former Moncton Landfill protection). If mitigation measures fail or are inadequate to the extent that risks to sensitive locations are unacceptable, adaptive management will modify the implementation strategy to ensure protection of the estuary.

The Follow-up Program for Stage 2 will involve taking seasonal cross sections along the length of the Petitcodiac River over a short time frame during ice-free periods. The location of each cross section will correspond with those locations in the Modelling Component Study (AMEC, 2005b) so that trends can be observed and compared to baseline data collected (AMEC, 2005b) (selected cross sections only). Cross-sectional information will include, in relation to the reference elevation, elevation of the deepest point, cross-sectional area, cross-sectional water surface width, mean depth, mean bed elevation and a width to depth ratio (AMEC, 2005b).

During Stage 2, the Follow-up of mitigation implemented during Stage 1 will involve annual visual inspection of upstream dyke restoration, former Moncton Landfill erosion protection, watermain relocation and embankment protection measures. Cross-sectional information as described previously will verify the effectiveness of channel bottom protection and upstream channel excavation. In addition, tourist surveys and commercial fisheries data will continue to be collected annually.

4.0 STAGE 3 FOLLOW-UP PROGRAM

4.1 Physical Characteristics of the Petitcodiac River Estuary

Long-term follow-up of the physical characteristics of the Petitcodiac River estuary will continue annually for 3 years, biannually for the next 6 years, and again at 20 and 30 years, to evaluate the accuracy of long-term modelling predictions. If the River does not evolve as predicted, adaptive management will be employed to mitigate the environmental effects (e.g., erosion protection, excavation). The number of cross sections will be reduced as the monitoring progresses. Only selected cross sections will be monitored as per Stage 2.

4.2 Atmospheric Environment

As there are no significant negative environmental effects predicted with respect to the Atmospheric Environment (i.e., climate, air quality, odour and sound quality) during operation of the Project, follow-up is not required.

However, in the event that odour complaints are reported, then a qualitative odour survey would be undertaken to verify the complaint and assess the nature, character, intensity, frequency and duration of the odour. If the anaerobic decay of organic matter is suspected as the cause, then dissolved oxygen sampling will be carried out in the nearby vicinity of the odour to assess the potential for anaerobic decay. If anaerobic decay is found to occur that results in odour problems, then further investigation into odour levels may be necessary. After evaluation it may be determined that ambient air monitoring is required to adequately assess the impacts.

In the unlikely event that monitored ambient air quality levels exceed health based air quality standards, an ambient air quality advisory would be issued by the New Brunswick Department of Health and/or NBENV. In addition, the Province of New Brunswick would initiate a public relations plan that would inform the public regarding the nature of the odour, the source of the odour and the likely duration of the odour.

4.3 Fish and Fish Habitat

4.3.1 Sediment and Water Quality

Long-term follow-up of sediment and water quality will verify predictions of the environmental effects assessment and permit adaptive management of these parameters if mitigation is required. Once construction of the Project is complete, a sampling program will be implemented that is consistent with the protocol (i.e., sampling period and locations) developed in the Biophysical Component Study (AMEC, 2005c). This will allow comparison of long-term follow-up data with baseline data. Sampling will occur seasonally for the first three (3) years after construction and will decrease to once every three years if the results are positive, until the ninth year.

4.3.2 Fish/Aquatic Animal Species and Fish Habitat

The Follow-up Program for fish and fish habitat will verify the environmental effects assessment prediction that the fish passage Project Objective (as defined in the EIA Report, AMEC 2005a) will have been met with the selected Project. The Follow-up Program will also verify compliance with the *Fisheries Act* (regulatory compliance). Follow-up will consist of verification of an open channel at all seasons capable of allowing fish passage in a manner similar to pre-causeway conditions. Overall inspection of cross section data will be employed. Fish communities above the causeway will be surveyed to demonstrate the presence/absence of the nine fish species that require passage for life cycle purposes. Fish sampling should be conducted for two days in June, two days in August, and two days in October in the freshwater sections of the Petitcodiac River to get an indication of what species are present in that portion of the River. The presence of the targeted fish species would confirm the effectiveness of the fish passage opportunities within the Petitcodiac River system. This Follow-up should be conducted for three (3) years after construction, but each year the need for continuation of the program should be considered based on the results of the previous year, in consultation with DFO.

4.3.3 Bioaccumulation of Metals in Fish Tissue

During Stage 3, a study will be designed and carried out (in consultation with Environment Canada) to monitor concentrations of metals in fish tissue to verify the EIA prediction that the implementation of the Project Options would not result in significant bioaccumulation of metals occurring in fish.

4.4 Terrestrial and Wetland Environment

4.4.1 Wetlands

Follow-up for Wetlands will test the predictions of the environmental effects assessment and evaluate the effectiveness of mitigation. The Follow-up Program will involve annual visual inspection of dykes protecting freshwater Ducks Unlimited sites. If these sites continue to be effectively protected by the dyke structures after five (5) years, follow-up will discontinue. Wetland and mudflat areas in the Assessment Area will be monitored through aerial photo interpretation every five years for 20 years, with some field verification. If the net loss of saltwater wetlands (Provincially Significant) exceeds baseline conditions (i.e., pre-causeway conditions), then the adaptive management approach will consider various mitigation strategies, including the purchase of dyked farmlands for conversion to saltwater wetlands.

4.4.2 Wildlife and Vegetation

No Follow-up is required for wildlife and vegetation as verification of the environmental effects assessment will be accomplished through Follow-up of wetland habitat.

4.4.3 Migratory Birds

As for wildlife and vegetation, there is no Follow-up required for migratory birds.

4.5 Mudflat Productivity

Follow-up will consist of monitoring the distribution and overall area of mudflats and comparing the results to the 1962 aerial photos.

4.5.1 Managed Areas

Environmental effects assessment predictions will be tested through analysis of cross-sectional data to determine the effects of erosion and sedimentation at Managed Areas in the Assessment Area (i.e., Outhouse Point ESA (Environmentally Significant Area) and Lower Coverdale Island ESA).

4.6 Municipal Services and Infrastructure

4.6.1 Water Distribution Services

Follow-up for water distribution services will involve regular visual inspection in cooperation with municipalities to ensure that the watermain lowered in Stage 1 does not become exposed due to erosion. No other Follow-up is required.

4.6.2 Sanitary Sewer Systems

Follow-up of physical characteristics of the Petitcodiac River estuary will demonstrate the degree to which channel conveyance improvements are achieved. This Follow-up will address predictions regarding improvement to existing conditions that result in the blockage of outfall flapgates.

4.6.3 Storm Sewer Systems

Follow-up for storm sewer systems has the same objective, content and schedule as described for sanitary sewer systems.

4.6.4 Dykes and Aboiteaux

Follow-up for Dykes and Aboiteaux, which will verify the effectiveness of mitigation, will involve visual inspection to ensure that the upstream dykes and aboiteaux that were restored in Stage 1 are functioning properly. This Follow-up will occur annually for the first five (5) years and then be transferred to the New Brunswick Department of Agriculture, and Aquaculture (NBDAA). If dykes and aboiteaux are not functioning, then adaptive management will be used to either repair or modify the dykes and aboiteaux or find an alternative solution. No other Follow-up is required.

4.6.5 Other Infrastructure

Evaluation of mitigation measures to protect the former Moncton Landfill from erosion will be accomplished through a Follow-up Program. The Follow-up Program will continue seasonal inspection of erosion protection measures at the landfill as described in Stage 2 for the first 5 years after construction. If erosion does not occur, the City of Moncton will incorporate inspection into its normal programs.

4.7 Road Transportation Network

As no negative environmental effects are predicted for the Road Transportation Network as a result of the Project, and no mitigation is recommended, long-term Follow-up is not required.

4.8 Vessel Traffic and Navigation

No mitigation is required for Vessel Traffic and Navigation. Follow-up will determine the accuracy of the environmental effects assessment predictions and will consist of annual examination of the cross-sectional data collected to determine if River width and depth is sufficient to permit vessel traffic and navigation at all times of the year.

4.9 Land Use and Value

Follow-up to determine the effectiveness of mitigation for dyked agricultural lands is described in Section 4.6.4. Therefore, Follow-up for Land Use and Value will evaluate the accuracy of the environmental effects assessment predictions. Five years after construction is complete, the market value of property along the River will be compared with the market value of equivalent properties in the Assessment Area to determine the effect of the River on the value of properties adjacent to it. If a decrease in market value for waterfront property is realized, then adaptive management will mitigate this loss.

4.10 Current Use of Land and Resources for Traditional Purposes by Aboriginal Persons

There is no specific mitigation proposed for Current Use of Land and Resources for Traditional Purposed by Aboriginal Persons, nor are there any negative environmental effects predicted by the environmental effects assessment. Follow-up of predictions will occur through Follow-up of other components (e.g., Fish and Fish Habitat, Terrestrial and Wetland Environment), and an effort will be made to communicate these results to the Aboriginal Community.

4.11 Tourism

Follow-up for Tourism will include continuation of the annual survey of tourists in downtown Moncton to determine if changes to the River (e.g., increase in tidal bore), as a result of the selected Project Option, has an effect on the number and activities of tourists coming to the GMA. The size of the tidal bore will be monitored annually through visual inspection, and cross-sectional data at the Moncton bend in the River (a control point for the tidal bore) will be analyzed to determine if erosion is occurring as predicted.

Follow-up for River-based tourism (as described in Section 4.11) will evaluate the predictions of the environmental effects assessment and determine the effects of the Project Option on tourism to the economy.

4.12 Recreation

The Follow-up Program for Recreation will verify the accuracy of the environmental effects assessment predictions. Annual follow-up in the spring will determine if recreational trails along

the River maintain continuity or are flooded. If they are flooded, adaptive management will determine if mitigation is necessary. If after 5 years trails remain functional, Follow-up will cease. Follow-up will also include annual surveys of boaters and anglers to determine the effects of the Project Option on recreational activities and fisheries on the River.

4.13 Commercial Fisheries (Labour and Economy)

The Follow-up Program for Commercial Fisheries will evaluate predictions of the environmental effects assessment and the effectiveness of its proposed mitigation. Follow-up for commercial fisheries will continue the annual collection of catch data for commercial lobster and scallop fisheries in the Bay of Fundy and eel fisheries in the Petitcodiac River system, as described in Stage 1.

4.14 Heritage and Archaeological Resources

No mitigation is proposed for Heritage and Archaeological Resources and no negative environmental effects are predicted. Follow-up will verify the accuracy of these predictions and will proceed to determine if the River channel affects pre-causeway shorelines. If so, adaptive management will be used to mitigate the potential environmental effects on archaeological resources.

4.15 Public Health and Safety

4.15.1 Vehicular Accidents

Long-term follow-up of vehicular accidents is not required, as there are no negative environmental effects predicted as a result of the Project Options and no mitigation proposed.

4.15.2 Non-vehicular Accidents and Unplanned Events

Long-term follow-up of non-vehicular accidents and unplanned events will evaluate the effectiveness of mitigation measures and predictions of the environmental effects assessment. Assessment of annual strandings in the River and its tributaries for the first 5 years after construction will determine the effectiveness of signage and boating safety education mitigation. Follow-up will end after this period, unless adaptive management requires its continuation.

Follow-up of water supply for emergency fire fighting will determine if water or other substances (e.g., chemical fire retardants) are available to fight forest fires. This Follow-up will take place for the first 5 years after construction, following any forest fires that occur in the vicinity of the Project.

4.15.3 Groundwater Quality and Quantity

Long-term Follow-up of groundwater quality will occur annually for a period of up to 5 years.

4.15.4 Contaminated Effluents and Redistribution of Contaminants

Follow-up for contaminated effluents and redistribution of contaminants is described in part in Section 4.3.1 (Sediment and Water Quality) and in part in Section 4.6.5 (Other Infrastructure – former Moncton Landfill erosion protection).

4.15.5 Human Disease Vectors

No mitigation is proposed and the environmental effects assessment predicts that there will be no negative environmental effects of the Project Options for human disease vectors. As such, no Follow-up is required.

4.15.6 Flooding

Follow-up of flooding in the Assessment Area will verify predictions of the environmental effects assessment (and Modelling Component Study (AMEC, 2005b)). Evaluation of cross-sectional data will provide the information necessary to determine channel conveyance, which is the basis for potential flood risk.

5.0 REFERENCES

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