

March 12<sup>th</sup>, 2011

Mr. Kris Fredrickson Senior Program Officer, Prairie Region Canadian Environmental Assessment Agency (CEAA) 101-167 Lombard Ave Winnipeg, MB R3B 0T6

Mr. Fredrickson:

RE: East Side Road Authority (ESRA) GHG Assessment – Report from Dillon Consulting

#### INTRODUCTION

The following provides comments for a November 2010 PR 304 to Berens River All-Season Road Environmental Impact Assessment - Greenhouse Gas Emissions Assessment DRAFT Report (ESRA/Dillon GHG Report) prepared by Dillon Consulting Ltd. for the East Side Road Authority with respect to this project.

The overall tenor and intent of the report seems to be the minimization of greenhouse gas (GHG) estimates. Important factors are deemed to be "beyond the scope of the study" and are therefore excluded. The result is a deficient GHG assessment. Little or no context with regard to Manitoba government climate change and green house gas policies or regulatory framework is provided.

The GHG Report was produced pursuant Manitoba Environment Act License #2929 issued to the Manitoba Floodway and East Side Road Authority. In particular clause 18 requires the Licensee to:

...provide a detailed calculation of greenhouse gas emission of the Development in relation to the existing baseline conditions within three months of the date of this licence.

Manitoba Conservation sent the report back due to deficiencies. Any updated GHGs report, if one has been provided, is not public at this time.

#### **GHG GUIDELINES & STANDARDS**

The ESRA/Dillon report purports to rely on the Canadian Environment Assessment Agency document (CEAA), *Incorporating Climate Change Considerations Environmental Assessments: General Guidance for Practitioners.* <sup>1</sup> The CEAA guidance document outlines a five step process and on page one of the ESRA / Dillon GHG Report refers to this five step process as such:

"1. Preliminary Scoping for GHG Considerations. This preliminary scoping assesses whether there are likely GHG considerations associated with the project.

<sup>&</sup>lt;sup>1</sup> CEAA GHG Guidelines (2003), p. 8 http://www.ceaa.gc.ca/A41F45C5-1A79-44FA-9091-D251EEE18322/Incorporating\_Climate\_Change\_Considerations\_in\_Environmental\_Assessment.pd



- 2. Identify GHG Considerations. This process considers the potential GHG emissions profile of the project in comparison to the industry profile.
- 3. Assess GHG Considerations. The process determines the direct and indirect GHG emissions of the project, the impacts on carbon sinks, and comparison with industry, provincial / territorial and national inventories.
- 4. GHG Management Plans. Development of a GHG management plans to mitigate and / or offset emissions if the project results in medium or high emissions. jurisdictional considerations and project specifics
- 5. Monitoring, follow-up and adaptive Management. This process monitors and verifies the GHG emissions forecast and determines the effectiveness of the GHG abatement jurisdictional considerations and project specifics."<sup>2</sup>

Yet despite citing the CEAA procedural steps ESRA / Dillon completely ignore steps 4 and 5, stating steps 4 & 5 are not necessary because this project is an "adaptation response to climate change". The ESRA / Dillon GHG Report's consideration of the impacts of indirect effects, such as changes in traffic habits, changes in the development patterns of the affected communities, and the impacts on carbon sinks (these issues will be discussed more below) is also inadequate. More serious is the claim that this ESRA project is an 'adaptation response to climate change.' CEAA should immediately request verification of this claim. We are not aware of anything in the public domain with respect to the public policy or regulatory framework in Manitoba, or the licence issued by Manitoba that verifies this claim. If this is so then the ESRA/Dillon report is significantly more deficient, as there are also standards and methods to quantify and qualify a project in relation to climate change adaptation.

Despite citing the CEAA GHG Guidelines for Practitioners, it is not apparent that any standard or methodology for GHG accounting was used in developing the ESRA GHG Report. GHG estimates can be significantly altered depending on the guidelines and underlying assumptions used. The government of Manitoba is a founding member of the Western Climate Initiative (WCI), and its Climate Registry. Extensive work has been done to assist all parties (governments and emitters) in calculation of greenhouse gas emissions, especially in relation to baseline conditions. It is not evident that Dillon Consulting is accredited for GHG assessments, and it is not evident that they relied on "industry, provincial / territorial and national inventories" as per step 3 of the CEAA GHG Guidelines. Nor is there any reference to WCI or Climate Registry guidance in the ESRA/Dillon report..

Also Manitoba entered into an arrangement with the Canadian Standards Association (CSA) with respect to certain greenhouse gas reporting standards. There is no reference in the ESRA/ Dillon report to this CSA partnership. The ESRA is a government of Manitoba agency, subject to public policy and regulatory requirements from our government. The east side road network project is a public work funded and undertaken by the Manitoba government. On this basis alone this report and any future reporting from the ESRA regarding climate change should clearly state the methodology and standards regarding greenhouse gases and baseline conditions with respect to carbon used.

The World Resources Institute and World Business Council on Sustainable Development in collaboration with numerous multi-stakeholder partners published the *GHG Protocol for Project Accounting* (WRI Project Protocol) in 2005. The WRI Project Protocol

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<sup>&</sup>lt;sup>2</sup> ESRA / Dillon GHG Report (2010), p. 1





...presents requirements for quantifying and reporting GHG reductions and provides guidance and principles for meeting those requirements.<sup>3</sup>

...intended to guide project developers sequentially through the requirements for GHG project accounting, monitoring, and reporting.<sup>4</sup>

In addition, the International Standards Organization (ISO) released the three part GHG accounting and verification standards known as ISO 14064. A 2006 March-April edition of the ISO Management Systems Newsletter explains:

ISO's goal in developing the standards is to provide a set of unambiguous and verifiable requirements or specifications to support organizations and proponents of GHG emission reduction projects.<sup>5</sup>

ISO 14064 Part 1 details principles and requirements for designing, developing, managing and reporting organizational or company level GHG inventories, and is consistent with the WRI GHG Protocol. ISO 14064 Part 2 focuses on GHG projects or project-based activities specifically designed to reduce GHG emission or increase GHG removals. ISO 14064 Part 3 details principles and requirements for verifying GHG inventories and validating or verifying GHG projects.

The Canadian Standards Association (CSA), in collaboration with Department of Standards Malaysia (DSM), was integral in developing ISO 14064. Presently the CSA offers a variety of courses on ISO 14064 training. The CSA has also been instrumental in creation of the Canadian Climate GHG Registry<sup>6</sup> and it also provides training for individuals and organizations on how to create an emissions report for the Climate Registry.

Clearly ESRA should have directed its consultants, based on a clear scope of work to: both fulfil the licence under the Environment Act, and fulfil Manitoba policy and regulatory oblifations regarding GHG emissions. There are also clear options in terms of standards and methodologies which ESRA should have directed its consultants to apply to the report contents, and future reporting re GHGs. If such a scope of work was put in place by ESRA it should be part of the filings by the proponent.

Throughout these comments we refer to CEAA GHG Guideline, the WRI Project Protocol standards, ISO 14064, and the Climate Registry where appropriate.

To assess the ESRA GHG Report, transparency about which standards, if any, were relied upon and the author(s) familiarity or certification with the standards used, is required. Without this information it is virtually impossible to know if the ESRA/ Dillon GHG Report provides any credible information.

<sup>5</sup> March-April 2006, ISO Management Systems Newsletter www/iso.org/ims

http://www.ghgregistries.ca/

<sup>&</sup>lt;sup>3</sup> WRI Project Protocol (2005), p. 5 <a href="http://www.ghgprotocol.org/files/ghgp/ghg">http://www.ghgprotocol.org/files/ghgp/ghg</a> project protocol.pdf

*<sup>⁻</sup> Ibid*, p. 26

<sup>&</sup>lt;sup>6</sup> CSA GHG Registry



Given the CEAA review and comprehensive study underway it is obvious the proponent needed to make sure their staff and consultants responsible for fulfilling the Manitoba Environment Act project licence regarding GHGs should have made sure CEAA and other standards were recognized, in order to be fulfilled.

It appears that none of these steps were taken, and that the ESRA may not recognize that the licence for this public works project must be fulfilled.

#### AUDITOR GENERAL'S REPORT ON MANITOBA CLIMATE CHANGE

In the spring of 2008 the Manitoba Government introduced the *Climate Change and Emissions Reduction Act*. In fall 2010 Manitoba's Auditor General performed a review of Manitoba's management of Climate Change and provided recommendations for improvement. Included in the fourteen recommendation were:

- 10. We recommend that the Department of Conservation work with climate change partner departments to ensure all greenhouse gas reduction estimates are based on sound data and reviewed for consistency with National Inventory accounting standards and practices.
- 13. We recommend that the Minister of Conservation determine the method that will be used to calculate greenhouse gas emissions for reporting purposes under The Climate Change and Emissions Reductions Act.<sup>7</sup>

#### As the Manitoba Auditor General notes:

The Act states that "the Minister may determine the method of calculating emissions and emission offsets for the purpose of quantifying Manitoba's emissions in any given year". In practice, a method is required for measurement to take place (emphasis added). The Act further states "the Minister shall have regard for relevant methodologies and principles that are used in other jurisdictions, including those that participate with Manitoba in regional or international climate change partnerships, and must consult with experts considered knowledgeable about standards for calculating emissions and offsets". This ensures the method determined by the Minister will be widely viewed as credible (emphasis added).

Clearly defining the method(s) used to calculate GHG emissions, ensuring that the estimates are based on sound data, and the method(s) and related data is publicly accessible is fundamental to the successful management of GHG emissions, because without methodology, transparency of methods and data, the GHG numbers are not considered credible.

The responsibility lies with the Department who carries both climate change and licensing responsibilities. Public works should not go forward in Manitoba, including should not be licensed

<sup>&</sup>lt;sup>7</sup> Manitoba Auditor General, Performance Reviews (2010), p. 47-48 http://www.oag.mb.ca/reports/rtl\_performance\_audits\_2010.pdf



in Manitoba, without carbon inventory and GHG measurement methods in place. The Auditor General only had estimates and projections to work with but was still able to determine that Manitoba will not meet its regulatory objectives for GHG reductions. This project and all other Manitoba public works should provide clear information about how it will avoid increase in emissions, while avoiding further delay in our province reaching its mandated GHG reductions target.

# **SCOPE OF THE PROJECT – Project Boundaries**

Manitoba Wildlands submitted a letter to the Canadian Environmental Assessment Agency (CEAA) July 7<sup>th</sup>, 2010 "Public Consultation - Comprehensive Study Scoping Document, Lake Winnipeg East Side Road CEAR Reference Number 09-03-52056," in which we provided comments on the Scoping document, suggesting:

... the scope for this project be considered to be as broad as possible, in order to apply the precautionary principle regarding possibly adverse environmental effects of this project. Making sure the project has a broad and inclusive scope will decrease the risks of significant adverse environmental impacts and effects.<sup>8</sup>

The Project study area according to the Dillon GHG Report:

...is along the eastern shoreline of Lake Winnipeg and extends from the southern limit of Hollow Water traditional lands north to Poplar River and east to Pauingassi and Little Grand Rapids First Nation on to the Ontario border. The study area encompasses all First Nations traditional lands.<sup>9</sup>

There is no stated justification for the chosen geographic scope of the project. And different reports for this project appear to be using different project areas/scopes. One has to wonder why the geographic area extends so far East of the proposed All-Season Road (ASR) to the Ontario border, while on the Western side of the ASR the geographic Scope only extends the few kilometres to the Lake's edge. It appears the geographic scope was selected on the basis of convenience using the provincial border and the edge of the lake as boundaries. What was the rationale for this choice?

ESRA/ Dillon also appear not to have read CEAA guidance with respect to project areas that border on large bodies of water. This is reference to Lake Winnipeg.

Additionally the scope of a project is delineated by more than geographic boundaries, as the effects, particularly the secondary effects, of a GHG project are not always constrained by geography.

We note that there is a lack of data and baseline information regarding the carbon in place before the project commences. This was required by the Manitoba licence. In particular we would suggest that

<sup>9</sup> Dillon Consulting (2010). GHG Report, p. 2

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<sup>&</sup>lt;sup>8</sup> July 7<sup>th</sup>, 2010 Manitoba Wildlands correspondence to CEAA http://manitobawildlands.org/pdfs/CEAA-ScopingDocReviewJuly2010.pdf





any estimate of carbon before the project needs to show clearly its data sources, and could be mapped. Public sources for carbon in our forest regions are available for most of Canada now.

# The WRI Project Protocol lays out a five step process for determining a GHG Assessment Boundary<sup>10</sup>:

- 1) Identify each project activity associated with the GHG project.
- 2) Identify all primary effects related to each project activity.
- 3) Consider all secondary effects related to each project activity.
- 4) Estimate the relative magnitude of all secondary effects.
- 5) Assess the significance of all secondary effects.

**Step 1** involves identifying the various activities of the project and determining the positive or negative GHG impacts. Examples in the current context include, but are not limited to activities such as the construction of a road, clearance of land, use of construction equipment, the movement of vehicles to the project area the quarrying of aggregate, the travel of vehicles on the road once constructed, etc.

Step 2 involves assessing the primary effects of each of these activities, or in other words what the primary effects in terms of GHG emissions will be.

Steps 3 -5 require estimating secondary or indirect effects. The ESRA/ Dillon GHG Report and analysis on secondary effects is particularly problematic. (We review some of these deficiencies below.) Then when all effects have been identified the boundary for the assessment would be set. That clearly was not followed in this report.

We recommend a thorough review of the CEAA Guidelines, WRI standards, and advice. ESRA needs to decide which methodology and standards it will use on this and future road network projects. Then ESRA needs to provide that information to the regulatory agencies for this and future projects. We note that there is to date no such methodology or standard in place for the Winnipeg Floodway Authority's projects and operations.

GHG reporting during construction and for a five year period afterwards should be filed in a public manner.

# SECONDARY EFFECT: POPULATION GROWTH

The ESRA/Dillon GHG report assumes no population growth in the communities of Berens River, Bloodvein First Nations or the communities along the route between Winnipeg and Berens River.<sup>11</sup>

A Manitoba government commissioned report, also prepared by Dillon Consulting Ltd. in August of 2000, entitled East Side of Lake Winnipeg All Weather Road Justification and Scoping Study (Dillon

<sup>WRI Project Protocol (2005), p. 30
Dillon Consulting (2010). GHG Report, p. 22</sup> 



Scoping Study)<sup>12</sup>, projected community population increases ranging from 2.5% to 4.8% in *annual* population growth.

A commissioned review of this study by Paskanake Project Management (PPM) showed that these annual population numbers were high, 2.5% per annum being a more correct rate of population growth, this overestimation led to "...an approximate \$7.63 million overstatement in transportation net benefits." <sup>13</sup>

Even at 2.5% population growth we would have a 28% population growth in the decade since the earlier Dillon Consulting Ltd report regarding an east side road network.

The same consulting firm, who over estimated population growth 10 years ago, is now claiming that that there will be/ was no population growth. This is simply an untenable assumption. A variety of public sources exist that document population growth patterns in Aboriginal communities, and population growth for communities in Manitoba has also been documented and projected. It appears as though we have opportunistic bases for the calculations in this current report.

#### SECONDARY EFFECT: CHANGES IN TRAVEL PATTERNS

The same 2000 Dillon scoping study from ten years ago determined that a North- South road on the East Side of Lake Winnipeg was likely to result in a 60% reduction in air travel. The PPM review questioned that number as high. Yet the 2010 Dillon GHG Report for ESRA assumes an 80% decline in air travel. <sup>14</sup>

We cannot see any basis for many of the assumptions in the current GHG report by Dillon Consulting Ltd. The Paskanake Project Management review of the Dillon 2000 feasibility report indicated that standard methods in the industry assumes as much as a 25% variance in such combined statistical and economic assumptions. We are not able to find any statement as to variances assumed in the ESRA/Dillon GHG report. Perhaps there is also a 25% variance in their GHG assumptions.

Likewise the ESRA/Dillon GHG Report assumes traffic levels will not change and that ratio of cars and light trucks to heavy trucks on this road will stay consistent at a 93% to 7%. <sup>15</sup> Once again, on what basis are these assumptions made? Increased access to roads is likely to lead to increased trip volumes; and once the all-season road is built it is also likely that the number of semi-trailers hauling goods is also likely to increase. Once freight does not need to be flown in there may be many

<sup>15</sup> *Ibid*, p. 29

<sup>&</sup>lt;sup>12</sup> Dillon Consulting (2000). Scoping Study, p. 8 http://www.gov.mb.ca/mit/tspd/completed#east

<sup>&</sup>lt;sup>13</sup> PPM (2001). Review and Analysis: East Side of Lake Winnipeg Road Justification and Scoping Study, p. 10

http://manitobawildlands.org/pdfs/BHart AWR Review2001.pdf

<sup>&</sup>lt;sup>14</sup> Dillon Consulting (2010). GHG Report, p. 28



changes in trip volumes, and kinds of vehicles. Has Dillon ignored these possibilities in order to validate assumptions about low GHGs? These traffic level assumptions are quite different than those in the 2000 Dillon report.

# DISCREPANCY: GHG EMISSIONS - WETLANDS, DEFORESTATION AND REFORESTATION

In April 2007 a symposium was held in Wageningen, the Netherlands, to advance our understanding of peatland Carbon cycling through integration across disciplines and research approaches in order to develop a more synthetic picture of the present and future role of peatlands in the global Carbon cycle and their interactions with the climate system. A paper, *Peatlands and the carbon cycle-a synthesis*<sup>16</sup> resulted. There is also ongoing research and findings with respect to peatlands ( muskeg ) in Canada's boreal regions from institutes and universities across Canada. The Dillon GHG report seems to dismiss current technical and research findings about carbon in the project region.

According to ESRA/Dillon estimates land clearing emissions will only create annual Carbon equivalent emissions of 1,361 tonnes during the first four years of construction (2010-13) with an additional 637 Carbon equivalent tonnes of emissions added in the first year to account for forest biomass decomposition (mainly roots). Additionally they claim annual carbon equivalent emissions sequestrated will be reduced by 45 tonnes in the first four years, and 32 tonnes for the years thereafter. An explanation of what 'carbon equivalent emissions sequestrated' means should be provided.

Other ESRA/Dillon assumptions regarding GHG emission estimates are similarly overly optimistic. Noteworthy is the assumptions that 67% of the 15,657 tonnes of cleared biomass is excluded from GHG calculations because it is assumed that 50% of cleared biomass would be converted to durable long lasting products for wood construction and 17% would be used as firewood by local communities and therefore "...this volume of biomass would have been harvested regardless of the project." <sup>18</sup>

As there is currently no operating mill, and no logging going on in the region – other than small community operations – we would recommend to the regulators that they ask ESRA to provide the data these assumptions are based on.

Do the neighbouring communities have the infrastructure, knowledge, ability and access to markets to convert the cleared wood into durable long lasting products? Are there any operations or licences in place to verify this potential activity? Is 50% even a realistic assumption? It is unclear how ESRA/Dillon determined that 50% of the biomass would be converted to durable products, *or how this would occur*.

<sup>18</sup> *Ibid*, pp. 23-24

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<sup>&</sup>lt;sup>16</sup> J. Limpens et. Al (2008)

<sup>&</sup>lt;sup>17</sup> *Ibid*, Table 4.1 & 4.2 pp. 32-33





What is the local demand for firewood in nearby communities? 2,662 tonnes of firewood is substantial. Can the communities really use this much firewood? Do they have a way to access it and move it? No supporting evidence was provided in this regard. It is also conceivable that the firewood would need to be hauled additional distances in order to be fully utilized. If this is the case the added emissions from hauling the firewood need to be included in the equation. The same applies to any biomass converted to other goods. If the proponent intends to stay with calculations that assume manufacture of goods then the emissions from the transport, manufacture, and further transport of goods would need to be reported as part of any calculations.

#### USING SELECTIVE DATA

It seems there is a consistent pattern on the part of ESRA/Dillon Consulting to "cherry-pick" data to produce a result desired by the proponent, rather than a factual result, based on accepted methodologies. This is further compounded by the fact that the rationale for numerous assumptions is not explicitly stated. The result here is to drastically underestimate the GHG impacts of the road both during construction, and once operational.

We are surprised at the steps and standards not accessed for this report. With respect to the boreal forest regions in Manitoba there are reliable, more recent sources that would help the proponent report the carbon inventory (pre project status) and the environmental effects of disturbance of the carbon during construction. The ability to project the resulting emissions also exists based on recent technical standards, research and academic work. Any GHGs data should, again, be based on credible, transparent standards and methods.

### IMPACTS OF CLIMATE CHANGE ON PROJECT

The ESRA/Dillon GHG study does not consider the impact that climate change will have on new permanent road (i.e heaving permafrost may cause roads to heave, they assume historical average of winter road access but climate change may change this).

It is somewhat ironic that the Dillon GHG report disclaims:

...the impacts of climate change to the study *cannot be exactly predicted* and is beyond the scope of this GHG assessment. The changes in climate are expected to impact transportation patterns of the study region.<sup>19</sup>

But if this is the case one has to wonder if the proponent does not want to consider the impacts of climate change on the road project and whether the regulator has been clear enough in its requirements etc. Stating there will be climate caused changes in transportation patterns in the region may mean the proponent contradicts its own GHG report.

<sup>&</sup>lt;sup>19</sup> *Ibid*, pp. 5-6





Clearly, at minimum the study needs to consider the impacts that changing climate will have on road operation, and maintenance etc. Heaving permafrost could cause the road to buckle, and repairs would be costly and would themselves cause GHG emissions. The region has been affected by serious weather events in the recent and distant past, has this been taken into account at all?

#### As noted in the CEAA GHG Guidelines:

if climate change risks extend beyond the project itself to potentially affect the public or the environment, this information must be factored into an informed decision by relevant authorities. Priority should also be given to projects that are both located in areas where there is a known sensitivity to climate change (i.e. projects located in Arctic regions or near large bodies of water), and are identified as sensitive to the effects of changing climatic parameters.<sup>20</sup>

A discussion about increased costs of building and maintaining the road due to climate change is also absent from the GHG report. Overall GHG emissions are having immense impacts in this region, and other boreal regions – so it is an avoidance to say the GHG emissions from this project will have a little local impact. In fact the report should be able to *identify and project the combined GHG emissions in the region*.

#### **CONCLUSION**

In conclusion Manitoba Wildlands recommends:

- 1. That any firm or individual providing technical reporting, advice etc regarding green house gases and climate change for a licensing process in Manitoba be certified. Also that any methods, sources, or criteria used to assess GHG be clearly identified in all reports, work products etc.
- 2. That any agency or developer whose project involves crown lands and waters use accredited climate change verifiers for any reporting, EIS, or actions taken.
- 3. That project areas for public works be identified in order to identify possible environmental effects while avoiding being large so as to be able to claim that impacts are insignificant simply based on chrematistics for size of area.
- 4. That the Manitoba government follow through on the recommendations of our auditor general regarding tracking and reporting carbon and emissions especially for both emitting and reductions. This involves actual emissions data rather than estimates and projections

http://www.ceaa.gc.ca/A41F45C5-1A79-44FA-9091-

D251EEE18322/Incorporating\_Climate\_Change\_Considerations\_in\_Environmental\_Assessment.pd f

<sup>&</sup>lt;sup>20</sup> CEAA GHG Guidelines (2003), p. 13



based on these. Clear guidelines and directives for environment licences ( GHGs reporting, baseline inventories, etc), especially for public works need to be made public

- 5. That Manitoba Conservation specify in EIS guidelines and scoping documents what is required of any proponent regarding climate change content and reporting.
- 6. Sources for research, data, assumptions, and advice regarding climate change, emissions, carbon sequestration, etc be identified in any licensing filing, report, or requirement under an Environment Act licence.
- 7. That all reports regarding climate change, environmental management that involves climate change, carbon sequestration, monitoring, reporting etc in relation to an Environment Act licence be made public, and placed in the public registry. We would encourage proponents to also post this information publicly.
- 8. All public sector proponents abide by and support the public policy and regulatory framework with regards to climate change, including going beyond minimum compliance so that best outcomes are sought.
- 9. Each community affected by the ESRA be informed of the climate change impacts, monitoring and reporting that will be put in place regarding the ESRA.

Regards,

Gaile Whelan Enns,

Director, Manitoba Wildlands

#### **Attachments List:**

Paskanake Project Management February 2001, "Review and Analysis Eastside of Lake Winnipeg All Weather Justification and Scoping Study."

Manitoba Wildlands July 7<sup>th</sup>, 2010 letter to the Canadian Environmental Assessment Agency (CEAA) "Public Consultation - Comprehensive Study Scoping Document, Lake Winnipeg East Side Road CEAR Reference Number 09-03-52056."

Manitoba Wildlands January 15<sup>th</sup>, 2010 Letter to Braun and Blaikie "Manitoba Environment Proposal: PR 304 to Berens River All Season Road Environmental Impact Assessment - File No: 5388"



July 7<sup>th</sup>, 2010

Lake Winnipeg East Side Road Canadian Environmental Assessment Agency Suite 101, 167 Lombard Ave. Winnipeg, Manitoba R3B 0T6

#### **Dear Minister Prentice:**

Public Consultation - Comprehensive Study Scoping Document, Lake Winnipeg East Side Road CEAR Reference Number 09-03-52056.

# General Scope of Document

Section 6.1 of the Comprehensive Study Scoping Document for the proposed Lake Winnipeg East Side Road Project states:

The proposed scope of project for the purposes of the federal environmental assessment include the physical works and activities associated with the construction, operation, modification, decommissioning, abandonment (as appropriate) and reclamation of the project as proposed by the East Side Road Authority, and compensation works to offset the loss of productive capacity of fish habitat resulting from the proposed project.

Section 6.8 of the Scoping Document indicates the environmental assessment will identify mitigation measures that will mitigate identified adverse environmental effects arising from the proposed project. Manitoba Wildlands suggests that the language in Section 6.1 should also reference the use of mitigation over the lifetime of the East Side Road, including construction, maintenance, decommissioning and reclamation.

Section 6.9. Environmental Effects Analysis and Significance of Environmental Effects states:

The federal environmental assessment will include an evaluation of the nature and extent of the residual adverse environmental effects after applying mitigation measures where possible. A determination of whether the adverse environmental effects are likely to be significant will be included along with the methods employed to reach this determination.

Recently, Manitoba Wildlands indicated there are many issues surrounding transparency of project information, and environmental effects and impacts data in relation to large-scale public works projects in Manitoba. Please refer to our January 2010 letter regarding Manitoba Environment Proposal: PR 304 to Berens River All Season Road Environmental Impact Assessment for more details on these comments: (http://manitobawildlands.org/pdfs/MWLcommentsESRAFNLJan10.pdf).



This being stated, Manitoba Wildlands requests that in addition to providing methodology of how adverse environmental effects of the project have been determined, that the full environmental effects assessment methodology be provided in the comprehensive study. Including full methodology will increase the public's ability to be involved in the project assessment. These steps allow for greater transparency of the publicly funded project. This will also make the project more understandable: basis for identification of environmental effects from the project; identification of significant effects, with identification of *all* environmental effects. Given that environmental standards, methodology and transparency are most important when a government is the proponent *and* licensing agency Manitoba Wildlands requests that the Canadian Environmental Assessment Agency (CEAA) require information on all environmental effects identified be included in all assessment of this project.

Federal responsibility has been identified, requiring a comprehensive study under CEAA. Manitoba Wildlands found the government East Side Road Authority (ESRA) agency Environmental Impact Statement (EIS) and its review by Manitoba Conservation insufficient in several areas, thereby adding risk of significant environmental effects from the project.

Manitoba Wildlands recommends that CEAA take steps to completely fulfill it scoping document contents – added to as a result of this review – in relation to the insufficiency of the ESRA EIS.

Backgrounder on Scoping under CEAA by M. Dolle and A. Kwasniak states that the broader a project is scoped and assessed for impacts and effects, the more likely significant adverse environmental effects will be found. Manitoba Wildlands therefore expects that the scope for this project be considered to be as broad as possible, in order to apply the precautionary principle regarding possibly adverse and environmental effects of this project. Making sure the project has a broad and inclusive scope will decrease the risks of significant adverse environmental impacts and effects.

Backgrounder on Scoping under CEAA also suggests that while sections of a scoping document works to highlight potential significant adverse effects, the scoping document can also be used to promote sustainable development, thereby achieving/maintaining a healthy environment and economy. Similarly, the scoping document can work to ensure that projects are considered in a careful and precautionary manner. Manitoba Wildlands agrees with these ideas, and fully encourages CEAA to promote these ideals into its final public scoping document for this project.

# **Proponents**

Currently, there are many fundamental questions here regarding who the proponent is for the East Side Road project. For example, is this is provincial government project, or a project being put forward by a separate body? This is currently very confusing from the perspective involved/affected communities. Manitoba Wildlands therefore would like the scoping document to require the question of who the proponent is to be addressed.

# Project Area

The CEAA scoping document does not include a specific description of the project area. This approach would be an outright contradiction of CEAA policy – and the basis that has been used in other



assessments where federal responsibility triggered a comprehensive study.

Manitoba Wildlands recommends that CEAA apply a project area standard to this road project consistent with its policy of one km each side of the road for assessment of environmental effects, thereby reducing risks from narrow scoping or narrow definition of a project area. Manitoba Wildlands recommends that the project area for this project be the width of the intended road, bridge, drainage, ditch areas with one kilometer on each side of the road included in the project area, and thereby the scope for assessment of environmental effects.

# **Future Intended Projects**

Section 1.0 of CEAA's Comprehensive Study Scoping Document for the ESRA project states: The East Side Road Authority is proposing to construct, operate, and maintain an all-season road from Provincial Road 304 at Manigotagan to Berens River. As shown on Figure 1, the proposed project is located on the east side of Lake Winnipeg in Manitoba, 35 extending from Manigotagan, north, approximately 155 km to Berens River.

It is a matter of public information and public policy of the proponent (ESRA is an agency of the Manitoba government) that this project will become part of a whole intended road system / set of projects for this region of Canada/Manitoba. As recently as the 2010 Manitoba budget address, and public documents the Manitoba government has confirmed its intended future projects that will be connected to this road project.

Regulation changes north of Berens River under the Manitoba Parks Act (January 2007) were enacted for future projects, connected to this project. Contracted engineering service providers for the ESRA, paid by government of Manitoba funds/public funds, are ongoing in relation to the future intended projects that will be connected to the road proposed in this project.

These engineering and technical services are ongoing in communities and ecosystems east and north of this current project and pertain to future intended projects linked to this project. Interviews during 2009 and 2010 in the Manitoba media with audiences who are paying for this project and intended future connected projects have consistently included commentary about the future intended projects.

It is generally understood that the development of the East Side Road Projects will ultimately result in the development of cottages subdivisions, housing and possible new communities. Increasing road access to the east side of Lake Winnipeg will also result increased use of wildness for hunting, fishing, recreation and tourism, among other activities.

Manitoba Wildlands recommends that CEAA include in the scope for its comprehensive study a regional plan that includes potential environmental effects from this project and future intended projects. Should the proponents be unable to provide the elements of such a plan (including identification of future intended projects), Manitoba Wildlands recommends that CEAA support the assessment process by providing such a regional plan.





# Project Definition – Multiple Intended Projects

Section 6.2 Comprehensive Study Scoping Document states:

As defined under CEAA, "project" means:

a) in relation to a physical work, any proposed construction, operation, modification, decommissioning, abandonment or other undertaking in relation to that physical work, or b) any proposed physical activity not relating to a physical work that is prescribed or is within a class of physical activities that is prescribed pursuant to 25 regulations made under 59(b) [of CEAA]

The current project includes the construction of highway from Manigotagon to Bloodvein First Nation. Ultimately this road will be connected to other intended projects and will result in other connected projects. Specific economic and social changes will result in communities along this project, while other communities will be impacted by the array of future intended projects.

Manitoba Wildlands recommends that CEAA include in its scoping document and comprehensive study assessment (or assessment undertaken by other responsible agencies) that a thorough study and assessment of how the environmental effects of undertaking this project will affect human health, culture, and traditional activities of community members along the route of the project, and within or adjacent to the project area

Today our ability to apply sophisticated analysis to the consequences of a project means that we have an obligation to provide communities who will benefit with information about impacts also. The ESRA filings simply did not provide any assessment of risks, or social, cultural, or economic impacts.

We note that unless CEAA fulfills its own standards for definition of this project area, effects/results of environmental effects upon the members of communities along/adjacent to this project could be omitted or ignored. This omission could result in increased risk to the human health, culture and traditional activities of the members of these communities.

It is especially urgent for CEAA to make sure its comprehensive study identifies these effects because Manitoba did no new assessment, and based its own filing and EIS on a ten year old study, which itself admitted to as much as a 25 % variance in all of its data, economic benefits analysis, costs, timelines. This kind of variance applied to a local economy, or the impacts on a species already endangered could simply mean dramatic adverse impacts. There was also no actual clear environmental effects content in the Manitoba ESRA EIS. It is mostly a policy and economic rationale document, though the authors indicated they did not bother to access the full Dillon Report from ten years ago, and only used the executive summary. Manitoba Wildlands hopes that CEAA scoping addresses these deficiencies, as the province's commitment to sustainable development is not reflected in its filings. It is generally assumed by the proponent that the East Side Road project will ultimately result in the development of cottage subdivisions, housing, expanded forestry, hydro bi pole corridor(s) and possible new communities. The proponents also assume in their environmental impacts filing that increasing access



to the east side of Lake Winnipeg will also result in the increase use of wildness for hunting, fishing, recreation and tourism, amoung other activities.

If the plan for this East Side Road project and various future intended/connected projects is to truly be comprehensive, Manitoba Wildlands suggests CEAA require the ESRA participate in and support a full plan for the region. Such a regional plan could include: general community plan/activities plan for the East side, based on information provided by the communities, First Nations, and potential developers. This planning information should include potential plans for the east side of Lake Winnipeg, and outline positive and negative aspects of introducing these developments to the region.

Manitoba Wildlands suggests that consideration is required as to the potential for further federal responsibilities under CEAA for this project and the various future intended projects identified in public policy, and in public statements by the proponent(s).

# **Cumulative Effects**

Page 8 of Backgrounder on Scoping under CEAA by M. Dolle and A. Kwasniak states:

"Cumulative effects" refer to a consideration of the interaction between the effects of the proposed project and others that have been carried out or may be carried out in the future. If the main purpose of an assessment under the Act is to identify likely significant adverse environmental effects of the project, this might suggest that a limited scope of cumulative effects is appropriate... If the purpose extends to promoting sustainable development through the assessment process, however, a much broader scope for the cumulative effects analysis might be warranted.

Manitoba Wildlands recommends that the CEAA comprehensive study be based on a broad scope of the East Side Road Project, thereby promoting sustainable development and adhering to the precautionary principle.

#### **Ecosystem Function**

Section 6.4. CEAA Comprehensive Study Scoping Document for this project states:

The spatial boundary will be determined specific to each factor in order to effectively assess the potential environmental effects of the project. Spatial boundaries are based on the *zone of the proposed project's influence* beyond which the effects of the project are expected to be non-detectable. Multiple study area boundaries are to be employed with the rationales provided for all boundaries selected, to reflect the range of geographic areas within which specific effects may be experienced.

While proponent appears to assume that the project area is restricted to the area of construction, it is well established that environmental effects extend beyond physical changes seen on a construction site. Manitoba Wildlands agrees that the zone of proposed project influence includes all effects. This approach to spatial boundary for the proposed project also fulfills the need for a broad scope, and is likely to help avoid risk from adverse environmental effects and impacts.



Section 6.12 of CEAA Comprehensive Study Scoping Document for this project states:

The environmental assessment will include consideration of the capacity of renewable resources that are likely to be significantly affected by the project to meet the needs of the present and those of the future.

As road access to the East Side of Lake Winnipeg region increases from this and future intended projects, there will be increased impacts and decreased capacity for renewable natural resources in the region. These impacts could include reduced access or predictability of access and harvest of natural resources for the Aboriginal persons resident in the region. The subsistence economy in a region where 'country food' is part of every household's daily life needs assessed.

Increased access to and use of renewable resources can be considered a by product of this highway project, and of the various other future intended projects. Manitoba Wildlands asks that this be a basis for decisions regarding: contents of the final scoping document and the comprehensive study; the potential for a federal, CEAA sponsored plan for the region. Cumulative impacts on renewable resources and on the subsistence economy from this project and future intended project needs to be a cornerstone of the comprehensive study.

#### Woodland Caribou

Woodland Caribou are listed as a threatened species - both federally and provincially- in Manitoba and therefore pose a challenge in assessment of this proposed project, and intended future projects. Currently, the proponent appears to be utilizing old information to determine the status of woodland caribou populations along the east side of Lake Winnipeg. This is concerning, given that caribou populations and movement can fluctuate quickly over the course of a single winter.

Manitoba Wildlands therefore recommends that the proponent provide OR CEAA collect updated information and data regarding caribou populations along the east side of lake Winnipeg. Also, given that woodland caribou population dynamics will fluctuate with time, the proponent OR CEAA should access independent historic information, that should be updated annually during this project, and any intended future projects. The proponents appear to have ignored certain facts:

- this region was home to elk, moose, and caribou historically, and in living memory
- cumulative impacts on caribou ranges, especially calving and wintering areas, from existing development in the region will be exacerbated by this project, and future intended projects.
- a broad scope for this project (in relation to existing impacts from development) and potential environmental effects for this species and others is essential to the health of the habitat and species
- woodland caribou are a sensitive species, listed by both levels of governments, so assessment of effects on their habitat will also work to assess and protect other species and their habitat.
- again when government is licensing itself Manitoba Wildlands looks for broad scope, independent data and assessment.

Currently, there is also a need to acknowledge that future intended projects for the east side of lake



Winnipeg will also strongly effect woodland caribou populations. It is broadly understood the woodland caribou avoid human disturbance, including housing developments, industry and roads – the developments intended for this area. If these intended developments proceed once the road is built, the effects on woodland caribou *MUST* be considered. This is another reason Manitoba Wildlands suggests CEAA support a regional plan for the East Side of Lake Winnipeg. Such a plan needs to ultimately reflect the cumulative effects of current and future intended projects. Such a plan will work to protect Woodland Caribou, all other species and environmental/socio-economic factors affected by this and future projects.

# **Species**

The proposed East Side Road is the first project of many intended projects for the East Side of Lake Winnipeg. It is therefore essential to have clear and current data regarding all terrestrials, avian, and aquatic data and environmental effects assessment before this or other intended projects place. This may require a new species and habitat surveys for the area- the Manitoba Conservation Data Centre holds little data from these regions and primary repository (Manitoba Hydro) does not make it's data collected from this area available.

Manitoba Wildlands recommends that CEAA obtain baseline data for species and habitat which Manitoba Hydro has collected from on the ground field work throughout the regions for use in the comprehensive study.

There are several specific species that we hope the scoping document will assess. White pelicans and Night Hawks are examples of specific bird species to include in the comprehensive study. We are also advised that given the north south nature of this and other future intended projects that species range areas an specific species in the region will vary going north. For that reason it will matter to identify species who are at the edge of their range near the south extent of this or other intended projects. Similarly it will be important to identify species with capacity to move north in their habitat, or not. And species whose habitat begins within the north south project boundary would need special attention in assessment also. Boreal ecosystem features, elements and functions will vary within the spatial boundary for this project, and future intended projects. The comprehensive study needs to reflect conservation biology standards and concerns based on these species and habitat concerns. Cumulative effects of construction up to two hundred kilometers of road –includes impact and contributions to climate change. The proponents appear to have avoided fulfilling Manitoba government public policy regarding protection of carbon, and the need for minimum climate impacts. Again when a government sponsored and licensed public works project receives review and assessment that review must be of the highest standards.

# Climate Change

Manitoba Wildlands recommends that CEAA include in its expectations of the proponents clear statements as to each of the following elements in a climate mitigation plan for this project and future intended projects:

- carbon inventory for broad spatial boundary;



- carbon budget for each project;
- baseline data as to current carbon storage and emissions;
- emissions reporting for all stages of this project, with relationship to baseline data so that relationship to no net loss goals are clear;
- emissions mitigation plan for construction, operation, decommission, reclamation;
- relationship to the proponents (Manitoba government) public policies and commitments ;regarding climate change, peatlands protection, etc;
- public lands, waters, carbon require full accounting on carbon and emissions;
- consider this project an opportunity for system approach re carbon and emissions in intact boreal regions of Canada.

### Mitigation

Section 6.8. of the Comprehensive Study Scoping Document, *Mitigation Measures*, states:

Mitigation means, in respect of a project, the elimination, reduction or control of adverse environmental effects. The environmental assessment will identify mitigation measures that are technically and economically feasible and that would mitigate identified adverse environmental effects arising from the proposed project.

Due to the scale, impact and location of this project and future intended projects, planning for mitigation of this project is extremely important. Does the proponent intend to counter act impacts of road construction? It is also important to highlight that this project is planned for the east side of Lake Winnipeg, within the boreal forest, adjacent to proposed world heritage site and Canadian Heritage River, and an existing wilderness park. Sustaining ecosystem functions, integrity, and renewable natural resources as must be of the highest priority during the course of this project, and future intended projects.

Manitoba Wildlands therefore recommends that CEAA require that the ESRA project plan include all aspects of the project to be addressed through mitigation. Potential effects would include air quality, noise level, construction, operation and commissioning/decommissioning, and maintain of the road. From there, the plan can then outline which mitigation measures are technically and economically feasible.

# Please refer to the following links for documents referenced in this letter:

Backgrounder on Scoping under CEAA by Meinhard Doelle, and Arlene Kwasniak: <a href="http://www.cen-rce.org/eng/caucuses/assessment/docs/Scoping%20Backgrounder%20Final%202%20-%20May%202007.pdf">http://www.cen-rce.org/eng/caucuses/assessment/docs/Scoping%20Backgrounder%20Final%202%20-%20May%202007.pdf</a>

Executive Summary for the 2000 East Side of Lake Winnipeg Road Scoping and Justification Study by H.N Westdal & Associates and Dillon Consulting:

http://www.gov.mb.ca/mit/tspd/completed.html#east



Review of the 2000 East Side of Lake Winnipeg Road Scoping and Justification Study By Manitoba Wildlands:

http://manitobawildlands.org/pdfs/BHart AWR Review2001.pdf

January 2010 letter regarding Manitoba Environment Proposal: PR 304 to Berens River All Season Road Environmental Impact Assessment (ESRA) By Manitoba Wildlands <a href="http://manitobawildlands.org/pdfs/MWLcommentsESRAFNLJan10.pdf">http://manitobawildlands.org/pdfs/MWLcommentsESRAFNLJan10.pdf</a>

Yours truly,

Gaile Whelan Enns,

Director, Manitoba Wildlands



#### March 31, 2010

Honourable Bill Blaikie Minister of Conservation and Climate Change Room 330 Manitoba Legislative Building 450 Broadway Winnipeg, Manitoba R3C 0V8

Ms. Tracy Braun,
Director, Environmental Assessment and Licensing Branch
Manitoba Conservation
123 Main St. Suite 160
Winnipeg, Manitoba,
R3C 1A5

Dear Minister Blaikie, Ms. Braun:

# RE: Manitoba Wildlands comments BipoleIII Scoping Document, Environment Act file # 5433

The BipoleIII Direct Current transmission project in Manitoba is the first direct current system to be built in Manitoba in decades. It is also the first transmission line of significant length to be designed, planned and reviewed in Manitoba in over 10 years (Wuskwatim transmission project designing and planning activity started pre 1999).

#### Scoping Document: A First Step in EA

The scoping process is crucial for the success of the whole Environmental Impact Assessment (EIA) process (Soderman, 2006). In addition, the scoping process itself is expected to outline the major effects and impacts for the preparation and quality of EIS reports (Soderman, 2006, International Association for Impact Assessment [IAIA], 1995). The Bipole III environmental assessment scoping document provides a statement of contents for the project's EIS. Manitoba Wildlands expects detail regarding research, or methods for processes, standards, decision making principles, construction and operation of Bipole III among other topics, to be thoroughly examined and explained in the EIS filed by Manitoba Hydro for this project. We assume the contents of the scoping document in place for public review are based on Manitoba Conservation expectations and direction.

Our efforts in research and review to provide comments are intended to assist both the proponent and the Manitoba Environmental Assessment and Licensing Branch. Our efforts and comments are provided in the public interest, and to increase certainty, quality of assessment, consultation, and technical and scientific content for the EIS. In turn Manitoba Wildlands efforts regarding this scoping document are intended to inform, strengthen, and support the project review, assessment, and licensing



process. We take these steps because major projects when government is in essence licensing itself or in this case a crown corporation, setting its own EA standards, and impacting significant areas of Manitoba's lands and waters, while spending or borrowing significant amounts of public funds *must have the very highest quality of planning, access to information, environmental impacts assessment, public reviews, and licensing processes*.

One significant aspect of scoping a project is the identification of the project area. We would suggest that Manitoba Hydro make sure that its project area scope does not arbitrarily leave out sensitive sites or issues. As per our comments above the utility needs to be conscious at all times that it is in a privileged but risky situation where it is allowed to define its own project area.

Manitoba Wildlands will provide suggestions about contents that would be useful to incorporate in the Bipole III EIS. Suggestions and questions as to standards, methods, criteria for transmission projects are also contained in the electronic version of our document. Watch for Green References in our text to materials we are attaching. Green is also used to highlight materials we quote. Indented writing refers to quoted material.

Manitoba Wildlands will also be providing recommendations for contents for the Bipole III EIS, and the Bipole III review/licensing process. Please watch for BOLD text.

It is our understanding the Bipole III scoping document itself will not be updated – though review of its content and recommendations or comments received should be applied to the next scoping document for a transmission project in Manitoba. Further it is our understanding that all public comments provided under the Environment Act in review of the scoping document will be: provided to the proponent by Manitoba Conservation; be used in the determination of next steps for the proposal EIS under the Act; and be included in the public registry (both online and stationary public registry files.) We expect the public registry file to be updated soon, as it recently took over two months for notification of updated public registry files on two other EIS reviews under the Act.

The Canadian Environmental Assessment Act website

(http://www.ccan.gc.es/default.asp?lang=En&n=C3BD5DA2-1) lays out specific guidelines and suggestions on what should be contained in a scoping document. Manitoba Wildlands suggests the Manitoba Conservation examine these guidelines when developing future scoping documents.

# Access to Information

Manitoba Hydro and Manitoba Conservation need to avoid the false assumption that if materials or information are posted on a web page they are available to all affected parties. Also there is a false assumption that posting materials on a web page is the same as notification. Steps to make sure all affected communities, governments, land owners are notified will be extremely important for the Bipole III project. Currently stationary public registry locations in Manitoba may not be sufficient for this project. Additional sites, complete files, all being updated consistently will be essential.



Manitoba Wildlands recommends that once the corridor is selected and the project area defined on that basis that the utility and Manitoba Conservation design a notification system that will work both during the next stages under the Environment Act, but will also be in place throughout the building of Bipole III. This plan should be posted to the public registry, on Manitoba Hydro web pages, and be advertised as soon as it is in place. Given the number of affected communities in northern and southern Manitoba we assume regular updates will go by mail to all communities.

The utility should be required to make public any report that may be needed by affected communities, landowners, municipal authorities and public participants to be able to participate in Bipole III processes.

Manitoba Wildlands recommends that Manitoba Conservation and Manitoba Hydro arrive at an access to information policy for this project that is more than minimum compliance, and more timely than has been the practice. In particular the community sessions and open houses, municipal meetings etc must be combined with ongoing access to information. Manitoba Hydro can on its own take steps beyond minimum compliance so that information that supports citizen engagement, and best decision making, is available as early as possible in the process.

The Bipole III EIS needs to describe the tools for access to information put in place for the entire review, licensing process, and construction period, starting from the selection of a corridor.

Manitoba will need to make sure that all public registry files and proposal/ project documents under the Environment Act for previous transmission systems in Manitoba are available in public registries. It would make sense to re-establish access to this information now.

We commend Manitoba Hydro for the electronic listserv that was put in place for the Wuskwatim generation and transmission projects from the time a referral from the minister to the Clean Environment Commission started the CEC proceedings. That was a first under the Environment Act in Manitoba, and needs to be in place, with improvements, for Bipole III.

Manitoba Wildlands recommends that an electronic list and other tools for all parties, including public participants and affected communities, regarding the Environment Act review, CEC proceedings, hearings etc be operational *before and during the hearings* for Bipole III. Significant time and resources can be saved by ensuring access to information by more than one medium during the reviews, CEC proceedings, and especially the hearings.

Manitoba Hydro and all parties would benefit from reviewing the pattern and trends in public participants' concerns about quality and access for information during recent Hydro project processes, in order to improve these practices.



Manitoba Wildlands recommends that the EIS for Bipole III include a review of past practices, and issues regarding access to information, with a resulting plan and practices. This discussion may well need to include the Manitoba government entities involved in all steps under the Environment Act. See our comment about access to information throughout the projects construction.

# Transmission System Standards & Regulation

Currently guidelines, standards or regulations for transmission systems in Manitoba either do not exist or are not publicly available. Licences for transmission systems, and the record as to environmental assessment are the main public sources. Other areas of Canada, such as Ontario and British Columbia, publicly post guidelines and regulations regarding major transmission line construction.

For example: The Ontario Energy Board regularly updates and posts their *Transmission System Code*.

The purpose of the Ontario Energy Broad Transmission System Code is to set out:

- (a) the minimum conditions that a transmitter shall meet in designing, constructing, managing, maintaining and operating its transmission system;
- (b) the rules governing a transmitter's obligation to connect customers to its transmission system, and to provide transmission service to its customers;
- (c) the obligations between a transmitter and its customers and between a transmitter and its neighbouring Ontario transmitters;
- (d) the rules governing the economic evaluation of transmission system connections and expansions;
- (e) the minimum standards for facilities connected to a transmission system; and
- (f) through the connection agreement set out in Appendix 1, the obligations of a customer to the transmitter to whose transmission system the customer's facilities are connected.

Manitoba Wildlands recommends that guidelines for actions to build transmission lines - planning, design, EA, licensing, construction and operations - should be available through Manitoba Conservation, Environmental Assessment and Licensing Branch. These should be applied to all stages or reviews and decision making under The Environment Act and any other Act triggered by a new transmission line. Manitoba Conservation also needs to make available to the public its policies and procedures standards for a scoping document under the Environment Act.

#### Crown Lands: Designations, Parks and Protected Areas

The Bipole III EIS will need to identify all crown land designations in or partly in the selected corridor. This includes any crown land where a regulation, agreement, or order in council is in place. We assume the choice among three possible corridors/project areas will be made in advance of contents for the EIS being finalized and provided. As a result, the public policy, ecological, regulatory and community or stakeholder issues, and impacts with respect to crown land designations will need to be identified. As the west side natural regions of Manitoba continues to lack fulfillment of protected areas commitments, despite many areas of special interest designed by Manitoba Conservation being



available for those decisions, the EIS for Bipole III will need to address protected areas commitments, options, while avoiding impacts to any opportunity outstanding for establishment of new protected areas. It would be beneficial to decision making and the boreal forest regions for Manitoba Hydro to indicate which areas of special interest it supports for protected status. The utility could also nominate or identify alternative sites, and indicate which areas of special interest it supports.

Manitoba Wildlands recommends that Manitoba Conservation and Manitoba Hydro work together for decisions for new protected areas in the regions impacted by Bipole III, with establishment being in advance of any construction, ideally this year.

In addition, at any point in time Manitoba Conservation has plans for several new wildlife management areas in the province, and currently as many as 40 sites are under review for ecological reserve status, with as many as 20 rivers being reviewed for Canadian Heritage River status. Therefore the EIS will need to be informed about these potential decisions. The EIS will also need to include how Manitoba Hydro will avoid increasing risk of habitat impacts near *or* inside any existing protected areas – federal or provincial which are impacted by the selected corridor. The EIS will need to define buffers and explain the standards applied in each instance.

We would caution that the 'no logging in parks' amendments to Manitoba Acts last spring has left confusion and controversy including with respect to Grass River Park. Manitoba Hydro may wish to obtain a legal opinion about whether roads they may build that could benefit the forestry industry and contravene this new regulation.

First Nations affected by this proposal under the Environment Act may also be involved in lands selection for treaty land entitlement. While this information is considered confidential and is not made public by the Manitoba government, various departments of the Manitoba government review these land selections. Manitoba Hydro will need to be able to state in its Bipole III EIS that all lands selections have been taken into account, and avoided.

Manitoba Wildlands recommends that Manitoba Conservation provide Manitoba Hydro with the information its needs to fulfill public policy, and avoid contradiction to policies, commitments, reviews, and standards in place with regard to current and future parks, protected areas, crown land designations, and treaty land entitlement selections.

Manitoba Wildlands further recommends that the EIS for Bipole III contain the analysis done in the project area/ corridor to verify the steps taken or to be taken based on our comments and recommendation above.

# Impacts: Construction & Operation

Please see our comments regarding cumulative impacts, and staged assessment of cumulative impacts during the operation of this transmission system and its corridors, roads, etc. These are intended to apply to impacts during operation that is cumulative impacts.



We would suggest that given the size, cost, and timelines for Bipole III it is time to clearly state in the EIS which impacts are from construction, and which are from operation. Depending on the proposal under the Environment Act the pattern in Manitoba goes to one extreme or the other: a focus on impacts from construction OR impacts from operation. We encourage Manitoba Conservation and Manitoba Hydro to set the bar high and include standards, impacts, and assessment for both in the Bipole III EIS.

This also means that Manitoba Conservation and Manitoba Government Services and Transportation may need to provide clear standards regarding road building, road categories, and road decommissioning for the EIS. A similar approach would be needed regarding any logging, clearing, or changes in drainage etc with respect to contents in the EIS. These standards and contents are needed for this EIS given the number of communities affected, the length of the transmission line, the potential significant impacts from the project - and the reality that an opportunity exists to put standards in place that will aid the entire project, and future projects.

Manitoba Wildlands recommends that Manitoba Conservation assemble the existing policies and procedures from relevant government departments in order to provide Manitoba Hydro with the requirements for a range of impacts from Bipole III that include logging, road building/decommissioning, drainage and culvert installations, etc. We further recommend that these policies and procedures be posted, put in the public registry and included in the EIS so that it is clear what Manitoba Hydro is expected to fulfill, and which government departments are responsible for work permits, etc.

With the changes from climate change anticipated in habitat, weather, soil, and hydrology - not to mention species behaviour, ranges, etc - it is imperative this EIS has specific content about impacts during operation. We would suggest that a transmission system that traverses many natural regions (which are based on weather, soil, geology, etc) may well have varying impacts, and variations in technical operations. So now is the opportunity to consider how to avoid an EIS that assumes the entire transmission system is homogenous - with regards to impacts. An opportunity exists to consider soil, hydrology, weather and other biophysical elements on a regional basis in the EIS.

# Impacts: Cumulative

Manitoba Wildlands sees that Manitoba Hydro will be including an entire chapter of the EIS to cumulative impacts assessment. We commend the utility, and look forward to reading this chapter.

The cumulative impact approaches outlined by Manitoba Hydro should be explained explicitly in the EIS on a performance basis. For Manitoba Conservation to act on cumulative impact assessment, Manitoba Wildlands recommends Manitoba Conservation and Manitoba Hydro take the overdue step of discussing regular reviews of cumulative impacts of the Bipole III project, with public component and transparency. The EIS can then reflect how this ongoing or living cumulative impact assessment will be conducted. We would suggest five year intervals for



these cumulative impact assessments – which must be based on operations and performance versus a policy / paper assessment.

In addition to guidelines outlined by the CEAA, it is worth noting that Canter and Kamath (1995) outline in a detailed list aspects of cumulative effects which should be considered. These include ecological, social, economic and cultural effects of the proposed development.

A Reference Guide for the Canadian Environmental Assessment Act – Addressing Cumulative Environmental Effects (prepared by the Federal Environmental Assessment Review Office) outlines detailed descriptions of what should be included in an EIS under the CEAA.

#### Manitoba Hydro Policies

In 1993, Manitoba Hydro adopted a sustainable development policy and 13 complementary guiding principles based on the principles and guidelines of sustainable development adopted by Manitoba's Round Table on Environment and Economy. These guidelines and principles are now enshrined in Manitoba's Sustainable Development Act. Manitoba Hydro states the crown corporation will apply these principles in all aspects of its operations to achieve environmentally sound and sustainable economic development. We do not know if Manitoba Hydro has ever had independent analysis of its performance regarding these principles and guidelines.

Manitoba Wildlands appreciates the crown corporation indicating it will hold to these standards and further encourages Manitoba Hydro to abide by and adopt best practices standards, such as those outlined in *Principles of Environmental Impact Assessment Best Practice* by IAIA.

Manitoba Wildlands would like Manitoba Hydro to adopt and make public guidelines, standards and policies for planning, construction, and maintenance of transmission lines. In addition, guidelines, standards and policies regarding other Manitoba Hydro projects; such as planning, construction, and maintenance of converter stations and generation stations, should be made public. See recommendation above.

The ideal approach would be for the utility and Manitoba Conservation to arrive at transmission system standards, including for reporting in relation to cumulative impact assessments, operations, environmental management plans, green house gas (GHG) emissions, etc. These standards could be applied to both existing, and future transmission systems in Manitoba. For next transmission system projects (including those which are part of a new generation project) the joint standards could be written into the licence.

Does Manitoba Hydro commission independent review of its EIS products? What safeguards does Manitoba Hydro put in place to make sure the technical analysis, advice, and products it files under The Environment Act have had adequate review before filing?



# Manitoba Policy and Regulatory Framework

The Manitoba Conservation Environmental Assessment Scoping Document for Bipole III states;

Federal legislation includes the Canadian Environmental Assessment Act, Species at Risk Act, Migratory Birds Convention Act, Fisheries Act, Navigable Waters Protection Act and Explosives Act. Provincial legislation includes The Environment Act, The Endangered Species Act, The Water Protection Act, The Heritage Resources Act, The Sustainable Development Act and The Dangerous Goods Handling and Transportation Act. There are also various municipal by-laws, agreements and other regulatory and policy structures and instruments that could influence or apply to the proposed Project and the environmental assessment process. The EIS will contain a comprehensive annotated list of applicable legislation, regulations, policies and guidelines.

Manitoba Wildlands would expect to see the following Acts and Policies included in the EIS:

- The Sustainable Development Act;
- The Forestry Act (see 2009 amendments);
- The Parks Act, The Ecological Reserves Act;
- The Wildlife Act:
- The Climate Change and Emissions Reductions Act;
- The Crown Lands Act;
- The Planning Act

We have attached here our 2009 listing of Manitoba lands and waters policies as an aid to identify the sets of policies and programs which the Bipole III project may well need to fulfill or avoid impacting. While a few months out of date the listing provides a set of tools and a caution as to the importance of avoiding damage to or contradiction of existing public policy when undertaking a significant public works project.

The scoping document is vague regarding Manitoba's policy and regulatory framework. We recommend the Bipole III EIS be more specific and clear about the policies, existing agreements, and regulatory framework which the proponent need to fulfill or take into account for this project.

# Policy and Strategic EA

While our organization's primary focus in reviewing this scoping document is to assist in arriving at steps for assessing impacts from the design, construction and operation of the Bipole III project under the Environment Act, we would observer that the larger, or more costly, or more public a project the greater the likelihood that a policy and strategic EA is also needed.

It is overdue for Manitoba to have a mechanism for policy and strategic EA under the Environment Act that would be conducted either before or right after filing the proposal under the Act. This mechanism could assist in building the Guidelines or Scoping for the project EA. Such a mechanism



would identify the policies, program, commitments, and government mandates inherent in making a decision to proceed with the project. It could also mean that alternatives are explored at the beginning of the process. All acts, agreements, policies, and other kinds of commitments relevant to the project would be identified at this stage.

If the utility has conducted an in house exercise akin to a policy or strategic EA then the EIS should contain a record of the process, elements used, and questions asked.

# From the Australian Government Environmental Assessment Website:

Strategic assessments allow for a 'whole of government' approach to assessing environmental impacts under a policy, plan or program. They allow government to work closely in the early stages of planning to ensure environmental issues, including matters of national environmental significance, are considered from the start.

Manitoba Wildlands recommends that Manitoba Conservation and Manitoba Hydro identify contents needed in the Bipole III EIS to provide the essential elements of a policy and strategic EA. Manitoba Wildlands further recommends that Manitoba Conservation and Manitoba Hydro design tools so that advance policy and strategic EA becomes part of the process with all Manitoba Hydro proposals under the Environment Act.

# Social Responsibility, Social Licence to Operate

Manitoba Hydro is a public utility, which provides energy to the citizens of Manitoba, and incurs public debts which the citizens of Manitoba are liable for. Revenues to the utility are from its shareholders' energy consumption, and from export of energy. International and continental discussions about corporate social responsibility apply to all sectors, and should be evident in the operations of a public utility, even more than in the private sector. While a new term, 'social licence to operate' is becoming more common, and refers to the steps a company or utility needs to take to maintain trust, and the best possible relationship with its shareholders, and public, clients, etc. This term then applies to Manitoba Hydro operations, its new projects, and all the steps it takes with Manitobans to prepare for a new transmission project. All social responsibility standards and guidelines are inherently about community and our natural world environment.

Manitoba Wildlands recommends that the Bipole III EIS contain a thorough discussion of Manitoba Hydro's support for, and monitoring of its social responsibility standards, and actions. In particular we recommend that Manitoba Hydro explain how it is maintaining its 'social licence to operate' in preparing for Bipole III.

### ISO 2600 Guidance Standard on Social Responsibility

ISO 26000 is a new forthcoming, international standard on social responsibility. We are providing some short elements from the standards document. All quotes are from the ISO web site, and current ISO 2600 documentation.



Manitoba Wildlands recommends that the EIS for Bipole III indicate whether Manitoba Hydro agrees with and supports the contents of ISO 2600 Standard on Social Responsibility. If it does not an explanation should be provided. If it does then the EIS should include the ways the utility is applying the ISO Standard 2600 to the Bipole III planning and decision making process.

The standard will provide harmonized, globally relevant guidance for private and public sector organizations of all types based on international consensus among expert representatives of the main stakeholder groups. The standard is meant to encourage the implementation of best practice in social responsibility worldwide.

# Principles of Social Responsibility Definitions from the ISO/DIS 26 000:

**Accountability:** Responsibility of an organization for its decisions and activities, and state of being answerable to its governing bodies, legal authorities and, more broadly, its other stakeholders regarding these decisions and activities.

**Transparency:** Openness about decisions and activities that affect society, the economy and the environment and willingness to communicate these in a clear, accurate, timely, honest and complete manner.

**Ethical Behaviour:** An organization's behaviour should be based on the ethics of honesty, equity and integrity. These ethics imply a concern for people, animals and the environment and a commitment to address stakeholders' interests.

**Respect for Stakeholder Interests:** An organization should respect, consider and respond to the interests of its stakeholders.

**Respect for the Rule of Law:** An organization should accept that respect for the rule of law is mandatory.

**Respect for International Norms of Behaviour:** An organization should respect international norms of behaviour, while adhering to the principle of respect for the rule of law.

**Respect for Human Rights:** An organization should respect human rights and recognize both their importance and their universality

Social responsibility involves an understanding of the broader expectations of society. A fundamental principle of social responsibility is respect for the rule of law and compliance with legally binding obligations. Social responsibility, however, also entails actions beyond legal compliance and the recognition of obligations to others that are not legally binding. These obligations arise out of widely shared ethical and other values.

**Social responsibility** has the organization as its focus and concerns the responsibilities of an organization to society and the environment.

**Indigenous peoples** enjoy collective rights, and individuals belonging to indigenous peoples share universal human rights, in particular the right to equal treatment and opportunity. The collective rights include: self determination (which means the right to determine their identity,



their political status and the way they want to develop); access to and management of traditional land, water and resources; maintaining and enjoying their customs, culture, language and traditional knowledge free from discrimination; and managing their cultural and intellectual property.

An organization should recognize and respect the rights of indigenous peoples when carrying out its decisions and activities.

# The Environment and Social Responsibility: Definitions from the ISO/DIS 26 000:

Principles: 6.5.2.1

**Environmental Responsibility:** In addition to complying with law and regulations, an organization should assume responsibility for the environmental burdens caused by its activities, products and services in rural or urban areas and the broader environment. It should act to improve its own performance, as well as the performance of others within its control or sphere of influence.

The Precautionary Approach: This is drawn from the Rio Declaration on Environment and Development [119] and subsequent declarations and agreements [109][131][94], which advance the concept that where there are threats of serious or irreversible damage to the environment or human health, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation or damage to human health. Environmental Risk Management An organization should implement programmes using a risk-based and sustainability perspective to avoid, assess, and reduce environmental risks and impacts from activities, products and services. An organization should develop and implement awareness-raising activities and emergency response procedures to reduce and mitigate environmental, health and safety burdens caused by accidents and to communicate information about environmental incidents to appropriate authorities and local communities.

**Polluter Pays:** An organization should bear the cost of pollution caused by its activities, products and services according to either the extent of the environmental burden to society and the remedial action required, or the degree to which the pollution exceeds an acceptable level (see Principle 16 of the Rio Declaration [119]). An organization should use the polluter pays principle to internalize the cost of pollution and quantify the economic and environmental benefits of preventing pollution in preference to mitigating its impacts.

#### Principles: 6.5.5.1

Climate Change Mitigation and Adaptation: It is recognized that greenhouse gas (GHG) emissions from human activities, such as carbon dioxide (CO2) and methane (CH4), are the very likely cause of global climate change, which is having significant impacts on the natural and human environment [16]. Among the trends observed and anticipated are: rising temperatures, changes in rainfall patterns, more frequent occurrences of extreme weather events, rising sea levels, and changes to ecosystems, agriculture and fisheries.



Manitoba Wildlands recommends that the proponent indicate whether Manitoba Hydro supports and applies these ISO standards in its operations. As a public utility which espouses corporate social responsibility Manitoba Hydro needs to inform its shareholders whether these principles of social responsibility, including with environmental principles, are integrated into its project planning. In addition we recommend that the proponent include in its EIS clear statements as to its approach to social responsibility for this project.

Manitoba Conservation may well benefit from placing standards of this sort in future scoping documents, and EIS Guidelines for projects under the Environment Act. A simple expectation for a proponent to indicate which ISO standards it uses would be a start; for the department to state a requirement for proponents to identify any ISO or CSA standards or certification it holds would be an important second step.

# Manitoba Hydro's Continental Social Responsibilities & Accountability

Manitoba Hydro website states:

In 2007–08 export sales totalled \$625 million with 82 per cent derived from the U.S. market and 18 per cent from sales to Canadian markets.

Because Manitoba Hydro exports power internationally and is a member of various electricity generating and transmitting continental organizations, Manitoba Wildlands assumes Manitoba Hydro follows international guidelines, standards, or requirements in the planning, construction, and operation of generation stations, spillways, converter stations and transmission systems.

Manitoba Wildlands recommends Manitoba Hydro create guidelines or requirements related to its membership in continental energy organization publicly available. Manitoba Hydro then needs to outline which standards, agreements and reporting requirements under the US Federal Energy Regulatory Commission (FERC), the Mid-Continent Area Power Pool (MAPP), and Midwest Independent Transmission System Operator (Midwest ISO) affect the Bipole III project design, construction, operation (including interconnections).

Further Manitoba Wildlands recommends the EIS for the Bipole III project identify these, as per above, while indicating what is required by Manitoba Hydro's membership in these continental organizations, and what the impact on the project would be.

For example, the Midwest ISO Transmission Planning Business Practice Manual states:

The Midwest ISO regional Transmission Planning process has as its goal the development of a comprehensive expansion plan that meets both reliability and economic expansion needs. The planning process identifies solutions to reliability issues that arise from the expected dispatch of Network Resources.

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**FERC Order Planning Principles** 

- (I) Coordination
- (II) Openness
- (III) Transparency
- (IV) Information Exchange
- (V) Comparability
- (VI) Dispute Resolution
- (VII) Regional Participation
- (VIII) Economic Planning Studies
- (IX) Cost Allocation for New Projects

#### Best Practices, National & International

The *Principles of Environmental Impact Assessment Best Practice*, published by the International Association for Impact Assessment, outlines Basic Best Practice, Operating Principles and Objectives of an Environmental Impact Assessment including:

- Ensuring that environmental considerations are explicitly addressed and incorporated into the development decision making process;
- Anticipating and avoiding, minimizing or offsetting the adverse significant biophysical, social and other relevant effects of development proposals;
- Protecting the productivity and capacity of natural systems and the ecological processes which maintain their functions; and
- Promoting development that is sustainable and optimizes resource use and management opportunities.

Currently, the environmental assessment scoping document for Bipole III does not discuss how Best Practices will be addressed in the Bipole III EIS. Manitoba Wildlands would like to know if Manitoba Hydro agrees with the principles outlined in *Principles of Environmental Impact Assessment Best Practice*. Does Manitoba Conservation agree with these principles? Will Manitoba Hydro apply these principles to the Bipole III EIS?

Manitoba Wildlands recommends the EIS for Bipole III respond to the Midwest ISO Principles (see above), indicating how the Bipole III project will uphold these Principles. We further recommend that Manitoba Hydro indicate in the EIS which sets of EIA standards, criteria, methods etc the utility applies to transmission line planning, design, and operation. Then the EIS can include identification of how Manitoba Hydro will be transparent about, and uphold the principles, standards, or criteria it subscribes to, for this project.

# Environmental Management Systems and Plans

Environmental management plans for Bipole III should be public early in the review and licensing process. They should be part of the EIS, for review and comment. To date environmental management plans for significant public works in Manitoba have often been absent during the processes under the



Environment Act, and then once licences are issued the plans are never made available, never filed in the public registry etc. (Please see our comments regarding cumulative assessment, and staged cumulative assessment reviews during the life of the Bipole III project).

These plans form an essential part of the project EIS, and an essential part of the information for communities, land owners, municipalities - all stakeholders - to use to understand Bipole III impacts. Given the time line on construction, and then operation for this project we hope that adaptive management systems plans will also be part of the EIS filing.

Manitoba Wildlands recommends that environmental management plans for the elements of the Bipole III project be part of the EIS filing. We further recommend that Manitoba Conservation ensure that these plans, and their updates, over the life of the project remain part of the public registry.

#### Manitoba Standards

Because Manitoba Conservation does not have mandated standards for planning, construction and operation of transmission lines Manitoba Wildlands assumes that the current standards for the Bipole III transmission project will be equal to or exceed the standards for the most recently approved transmission line in Manitoba, the Wuskwatim transmission project (License No. 2700).

Manitoba Wildlands would like to highlight that there are currently no formal environmental assessment process or requirements under our Environment Act. There are also no recommended Best Practices in Manitoba for developments such as this.

This compares to Ontario and British Columbia, which explicitly state Best Practices and regulate policies and procedures for projects such as transmission line development. If Manitoba is to become a national and international leader in the energy sector, we must have public requirements for environmental impact assessments, environmental standards and Best Practices, with more strict and applicable requirements under the Sustainable Development Act, The Environment Act, etc.

Manitoba Wildlands would like Manitoba Conservation to confirm the following: Are the standards for this project the same as those licensed for the Wuskwatum Transmission project? What did Manitoba Conservation use to arrive at scoping document content? What review and updated approaches to planning, design, data collection, biophysical information, environmental plans, mitigation etc. have Manitoba Conservation and Manitoba Hydro incorporated since The North Central Project and Wuskwatim transmission projects? Has Manitoba Conservation kept up to date in terms of changes, improvements, and new challenges in transmission line design, construction, and operation in relation to EA, impacts and recent scientific information? Are new elements evident in the Manitoba Conservation scoping document?



# Sustainability – CERES Expectations

We are providing below another example of tools available for Manitoba Hydro, and Manitoba Conservation to consider in shaping the EIS for Bipole III. CERES was formed after the Valdez oil spill twenty years ago by business interests that wished to avoid such events and the social and environmental impacts that result. Clearly Manitoba Conservation, as is evident in our earlier comments, can encourage and invite proponents to clearly state which organizations, standards, principles and methods they apply to their project planning, construction, and operations. In particular the CERE sustainability expectations, best practices and tools for sustainability focus on governance, stakeholder engagement disclosure and performance would potentially assist all parties.

Manitoba Wildlands wants to know whether our utility supports these CERES standards, and uses the tools to continually improve its operations. In particular CERES has been a leader in both corporate governance and stakeholder engagement systems.

Manitoba Wildlands recommends that Manitoba Conservation consider how best to include in EIS contents clear indications of the standards, principles, and methods they ascribe to, and use in the EIS and planning for new projects. In particular we recommend that this EIS include Manitoba Hydro's statements to this effect.

# 21<sup>st</sup> Century Corporation: The Ceres Roadmap for Sustainability <a href="http://www.ceres.org/Page.aspx?pid=1211">http://www.ceres.org/Page.aspx?pid=1211</a>

"Ceres has released the *21st Century Corporation: The Ceres Roadmap to Sustainability* as a vision and practical roadmap for integrating sustainability into the DNA of business—from the boardroom to the copy room. This Roadmap is designed to provide a comprehensive platform for sustainable business strategy and for accelerating best practices and performance."

# What is in The Ceres Roadmap?

"The Roadmap sets out 20 expectations for sustainability that companies should start implementing now to be considered sustainable going forward. These expectations are laid out in four broad areas that are key for corporate sustainability: governance, stakeholder engagement, disclosure, and performance. All of the expectations presented in the Roadmap need to be addressed. The full report has more than 200 company best practice examples across 20 sectors. Many companies have started this journey — from heavy industry to consumer products — and the Roadmap includes a full range of examples to demonstrate what is possible now and where companies need to go in the future."

"The report features more than 250 resources and tools from a wide range of global experts, organizations and thought leaders. There is increasing interest from mainstream investors to understand and evaluate sustainability risks and opportunities in their investment decisions. The best performing companies of the 21st century will be those that recognize the opportunities presented....These companies will be best positioned to thrive in the coming low-carbon, resource-constrained global economy of the 21st century."

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# Climate Change: Effect of Climate on Project, Effect of Project on Climate

We note that the CSA/ISO standard 14064 has relevance to this proposal under our Environment Act. It is also good to see that Manitoba Hydro participated in establishing CSA Canada's advice / white paper regarding education of engineers in Canada regarding climate change. Given 220 engineers in Manitoba who responded to the CSA survey used to inform the committee we assume other Manitoba Hydro engineers beyond their committee member participated.

CSA /ISO 14064

ISO 14064 objectives are:

"[to] enhance environmental integrity by promoting consistency, transparency and credibility in GHG quantification, monitoring, reporting and verification"

Climate Change and Infrastructure Engineering: Moving Towards a New Curriculum, prepared by the Canadian Standards Associates, 2007 aims to upgrade current engineering training with respect to Climate Change. The study also asked 220 Manitoba engineers a range of climate change and infrastructure engineering questions. It is our hope that those engineers already trained and working on project such as Bipole III are acquiring climate change engineering expertise quickly.

Manitoba Wildlands recommends that Manitoba Hydro include in the EIS information as to the approach to project planning, engineering, and all stages of construction and operation of Bipole III in relation to climate change. We also recommend that Manitoba Conservation begin to consider how to make sure that scoping of effects and impacts from projects on climate are thoroughly scoped in advance of EIS preparation for projects under our Environment Act.

# This EIS needs to provide clear information as to:

- the project baseline scenario for carbon in situ
- the carbon inventory for the project area
- the carbon budget for the project
- the emissions inventory for elements of the project
- monitoring regarding restoration of carbon during the life of the project
- further loss of carbon during the life of the project, reporting
- overall carbon footprint of the Bipole III transmission system.

In particular Manitobans are entitled to know what the intent of the project is with regards to sequestered carbon and emissions. Will Bipole III have a large carbon footprint compared to other transmission systems? Will Manitoba Hydro be reviewing recent transmission systems, especially in boreal forest regions in Canada, to identify scenarios to reduce carbon loss, and emissions? Does Manitoba Hydro have a plan for a no net loss of carbon for this transmission project? Does Manitoba Conservation intend to fulfill its mandate regarding climate change when directing EA under our Environment Act for public works, including those which have significant impacts and public costs? Will the recommendations of Manitoba's Climate Change Task Force regarding Manitoba Hydro be fulfilled in this EIS? Will Manitoba Hydro voluntarily make this the first project built by the utility for



Manitobans where full carbon accounting is in place?

What elements of the project and project area will be analyzed for GHG emissions and carbon loss? Will a carbon inventory be put in place for baseline scenario data for the project area prior to any impacts? What are Manitoba Hydro's carbon mitigation intentions for this extensive project - which will have carbon losses during construction, and operation? How will carbon loss and emissions be measured and reported?

How will green house gas emission and carbon loss be calculated? Using which registry? Is Manitoba Hydro ready for a 25,000 tonne threshold for reporting during construction and then operation of the project? Will Manitoba Hydro comply with the Western Climate Initiative standards for reporting emissions? Is Manitoba Conservation preparing for updating and clarification of GHGs inventory and reporting for Canada and Canada, including for Manitoba Hydro projects? Will Manitoba's new peatlands conservation policy be reflected in the outcome for this project? (We note the recent announcement, and the multi year time line for this project.)

Manitoba Wildlands recommends that Manitoba Conservation and Manitoba Hydro use the Bipole III project as a demonstration of methods for carbon and green house gas planning, reporting, and mitigating to fulfill public policy and commitments made by the Manitoba government.

### Climate Change: Policies, Assumptions

The scoping document does not expect information as to how the bipole III EIS will address this project's contribution and mitigation regarding the effects of the project on climate, carbon stocks, etc. The EIS should include references to how the project will support *The Manitoba Climate Change Strategy* (2008), and the *Manitoba Climate Change and Emission Reduction Act*. In addition, we would suggest that the EIS should also respond to recommendations in the Manitoba Climate Change Task Force report – where specific to Manitoba Hydro. See questions above. It is also necessary for the EIS to address any agreements, or requirements Manitoba is part of with US States, or electricity/transmission consortiums regarding or affecting climate change. Among other reasons, energy on this DC line is likely to be exported to the US.

Manitoba Wildlands recommends that the Bipole III transmission project be designed, and planned, as a showcase for how Manitoba Hydro and Manitoba Conservation will verify carbon stocks inventory, set a project carbon budget, report emissions during construction, and mitigate carbon loss with the aim of reporting in a transparent manner all steps to achieve a no net loss of carbon goal for the project.

We would observe that when the utility has several projects being constructed, and planned it is overdue for Manitoba Hydro to clearly indicate how it will deal with its emissions *in Manitoba*. (See commitments made during the press conference to table the new climate Act in the Manitoba



legislature. These commitments were that all emissions reductions under the Bill, and the new Climate Strategy would be achieved *inside Manitoba*).

Manitoba Wildlands recommend that the EIS specifically address our recommendation above, while addressing the coming 25,000 tonne reporting requirement for GHGs in Canada, for each project or installation. The context for this recommendation is the current lack of public data about Manitoba Hydro emissions, including for annual emissions from each reservoir, during construction of projects, during operation of projects, and especially during high water years which produce extra methane. We would further recommend that Manitoba Hydro conduct a survey of electrical utilities – especially those publicly owned – to share expertise in this matter, and in order to provide relevant contents in the EIS.

## Justification and Alternatives to Bipole III from Scoping Document The Manitoba Hydro website states:

Studies have concluded that new transmission capabilities would improve system reliability and reduce our dependency on Dorsey Station and the existing HVDC Interlake corridor. The Bipole III Transmission Reliability Project will establish a second converter station (Riel Reliability Improvement Initiative) in southern Manitoba, to provide a second major point of power injection into the transmission system.

Bipole III will reduce the existing Bipoles I & II line losses and provide additional transmission line capacity from north to south.

Current justification for the Bipole III development is to improve reliability and security in electricity access through the Manitoba grid. While Bipole III would still be vulnerable to severe weather, fire, sabotage and other unpredictable events, we suggest the EIS state clearly the history of bi poles in the province, the risks, and the justification for Bipole III. Given that confusion exists in the media, and with Manitobans, about the various significant transmission lines being planned or discussed by Manitoba Hydro it is important for this EIS to provide clear, understandable information about current, future and intended transmission projects.

## Manitoba Wildlands recommends detailed information about justification for Bipole III, that includes all justifications be included in the EIS.

The current justification language also does not acknowledge the need to increase DC capacity and service within the system. The Manitoba Hydro website states: "Manitoba Hydro's Integrated Resource Plan indicates a requirement for Conawapa in 2021 to meet domestic load, with the majority of the power available for export until needed by Manitobans." It can therefore be assumed that Bipole III is not purely to improve reliability and security in the grid. So the EIS needs to discuss how the energy moving on Bipole III will be used: who by, in the province or as export, through which connections to customers etc.



This leads to the question of why Bipole III is designed, or limited to 500kv. The first 735-kV transmission lines in Canada were built by Hydro-Québec in 1965 – since then nine transmission lines in the 700-800 kv range—in Canada, United States, Brazil, Venezuela, Russia, South Africa, South Korea, and India, and two lines in the 1000-1200 kV range in Russia and Japan have been developed (Lings, 2005). Given Manitoba Hydro plans to expand their services within the next twenty years, why is Bipole III currently limited to 500 kV?

Manitoba Wildlands recommends that the Bipole III EIS include a specific discussion as to why Bipole III is limited to 500 kv and what steps to consider alternative Kv the utility has taken.

Manitoba Wildlands has observed Manitoba Hydro open the discussion of the bipole III route to the public, and include three separate options into the process. These corridor options must include 15 – 20% of the province. The EIS will need to include the reasoning for the corridor selected, with thorough details as to proportion of the province, proportion of crown land, private land, water, infrastructure/ townsites, homes, natural intact lands etc.

There has been a great amount of public discussion regarding the potential of running part of Bipole III through Lake Winnipeg (under water). The justification for development of Bipole III states on page one of the scoping document that "The existing transmission system is vulnerable to the risk of catastrophic outage of either or both Bipoles I and II in the Interlake corridor and/or the Dorsey Station due to severe weather, fire, sabotage and other unpredictable events." The development of bipole III transmission line under Lake Winnipeg would not only avoid these issues, but also other potentially unforeseen problems.

While this option would come with its own set of challenges to scope, discussion of this option is of value, as many of the risks identified by the utility would not exist under water.

Manitoba Wildlands recommends that a status report regarding Manitoba Hydro's consideration of this alternative (underwater transmission) be included in the EIS. In particular the technical work and reports commissioned to consider the ingredients in underwater transmission systems in Lake Winnipeg should be filed, or made public as soon as possible, with the EIS containing a discussion of the steps in consideration of this alternative taken by the utility.

## Caribou

Woodland caribou are listed as a threatened species under the Manitoba Species at Risk Act and the Federal Species at Risk Act (SARA)(western population). Section 68. (1) of SARA states:

"No person shall destroy any part of the critical habitat of a listed endangered species or a listed threatened species that is in a province or territory and that is not part of federal lands."



Manitoba Wildlands would therefore like to know if any of the proposed Bipole III routes cross critical habitat inhabitant by woodland caribou. We request that Manitoba Hydro also compile information about each of the sub species of caribou that may be impacted by the Bipole III project, starting with woodland caribou. The information must be included in the EIS so a thorough review and assessment is feasible. In particular Manitoba Conservation needs to provide Manitoba Hydro with historic data as to all sub species of caribou in the project area in order to support an accurate and appropriate assessment.

Now that woodland caribou in Manitoba are listed under both the federal act (SARA) and the provincial act (MESA) the Bipole III EIS will need to include up to date and historic information about woodland caribou in the project area. Any wintering or calving areas (past and current) with any overlap with the project area should be included in the EIS contents and assessment.

We would caution the proponent regarding other species to avoid the pitfall shown in recent project EIS under our Environment Act, where limited data sets that do not provide adequate species information for assessment are used to:

- indicate there are few of a species present
- indicate that there are no significant risks or impacts to the species

Manitoba Hydro holds or has access to consider data about species in the project area, corridor options. But more will be needed to be able to fulfill biophysical and species information for the EIS. It will also be important to make sure reports, and analysis are provided with the EIS, rather than interpretations of non disclosed reports.

#### Linear Disturbance & Transmission Corridors

Creation of linear corridors and transmission lines is of great concern in regard to wildlife and forest management. Not only does the construction of transmission lines causes great disturbance to the surrounding ecosystem, but also transforms the system so that the current forest-wildlife interactions no long exist.

Numerous studies have been done on this topic, with particular interest in Woodland Caribou. Nellemann et al. (2001) demonstrated that woodland caribou show diminished use of habitat within 2.5 km of power lines. Linear corridors may also fragment caribou range. In Alberta, gravel roads with moderate vehicular traffic acted as a semi-permeable barrier to caribou movements. Finally, Caribou may be at higher risk of predation in the vicinity of linear corridor. Wolves appear to capitalise on corridors as travel routes, increasing access to caribou range and ability to hunt caribou. (James & Stuart-Smith 2000). It has also been verified that humans use transmission corridors to ease access while hunting. Finally, concern based on conservation biology shows that edges of habitat, such as those existing along corridors, can increase of predation and decrease diversity in a ecosystem (Yahner, 1988, Erinc Bayne 2004).



Manitoba Wildlands would like to know what will be done to avoid or mitigate the impacts described above. We suggest presentations posted in the archives of EnergyManitoba.org, especially by Dr. James Schaeffer, and Dr. Erin Bayne, as they pertain to linear disturbance and caribou, and a variety of birds species. Scientific analysis of impacts from linear disturbance in our boreal forests support the need for the proponent to clearly identified the impacts on species from this transmission corridor, and system of roads. Clear acknowledgement of impacts is the best basis for environmental management planning, and mitigation.

## Species and Biodiversity

Previous studies of environmental assessments have concluded that review of impacts on biodiversity is generally lacking or weak in environmental assessments products (Soderman, 2006). The Convention on Biological Diversity (CBD, 1992) defines the concept of biodiversity as including levels of biodiversity (genetic, species/community and ecosystem/habitats) and ecosystem structure and function (CBD, 1992). It should be noted that Manitoba has participated in national biodiversity strategies since 1992, and supported various species accords among the provinces in Canada.

Therefore, in accordance with the CBD and Millennium Assessment (MA, 2003), an EIA must define all biodiversity components and their use for society and provide information regarding how a proposed development will effect or change these ecosystem components (Soderman, 2006).

How will Manitoba Hydro's development of Bipole III across Manitoba specifically impact biodiversity? Manitoba Conservation should require a detailed list of potential biodiversity issues, impacts, policies and regulations associated with the selected route/corridor.

#### First Nations & Affected Aboriginal Communities

While the scoping document addresses the acquisition and use of ATK in the planning of Bipole III, more information as to methods for discussing impacts and mitigation of the development with affected communities will be needed in the EIS.

The following questions must be addressed in the EIS: What mechanisms will there be in place to compensate First Nations for impacts of this development? The Bipole III scoping document states on pages 6 and 7, *Southern/Public Component*:

The goals for the public consultation process are to

- Provide timely, accurate and relevant project information to potentially affected stakeholders, interested parties and the general public;
- Provide meaningful and on-going opportunities for public and stakeholder input to the SSEA and EIS;
- Obtain information and feedback from potentially affected stakeholders to assist in site selection and environmental assessment, and development of appropriate mitigation measures; and



 Record what was heard and demonstrate how it was considered in the project site selection and environmental assessment.

It is evident that First Nations are not stakeholders.

Manitoba Wildlands recommends that the EIS contain clear identification of methods for consultation with affects communities, and affected lands owners. Then the specifics of mitigation, negotiations and mitigation methods will need to be described.

Manitoba Wildlands further recommends the Manitoba government, Manitoba Conservation consultation guidelines for Aboriginal communities be provided in the EIS – ideally filed in the public registry immediately – with the EIS containing a description of consultation protocols for affected First Nation and Aboriginal communities. Specific risks and impacts, and steps that could be taken with consent of affected communities will need to be clearly stated in the EIS. For clarification purposes Manitoba Wildlands also recommends that Manitoba Conservation and Manitoba Hydro consider steps necessary so information regarding the selected routes, and steps for consultation reach the affected communities. That information should include full access to public registry information. ( see our earlier recommendation regarding land designations and land selections.)

#### Landowners, and Affected Communities

Bipole III potentially affects dozens of communities. Many private land holdings are also affected. Municipalities, conservation districts, and some planning districts in southern Manitoba will be involved. There are drainage issues, bridges, culverts, road and traffic issues in southern Manitoba. The EIS will need to be fairly clear about the steps Manitoba Hydro is taking with the range of communities and lands holders through the several regions where the project corridor would be located.

#### CEC Wuskwatim Recommendations – EA in Manitoba

We are providing here the primary recommendation from the Clean Environment Commission report regarding the EA for project licences.

7.8 The practice of environmental assessment in Manitoba be enhanced by requiring higher standards of performance. In this regard, the Government of Manitoba should:

- enact environmental assessment legislation.
- provide guidance for proponents, consultants and practitioners,
- establish protocols for best professional practice that includes cumulative-effects assessment.

The process should include use of traditional scientific knowledge, selection of appropriate Valued Environmental Components (VECs), establishment of baseline conditions, and establishment of



thresholds in the conduct of environmental assessments. The protocols should reduce uncertainty, enhance effectiveness and improve predictability of future environmental assessments.

Manitoba Wildlands recommends that Manitoba Conservation ensure that the proponent for Bipole III fulfill the intent of the text above, and any other recommendations that will assist in requiring higher standards for EA in Manitoba, and for this project. In particular we recommend that Manitoba Conservation conduct an internal process about the current lack of environmental assessment legislation and regulation in Manitoba. The result of that review should be available to the CEC and the proponent in advance of the hearings for Bipole III.

Manitoba Wildlands is attaching our work product that is a response to the Clean Environment Commission recommendations after the Wuskwatim hearings to show which our organization spoke to, supported, etc. Certain of these are relevant at this juncture and in support of our recommendation above for Bipole III.

## **Closing Comments**

Manitoba Wildlands is submitting this letter as a set of comments regarding the scoping document for the bi pole III EIS. We note that we expect a variety of issues, topics and contents to be in the EIS, which are not present in the scoping document. Our comments at this time are not complete. Rather we undertook research to assist in raising the standards for this and future EIS/ reviews under the Environment Act. As we have stated in past public correspondence the lack of environmental assessment regulation, and other standards in Manitoba hampers all parties, and can add risk or uncertainty to decision making. In particular public ownership of our utility is essential to Manitoba society. It is in the context that we urge a thorough review and discussion about the suggestions and recommendations provided here. We are of course available to answer questions.

We are providing a list of organizational websites and specific reports and publications accessed during our research. The attachments here are listed below.

- Manitoba Wildlands Lands and Water Policies Listing 1999 2009.
- Manitoba Wildlands Analysis of Recommendations Report on Public Hearings Wuskwatim Generation and Transmission Projects
- Manitoba Wildlands BiPole III Comment Letter References and Materials
- Principles of Environmental Impact Assessment Best Practice by the International Association for Impact Assessment (IAIA).
- Questionnaire Checklist for Cumulative Impacts by L. W. Canter and J. Kamath, 1995.
- Treatment of Biodiversity Issues in Impact Assessment of Electricity Power Transmission Lines: A Finnish Case Review. By Tarja Soderman. October 2005.
- CERES Roadmap for Sustainability Summery Document.

The Clean Environment Commission panel who heard nine weeks of hearings content regarding: Wuskwatim Transmission, Wuskwatim Generation, and Wuskwatim Needs for and Alternatives to



undertook a daunting task. Their report contains many recommendations relevant for Bipole III and other Hydro proposals under the Environment Act. We urge the parties to take a close look at this time.

We assume that this letter, and its attachments will be posted in all public registry files, on line and stationary, regarding Bipole III.

Yours truly,

Gaile Whelan Enns,

Director, Manitoba Wildlands



# **BiPole III Comment Letter References and Materials**

## <u>Links Identified as Relevant to contents of Manitoba Wildlands comments re bi pole III scoping document, March 2010.</u>

\*\* Quote or Reference Inside Comments Letter.

\*\*International Standards Organization - ISO standards <a href="http://www.lsd.lt/typo">http://www.lsd.lt/typo</a> new/fileadmin/Failai/N172 ISO DIS 26000 E .pdf

High Voltage Direct Current (HVDC) Transmission Systems Technology Review Paper <a href="http://www2.internetcad.com/pub/energy/technology\_abb.pdf">http://www2.internetcad.com/pub/energy/technology\_abb.pdf</a>

\*\*Guide to Risk Assessments and Public Health Assessments
<a href="http://www.eoearth.org/article/Guide">http://www.eoearth.org/article/Guide</a> to Risk Assessments and Public Health Assessments

Life cycle assessment http://www.eoearth.org/article/Life cycle assessment

Restructured Rivers: Hydropower in the Era of Competitive Markets <a href="http://www.centrehelios.org/en/">http://www.centrehelios.org/en/</a> Studies and Reports by Philip Raphals

Market-Based Transmission Expansion Planning http://motor.ece.iit.edu/papers/01350848.pdf

\*\*International Association for Impact Assessment <a href="http://www.iaia.org/publications/">http://www.iaia.org/publications/</a>

Social Problems, Community Trauma and Hydro Project Impacts <a href="http://www2.brandonu.ca/Library/cjns/15.2/loney.pdf">http://www2.brandonu.ca/Library/cjns/15.2/loney.pdf</a>

#### Electrical power systems quality

http://books.google.ca/books?hl=en&lr=&id=Y4IvvSJq1bMC&oi=fnd&pg=PA1&dq=Building+DC+Electric+Transmission+Systems+&ots=44sVcG9pQw&sig=-xdNPMwoAIjvjZmS5KSC1tHPvM4#v=onepage&q=&f=false

Wuskwatim Transmission and Generation Station Archives: Presenters / Presentations <a href="http://www.energymanitoba.org/wusk\_archives/presenters.htm">http://www.energymanitoba.org/wusk\_archives/presenters.htm</a>



A Compendium of Electric Reliability Frameworks Across Canada <a href="http://www.neb.gc.ca/clf-nsi/rnrgynfmtn/nrgyrprt/lctrcty/cmpndmlctrcrlbltycnd2004-eng.pdf">http://www.neb.gc.ca/clf-nsi/rnrgynfmtn/nrgyrprt/lctrcty/cmpndmlctrcrlbltycnd2004-eng.pdf</a>

Mid-Continent Area Power Pool Website Links and Pages <a href="http://www.mapp.org/DesktopDefault.aspx">http://www.mapp.org/DesktopDefault.aspx</a>

Reliability Performance Project: Manitoba Hydro and SASK Power both inside doc <a href="http://www.mapp.org/ReturnBinary.aspx?Params=584e5b5f4558560000000253">http://www.mapp.org/ReturnBinary.aspx?Params=584e5b5f4558560000000253</a>

Transmission and Distribution World

http://tdworld.com/news/power minnesota power joins/

Midwest ISO's system Planning Reserve 2010/2011 Margin

http://www.midwestmarket.org/publish/Document/4dfde8\_124a04ca493\_-

7f5f0a48324a/Planning%20Year%202010%20Findings\_final.pdf?action=download&\_propert y=Attachment

Midwest Independent System Operator: 2009 Long-Term Assessment Reliability Report <a href="http://www.midwestmarket.org/publish/Document/2c2ca5\_12511ba6cdc\_-7fab0a48324a/2009%20Long-Term%20Assessment%209-02-09.pdf?action=download&property=Attachment">http://www.midwestmarket.org/publish/Document/2c2ca5\_12511ba6cdc\_-7fab0a48324a/2009%20Long-Term%20Assessment%209-02-09.pdf?action=download&property=Attachment</a>

Midwest Independent Transmission System Operator 2009-2010 Winter Reliability Assessment Midwest ISO Market Footprint

http://www.midwestmarket.org/publish/Document/2c2ca5\_12511ba6cdc\_-7fbc0a48324a/2009-

2010%20Winter%20Assessment FINAL v3.pdf?action=download& property=Attachment

Department of Energy US - reporting requirements via Mid-Continent Area Power Pool and MISO

http://www.midwestmarket.org/publish/Document/66d196\_115dc8fa4a2\_-7e9c0a48324a/EIA%20411%20definitions.pdf?action=download&\_property=Attachment

## \*\*Planning Standards MISO

http://www.midwestmarket.org/publish/Document/6b6059 1239ec7b046 -7fd90a48324a

http://www.midwestmarket.org/page/Expansion%20Planning

Contains various MISO transmission planning and transmission expansion manuals, and protocols



\*\*International Organization of Standards: Guidance on Social Responsibility <a href="http://isotc.iso.org/livelink/livelink/fetch/-8929321/8929339/8929348/3935837/ISO\_DIS\_26000\_Guidance\_on\_Social\_Responsibility.pdf">http://isotc.iso.org/livelink/livelink/fetch/-8929321/8929339/8929348/3935837/ISO\_DIS\_26000\_Guidance\_on\_Social\_Responsibility.pdf</a> f?nodeid=8385026&vernum=-2

\*\*Australian Government. Department of Environmental Assessment <a href="http://www.environment.gov.au/epbc/assessments/index.html">http://www.environment.gov.au/epbc/assessments/index.html</a> (contains one perspective and process for strategic assessments)

\*\*The Ceres Roadmap for Sustainability <a href="http://www.ceres.org/ceresroadmap">http://www.ceres.org/ceresroadmap</a>

Considering Aboriginal traditional knowledge in environmental assessments conducted under the *Canadian Environmental Assessment Act -- Interim Principles* <a href="http://www.ceaa.gc.ca/default.asp?lang=En&n=4A795E76-1">http://www.ceaa.gc.ca/default.asp?lang=En&n=4A795E76-1</a>

## PDF References and Materials Used for Manitoba Wildlands Comments Re bi pole III March 2010

\*\*Overview of Transmission Lines Above 700 kV Raymond Lings, July 2005

Guidelines for Development Near Overhead Transmission Lines in BC BC Hydro

\*\*Treatment of biodiversity issues in impact assessment of electricity power transmission lines: A finnish case review.

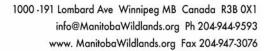
Soderman. 2006.

Multi-Jurisdictional Environmental Impact Assessment: Canadian Experiences Fitzpatrick and Sinclair, 2008.

\*\*A Reference Guide for the Canadian Environmental Assessment Act: Addressing Cumulative Effects by the Federal Environmental Assessment Review Office. 1994.

\*\*Canadian Environmental Assessment Act: An Overview by Canadian Environmental Assessment Agency

Executive Summery on Energy Efficiency by the International Energy Agency





Transmission investment and expansion planning in a restructured electricity market by F.F Wu, F.L. Zheng and F.S. Wen

Guide to Environmental Assessment Requirements for Electricity Projects by Ministry of the Environment Environmental Assessment and Approvals Branch

\*\*Guide for Social Responsibility by International Organization for Standardization (ISO).

High Voltage Direct Current (HVDC) Transmission Systems Technology Review Paper

\*\*Principles of Environmental Impact Assessment Best Practice by the International Association for Impact Assessment (IAIA) 1996.

Biodiversity in Impact Assessment by the International Association for Impact Assessment (IAIA) . 2005

Class Environmental Assessment For Minor Transmission Facilities Pursuant to the Environmental Assessment Act, Ontario, Canada

2009 Long-Term Assessment Reliability Report Midwest Independent System Operator

Overview of Transmission Lines Above 700 kV Raymond Lings

Environmental Assessment in Canada: Encouraging decisions for sustainability by A. J. Sinclair and M. Doelle

Conceptualizing learning for sustainability through environmental assessment: Critical reflection on 15 years of research by A. J. Sinclair, A. Diduck and P. Fitzpatrick

Framework for the Transmission Lines Standard by Alberta Electric System Operator

\*\*Ontario Energy Board Transmission System Code. October, 2009.

Market-Based Transmission Expansion Planning by M. O. Buygi, G. Balzer, H. M. Shanechi, and M. Shahidehpour

\*\*Manitoba Wildlands Lands and Waters Policies 1999-2009

\*\*Questionnaire Checklist for Cumulative Impacts by L. W. Canter and J. Kamath, 1995.



Climate Change and Infrastructure Engineering: Moving Towards a New Curriculum By the Canadian Standards Association. October 2007.

\*\*Manitoba Wildlands Analysis of Recommendations - Report on Public Hearings - Wuskwatim Generation and Transmission Projects



January 15th, 2010

Honourable Bill Blaikie Minister of Conservation and Climate Change Room 330 Manitoba Legislative Building 450 Broadway Winnipeg, Manitoba R3C 0V8

Ms. Tracy Braun
Director, Environmental Assessment and Licensing Branch
Manitoba Conservation
123 Main St. Suite 160
Winnipeg, Manitoba
R3C 1A5

Dear Minister Blaikie, Ms. Braun:

Re: Manitoba Environment Proposal: PR 304 to Berens River All Season Road Environmental Impact Assessment - File No: 5388

Manitoba Wildlands is providing comments about the East Side All Weather Road proposal Environmental Impact Assessment for PR 304 to Berens River, as prepared by SNC Lavalin and AECOM for the East Side Road Authority. We assume this document and attachments will be both: filed in the public registry *and* posted on Manitoba Conservation website. We also expect to receive the proponent's responses to our review comments, as filed in the public registry.

The East Side Road, which includes the upgrade of the Rice River Road and construction of new road from Bloodvien First Nation to Berens River First Nation has been under discussion for many years. Manitoba Wildlands is concerned this project is the first of its kind with many precedents being set. Obviously this is the first highway project in Manitoba where the provincial government department responsible for highways is not even contracting the environmental assessment. In fact we now have the provincial government, the new East Side Road Authority and a contracted company involved in filings under the Environment Act. This has caused disconnected public documents sources, variations in the name of documents, and a confusing landscape of information for a citizen attempting to participate in this review. We would point out that the ESRA web site contains misleading information that contradicts public policy.

Whenever government is licensing itself pubic review is essential, and disclosure and access to information needs to be thorough and transparent. As there are public funds being used and government agencies involved as proponents this is an instance where government is contracting services, entering into various agreements, handing off services and some decision making to a government agency, conducting reviews, and licensing and funding the proposal under the Environment Act. (and various other Acts.)



We wish to make sure that areas of concern and potential impact are being addressed. Information on a project using public funds (both provincial and federal) needs to be available in a complete public registry file with project environmental guidelines being fulfilled to protect the environment.

## Areas of concern after reviewing the East Side Road EIA are as follows:

## **Public Registry**

The information on the East Side All Weather Road in the public registry is not complete, and relevant information cannot be found in its entirety in one location. What is available is scattered across multiple websites and archives and is not cohesive.

The files in the public registry file # 5388 only include the environmental assessment and appendices, project description, scoping document and comments and proposal notification for the project.

According to the information referenced in the East Side All Weather Road EIA, the public registry file #5833 is missing the following documents (or access to) directly related to this project: (Access would be easy if there were, as per recommendations in COSDI report, files for these processes. Also we would recommend that a clear indication of whether any public comments were received be available in the existing file.)

- Promises to Keep- East Side Planning Initiative/Broad areas planning initiative "As identified in the *Promises to Keep (2004)* document, the establishment of an allweather road to link the remote communities on the east side of Lake Winnipeg." (ESRA EIA Executive Summary Pg ES-1)
- 2005 UMA/MB Transportation Functional Design Report: Rice River Road Upgrading and Extension Report

"The functional alignment originally proposed in the 2005 UMA Functional Design Report: Rice River Road Upgrading and Extension from Loon Straits to the Bloodvein FN was refined." (ESRA EIA Section 3 Pg 37)

- Public Comments from All- Weather Road-East Side of Lake Winnipeg Justification and Scoping Study, August 2000
- Copies of MOUs with Berens River, Bloodvein River and Wasagamack First "Consistent with the NDS, the Berens River First Nation has recently signed a Memorandum of Understanding (MOU) with ESRA that will provide the community with job training and economic development opportunities...... Similar MOUs are expected to be signed with the FN communities of Bloodvein, and Hollow Water" (ESRA EIA Section 3 Pg 35)
- Copy of Manitoba Floodway and East Side Road Authority Act 2009
- Information for the portion of this project already underway (upgrade of Rice River Road)

"A new First Nation-owned company called Pigeon River Contractors Inc. has been formed to undertake some of the road's preparatory work." (ESRA EIA Section 3 Pg 35)

• Copy of 2007 Accord between the Manitoba government and the First Nations in the region, most of whom will be affected by this or future road projects.



• East Side Transportation Initiative Network Study, preliminary work (as this project is only the first step of this much larger vision and the study is referenced.)

"The Province of Manitoba (Province) committed to undertake a Large Area Transportation Network Study to confirm basic corridor concepts for all season road development to service communities on the east side of Lake Winnipeg" (ESRA EIA Executive Summary Pg 1)

- Funding information regarding how the cost of the highway will be covered.
- Information to explain how ownership of the Rice River logging road was transferred to the province, and how the road became a provincial trunk highway (PTH).
- Permits, authorizations and approvals required for this project to proceed, are not in the public registry. The same situation exists for the previous stage of this highway project.

"Permits, authorizations and approvals required for the project to proceed will be maintained in a permit registry." (ESRA EIA Section 2 Pg 30)

Manitoba Wildlands recommends that Manitoba Conservation and the East Side Road Authority assemble a full listing of public documents, policies, records of meetings, etc relevant to this project with details for public access, and provide it to all affected parties, post on Manitoba Conservation and ESTA web sites, and place in public registry files.

Our research failed to identify the usual listing for proposals of this significance. Normally it would be contained in the project description or/and in the scoping document. The lack of these requirements is like saying there are no public policy or standards relevant for this project. Steps to solve this deficiency are urgent, and must be in place before any further expansion of the east side road/highway.

We would note that Manitoba Wildlands updated our collection and listing of Lands and Waters Policies of the Manitoba government 1999 – 2009 recently. It is available to the Authority and its consultants on DVD by request. We also attached for use by those acting on need to update, etc.

#### **Public Registry Procedures**

It would be helpful to have the policies and procedures guidelines for the Environment Act public registry per Environment Act: Section 17 available so public registry file contents for a proposal under the Environment Act for a new Highway in Manitoba are clear. Such policies and procedure guides inside government are common, usually identify steps that fulfill regulation. The current description in Environment Act, Section 17, leaves much room for interpretation and fails to include background or other pertinent information – necessary to be able to review the filings. This is especially important when the numerous documents identified in the filings/ EIA are not available. The department's policy and procedure guidelines for the public registry will assist all parties.

Manitoba Wildlands recommends that the policy and procedures used in Manitoba Conservation to guide the operation of the public registry, especially under the Environment Act, and any other policy and procedures for on line posting of public registry materials be



## immediately posted on the departments web site and provided to each public registry site in the province.

(Environment Act: Section 17):

## "Public registry

- 17 Subject to section 47, the director shall maintain or cause to be maintained a public registry, containing for each proposal received
- (a) A summary, prepared by the proponent in form and detail approved by the department;
- (b) The disposition and status of each proposal;
- (c) A copy of the environmental license, where applicable;
- (d) A copy of the assessment report;
- (e) Justification for not accepting the advice and recommendations of the commission, where applicable; and
- (f) Justification for refusing to issue an environmental license, where applicable; and
- (g) Such other information as the minister or director may from time to time direct."

### Funding, and Cost Issues

There is no indication in any of the documents surrounding this project where the money is coming from for this project. It is apparent the Manitoba government is putting forward some funds, but federal money for this project does not appear to be present and there is no indication of amount of federal funding or when it will be available. A search of Manitoba Throne and Budget speeches locates several monetary commitments from Manitoba for this highway project. None of these commitments come close to covering costs. There is therefore a significant outstanding question – What is the economic viability of this project? Who will be paying and what will the cost be?

Upon searching federal government databases, there is no listing of this project under the:

- Canada-Manitoba Building Canada Fund- communities component,
- Canada-Manitoba Municipal Rural Infrastructure Fund
- Canada- Manitoba Infrastructure Program

There is also no indication of federal funds to the East Side Road from the Manitoba East Side Road Authority, as the proponent. We would observe that the Authority, given it also provides significant services to Manitoban as the Winnipeg Floodway Authority, is knowledgeable about the importance of clarity on source and amount of funds for project costs.

We are left to assume costs are coming out of the \$ 535 million for roads and highways in the Manitoba infrastructure budget. Information about funding should be a requirement for any such proposal under the Environment Act. The East Side Road is only one of 5 "northern highway investments", and one of 15 other road and bridge infrastructure commitments (2009 Budget). At a cost of up to 2 million a km, with a total of 132 km of upgrades and construction, this would decrease the amount in the budget for other infrastructure projects by more than half.

"Maintenance costs are based on an annual maintenance cost of \$5,000/km for an all-season road and were applied to all route alternatives. This estimated cost if for the road maintenance only and does not include the cost of bridge maintenance." (ESRA EIA Section 4 Pg 86)

This is a very expensive project and involves a long term investment with *operational costs* of at least \$377 000 a year just for the road and \$22 000/ year for bridges, those estimates being only for the portion of road from Bloodvein to Berens River (ESRA EIA Section.4, Pg 97). The road maintenance costs (to Berens River) can be roughly estimated at \$660 000 per year, current



dollars. No information exists as to the contribution from INACanada to the operation and maintenance costs for the highway, or whether funds already available to maintain the winter road will be redirected to maintenance for the upgraded highway. This information should be available, as we assume that agreements are in place.

There is also an identified cost of \$5 million dollars as stated in Section 4 of the EIA, to procure crown lands. This is not explained. Is the Manitoba government selling itself the lands for this segment of the highway?

"The property cost of \$5 million is a nominal amount allowed for each alternative to cover the cost of assembling Crown Land needed for the project" (ESRA EIA Section 4 Pg 86)

In 2007 the Manitoba Government promised \$15 million to upgrade the Rice River Road. What has that money been used for to date, and what is it going towards?

"Manitoba has committed \$15 million to begin construction of the first leg of an all-weather road on the east side of Lake Winnipeg, Infrastructure and Transportation Minister Ron Lemieux announced today." <a href="http://news.gov.mb.ca/news/index.html?archive=2007-4-01&item=1420">http://news.gov.mb.ca/news/index.html?archive=2007-4-01&item=1420</a>

The EIA and filings rely to a surprising degree on a ten year old study – and in fact only reference the executive summary of that report. Our offices could have provided the full report if the Authority had trouble accessing it. The deficiencies in that former report were assessed in one of the attachments to this comments letter. Please see attachment – Cost analysis conducted by Paskanake Management regarding variances and assumptions for the east side Highway.

Manitoba Wildlands recommends that full costing figures/projections and assumptions be provided in an updated EIA for the East Side Road/Highway, and that all references or calculations based on 10 year old data and calculations be updated.

### Responsibility and Ownership

Who is responsible for the highway project? It appears it will have federal government funding, and the provincial government authority is the Manitoba East Side Road Authority. Does a Manitoba government department assume maintenance or supervision of maintenance responsibility for completed sections of the Highway? Is this cost included in projections?

Although the Manitoba Floodway and the East side Road Authorities both fall under one Act, *Manitoba Floodway and East Side Road Authority Act*, they are being maintained as two separated authorities with two separate itineraries and agendas.

The filings are not clear about the reporting authority for the East Side Reporting Authority to the Manitoba government. Nor is there any information about how tenders are being handled.

## **Ownership:**

It is unclear from our research who owns the Rice River Road that is being upgraded as part of this project. It is stated that the Rice River Road was a timber road that has been upgraded.

"A haul road was built to support these cutting operations and this has been upgraded over the years to the current Rice River Road. This road does not connect to the Bloodvein River, terminating about 1 km south of the river itself" (ESRA EIA Section 7 Pg 234)



There are past documents and licences that indicate the Tembec/Pine Falls Paper Co, *Lake Winnipeg Forest Access Road East* (Order in Council 301/1996) built and owned the road. (There are several previous Orders in Council regarding the road over a number of years, including with previous owners of the forestry company.) There is no evidence/no public information that the road has been re-licensed as a provincial road, or how ownership was transferred. This should be a matter of public record. It is further important to make information public whether any of the funds that were provided to Tembec in negotiations about the decision to stop logging in parks were also in compensation for the Rice River Road.

Manitoba Wildlands recommends that the government of Manitoba review all past OIC documents regarding the Rice River Road and determine any further steps regarding transfer of ownership of the road, making the outcome of this review part of the public registry file for this project. Also Manitoba Wildlands recommends the government confirm that none of the funds paid to Tembec regarding no logging in parks were actually compensation for the Rice River Road.

## **Federal Government responsibility (Section 2) (Triggers):**

Federal legislation applicable includes: (Exec Summary Pg 16)

- Fisheries Act;
- Navigable Waters Protection Act;
- Migratory Birds Convention Act;
- Canada Wildlife Act:
- Species at Risk Act (SARA); and
- The Dangerous Goods Handling and Transportation Act

Due diligence and presumably best planning and assessment practices on behalf of public interests and communities affected by this proposal under the Environment Act would be the goal of all regulatory agencies. This should mean the joint federal and provincial Technical Advisory Committee would be in place prior to filing this proposal. Exchange of information between CEAA and potential responsible agencies should have progressed by now, with public information from the exchange available.

Winnipeg open houses regarding the project from the start of the Rice River Road all the way to Berens River should have been held. (Open houses did not cover either the full project that has been proposed, or provide sufficient information about the future projects referenced in the filings. No information about the projects used as justification for the highway was made public.) We note that none of the information on display at the open houses held is available on the ESRA website.

Transport Canada has not yet identified all of the navigable waters along the length of the AWR (Sec 3.10).

"Whereas confirmation has not yet been obtained from Transport Canada, it is anticipated that four or more watercourses along the alignment from Bloodvein to Berens River will be deemed navigable," (ESRA EIA Section 3 Pg 63)



How can the impact of the road be assessed unless this is done? As of yet there are no permits in place and no applications in process for the East Side Road, Berens River or Bloodvien River and according to the Navigable Waters Branch no paper work has been submitted. There are also no Navigable Waters Permits for the existing Rice River Road. Which government agency now holds Navigable water permits issued in the past for the first phase of the East Side Road/ highway? Were these permits in fact transferred from Tembec? Who will be responsible for making sure this deficiency in the filings will be fixed? We suggest that the contents in the project description and scoping document is misleading as no steps appear to have been taken.

The Manitoba Environment Act prohibits construction of a development unless a proposal is filed and a licence obtained. Where is the proposal under the Environment Act for the upgrade of the Rice River Road and work that has already started? Why is the road being upgrade and built in stages when the current government of Manitoba is on the record as being against staged licensing? Why is information about the whole project not in the public domain? How can environmental assessment or public review be conducted in stages with inadequate information?

Manitoba Wildlands recommends that Manitoba Conservation, the East Side Road Authority, and both CEAA and federal authorities immediately commence the EA harmonization process — making sure that the schedule and intentions for this process be in public registries before any licence or permits are issued. It is assumed that the harmonization process would be for the project described in the proposal filed under Manitoba's environment act. We also recommend that the federal Responsible Authority and CEAA staff be available to stakeholders and affected communities for any questions or information requests regarding federal concerns, technical or regulatory responses, and so they are aware of stakeholders' concerns.

#### **Endangered Species – Federal and Provincial**

According to the EIA woodland caribou habitat protection measures and mitigation rely almost solely on route selection. This is inadequate, as it has been shown that the area is still used by woodland caribou.

"It is important to note that, when inferring impacts, "avoidance" of an affected area need not be complete; nor are anecdotes of animals crossing a corridor a demonstration of the lack of effect. Detrimental effects are demonstrated when use of an area is lower than expected (often determined from a before-after experiment)." (Woodland Caribou and the Waskwatim Hydro Electric Project, James Schafer, 2004)

The Executive Summary of the EIA states that it anticipates residual effects on caribou will be low, which is rarely the case as these animals are extremely sensitive to habitat change. The EIA does not provide information on the negative impact that roads have had on Woodland caribou herds in other incidences.

"factors leading to caribou decline include habitat loss when forest land is converted to other uses such as agriculture; habitat degradation as a result of harvesting or other disturbances, and landscape and habitat fragmentation due to harvesting, roads, pipelines, transmission corridors or other developments" (Sustainable Forest Management in Canada: <a href="http://www.sfmcanada.org/english/topics-caribou.asp">http://www.sfmcanada.org/english/topics-caribou.asp</a>)



Manitoba Wildlands finds the woodland caribou contents in the filings deficient especially because of the lack of information as to the current science/conservation biology, and studies regarding woodland caribou, in relation to highway projects, corridors and boreal project areas. This filing should include analysis as to wintering, calving areas, and female mortality, size of herds and range areas over time. See below for further deficiencies.

The EIS disregards road building changes to the composition of habitat around the road that will leave habitat more preferable to moose while increasing hunting opportunities for wolves. Predator prey risks from new roads opening up have been studied and documented thoroughly. (James, A. and Stuart-Smith K, Distribution of caribou and wolves in relation to linear corridors, 2000) This technical information is absent from the ESI. Roads also bring in other risk to woodland caribou – because human hunting is easier. The EIA includes insufficient analysis – based on Canadian know how – concerning the impact zone beyond the roadbed.

Section 8 of this EIA, *Environmental Effects and Mitigation Measures*, indicates that habitat fragmentation and hunting pressures are addressed through mitigation by closing sections of winter road not used by the AWR and decommissioning, but this does not accommodate the habitat shift in terms of vegetation change. *It also ignores the impact on woodland caribou of the road being built*. The suggested approach to mitigation would need to be based on a comparison before and after the winter road was built, and before and after the east side highway was built. There is no data included for that comparison. The text below takes advantage of lack of knowledge of winter road corridor widths, the kind of regeneration that may occur, and the impacts of the road being built.

"The alignment has been designed to follow the existing rights of way. The current alignment follows approximately 60% of the existing winter road. Measures identified to close access and allow for vegetative regeneration along the winter road will also further minimize fragmentation, as well as the effects of predator movements and hunting access on key stone species. The cumulative effect of these existing developments with the Project is identified as minor with the application of the aforementioned mitigation measures." (ESRA EIA Section 8 Pg 369)

Because this project is only the first step in the much larger Transportation Initiative for the East Side of Lake Winnipeg, it should be noted that continuing with construction of more northern portions of the highway, (I.e.: to Poplar river), will have further high impact on woodland caribou habitat as habitat between Berens River and Pigeon River has a higher Habitat Suitability Index.

"the greatest concentration of tagged caribou occurs in a large area arc between the Berens and Pigeon Rivers, and the area south of the Pigeon River into Atikaki Provincial Park." (ESRA EIA Section 7 pg 255)

Manitoba Wildlands recommends that all the contents of this EIA regarding woodland caribou be updated, based on current science and monitoring of woodland caribou with respect to new corridors. As one of the first EIA documents under the Environment Act since woodland caribou were listed under Manitoba's Endangered Species Act, the contents are deficient and must be improved. The variety of contents as to future projects as justification for this project, and the stages of the east side road, to be licensed in future proposals points to cumulative risk to endangered species.



So the filings & EIA, and proponents are taking advantage of appearing to assess impact on a species that is listed by both Canada and Manitoba laws by avoiding any assessment of the impact from the whole project.

When mentioning rare and endangered plants the EIA does not consider them to be of any concern with the following justification:

"definition of "rare" that is used for the CDC lists is based on standardized terminology used throughout the CDC network in Canada. The listings for rare species are broken down into the ecoregions of Manitoba. The listing for the Lac Seul Upland Ecoregion that contains the study area shows 48 plant species and eight vertebrate animal species. These are listed in a provincial designation (subnational rank) of S1 (very rare) to S5 (secure). A global designation is also given that shows the status of the species throughout its natural range, designated as G1 (very rare) to G5 (secure). A species can be rare in a province but common elsewhere in its range. In the case of the CDC list for the Lac Seul Upland Ecoregion, most of the plants shown have a G5 global ranking. The reason for their rare designation in Manitoba may relate to the fact that many plants along the east side of Lake Winnipeg are reaching either their northern, southern or western range limits. Plants that are just within their range and uncommon in the Lac Seul Upland may be common further east in Ontario, and this seems to be the case with most of the plants shown on the CDC list. There is also a practical aspect to a rare designation, that of access. The area east of Lake Winnipeg is a remote region and summer access during the growing season is only possible either by water along the major rivers, which would involve portaging, or by air into lakes by float plane or by helicopter. As a result biological surveys are not conducted as often as in areas with road access. Further study in the east Lake Winnipeg zone may reveal more individuals of species now considered rare. Such surveys may also reveal new species not known to occur there previously." (ESRA EIA Section 7 Pg 237)

It is unacceptable practice to consider that a species in not important to preserve in Manitoba just because it is present in other parts of Canada and the world. This approach shows a basic lack of conservation biology understanding. Habitat for these rare plants needs to be secured, and the plants are a part of this ecosystem. Also, if rare plant species that exist in the study area are considered rare because of their distribution patterns,

"A further cause of a rare designation can be the normal growth form of a plant. Plants may be uncommon because it is natural for them to grow in a widely dispersed form with few individuals in any one geographic location" (ESRA EIA Section 7 Pg 237)

The biologist who provided the rationale in this section of the EIA should be named. Clearly the area needs to be studied more extensively to see if these plants are indeed as rare as they seem – and to identify other species to study. It is not good practice to just say that it does not matter. If every area at the edge of a plant species range was assessed as having not significant impact, the plant species would quickly become extirpated. There appears to be a complete lack of knowledge of edge effect in the EIA.

It should be noted that the CDC in Manitoba has very little data for the east side of Manitoba. Making assumptions that the data held is complete or sufficient surprises our reviewers. One simple test: Does the CDC hold all the species data collected by Manitoba Hydro over the last 20 years in this region? Why would the proponents pretend that the CDC data is all that exists, and sufficient for their assessment?



Manitoba Wildlands finds the species at risk contents of the filings deficient. We recommend that the Manitoba government, and ESRA immediately secure the species data collected by Manitoba Hydro in this region (the whole planning area) during the period 1988 – 1993, and since and take the following steps:

- Redo sections of this assessment regarding species, and habitat needed for species
- Undertake the assessment for impacts on habitat for both flora and fauna based on the extensive data held by Manitoba Hydro
- Provide this data to any First Nations affected by the highway project, who are involved in their own lands planning exercises
- Make sure these data are then part of the CDC information system
- File a species monitoring plan for the period of construction and operation of this highway project over time, indicating how monitoring will be managed, how data will be shared, and what kinds of mitigation approaches may be applied depending on the species at risk.

### **Justification For the Project**

Although the East Side All-weather road EIS states that the highway can strictly be justified by a decrease in transportation costs, much of the justification for building the road is based on identified new resource development taking place such as forestry, the Pine Falls Paper Mill (now Tembec Mill) which is now indefinitely closed, Bipole 3 being developed (now being planned for the west side of the province), and the fisheries industry.

"A north-south All-Weather Road from Manigotogan to Bloodvein to Berens River to St. Theresa Point/Wasagamack to Garden Hill to Gods Lake Narrows to Oxford House is justified on the basis of \$65.9 M net benefits and a benefit-cost ratio of 1.27, assuming that currently identified new resource development takes place. Without potential forestry, resource development projects such as PFPC expansion, Bipole III, and enlarged fisheries, there is a reduced justification for the All-Weather Road (net benefits of \$12.8 M+ (benefit-cost ratio of 1.05)." (Justification and Scoping Study Executive Summary Pg 2, Dillon Consulting Ltd, 2000)

It appears that ESRA is simply repeating conclusions from a study ten years old, and using the executive summary only. This may indicate the ESRA did not fulfill its requirements regarding justification for this project. Was any review of the ten-year-old figures done? Does this mean that all cost factors for this filing are ten years old? Also it appears that ESRA did not bother to read the whole study from 2000. The Executive Summary is about one tenth the information as the full study. See note on page one of this comments letter, and attachment.

Tembec pushed for this road development to ease transportation costs, and to be able to get fibre out during the winter. With the Tembec mill closed this is a controversial issue. Currently a 20-year forest management plan and Environment Act proposal is being reviewed in advance of pubic hearings and potential environmental licence. That proposal under The Environment Act only covered FML 01. It contains no expansion or future projects for fibre access beyond FML 01. Aside from the mill being closed perhaps permanently and being for sale, the East Side Road Authority needs to state clearly in its revised EIA why they created this invalid justification.

Manitoba Wildlands recommends that the Economic and Justification sections of the EIA be updated with current data, and filed again in relation to the current situation – clearly stating the justification basis and economic basis – See comment above re 10 year old study, and attached independent review of that study. Also the government of Manitoba has consistently over the last several years identified Justifications for this highway that are not included in the EIA. This points to a strong case for reviewing public policy with regards to the highway project and refilling the EIA so that public policy justifications identified by the Manitoba government are included.

The East Side All-Weather Road Justification and Scoping Study (Dillon Consulting Ltd 2000) states that the only stakeholders completely in favour of the East side all-weather Road were transport and supply resource industries, not including air transport (pulpwood movement along the east side accounts for 15000/tons per year of potential use...East Side All Weather Road Justification and Scoping Study, Dillon Consulting, 2000).

## Stakeholder Responses

	Totally Opposed	Conditional Support	Totally in Favour
Resorts/Lodges	30%	35%	35%
(11 responses)		(35 km dist.)	
Transport & Supply	33%	10%	57%
Companies (9 responses)	(Air)	(W.R.	(Trucker &
		Truckers)	Store Op.)
Resource Industries Trapping/Fishing/Forestry ( 5 responses)	_	_	100%
Environmental & Other		75%	
Interest Groups	25%	(if done	_
( 8 responses)		properly)	

(East Side All-Weather Road Justification and Scoping Study, Dillon Consulting 2000, Pg 42)

When the 2001 Justification and Scoping study for the East Side All-weather Road was released, Bipole III was also expected to go down the east side. The Manitoba government has directed Manitoba Hydro to consider other options on the west side of Manitoba, and the utility is currently reviewing three options. Reduced mineral exploration costs once the highway is in place are assumed in the EIA to attract more mining to the east Side of Lake Winnipeg. This appears to be based on insufficient information regarding mineral potential in the corridor for this current project. Information is missing with respect to the kinds of mineral operations that consistently avoid having easy road access (diamond and gold mines). Both these types of mineral operations are currently subject to exploration on the east side. We note that as in other aspects of the EIA use of the 10 year old executive summary of the Dillon report is not in context for the specifics of this project, and the project area for this proposal under the Environment Act



Although cost to transport food and materials will decrease for the communities, costs for access to health services will not change as the travel times for the all weather road is only expected to be 30-40% faster than the existing winter road. Anyone with serious health issues will still need to be flown into a larger center. No projections as to increases in fuel costs are included in the filings.

The justifications for this highway project include assumptions that it will bring employment to the communities through increased tourism. However, the main tourist activity on the east side is fly in fishing camps that may actually find the road detrimental to their business as access to the pristine areas will increase. Including tourism economic benefits needs to be in the context of today's tourism market. (See chart above.) Studies show that the greatest international tourism market is for wilderness, and remote areas. Also the types of tourism activity in the region will also be a consequence of community lands plans.

"The Study concludes that there will be net benefits for the tourism industry under an AWR despite a contrasting assessment provided by Manitoba Tourism." (Review of Justification and Scoping study Pg 12, Paskanake Project Management 2001)

It should be noted that First Nations communities across Canada, and in Manitoba who have road access continue to suffer from high employment rates. This EIA and the filings needed to provide a stronger and more accurate picture of the economic benefits from the project.

Section 4.5 of the East Side All Weather Road EIA, says the route was chosen in part to provide access to lands for waterfront development of lakefront properties and tourism facilities.

"This review resulted in the following refinements or adjustments to improve the preferred route... Provide a greater set-back from the Lake Winnipeg shoreline in the southern segment of the route to improve on the potential development of lakefront cottage properties or tourism facilities. (ESRA EIA Section 4 Pg 91)

Cottage development and tourism facilities are not considered in the cumulative impacts of the project. We appear to have a project being justified by other future projects (tourism) without full treatment or accurate content about the future projects. Nor is there any public policy or commitment from the Manitoba government supporting cottage development along the new highway on the east side of Lake Winnipeg.

Manitoba Wildlands finds the EIA deficient regarding justification of the project – for several reasons. We recommend that the ten year old, rehashed technical information be updated. More importantly it is essential for the Manitoba government to confirm the other intended projects mentioned or to clearly indicate there are no plans as yet for these projects. Should these other projects, assumed to be enabled by the highway project, in fact be intended by the Manitoba government, then an explanation of, notification to communities, and steps for public review need to be in place before a licence is issued for this section of the highway.

The East Side All-weather Road EIA references *most* First Nations agree with the new highway by using the following quote:

It can generally be concluded that there is support for upgrading the existing Rice River Road and its extension to the community of Bloodvein, as well as support from most communities for a regional



all-weather road network beyond Bloodvein." (Status Report "Promises to Keep", East Side Planning Initiative, November 2004)

Is this EIA for one phase of the intended highway as per the proposal under the Environment Act? If it is for the whole intended highway then the rest of the filing and EIA for the whole project is missing. We assume that the project proposal and scoping document – which both specify this project's parameters – mean there will be no extensions or additions to this project without public notification, review, and EIA.

Manitoba Wildlands recommends that there be an immediate clarification that this proposal under the Act pertains to the Rice River Road, and highway extension to Bloodvein and Berens River First Nations only. This clarification should be from the ESR Authority, and the minister of conservation, and placed in the public registry, as confirming the project description, and project proposal.

### **East Side Transportation Initiative**

It is clearly stated in the East Side All Weather Road EIA, in multiple sections of the document and supporting documents, that the upgrade of the Rice River Road to Bloodvein and the extension to Berens River FN is only the first part of a much larger project being explored through the East Side Transportation Network Study. No timeline or economic information is provided for the larger project, and the Environment Act proposal and EIS only apply to the current proposal and project.

"The Province of Manitoba (Province) committed to undertake a Large Area Transportation Network Study to confirm basic corridor concepts for all season road development to service communities on the east side of Lake Winnipeg.... In April 2007, the Province announced the first segment of the ASR will be developed by upgrading the existing Rice River Road with an extension to Bloodvein, and construction of an ASR from Bloodvein to Berens River" (ESRA EIA Exec Summary Pg ES1-2)

"East Side Road Transportation Study is currently in process, assessing opportunities to pursue transportation improvements between the communities on the east side of Lake Winnipeg and connections with the rest of the province." (ESRA EIA Section 8 Pg 368)

However, only the Rice River Road upgrade and road extension from Bloodvien to Berens River portion of the much larger project are being assessed.

**"PR 304 to Berens River All-Season Road**: Environmental Impact Assessment" (ESRA Environmental Impact Assessment Title Page)

Is the proponent aiming for a licence and approval for a project beyond what is actually described in the filings? Combined with our stated concern above about the *assumed future projects that are not road building* – Manitoba Wildlands considers the EIA deficient and confusing.

Why are the objectives of the larger transportation initiative referenced in content concerning the study area for the ESRA Environmental Impact Assessment with mention of the extension to Poplar River, the logical next section of an all-weather road on the east side of Lake Winnipeg (See Figure 1-2: Project Study Area)? The larger transportation initiative study is directly related



to cumulative effects and impacts that may result from the PR 304 to Berens River portion of the highway, despite the odd assertion below.-

"Some potential road projects well outside the study area have been proposed, but will not result in cumulative effects with this project." (ESRA EIA Section 8 pg 368)

Are we to take this quote above as an indication that no Environment Act proposal, plans or EIA will be filed when other roads are connected to this stage of the highway? Does the ESR Authority assume it can build roads without a public review and licensing process?

## Protected Areas, Parks and Crown Land Designations

#### Atikaki Park Boundaries:

The movement of Atikaki Park boundaries are only briefly mentioned and the effects of this are missing from this study.

"A 12 ha adjustment to the provincial park boundary will be required at the northwest section of the park on the Bloodvein River in order to accommodate construction of the Bloodvein River crossing." (ESRA EIA Section 3 pg 64)

It was incumbent on the proponent to include here a gap analysis of the results of this wilderness park/ protected area boundary change.

The Atikaki park management plan makes no concessions for road building through the park. It is also stated in the East side all weather road EIA that moving the park boundaries will not cause any cumulative affects

"The intent of the proposed compensatory changes will not cause any cumulative effects" (ESRA EIA section 8 pg 371)

How will movement of the Atikaki Provincial Park boundary not cause any cumulative effects when it opens the area to a road for the first time, opens the park up to use and impacts the enduring features of the area?

"Atikaki provides a wild and undeveloped taste of Manitoba's great outdoors, visitors should be familiar with wilderness travel....There is no direct road access into the park.

Changing the boundaries of the park for this purpose is also in blatant disregard of pan Canadian governments' recommendations from *Principles and Guidelines for Ecological Restoration in Canada's Protected Natural Areas* document:

"The Canadian Parks Council provides a Canada-wide forum for intergovernmental information sharing and action on parks and protected areas. The development of Principles and Guidelines for Ecological Restoration in Canada's Protected Natural Areas is an initiative under its 2006 Strategic Direction to advance the protection efforts of member agencies. These Principles and Guidelines for Ecological Restoration in Canada's Protected Natural Areas represent the first-ever Canada-wide guidance for ecological restoration practices. They result from collaboration among experts and managers from Canada's federal, provincial and territorial parks and protected areas agencies, Canadian and international universities, the US National Park Service, the Society for Ecological Restoration International (SER), and SER's Indigenous Peoples Restoration Network Working Group" (Parks Canada <a href="http://www.pc.gc.ca/eng/docs/pc/guide/resteco/index.aspx">http://www.pc.gc.ca/eng/docs/pc/guide/resteco/index.aspx</a>)



Manitoba is an active member of the Canadian Parks Council – yet this EIA appears to be ignorant about public policy regarding protected areas and parks in Manitoba.

The enduring features affected by this change in boundary are not taken into consideration and are not considered a Valued Ecosystem Component for the discussions within the EIA. Why is this information missing?

## **Bloodvien Heritage River:**

This Canadian Heritage River needs to have 1km on either side (uplands) protected. Construction of the road also opens up the area to use from the general public. These impacts and or benefits should have been included. The proponent needs to take a closer look, as not the entire river is inside Atikaki Park. It is also unclear which management plan for the river is used, the quote below avoids the EIS responsibility to discuss potential future impacts in relation to the project.

"The Management Plan established the Bloodvein River corridor to include all lands stretching one kilometer from either bank of the river... Having been included within the boundaries of Atikaki Provincial Wilderness Park, and subject to protection under the *Provincial Parks Act (1996)*, the Bloodvein River has been subject to little, if any conflicting land use which have negatively influenced the designated river corridor." (ESRA EIA Section 7 Pg 379)

#### Other areas of concern:

Transport Canada has not yet identified **navigable waters** along the length of the preferred shoreline road alignment (or other options) and archaeological investigation in the study area is not extensive enough to start building along waterways

"Transport Canada has not yet identified all of these watercourses as navigable," (ESRA EIA Section8 Pg 358)

"There has been little archaeological investigation in the study area and very few sites with identified archaeological resources have been recorded." (ESRA EIA Section 8 Pg 363)

Again, the fact that there has been **little archaeological investigation** in the study area means that more archaeological work using predictive modelling and all existing government data should be applied to the road corridor. The Manitoba Archaeological Sites Database is likely 30 years or more old. Methods and historic basis for archaeological work, especially regarding Aboriginal lands and sites, has changed significantly in that period.

The Archaeological data studied for the purpose of the ESRA EIA evaluated the Manitoba Archaeological Sites Database, but no indication of. Date of the data is provided.

"The investigation of recorded archaeological sites listed in the Manitoba Archaeological Sites Database, maintained by Historic Resources, yielded four sites in the entire area" (ESRA EIA Section 8 Pg 358)

Without up to date modelling and research into Archaeological sites and acknowledging the area has not been adequately studied, it is not justified to comment that impacts on archaeological resources are low.

"None of these sites, given the location of the preferred alignment and the location of the sites, is expected to be affected by construction, operations or maintenance activities, so the potential effect is very low, and no mitigation is required" (ESRA EIA Section 8 Pg 364),



Manitoba Wildlands finds the Archaeology assumptions as to number of sites and impacts from the project on sites deficient. We recommend that the proponents be required to apply up to date modelling as to likely number of archaeological sites, especially Aboriginal sites, file an updated section for the EIA and indicate immediately whether or not The Heritage Act applies and then indicate what approach the East Side Road Authority and Manitoba Conservation will take to their future responsibilities regarding Archaeology impacts.

Another concern regarding **protected areas and parks** is that the study area considered for the East Side All-Weather Road EIA includes Poplar/Nanowin Rivers Park Reserve (ESRA EIA Section 1 Fig 1-2), which is within the World Heritage Site (WHS) project area. Bloodvein River First Nation traditional lands are also again now part of the WHS nomination process. (We note again that this proposal under the Environment Act, and this project does NOT include the highway through the park reserve.)

Has consideration been made that the study area for this project includes lands and waters for the WHS nomination and UN listing? If so it is not apparent in the filings. Why is this not considered in the cumulative impacts or mitigation measures? It is public information that Bloodvein River First Nation is a member of the First Nation consortium for the World Heritage Site nomination. Yet the EIA filing ignores this future United Nations listing, and the designation of the Bloodvein River as a Heritage River – which is also of high importance for the WHS.

### **Climate Change**

As stated in the ESRA EIS (Section 4 Table 4-5 Pg 95), construction of this East Side Road Project (shoreline route) will disturb 2,338,750 ha of boreal forest including/and (UNCLEAR IN EIS) 1,723,750 ha of wetlands area. This translates into approximately 544,447,355 tonnes of stored carbon removed (Kasischke et al 1995). In addition, the removal of these boreal forest and wetlands will reduce the ability of this boreal region to sequester carbon. How will the ESRA and the Manitoba government mitigate these effects? Given the recent Manitoba government public policy announcement regarding protection of Manitoba boreal region peatlands and carbon in peatlands there is a significant gap in the EIA contents and public policy.

The EIA needed to start with the carbon inventory for the project areas, identify emissions from construction – all activities and sources – and then identify emissions from road operation and maintenance. Mitigation measures are the next specific step and set of information needed. Manitoba Wildlands recommends that the climate change section of the EIS be updated immediately, including so it is in context with Manitoba government policies, and the intent of the new legislation.

The figures provided in Table 4-5, page 95 simply do not make sense. Totals indicate that the entire sub region will be impacted by the road corridor. Manitoba Wildlands recommends that all figures in the EIA be reviewed, with public corrections of any section where figures/calculations have to be adjusted to be refiled in the public registry.



The EIS does not adequately indicate the **effects on wildlife and plants** of this kind of loss of carbon and the emissions. Mitigation regarding the loss of over four million hectares of boreal habitat is missing from the EIS.

### Based on the numbers provided in the EIA we have calculated the carbon loss:

If you consider that  $4.9 \text{kg/m}^2$  per hectare carbon is stored in the living biomass of the boreal forest (Apps et al 1993 in Kasischke et al 1995), you are essentially removing 114,370,000 tonnes of stored carbon from the boreal forest for this project.

2338750 ha=23387500000m<sup>2</sup> x 4.9kgCarbon/ m<sup>2</sup>

- = 114598750000kg Carbon/1002
- = 114370009.9 tonnes

It should also be noted that this project's disturbance to wetlands (anticipated at 1,723,750 ha (ESRA EIA Section 4 Table 4-5 pg 95) with the greater capacity to store 25kg Carbon/m<sup>2</sup> per hectare removes 430,077,345 tonnes of stored carbon from the project area.

1723750ha=17237500000m<sup>2</sup> x 25kg Carbon/m<sup>2</sup> = 430937500000kg Carbon/1002 = 430077345.3 tonnes

This does not factor in taking away 2,338,750 ha of forest and 1,723,750ha of disturbed wetlands ability for sequestration carbon permanently.

The effects of this road project on climate change increases when you factor in the estimations for emissions for the road use: (emissions for road construction not in calculations.)

"The preliminary estimate of total emissions greenhouse gas emissions for a 24 hour period compiled for the projected 10 year Average Annual Daily Traffic (AADT) volumes...is estimated to be:

CO EmissionsNOX Emissions1.2 tonnes

• VOC Emissions 1.5 tonnes" (ESRA EIA Section 8 Pg 336)

The East Side All weather Road EIA only gives these estimates for a 24 hour period, but in reality, if you use these estimated emissions and calculated the emissions for a year you get:

CO emissions 2,117tonnes
 NOX emissions 438 tonnes
 VOC Emissions 547.5 tonnes
 Total= 3102.5 tonnes of emissions/year

These calculations only take into account road use and do not account for the emissions produced during construction.

According to Canadian Environment Assessment Agency document, *Incorporating Climate Change Considerations Environmental Assessments: General Guidance for Practitioners* (Pg 8):

"The recommended procedures for addressing GHG considerations are as follows:

- 1. Preliminary Scoping for GHG Considerations
- 2. Identify GHG Considerations: jurisdictional considerations, industry profile and project specifics
- 3. Assess GHG Considerations: direct and indirect GHG emissions, and effect on carbon sinks
- 4. GHG Management Plans: jurisdictional considerations and project specifics



5. Monitoring, Follow-up and Adaptive Management: jurisdictional considerations and project specifics

Following these CEAA recommendations would be the responsible choice. Indirect GHG emissions and effects on carbon sinks are not addressed in the east side all-highway EIA. Section 3 (Pg 32) of the east side all-weather road EIA lists the Consultation on Sustainable Development Implementation Report (COSDI 1999) and Manitoba's Climate Change Task Force report (2001) as sources for EIS contents re climate change. *All Manitoba government current climate change public policy, programs, and law since those reports are left out.* 

Manitoba Wildlands finds the EIA and filings deficient regarding climate change science and impacts in the project region (including current impacts on communities), weather and climate shifts, impacts on the highway from climate change, and impacts from construction and operation of the highway.

Manitoba Wildlands recommends that the EIS be updated to reflect current climate change policy and programs in Manitoba, to clearly identify emissions from construction, operation, and changes over time in the road corridor. Then specific mitigation for each of these time periods with independent monitoring for delivery should be part of updated EIA materials filed.

Another climate change issue is whether the East Side All-Weather Road Authority and this highway project are going to be covered in the Manitoba Government Cap and Trade policy recently announced. It is particularly serious when a public works project that is paid for by government, built by government, and licensed by government shows out of date compliance in public policies and programs. It is even more serious when the deficiency is in climate change with a project area in the most carbon rich region in our province..

Cap and Trade Gov press release: http://news.gov.mb.ca/news/index.html?archive=2009-12-01&item=7325

## **Regulatory and Policy Compliance**

Our review of the East side All-Weather Road EIA locates no policy guidelines for preparation of the Environmental Impact Statement for the East Side road The Scoping Document does not list any programs or public policy requirements also. Those references regarding public policy inside the EIA are badly out of date. (Eg: Manitoba climate change policies.)

Not only does the East Side Road EIA not contain its own set of EIA and construction guidelines, we found that The Principles and Guidelines of Sustainable Development referenced in the EIA state that

"2(1) the economy, environment, human health and social well-being should be managed for the equal benefit of present and future generations."

This is not accomplished in the EIA as impacts and benefits of the road as a whole are absent, and mitigation measures are only to be implemented for short term problems. The quote below appears



to refer to guidelines that were not included or made available in the filings. Does the proponent mean that Manitoba's sustainable development principles and guidelines are not relevant to their assessment?

"In accordance with federal and provincial regulatory guidelines, only those effects resulting from a project activity on the physical or biological environment must be considered in the assessment of socio-economic and cultural effects." (ESRA EIA Section 8 Pg 323)

This statement above ignores the practice under Manitoba Environment Act to include social economic impacts from the project itself in its project plan and filings. Given the strong pattern of providing business plans, operational guidelines, and socio economic impacts for a variety of proposals under the Environment Act, the Authority and Manitoba Conservation should be directed immediately to file an indication of whether they intent to, for instance, ignore Manitoba's Sustainable Development principles and guidelines in the future. We would observe that the quote above is mis-used. This entire project is 'on the physical or biological environment' which means that all effects are part of assessment of socio-economic and cultural effects.

## **Community Access & Services:**

There are many questions not addressed regarding accessibility for the communities due to development of the road. Although the communities will be accessible by road, their overall access to services has the potential to decline as a result.

Ouestions we feel have not been answered in the East Side Road EIA are:

- Will other forms of transportation continue to be available to community members on the East side of Lake Winnipeg after the road has been developed?
- I.e.: ferry services, barges and the ice road at the narrows
- Will the road result in declining value of airstrips and closures or reduced air service?

"The Study does not consider the overall impact on the airline industry with specific reference to community-owned airlines and likely local employment losses, etc." (Review of Justification Study and Scoping Document, Brian Heart, 2001 Pg 12)

How will the assumed declining value of airstrips and flight services be mitigated?

Another matter that has not been addressed is that the road may encourage off reserve settlements. Again, as a public works that is proposed by, paid for by, developed by, paid for by, and licensed by the Manitoba government this deficiency is problematic.

See comments above re the assumed future projects in Justification section of the EIA. These are economic projects used to justify this project. Including these projects in justification while leaving out other specific economic issues in the EIA shows an inconsistency that fails the public interest.

Manitoba Wildlands recommends that the EIA be accompanied by a business plan, economic analysis and full identification of the policy, program, and regulatory compliance for a Manitoba government public highway project. The current state of the contents of the EIS



would cause one to wonder whether the proponents realize that this is a public works where public policy should be reviewed and applied..

#### **Access Roads:**

Access from the main road being constructed into the community or reserve is not discussed. It was found that there is a separate project for Berens River being evaluated under the Canadian Environmental Assessment Agency.

• Berens River Road Project, CEAR # 04-01-8481

Other communities have commented that they found themselves responsible for access roads. If the road upgrades in Berens River are a direct result of the all-weather road from Bloodvien to Berens River then those upgrades should be addressed within the scope of this project. They should also be a guaranteed aspect of any agreement with a community along the corridor for the Highway.

The preferred shoreline route does not show where the access road to Pauingassi and Little Grand will start. Our understanding from our research is that this access point was a key point in consultations with these communities. Again if the EIS contains references to future projects then it should be followed through clearly.

#### **Road Construction Standards**

Because the East Side Road represents the first time an EIA has been contracted out to private companies through an agency rather than a department of the Manitoba government road building standards need to fulfill provincial and federal guidelines. We were unable to locate such guidelines in our research. These should be made public and placed in the public registry file immediately, and posted on the Manitoba government website.

Areas of concern we feel should be dealt with or made more clear in the East Side Road EIA are:

- Decommissioning and mitigation of road building impacts is not being taken into consideration except for burrow sources/quarries and temporary camps and staging areas (ESRA EIA Section 3 Pg. 52)
- Clearance for the road right of way will incorporate 60m width with additional clearing as required. Will this "as required" have a maximum allowable width?
- Information as to the existing long term gravel reserves on the east side in the project area, or accessible to the project area, should have been included, and made public at the time of filing.
- Standards for notification to affected communities regarding any quarry permit requests, with first right of permitting for the community.

## **Quarry Permits**

Our research confirms communities affected by this road project were not made aware of provincial government gravel reserves in the region. The process of notification for permit requests along the route of the intended highway also is not public. Maps to show the gravel



reserves should have been included in the EIA filings. Manitoba Wildlands recommends that policy and procedure guides regarding road building in Manitoba be filed in the public registry immediately and that Manitoba Conservation make sure they are among the required policy standards to be fulfilled by any proposal for future highway projects in Manitoba a.

A potential problem not included in the EIA mitigation measures: the East Side Road EIA Executive Summary states that the road will limit the establishment of new right of ways. This is an odd assertion given the justification section includes future projects that would require rights of ways.

## **Impacts and Mitigation**

Although a lot of work may have gone into researching and developing the East Side Road EIA mitigation measures and cumulative impacts content are insufficient as the writers work to make potential problems seem insignificant and do not address the big picture. It clearly states in the assessment that the *Cumulative Effects Assessment Practitioners Guide* expects inclusion of:

Effects relative to the existing transportation network and the future linkages created by the Project (ESRA EIA Section 8 Pg 367)

A mitigation measure not yet addressed is **mitigation for future forestry operations** resulting from the development of the highway, as it is handed off to a third party, or future third parties (Tembec, etc).

"The potential for cumulative effects of the Project in relation to future forestry operations are mitigated through forestry plan licensing specifying the environmental protection measures. Government also controls timber-harvesting quotas and long term plans. The Tembec management plan is up for renewal which offers government the opportunity to specify any additional mitigation measures that may be required to protect water quality and keystone species. As a result of the strength of the migitative measures and ability of the Crown to establish additional measures, the potential for adverse cumulative effects of the Project in relation to future forestry operation is deemed to be minor." (ESRA EIA Section 8 Pg 371)

Except the cumulative impacts or benefits of the east side highway, in terms of forestry operations, are not included in the guidelines for the Tembec forest management plan and EIS. As the Tembec Mill is for sale and non-operational at this time and should not be getting their management plan renewed at all.

Manitoba Wildlands recommends that any element used as Justification for this project be thoroughly explored in the updated EIA and filings – and that any other Environment Act proceeding referenced in Justification or EIA must have the public works as an element required in the Plans and EIS. In this case the Tembec guidelines should have included the road – and the ESRA guidelines should have specified Tembec or other future forestry operations.

## **Development**

This project could open the east side of Lake Winnipeg to development such as cottages, forestry, logging, hydro lines, mining and tourism. This increase in development is used as unsubstantiated justification of this project as stated in the original Justification and Scoping Study. However,



development of lands that will impact the traditional values of the First Nations is a key concern identified by the communities involved and yet these impacts are not addressed in the cumulative impacts and mitigation section.

Because this project is part of a much large transportation initiative (Large Area Transportation Network Study) it should also be noted that these issues, and all impacts will be magnified as the length of the road continues to grow, and with overtime cumulative impacts during operation of the highway.

#### **First Nation Concerns**

The Executive Summary of the East Side Road EIA states TEK studies of aboriginal respondents did not have significant concerns with this project. This is directly contradictory to the information in Section 6: Traditional Ecological Knowledge, which lays out the concerns of FN communities. These included concerns with development and changes to hunting and trapping and the health of animals

"consensus that development of the proposed all-season road will likely result in some changes, including a reduction in the number of animals in the area, thereby reducing the number of animals available to trap and hunt. Respondents cited a number of road characteristics that could potentially cause this effect, including: Disturbances to animal habitat causing the animals to migrate elsewhere (e.g., construction noise, traffic noise, clearing, etc.); Accidents between animals and vehicles on the road resulting in animal fatalities; Contamination of soils and water, causing animals to become sick and/or to migrate elsewhere; and Improved access to the community's traditional lands by outsiders, increasing hunting and trapping pressure, and reducing the number of animals available to Aboriginal community members. Respondents expressed concerns for the protection of water quality, fearing there could be contamination during the construction phase, such as oil and fuel spills during construction; dust from the heavy machinery during construction; and litter and uncontrolled dumping during operation

#### These were even more concerned with socioeconomic concerns such as:

"Respondents with concerns about the all-season road identified such issues as:

- increased traffic (noise, dust, etc.);
- outsiders gaining access to cultural/spiritual areas;
- increased drug and alcohol abuse;
- loss of language;
- increased gang activity;
- increased flooding, from disrupting beavers and dams;
- increased forest fires;
- loss of traditional medicine knowledge." (ESRA EIA Section 6 pg 164)

We would note that similar concerns were part of the record in the 2001 Dillon report – though it is not clear whether the Authority actually read the full report.

Respondents were very concerned with traditional values. These traditional values will have to compete with growing infrastructure and needs of the communities as well as increased access to the communities and their traditional areas and the ability of community members to more easily leave traditional lands.

"A drop in traditional activities could have a negative effect on the language" (ESRA EIA Section 6)



The East Side Road EIA section 5 (Table 5-5) states areas of concern from communities such as: decrease in traditional lifestyle, increased drug use, and increase in criminal activity resulting from the road are written off as being part of larger trends that can not be related to the project. It would be interesting to know if the Authority experts have ever dealt with the social consequences of roads into isolated communities. In particular certain of these communities wish to be able to control traffic form the road into their communities. Did the Authority take this into account?

These are examples of community concerns that a) should be at least addressed and b) problems that have the potential to be influenced by increased traffic to the communities. They should be addressed rather than saying that these things won't happen and therefore do not have to be addressed

Other issues identified that were not addressed include:

- Community tourism development plans before the Road is developed, a recommendation from the Justification and Scoping study
- Communities along the East side are supposed to have land use plans before any further development occurs. These plans are not in place yet.

There are significant deficiencies in the EIA which are identified throughout our comments. Recommendations are intended to improve the basis for licensing and the delivery of the project. We are concerned about lack of public policy standards, and most concerned about the set of numbers that basically indicates that the entirety of the sub region from the start of the Rice River Road to Berens River north side of its traditional territory will be impacted by the project. These numbers need a review, and then if corrections are need, all sets of numbers in this EIS need to be reviewed, and re issued.

Upon recent review we found that the East Side Road Authority is not on the Manitoba government organizational chart for highways, and similar projects, while the Floodway Authority is. Similarly tenders for highways projects in Manitoba, including those affecting Manitoba First Nations are listed on line by the Manitoba government, while tenders for the ESRAuthority are not publicly listed.

We qualify these public comments. Manitoba Wildlands does not oppose the need for road access for east side First Nation communities in the face of climate change. Nothing in this document is to be taken as opposition to road access for these communities. However, our staff were repeatedly surprised at the deficiencies in the EIA. In the public interest, and in the interest of east side communities these must be corrected.

Attachments to this set of public review comments are provided to assist the proponent in correcting deficiencies.

See next page.



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Regards,

Gaile Whelan Enns Director, Manitoba Wildlands

# **Attachments List:**

- -James Schaefer Woodland Caribou and the Wuskwatim Hydroelectric Project April 2004
- -Manitoba Wildlands August 2009 Manitoba Government Lands and Waters Policies (1999-2009)
- -Manitoba Wildlands East Side Road Project: September 2009 brief: *Provincial information, resources, regulatory steps and permits*
- -Manitoba Wildlands December 19<sup>th</sup>, 2007 Letter to Braun and Blunt Regarding Norway House to Poplar River Winter Road
- Paskanake Project Management February 2001: Review and Analysis Eastside of Lake Winnipeg All Weather Justification and Scoping Study.

# **Review and Analysis**

# East Side of Lake Winnipeg All Weather Road Justification and Scoping Study

Bryan Hart, Project Manager

Paskanake Project Management (PPM)

for

Whelan Enns Associates Inc.

February, 2001

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## **EXECUTIVE SUMMARY**

This report offers a preliminary review of an August 2000 report prepared by Dillon Consulting Limited and H.N. Westdal & Associates for the Manitoba Highways and Government Services entitled East Side of Lake Winnipeg All Weather Road Justification and Scoping Study (herein referred to as "Study"). The Study examined two potential all-weather road (AWR) routes: a north/south route from Manigotogan to Oxford House and an east/west route from Norway House to Oxford House.

The Study concluded that there is greatest economic justification for a north/south *main stem* AWR from Manigotogan to Oxford House. Furthermore, the Study reported that transportation benefits/costs <u>alone</u> justify a north/south *main stem* AWR without the factoring in of other potential development benefits.

This review examined the main conclusions of the Study including some of its underlying assumptions used to generate its justification levels. In summary, this review concludes that the greatest economic justification for an AWR <u>may not</u> be a north/south *main stem* AWR route but rather an east/west *main stem* AWR route –assuming that AWR construction cost estimates are not understated within the analysis.

In effect, this review has identified three significant areas where the Study has likely erred in reporting its conclusions or at the very least has not substantiated its assumptions. The three areas include:

- 1. Assumptions for projected **air travel reductions** -with an approximated total of \$41 million in transportation net benefits (present value) favouring a north/south AWR route over an east/west AWR route in both a *main stem* analysis as well as an *all-community* analysis;
- 2. Estimates for transportation net benefits in the cases of both **Oxford House** and **Gods River** -with an approximated total of \$5.14 million in transportation net benefits (present value) favouring a north/south AWR route over an east/west AWR route in a *main stem* analysis and an approximated \$6.56 million in transportation net benefits in an *all-community* analysis;
- 3. Higher than expected estimates used for **population growth rates** for St. Theresa Point, Wasagamack, and Garden Hill and its impacts on projected **air freight reductions** —with an approximated total of \$7.63 million in transportation net benefits (present value) overstated within the overall justification for <u>both</u> AWR route scenarios in both a *main stem* and *all-community* analysis.

Notwithstanding these three critical issues, this review has identified additional areas within the Study that will have clear impacts on its reported overall justification levels for both all-weather road scenarios. These issues include:

- The Study did not examine Thompson within its transportation analysis —with the result being an inherent bias for a north/south AWR route over an east/west AWR route;
- The Study overstates the level and degree of community support for an allweather road with respect to the majority of affected communities;
- The Study does not consider the issue of all-weather road construction time within its 20-year forecast period –with the result being an overstatement of economic justification for <u>both</u> AWR route scenarios.

# PART A: INTRODUCTION AND BACKGROUND

This report has been prepared by Paskanake Project Management for Whelan Enns Associates Inc. It is a review of an August 2000 report prepared by Dillon Consulting Limited and H.N. Westdal & Associates for Manitoba Department of Highways and Government Services (now called Manitoba Department of Transportation and Government Services) entitled <u>East Side of Lake Winnipeg All Weather Road</u> Justification and Scoping Study.

The issue of an all-weather road (AWR) on the east-side of Lake Winnipeg continues to be a contentious issue between many competing and common interests in Manitoba.

In August of 1999, the Province of Manitoba commissioned a study that examined two potential all-weather road routes on the east-side of Lake Winnipeg in Manitoba. The two potential AWR routes studied included:

- North/south AWR from Manigotogan to Oxford House;
- East/west AWR from Norway House to Oxford House.

The study was intended to provide a preliminary benefit/cost assessment on each of these two potential AWR routes and to determine which, if any, was more economically justified. In August 2000, Dillon Consulting Limited and H.N. Westdal & Associates completed their assessment with a 110-page report in addition to a separate and accompanying 49-page executive summary.

The August 2000 report concluded that a north/south *main stem* all-weather road from Manigotogan to Oxford House (connecting a total of seven communities) had the greatest economic justification. The Province of Manitoba has recently indicated an interest in studying a specific all-weather road corridor, based on the assumptions, analysis and results of the August 2000 report.

In January 2001, Whelan Enns Associates Inc. contracted Paskanake Project Management to provide a preliminary review of the main conclusions of August 2000 report. The purpose is to provide the many common and competing interests with an independent analysis of the accuracy of the August 2000 report.

The review should not be viewed as a complete analysis of the August 2000 report but only as a preliminary review of some of its main conclusions. Nevertheless, this review offers insight and discussion on some of the critical issues affecting the overall reported justification for an all-weather road within the east-side region of Manitoba.

An important point should be noted. One of the fundamental limitations of benefit/cost analyses as a pre-project evaluation and assessment tool is in its general inability to represent "values" not normally or directly associated with hard numbers. The problem is exacerbated in dealing with the impacts on traditional economies and social/cultural issues affecting Aboriginal peoples. Without adequate attention paid to Aboriginal-focused values, a benefit/cost analysis is essentially ethnocentric-based (i.e. biased since only one set of values is being considered).

## PART B: OVERVIEW OF ANALYSIS

## **General Information**

Part B identifies and analyzes four key areas that have a significant impact on the Study's overall justification levels and main conclusions. The four areas specifically include:

- 1. The manner in which an east/west AWR is presented within the Study;
- 2. The Study's assumptions concerning air travel reduction;
- 3. The Study's estimates concerning Oxford House and Gods River; and,
- 4. The Study's estimates concerning annual population growth rates for St. Theresa Point, Wasagamack, Garden Hill, and Red Sucker Lake.

The following notes are provided only for reference purposes.

- A north/south *main stem* AWR, via Manigotogan, would connect the First Nation communities of Bloodvein, Berens River, Wasagamack, St. Theresa Point, Garden Hill, Gods Lake, and Oxford House. It does <u>not</u> include the communities of Poplar River, Pauingassi, Little Grand Rapids, Gods River, and Red Sucker Lake.
- An east/west *main stem* AWR, via Norway House, would connect the First Nation communities of Wasagamack, St. Theresa Point, Garden Hill, Gods Lake, and Oxford House. In addition, the Study also includes an AWR from Manigotogan to Bloodvein and Berens River. It does <u>not</u> include Poplar River, Pauingassi, Little Grand Rapids, Gods River, and Red Sucker Lake.
- Transportation net benefits/costs are <u>direct</u> net benefits/costs associated with an all-weather road.
- Other benefits refer to transportation-based benefits arising from <u>potential</u> development activities that include Pine Falls Paper Company (PFPC) expansion, Manitoba Hydro By-Pole III development, and commercial fishing expansion.
- **Overall** benefits refer to both direct net transportation benefits <u>and</u> transportation-based benefits arising from potential development activities.
- All benefits/costs are presented as 20-year **present values** in millions of dollars.

In all cases, this review does not endorse one AWR route over another. Furthermore, while it specifically examines the two AWR routes (as presented within the Study), the review does not aim to prejudice other potential routes.

# 1. The Study does not provide a clear picture of an east/west AWR.

The Study concludes that there is greatest economic justification for an AWR along a north/south *main stem* route from Manigotogan that connects the First Nation communities of Bloodvein, Berens River, St. Theresa Point, Wasagamack, Garden Hill, Gods Lake, and ending at Oxford House.<sup>1</sup>

In contrast, an east/west *main stem* AWR has a reported \$24.3 million net **cost** (direct transportation benefits/costs alone) and a net overall benefit of \$7.2 million.

An important question to ask is why the Study combines a north/south AWR route to Bloodvein/Berens River within the overall justification for an east/west AWR to the four Island Lake Tribal Council (ILTC) and the three Keewatin Tribal Council (KTC) communities?<sup>2</sup>

There are significant implications. For instance, subtracting the southern extension to Bloodvein/Berens River from the east/west AWR analysis generates a new picture.<sup>3</sup> Utilizing the Study's own assumptions, an east/west AWR to Oxford House would generate a \$0.1 million net **benefit** (direct transportation benefits/costs alone) and a \$4.6 million overall net benefit.<sup>4</sup> In essence, transportation costs alone do <u>not</u> justify this southern extension under a western AWR –it is only justified if PFPC and Manitoba Hydro engage in developmental activities.<sup>5</sup>

Therefore, based on transportation costs/benefits alone (without PFPC and Manitoba Hydro Bypole III), <u>both</u> AWR *main stem* scenarios can provide net transportation benefits <u>within the Study's existing framework of assumptions/numbers</u>. <sup>6</sup>

<sup>&</sup>lt;sup>1</sup> It reports that the 20 year present value of such an AWR has a \$12.8 million net **benefit** (direct transportation benefits/costs alone) and a net overall benefit of \$65.9 million.

<sup>&</sup>lt;sup>2</sup> In both AWR scenarios, the bulk of direct transportation net benefits (between 87.3% to 91%) will accrue from the seven northern communities (based on relatively higher freight demands and air travel reduction).

<sup>&</sup>lt;sup>3</sup> According to the Study, a separate north/south AWR connection to Bloodvein/Berens River has a transportation net **cost** of \$24.38 million. It is feasible only if <u>other</u> development activities are factored in. <sup>4</sup> This is directly a result of the projected \$24.4 million net cost (direct transportation benefits/costs alone) of building an AWR from Manigotogan to Berens River. The net cost is further increased if the specific benefits attributed to the existing PFPC pulpwood transport is subtracted from the analysis (representing approximately \$11 million in total increased costs for an overall net transportation cost of \$35.4 million).

<sup>&</sup>lt;sup>5</sup> \$26.9 million offsets the \$24.4 million net cost (overall net benefit of \$2.5 million for the extension).

<sup>&</sup>lt;sup>6</sup> \$12.8 million for a north/south AWR to Oxford House and \$0.1 million for an east/west AWR to Oxford House.

# 2. The Study provides questionable assumptions concerning air travel reductions.

An important issue to consider in assessing the benefits/costs of an AWR is the Study's assumptions concerning air travel reductions (ATR).<sup>7</sup> The Study assumes that a north/south AWR will cause a 60% ATR and an east/west AWR will cause a 40% ATR. In either case, despite their very high relative impact on the overall justification, these assumptions are not supported with sufficient evidence.<sup>8</sup>

An important issue to determine is whether a four-hour difference in travel time to Winnipeg will result in a 20% difference in the assumed tradeoff. See the below chart for community-specific travel time differences for both AWR routes to Winnipeg.

**Estimated Travel Time to Winnipeg** (based on estimates provided by the Study)

======================================						
Community	East/West (hours)	North/South (hours)	<b>Difference</b> (hours)			
STP/WAS	10.5	6.4	4.1			
Garden Hill	11.3	7.4	3.9			
Gods Lake	11.6	7.7	3.9			
Gods River	12.3	8.4	3.9			
Red Sucker Lake	11.7	7.8	3.9			
Oxford House	12.5	8.6	3.9			

Since a six-hour drive time is long already, does a four-hour difference determine whether the individual will choose to fly or drive? More importantly, will it result in a 20% difference in air travel reduction between the two access routes?

Furthermore, the Study does not factor in Thompson as a preferred destination even though, for the three KTC communities, Thompson may represent a more preferred travel destination than Winnipeg.<sup>10</sup> For instance, if a southern AWR were in place, would an individual in Oxford House drive to Thompson via Winnipeg (approximately 16

<sup>&</sup>lt;sup>7</sup> Reduction in air travel and the trade-off towards automobile travel (cost-avoidance factor).

<sup>&</sup>lt;sup>8</sup> While providing a detailed and comprehensive analysis in the area of freight cost comparisons for each access route, the Study does not provide either a detailed and/or comprehensive analysis to support air traffic reduction assumptions and projections. Yet, in the overall scope of the Study, it is the projected reductions in air traffic which has the greater determining impact on the overall justification to develop a north/south AWR (relatively speaking, freight cost issues are much lesser in comparison).

<sup>&</sup>lt;sup>9</sup> In other words, will individuals choose to fly 20% more when faced with an east/west AWR then they would for a north/south AWR? Since only one AWR access route would be built, individuals would make their decisions separately in each case. For instance, will the individual in St. Theresa Point fly to Winnipeg rather than incur the 10.5-hour estimated drive time for an east/west AWR? Will the same individual in St. Theresa Point fly to Winnipeg rather than incur the 6.4 estimated drive time for a north/south AWR?

<sup>&</sup>lt;sup>10</sup> For the three KTC communities, Thompson is home to many regional offices, business interests, and personal connections. This includes MKO, KTC, KCC, etc. Many regional federal/provincial government services/offices are also located in Thompson.

hours)?<sup>11</sup> See the following chart for community-specific travel time differences for both AWR routes to Thompson.

**Estimated Travel Time to Thompson** (Based on estimates provided by this review)

Community	East/West (hours)	North/South (hours)	Difference (hours)
ST. Theresa Point	5.5	14	8.5
Garden Hill	6.5	15	8.5
Gods Lake	6.5	15	8.5
Gods River	7.5	16	8.5
Red Sucker Lake	6.5	15	8.5
Oxford House	7.5	16	8.5

The Study's estimates have a significant impact on the overall justification for a north/south AWR over an east/west AWR. According to the results of the Study, there is an approximate \$41 million difference in benefits that rest on these assumptions. 12

The Study assumes that of the 60% reduction in air travel indicated for a north/south AWR, approximately 1/6 will be derived via the "Medical Services/Evacuation" segment. While it is difficult to imagine either AWR transporting a significant amount of patients to Winnipeg, it is reasonable to expect greater utilization of the Norway House hospital under an east/west AWR scenario (especially with respect to Island Lake residents that require moderate health-care services). Since the Study does not make reference to the Norway House hospital, it understates the potential air travel reductions for an east/west AWR.

In similar fashion, given KTC communities close connections with political offices (i.e. KTC and MKO) and federal/provincial regional government offices in Thompson, air travel reduction projections that favour a north/south AWR are likely to be overstated while at the same time understating projections for an east/west AWR. <sup>15</sup> Similar questions can be equally applied to other segments. <sup>16</sup> Overall, the Study's assumptions concerning air traffic reduction projections are at the very least questionable, likely distorting the overall economic justification of either AWR access route.

<sup>11</sup> Would the same individual drive or fly to Thompson via an east/west AWR (approximately 8 hours)?

<sup>&</sup>lt;sup>12</sup> See Figures 8.4 and 8.5 within the Study. Based on an approximated \$205 million air travel cost for winter road status quo scenario within a *main stem* AWR analysis (extracted from bar graphs).

<sup>&</sup>lt;sup>13</sup> In comparison, it assumes that of the 40% reduction in air travel for an east/west AWR, approximately 1/8 will be derived for this purpose. See pages 37 and 38 within the Study.

<sup>&</sup>lt;sup>14</sup> In many cases, due to a lack of physicians on site, a chronic shortage of nurses, and poor local medical facilities, it is reasonable to expect that many patients will continue to be flown to Winnipeg for treatment. <sup>15</sup> While ILTC is Winnipeg-based, ILTC forms part of the MKO Thompson-based political body.

<sup>&</sup>lt;sup>16</sup> It is unlikely that significant air traffic reductions for lodges and outcamps will result since many that currently fly are mainly American-based anglers/hunters. It is reasonable to suggest that these individuals prefer quick entrance/exits to and from their destinations. In addition, it is unlikely that representatives from senior governments (i.e. federal/provincial) will incur the extended driving time in either AWR scenario, choosing instead to fly.

# 3. The Study provides questionable estimates for transportation net benefits in the cases of Oxford House and Gods River.

In comparing the Study's analysis and conclusions with respect to the north/south and east/west AWR routes, consideration must be paid to the transportation net benefits in the cases of Oxford House and Gods River. The Study concludes that under a north/south AWR, Oxford House would realize \$45.63 million in transportation net benefits compared to \$26.8 million for an east/west AWR (41.3% difference). It also concludes that under a north/south AWR, Gods River would realize \$19.98 million in transportation net benefits compared to \$12.57 million for an east/west AWR (37.1% difference). The below chart outlines the reported differences in the Study.<sup>17</sup>

**Transportation Net Benefits by Community** (Extracted from Study)

Community	North/South AWR	East/West AWR	% Difference
Oxford House	45.63	26.80	41.3%
Gods Lake	37.43	27.60	26.3%
Garden Hill	85.71	59.07	31%
Red Sucker Lake	25.40	18.51	27.1%
Gods River	19.98	12.57	37.1%
St. Theresa Point	62.06	44.22	28.7%

An important issue is to question why the reported differences in transportation net benefits for Oxford House and Gods River are so much greater compared to the other four communities. This is important since Oxford House and Gods River are likely to benefit relatively higher with a shorter east/west AWR access route to Thompson.

The implications are significant. For instance, if a 30% difference in transportation net benefits between both AWR routes is more accurate, there will be a \$5.14 million overstatement for a north/south AWR versus an east/west AWR within a *main stem* AWR analysis. In terms of an *all-community* AWR analysis, this overstatement increases to \$6.56 million. For the purpose of this review, it is assumed that transportation net benefits for a north/south AWR are overstated with no change in transportation net benefits for an east/west AWR.

Unfortunately, the Study does not provide sufficient detail on how it justifies higher differences in Oxford House and/or Gods River. Therefore, based on the scope of this analysis, there is concern that the Study further overstates the justification for a north/south AWR over an east/west AWR.

<sup>&</sup>lt;sup>17</sup> It is important to keep in mind that these are the Study's numbers based on their assumptions in all cases. It should be noted that the Study's assumptions concerning ATR projections represent a significant determining factor in the reported differences for both routes (i.e. comprising 20% for each difference). See pages 78 and 79 in the Study.

# 4. The Study overestimates transportation net benefits associated with air freight cost reductions due to excessively high population growth rate estimates.

The Study overestimates population statistics and therefore overstates the transportation net benefits in the analysis of both AWR scenarios. Population statistics are a key determining base-line variable within the overall analysis with specific reference to air freight cost diversion benefits and air travel cost diversion benefits.

Specifically, the Study uses a 4.0% annual population growth rate projection for both St. Theresa Point and Wasagamack and a 3.5% annual rate for both Garden Hill and Red Sucker Lake. In comparison, the Study uses a 2.5% annual rate for the three northern KTC communities. According to the Study:

The growth rate identified for St. Theresa Point/Wasagamack is perhaps 0.5 percent higher than what would be strictly justified by historical population data; however, the strategic location of these two communities within the freight haul system and the anticipated new airport justify an assumption of significant future population in-flow."

However, according to Indian and Northern Affairs Canada (INAC), population growth rate estimates for planning purposes are set at 2.5% for each community. Furthermore, it may be the case that an all weather road could result in increased out migration since this would make it easier to live off reserve and still maintain community contact. <sup>19</sup>

As a determining base-line variable, there are significant implications for this discrepancy. Projections used to determine AWR-induced air freight cost reductions will be proportionately higher as the population growth rate estimate is increased. In effect, the higher the population growth rate, the more transportation net benefits will be accrued as a result of the benefits of reduced air freight costs projected over a 20 year period under a status quo model (i.e. continuing winter road system as the primary travel mode).

Using a 2.5% annual population growth rate for all communities, there is an approximate \$7.63 million <u>overstatement</u> in transportation net benefits for <u>both</u> AWR scenarios. This is based on adjusted population levels for each year, estimated per capita air freight demand, as well as discounting annual totals at an 8% rate.<sup>20</sup>

A similar analysis could also be undertaken for population impacts on the Study's estimates concerning air travel reduction benefits/costs. An extended analysis in this area would have the effect of reducing transportation net benefits for <u>both</u> AWR routes even further.

<sup>&</sup>lt;sup>18</sup> While the Study identifies a 4.8% annual population growth rate for both St. Theresa Point and Wasagamack it seems likely that a 4.0% was actually used in the analysis. This review makes an assumption that the 4.8% number is in fact an error intending to read 4.0%.

<sup>&</sup>lt;sup>19</sup> By using historical population growth data over the past 20 years, the Study includes changes associated with Bill C-31 –impacts that are not likely to happen in the next 20 years.

<sup>&</sup>lt;sup>20</sup> Based on 450 kilograms/capita for St. Theresa Point and Wasagamack; 1000 kilograms/capita for Garden Hill; 1200 kilograms/capita for Red Sucker Lake; \$1.30/kilogram air freight cost estimate. Based on approximated \$30 M air freight cost for St. Theresa Point/Wasagamack and \$51.5 M for Garden Hill with respect to winter road status quo scenario (extracted from bar graphs in Study –Figures A3, A4).

# PART C: OTHER ISSUES

• The Study does not provide sufficient justification for air travel reduction (ATR) assumptions.

The Study does not provide reasonable evidence to support its assumptions concerning air travel reductions. While plenty of research was used to support freight issues, freight cost impacts alone are minimal in comparison to the impacts associated with the assumptions used for air travel reduction. Vitally missing is a formal analysis on air traffic reduction (ATR) projections considering a north/south AWR and an east/west AWR separately.

The Study does not include Thompson within its transportation analysis.

A critical issue missing from the transportation analysis is the significance of Thompson. For the seven northern communities, especially the three KTC communities, Thompson represents a significant destination (in terms of individual demand and associated costs). Without its inclusion within the justification analysis, the Study inherently favours a north/south AWR over an east/west AWR.

• The Study does not consider alternative routes such as an eastern-oriented AWR route involving Ontario and/or potential hybrid models.

An important issue missing from the Study and its terms of reference is an analysis on alternative AWR routes and scenarios. The Study does not consider an AWR scenario that could connect the seven northern First Nation communities from the east (Ontario via Sandy Lake and Red Lake). In addition, the Study does not examine potential hybrid models that combine regional AWR connections with connecting winter road access roads

- The Study does not consider the overall impact on the airline industry with specific reference to community-owned airlines and likely local employment losses, etc.
- The Study does not sufficiently consider issues relating to socio-cultural values and the associated costs/benefits expected from an AWR.

According to the Study, each of the potentially affected communities has indicated a concern that an AWR will lead to social/cultural disruptions and related losses/costs. Important issues include increased access to alcohol and drugs, loss of language and cultural identity, and associated increases in family and community problems (domestic violence, chemical addictions, crime, etc.). While difficult to predict, there is no overall analysis provided on these important issues within the Study.

Once an AWR is built, the likely expansion of forestry-related resource development activities within the region under a north/south AWR represents one of the greatest concerns expressed by First Nations. The concern is that such activity will negatively

conflict with First Nation traditional economic pursuits (fishing, hunting, trapping, and gathering) and other future economic development interests. In this light, the Study does not address potential resource conflicts and the resulting economic costs and tradeoffs concerning alternative and, sometimes competing, land use activities.

• The Study does not include or make mention to the time factor in AWR construction.

One of the main limitations of the Study is that it assumes that an AWR would be completed at the beginning of the 20-year forecast period suggesting that assumed and projected benefits would accrue in full every year during this 20-year period.<sup>21</sup> There are implications for such an assumption.<sup>22</sup> As a result, the Study may significantly overstate the 20-year present value in both AWR routes scenarios.<sup>23</sup>

• The Study does not sufficiently assess and report on expected winners/losers.

The Study does not adequately determine the relative benefits/costs for each stakeholder, community, and other interests. It offers only aggregate totals. To what degree will individual communities benefit? Who are the likely winners and losers?

- The Study does not provide sufficient analysis on the expected net cost to the service sector in each community neither does it provide a sufficient analysis on the overall impact of the tourism industry.<sup>24</sup>
- The Study provides only preliminary cost estimates for AWR construction. Based on follow-up discussion with Department of Highways staff who provided information to the consultants that prepared the Study, costs may increase or decrease by 25% from the estimate used in the analysis. A 25% increase may not justify an AWR in either case.<sup>25</sup>

For instance, an AWR that is built over a five-year period would require the majority of affected communities to incur winter road-related costs during this construction stage (with winter road-related costs decreasing respectively at each stage of the development process as each community becomes connected). This is especially significant since the bulk of the transportation net benefits will accrue from the seven northern communities. In effect, the value of benefits after a five-year period will be considerably lower due to the compounding effects of an annual discount rate of 8%.

<sup>&</sup>lt;sup>21</sup> The Study does not state explicitly its assumptions on this important issue.

<sup>&</sup>lt;sup>23</sup> For instance, assuming a five-year construction period, the present value in year 20 is essentially an estimate for year 25. Using an eight percent annual discount rate, the present value in year 25 is considerably lower than a comparable present value for year 20.

<sup>&</sup>lt;sup>24</sup> The Study concludes that there will be net benefits for the tourism industry under an AWR despite a contrasting assessment provided by Manitoba Tourism. The Study does not provide sufficient evidence to base its conclusion other than recommending the design of a tourism development plan in conjunction with the AWR planning process.

<sup>&</sup>lt;sup>25</sup> Not addressed is the issue of contingencies for added kilometers due to environmental and social mitigation issues and the associated increase in costs. The Study based its construction cost estimates at \$400,000 to \$500,000 per kilometer.

# Examining the Issue of Community Support for an AWR

The Study does not provide a sufficient assessment of community support for an AWR. The issue of an AWR on the east-side of Lake Winnipeg continues to be a contentious issue between and within First Nation and other Aboriginal communities.

Based on limited community meetings, the Study concludes that there is "general support" for an AWR. However, in reviewing the specific community meeting summary notes for each affected community, it is clear that all communities expressed support for an AWR **providing** that they had adequate control over all development activities likely to take place once a road was built. In essence, most communities expressed this type of "qualified support" for an AWR. As a result, the Study greatly overstates the extent of community support inasmuch as it separates the issue of an AWR from the issue of potential additional development activities.

The implications of this form of "qualified support" are significant. It demands considerable accommodation by both the Government of Manitoba and the Government of Canada to facilitate adequate and effective First Nations participation in the decision-making forums affecting the future licensing of resource development activities and landuse planning and road planning processes within the affected regions. In essence, it demands a high-level and formal joint-management relationship between the provincial, government, federal government, and First Nation governments over large areas of non-reserve lands impacting and affecting traditional territories. Ultimately, it may even require a formal revisiting of the 1930 Natural Resource Transfer Agreement (NRTA).

Without adequate First Nation control over all likely development activities within the affected regions, it is conceivable that the majority (if not all) of First Nation and other Aboriginal communities will oppose the development of an AWR, irrespective of any route proposed.

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<sup>&</sup>lt;sup>26</sup> It specifically concludes that five of the twelve affected communities indicate "strong support", two indicate "qualified support", two indicate "significant reservations", and three were "unknown or uncertain".

## **CONCLUSION**

The following are some of the main conclusions of this review.

- The Study provides a bias for a north/south AWR over an east/west AWR. For the benefit of the seven northern communities, it would be advantageous to clearly indicate the overall justification of an east/west AWR without a Bloodvein/Berens River southern extension. Including Bloodvein/Berens River in the east/west AWR analysis distorts the overall justification for an east/west AWR. In many respects, the two AWR route options may be better assessed as if they were two separate projects each assessed separately based on their own merits.
- The Study uses very questionable assumptions concerning air travel reduction. Critically absent are formal community specific surveys that examine individual decision-making by segment/sector (i.e. whether individuals will drive or fly). The same could be said for the Study's assumptions concerning population growth rates estimates. Both areas significantly call into question their overall justification levels and main conclusions.
- An east/west AWR is likely to increase northern economic development capacity in a manner far exceeding a north/south AWR. This issue alone may make an east/west AWR route favourable.
- In total, the five northern First Nation communities represent approximately 91% of all transportation net benefits with respect to the north/south AWR *main stem* analysis. In the larger north/south AWR *all-community* analysis, the seven northern First Nations represent approximately 83.4% of all transportation net benefits. Without the northern connections, a north/south AWR cannot be justified on direct transportation benefits/costs alone.
- Based on general conversations and available information, each of the seven northern communities has indicated a clear preference to have an east/west AWR over a north/south AWR.
- Under an east/west AWR, each of the seven northern communities will have a better choice to either travel to Winnipeg or Thompson relative to a north/south AWR.
- The Study overstates the degree of community support with respect to affected communities for an AWR. It does not adequately factor in the implications for "qualified support". The issues identified from the community consultation process (should they be adequately addressed) would result in an unprecedented undertaking (i.e. joint-management over decisions affecting future resource development activities in large areas of non-reserve land in and around First Nation traditional territories).
- The Study's extensive analysis and projections concerning freight costs depends on the construction of a high quality gravel AWR. On this issue, the Study does not

- anywhere specify the level, class, and/or quality of AWR assumed within the analysis. Therefore, it is not clear whether the estimated AWR construction cost of \$0.4 to \$0.5 million per kilometer will be sufficient to construct the required road quality to generate the Study's projected freight cost savings.
- The Study concludes that the forestry sector will stand to gain approximately \$22 million in 20-year present value in transportation net benefits in a north/south AWR to Berens River and approximately \$40-\$45 million for a north/south AWR to Oxford House. In terms of an east/west AWR, the forestry sector appears to have little to gain. In each of the AWR route scenarios examined by the Study, it is these additional forestry benefits that seem to add the necessary justification for the construction of an AWR.

# APPENDIX A

# AWR ANALYSIS (re-stated)

The following six charts provide a re-statement of the justification levels for each AWR scenario. In each case, the re-statement includes the following adjustments:

- Oxford House adjustment (\$5.14 million) affecting each *main stem* AWR scenario.
- Oxford House and Gods River adjustment (\$6.56 million) affecting each *all-community* AWR scenario.
- Population adjustments and their direct impact on freight diversion benefits affecting the communities of St. Theresa Point, Wasagamack, Garden Hill, and Red Sucker Lake (approximated \$7.63 million total)

Each chart illustrates the impact of ATR assumptions on overall justification levels. Each expresses an ATR range from a high of 60% to a low of 30%. The purpose for these charts is to illustrate the uncertainty of overall justification levels without a certain ATR percentage. All estimates are 20-year present value totals expressed in millions (\$).

B/C Benefit/Cost

ATR Air Travel Reduction
AWR All-weather Road
East/west AWR via Norway House
North/south AWR via Manigotogan

Other Additional benefits related to PFPC Phase 1 transport, Manitoba Hydro By-Pole

III, and commercial fishing

## East/West AWR Scenarios

East/west AWR Main Stem Analysis (without Bloodvein/Berens River)

ATR %	Net AWR Cost	Transportation Net Benefits	Plus/Minus	Other	Overall B/C	B/C Ratio
60%	157.59	191.06	33.47	4.64	38.11	1.242
55%	157.59	180.81	23.22	4.64	27.86	1.177
50%	157.59	170.56	12.97	4.64	17.61	1.112
45%	157.59	160.31	2.72	4.64	7.36	1.047
40%	157.59	150.06	-7.53	4.64	-2.89	0.982
35%	157.59	139.81	-17.78	4.64	-13.14	0.923
30%	157.59	129.56	-28.03	4.64	-23.39	0.871

Note: ATR based on approximated \$205 M air travel cost for winter road (extracted from bar graph in Study).

East/west AWR Main Stem Analysis (with Bloodvein/Berens River)

ATR %	Net AWR Cost	Transportation Net Benefits	Plus/Minus	Other	Overall B/C	B/C Ratio
60%	204.91	213.99	9.08	31.51	40.59	1.198
55%	204.91	203.74	-1.17	31.51	30.34	1.148
50%	204.91	193.49	-11.42	31.51	20.09	1.098
45%	204.91	183.24	-21.67	31.51	9.84	1.048
40%	204.91	172.99	-31.92	31.51	-0.41	0.998
35%	204.91	162.74	-42.17	31.51	-10.66	0.951
30%	204.91	152.49	-52.42	31.51	-20.91	0.907

Note: ATR based on approximated \$205 M air travel cost for winter road (extracted from bar graph in Study).

# East/West AWR Scenarios (continued)

East/west AWR All-Community Analysis (only seven northern communities included)

ATR %	Net AWR Cost	Transportation Net Benefits	Plus/Minus	Other	Overall B/C	B/C Ratio
60%	207.24	227.54	20.3	4.64	24.94	1.120
55%	207.24	215.94	8.7	4.64	13.34	1.064
50%	207.24	204.34	-2.9	4.64	1.74	1.008
45%	207.24	192.74	-14.5	4.64	-9.86	0.955
40%	207.24	181.14	-26.1	4.64	-21.46	0.906
35%	207.24	169.54	-37.70	4.64	-33.06	0.862
30%	207.24	157.94	-49.30	4.64	-44.66	0.823

Note: ATR based on approximated \$232 M air travel cost for winter road (extracted from bar graph in Study).

East/west AWR All-Community Analysis (all communities included)

ATR %	Net AWR Cost	Transportation Net Benefits	Plus/Minus	Other	Overall B/C	B/C Ratio
60%	338.2	288.38	-49.82	32.71	-17.11	0.952
55%	338.2	275.28	-62.92	32.71	-30.21	0.918
50%	338.2	262.18	-76.02	32.71	-43.31	0.886
45%	338.2	249.08	-89.12	32.71	-56.41	0.857
40%	338.2	235.98	-102.22	32.71	-69.51	0.830
35%	338.2	222.88	-115.32	32.71	-82.61	0.804
30%	338.2	209.78	-128.42	32.71	-95.71	0.779

Note: ATR based on approximated \$262 M air travel cost for winter road (extracted from bar graph in Study).

# North/South AWR Scenarios

North/south AWR Main Stem Analysis

ATR %	Net AWR Cost	Transportation Net Benefits	Plus/Minus	Other	Overall B/C	B/C Ratio
60%	241	240.99	-0.01	53.11	53.1	1.220
55%	241	230.74	-10.26	53.11	42.85	1.178
50%	241	220.49	-20.51	53.11	32.60	1.135
45%	241	210.24	-30.76	53.11	22.35	1.093
40%	241	199.99	-41.01	53.11	12.10	1.050
35%	241	189.74	-51.26	53.11	1.85	1.008
30%	241	179.49	-61.51	53.11	-8.40	0.966

Note: ATR based on approximated \$205 M air travel cost for winter road (extracted from bar graph in Study).

North/south AWR All-Community Analysis

ATR %	Net AWR Cost	Transportation Net Benefits	Plus/Minus	Other	Overall B/C	B/C Ratio
60%	363.99	315.58	-48.41	54.32	5.91	1.017
55%	363.99	302.48	-61.51	54.32	-7.19	0.981
50%	363.99	289.38	-74.61	54.32	-20.29	0.947
45%	363.99	276.28	-87.71	54.32	-33.39	0.916
40%	363.99	263.18	-100.81	54.32	-46.49	0.887
35%	363.99	250.08	-113.91	54.32	-59.59	0.859
30%	363.99	236.98	-127.01	54.32	-72.69	0.834

Note: ATR based on approximated \$262 M air travel cost for winter road (extracted from bar graph in Study).

# TRANSPORTATION PLANNING STUDY

EAST SIDE OF LAKE WINNIPEG Fin Flon Missing from the map are the following First Nation communities; Garden Hill, St. Theresa Point, Wasagamack, and Red Sucker Lake, which are part of the Island Lake Tribal Council. God's River from the Keewatin Tribal Council has also been omitted. Hollow Water and Little Black River First Nations, south of Bloodvein, are also impacted by the study and missing from the map.. STUDY AREA Pavingassi Little Grand Rapids SCALE IN KILOMETRES Dauphin MAY 1999 Portage Figure 1.1