

**SUBJECT AREA:** Clearing, Property

**REFERENCE:** MCWS MMTP IR No 1

**QUESTION:**

Please provide comments on the concerns from Mr. Mike Lambert regarding the potential impacts of the proposed tree clearing on his property.

**RESPONSE:**

1 Based on the information provided, the property in question is SW 28-009-07E1 located in the  
2 RM of Tache as outlined in the following map.

3 This alignment through the RM of Tache parallels an existing 230 kV transmission line (R49R).  
4 Preference regarding paralleling existing infrastructure was heard frequently throughout the  
5 engagement process and addresses various concerns in the area, such as proximity to  
6 residences, quarry concerns and multiple right-of-ways on the landscape.

7 The new ROW will be parallel to R49R, creating the potential for a reduction in the width of  
8 new right-of-way width (currently 80m) which may lower the amount of new clearing required.  
9 As a result, Manitoba Hydro may be able to retain more vegetation between the existing homes  
10 and potentially reduce the amount of treed vegetation that would be cleared. Maintaining all  
11 applicable safety and reliability requirements are the driving considerations in determining  
12 right-of-way widths in the area. This is further explained in Chapter 3, Section 3.10.3.2, Table 3-  
13 17.

14 Mr. Lambert owns the timber located on his property and Manitoba Hydro will work with the  
15 landowner to clear and pile the timber off the right of way for his ongoing use.

16 Regarding concerns related to clearing and wildlife/vegetation, Manitoba Hydro has assessed  
17 the potential impacts of the Project on wildlife in Chapter 9 of the EIS. Effects will be mitigated

18 with the development and implementation of construction and operational Environmental  
19 Protection Plans, as outlined in the EIS.

20 Regarding the concern of the fruit bearing shrubs on the property, Manitoba Hydro does  
21 require the right-of-way to be completely cleared of vegetation in the centerline trail and tower  
22 locations during construction, however, the remaining area of right-of-way on Mr. Lambert's  
23 property may be selectively cleared of tree species to retain the existing fruit bearing shrubs  
24 where feasible. Through an integrated vegetation management approach during operations of  
25 the line, Manitoba Hydro encourages the re-growth of shrubs, fruit bearing plants, and  
26 herbaceous understory through controlling the growth of tree species.

27 Manitoba Hydro encourages all affected landowners to identify site specific locations and  
28 discuss related concerns with Manitoba Hydro. Manitoba Hydro welcomes the opportunity to  
29 discuss further with Mr Lambert the site-specific locations of the ephemeral ponds and  
30 locations of valued fruit bearing shrubs to be considered in the determination of final tower  
31 placement and incorporation into the ongoing vegetation management planning.





NW-28-9-7-E

NE-28-9-7-E

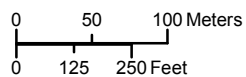
SE-28-9-7-E

SW-28-9-7-E

NW-21-9-7-E



Coordinate System: UTM Zone 14 NAD 83  
 Data Source: MBHydro, ProvMB  
 Date Created: March 02, 2016



- Provincial Road
- Provincial Trunk Highway
- Final Preferred Route
- MMTP Right of Way
- Parcel Boundary

**SW-28-09-07E**

*Draft: For Discussion Purposes Only*



**SUBJECT AREA:** Human Health Risk, Vegetation Management

**REFERENCE:** MCWS MMTP IR No 2 - Item 1

**QUESTION:**

We would like more information on the burning of slash. How is it conducted? Does the burning occur into the evening? How is it monitored (including air emissions blowing into populated areas) and the potential for fires. Will nearby communities be notified?

**RESPONSE:**

1 Much of this information can be found in the EIS in Chapters 18 and 22. Disposal of cleared  
2 vegetation typically involves a variety of options including piling and burning, mulching,  
3 collection and secondary use by local communities (e.g., firewood), or salvage and marketing of  
4 merchantable timber resources, if feasible. The final decision for disposal of vegetation will be  
5 determined based on the method of clearing used and the environmental licence conditions  
6 applied to the Project. From November 16 to March 31, there is no requirement for a burning  
7 permit under the *Wildfires Act* and if burning is required outside of those dates (i.e. between  
8 April 1 and November 15) a burning permit application is made to the local Manitoba  
9 Conservation and Water Stewardship office. A copy of the burning permit must be on hand at  
10 all times while burning. All fires must be extinguished by March 31.

11 The process of burning involves raking timber/slash into piles using a bulldozer a safe distance  
12 from existing timber. The piles are then ignited and gas powered fans are used to spread the  
13 flames evenly. Depending on the needs of the project, burning can occur throughout the day  
14 and evening. Manitoba Hydro will minimize the extent of burning near populated areas. The  
15 burning of slash will be in accordance with the permit and the specific mitigation measures  
16 included in the Construction Environmental Protection Plan (page 5-12 of Chapter 22, Appendix  
17 A). Nearby communities would be made aware of burning activities.

**SUBJECT AREA:** Vegetation Management, First Nation and Metis Engagement

**REFERENCE:** MCWS MMTP IR No 2 - Item 1

**QUESTION:**

Will there be independent quality control inspections to determine if the pesticides and other measures are being applied appropriately and could this be reported on annually as this will be an ongoing issue, particularly on land important to First Nations?

**RESPONSE:**

- 1 Permits for pesticide use are obtained on an annual basis. The process involves public
- 2 notification as part of the formal permit application to Manitoba Conservation Pesticide
- 3 Approvals Branch. All herbicide applications are completed and supervised by licensed
- 4 applicators and in accordance with conditions specified in the Pesticide Use Permit. Manitoba
- 5 Hydro's Chief Forester in accordance with product label instructions establishes herbicide
- 6 application rates. As part of the permit, there are annual reporting requirements that include
- 7 the type, amount and location of pesticide use.
  
- 8 Through the engagement process and Aboriginal Traditional Knowledge (ATK) studies,
- 9 Aboriginal communities expressed concerns about the use of herbicides. Based on feedback
- 10 received Manitoba Hydro has developed the following mitigation:
  
- 11 *"Clearly identified sensitive sites will not be treated with pesticides, such as those used for*
- 12 *gathering berries and harvesting other types of traditional plant and animal country foods, that*
- 13 *have been identified through ATK."*

**SUBJECT AREA:** First Nation and Metis Engagement, Access

**REFERENCE:** MCWS MMTP IR No 2 - Item 1

**QUESTION:**

Is there a First Nation liaison group to discuss the mitigation of ongoing issues that may develop, such as hunters or snowmobilers who may enter the land?

**RESPONSE:**

- 1 Manitoba Hydro is committed to continuing to share information and discuss any ongoing
- 2 concerns with First Nations, the MMF and Aboriginal organizations throughout the regulatory,
- 3 construction and operation and maintenance phase of the Project.

**SUBJECT AREA:** Noise & EMF, Community Health and Well-being

**REFERENCE:** MCWS MMTP IR No 2 - Item 1

**QUESTION:**

Is there a plan to monitor noise levels of the lines/stations once in operation in populated areas to assure recommended levels are not exceeded for residents/occupants in the area?

**RESPONSE:**

1 **Transmission Line**

2 Monitoring of transmission line Audible Noise (AN) levels is not proposed. As noted in the  
3 Electric Field, Magnetic Field, Audible Noise and Radio Noise Calculations Technical Data  
4 Report, the highest median fair-weather edge-of-ROW AN level anywhere along the proposed  
5 route is approximately 23dBA, which would result in an inaudible increase (less than 1 dB)  
6 above a typical ambient noise level of 30-40dBA. The audible noise associated with the  
7 transmission line at the edge of the ROW in fair-weather conditions is comparable to a  
8 bedroom at night (24dBA) and quieter than a library (35dBA). Thus, AN from the MMTP project  
9 is expected to have a negligible effect on ambient noise levels, and total sound levels would  
10 remain well below the Manitoba Provincial Guidelines of 45dBA for nighttime outdoor  
11 conditions in residential and commercial areas, and 55dBA for daytime conditions. During foul  
12 weather, the calculated levels of AN are higher, but the wind and rain that typically occur are  
13 themselves likely to generate ~41-63dBA of AN and would likely mask the noise from the  
14 transmission lines during these conditions (Miller, 1978).

15 **Stations**

16 The Electric Field, Magnetic Field, Audible Noise and Radio Noise Calculations Technical Data  
17 Report noted that AN levels due to equipment added at each station are conservatively  
18 calculated to be as high as 52dBA at the residence nearest to Dorsey Converter Station, 44dBA  
19 at the residence nearest to Riel Converter Station, and 55dBA at the residence nearest to

20 Glenboro South Station. These conservative estimates do not exceed the 55dBA daytime  
21 guideline for maximum desirable 1-hour equivalent noise levels for residential and commercial  
22 areas as specified by the Manitoba Provincial Guidelines, but Glenboro and Dorsey do exceed  
23 the 45dBA nighttime guideline (EMD, 1992).

24 Manitoba Conservation and Water Stewardship do not enforce specific noise limits; they  
25 respond to complaints of nuisance due to noise. If five or more complaints are received, the  
26 proponent may be asked to seek methods to reduce noise. In the event that five or more  
27 complaints are received, Manitoba Hydro will undertake sound monitoring and consider the  
28 implementation of passive mitigation measures such as the construction of sound-attenuating  
29 barriers.



**SUBJECT AREA:** Community Health and Well-being, Access

**REFERENCE:** MCWS MMTP IR No 2 - Item 1

**QUESTION:**

In addition to country food quality, should there also be a discussion of the potential health effects of changes to country food availability related to land changes (e.g. opening up the areas to non-residents by providing a passage/easy access) and the potential impact on health in the HHIRA.

**RESPONSE:**

- 1 Manitoba Hydro assessed the effects of the Project on fish and fish habitat in Chapter 8, wildlife
- 2 and wildlife habitat in Chapter 9, vegetation and wetlands in chapter 10, and traditional land
- 3 and resource use in Chapter 11. These chapters, which address changes to fish, wildlife, and
- 4 vegetation abundance caused by the Project are used to inform the following discussion on
- 5 changes in country foods availability related to land changes, and potential impact on
- 6 community health.
  
- 7 Manitoba Hydro acknowledges concerns expressed through the First Nation and Metis
- 8 Engagement Process in regards to potential reduction in the availability of traditional foods and
- 9 medicines due to the clearing of Crown land for right-of-way development. The need for such
- 10 clearing was considered in route selection, which responded to concerns expressed through the
- 11 First Nation and Metis Engagement Process over harvesting and cultural locations, and made
- 12 use of existing transmission corridors as much as practical. Over 40 percent, or 92 of the 213
- 13 km, of the Final Preferred Route (FPR) is located within an existing transmission corridor, and a
- 14 large portion of the new right-of-way would be located on private lands (70 percent), with
- 15 existing access restrictions. Manitoba Hydro proposes several mitigation measures designed to
- 16 address the reduction in the area available for traditional harvesting due to the Project, and will

- 1 endeavor to work with First Nations and Metis to address concerns related to EMF and
- 2 potential risks to traditional foods harvesting.
  
- 3 Project effects on Aboriginal health related to the availability of traditionally harvested food will
- 4 be not significant because changes to harvested foods availability within the regional
- 5 assessment area will not be outside of the range of normal variability due to availability of
- 6 other similar habitat in the area and mitigation measures applied.

**SUBJECT AREA:** Routing, Accidents, Malfunctions and Unplanned Events

**REFERENCE:** MCWS MMTP IR No 2 - Item 1

**QUESTION:**

In terms of climate change risk, is there a risk that putting the lines together may create the possibility of a problem to both lines at once (e.g. flooding, tornado, ice storm).

**RESPONSE:**

- 1 Yes, there is a risk that multiple line failure could occur in locations where transmission lines are
- 2 in a parallel alignment. These risks are considered in routing (Chapter 5-Transmission Line
- 3 Routing Process) and tower design and are discussed in Chapter 20-Effects of the Environment
- 4 on the Project and Chapter 21 Accidents, Malfunctions and Unplanned Events. Where the new
- 5 transmission line parallels existing transmission lines Manitoba Hydro is confident that it can
- 6 mitigate risks.
  
- 7 Manitoba Hydro's Corporate Emergency Management Program (Chapter 22-Environmental
- 8 Protection, Follow-up and Monitoring) has response procedures to address extreme weather
- 9 and climate conditions.

**SUBJECT AREA:** Noise & EMF, Human Health Risk

**REFERENCE:** MCWS MMTP IR No 2 - Item 1

**QUESTION:**

Recently electromagnetic hypersensitivity has been discussed as a concern

<http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=8041315&Language=E&Mode=1&Parl=41&Ses=2&File=87>

Commentary or a section on this issue may be warranted.

**RESPONSE:**

1 In response to public concern expressed by some constituents about radiofrequency (RF)  
2 electromagnetic fields from wireless devices like Wi-Fi, mobile phones, smart meters, etc., and  
3 the updating of Health Canada's Safety Code 6 that applies to such exposures, a committee of  
4 Parliament prepared recommendations for consideration by the federal government. Health  
5 Canada was unable to establish any linkages between non-specific health complaints attributed  
6 by some to wireless devices and exposure to RF electromagnetic fields. Other national and  
7 international health and scientific agencies concur with this conclusion. See information from  
8 Health Canada ([http://www.hc-sc.gc.ca/ewh-semt/radiation/cons/radiofreq/index-](http://www.hc-sc.gc.ca/ewh-semt/radiation/cons/radiofreq/index-eng.php)  
9 [eng.php](http://www.hc-sc.gc.ca/ewh-semt/radiation/cons/electri-magnet/electromagnet-eng.php);[http://www.hc-sc.gc.ca/ewh-semt/radiation/cons/electri-magnet/electromagnet-](http://www.hc-sc.gc.ca/ewh-semt/radiation/cons/electri-magnet/electromagnet-eng.php)  
10 [eng.php](http://www.hc-sc.gc.ca/ewh-semt/radiation/cons/electri-magnet/electromagnet-eng.php)) and the World Health Organization ([http://www.who.int/peh-](http://www.who.int/peh-emf/publications/facts/fs296/en/)  
11 [emf/publications/facts/fs296/en/](http://www.who.int/peh-emf/publications/facts/fs296/en/)), for example.

12 The dominant frequency of electromagnetic fields associated with power lines, household  
13 wiring, appliances, etc., is centered at 60 cycles per second (60-Hertz [Hz]). Because of vast  
14 differences in frequency between RF and 60-Hz fields, they have quite different physical  
15 properties and interact differently with objects, including organisms. These differences account  
16 for why 60-Hz fields are not within the scope of Safety Code 6. While some persons have  
17 suggested that 60-Hz fields might be a cause of symptoms dubbed electromagnetic



18 hypersensitivity, again the allegations that 60-Hz fields are the cause of or associated with these  
19 symptoms are not supported by the weight of scientific evidence.

20 See WHO, 2007 at [http://www.who.int/peh-emf/publications/elf\\_ehc/en/](http://www.who.int/peh-emf/publications/elf_ehc/en/) and the European  
21 Commission, 2015

22 [http://ec.europa.eu/health/scientific\\_committees/emerging/docs/scenihr\\_o\\_041.pdf](http://ec.europa.eu/health/scientific_committees/emerging/docs/scenihr_o_041.pdf)

**SUBJECT AREA:**      **Employment and Economy, Environmental Protection, Follow-up and Monitoring**

**REFERENCE:**        **MCWS MMTP IR No 2 - Item 1**

**QUESTION:**

Will there be efforts to recruit local workers and will this be tracked?

**RESPONSE:**

- 1    The effects of the Project on employment and economy are described and assessed in Chapter
- 2    14. Manitoba Hydro works through the contracting process to actively promote participation of
- 3    Manitoba businesses for the Project. Recruitment for the project will be tracked.

**SUBJECT AREA:** Project Description, Community Health and Well-being

**REFERENCE:** MCWS MMTP IR No 2 - Item 1

**QUESTION:**

The mobile work camps at Piney and Zhoda are not mentioned in the overall summary on impacts to the community (just Steinbach and Winnipeg). Piney was mentioned to have lower resilience and Zhoda was not mentioned in the community resilience section. More information on these mobile work camps are requested. E.g. how long are they going to be in place and where will they be receiving their services, including health services, bars, etc ( e.g. closest communities).

**RESPONSE:**

1 **Temporary Camps**

2 As noted in Chapter 2 (Project Description), it is anticipated that clearing and construction  
3 workers will be housed in accommodations available in local communities where feasible and  
4 practical. In the southern portion of the Project area, where accommodations are less  
5 prevalent, one or two temporary mobile camps may be established. Mobile construction camps  
6 would include facilities such as sleeper units, a wash car, cooking and eating trailers, offices and  
7 machine/parts shops. Camp size could be in the range of 10 to as many as 100 workers but will  
8 vary according to the activity, contract size and labour force requirements.

9 **Effects on health services**

10 Regional hospitals, such as the Bethesda Regional Health Centre in Steinbach, will provide  
11 urgent care for the Project workforce. It is expected that workers will seek non-urgent care  
12 from medical facilities in their home communities. Given the small size of the workforce (see  
13 Section 19.5.6.3) and available medical services capacity, the Project's effect on health services  
14 in the LAA is expected to be low.

15 **Other services**

16 The Project will rely on municipal utilities for potable water and wastewater treatment, local  
17 facilities for solid waste disposal, as well as local emergency service providers, such as fire and  
18 police services. As noted in 13.7.1 of Chapter 13, due to the relatively small workforce, Project  
19 demands are not anticipated to exceed the available capacity of community infrastructure and  
20 services nor decrease the quality of service available.

21 There are several pubs and restaurants in Steinbach, Piney, and elsewhere in southern  
22 Manitoba. The maximum size of the Project workforce in southern Manitoba will be small,  
23 relative to the local population, and the additional patronage from the Project workforce is  
24 expected to have a negligible incremental effect on such hospitality services, and provide a  
25 local economic benefit



**SUBJECT AREA:** Compensation, Property

**REFERENCE:** MCWS MMTP IR No 2 - Item 1

**QUESTION:**

Do the easements discussed in the mitigation section include financial compensation for use of land?

**RESPONSE:**

1 Yes. Manitoba Hydro offers a comprehensive compensation policy for landowners who house  
2 the transmission line as discussed in Chapters 15, 16, and 19 of the EIS. Manitoba Hydro's  
3 compensation policy for major transmission projects such as MMTP was designed to  
4 compensate on the following basis:

5 For an easement, landowners can expect to be compensated as follows:

- 6 • Land Compensation of 150% of the market value for granting the easement for  
7 the transmission line right-of-way.
- 8 • A one-time lump sum Structure Impact Payment, for each tower located on land  
9 classed as agricultural.
- 10 • Ancillary Damage Compensation where disturbance or injurious infection  
11 damages are justified.

12 Construction Damage Compensation is paid for damages caused by construction activities.

13 Financial compensation to tenant operators is generally restricted to actual construction  
14 damages related to the construction, operation and maintenance activities only.

15 A copy of the compensation brochure that was provided to the public has been submitted as  
16 part of this response as MCWS\_MH-I-139-attachment.

## Frequently asked questions

### How is compensation determined?

For the granting of an easement, landowners are eligible to receive one-time payments for up to four types of compensation:

- Land compensation for the transmission line right-of-way;
- Construction damage compensation for damages caused by construction, operation and maintenance of the transmission line;
- Structure impact compensation for each tower located on agricultural lands;
- Ancillary damage compensation where Manitoba Hydro's use of the right-of-way directly or indirectly impacts the use of the property.

### Are landowners eligible for a buyout?

Easements are preferred to allow landowners the ability to continue farm operations. However, in special circumstances, a buyout can be offered to provide compensation to landowners for all related and reasonable relocation costs where the proximity of the transmission line is within 75 m of the landowner's residence.

### What are the benefits of a one-time compensation payment?/How was this method of payment arrived at?

The benefits to landowners for one-time compensation payments are:

- Allows the landowner the opportunity to leverage the investment;
- Payment is made regardless of weather or production limitations;

- Payment maximizes exceptional crop management practices;
- Calculation maximizes the one-time payment.

A one-time compensation payment was chosen based on feedback obtained from the following:

- Feedback from previous transmission line projects;
- Public engagement activities;
- Comparisons with other public electric utilities.

### As a tenant, what can I expect for compensation from the transmission line?

Tenants may be eligible for construction damage compensation for damages caused by construction of the transmission line.

### When can landowners expect to receive payments?

Land compensation will be paid based on the current land values and escalated to 150 per cent of fair market value. A \$225 advance payment will be made at the time of signing the easement with the balance being paid at the time of easement registration at the appropriate Land Titles office.

Structure impact compensation, for towers located on lands classed as agriculture, will be paid once towers are installed and construction is complete.

Ancillary damage compensation will be paid at the time of easement registration at the appropriate Land Titles office, if such damage has occurred.

Construction damage compensation will be identified, negotiated and paid during and/or after towers are installed and construction is complete, if such damage has occurred.

### Does Manitoba Hydro have an agricultural biosecurity program?

Manitoba Hydro developed a biosecurity policy in consultation with government and industry. The policy outlines the requirements of employees and contractors who carry out work on cultivated agricultural lands.

For more information, please contact:

#### Manitoba Hydro Property Department

P.O. Box 7950, Station Main  
Winnipeg, Manitoba  
R3C 0J1

Phone: (In Winnipeg) 204-360-7888;  
(toll-free) 1-877-343-1631

Email: [mmtp@hydro.mb.ca](mailto:mmtp@hydro.mb.ca)

For information on the Manitoba-Minnesota Transmission Project, please visit [www.hydro.mb.ca/mmtp](http://www.hydro.mb.ca/mmtp)

# Manitoba-Minnesota Transmission Project Landowner Compensation Information



## Manitoba-Minnesota Transmission Project Landowner Compensation

Landowners whose properties have the Manitoba Minnesota Transmission line located on or crossing their properties will be compensated. Four types of compensation are available:

- Land Compensation: to landowners granting an easement for the right-of-way;
- Construction Damage Compensation: to landowners for damages caused by construction activities;
- Structure Impact Compensation: to landowners for each tower located on agricultural lands;
- Ancillary Damage Compensation: to landowners where Manitoba Hydro's use of the right-of-way directly or indirectly impacts the use of the property.

### Land Compensation

In Manitoba, rights-of-way for transmission lines are normally obtained by way of easement. Land compensation is a one-time payment to landowners for granting of an easement for a transmission line right-of-way.

The following factors are used to determine land compensation:

- Total area (acres) of easement required by Manitoba Hydro for the transmission line right-of-way;
- The current market value of the land (per acre);

- The easement compensation factor, which is determined based on the size and type of the transmission line. For the 500-kilovolt (kV) Manitoba-Minnesota Transmission Line, the easement compensation factor is 150 per cent of the current market value that will be certified by the Land Value Appraisal Commission of Manitoba.

For example, if the easement area required for the 500-kV transmission line is 1,609 metres (m) long and 80 m wide, the total area of the easement is approximately 31.81 acres. If the land is assessed at \$2,300 per acre, the following compensation formula will apply:

$$\begin{aligned} & \$2,300 \text{ (current market value per acre)} \\ & \times 150 \text{ per cent (easement compensation factor)} \\ & \times 31.81 \text{ (acres)} = \$109,745. \end{aligned}$$

### Construction Damage Compensation

Construction damage compensation is provided to landowners who experience damage to their property due to the construction, operations and maintenance of the transmission line. A one-time payment for construction damage is negotiated on a case-by-case basis. Manitoba Hydro will:

- Compensate or be responsible for repairing, to the satisfaction of the landowner, any damage to a landowner's property;
- Compensate a landowner for damages such as the reapplication or rejuvenation of compacted top soil where the remedial work requires farm machinery and the expertise of the landowner.

In the instance of damage to cultivated agricultural lands, a landowner would be compensated as follows:

If crops were in place prior to the construction of the transmission line, the crop owner will be compensated for the amount of loss due to damage. This compensation is based on the current value of the harvested crop (Manitoba Agricultural Services Corporation [MASC] insured value in dollars per bushel), multiplied by the acres of damaged area and multiplied by the crop owner's yield of that same crop (based on MASC Area bushels per acre yield).

The following compensation formula will apply:

$$\begin{aligned} & \$7.48 \text{ per bushel for 2013: Red Spring Wheat} \times 4.25 \\ & \text{(acres damaged)} \times 55.7 \text{ (bushels per acre yield)} = \$1,771. \end{aligned}$$

### Structure Impact Compensation

Structure impact compensation is a one-time payment to landowners for each transmission tower placed on land classed as agricultural. Structure impact compensation covers:

- Crop losses on lands permanently removed from production;
- Reduced productivity in an area of overlap around each tower structure;
- Additional time required to manoeuvre farm machinery around each structure;
- Double application of seed, fertilizer and weed control in the area of overlap around each tower structure.

Structure impact compensation takes into consideration:

- the four types of agricultural lands;
- the type of tower structure constructed on the land;
- the location of the tower structure in relation to property lines.

Manitoba Hydro prepares a compensation schedule semi-annually based on current data provided by MASC. For example, for a tower structure with a base size of approximately 10 m x 10 m (in accordance with the current (June 2013) compensation schedule) the compensation rates are:

- Natural hay land/\$6,640 each;
- Seeded hay land/\$12,730 each;
- Cereal crop land (wheat, canola)/\$17,930 each;
- Row crop land (corn and potatoes)/\$25,520 each.

Assuming the land is classed as cereal crop land and one mile of transmission line with four towers is to be located on the property (the average space between towers is 400 m), the compensation would be:

$$\begin{aligned} & \$17,930 \text{ (structure payment)} \\ & \times 4 \text{ (number of structures)} = \$71,720. \end{aligned}$$

### Ancillary Damage Compensation

Ancillary damage compensation is a one-time payment when Manitoba Hydro's use of the right-of-way directly or indirectly impacts the use of the property. Ancillary damage compensation is negotiated. Landowners may be compensated for the following:

- Agricultural impacts such as irrigation and drainage;
- Constraint impacts such as restricted access to adjacent lands;
- Traditional impacts such as highest and best use of land.

**SUBJECT AREA:** Safety, Human Health Risk

**REFERENCE:** MCWS MMTP IR No 2 - Item 1

**QUESTION:**

It should be noted that ticks and mosquitoes may be a risk to workers. Is there a section on worker safety?

**RESPONSE:**

- 1 Chapter 21 (Accidents, Malfunctions and Unplanned Events) discusses worker safety that is
- 2 facilitated through Emergency Response Plans (ERP). The experience, skills and insights gained
- 3 through dealing with past accidents and malfunctions are reflected in the transmission and
- 4 distribution emergency response plan in Manitoba Hydro's Corporate Emergency Management
- 5 Plan (CEMP) (Manitoba Hydro 2014). This plan outlines the Corporation's emergency
- 6 preparedness plan, emergency response plans and hazard risk assessment; the Incidence
- 7 Command System; roles accountabilities and duties; the Emergency Operations Centre; and
- 8 documentation and communication protocols. It is the result of a recent review of past
- 9 practices and procedures, and is subject to continuous review and improvement.
- 10 In addition, each contractor also has their own ERP that addresses the safety of workers and is
- 11 part of Manitoba Hydro's contracting requirements.



**SUBJECT AREA:** Wildlife and Wildlife Habitat, Access

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

Elk, Deer and Moose Mortality: The table states that there is concern that increased access along the new ROW could lead to increased elk mortality if the herd moves its core area to areas east near Piney.

Comment-

We appreciate that MB Hydro selected a route which avoids traversing the known core area of the Vita elk herd. Notwithstanding these efforts, it should be recognized that the full scope of elk movements is currently unknown. The core area in the vicinity of Vita only represents winter observations, and elk are known to be highly mobile. Only one systemic survey has been conducted over the entire potential range, and that survey (in 2011) found elk near Piney, in the vicinity of the final preferred route. Furthermore, it is not unusual to receive reports of individual elk or small groups of elk well beyond the core area, and the last survey (in 2014) found groups of elk beyond the identified core area. In the absence of systematic surveys (for winter range) and GPS collar data (for all seasons), conclusive statements about elk core use areas cannot be made. And, mortality risks may potentially be elevated for any elk using areas in the vicinity of the new transmission line.

**RESPONSE:**

- 1 In the development of this environmental assessment and throughout transmission line
- 2 routing, Manitoba Hydro utilized the best available information to help understand the ecology
- 3 and movements of elk within the Project study area. In addition, Manitoba Hydro conducted
- 4 field studies, key-person interviews, a First Nation and Metis Engagement Process and Public
- 5 Engagement Process to further inform the assessment. As a result of this analysis, outlined
- 6 throughout Chapter 9, Manitoba Hydro believes it has adequate information to support the

7 conclusion that the final preferred route avoids the herd's core area and that the elk population  
8 known to occur in southeast Manitoba is not anticipated to be affected by the Project.

9 Manitoba Hydro does outline the existence of some uncertainty in relation to elk movements  
10 with respect to the LAA in Section 9.8, and in Section 9.5.2.1.1 acknowledges that core areas  
11 are not static and future changes in habitat, food availability, and hunting activity could result in  
12 shifts of core areas. To address this uncertainty, Manitoba Hydro proposes a number of  
13 initiatives to build on the information contained in the environmental assessment.

14 To verify environmental assessment predictions regarding change in habitat availability and  
15 mortality risk and to evaluate the effectiveness of mitigation for wildlife and wildlife habitat,  
16 including elk, monitoring programs will be implemented over the Project's pre-construction,  
17 construction and operation and maintenance phases. These monitoring programs are  
18 consistent with those used in previous and current Manitoba Hydro transmission projects,  
19 including the recently licensed Bipole III Transmission Project. The implementation of these  
20 monitoring programs will help determine if and when elk interact with the project, and allow  
21 for the execution of adaptive management actions, if they are deemed necessary.

22 As outlined in the environmental assessment, Section 9.4.3, wildlife managers describe the  
23 greatest threats to the Vita elk herd to be habitat fragmentation, particularly in Crown lands  
24 and contiguous habitat patches, which can lead to increased predation rates and increased  
25 opportunities for hunters. Manitoba Hydro considered habitat fragmentation during project  
26 routing and conducted detailed analysis of Project effects on intactness (fragmentation) in  
27 Chapter 10. Analysis showed the Project will cause only about a 1% reduction in the total area  
28 in the RAA that is occupied by patches larger than 200 ha and the project will occur outside of  
29 the known core area of elk in southeast Manitoba. In addition, an overview of the area east of  
30 the RAA shows that the mosaic of habitats including forested crown land parcels, intensively  
31 cropped agricultural fields, livestock pastures, roads, fences and utility and border corridors are  
32 known to be supportive of elk populations. This information, coupled with scientific studies on  
33 the effects of 500kV lines on elk movement in other parts of their ranges (Nelson, G. P. (1986).  
34 *Responses of elk to a 500 kV transmission line on the North Boulder winter range, Montana*

35 (Doctoral dissertation, Montana State University-Bozeman, College of Letters & Science), helps  
36 to minimize the concern that elk mortality will be measurably affected if individual elk or the  
37 herd shifts their core range into the Project development area.

38 Nonetheless, if elk are identified to interact with the Project area during the preconstruction,  
39 construction, operation and maintenance phases, Manitoba Hydro commits to immediately  
40 providing this information to Manitoba Conservation and Water Stewardship and then jointly  
41 identifying what, if any, mitigation measures should be implemented as a part of adaptive  
42 management. These could include altering, changing or removing human access points,  
43 adjusting vegetation management schedules or prescriptions, adjusting transmission line  
44 inspection and maintenance schedules and adjustments to elk monitoring activities.

45 To demonstrate a commitment to project monitoring and to contribute to research that will  
46 help develop better understanding of regional elk movements, Manitoba Hydro has partnered  
47 with Manitoba Conservation and Water Stewardship, the Rural Municipality of Stuartburn and  
48 the Nature Conservancy of Canada to conduct a study titled “Home Range and Seasonal  
49 Movements of the Caribou-Vita Cross Border (Manitoba-Minnesota) Elk Herd”. This project was  
50 initiated in February 2016 with the GPS collaring of eight elk with the goal of monitoring their  
51 movements for up to three years. The information from this study combined with a sister study  
52 being carried out by the Minnesota Department of Natural Resources and University of  
53 Minnesota on the same population of elk, will help provide high quality information on elk  
54 movements, and their relationship, if any, to the Project area.

55 To enhance understanding of predator risk, Manitoba Hydro has also recently partnered with a  
56 PhD student and professor from Memorial University to help understand the movements,  
57 habitat use and kill rates of wolves in southeastern Manitoba, with a specific interest in wolf  
58 movements along transmission corridors. This research program began in 2015 and will  
59 continue through 2017. The results of this research project will help inform ongoing adaptive  
60 management of transmission lines, including operational management of the proposed project.

61 Manitoba Hydro is focused on understanding the Project's potential effects to elk in the  
62 assessment area. This information may contribute to provincial programming aimed at elk  
63 management.

64 This information provided is consistent with the information included in the EIS therefore does  
65 not change the conclusion of the environmental assessment.



**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

This section states that the LAA (PDA plus 1 km buffer) was established to consider the area in the Project could have effects on wildlife and wildlife habitat; and, that the RAA (PDA + LAA + 15 km) is large enough to encompass the home ranges or dispersal distance of the most wide-ranging species in this assessment. The examples given include black bear – 5-25 km<sup>2</sup>; deer – 89 km<sup>2</sup>, elk – 12-52 km<sup>2</sup>, snakes – 18 km dispersal distance.

Comments

The examples given are not necessarily representative of the literature. In the case of the Vita elk herd, the core use area in Manitoba is approximately 2 x 3 townships ( 20 x 30 km), or 600 km<sup>2</sup> , and this does not include the portion of the core area within Minnesota.

It may not be reasonable to assume that all VC's will be impacted within a standard LAA. Each VC should have a LAA defined independently in consideration of the expected maximum geographic extent for the potential of the project to cause an adverse effect on the VC.

Similarly, it may not be reasonable to assume that effects to all VC's will be observed in a one-size fits all RAA buffer

**RESPONSE:**

- 1 Manitoba Hydro acknowledges that home ranges vary both by species and by population.
- 2 However, the LAA is defined to evaluate potential project effects on wildlife, as outlined in
- 3 Table 9-6. Most of the interactions listed are limited to occurring directly along the right-of-way
- 4 or at station sites and it is unreasonable to expect that these effects would extend beyond one
- 5 (1) km, regardless of species (Benitez-lopez et al 2010; Linnell et al. 2000). With respect to the
- 6 RAA, it is defined primarily to provide an ecologically reasonable context for interpreting any
- 7 effects within the LAA and to evaluate cumulative effects. While some examples of home

8 ranges of target species were used to define the RAA, this was not intended to suggest that the  
9 RAA need be proportional to home range for all species. Rather, Manitoba Hydro maintains that  
10 the RAA defined as a 15km buffer of the PDA provides an adequate context for evaluating  
11 cumulative effects on wildlife and wildlife habitat.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

Table 2-1

Elk – the table states that the Vita herd is generally restricted to a limited area overlapping the eastern portion of the RAA.

The elk herd is not restricted to a limited area (see our comments for table 1-1).

**RESPONSE:**

- 1 Manitoba Hydro acknowledges this clarification in wording and notes that the intent was not to
- 2 suggest that there are limitations on the movements of the herd, but rather that elk are not
- 3 widespread throughout the region.
  
- 4 Further information on elk can be found in response MCWS\_MH-I-081.
  
- 5 This information provided is consistent with the information included in the EIS therefore does
- 6 not change the conclusion of the environmental assessment.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

Table 2-1

Black Bear – the table states that black bear is a furbearing predator.

Comment:

The black bear is classified as a big game species, not a furbearer.

**RESPONSE:**

- 1 Manitoba Hydro acknowledges that black bear is classified as a big game animal under Schedule
- 2 A of the *The Wildlife Act*. However in other contexts, black bears are often defined as predators,
- 3 furbearers or big game animals. In this environmental assessment Manitoba Hydro chose to use
- 4 a broad, non-technical description.
  
- 5 Changing this wording does not change the conclusions of this environmental assessment.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

2.2.1.1 Methods: The reference stated for using 200 Hectares as a core area is Environment Canada 2013a ( How much Habitat is enough).

Comment:

It should be recognized that this publication is intended to provide science based guidance to conserve and restore habitat for migratory birds, species at risk and other wildlife species within the settled landscapes of the Lower Great Lakes and Mixed Wood Plains. While the principles are relevant for avian species and herptiles in SE Manitoba, they are not transferable to widely-ranging mammalian species such as elk or lynx.

**RESPONSE:**

- 1 Manitoba Hydro recognizes that Environment Canada (2013a) defines core habitat area
- 2 primarily with respect to forest birds. The intent was not to define an area that meets the
- 3 minimum requirements of all species but rather to use an accepted threshold to identify intact
- 4 patches of habitat within the RAA. Setting a higher threshold might better represent widely-
- 5 ranging mammals but would considerably reduce the number of sites within the RAA that
- 6 qualify as core habitat patches. Therefore, the total area being evaluated as core habitat would
- 7 be much less and would be less informative with respect to assessing project effects.

**SUBJECT AREA:**      **Vegetation and Wetlands, Wildlife and Wildlife Habitat**

**REFERENCE:**        **MCWS MMTP IR No 2 - Item 2**

**QUESTION:**

Comment:

The various wetland sub-categories have different values to wildlife species. For example, the willow/alder sub-category represents high value winter habitat for deer and elk, whereas muskeg and string bogs are of low value to both of these species. Table 2-3 – The table includes sub-categories of Forest Habitat, but all the wetland sub-categories mentioned in a previous table (table 2-2 – muskeg, string bogs, marsh, willow/alder) are lumped together.

**RESPONSE:**

- 1    Manitoba Hydro acknowledges that the various wetland sub-categories have different value to
- 2    wildlife species. However, the intent of Table 2-3 (Wildlife and wildlife habitat TDR) was to
- 3    provide a high-level summary of wildlife habitat in comparison with modified habitat.



**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

2.3.1.2.2 Elk – This section states that MCWS and Minnesota DNR conducted simultaneous aerial surveys in 2014 to obtain a total herd count for the first time.

Comment:

This statement is inaccurate, as the two jurisdictions conducted the first-ever simultaneous surveys in 2011 (not in 2014), and the purpose was to obtain a minimum count (not a total count). The 2014 surveys were not conducted simultaneously, and the Manitoba survey was limited to a portion of the core area. A total of 106 elk (minimum count) were observed in a portion of the Manitoba core area in 2014.

**RESPONSE:**

- 1 Manitoba Hydro appreciates this clarification and correction.
- 2 Clarifying this wording does not change the conclusions of this environmental assessment.

**SUBJECT AREA:**      **Wildlife and Wildlife Habitat, General Assessment**

**REFERENCE:**        **MCWS MMTP IR No 2 - Item 2**

**QUESTION:**

2.3.1.2.3 – This section states that...

Park (Banfield 1974; MCWS 2014f). Generally a forest species, moose primarily inhabit younger successional forests and shrubby habitats where food is readily available and retreat to dense closed-canopy forests during the cold winter months (Banfield 1974). With the exception of areas surrounding Piney, MB, the capability of lands to support ungulates in the RAA is moderate to severely limited (CLI 2002a). Lands surrounding Piney have great importance to overwintering ungulates (CLI 2002a).

And also that:

Suitable habitat is not thought to be limiting in eastern portions of the RAA (Leavesley 2015, pers. comm.; CLI 2002a). Instead, a combination of factors such as habitat fragmentation, predation...

Comment:

The capacity of lands to support ungulates in the RAA is not limited. It may be moderate in certain locations, but not severely limited. If the capacity of lands to support ungulates in the RAA is indeed moderate to severely limited, you would anticipate habitat playing a larger role in the abundance of ungulates, especially in cases where capacity is severely limited. However, at the bottom of the page it mentions suitable habitat is not thought to be limiting.

**RESPONSE:**

- 1 Please see response to MCWS\_MH-I-019.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

2.3.1.2.5

Gray wolves are only mentioned in the context of furbearers and other mammals. They are an important big game and furbearer species. New linear features, such as transmission lines can facilitate travel for a predator such as the gray wolves, which could in turn impact ungulate species such as white-tailed deer and elk. Due to its importance as a big game and furbearer species and the impacts it can have on other important big game species such as white-tailed deer and elk, gray wolves should be addressed in their own category as is the case for white-tailed deer, elk and black bears.

**RESPONSE:**

- 1 Manitoba Hydro acknowledges that in the context of Section 2.3.1.2.5 gray wolf was not
- 2 described in detail. However, the role of transmission lines in facilitating travel for wolves and
- 3 the corresponding implications for prey species is highlighted in Sections 9.1, 9.5.2.1.1, and
- 4 9.5.3.1.2. Given that this effect has been addressed, Manitoba Hydro maintains that a separate
- 5 section on gray wolf is not warranted.

**SUBJECT AREA:**     **Hunting, Trapping and Fishing, Wildlife and Wildlife**

**REFERENCE:**       **Habitat MCWS MMTP IR No 2 - Item 2**

**QUESTION:**

2.3.2.2.5... "Threats to the species..."

Comment:

This may be the case when compared to white-tailed deer, but black bear resident hunting is still an important and substantial part of the hunting occurring in the area.

**RESPONSE:**

- 1   Manitoba Hydro acknowledges this information.
- 2   This additional information does not change the conclusions of this environmental assessment.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, Vegetation and Wetlands

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

2.3.2 .2.7 Important Habitat Features

Comment:

We suggest that willow/alder swamps be noted as an important habitat feature. Deer and elk are both commonly observed in these habitats during winter aerial surveys.

**RESPONSE:**

- 1 Manitoba Hydro acknowledges the suggestion and will consider this information in analysis of
- 2 effects during monitoring.
- 3 This suggestion does not change the conclusions as stated in the EIS.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, Land and Resource Use

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

2.3.2.3 –Summary of Results – This section states that apparent opposition to the Project was limited, and that almost all persons interviewed indicated that resource users can and would utilize the ROW for their pursuits, most often to improve access to certain areas.

Comment:

This statement reinforces that wildlife will be at elevated risk due to access by resource users on the new ROW.

**RESPONSE:**

- 1 Manitoba Conservation and Water Stewardship's statement is consistent with the assessment
- 2 of change in mortality risk in Section 9.5.3.1.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

#### 2.3.3.1 Camera Trap Survey

Question:

The deployment period for the cameras is not clear. It is stated that the cameras were deployed April 25-May 2, 2014 and that crews attended to the sites July 2-5 to replace batteries, and then again October 6-7 to remove the cameras. It is also stated that there were 121 camera-days (mean) per camera.

Can MB Hydro clarify if the purpose was to collect data throughout July, August and September?

**RESPONSE:**

- 1 The objective was to collect data from late April to early October. While the span from earliest
- 2 deployment (April 25) to latest retrieval (October 7) was 166 days, some cameras were
- 3 functional for only part of the season hence the mean of 121 days per camera.
  
- 4 The primary objective of the camera trap survey was to gather information on the presence of
- 5 elk within the route planning area.



**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

#### 2.3.3.1 Camera Trap Survey

In view of elk behavior (clumpy distribution), as well as timing (summer only) and duration ( 121 days) of camera deployment, this study should not be used to make any conclusions about “key habitats used by elk”, particularly insofar as the majority of elk sightings in SE Manitoba occur during the winter months.

**RESPONSE:**

- 1 Field studies collectively were intended to “provide information on key habitats used by elk”
- 2 (Section 2.3.3); the camera study was only one of three primary efforts addressing elk, along
- 3 with winter track surveys and the elk breeding survey. While a synthesis of mammal results
- 4 was provided (Section 2.3.4) including a discussion focusing on elk (Section 2.3.4.3), this section
- 5 provides a summary of existing knowledge, rather than a formal conclusion about any species.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

2.3.3.2 Elk Breeding Survey

Comments:

The elk rut begins in late August, peaks in mid September and can continue until mid-October. Some jurisdictions incorporate citizen science input on bugling as complementary information in their reports on elk, but we are not aware of any jurisdictions who use elk bugling as an indicator of elk presence/absence and/or distribution. The small number of surveys conducted in 2014 should not be used to make any conclusive statements about the presence or distribution of elk in the Project study area(s).

**RESPONSE:**

- 1 The summary of elk breeding survey results (Section 2.3.3.2.3) simply notes that no elk
- 2 breeding activity was detected by this survey. This was factored into the overall summary of elk
- 3 results in Section 2.3.4.3 that also takes into consideration other field surveys and desktop data
- 4 review but draws no detailed conclusions about elk presence/absence or distribution. However,
- 5 the introduction to the elk breeding survey (Section 2.3.3.2) overstated the objectives; it should
- 6 instead have been written as:
  
- 7 “The elk breeding survey was designed to detect breeding or rutting activity in the vicinity of
- 8 the refined alternate routes, as well as areas nearby where elk are known to occur at other
- 9 times of year.”

**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

2.3.3.3 Winter Track Surveys

Question:

What is meant by in 2015....the areas covered were searched more extensively?

The transect lines were similar in both 2014 and 2015 (1 km apart). Was the more extensive search related to the use of a helicopter (with 3 observers) in 2015 vs the use of a fixed wing (with one observer) in 2014; or; to some other variable?

**RESPONSE:**

- 1 Manitoba Hydro notes that the text specifies the area was searched more “intensively” in 2015,
- 2 rather than “extensively”. As described under “Field Methods” in Section 2.3.3.3.1, this refers
- 3 to the use of three biologists as observers in 2015, compared to one in 2014.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, Vegetation and Wetlands

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

Tables 2-4 to 2-6

Question:

Was consideration given to performing analyses on wetland sub-categories? We ask this because we would expect few deer observations in muskeg and string bogs, vs. many observations in willow/alder swamps.

**RESPONSE:**

- 1 Manitoba Hydro acknowledges that white-tailed deer abundance in winter may differ to some
- 2 degree among different wetland types. The Habitat Suitability Index Model for White-tailed
- 3 Deer (The Manitoba Forestry Wildlife Management Project 1996) classifies willow/alder
- 4 swamps as providing moderate to marginal winter habitat and guided the analysis for white-
- 5 tailed deer. While this is somewhat better than other wetland types, the difference was not
- 6 sufficient to warrant separating the categories and the emphasis was instead placed on
- 7 comparing among forest types.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

Tables 2-4 to 2-6

Comment:

It seems counter-intuitive that a positive relationship was not found for wolves in those habitat types associated with a positive relationship for white-tailed deer.

**RESPONSE:**

- 1 Manitoba Hydro agrees that a positive correlation between gray wolf and white-tailed deer
- 2 might be expected. Table 2-6 only reports statistically significant relationships and given that
- 3 wolf sightings and tracks were relatively uncommon, sample sizes were small enough that there
- 4 was no observable effect for wolf in most habitat types.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

Tables 2-4 to 2-6

Question:

Why were deer observations not recorded in 2014?

**RESPONSE:**

- 1 Please see response to MCWS\_MH-I-037.

**SUBJECT AREA:**      **Wildlife and Wildlife Habitat, General Assessment**

**REFERENCE:**        **MCWS MMTP IR No 2 - Item 2**

**QUESTION:**

Tables 2-4 to 2-6

Comment:

We are interested in Hydro's thoughts on why there are substantial differences in tracks and/or species observations between 2014 and 2015.

**RESPONSE:**

- 1 Comparison of 2014 and 2015 data was not an objective of the study (See Section 9.3.1.4.1).
- 2 Several factors may have influenced the differences in results between 2014 and 2015,
- 3 including observers, weather, timing, location, and natural variability in populations.



**SUBJECT AREA:** Wildlife and Wildlife Habitat, Hunting, Trapping and Fishing

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

2.3.4 Synthesis of Mammal results

2.3.4.2 White-tailed Deer

Comment:

The primary reason for declines in white-tailed deer numbers is recent years of harsh winter conditions. There is no data to suggest that increased pressure from rights-based hunting or predation from wolves and coyotes may be contributing in any measurable way to white-tailed deer declines.

**RESPONSE:**

- 1 Manitoba Hydro acknowledges the comments from Manitoba Conservation and Water
- 2 Stewardship and notes that information supplied by three southeastern Manitoba Game and
- 3 Fish Association presidents, as part of Key Person Interviews, also described recent harsh
- 4 winters as the primary factor for the recent decline of white-tailed deer. In addition to harsh
- 5 winters, predation from wolves and coyotes and rights-based hunting were also described as
- 6 contributing factors.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

3.0 Important Areas for Wildlife

Comment:

MCWS staff commonly observe elk and white-tailed deer in willow/alder swamps during aerial surveys of this area. The extensive willow/alder swamps associated with the Rat River are considered to provide important wintering areas for both of these species.

**RESPONSE:**

- 1 Manitoba Hydro acknowledges this input and will consider it during analysis of effects
- 2 monitoring. This information does not change the conclusions of the EIS.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

4.0 Summary

Comment:

This section references Map 9.8 as depicting the range of the Vita elk herd; however; Map 9.8 depicts the 2014 aerial survey blocks, with no elk range shown. Furthermore, we could not locate a map in the document illustrating elk range.

**RESPONSE:**

- 1 Manitoba Hydro acknowledges this as an error. There is no map depicting elk range in the
- 2 technical data report or anywhere else in the environmental assessment.
- 3 This error does not change the conclusions of this environmental assessment.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

9.2 Scope of Assessment

9.2.1 Spatial Boundaries

Comment:

See comments for 1.2.3. For previously stated reasons, the RAA will not provide an adequate framework for assessing potential effects on the Vita elk herd.

**RESPONSE:**

1 Manitoba Hydro maintains that the RAA is adequate as presently defined, i.e., a 30km buffer  
2 (15km on each side of the right-of-way) resulting in an area of 7233km<sup>2</sup> around all components  
3 of the Project Development Area. The objective of the RAA is to provide a context for  
4 determining the significance of project-specific effects on wildlife and wildlife habitat and  
5 assessing cumulative effects. If an RAA is too large, metrics used to calculate effects can under-  
6 represent effects (some measurement parameters are spatial and consider percent direct  
7 change in wildlife habitat availability of an LAA or RAA). Measurable Project-specific effects on  
8 elk are generally limited to within 1km (the LAA) (McCorquodale 2014). No elk were observed  
9 in the RAA during field surveys in 2014 and 2015 (Wildlife and Wildlife Habitat TDR Section  
10 2.3.4.3) although there were several records in the Arbakka area outside the RAA. Combined  
11 with existing knowledge regarding the core range of the Vita elk herd (TDR Section 2.3.1.2.2)  
12 suggests that while some elk may occasionally use parts of the RAA, it is unlikely that they are  
13 routinely present, let alone frequenting the LAA. The RAA therefore provides an appropriate  
14 context for considering the regional context of project-specific effects on elk.

15 **Reference:**

16 McCorquodale, 2013. A brief review of scientific literature on elk, roads and traffic. Wildlife

17 Research Scientist, Washington Department of Fish and Wildlife.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

### 9.2.3 Learnings from Past Assessments

This section states that the use of proxies was incorporated into the design of the Project baseline environmental studies, which included aerial track surveys, camera trap studies.....under existing transmission lines...located within the RAA.

Comment

By “proxies” we assume this to mean appropriately designed “control areas” which will be used to assess what effects may or may not be attributable to the new ROW. If so, “one pass” by a fixed wing aircraft along the centre of an existing transmission line in 2014 (as described in 9.3.1.4.1) will not meet this standard. An adequate design would incorporate the use of control blocks similar in area to the 20 x 20 monitoring blocks. This would be in MB Hydro’s best interests, as controls provide a basis for comparison that can be used to separate ROW effects from those arising from other sources (e.g. weather or climatic trends).

**RESPONSE:**

- 1 Proxies, as described in Section 9.3.1.4.1, are defined as existing transmission lines that were
- 2 surveyed to help predict effects of the proposed project; as such, they were not intended as
- 3 control areas. The use of proxies was in response to the CEC recommendation that it would
- 4 have been helpful had Manitoba Hydro used data gathered under Bipole I and II (potential
- 5 proxy areas) in the assessment of potential Bipole III Transmission Project-related effects on
- 6 wildlife (MB CEC 2013). The 20 x 20km monitoring blocks that were surveyed can be used as a
- 7 baseline for future comparison, given that they include areas both near (i.e., potentially
- 8 affected areas) and far (i.e., potential control areas) from the project.

**SUBJECT AREA:**      **Wildlife and Wildlife Habitat, General Assessment**

**REFERENCE:**        **MCWS MMTP IR No 2 - Item 2**

**QUESTION:**

9.3.1.5 Addressing Uncertainty

This section states that the paucity of... data on the elk herd was addressed through elk breeding surveys, winter track surveys, large mammal surveys (camera trap?) and KPIs.

Comment:

See our previous comments. For reasons stated in previous sections, these methods, while well intentioned, are not adequate for making any conclusions on the presence/absence or distribution of elk in the area

**RESPONSE:**

- 1 The intent of the statement was simply to acknowledge that in recognition of gaps in
- 2 knowledge about the Vita elk herd, multiple investigations were undertaken to collect
- 3 additional data. It was not meant to imply that all gaps have been filled. Please see the
- 4 response to MCWS\_MH-I-081.



**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

9.3.2.1.1 Change in Habitat Availability

Comment:

Use of a 100m and 200m buffer may not be appropriate depending on the species. Use of a 500m (or greater) buffer may be more appropriate for higher mobile species (e.g. deer, elk, etc.).

**RESPONSE:**

- 1 Buffer distances in this case were identified in relation to wildlife sensitivity to sensory
- 2 disturbance and edge effects, rather than mobility of species. It pertains to species that are
- 3 limited in distribution to core areas of wildlife habitat, rather than species such as white-tailed
- 4 deer which can thrive along edges and even make regular use of linear features.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, General Assessment

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

### 9.3.2.3 Residual Environmental Effects Description Criteria

Comments:

Table 9-4

o Magnitude – With the recent Cumulative Effects Assessment completed for the Northern Area in MB, why have different values been used in this assessment? For example, in the new report prepared by Hydro, “Low” was defined as <5% of wildlife habitat impacted.)

o After some literature review, it would be useful to include two additional variables for consideration; Probability and Level of Confidence. These appear to be industry standards used in other projects of a similar nature across Canada.

§ Probability: the likelihood that an adverse effect will occur (low, high, unknown)

§ Level of Confidence: An evaluation of the scientific certainty one has in the review of the project specific data, relevant literature and professional opinion

**RESPONSE:**

1 The definitions put forward for magnitude criteria are intended to be relevant to each VC, or in  
2 the case of the Regional Cumulative Effects Assessment, each regional study component. The  
3 Regional Cumulative Effects Assessment (RCEA) differs in that it related changes to historical  
4 conditions, has a substantially different study area, and uses a different framework for  
5 assessing study components (regional study components rather than focal species).

6 The probability or likelihood that an adverse effect will occur was assessed if the residual effect  
7 was considered significant (see Chapter 7, Section 7.3.6.1 in the Environmental Impact  
8 Statement). This follows CEAA’s Operational Policy Statement: *Determining Whether a*

9 *Designated Project is Likely to Cause Significance Adverse Environmental Effects Under the*  
10 *Canadian Environmental Assessment Act, 2012, (November 2015).* If effects are considered  
11 adverse *and* significant, their likelihood is determined.

12 Chapter 9, Section 9.8 discusses the level of confidence in the predictions made for wildlife and  
13 wildlife habitat. Prediction confidence is based on the quantity and quality of information  
14 compiled during desktop evaluations, KPIs, inputs from the Public Engagement Process, First  
15 Nations and Metis Engagement Process, field surveys, data analyses and understanding of  
16 Project activities, location, and schedule.

**SUBJECT AREA:** **Wildlife and Wildlife Habitat, General Assessment**

**REFERENCE:** **MCWS MMTP IR No 2 - Item 2**

**QUESTION:**

9.4.6 Summary

Comment:

See our previous comments respecting the applicability of a 200 h core to large mammalian species (i.e. 200 h is inadequate).

**RESPONSE:**

- 1 Please see response to MCWS\_MH-I-085.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, Fragmentation

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

9.5.2.1.1 Construction

Comment:

Indirect changes in Wildlife Habitat

- Habitat Fragmentation – there is no question that habitat intactness WILL be reduced, not “may be”.

Also, habitat fragmentation WILL lead to a reduction in intact core habitat, not “may lead”.

- Sensory Disturbance – how will den abandonment by black bears be mitigated?

**RESPONSE:**

- 1 Manitoba Hydro acknowledges that habitat intactness will be reduced in some locations due to
- 2 right-of-way clearing and that “may be” was used in error in that sentence.
- 3 The second point (“Habitat fragmentation may lead to a reduction in intact core habitat...”) has
- 4 been cited out of context. As written in Chapter 9, Section 9.5.2.1.1, this sentence is a general
- 5 introduction to the concept of habitat fragmentation, based on Driscoll et al. (2005) and Nol et
- 6 al. (2005). Core habitat in this assessment was considered to begin approximately 100m in from
- 7 the edge of forests, as described in the references above. Due to existing fragmentation in the
- 8 RAA, and consideration of intactness in transmission line routing, the loss of core habitat will be
- 9 minimal (i.e., 0.3ha of mature deciduous or mixed wood forest).
- 10 Mitigation for black bears will be among the items detailed in the Construction Environmental
- 11 Protection Plan, currently under development. The protocol will be based on relevant guidance
- 12 and experience, including recent construction of the Wuskwatim Transmission Project, Keeyask
- 13 Transmission Project, Bipole III Transmission Project and the Lake Winnipeg East System
- 14 Improvement Transmission Project. It will include contacting Manitoba Conservation and Water

15 Stewardship as soon as possible when a bear den is identified; establishing a 150m buffer  
16 around identified bear dens within which no machinery with potential to disturb a bear may  
17 operate; flagging to mark the perimeter; and, monitoring the site to ensure that project related  
18 disturbances do not resume until after the den has been vacated. To date, construction  
19 activities on other Manitoba Hydro transmission projects have not resulted in any known black  
20 bear mortality or den abandonment.

**SUBJECT AREA:**      **Wildlife and Wildlife Habitat, General Assessment**

**REFERENCE:**        **MCWS MMTP IR No 2 - Item 2**

**QUESTION:**

9.5.2.3.1 Characterization of Residual Environmental Effect for Change in Habitat Availability

Comment:

See previous comments. There is no certainty that the core area for elk was avoided during the route selection process. The available data is inadequate for drawing such a conclusion.

**RESPONSE:**

- 1 Please see response to MCWS\_MH-I-081.

**SUBJECT AREA:** Wildlife and Wildlife Habitat, Hunting, Trapping and

**REFERENCE:** Fishing MCWS MMTP IR No 2 - Item 2

**QUESTION:**

9.5.3.1 Pathways for Change in Mortality Risk

Comments

- What about access from a hunting perspective? Was this considered as a mortality risk factor?
- "...the ROW may increase mortality of game or prey species..." – this sentence seems buried in the paragraph/section in what appears as an attempt to reduce the perceived importance of this statement. It is an important fact and needs to be stated with the other factors in the opening paragraph of the section.

**RESPONSE:**

- 1 There was no intent to reduce the perceived importance of how the presence of the ROW may
- 2 increase mortality risk to game or prey species. All items mentioned in the introduction to
- 3 mortality risk (Chapter 9, Section 9.5.3.1) have been included because they are recognized as
- 4 important considerations.
- 5 The potential effects to prey species from the presence of the right-of-way is also described in
- 6 Chapter 9, Sections 9.1, 9.1.2.2, 9.5.2.1.1, 9.5.2.1.2 and 9.5.3.1.2.



**SUBJECT AREA:** Environmental Protection, Follow-up and Monitoring, First Nation and Metis Engagement

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

22.3.1 First Nation and Metis Engagement Process

Question

Will there be opportunities for wildlife staff to participate on some of the planned field trips with First Nation and Metis representatives?

**RESPONSE:**

- 1 Manitoba Conservation and Water Stewardship wildlife staff may have an opportunity to join in
- 2 planned field trips if tour participants welcome their involvement.

**SUBJECT AREA:** Environmental Protection, Follow-up and Monitoring, Biophysical Monitoring

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

### 22.3.3 Monitoring Plan

This section states several objectives, including :

- confirm the nature and magnitude of predicted environmental effects;
- assess effectiveness of mitigative measures;
- identify unexpected environmental effects;
- identify mitigation to address unexpected environmental effects;
- provide baseline information to evaluate long term changes or trends;

Comments:

Appropriately-designed “before and After” monitoring methods will be needed to meet these objectives. Some of baseline information collected to date will not be adequate for assessing effects, assessing effectiveness of mitigation measures, or for evaluating long term changes or trends.

**RESPONSE:**

- 1 While Manitoba Hydro does believe appropriately designed monitoring methods are required
- 2 to assess project effects, it does not concur in all instances “before and after” methodologies
- 3 are appropriate for meeting the plan objectives. Manitoba Hydro is fully committed to
- 4 collecting sufficient baseline information to meet the objectives of the plan, and has continued
- 5 baseline data collection post filing of the EIS.

**SUBJECT AREA:** Environmental Protection, Follow-up and Monitoring, Public Engagement

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

22.6 Review and Updating

22.6.1 CEnvPP

This section states that the CEnvPP will be reviewed annually.

Question:

In what month will the annual report be available for review?

**RESPONSE:**

- 1 Manitoba Conservation and Water Stewardship's Environmental Approvals Branch typically
- 2 dictates through license conditions the date the Annual Report is to be submitted. Manitoba
- 3 Hydro prefers the date determined to consider the licence issue date and the opportunity to
- 4 allow all field monitoring activities to have taken place in all seasons to allow sufficient time to
- 5 analyze the results and compile a report.

**SUBJECT AREA:** Environmental Protection, Follow-up and Monitoring, Vegetation Management

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

Appendix 22A CEnvPP

5.2 General Mitigation Tables

General Comment:

There are repeated references in the tables to in accordance with the Rehabilitation and Vegetation management Plan. We could not find this plan – should it have stated the “Rehabilitation and Weed Management plan”?

**RESPONSE:**

- 1 Manitoba Hydro will list this as an errata and correct the title to be “Rehabilitation and Weed
- 2 Management Plan” in the final Construction Environmental Protection Plan.

**SUBJECT AREA:** Environmental Protection, Follow-up and Monitoring, Biophysical Monitoring

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

Appendix 22A CEnvPP

Aircraft Use (EI-1):

Comment:

A statement should be included that requires the proponent to advise Wildlife Branch of their flight plans. Wildlife staff may be conducting flights in the same area on concurrent days; therefore; communication on plans will help to ensure the safety of our respective staff.

**RESPONSE:**

- 1 Manitoba Hydro utilizes aircraft for a number of operations in this region including transmission
- 2 line inspection, emergency repairs, project planning purposes and monitoring. These activities
- 3 may occur at any time of the year, often on short-notice. In compliance with corporate policy
- 4 and Federal legislation, Manitoba Hydro utilizes licensed aircraft operators that follow all
- 5 standards for aircraft communication protocols as required by Transport Canada to ensure the
- 6 safety of all aircraft conducting operations in regional airspace. These protocols and legal
- 7 requirements allow for a safe working environment for aircraft operators.
  
- 8 However, Manitoba Hydro is interested in building and maintaining good communication with
- 9 the Wildlife Branch as it relates to project monitoring and will make efforts to advise when
- 10 aircraft will be used for project monitoring.

**SUBJECT AREA:** Environmental Protection, Follow-up and Monitoring, Wildlife and Wildlife Habitat

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

Appendix 22A CEnvPP

Wildlife Protection (EC-9):

Comments:

9.02-MCWS should be advised as to where the bird diverters/aerial markers will be installed

9.09-MCWS should be notified if traps or bait sites are encountered

9.15-MCWS should be notified if artificial nesting structures are to be installed. Post – installation monitoring should occur to assess whether these structures are subsequently used.

9.16-MCWS should be consulted prior to erecting any wildlife warning signs

9.18-Will the proponent consider the provisions of Manitoba’s draft No Net Loss Guidelines?

**RESPONSE:**

1 9.02-The locations where bird diverters will be installed are outlined in the Appendix 22A

2 Mapbook.

3 9.09-Manitoba Hydro will incorporate into the Wildlife Protection Table EC-9a provision to

4 notify Manitoba Conservation and Water Stewardship if traps or bait sites are encountered on

5 Crown Lands.

6 9.15-Manitoba Hydro will incorporate this into the Wildlife Protection Table EC-9

7 9.16-Manitoba Hydro will incorporate this into the Wildlife Protection Table EC-9

8 9.18-Manitoba Hydro considered many of the provisions of the no net loss guidelines and

9 incorporated them into the Project’s Construction Environmental Protection Plan. Examples of

10 this include; Project routing considerations, scheduling of construction activities in wetlands to  
11 occur under frozen ground conditions and the retention of vegetation buffers around riparian  
12 and wetland habitat. Manitoba Hydro is committed to adhering to all legislative requirements  
13 in the development of this Project.

**SUBJECT AREA:** Environmental Protection, Follow-up and Monitoring, Access

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

Appendix 22B Access Management Plan

2.0 Purpose and Objectives

2.1 Construction Access Management Plan Coverage

Comments:

This section states that “Public access restrictions are primarily limited to the active construction site, for reasons of safety, and will generally not interfere with traditional traffic patterns”.

If traditional traffic patterns are not to be interfered with, we request clarification as to what steps will be taken to discourage establishment of new traditional traffic patterns on access routes intended for temporary purposes only.

**RESPONSE:**

- 1 Manitoba Hydro will implement decommissioning strategies seasonally during construction as
- 2 described in response to MCWS\_MH-I-120 along with currently planning to only to utilize
- 3 existing or previously used roads and trails for temporary construction access routes.



**SUBJECT AREA:** Environmental Protection, Follow-up and Monitoring, Access

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

Appendix 22B Access Management Plan

2.0 Purpose and Objectives

2.1 Construction Access Management Plan Coverage

Question:

Will Hydro be willing to erect physical impediments to public access either seasonally or year-round on those routes which provide new or improved access to “sensitive” areas where preservation of values is of concern?

**RESPONSE:**

- 1 Manitoba Hydro, as it has done for other recent projects, will consider various forms of access
- 2 control measures both seasonally or year-round which provide new or improved access to
- 3 “sensitive” areas. Manitoba Hydro is currently unaware of any “sensitive” areas as designated
- 4 by Manitoba Conservation and Water Stewardship.

**SUBJECT AREA:** Environmental Protection, Follow-up and Monitoring, Access

**REFERENCE:** MCWS MMTP IR No 2 - Item 2

**QUESTION:**

Appendix 22B Access Management Plan

2.2 Identification of Potential Construction Access Opportunities

Comment:

Given the short time afforded to review the EIA, our staff were not able to ground truth all the proposed access routes which may potentially utilize Crown lands. Our review of the maps indicated that some of the routes identified as “existing” may be overgrown to the extent that they are no longer passable/in-use as travel corridors. We will therefore require additional time to ground-truth their current status and determine whether or not there may be issues associated with re-opening or substantially improving these routes.

**RESPONSE:**

- 1 The time afforded to the Technical advisory Committee for the review of the EIS was not set by
- 2 Manitoba Hydro. Based on the direction provided by Manitoba Conservation and Water
- 3 Stewardship in the Manitoba-Minnesota Transmission Project Scoping Document, Manitoba
- 4 Hydro prepared “Appendix 22B Access Management Plan” so that it can be reviewed as part of
- 5 the EIS Submission. As such, Manitoba Hydro is basing its construction schedule plans for its
- 6 approval to occur concurrently with licence issuance.