

BIPOLE III TRANSMISSION PROJECT:

Moose and Woodland Caribou Sensitive Range Delineation and Mitigation Plans

Updated January 22, 2015

Introduction

Clause 20 of the Bipole III Transmission Project (the Project) *Environment Act* licence 3055 states:

The Licencee shall consult the Wildlife Branch of CWS regarding the design and implementation of mitigation measures for the protection of moose and caribou in known sensitive ranges along the transmission line right-of-way. A mitigation plan for these ranges shall be submitted to the Director for approval prior to clearing of the transmission right-of-way in known sensitive areas.

Manitoba Hydro has developed this mitigation plan to address the requirements of Clause 20 of the licence in cooperation with Wildlife Branch of Manitoba Conservation and Water Stewardship (MCWS). Manitoba Hydro has met several times with the Branch to define sensitive moose and woodland caribou ranges and to develop mitigation measures for these species. Mitigation plans have been developed for two woodland caribou ranges and four moose ranges. Each range is described and mapped and mitigation measures prescribed by sensitive zone. Input from Wildlife Branch has been instrumental in arriving at mitigation measures that will reduce potential impacts on the two species in the sensitive ranges.

The original mitigation measures proposed in the Bipole III Environmental Impact Study (EIS) and subsequent documentation including a Commitments Table and draft Construction Phase Environmental Protection plans, were reviewed as part of the development of mitigation plans for sensitive zones (Appendix A). Some of the original mitigation measures were modified to add additional detail or clarity and have become part of the sensitive zone mitigation plan outlined below. In addition, new mitigation measures were also developed and included below for each of the sensitive zones identified in this plan. Mitigation measures listed in Appendix A will be included in Construction Phase Environmental Protection Plans for each construction zone as well as the specific mitigation developed for sensitive moose and caribou ranges provided below.

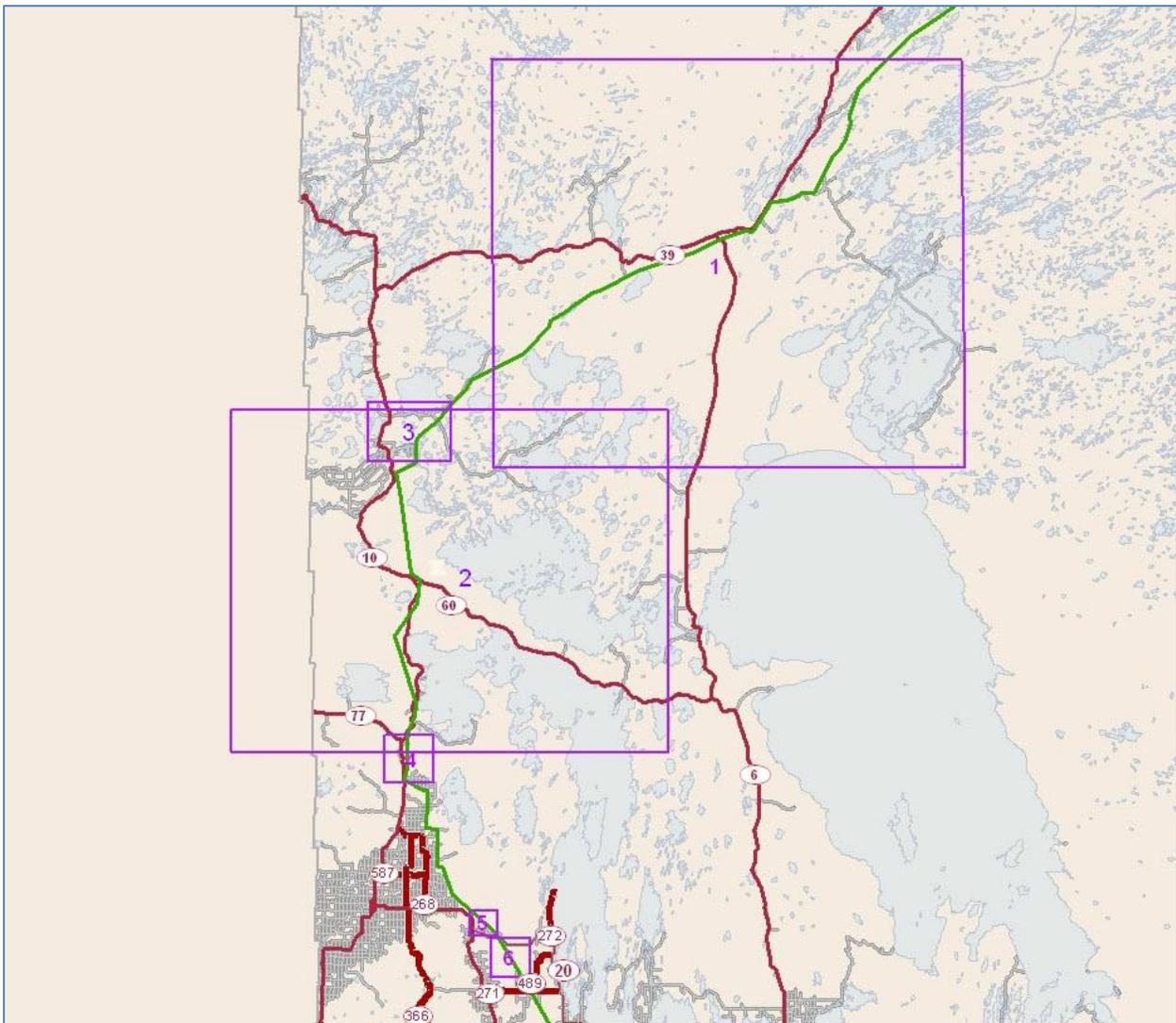
Sensitive Zone Selection and Rationale

Through discussion and review with the Wildlife Branch of Manitoba Conservation and Water Stewardship (MCWS), a total of six sensitive ranges were identified for woodland caribou and moose (2

woodland caribou and 4 moose). See Overview Map. The criteria used in selecting sensitive ranges included:

- areas identified in Clause 49 of the *Environment Act* Licence;
- documented woodland caribou ranges intersected by the transmission line;
- areas providing new access to humans and predators in moose ranges;
- areas currently under special moose management measures;
- areas where there is limited data for appraisal of moose population – GHA 19A,14A; and
- areas of high value for domestic use for moose hunting as identified through the Bipole III Transmission Project environmental review process.

The sensitive ranges selected and corresponding mitigation plans are presented in the following pages.



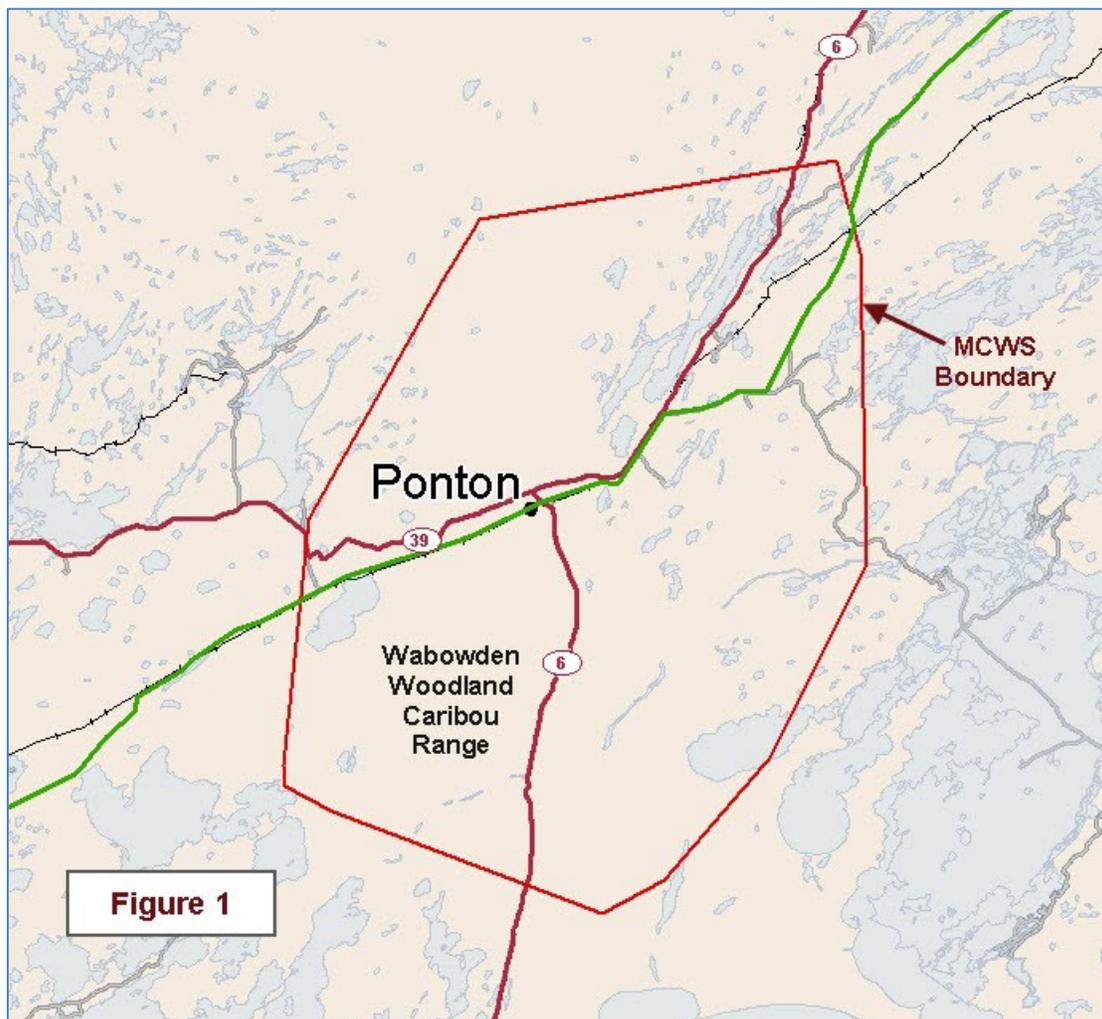
Overview Map

Wabowden Woodland Caribou Range

Location: Near the intersection of PTH 6 and PTH 39 near Ponton (Figure 1).

Description: The Bipole III transmission line traverses an area of core habitats along PTH 6 and the adjacent rail line. The MCWS woodland caribou range boundary is the sensitive area as shown in Figure 1. The defined sensitive range is subject to revision based on Kernel analysis that is satisfactory to CWS.

Rationale for Selection: The range was deemed to be sensitive based on it being a known location of woodland caribou summer and winter habitats. Woodland caribou is considered a threatened species under provincial and federal legislation.



**Table 1: Wabowden Woodland Caribou Sensitive Range Mitigation Measures
(New mitigation measures or measures modified from those listed in Appendix A)**

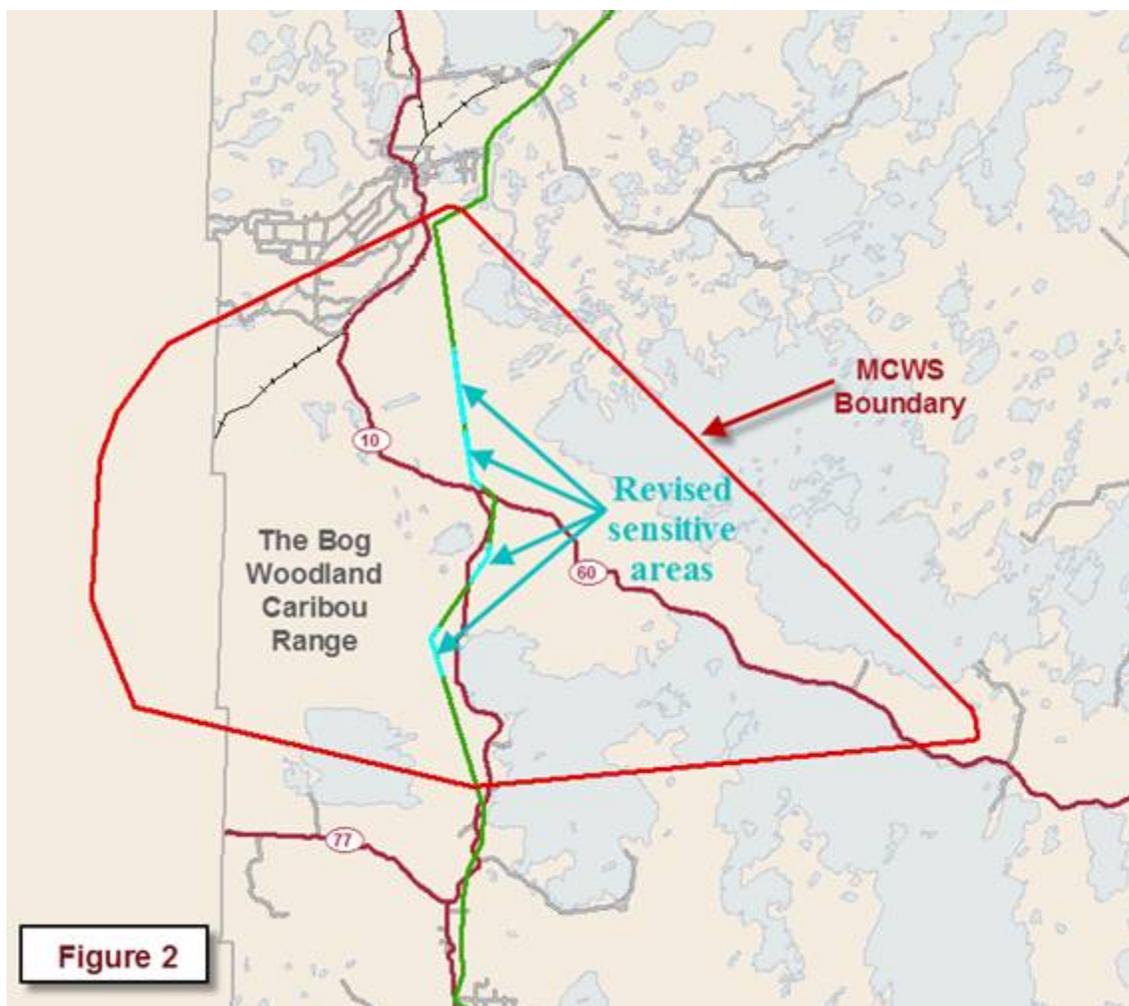
Mitigation Topic	Transmission Mitigation
Maintaining Natural Cover Wildlife Corridors	Natural low tree cover in the Wabowden and Bog ranges will be maintained in core winter use areas and known and potential calving areas to maintain natural functional structure to encourage ongoing use by boreal woodland caribou. Boreal woodland caribou in the Wabowden area have demonstrated movement north and south of the Final Preferred Route (FPR). Natural vegetation corridors for wildlife will be developed on the FPR in 70% kernel through the maintenance of naturally low vegetation such as black spruce and tamarack.
ROW Access	In the Wabowden range, robust and effective access control to the right-of-way from PTH #6 will be applied near core use areas. This will be based on site specific conditions and methods that halt or limit ATV and snowmobile traffic. Access for construction and maintenance will not occur off the north south portion of PTH 6 where the Bipole III line crosses. New access may be required from the existing rail line east and west of PTH 6. Site investigation with MCWS will occur to confirm locations for access on site. Only selective cutting will be done for danger trees in a 50 m buffer on the ROW at PTH 6 crossing.
ROW Access	Limiting recreational use and travel by ATVs and snowmobiles along the right-of-way in the core winter use areas and known potential calving areas. To reduce access, mitigation measures will be considered based on site inspection in conjunction with Wildlife Branch. Manitoba Hydro will not support development of designated motorized recreational trail use within areas described above if requested.
Access Roads and Trails	Manitoba Hydro access routes required for construction will be decommissioned in accordance with MCWS review and approval, unless required for operations.
Clearing	Right-of-way clearing within caribou range boundary will not include shear blading except for areas for access, conductor stringing trails, and tower footprints. Selective cutting methods will only be used to remove danger trees, vegetation within tower footprint, access route, and helicopter access points, to maintain low tree, shrub and herb plant communities on the ROW.
Maintenance Trails	Maintenance trails to be maintained to reduce line of sight for hunters and predators.
Ground Inspection	Annual ground inspection of towers to occur late in winter season to avoid creating packed snow trails that facilitate predator use of the ROW.

The Bog Woodland Caribou Range

Location: South of The Pas in the vicinity of PTHs 10 and 60 (Figure 2).

Description: The Bipole III transmission line traverses an area of core habitats in this woodland caribou range. The MCWS range boundary and the revised sensitive area as shown in Figure 2.

Rationale for selection: The range was deemed to be sensitive based on it being a known location of woodland caribou summer/winter habitats and travel corridor. Woodland Caribou is considered a threatened species under provincial and federal legislation.



**Table 2: The Bog Woodland Caribou Sensitive Range Mitigation Measures
(New mitigation measures or measures modified from those listed in Appendix A)**

Mitigation Topic	Transmission Mitigation
Maintaining Natural Cover Wildlife Corridors	Natural low tree cover in the Wabowden and Bog ranges will be retained to maintain natural functional structure to encourage ongoing use by boreal woodland caribou.
ROW Access	Limiting recreational use and travel by ATVs and snowmobiles along the right-of-way in the core winter use areas and known potential calving areas. To reduce access, mitigation measures will be considered based on site inspection in conjunction with Wildlife Branch. Manitoba Hydro will not support development of designated motorized recreational trail use within areas described above if requested.
Access Roads and Trails	Manitoba Hydro access routes required for construction will be decommissioned in accordance with MCWS review and approval, unless required for operations.
ROW Use	Manitoba Hydro will not support development of designated motorized recreational trail use within areas described above if requested.
Adjacent Transmission Line	Extension of wildlife crossing and vegetation management measures to the 230 kV line running adjacent to the Bipole III transmission line in this range. Location of specific measures on the 230kV line to be determined in conjunction with Wildlife Branch.
Clearing	Right-of-way clearing within caribou range boundary will not include shear blading except for areas for access, centerline conductor stringing trail (24m width), and tower footprints (66mx82m). Selective cutting methods will be used to remove existing and approaching danger status, vegetation within tower footprint, access route, and helicopter access points, to maintain low tree, shrub and herb plant communities on the ROW.
Maintenance Trails	Maintenance trails to be maintained to reduce line of sight for hunters and predators.
Ground Inspection	Annual ground inspection of towers to occur late in winter season to avoid creating packed snow trails that facilitate predator use of the ROW.

Mitigation Topic	Transmission Mitigation
Highway Crossings	At PTH 10 and 60 crossings a vegetated buffer zone 30m wide will be left at the edge of the ROW to reduce visibility and access on to the ROW from the highways. A maintenance trail will still be needed on to the ROW from the highway.
Field Visit	A field visit will be arranged with MCWS NW Region Wildlife- Kent Whaley and Maria Arlt- once line clearing has commenced in the portions of the line that are regularly crossed by The Bog Woodland Caribou herd to ensure that vegetation retention goals and expectations are being met.

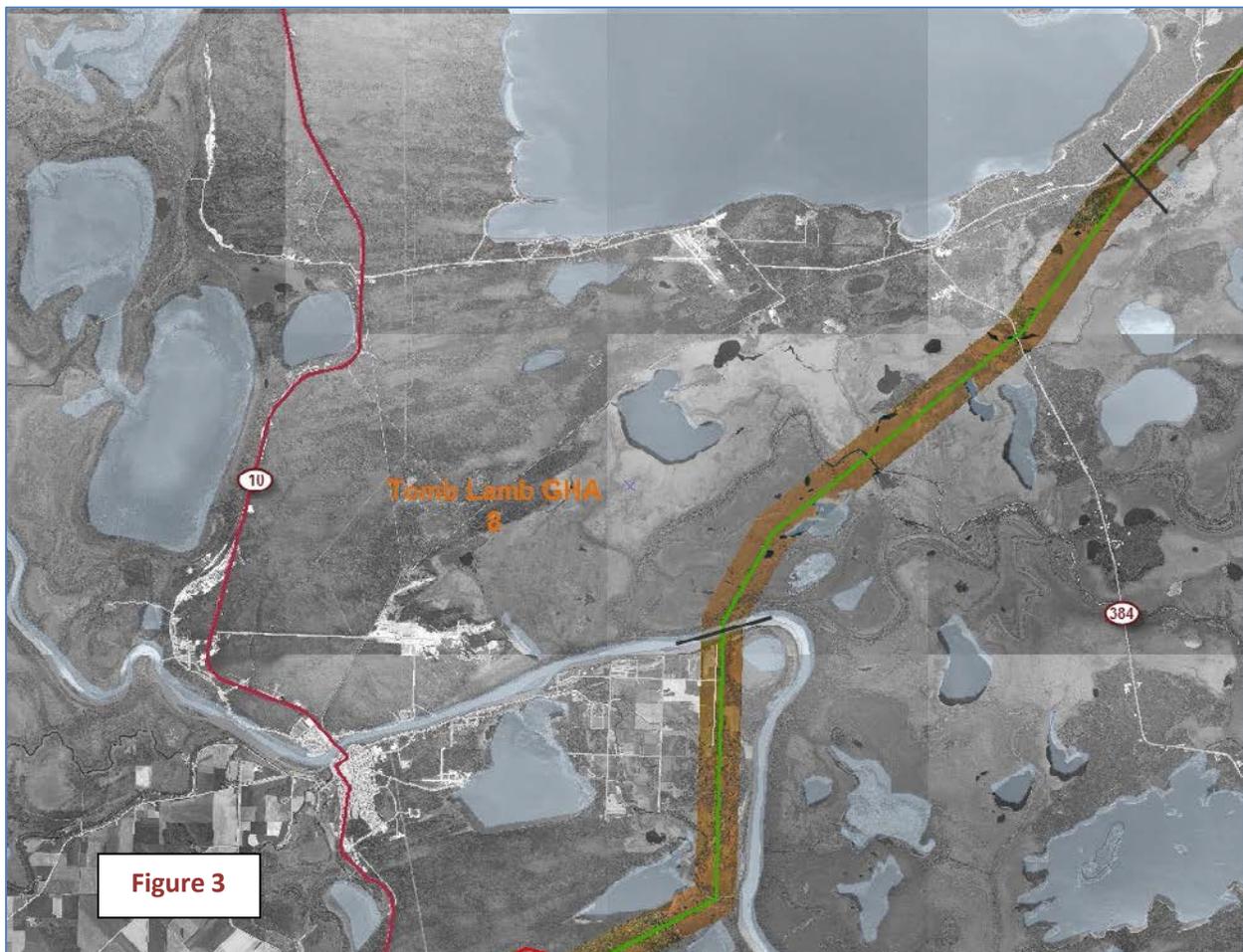
Tom Lamb Sensitive Moose Range

Location: In the Tom Lamb Wildlife Management Area (WMA) and GHA 8 NE of The Pas (Figure 3).

Length of ROW in Sensitive Moose Range: 19 km

Description: Bipole III transmission line traverses an area of bog in this area within GHA 8.

Rationale for selection: The range was deemed to be potentially sensitive and considered an area of interest due to dwindling moose numbers in the GHA and the importance of undisturbed moose refugia. Increased access was not considered a major issue in this area due to the open bog environment easily accessible during winter periods.



**Table 3: Tom Lamb Sensitive Moose Range Mitigation Measures
(New mitigation measures or measures modified from those listed in Appendix A)**

Mitigation Topic	Transmission Mitigation
ROW Use	Manitoba Hydro will not support development of designated motorized recreational trail use within areas described above if requested.
Clearing	No shear blading to clear the ROW in the sensitive range. Majority of transmission line in this area will not require clearing due to the absence of tree cover. Selective cutting methods to be used for any treed areas leaving low shrub and plant communities on the ROW.
Access Roads and Trails	Manitoba Hydro access routes required for construction will be decommissioned in accordance with MCWS review and approval, unless required for operations. Access approaches from Moose Lake Road will be decommissioned.

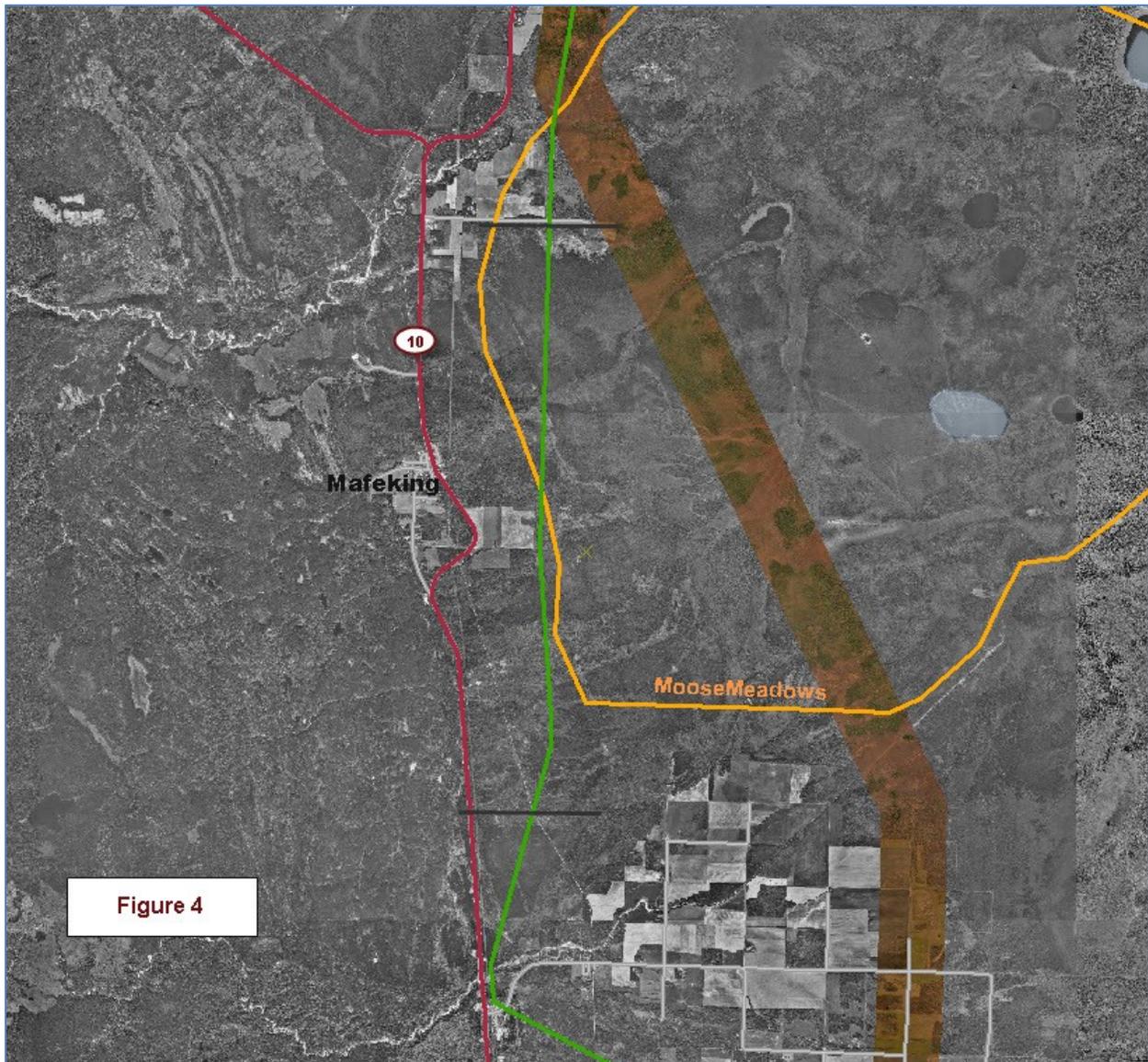
Moose Meadows Sensitive Moose Range

Location: From Bellsite to north of Mafeking and south of the PTH 10 and 77 junction (Figure 4).

Length of ROW in Sensitive Moose Range: 12 km

Description: Bipole III transmission line traverses an area adjacent to the moose meadows area in a zone of mature forest.

Rationale for selection: The range was deemed to be sensitive based on it being in close proximity to the moose meadows area - a winter refuge for moose in a GHA currently closed to moose hunting. A route adjustment was already made in this area to mitigate potential impacts on moose related to increased access.



**Table 4: Moose Meadows Sensitive Moose Range Mitigation Measures
(New mitigation measures or measures modified from those listed in Appendix A)**

Mitigation Topic	Transmission Mitigation
ROW Use	Manitoba Hydro will not support development of designated motorized recreational trail use within areas described above if requested.
Clearing	Right-of-way clearing within range will not include shear blading except for areas for access, conductor stringing trails, and tower footprints. Selective cutting methods will be used to remove danger trees, vegetation within tower footprint, access route, and helicopter access points, to maintain low tree, shrub and herb plant communities on the ROW.
Maintenance Trails	Slash piles will be stockpiled every 200-400m during clearing in mature treed areas and other areas where possible, adjacent to centreline trail .These piles will be placed on the centreline trail after construction to reduce line of sight along the ROW and in a manner that provides maintenance access along the centreline. This is to be done to the satisfaction of the supervising officer.
Ground Inspection	Annual ground inspection of towers to occur late in winter season to avoid creating packed snow trails that facilitate predator use of the ROW.
Clearing	Selective cutting to remove danger trees only on portions of the ROW to reduce line of site for hunters and predators and facilitate wildlife movement across the ROW.
Access Roads and Trails	Manitoba Hydro access routes required for construction will be decommissioned in accordance with MCWS review and approval, unless required for operations.

GHA 14A Sensitive Moose Range

Location: North East of Duck Mountain and (Figure 5).

Length of ROW in Sensitive Moose Range: 8 km

Description: Bipole III transmission line traverses an area of relatively inaccessible moose winter habitat east of Duck Mountain.

Rationale for selection: The range was deemed to be sensitive based on it being an area of winter use by moose in an area of limited remote habitat north east of the Duck Mountains



**Table 5: GHA 14A Sensitive Moose Range Mitigation Measures
(New mitigation measures or measures modified from those listed in Appendix A)**

Mitigation Topic	Transmission Mitigation
ROW Use	Manitoba Hydro will not support development of designated motorized recreational trail use within areas described above if requested.
Clearing	Right-of-way clearing within range boundary will not include shear blading except for areas for access, conductor stringing trails, and tower footprints. Selective cutting methods will be used to remove danger trees, vegetation within tower footprint, access route, and helicopter access points, to maintain low tree, shrub and herb plant communities on the ROW.
Maintenance	Maintenance trails to be maintained to reduce line of sight for hunters and predators.
Ground Inspection	Annual ground inspection of towers to occur late in winter season to avoid creating packed snow trails that facilitate predator use of the ROW.
Access Roads and Trails	Manitoba Hydro access routes required for construction will be decommissioned in accordance with MCWS review and approval, unless required for operations.

GHA 19A Sensitive Moose Range

Location: Southeast of Cowan and east of Pine River in GHA 19A (Figure 6).

Length of ROW in Sensitive Moose Range: 8 km

Description: Bipole III transmission line traverses an area of forest and wetland in a relatively inaccessible area east of Duck Mountain.

Rationale for selection: The range was deemed to be sensitive based on it being an area of winter use by moose coming off of the Duck Mountains in a previously inaccessible area. Moose population in GHA 19A is under pressure. This area is also subject to Bipole III *Environment Act* licence clause 49 which prescribes specific mitigation measures for moose protection in a portion of GHA 19A.



**Table 6: GHA 19A Sensitive Moose Range Mitigation Measures
(New mitigation measures or measures modified from those listed in Appendix A)**

Mitigation Topic	Transmission Mitigation
ROW Use	Manitoba Hydro will not support development of designated motorized recreational trail use within areas described above if requested.
Clearing	In compliance with Licence clause 49 only tower locations, danger trees, and trees in excess of 17 m in height can be cleared along an 8 km stretch that is currently inaccessible.
Ground Inspection	Annual ground inspection of towers to occur late in winter season to avoid creating packed snow trails that facilitate predator use of the ROW.
Access Roads and Trails	Manitoba Hydro access routes required for construction will be decommissioned in accordance with MCWS review and approval, unless required for operations.

Appendix A:

Mitigation Measures Reviewed from Original Bipole III Documentation

Table A-1: Woodland Caribou Related Mitigation Measures

(Source: Bipole III Commitments Table and draft Construction Phase Environmental Protection Plans)

Mitigation Topic	Transmission Mitigation
Boreal Woodland Caribou	Timing of construction (winter) will mitigate sensory disturbance on females during calving and calf rearing in calving areas.
Boreal Woodland Caribou	Natural low tree cover in the Wabowden and Bog ranges will be maintained in core winter use areas and known and potential calving areas to maintain natural functional structure to encourage ongoing use by boreal woodland caribou. Boreal woodland caribou in the Wabowden area have demonstrated movement north and south of the FPR. Natural vegetation corridors for wildlife will be developed on the FPR in strategic locations through the maintenance of naturally low vegetations such as black spruce and tamarack. Strategic locations will be determined through the analysis of current telemetric data and in consultation with Manitoba Conservation.
Boreal Woodland Caribou	In the Wabowden range, robust and effective access control to the right-of-way from PTH #6 will be applied near core use areas. This will be based on site specific conditions and methods that halt or limit ATV and snowmobile traffic. Methods include gates (during construction) and the spreading of debris, ditching and trenching (post construction). Natural vegetation will be encouraged and where necessary planting of trees will occur to discourage future snowmobile and ATV access into core winter and summer use areas.
Boreal Woodland Caribou	Future maintenance along the right-of-way during operations will involve helicopter access and minimize snow packing in the Wabowden Range. In other areas development of Manitoba Hydro snowpack trails will be limited in core winter areas to minimize potential predator effects into core areas and potential illegal hunting activities.
Boreal Woodland Caribou	Limiting recreational use and travel by ATVs and snowmobiles along the right-of-way in the core winter use areas and known potential calving areas (Bipole III Caribou Technical Report 2011) will be encouraged to reduce sensory disturbances and minimize functional habitat loss.

Mitigation Topic	Transmission Mitigation
Boreal Woodland Caribou	Ancillary access and other project footprints (staging areas) will be located to avoid core use areas and reduce potential disturbance, functional habitat loss, and temporary range fragmentation. Areas temporarily cleared for Project construction will be rehabilitated through the planting of native vegetation to facilitate a quick recovery to natural low growing vegetation that will provide security cover to encourage animal movement across the right-of-way in future.
Boreal Woodland Caribou	Long term monitoring of the boreal caribou ranges intersected by the Project will continue and include population monitoring, and assessment of recruitment and mortality. Data will be gathered through satellite collaring and assessments will be conducted on sensory disturbance and avoidance of the right-of-way and overall range fragmentation.
Boreal Woodland Caribou	Monitoring of wolves will be conducted in all boreal woodland caribou ranges intersecting the Project using aerial surveys and satellite tracking studies to determine use of the right-of-way and increased predation.
Boreal Woodland Caribou	Studies will be initiated on the effects of black bears and the potential effects of the right-of-way on bear activity and predation in calving areas near the right-of-way in the Wabowden range.
Boreal Woodland Caribou	Maintenance of low tree cover and the development of natural vegetation corridors will also minimize predator flow through these critical habitats and discourage human use of the right-of-way for snowmobile travel and other uses. Emphasis will be placed on the Wabowden range in core use areas natural vegetation corridors will also be implemented in The Bog range.
Access Roads and Trails (PC-1)	Access roads and trails no longer required will be decommissioned and rehabilitated in accordance with the Rehabilitation and Vegetation Management Plan.
Access Roads and Trails (PC-1)	Existing access roads, trails or cut lines will be used to the extent possible. Permission to use existing resource roads (i.e. forestry roads (North/South Jonas roads) will be obtained.
Access Roads and Trails (PC-1)	MCWS Work Permits will be obtained prior to the commencement of the project.
Access Roads and Trails (PC-1)	Public use of decommissioned access routes will be controlled through the Access Management Plan.
Access Roads and Trails (PC-1)	Public use of project controlled access roads and trails during construction will be controlled through the Access Management Plans.
Access Roads and Trails (PC-1)	Access roads and trails required for future monitoring, inspection or maintenance will be maintained in accordance with the Access Management Plan.
Access Roads and Trails (PC-1)	Vegetation control along access roads and trails will be in accordance with Rehabilitation and Vegetation Management Plan.

Mitigation Topic	Transmission Mitigation
Access Roads and Trails (PC-1)	Access roads and trails will be constructed to a minimum length and width to accommodate the safe movement of construction equipment.
Access Roads and Trails (PC-1)	Access roads and trails will be located, constructed, operated and decommissioned in accordance with contract specifications.
Access Roads and Trails (PC-1)	Bypass trails, sensitive sites and buffer areas will be clearly marked prior to clearing.
Access Roads and Trails (PC-1)	Contractor will be restricted to established roads and trails, and cleared construction areas in accordance with the Access Management Plan.
Construction Camps (PC-3)	Feeding or harassment of any wildlife is prohibited.
Construction Camps (PC-3)	Hunting and uncontrolled Fishing will not be permitted within the project footprint.
Management Measures (MM)	All licenses, permits, contracts, project specifications, guidelines and other applicable documents will be in the possession of both the Contractor and Manitoba Hydro prior to commencement of work.
Management Measures (MM)	Relevant documents including licenses, permits, approvals, legislation, guidelines, environmental protection plans, orthophotos maps, etc will be made available to all project participants.
Management Measures (MM)	The Contractor will obtain all licenses, permits, contracts and approvals other than those that are Manitoba Hydro's responsibility prior to project start-up.
Management Measures (MM)	Manitoba Hydro will meet the Contractor at the beginning of each new contract to review environmental protection requirements including mitigation measures, inspections and reporting.
Rights-of-Way (PC-8)	Access to transmission line rights-of-way for clearing and construction will utilize existing roads and trails to the extent possible.
Rights-of-Way (PC-8)	Access to transmission line rights-of-way will be closed, signed and/or controlled in accordance with an Access Management Plan.
Rights-of-Way (PC-8)	Additional clearing outside established rights-of-way will be approved by the Construction Supervisor/Site Manager prior to clearing and may require an amendment to contract specifications.
Rights-of-Way (PC-8)	Clearing and disturbance will be limited to defined rights-of-way and associated access routes to the extent possible.
Rights-of-Way (PC-8)	Clearing of rights-of-way will occur under frozen or dry ground conditions during established timing windows to minimize rutting and erosion where applicable.
Rights-of-Way (PC-8)	Disturbed areas along transmission line rights-of-way will be rehabilitated in accordance with site Rehabilitation and Vegetation Management Plan.
Rights-of-Way (PC-8)	Environmentally sensitive sites, features and areas will be identified and mapped prior to clearing.
Wildlife Protection (EC-9)	Any wildlife killed or injured by vehicles will be reported to Manitoba Conservation.

Mitigation Topic	Transmission Mitigation
Wildlife Protection (EC-9)	No firearms will be permitted at construction sites.
Wildlife Protection (EC-9)	Orientation for Contractor and Manitoba Hydro employees will include awareness of environmental protection measures for wildlife and wildlife habitat.
Wildlife Protection (EC-9)	Problem wildlife will be reported immediately to Manitoba Conservation and Water Stewardship.
Wildlife Protection (EC-9)	Trails through or near important habitat types will be managed in accordance with the Access Management Plan.
Wildlife Protection (EC-9)	Vehicles will not exceed posted speed limits and wildlife warning signs may be installed in high density areas and at known crossings locations as a result of wildlife monitoring.
Wildlife Protection (EC-9)	Wildlife and wildlife habitat will be protected in accordance with provincial and federal legislation and provincial and federal guidelines,
Wildlife Protection (EC-9)	Wildlife will not be fed, befriended or harassed at construction areas.
Wildlife Protection (EC-9)	Understory vegetation will be managed at access routes to limit line of sight.
Wildlife Protection (EC-9)	New by-pass trails and access routes will be sited where possible to utilize existing natural terrain features and existing vegetation to minimize line of site.
Wildlife Protection (EC-9)	Boundaries of important wildlife habitats will be flagged by prior to commencement of construction.
Wildlife Protection (EC-9)	Clearing will occur during late fall and winter to the extent possible to avoid the spring/summer nesting season for birds and parturition times for mammal species and breeding windows for frog species
Wildlife Protection (EC-9)	Construction activities will not be carried out during prescribed timing windows for wildlife species.
Wildlife Protection (EC-9)	Hunting and harvesting of wildlife by project staff will not be permitted while working on the project sites.

Table A-2: Moose Sensitive Range Mitigation Measures

(Source: Bipole III Commitments Table and draft Construction Phase Environmental Protection Plans)

Mitigation Topic	Transmission Mitigation
Moose	In the northern areas disturbances from construction activities will occur during winter which will avoid the sensitive parturition period near potential moose calving sites such as bogs and wetlands.
Moose	Hunting by Project personnel will be prohibited and firearms restricted in work camps and use of access roads for the Local Study Area by hunters limited during construction to minimize moose mortality.
Moose	Pre-construction surveys will be conducted to identify and locate mineral licks, and specific protection prescriptions developed based on site and environmental conditions.
Access Roads and Trails (PC-1)	Access roads and trails no longer required will be decommissioned and rehabilitated in accordance with the Rehabilitation and Vegetation Management Plan.
Access Roads and Trails (PC-1)	Existing access roads, trails or cut lines will be used to the extent possible. Permission to use existing resource roads (ie forestry roads (North/South Jonas roads) will be obtained.
Access Roads and Trails (PC-1)	MCWS Work Permits will be obtained prior to the commencement of the project.
Access Roads and Trails (PC-1)	Public use of decommissioned access routes will be controlled through the Access Management Plan.
Access Roads and Trails (PC-1)	Public use of project controlled access roads and trails during construction will be controlled through the Access Management Plans.
Access Roads and Trails (PC-1)	Access roads and trails required for future monitoring, inspection or maintenance will be maintained in accordance with the Access Management Plan.
Access Roads and Trails (PC-1)	Vegetation control along access roads and trails will be in accordance with Rehabilitation and Vegetation Management Plan.
Access Roads and Trails (PC-1)	Access roads and trails will be constructed to a minimum length and width to accommodate the safe movement of construction equipment.
Access Roads and Trails (PC-1)	Access roads and trails will be located, constructed, operated and decommissioned in accordance with contract specifications.
Access Roads and Trails (PC-1)	Bypass trails, sensitive sites and buffer areas will be clearly marked prior to clearing.
Access Roads and Trails (PC-1)	Contractor will be restricted to established roads and trails, and cleared construction areas in accordance with the Access Management Plan.
Management Measures (MM)	All licenses, permits, contracts, project specifications, guidelines and other applicable documents will be in the possession of both the Contractor and Manitoba Hydro prior to commencement of work.

Mitigation Topic	Transmission Mitigation
Management Measures (MM)	Relevant documents including licenses, permits, approvals, legislation, guidelines, environmental protection plans, orthophotos maps, etc will be made available to all project participants.
Management Measures (MM)	The Contractor will obtain all licenses, permits, contracts and approvals other than those that are Manitoba Hydro's responsibility prior to project start-up.
Management Measures (MM)	Manitoba Hydro will meet the Contractor at the beginning of each new contract to review environmental protection requirements including mitigation measures, inspections and reporting.
Rights-of-Way (PC-8)	Access to transmission line rights-of-way for clearing and construction will utilize existing roads and trails to the extent possible.
Rights-of-Way (PC-8)	Access to transmission line rights-of-way will be closed, signed and/or controlled in accordance with an Access Management Plan.
Rights-of-Way (PC-8)	Additional clearing outside established rights-of-way will be approved by the Construction Supervisor/Site Manager prior to clearing and may require an amendment to contract specifications.
Rights-of-Way (PC-8)	Clearing and disturbance will be limited to defined rights-of-way and associated access routes to the extent possible.
Rights-of-Way (PC-8)	Clearing of rights-of-way will occur under frozen or dry ground conditions during established timing windows to minimize rutting and erosion where applicable.
Rights-of-Way (PC-8)	Disturbed areas along transmission line rights-of-way will be rehabilitated in accordance with site Rehabilitation and Vegetation Management Plan.
Rights-of-Way (PC-8)	Environmentally sensitive sites, features and areas will be identified and mapped prior to clearing.
Wildlife Protection (EC-9)	Any wildlife killed or injured by vehicles will be reported to Manitoba Conservation.
Wildlife Protection (EC-9)	No firearms will be permitted at construction sites.
Wildlife Protection (EC-9)	Orientation for Contractor and Manitoba Hydro employees will include awareness of environmental protection measures for wildlife and wildlife habitat.
Wildlife Protection (EC-9)	Problem wildlife will be reported immediately to Manitoba Conservation and Water Stewardship.
Wildlife Protection (EC-9)	Trails through or near important habitat types will be managed in accordance with the Access Management Plan.
Wildlife Protection (EC-9)	Vehicles will not exceed posted speed limits and wildlife warning signs may be installed in high density areas and at known crossings locations as a result of wildlife monitoring.
Wildlife Protection (EC-9)	Wildlife and wildlife habitat will be protected in accordance with provincial and federal legislation and provincial and federal guidelines,

Mitigation Topic	Transmission Mitigation
Wildlife Protection (EC-9)	Wildlife will not be fed, befriended or harassed at construction areas.
Wildlife Protection (EC-9)	Understory vegetation will be managed at access routes to limit line of sight.
Wildlife Protection (EC-9)	New by-pass trails and access routes will be sited where possible to utilize existing natural terrain features and existing vegetation to minimize line of site.
Wildlife Protection (EC-9)	Boundaries of important wildlife habitats will be flagged by prior to commencement of construction.
Wildlife Protection (EC-9)	Clearing will occur during late fall and winter to the extent possible to avoid the spring/summer nesting season for birds and parturition times for mammal species and breeding windows for frog species.
Wildlife Protection (EC-9)	Construction activities will not be carried out during prescribed timing windows for wildlife species.
Wildlife Protection (EC-9)	Hunting and harvesting of wildlife by project staff will not be permitted while working on the project sites.