

Appendix 13-1

Scoping of VCs Predicted to Experience Residual Effects of the Project

Appendix 13-1: Scoping of VCs Predicted to Experience Residual Environmental Effects of the Project

Valued Component	Location of Project Effects Assessment Information in EIS	Summary of Residual Project Effects	Spatial Extent of Residual Effect ¹	Temporal Extent (Duration) of Residual Effect ¹	Potential for Significant Adverse Cumulative Effects?
Surface Water	Chapter 7, Sections 7.2 and 7.3.1	<ul style="list-style-type: none"> Minor and localized alteration of surface drainage patterns adjacent to the P4 all-season road. Minor alterations of ice dynamics at waterbody crossings. 	Low (Level I)	High (Level III)	Low
Air Quality	Chapter 7, Sections 7.2 and 7.3.2	<ul style="list-style-type: none"> Minor and temporary increase in fugitive dust and vehicle/machinery emission levels (greenhouse gases and VOCs) due to Project construction and operations and maintenance activities (e.g., clearing and woody debris burning, blasting, roadbed construction and maintenance works). Minor and localized fugitive dust and emissions (greenhouse gases and VOCs) from vehicles using the road during the operations and maintenance phase. Minor loss of carbon sink (i.e., removal of vegetation) for permanent Project components (i.e., the P4 all-season road and quarries required for on-going maintenance) and on-going vegetation maintenance along the all-season road right-of-way. 	Low to Moderate (Level II to III)	High (Level III)	Low
Noise and Vibration	Chapter 7, Sections 7.2 and 7.3.3; Chapter 9, Section 9.2.5	<ul style="list-style-type: none"> Minor and temporary sensory disturbance to wildlife due to noise and/or vibrations. Minor and temporary sensory disturbance to local communities/people due to noise and/or vibrations. 	Moderate (Level II)	Low (Level I)	Low
Fish Habitat, Fish and Harvested Fish, and Aquatic Species at Risk	Chapter 8, Sections 8.2 and 8.3	<ul style="list-style-type: none"> Permanent destruction of a maximum of 206.5 m² of instream habitat and 180 m of riparian zone habitat. 	Low (Level I)	High (Level III)	Low
Vegetation Communities	Chapter 9, Section 9.2.4.1	<ul style="list-style-type: none"> Loss or impairment of vegetation communities in the Project Footprint due to clearing of vegetation. Introduction and spread of non-native and invasive species in 	Low to Moderate (Level II to III)	High (Level III)	Low

Valued Component	Location of Project Effects Assessment Information in EIS	Summary of Residual Project Effects	Spatial Extent of Residual Effect ¹	Temporal Extent (Duration) of Residual Effect ¹	Potential for Significant Adverse Cumulative Effects?
		the Project Footprint or Local Assessment Area.			
Plant Species of Cultural Importance	Chapter 9, Section 9.2.4.2	<ul style="list-style-type: none"> ▪ Loss or impairment of plants species of cultural importance in the Project Footprint due to clearing of vegetation. ▪ Introduction and spread of non-native and invasive species in the Project Footprint or Local Assessment Area. 	Low to Moderate (Level I to II)	High (Level III)	Low
Ungulate: Moose	Chapter 9, Section 9.2.5.1	<ul style="list-style-type: none"> ▪ Loss, alteration and fragmentation of moose habitat. ▪ Temporary sensory disturbance. 	Low (Level I)	Low to High (Level I to III)	Low
Ungulate: Boreal Woodland Caribou	Chapter 9, Section 9.2.5.2	<ul style="list-style-type: none"> ▪ Loss, alteration and fragmentation of habitat. ▪ Temporary sensory disturbance. 	Low (Level I)	Low to High (Level I to III)	Low
Furbearer: Beaver	Chapter 9, Section 9.2.5.3	<ul style="list-style-type: none"> ▪ Loss, alteration and fragmentation of habitat. ▪ Temporary sensory disturbance. 	Low (Level I)	High (Level III)	Low
Furbearer: Marten	Chapter 9, Section 9.2.5.4	<ul style="list-style-type: none"> ▪ Loss, alteration and fragmentation of habitat. ▪ Temporary sensory disturbance. 	Low (Level I)	High (Level III)	Low
Migratory Birds: Forest Birds	Chapter 9, Section 9.2.5.5	<ul style="list-style-type: none"> ▪ Loss, alteration and fragmentation of habitat. ▪ Temporary sensory disturbance. 	Low (Level I)	High (Level III)	Low
Migratory Birds: Waterbirds	Chapter 9, Section 9.2.5.6	<ul style="list-style-type: none"> ▪ Loss, alteration and fragmentation of habitat. ▪ Temporary sensory disturbance. 	Low (Level I)	High (Level III)	Low
Environmentally Sensitive Wildlife Sites	Chapter 9, Section 9.2.5.7	<ul style="list-style-type: none"> ▪ Loss, alteration or physical disturbance of overwintering dens, heron rookeries, hibernacula, large stick nests or mineral licks. ▪ Temporary sensory disturbance. 	Low (Level I)	Low to High (Level I to III)	Low
Herptiles (Amphibians and Reptiles)	Chapter 9, Section 9.2.5.8	<ul style="list-style-type: none"> ▪ Increased mortality due to vehicle collisions. ▪ Loss or alteration of breeding or feeding habitat due to construction or operations and maintenance activities located near waterbody or bog and fen areas having suitable habitat 	Low (Level I)	Low to High (Level I to III)	Low

Valued Component	Location of Project Effects Assessment Information in EIS	Summary of Residual Project Effects	Spatial Extent of Residual Effect ¹	Temporal Extent (Duration) of Residual Effect ¹	Potential for Significant Adverse Cumulative Effects?
		for the species.			
Tourism*	Chapter 10, Sections 10.2.4.1 and 10.3	<ul style="list-style-type: none"> Potential for Increase in tourism business opportunities in the Local assessment area. Temporary reduced interest in tourist activities due to disturbance of tourism-related activities in the Local or Regional Assessment Areas. 	Low (Level I) for temporary disturbance effect; Moderate (Level II) for increased tourism opportunities	Low (Level I) for temporary disturbance effect; High (Level III) for increased tourism opportunities	Low
Hunting, Trapping, Fishing and Gathering	Chapter 10, Sections 10.2.4.2 and 10.3	<ul style="list-style-type: none"> During project construction, temporary impairment of traditional resource use (hunting, trapping, fishing and gathering) and licensed resource use (hunting, fishing) including limited access or detoured access to land trails and waterways used to access those resources use areas. Increased access to new areas for hunting, trapping, fishing and gathering areas for edible, medicinal and cultural plants. 	Low (Level I) for temporary disturbance effect; Moderate (Level II) for increased access effect	Low (Level I) for temporary impairment effect; High (Level III) for access improvement effect	Low
Travel Routes	Chapter 10, Sections 10.2.4.3 and 10.3	<ul style="list-style-type: none"> Temporary limited access or detoured access to travel routes including land trails and waterway routes that intersect with the Project right-of-way (during project construction and maintenance activities). The Project represents a substantial additional travel route (P4 all-season road) that is connected to the southern Manitoba road network. The Project provides access to new potential travel routes that may be established off the P4 all-season road. 	Low (Level I)	Moderate (Level II)	Low
Cultural Heritage and	Chapter 10, Sections 10.2.4.4	<ul style="list-style-type: none"> Refer to the above VCs regarding hunting, trapping, fishing, gathering and travel routes as aspects of cultural heritage 	N/A (no adverse)	N/A (no adverse)	N/A

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Archaeological Resources	and 10.3	resources. <ul style="list-style-type: none"> No residual adverse effects on cultural, heritage, and archaeological resources are anticipated. 	residual effects anticipated)	residual effects anticipated)	
Human Health and Safety	Chapter 10, Sections 10.2.4.5 and 10.3	<ul style="list-style-type: none"> Minor risk to health of road users from accidents or collisions. The Project provides a substantial improvement and benefit to all-season travel for community members. 	Low (Level I)	Low (Level I)	Low
		<ul style="list-style-type: none"> Minor risk to health of community members and road users from changes to drinking water quality, air quality and noise exposure levels 	High (Level III)	Low to High (Level I to III)	Low
		<ul style="list-style-type: none"> Minor risk to the health of community members from changes to the availability or quality of country foods (short-term during construction and long-term operation). 	Low to High (Level I to III)	Low to High (Level I to III)	Low

¹ See column #2 for location of temporal ('duration') and spatial ('extent') assessment information for each VC and see Chapter 6, Table 6.3 for those assessment criteria definitions. Chapter 15, Appendix 15-1 provides a summary of residual effects for each VC.

Note: *Potential effects to tourism are considered positive. Therefore, the 'tourism' VC is not carried forward in the cumulative effects analysis.