

**Table 7.3.1-1: Summary of Valued Components (VCs) and Residual Adverse Effects**

Discipline	Valued Components (VCs)	Indicators	Residual Adverse Effects
Terrain and soils	Natural landscapes	Viewscales	Yes
	Overburden	Erosion of disturbed overburden	—
	Soil chemistry	Changes in soil chemistry	—
Geology and Geochemistry	Pit lake water quality	Concentrations of indicator compounds	Yes
Noise	Environmental noise levels	Equivalent noise levels, $L_{EQ}$	Yes
	Noise disturbance to wildlife (including SAR)	Area predicted $L_{EQ}$ above 50 dBA	Yes
	Blasting noise and vibration	Peak sound pressure level	Yes
		Peak particle velocity	Yes
Noise (continued)	Noise related health effects	Absolute sound pressure, $L_{DN}$	Yes
		Percent highly annoyed, %HA	Yes
Light	Light trespass	Ambient light levels	—
Air quality	Air quality	Concentrations of indicator compounds	Yes
Climate	Project GHG emissions	Annual equivalent carbon dioxide emissions ( $eCO_2$ )	Yes
	Changes in climate due to the Project	Changes in annual temperature	—
		Changes in annual precipitation	—
Surface water quality	Surface water quality	Concentrations of indicator compounds	Yes
Surface water quantity	Surface water quantity	Increase in surface water flows	Yes
		Decrease in surface water flows	Yes
		Change in lake levels	—
Groundwater quality	Groundwater quality	Concentrations of indicator compounds	—
Groundwater quantity	Groundwater quantity	Decrease in groundwater elevations in private water wells	—
Wildlife and wildlife habitat	Wildlife Species at Risk	Common Nighthawk	Yes
		Northern Myotis/Little Brown Myotis	Yes
		Barn Swallow	Yes
	Ungulates	Moose	Yes
	Furbearers	American Marten	Yes
		American Beaver	Yes
	Upland birds	Upland birds	Yes
	Wetland birds	Marsh birds	Yes
	Small mammals	Small mammals	Yes
	Reptiles and amphibians	Reptiles and amphibians	Yes
Invertebrates	Terrestrial invertebrates	Yes	
Migratory Birds	Upland birds	Upland birds	Yes
	Wetland birds	Marsh birds	Yes
Fish and fish habitat	Stream-resident fish populations	Direct loss or alteration of habitat	Yes
		Changes in flows or water levels	—

**Table 7.3.1-1: Summary of Valued Components (VCs) and Predicted Residual Effects (continued)**

Discipline	Valued Components (VCs)	Indicators	Residual Adverse Effects
		Changes in water quality	—
		Blasting	—
	Migratory fish populations	Direct loss or alteration of habitat	—
		Changes in flows or water levels	—
		Changes in water quality	—
		Blasting	—
Fish and fish habitat (continued)	Lake-resident fish populations	Direct loss or alteration of habitat	—
		Changes in flows or water levels	—
		Changes in water quality	—
		Blasting	—
	Fish species-at-risk	Direct loss or alteration of habitat	—
		Changes in flows or water levels	—
		Changes in water quality	—
		Blasting	—
Wetlands and vegetation	Wetlands	Wetland extent	Yes
		Wild rice	—
		Floating Marsh Marigold ( <i>Caltha natans</i> )	—
	Vegetation communities	Predominantly coniferous forest	Yes
		Predominantly deciduous forest	Yes
		Successional areas	Yes
		Potential berry harvesting areas	Yes
Land use	Land Use Planning and Policies	Conflict with accepted land uses as stipulated in approved land use plans.	—
		Overlap with protected areas.	—
	Aggregate Operations	Change in access to aggregate resources.	—
		Change in demand of aggregate resources extraction.	—
	Forestry	Change in access to forestry resources.	—
		Loss of forestry resources.	Yes
	Mineral Exploration	Change in access to mineral claims for exploration and production.	—
	Fishing - Recreational and Commercial	Change in access to fisheries resources.	—
		Change in the abundance of fisheries resources.	—
		Change in contaminant levels in fish	—
		Diminished experience of being on the land.	Yes
	Hunting	Change in access to wildlife resources.	Yes

**Table 7.3.1-1: Summary of Valued Components (VCs) and Predicted Residual Effects (continued)**

Discipline	Valued Components (VCs)	Indicators	Residual Adverse Effects
		Change in abundance of wildlife resources.	Yes
		Diminished experience of being on the land	Yes
	Trapping	Change in access to wildlife resources.	Yes
		Change in abundance of wildlife resources.	Yes
		Diminished experience of being on the land	Yes
	Cottagers and Outfitters	Diminished experience of being on the land.	Yes
	Land use (continued)	Cottagers and Outfitters (continued)	Change in access to cottage and/or outfitter areas.
Changes in clientele for outfitters with lodges located near the Project.			Yes
Other Recreational Uses		Change in access for residents and visitors to public lands for non-consumptive purposes	—
		Change in access for residents and visitors to public lands for consumptive purposes.	Yes
		Change in abundance of berries, mushrooms and/or other vegetation used for consumption	Yes
		Diminished experience of being on the land.	Yes
Social		Population demographics	Population change
	Education	Capacity of education services	Yes
		Education attainment	Yes
		Project-specific Training	Yes
	Infrastructure and services	Municipal Services	Yes
		Community services (e.g., health, social services)	Yes
	Housing and property values	Housing availability	Yes
		Property values	Yes
	Public safety	Crime rate	Yes
		Capacity of emergency services	Yes
		Requests for emergency services by Project	Yes
Transportation and traffic	Road network capacity and conditions	Yes	
Economic	Labour force, labour participation and employment	Labour income employment	Yes
	Income levels	Income levels and categories	Yes
	Cost of living	Current prevailing cost of living	Yes
	Real estate	Housing prices and affordability	Yes
	Economic development	Municipal taxes and contribution to economic development projects	Yes

**Table 7.3.1-1: Summary of Valued Components (VCs) and Predicted Residual Effects (continued)**

Discipline	Valued Components (VCs)	Indicators	Residual Adverse Effects
	Existing businesses	Local business availability	Yes
	Government revenues	Taxes and revenues	Yes
Human health	Non-Indigenous Human Health	Subsurface/Construction Worker	—
		Outdoor Worker	—
		Indoor Worker	—
		Site Visitor, or Harvester	—
		Resident	—
Human health (continued)	Indigenous Human Health	Resident	—
		Site Visitor, or Harvester	—
		Subsurface/Construction Worker	—
		Outdoor Worker	—
		Indoor Worker	—
Heritage resources	Archaeological sites	Archaeological sites	—
	Historic heritage sites	Historic heritage sites	—
Aboriginal Peoples	Human Health	Risk Assessment for Indigenous Human Health	—
	Harvesting and gathering of plant material	Wild rice	—
		Berry Harvesting	Yes
		Medicinal plant harvesting	Yes
		Changes in access	Yes
		Diminished on-the-land experience	Yes
	Hunting	Ungulates	Yes
		Furbearers	Yes
		Waterfowl	Yes
		Changes in access	Yes
		Diminished on-the-land experience	Yes
	Trapping	Furbearers	Yes
		Changes in access	Yes
		Diminished on-the-land experience	Yes
	Fishing	Sport fish	—
		Baitfish	—
		Commercial fishing	—
		Changes in access	—
		Diminished on-the-land experience	Yes
	Cultural and spiritual	Cultural or spiritual sites	—
Traditional Travel routes		—	
Diminished on-the-land experience		Yes	

**Table 7.3.1-1: Summary of Valued Components (VCs) and Predicted Residual Effects (continued)**

Discipline	Valued Components (VCs)	Indicators	Residual Adverse Effects
	Socio-economic factors	Economic effects	Yes
		Social effects	Yes

Note: The “—” symbol denotes where no residual adverse effects were predicted for the discipline, VC and indicator. This could represent situations where no adverse effects were predicted, or where predicted adverse effects were fully mitigated, as detailed in Sections 6.2 through 6.21.



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**Table 7.3.1-1: Summary of Valued Components (VCs) and Predicted Residual Effects (continued)**