

Potential Effects Identification Matrix

Criteria	Construction						Operation						Decommissioning						Comments	Update Document Reference
	Potential Level of Effect						Potential Level of Effect						Potential Level of Effect							
	Unk	H-	L-	Nil	L+	H+	Unk	H-	L-	Nil	L+	H+	Unk	H-	L-	Nil	L+	H+		
General Environmental Considerations																				
Air quality				X						X						X			No New Impact	
Surface water quality				X						X						X			No New Impact	
Ground water quality				X						X						X			No New Impact	
Species at risk and their habitat				X						X						X			Updated SAR list includes new species. Biologists confirmed that no SAR have been recorded in the project area.	2012 Species at Risk List (Table3-22)
Significant earth or life science features				X						X						X			No New Impact	
Land subject to natural or human made hazards				X						X						X			No New Impact	
Terrestrial wildlife (numbers, diversity, distribution)				X						X						X			Updated Bird Species List, no new threatened species identified.	Bird Status Report (Appendix II)
Natural vegetation and habitat linkages			X							X						X			Construction of Submarine Cable will permanently alter 10 m of riparian land along bank for the length of the cable.	Submarine Cable Impacts on Fish Habitat (Table 1B)
Soils and sediment quality				X						X						X			No New Impact	
Significant natural heritage features and areas				X						X						X			No New Impact	
Aquatic and Riparian Ecosystem Considerations																				
Shoreline dependant species			X							X						X			Impacts associated with the inundation of existing wetlands and the temporary loss of habitat until new wetland and riparian vegetation is re-established.	Post-construction Impacts on Wetlands Above R1
Wetland dependant species			X							X						X			Impacts associated with the inundation of existing wetlands and the temporary loss of habitat until new wetland and riparian vegetation is re-established.	Post-construction Impacts on Wetlands Above R1
Fish habitat			X							X						X			Salmon spawning confirmed in 2011 studies; no significant impacts as potential was addressed in original report. Walleye studies showed no significant impacts. Impacts to benthics in the bypass, tailrace and headpond.	Results of 2011 Salm Spawning Studies (Aquatic Memo 3)
Fish migration				X						X						X			No New Impact	
Fisheries				X						X						X			No New Impact	
Erosion and sedimentation			X							X						X			Minor additional low potential for erosion/sedimentation identified in submarine cable impacts. Mitigation steps included.	Submarine Cable Impacts on Fish Habitat (Table 1B)
Fish injury or mortality (impingement and entrainment)				X						X						X			No New Impact	
Water levels, flows and movement (surface or groundwater)				X						X						X			Zone of Influence extended to include Upper Lizard and Lillie Lake, modeling of extended ZOI shows level changes within natural fluctuations at Upper Lizard Lake and Lillie Lake	General Project Arrangement Drawings: GA-1, Potential Impacts at Upper Lizard Lake and Lillie Lake (Table UL1)
Drainage, flooding and drought patterns				X						X						X			No New Impact	
Water temperature			X							X						X			Potential for water temperatures to change from uniformly mixed during all seasons to stratified during low flow in some areas. Impacts mitigable through design.	Updated Aquatic Baseline Data for Biomonitoring (Aquatic Memo 5)
Aboriginal Community Considerations																				
First Nation reserves and other Aboriginal communities				X						X						X			No New Impact	
Spiritual, ceremonial, cultural, archaeological or burial sites				X						X						X			No New Impact	

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	Unk	H-	L-	Nil	L+	H+	Unk	H-	L-	Nil	L+	H+	Unk	H-	L-	Nil	L+	H+		
Traditional land or resources used for harvesting activities				X						X						X			No New Impact	
Employment				X						X						X			No New Impact	
Lands subject to land claims				X						X						X			No New Impact	
Economic development				X						X						X			No New Impact	
Land and Resource Use Considerations																				
Access to inaccessible areas (land or water)				X						X						X			No New Impact	
Navigation				X						X						X			No New Impact	
Riparian rights or privileges				X						X						X			No New Impact	
Recreational use - (land or water)				X						X						X			No New Impact	
Angling and hunting opportunities				X						X						X			No New Impact	
Trapping activities				X						X						X			No New Impact	
Baitfish harvesting activities				X						X						X			No New Impact	
Views or aesthetics				X						X						X			No New Impact	
An existing land or resource management plan				X						X						X			No New Impact	
An existing water management plan				X						X						X			No New Impact	
Protected areas				X						X						X			No New Impact	
Cultural Heritage Resources Considerations																				
Archaeological sites				X						X						X			No New Impacts	
Buildings or structures				X						X						X			No New Impacts	
Cultural heritage landscapes				X						X						X			No New Impacts	
Social and Economic Considerations																				
The location of people, businesses, institutions or public facilities				X						X						X			No New Impacts	
Community character, enjoyment of property or local amenities				X						X						X			No New Impacts	
Employment				X						X						X			No New Impacts	
Public health and/or safety				X						X						X			No New Impacts	
Local, regional or provincial economies				X						X						X			No New Impacts	
Tourism values				X						X						X			No New Impacts	
Water supply				X						X						X			No New Impacts	
Aesthetic image of the surrounding area				X						X						X			No New Impacts	
Energy/Electricity Considerations																				
Reliability				X						X						X			No New Impacts	
Security				X						X						X			No New Impacts	
Electricity flow patterns				X						X						X			No New Impacts	