<u>Name of Project</u>: Renewal of existing disposition: extending the term of occupation for existing cottage lots in Algonquin Provincial Park (the project).

Table 4.1: Screening Criteria (Source: Class Environmental Assessment for Provincial Parks and Conservation Reserves, 2005)

The reviewer should read each criterion as beginning with the phrase: "This project may affect....". All criteria apply to the environment inside as well as outside the provincial park or conservation reserve. Note: In this screening table, a "nil" rating of the potential net effect means that the project is not anticipated to have a measurable effect on that criteria.

	Rating of Potential Net Effect								
Screening Criteria "This project may affect"	-Н	-M	-L	Nil	Unk	+L	+M	+H	Comments, Rationale
■ Values for which the provincial park or conservation reserve was established			X						Since its inception in 1893, Algonquin has served as a multipurpose park with multiple objectives (e.g. protection of natural and cultural heritage resources, recreation including private cottaging, interpretive/education opportunities, hunting, fishing, timber harvesting, scientific research). Since the establishment of the first cottage lots in Algonquin in 1905, modern day infrastructure and technologies (e.g., roads, cars, generators, off-grid technologies, etc.) have made the park easier to access, providing increased opportunity for cottagers to stay for longer periods which as a result has intensified the environmental effects of cottages and their associated uses. The potential net effects on many of the values for which the park was established have been assessed/described elsewhere in this table. Overall, there is a high degree of certainty that cottages and their associated uses would have a net negative effect on some park values. Potential negative environmental effects associated with the cottages and associated uses would be mitigated, to the extent possible, through conditions imposed through the tenure instrument, including some new conditions that would limit certain activities carried out on the cottage lots.

		F	Rating	of Po	tential I	let Eff	ect		
Screening Criteria "This project may affect"	-н	-М	-L	Nil	Unk	+L	+M	+H	Comments, Rationale
			1	Natur	al Env	/ironi	ment (Consi	iderations
■ Air quality			X						The effects on air quality from the cottages and their associated uses (e.g., wood burning stoves/fireplaces, generator and propane use) are anticipated to be of minimal significance. Conditions including, but not limited to, those described in the project description would mitigate, to the extent possible, the net negative effects of cottages and their associated uses on air quality.
■ Water quality or quantity (ground or surface)		A	В						There is a high degree of certainty that there would be a net negative effect on water quality as some lakes on the Precambrian shield are known to be sensitive to anthropogenic sources of nutrients. Water quality data are not available for every cottage lake in Algonquin. However, dissolved oxygen and total phosphorus data is available for some lakes. Based on this, two cottage lakes (Cache and Galeairy) are known to have dissolved oxygen levels that are below the levels established by MNR for the protection of lake trout in inland lakes on the Precambrian shield, and two cottage lakes (Brule and Whitefish) were found to have phosphorus levels that are higher than would be normally expected for those lakes (i.e. oligotrophic lakes). A number of water quality studies on lakes outside of the park but within the same or adjacent watersheds have shown that shoreline development does have negative effects on water quality. Further studies would be required to determine the <i>level of impact</i> that can be attributed to cottages and their associated uses specifically. The effects are anticipated to be: A: greater on lakes with a higher density of cottage lots, and B: lower on lakes with a lower density of cottage lots.

		F	Rating	of Pot	ential N	let Eff	ect		
Screening Criteria "This project may affect"	-н	-М	-L	Nil	Unk	+L	+M	+H	Comments, Rationale
									As the cottages are located on three secondary and seven quaternary watersheds in the park, the net negative effects on water quality could extend downstream.
									Conditions including, but not limited to, those described in the project description would mitigate, to the extent possible, the net negative effects of cottages and their associated uses on water quality.
■ Species at risk (SAR) or their habitat			Х						SAR and their habitat are known to occur on or in the vicinity of some cottage lots. The full extent of the effects on SAR are unknown.
									Activities on cottage lots may subsidize SAR predators (e.g., raccoons, foxes subsidized by improperly stored food, feeding, etc.) which may increase predation on some species at risk populations.
									Impacts to some SAR (e.g. large mammals) may be limited to behavioural changes such as avoiding of areas with cottages, although this is not likely to hinder the survival of these individuals in the park.
									For clarity, cottagers would be required to follow all other relevant legislation and policies including the <i>Endangered Species Act</i> .
Significant earth or life science features					Х				Based on coarse level data sources, six cottage lots intersect with two landform – vegetation types (19-44 and 19-27) that are below the minimum representation targets in Ecodistrict 5E-9 and 5E-10, respectively. Further studies would be required to confirm the boundaries of the landform-vegetation types and the specific impacts of the project (if any) on those landform – vegetation types.
Fish or other aquatic species, communities,		Α	В						Some cottage lots on Smoke Lake were found to occur in the

		F	Rating	of Pot	ential N	let Eff	ect		
Screening Criteria "This project may affect"	-н	-М	-L	Nil	Unk	+L	+M	+H	Comments, Rationale
or their habitat (including numbers, diversity and movement of resident or migratory species)									vicinity of lake trout spawning habitat (spawning habitat has not been mapped on the remaining cottage lakes). Although brook trout spawning habitat has not been specifically mapped on the cottage lakes, few cottage lots were found to coincide with areas that have the potential to be brook trout spawning or nursery areas (i.e., groundwater recharge and discharge areas). Cache Lake is the only lake where there is a known significant overlap between the cottage lots and groundwater recharge/discharge areas. A few cottage lots on ten other lakes may overlap with groundwater recharge and discharge areas. Given that there is a high degree of certainty that a net negative effect on water quality would occur on at least some lakes, (see above, water quality/quantity), it is anticipated a net negative effect on fish and other aquatic species and their habitat would also occur on at least some of the cottage lakes. Further studies would be required to determine the level of impact that can be attributed to cottages and their associated uses specifically. It is reasonable to anticipate that the effects on fish and other aquatic species and their habitat are anticipated to be: A: greater on lakes with a higher density of cottage lots, and B: lower on lakes with a lower density of cottage lots, the net negative effects of cottages and their associated uses on fish and other aquatic species and their associated uses on fish and other aquatic species and their habitat.
Land subject to natural or human-made hazards			X						Water levels within Algonquin are managed to maintain fish habitat, control downstream flooding and support recreational

		F	Rating	of Po	tential N	Net Eff	ect		
Screening Criteria "This project may affect"	-н	-М	-L	Nil	Unk	+L	+M	+H	Comments, Rationale
									uses, including cottages. Although, there are no lakes within the park where water levels are managed exclusively for cottages and their associated uses, some water level fluctuations are controlled primarily for cottaging thereby reducing natural disturbance.
 Recovery of a species under a special management program (e.g. elk restoration) 									Not applicable
■ Ecological integrity		A	В						The potential net effects on various components and processes that collectively make up ecological integrity (e.g., water quality, fish/aquatic species, terrestrial plants and wildlife, soils, drainage) have been assessed/described elsewhere in this table. Based on this, there is a high degree of certainty that cottages and their associated uses would have a net negative effect on ecological integrity. The effects are anticipated to be generally be: A: greater on lakes with a higher density of cottage lots, and B: lower on lakes with a lower density of cottage lots. Conditions including, but not limited to, those described in the project description would mitigate, to the extent possible, the net negative effects of cottages and their associated uses on ecological integrity.
 Terrestrial wildlife (including numbers, diversity and movement of resident or migratory species) 			X						The net effects of this project are anticipated to be of minimal significance to wildlife populations within the park. Collectively the cottage lots occupy a small portion of the park
									(a total of 131ha). Individuals of some species (i.e., bears, wolves, moose), may exhibit behavioural changes (e.g., some individuals may avoid cottage lots; other individuals may be attracted to cottages in looking for additional food sources, which may require MNR to

		F	Rating	of Pot	ential N	let Eff	ect		
Screening Criteria "This project may affect"	-н	-М	-L	Nil	Unk	+L	+M	+H	Comments, Rationale
									use non-lethal, and in some cases lethal, techniques to address wildlife that becomes a threat to human health and safety).
									There may be some localized fluctuations in small mammal populations (e.g., mice) within/around the cottage lots (e.g., increases of small mammals due to additional food sources brought in by cottagers, and the resulting potential for the trapping/killing some individuals).
									In addition, studies have shown differences in bird communities in areas of development versus undeveloped areas. Species more tolerant to humans are more abundant around cottage lots while those intolerant of humans are less so.
 Natural vegetation and terrestrial habitat linkages or corridors through fragmentation, alteration and/or critical loss 			X						In total, the cottage lots occupy 26km of the shoreline within the park. The amount of developed shoreline attributed to cottage lots was highest on Cache (25% shoreline development attributed to cottage lots), Smoke (16%), Canoe (14%) and Source (10%) Lakes.
									Some loss of vegetation diversity/quantity, as well as fragmentation or alteration of shoreline/riparian habitat would occur. Conditions would be applied to mitigate these effects, to the extent possible.
									Cottages and their associated uses, (e.g., motor boats, road access, gardening/landscaping, and some construction/maintenance activities), would contribute to the spread of non-native/invasive species in the park.
									Conditions including, but not limited to, those described in the project description would mitigate, to the extent possible, the net negative effects of cottages and their associated uses on

		F	Rating	of Pot	tential N	Net Eff	ect		
Screening Criteria "This project may affect"	-Н	-М	-L	Nil	Unk	+L	+M	+H	Comments, Rationale
									natural vegetation/terrestrial habitat.
■ Permafrost									Not applicable
Soils and sediment quality			X						Soil compaction and sedimentation/erosion (runoff) are expected to occur as a result of hardened surfaces on the cottage lots (e.g., walkways, driveways, patios) in combination with shoreline alteration/disturbance and reduced vegetation on the cottage lots. Conditions including, but not limited to, those described in the project description would mitigate, to the extent possible, the
									net negative effects of cottages and their associated uses on soils and sediment quality.
■ Drainage or flooding			X						Reduced opportunities for precipitation to penetrate the soil and renew the water table, along with soil compaction and sedimentation/erosion (runoff) are anticipated to occur as a result of hardened surfaces on the cottage lots (e.g., walkways, driveways, patios) in combination with shoreline alteration/disturbance and reduced vegetation on the cottage lots.
									Conditions including, but not limited to, those described in the project description would mitigate, to the extent possible, the net negative effects of cottages and their associated uses on drainage/flooding.
■ Sedimentation or erosion			Х						See above (soil and sediment quality)
Release of contaminants in soils, sediments			Х						There is the potential for chemical spills (gasoline for boats, generators) as a result of cottages and their associated uses. Conditions including, but not limited to, those described in the project description would mitigate, to the extent possible, the net negative effects of cottages and their associated uses on the release of contaminants in soils/sediments.
Natural heritage features and areas (e.g. areas of natural and scientific interest, provincially significant wetlands)			X						The potential net effects on natural heritage features and areas (e.g., fish habitat, species at risk habitat, wildlife habitat) have been assessed/described elsewhere in this table. Based

		F	Rating	of Po	tential N	Net Eff	ect			
Screening Criteria "This project may affect"	-н	-М	-L	Nil	Unk	+L	+M	+H	Comments, Rationale	
									on this, there is a high degree of certainty that cottages and their associated uses would have a net negative effect on some natural heritage features/areas.	
Other (specify)									None	
		La	nd U	se, R	esour	се М	anage	men	t Considerations	
■ Remoteness (access inaccessible areas)		A	В						The majority of cottage lots are located along the Highway 60 corridor where other development (e.g., campgrounds, visitor centre, trails, picnic areas, beaches, park access points, commercial lodges, youth camps) is located. Existing access infrastructure (e.g. portages) would be maintained for cottagers and other park users. No new opportunities for access and travel to/on any of the cottage lakes are anticipated as a result of this project. The cottages and their associated uses would affect the remote character/experience of the park for some park users. The effects on remoteness are anticipated to be: A: greater on lakes where there is little/no other development, and B: lower on lakes where other development exists.	
■ Navigation			X						The net effects of the cottages and their associated uses are anticipated to be of minimal significance to navigation within the park. Existing water control structures and other infrastructure (i.e., docks and boat launches) would continue to be maintained. No new water control structures or other infrastructure are anticipated as a result of this project.	
■ Other projects within a park or reserve			Х						The cottage lots may influence the location and associated costs of future resource management or development	

		F	Rating	of Po	tential N	let Eff	ect		
Screening Criteria "This project may affect"	-н	-M	-L	Nil	Unk	+L	+M	+H	Comments, Rationale
									activities (e.g., prescribed burning, trail or interior campsite development).
Other projects outside a park or reserve					X				No known projects outside the park boundaries are anticipated to be affected by this project at this time.
									As the cottages are located on three secondary and seven quaternary watersheds in the park, the net negative effects on water quality (described above) may extend downstream, which may influence the future uses and development opportunities on some lakes located outside the park.
■ Traffic patterns or traffic infrastructure			X						The net effects of the cottages and their associated uses are anticipated to be of minimal significance to traffic patterns/infrastructure within the park.
									Existing parking lots and boat launches used to support access to the cottage lots would continue to be maintained and may be improved.
									No new parking lots or boat launches are anticipated as a result of this project.
■ Public or private recreation			В					A	A: Continuing the disposition for existing cottage lots would provide a significant positive effect for the cottagers/cottage community, as it would provide them with the continued, exclusive right to occupy and use existing cottage lots, subject to conditions imposed through the tenure instrument.
									B: Continuing the disposition for existing cottage lots would restrict other park users from accessing/using the lots and would affect the recreational experience for some park users on the cottage lakes.
Or create excessive waste materials				Х					No measurable effects anticipated.
									The existing waste management system in the park has been designed to accommodate the current amount of daily waste

		R	ating	of Pot	ential I	Net Eff	ect		
Screening Criteria "This project may affect"	-н	-М	-L	Nil	Unk	+L	+M	+H	Comments, Rationale
									produced by all park users, including the day to day household waste produced by existing cottagers.
									The construction of new or replacement of existing buildings, structures or other infrastructure may require additional approvals/authorizations.
 Or commit a significant amount of a non- renewable resource (e.g. aggregates, agricultural land) 									Not applicable
■ Noise levels			X						Some noise pollution would occur as a result of cottages and their associated uses (e.g., generators, boat motors). Conditions including, but not limited to, those described in the project description would mitigate, to the extent possible, the net negative effects of cottages and their associated uses on noise levels.
■ Views or aesthetics			X						Cottages and their associated uses would have visual impacts on "natural" lakes. Conditions including, but not limited to, those described in the project description would mitigate, to the extent possible, the net negative effects of cottages and their associated uses on views/aesthetics.
Another project or be a precondition or justification for implementing another project			Х						See above (Other projects within park or reserve)
 Uses, persons or property outside a park or reserve 					Х				See above (Other projects outside a park or reserve)
Other (specify)									None
		Sc	cial,	Cult	ural ¹¹	, and	Econ	omic	Considerations
■ Archaeology				Х					No measurable effects anticipated.

¹ Where projects may affect a known or suspected cultural resource, further technical heritage studies may be warranted. Technical studies that may be required include items such as archaeological assessments by licensed archaeologists and built heritage studies by qualified heritage consultants if a significant built heritage structural feature is being affected.

MNR shall develop a technical guideline, in consultation with the Ministry of Culture, to address how cultural heritage resources should be identified, and how to assess their significance and develop mitigation techniques.

		F	Rating	of Pot	ential N	let Eff	ect		
Screening Criteria "This project may affect"	-Н	-M	-L	Nil	Unk	+L	+M	+H	Comments, Rationale
									There are known archaeological sites and areas of high archaeological potential on and/or within the vicinity (250 metres) of the cottage lots.
									Cottagers wishing to carry out activities that have the potential to result in significant ground disturbance would require additional approvals.
■ Built heritage				Х					No measurable effects anticipated.
									Although a comprehensive built heritage inventory has not been completed to date, there are known built heritage resources within the vicinity (250 metres) of the lots. Cottagers wishing to carry out activities that have the potential
									to disturb or alter these structures would require additional approvals.
Cultural heritage landscapes					Х				Algonquin is a federally designated national historic site.
									Numerous elements exist within the park that collectively contribute to the park's cultural history including but not limited to: railway lines, pictograph sites, former ranger cabins, depot farms and chutes associated with historic logging activities, lodges, youth camps and cottages.
									Further studies would be required to determine the level of significance that private cottaging contributes to the cultural heritage landscape of the park.
■ Sacred or traditional use sites				Х					No measurable effects anticipated.
									There are known sacred or traditional use sites within the vicinity (250 metres) of the lots.
									Cottagers wishing to carry out activities that have the potential to result in alteration or disturbance of these sites would

		F	Rating	of Pot	tential I	Net Eff	ect		
Screening Criteria "This project may affect"	-Н	-М	-L	Nil	Unk	+L	+M	+H	Comments, Rationale
									require additional approvals. See also "Spiritual, ceremonial or cultural sites" in the Aboriginal Considerations section below.
Or displace people, businesses, institutions, or public facilities			X						Collectively the cottage lots occupy a small portion of the park (a total of 131ha). While this project would not result in new displacements, it would provide cottagers with the continued, exclusive right to occupy and use the lands for existing cottage lots, thereby restricting other park users from accessing/using those lands.
Community character, enjoyment of property, or local amenities			В					A	See above (public or private recreation)
Demands on government services or infrastructure						X			Human and financial (capital and operational) resources would be required to manage/administer the cottages and their associated uses (e.g., review and approve applications for work permits, maintain infrastructure, monitoring and enforcement). The demands on these government services would be mitigated by ensuring fees charged to cottagers for the exclusive use of the cottage lots are based on full cost recovery and on a fair return to the Crown.
■ Public health and/or safety									Not applicable
 Local, regional or provincial economies or businesses 			В			A			A: Some park concessions, local contractors etc. benefit from cottagers, including local and regional economies. B: Cottages may be displacing revenue generation opportunities for Ontario Parks (e.g., through added campsites).
■ Tourism values (e.g. resource-based tourist lodge)					Х				Commercial lodges are present on seven of the cottage lakes. While the effects on these lodges are not known, they are anticipated to be of minimal significance.
Other (specify)									None
			,		Aboriç	ginal	Consi	iderat	
■ First Nation reserves or communities									Not applicable

Rating of Potential Net Effect									
Screening Criteria "This project may affect"	-н	-М	-L	Nil	Unk	+L	+M	+H	Comments, Rationale
									There are no reserves in the park; however the park is part of both the Algonquins of Ontario and the Williams Treaties First Nations asserted traditional territories.
■ Spiritual, ceremonial, or cultural sites				X					No measurable effects anticipated. Spiritual, ceremonial or cultural sites are known to occur on some of the cottage lakes. Cottagers wishing to carry out activities that have the potential to result in alteration or disturbance of known sites would not be permitted without prior involvement with affected Aboriginal
■ Traditional land or resources uses, or affect economic activities					X				communities and any required approvals. Potential exists to impact the AOO's Aboriginal title claim and their exercise of Aboriginal rights in the area. William Treaties First Nations asserts unextinguished harvesting rights in their asserted traditional territory which includes the west side of Algonquin Park. They have also claimed the restoration of harvesting rights. Further communications with these groups will provide greater clarity.
Aboriginal values				Х					See above (Spiritual, ceremonial, or cultural sites, and Traditional land or resources uses, or affect economic activities)
■ Lands subject to land claims			X						Some cottage lots are located within the Algonquins of Ontario Land Claim Settlement Area as defined in the Preliminary Draft Comprehensive Land Claim Agreement-in-Principle among the Algonquins of Ontario and Ontario and Canada, December 2012 (PDAIP). For clarity, this project would extend the term of occupation for existing private, non-commercial cottage lots in Algonquin and would not grant dispositions for new private, non-commercial cottage lots within the park.

		R	ating	of Pot	ential N	let Eff	ect		
Screening Criteria "This project may affect"	-Н	-М	-L	Nil	Unk	+L	+M	+H	Comments, Rationale
									Given this, the project is not anticipated to have any effects on lands identified for transfer as part of the land claim settlement. Some cottage lakes fall within the asserted traditional territory of the Williams Treaty communities as understood by the Crown, although this assessment is preliminary and may be updated on the basis of additional information received, for example through court proceedings or through negotiations.
Other (specify)									None