

Development of Versant Soleil and Camp Nord, Mont-Tremblant (Phases 3 and 4)

Proponent: Mont Tremblant Resort, Limited Partnership

Screening Report *Canadian Environmental Assessment Act*

Prepared by

Infrastructure Canada

Fisheries and Oceans Canada

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1.0 Legislative background and responsible authorities

Mont Tremblant Resort, Limited Partnership, initially applied for financing under the Canada-Quebec Infrastructure Program, for which Canada Economic Development (CED) is partly responsible, to carry out the “Development of Versant Soleil and Camp Nord, Mont-Tremblant” project. Phases 3 and 4 of Mont Tremblant Resort’s development plan provide for the expansion of the ski resort with two new villages (Versant Soleil and Camp Nord) as well as of the skiable areas on the White, Timber, Edge and Pangman peaks. The project involves the construction of basic infrastructures (water supply system, sewers, access roads) and recreational and tourist infrastructures (condos, hotel, businesses, ski and bike trails, etc.).

The funding application submitted to CED initially triggered the *Canadian Environmental Assessment Act* (CEAA) on November 22, 2001. In compliance with the CEAA, Canada Economic Development, as primary responsible authority, ensured that an environmental assessment of the project was conducted by the proponent and analyzed by various federal and provincial authorities. However, following an announcement on August 10, 2004, Infrastructure Canada is now the sole responsible authority for this project as a result of a funding application made under its Canada Strategic Infrastructure Fund. Fisheries and Oceans Canada (DFO), represented by the Fish Habitat Management Branch, also acts as responsible authority since this Department must issue an authorization to “cause the alteration, disruption or destruction” of fish habitat under subsection 35(2) of the *Fisheries Act*.

Pursuant to subsection 20(1) of the CEAA, the responsible authorities may exercise their powers if the environmental assessment of the project concludes that the project is not likely to cause significant adverse environmental effects, taking into account the implementation of mitigation measures.

The document “Projets de développement du Versant Soleil et du Camp Nord, Mont-Tremblant, évaluation environnementale, octobre 2003” (report prepared by Roche Ltd., Consulting Group, for Mont Tremblant Resort) was presented by the proponent to the responsible authorities, who deemed the final document satisfactory.

2.0 Other stakeholders

Infrastructure Canada is responsible for overall project coordination. Throughout the process, the Canadian Environmental Assessment Agency provided advice concerning CEAA assessment procedures.

In addition to Infrastructure Canada, Fisheries and Oceans Canada and Canada Economic Development, several other federal departments were called upon to give their expert opinion on the Mont Tremblant Resort project. Natural Resources Canada thus provided its opinion in the areas of hydrology and forestry, while Transport Canada's Navigable Waters Protection Division intervened in accordance with the *Navigable Waters Protection Act*. Environment Canada was consulted regarding wetlands and avian fauna. Lastly, Public Works and Government Services Canada acted as environmental advisor for expertise on hydrology and water quality.

Two provincial agencies were called upon to give their opinion on various project components related to their areas of expertise. The ministère de l'Environnement du Québec intervened under sections 22 and 32 of the *Environmental Quality Act* (wastewater management, water crossings, hydrology, etc.). The Société de la faune et des parcs du Québec was also consulted on application of *An Act respecting the conservation and development of wildlife* (white-tailed deer, ichthyological fauna, avifauna, etc.) as well as with respect to the work conducted on the leased territory of Parc national du Mont-Tremblant.

3.0 Project identification

Project title	Development Project for Versant Soleil and Camp Nord, Mont-Tremblant
Project proponent	Mont Tremblant Resort, Limited Partnership
Contact name and position	Éric Ayotte, Director – Planning and Development Mont Tremblant Resort
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4.0 Scope of the environmental assessment

4.1 Scope of the project

The various phases of the Mont Tremblant Resort project are outlined in the following tables. For a complete list, please refer to the document titled "Projets de développement du Versant Soleil et du Camp Nord, Mont-Tremblant, évaluation environnementale, octobre 2003" (report prepared by Roche Ltd., Consulting Group, for Mont Tremblant Resort).

Components submitted for the environmental assessment of the development of Versant Soleil

Project phase	Versant Soleil
Site preparation	<ul style="list-style-type: none"> • Clearing and weeding • Establishment of water intercepting ditches • Reshaping of the foot of the mountain • Temporary embankment • Filling
Construction	<ul style="list-style-type: none"> • Restructuring and diversion of streams • Artificial lake (excavation, filling, sluice gate, settling pond, weir, thermograph) • Roads, parking lots, streets and pipes • Water crossings • Development of the village • Drilling, blasting • Residential and commercial buildings • Water flow net and drainage system • Operation of machinery • Water barrier • Boosting pumping station • Storage of various materials
Operation	<ul style="list-style-type: none"> • Maintenance of roads, streets, parking lots (de-icing salt) • Hydrological conditions (flood peak, water trickle surface, infiltration rate, water temperature, conductivity, chloride content) • Presence and operation of the village and infrastructures • Management of the artificial lake • Storage and management of hydrocarbons and chemicals

Components submitted for the environmental assessment of the development of Camp Nord

Project phase	Camp Nord
Site preparation	<ul style="list-style-type: none"> • Clearing and weeding • Development of ditches to divert drainage water • Demolition of old buildings and decontamination of soils and groundwater
Construction	<ul style="list-style-type: none"> • Water crossings • Aerated pond and settling pond • Development of the village; residential and commercial buildings • Roads, streets, parking lots and water supply system and sewers • Operation of machinery • Excavation and modification of the grounds • Drainage system • Drilling and particulates suspended in water • Noise and dust • Traffic and safety • Outfall to Diable River and filtration plant • Drinking water supply well
Operation	<ul style="list-style-type: none"> • Hydrological conditions (flood peak, infiltration area, runoff, chloride content, water temperature) • Management of aerated ponds • Water catchment, outfall and effluent in watercourses • Groundwater flow to wetlands • Maintenance of roads, streets, parking lots (de-icing salt) • Loss of wildlife habitat (wetlands compensation) • Water supply system and wastewater treatment • Presence and operation of the village and infrastructures • Storage and management of hydrocarbons and chemicals

Components submitted for the environmental assessment of the development of the skiable area and other interventions

Project phase	Skiable area and other interventions
Site preparation	<ul style="list-style-type: none"> • Clearing and earthwork • Drainage swales
Construction	<ul style="list-style-type: none"> • New ski trails and ski lifts • Community trails and shelters • Water crossings • Application of fertilizer on future trails • Operation of machinery • Noise and dust • Suspended particulates, sediment in water and nutrient supply
Operation	<ul style="list-style-type: none"> • Hydrological conditions (runoff, flood peak) • Wastewater treatment for shelters • Presence and maintenance of trails, ski lifts, shelters and community trails • Storage and management of hydrocarbons and chemicals • Expansion of the snowmaking system

4.2 Scope of the assessment

The environmental assessment includes a study of the environmental effects of the project and of the extent of the residual effects, taking into account the application of technically and economically feasible mitigation measures. The environmental assessment also includes the concerns of the communities, a review of the effects caused by potential accidents and/or resulting malfunctions, monitoring and follow-up programs as well as the cumulative effects likely to be caused to the environment in carrying out the project, combined with the existence of other installations or the conduct of other projects and activities.

Environmental effects, as defined in subsection 2(1) of the CEEA, are the changes caused by the project to the biophysical environment and the effects directly resulting from these changes on human health, socioeconomic conditions, the natural and cultural heritage (historical, archaeological, paleontological and architectural), as well as the current use of lands and natural resources by Aboriginals for traditional purposes.

The environmental effects anticipated with this project include, but are not limited to, those affecting hydrology and the river system; hydrogeology (groundwater); surface water; soil quality; terrestrial, riparian and aquatic vegetation and wetlands; fish and fish habitat; herpetofauna; terrestrial and semi-aquatic fauna; avian fauna; navigation; land development and land use; the noise environment; air quality; landscape; heritage and archaeological potential.

5.0 Project description

5.1 Versant Soleil

The Versant Soleil development project consists in the construction of a village containing 2,100 accommodation units (condos, cottages, etc.), 9,000 m² of commercial space, 1,200 underground parking spaces, 1,550 outdoor parking spaces, an arena, an aquatic centre and a playground. The village is accessible via chemin Duplessis and the 900 m-long main road, which divides into two secondary segments (850 m to the east and 970 m to the west).

A total of 23 water crossings are planned at Versant Soleil. Culverts will be installed at two of these crossings and 21 crossings will use bridges or (bottomless) arch culverts. In addition, to avoid the risk of flooding in the village, a diversion barrier consisting of an open drainage ditch will be built. This work will require the reshaping of the base of the mountain by lowering the ground level by 3 metres. Also, a storm drainage system will be installed on the edge of the village. Three watercourses will be backfilled, displaced and redirected toward the water barrier and the artificial lake.

A 2.31 ha artificial lake will be built in the heart of the village. The lake will be 152 m long and 207 m wide, and have a maximum depth of 6 m. In order to control the water flow in the outfall (stream 115), a dike will be installed with a crested weir, as well as an underwater pipe and drainage pipe. The dike will be 50 m wide at its base and 5.5 m wide by 180 m long at the top, with a maximum height of 7 m. A pedestrian bridge and an access road will be built on the crest of the dike. The artificial lake will reduce the runoff from the mountain, thereby preventing sudden flows in downstream watercourses.

Drinking water will be supplied via the municipal system of Ville de Mont-Tremblant. For this purpose, a 1,050-m-long connecting pipe will be installed under chemin Duplessis. The difference in level between this road and the village requires the construction of a pumping station. Wastewater will be treated using the existing aerated ponds. However, a pipe will have to be installed under chemin Duplessis and the new access road to connect the aerated ponds to the Versant Soleil installations. Electric, telephone and television cables will be buried under the roads.

5.2 Camp Nord

A new village with a recreational and tourist centre will also be built at Camp Nord. This village will have a youth camp, an equestrian, curling and aquatic centre as well as 9,000 m² of commercial space and 1,000 accommodation units, including a hotel. In addition, 1,000 outdoor parking spaces are planned. Development of this village will require the demolition of existing buildings and septic tank, as well as the decontamination of soils due to traces of various oils and hydrocarbons. The village is accessible via the existing access road. However, streets will be built in order to provide access to residential areas and parking lots.

The water supply system at Camp Nord will draw its water partly from the Diable River groundwater and surface water. Supplying drinking water from Diable River will require an activated charcoal filtration plant, a pumping station and a water tank in case of fire or increased water demand. A pipe will be installed under chemin Duplessis. Wastewater treatment will require the installation of aerated ponds, which will include 2 basins and a new outfall located approximately 200 m downstream of the current water intake in Diable River. A new pipe, 250 mm in diameter, will be buried under the riverbed and pass under chemin Duplessis to access the aerated ponds.

Electric, telephone and television cables will be buried under the roadways. A total of 23 bridges or arch culverts will be built across Johannsen Stream and streams 101 to 105.

5.3 Development of the skiable area and other interventions

Mont Tremblant Resort will add 185 ha of ski trails on the slopes of Mont Timber, Pic Pangman and in the Nansen area. The refitting of old ski lifts and the addition of new ones will be required. The snowmaking system will also be expanded in the process. A total of 19 water crossings are planned for the skiable area, including 10 that will require the installation of bridges or arch culverts.

The project also includes the development of community trails (mountain bike, multifunctional, snowshoe and cross-country ski trails). Four new mountain shelters will be built in the trail areas. The water supply system and sewers for these shelters will either be connected to the Versant Soleil system or be independent and use composting toilets.

6.0 Description of the environment

The boundaries of the study area were set so as to cover all of the environmental components and the project's anticipated environmental impacts. The study area includes: Versant Soleil, Camp Nord, the skiable area and the multifunctional trails. It is bordered by Diable River to the east and south and by the edges of the drainage basins of the

Johannsen, 115 and Nansen streams to the north and west (map 4.1 of the environmental assessment). A larger area including the Laurentians regional county municipality as well as the municipalities surrounding the sectors of the study area was also studied in less detail.

The Mont-Tremblant area is part of the Laurentian plateau and is characterized by a relief of mountains and valleys. The study area is located in a region with a highly developed river system and dominated by Diable River and Johannsen Stream. The study area is represented by a sugar maple-yellow birch stand. Vegetation consists mainly in hardwood stands and secondly, predominantly hardwood mixed stands.

For more information on the various resources inventoried in the study area (avifauna, vegetation, ichthyofauna and its habitat, wetlands, etc.), readers should refer to the proponent's environmental assessment (Roche Ltd., Consulting Group, October 2003).

7.0 Environmental impacts

In the course of the environmental assessment, amendments were made to the project and to the terms and conditions for carrying out the project (mitigation measures) to improve the beneficial effects and further mitigate the risk of adverse effects or impacts of the project. In addition, compensation projects are planned to recreate fish and deer habitats as well as wetlands to compensate for those affected by the construction work.

The following tables outline the anticipated environmental effects of the project and the findings of the responsible authorities. A detailed description of the environmental effects assessed as part of the project is presented in the proponent's environmental assessment (Roche Ltd., Consulting Group, October 2003) in Chapter 4, Part C. This document presents partial findings on environmental effects for every environmental component assessed.

Synthesis of the environmental effects of the development of Versant Soleil

Environmental components assessed		Findings of the responsible authorities					
		Environmental effect				Residual effect	
		Possible adverse effect?		Can it be completely attenuated?		Is it significant?	
		Yes	No	Yes	No	Yes	No ¹
Physical environment	Hydraulics and hydrology	X			X		X
	Hydrogeology	X			X		X
	Surface water	X			X		X
	Soil quality	X		X			
Biological environment (aquatic)	Aquatic vegetation	X			X		X
	Wetlands	X		X			X
	Ichthyofauna/habitat	X		X			X
	Herpetofauna/habitat	X			X		X
Biological environment (terrestrial)	Terrestrial and riparian vegetation	X			X		X
	Terrestrial and semi-aquatic fauna/habitat	X			X		X
	Avian fauna/habitat	X			X		X
Human environment	Land-use planning t and land use ²	X		X			
	Ambient Noise	X		X			
	Air quality	X			X		X
	Landscape	X			X		X
	Archaeology		X				
Heritage		X					
Cumulative effects	Quantity of water taken						X
	Water quality						X
	Ichthyofauna/habitat						X
	Terrestrial fauna/habitat						X
	Wildlife species with special status						X
	Quality of life of residents ³						X

¹ In view of the information available and taking into account the application of mitigation measures, the responsible authorities are of the opinion that completion of the project is not likely to cause significant adverse environmental effects.

² Land-use planning and land use include: recreational activities, road traffic, residences erected, etc.

³ Quality of life of residents includes: ambient noise, traffic and landscape.

Synthesis of the environmental effects of the development of Camp Nord

Environmental components assessed		Findings of the responsible authorities					
		Environmental effect				Residual effect	
		Possible adverse effect?		Can it be completely attenuated?		Is it significant?	
		Yes	No	Yes	No	Yes	No ¹
Physical environment	Hydraulics and hydrology	X			X		X
	Hydrogeology	X			X		X
	Surface water	X			X		X
	Soil quality	X		X			
Biological environment (aquatic)	Aquatic vegetation	X			X		X
	Wetlands	X		X			
	Ichthyofauna/habitat	X		X			
	Herpetofauna/habitat	X			X		X
Biological environment (terrestrial)	Terrestrial and riparian vegetation	X			X		X
	Terrestrial and semi-aquatic fauna/habitat	X			X		X
	Avian fauna/habitat	X			X		X
Human environment	Land-use planning and land use ²	X		X			
	Ambient noise	X		X			
	Air quality	X			X		X
	Landscape	X			X		X
	Archaeology		X				
	Heritage		X				
Cumulative effects	Quantity of water taken						X
	Water quality						X
	Ichthyofauna/habitat						X
	Terrestrial fauna/habitat						X
	Wildlife species with special status						X
	Quality of life of residents ³						X

¹ In view of the information available and taking into account the application of mitigation measures, the responsible authorities are of the opinion that completion of the project is not likely to cause significant adverse environmental effects.

² Land-use planning and land use include: recreational activities, road traffic, residences erected, etc.

³ Quality of life of residents includes: ambient noise, traffic and landscape.

Synthesis of environmental impacts of the development of the skiable area and other interventions

Environmental components assessed		Findings of the responsible authorities					
		Environmental effect				Residual effect	
		Potential adverse effect?		Can it be completely attenuated?		Is it significant?	
		Yes	No	Yes	No	Yes	No ¹
Physical environment	Hydraulics and hydrology	X			X		X
	Hydrogeology		X				
	Surface water	X			X		X
	Soil quality	X		X			
Biological environment (aquatic)	Aquatic vegetation	X			X		X
	Wetlands	X		X			
	Ichthyofauna/habitat	X		X			
	Herpetofauna/habitat	X			X		X
Biological environment (terrestrial)	Terrestrial and riparian vegetation	X			X		X
	Terrestrial and semi-aquatic fauna/habitat	X			X		X
	Avian fauna/habitat	X			X		X
Human environment	Land-use planning and land use ²		X				
	Ambient noise		X				
	Air quality		X				
	Landscape	X			X		X
	Archaeology		X				
	Heritage		X				
Cumulative effects	Quantity of water taken						X
	Water quality						X
	Ichthyofauna/habitat						X
	Terrestrial fauna/habitat						X
	Wildlife species with special status						X
	Quality of life of residents ³						X

¹ In view of the information available and taking into account the application of mitigation measures, the responsible authorities are of the opinion that completion of the project is not likely to cause significant adverse environmental effects.

² Land-use planning and land use include: recreational activities, road traffic, residences erected, etc.

³ Quality of life of residents includes: ambient noise, traffic and landscape.

8.0 Mitigation measures

All the mitigation measures cited in the environmental assessment report (Roche Ltd. – October 2003) as well as those described below will have to be put forward by Mont Tremblant Resort.

Machinery

- No machinery shall travel in the water.
- Ensure the machinery is in good working condition to avoid accidental oil spills (fuel or motor oil).
- The contractor shall have on hand at all times a complete kit to clean up oil spills to deal with minor accidental spills, recover and store soiled equipment and manage contaminated soil and materials.
- Fuel refills, oil changes, equipment cleanup and the mechanical testing of equipment shall be done a minimum of 60 m from the watercourse, in a place reserved for this purpose.
- Waste oil from machinery use and other waste shall be removed from the work area and hauled to designated sites.
- There shall be no traffic except on access roads, passageways and work areas; clearly identify in the field the boundaries of the worksite.

Blasting

- If blasting is required in the aquatic environment (not planned at the moment), follow the *Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters* (Wright and Hopky, 1998) and advise DFO at least 30 days in advance.
- Do not use ANFO explosives or manufacture explosives on-site.
- Enforce the following measures: controlled-access area, audible blasting signals, use of rubber blast mats in blasting areas, low-volume blasting, etc.

Land maintenance

- No biocidal (anti-fouling) chemicals shall be used.
- Regularly clean public roads and areas used by trucks before and after construction work.
- Minimize dust emission during excavation work.
- Do not use salt in parking lots.

- Use abrasives only when there is a safety hazard for clients.
- Regularly inspect parking lots for any sign of oil. Should a spill occur, quickly remove the contaminated soil and dispose of it at a designated site.
- Use organic fertilizers whenever possible.
- Do not use herbicides, fungicides or pesticides other than the products listed in Schedule II of the new Pesticide Management Code in public areas. For other areas, follow the standards set out in the Pesticide Management Code or in municipal by-laws, should these be stricter, in particular as regards the choice of products and allowable proximity to watercourses.
- Do not apply fertilizers within 30 m of a watercourse.

Suspended particulates

- Generally speaking, measures should be taken to limit the movement of sediments into the drainage system rather than to filter out or clarify sediments in the runoff: keep the work area as small as possible, stabilize ditches with riprap or plants (depending on the slope), install silt barriers parallel to drainage channels (if possible more than 5 m away), quickly restore plant cover after the work is completed, use mulches, etc. Secondly, place hay-bale dams and settling ponds in strategic places (if need be use filter berms, sediment traps, settling ponds, mulches).
- Create temporary settling ponds in ditches feeding into the various watercourses.
- Renaturalize riverbanks and areas stripped of vegetation as quickly as possible after the work is completed.
- Place berms around the parking lot (there must be regular gaps between them to keep the parking lot drained; build settling ponds in the gaps).
- Install a Stormceptor at the end of each storm drainage system.

Work in the aquatic environment

- Carry out work in the aquatic environment outside the sensitive periods for ichthyological fauna (brook trout: September 15 to June 1; rainbow trout: April 15 to June 15).

Water crossings

- Perform the work in July and August (low-water period) to minimize erosion; this also avoids the sensitive periods for brook trout and rainbow trout (i.e., from September 15 to June 15).

- Use bridges or (bottomless) arch culverts on all watercourses that constitute a fish habitat (this includes all watercourses except the upstream parts of stream 115 and VS-2).
- No structure attached to a bridge or arch culvert (riprap, bridge seat, etc.) shall encroach on the natural high-water mark.
- Before design work begins, inspect the lot to verify the condition of the substrate at the crossing site to make sure it is not a potential spawning ground for any species that could be present. If it is, choose a different crossing site.
- Conduct an individual hydraulic study for each arch culvert or bridge so as to size it properly (slope, substrate, width) in view of the future hydraulic conditions of the watercourse, i.e., after completion of the work for phases 3 and 4.
- Install the arch culverts or bridges in such a way that they do not constitute a barrier for fish migration and so that the structures themselves do not cause erosion (as required, stabilize the structures upstream and downstream with a geotextile membrane combined with riprap (approximate stone size between 0.5 and 1 m) on part of the slopes and the area around the culverts, to stabilize the bank and avoid any increase in suspended particulates in the watercourse.
- Arch culverts installed in watercourses constituting a fish habitat must rise above the foot of the road embankments.
- Revegetate the upper banks and any work areas located nearby or within the natural high-water mark with native shrubs and/or herbaceous plants typically found in these environments.
- Install water-crossing structures in a dry environment, using a cofferdam (sandbags, sheets of plywood, concrete blocks; depending on the size of the watercourse, its flow and the expected duration of the installation) upstream of the work area and a pump installed upstream of this cofferdam.
- Prioritize the use of untreated wood (cedar, hemlock) for gangplanks and floating docks, particularly if children are likely to use these structures. If treated wood is used, it must be certified by Agriculture and Agri-Food Canada for construction in a wet environment. No copper arsenate treated wood shall be used in the project.

Buffer zone, natural high-water mark and sensitive sites

- No clearing (except for road, path, ski trail or pipe crossings) shall be done below the natural high-water mark where fish habitats are present (this includes all watercourses except the upstream parts of stream 115 and VS-2).

- Maintain buffer zones (no clearing) 10 metres wide (beyond the natural high-water mark) along the watercourses identified on map 3.1 (Johannsen, 115, Nansen, Élisabeth, VS-1, VS-2 and their tributaries, streams 101 to 105 and all other unnamed streams) and verify their buffering ability. If necessary, plan for and design filter ditches or marshes to increase their buffering ability.
- In the field, identify sensitive areas with coloured ribbons (riparian strips, wooded areas to be protected, locations of silt barriers, natural high-water mark, buffer zones, etc.).
- Ensure full conservation of the wetlands' buffer strip surrounding Johannsen Stream (10 m beyond the NHWM), identifying it in the field with ribbons.
- Locate parking lots more than 15 m from any watercourse.
- Review the location of downhill ski trails along streams 101 and 105 to ensure that a 10-m-wide buffer zone is maintained.
- Review the location of the parking lot at Camp Nord to avoid any encroachment on stream 103 and maintain the 10-m-wide buffer zone.
- Mark vegetation areas to be preserved (NHWM, 10-m-wide buffer zones, special sites such as the wet meadow at Camp Nord, close to Johannsen Stream).

Terrestrial fauna and flora

- Limit forest clearing to the strict minimum.
- Mark and clearly identify the trees and wetlands to be preserved.
- Clearing should be done from mid-August to late winter.
- Whenever possible, avoid clearing woodland during bird nesting and breeding periods in May, June and July.
- In dominant or co-dominant balsam fir habitats above 800 m altitude, the clearing of woodland shall only be conducted outside the breeding period of Bicknell's thrush.
- Preserve travel corridors currently used by deer in the Versant Soleil area.
- Wherever possible, preserve mature conifer stands surrounding the Versant Soleil area.
- Prohibit the storage of any materials, excavation work, digging, filling and/or grubbing in vegetated areas to protect vegetation (trees, shrubs and herbaceous plants).

Archaeology

- Provide for archaeological monitoring during the work so that any archaeological remains may be preserved and possibly developed.
- Should any archaeological sites be discovered, protection or salvage measures shall be taken in accordance with the ministère de la Culture et des Communications.

Quality of the groundwater and contaminated soil

- Complete the characterization of soil, groundwater and sediments before work begins (phases 1 and, if required, 2 and 3).
- Manage contaminated soil during excavation and the handling of soil in accordance with the ministère de l'Environnement's Soil Protection and Contaminated Sites Rehabilitation Policy and related guidelines.
- Immediately remove from the construction site the contaminated materials excavated (or store them safely on-site before they are transported to an authorized site).
- Pump any groundwater found in the course of the work into a settling pond. Ensure that the pond is big enough to allow suspended particulates to settle and to ensure that the drained water complies with water quality criteria (transmit plans for the pond(s) to INFC 60 days before work begins).
- Discharge water from the settling ponds into vegetated areas, not directly into watercourses.

Skiable area and multifunctional community trails

- In the final design of the skiable area, move the passenger ropeways (magic carpets) currently planned in the wetlands (black spruce sphagnum stands) west of Versant Soleil, out of that area. Wetlands must be identified during the work to prevent losses.
- Direct and stabilize transverse runnels and lateral ditches (by seeding the banks or with riprap geotextile) to minimize the risk of washout and direct the water into stable areas (vegetated areas, not directly into watercourses).
- Seed bare slopes immediately after they have been graded.
- Clearing shall be done by teams of loggers, without the use of skidders or other heavy machinery.
- In general, buck and trim felled trees and bury them on the spot during general excavation. However, trees felled in the park (leased territory) for trails, if located in the areas now directly accessible via existing passable roads, must be recovered by the contractor and given to the park (if the park sees fit).

- Under ski lifts, leave the logs on the ground rather than bury them.
- Place the 45-gallon barrels used to fuel the power shovels for earthwork and grading along the trails by helicopter (when justified by the scale of the project—large- and medium-scale projects). Use the helicopter to carry in culverts, geotextiles, seeds and fertilizers, hay bales, concrete castings and pillars for the ski lifts, and, finally, materials to build shelters.
- Follow the mitigation measures and methods specified in the *Guide d'aménagement des pistes de ski* (SMT, 1994), and in particular Appendix 5.
- Create, as required, settling ponds downstream of water barriers (file detailed plans on the location and size of these structures with DFO 60 days before work begins).
- Carry out work from the top of the mountain to the bottom, in a single stage.
- Seeding shall be done as soon as a stretch of trail is ready, so as to ensure proper soil stabilization.
- Whenever possible, and following discussions with the officials of Parc National du Mont Tremblant, use indigenous plant species to revegetate slopes.
- File with Infrastructure Canada, 60 days before work begins, a detailed trail construction plan (detailed plan specifying all stages of the trail layout work, timelines for each stage and compliance with restriction periods).
- Postpone work when heavy rain is forecasted.
- Keep soil amendments to a strict minimum. To this end, a soil analysis shall be performed at several strategic locations to ascertain amendment needs for optimal plant recovery.
- Apply plant starters only where there is a good buffer zone (15 m wide from the NHWM and composed of dense, already well-established herbaceous vegetation) between the areas receiving fertilizer and sensitive areas—wetlands or permanent bodies of water (lake, pond, stream, river, etc.) and their buffer strips.
- Place an anti-erosion cover immediately after the final grading and seeding of the land in the exposed buffer zone.
- Seeding shall be done as soon as the earth is laid bare and not repeated the following year.
- Place bridge towers more than 10 m from the NHWL of each watercourse.
- Use the helicopter to transport concrete bases and new steel bridge towers and to fix the latter to the bases.
- Hydroseed the borders (areas of soil cut and fill) of the multifunctional trail so as to avoid washout.

- For other trails, use the erosion prevention techniques described in such guidebooks as the *Guide de construction en milieu naturel* (Quebec City, 1984) and the *Guide d'aménagement de sentiers de vélo de montagne* (Auclair et al., 1998). For example, regularly diverting water to vegetated areas (to avoid the formation of runnels in the trail) or cutting rustic steps into steeper slopes.
- Aboveground storage tanks must have a diked enclosure or a second wall.
- Ensure that the tanks installed are in compliance with CCME standards and those of the provincial regulations on petroleum products.
- As early as in the trail design stage, use erosion prevention techniques drawn from the *Guide de construction en milieu naturel* and the *Guide d'aménagement de sentiers de vélo de montagne*, among others (e.g., regularly diverting water to vegetated areas to avoid the formation of runnels in the trail or cutting rustic steps into steeper slopes).

Artificial lake

- Ensure that lake outflow is similar to its intake on an annual and daily basis.
- Ensure a minimum flow of 8.4 L/s downstream of the lake at all times.
- Use the controlled flow pipe in the summer to ensure that the temperature of the water discharged is as close as possible to that of the water flowing into the lake (as measured in source stream 115-3).
- To avoid depleting the lake's cold layer in early summer, between early June and July 15 discharge water that is 2° C warmer than that entering the lake. From July 15 to early September, discharge water that is around the same temperature as that entering the lake.
- During regular lake maintenance, control the maximum flow discharged (the latter must be set to a value 10% to 20% greater than the incoming flow).
- Drain, maintain and refill between June 1 and June 15.
- Before draining, divert the flow of stream 115-2 into stream 115-3 to keep the work area from flooding.
- Lower the lake level only enough to uncover its upstream part, i.e., where the settling ponds are (by about 1.0 to 1.2 m).

Aerated ponds and water supply

- MTR will pursue studies to supply Camp Nord exclusively in groundwater. The drinking water supply via the Diable River will be acceptable up to 1531 m³/d, only if MTR takes the measures to prove, to the satisfaction of the federal authorities, that there is not enough groundwater.

- The proponent will have to design their own drawings and specifications, build and operate the aerated ponds and manage the wastewater according to provincial requirements in terms of environment protection. MTR is responsible for obtaining any permit and authorization required to operate the aerated ponds and the management of wastewater, in a timely fashion.
- A procedure designed to test the return flow in the Diable River will have to be prepared by MTR and approved by Environment Canada before the launch of the aerated pond operations. A review report of the results of the return flow quality test will have to be forwarded to Environment Canada during its first year of operation. Environment Canada will assess the effectiveness of the system and will see if SMT needs to make corrective measures. If need be, the proponent will have to make the necessary corrections pursuant to the Fisheries Act, especially sub-section 36(3).
- During the construction of the aerated ponds, use the code of good practice in this domain.
- Install drains under aerated ponds during their construction, to allow for the drainage of groundwater.
- Perform a detailed hydrogeological study to determine possible flows, well location(s) and the effects on the surface layer and surrounding environment.
- In order to minimize the quantities of water taken from Diable River during snowmaking season, deduct from the authorized quotas for snow the drinking water withdrawn so as to respect the ecological flow when natural flows exceed the former.
- During construction, discharge the groundwater pumped out as well as water from the diversion ditches into a settling pond prior to releasing it into vegetated areas.

Compensation projects

- Fish habitat: Management of Mercier Stream over a linear distance of 805 m to support the fry rearing and feeding requirements of the brook trout, brown trout, white sucker and fallfish.
- Wetlands: Management of filter marshes to intercept drainage water from golf courses and thus improve the water quality in downstream streams and rivers to compensate for the loss of wetlands.

Traffic

- Conduct a traffic study and submit it to Ville de Mont-Tremblant within 18 months of the signing of the memorandum of understanding.
- Update this study every five years or for every additional group of 700 housing units, whichever occurs first (including the suitability between the measures foreseen by the MTQ and the MRC in terms of road network and the traffic anticipated).

- Coordinate the time tables between the development phases of the station and the MTQ and Ville de Mont-Tremblant projects.
- Access roads reserved for emergency vehicles will be built.

Lighting

- Encourage lighting that is directed downward and with low intensity to illuminate the two villages.
- Follow the municipal regulations and/or those of the MTQ with regard to road lighting.
- The project does not include the lighting of the ski trails at night.

Air quality

- MTR will implement a shuttle service between the various stations.
- The fireplaces in the new condos and hotels built by MTR will use natural gas and will have to meet EPA standards.

9.0 Monitoring and follow-up

During construction work, the proponent shall arrange for environmental monitoring of the work to ensure that mitigation and compensation measures are complied with and implemented. Upon completion of the work, an environmental monitoring report shall be completed and signed by the proponent and sent to the responsible authorities.

Follow-up programs are intended to check the accuracy of the findings of the environmental assessment for a project and the effectiveness of the measures implemented. For the purposes of this project, the components and terms and conditions of the environmental monitoring and compensation programs are set out in Chapter 5 of the document titled “Projets de développement du Versant Soleil et du Camp Nord, Mont-Tremblant, évaluation environnementale, octobre 2003” (report prepared by Roche Ltd., Consulting Group, at Mont Tremblant Resort). The monitoring and compensation projects shall be implemented by the proponent to the satisfaction of the responsible authorities.

In addition, representatives of the offices of Infrastructure Canada and Fisheries and Oceans Canada reserve the right to make monitoring visits to the site, if they deem it necessary.

10.0 Public consultation

A public consultation was conducted as part of the *Canadian Environmental Assessment Act* by Infrastructure Canada and Fisheries and Oceans Canada. Between August 23, 2004 and September 20, 2004, the public was invited to submit their comments on the factors considered in the proponent's environmental assessment, as well as the conclusions and recommendation of the Screening Report.

Public concerns, submitted during the federal public consultation period, covered all the environmental factors assessed in the Screening Study, namely the physical environment, the biological environment (aquatic), the biological environment (terrestrial), the human environment and the cumulative effects. However, it appears obvious that the main concerns revolve around water management and its possible impacts.

As a result of these comments, an analysis has been undertaken by federal authorities and mitigation measures were modified or added as needed.

11.0 Overall conclusion on the scope of the environmental impacts

In light of the information contained in the environmental assessment, the scientific documentation and according to the experts consulted, and taking into account the implementation of all mitigation measures and conditions stipulated in the environmental assessment, Infrastructure Canada and Fisheries and Oceans Canada consider that the Versant Soleil and Camp Nord development project are not likely to cause significant adverse environmental effects.

The document entitled "*Versant Soleil and Camp Nord, Mont-Tremblant development project, environmental assessment, November 2003, report drafted by the Roche Ltd. Consultant Group, Station Mont-Tremblant,*" and was reviewed by, and the Screening Report was drafted by:

Original French document signed by Alain Guitard
Alain Guitard, Analyst
Fish Habitat Management Branch
Fisheries and Oceans Canada

Date: December 13, 2004

Original French document signed by Lise Poulin
Lise Poulin, Biologist
Analyst, Environmental Impact Assessment
Infrastructure Canada

Date: December 10, 2004

In light of the information contained in this document, Infrastructure Canada and Fisheries and Oceans Canada decide, by virtue of subsection 20 (1a) of the CEAA, to exercise their right to implement the project.

Approved by:

Original French document signed by Gordon Walsh
Gordon Walsh, Director
Fish Habitat Management Branch
Fisheries and Oceans Canada

Date: December 14, 2004

Original French document signed by Keith Grady
Keith Grady
Senior Environmental Co-ordinator
Infrastructure Canada

Date: December 10, 2004