



Provisional Master Plan



Parc national des Monts-Pyramides Project



Québec 

Provisional Master Plan



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Ministère du Développement durable, de l'Environnement
et des Parcs
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Foreword

Since the enactment of the Parks Act in 1977, the Government of Québec has created 24 national parks. Established on the basis of criteria recognized by the International Union for Conservation of Nature (IUCN), these parks are protected from commercial and industrial development of their forest, mineral and energy resources. Hunting is also prohibited¹, as are oil and gas pipelines and energy transmission lines. These restrictions will ensure that the natural heritage of these protected territories is kept intact for future generations.

V

In 1999 the Government delegated the operation of national parks in southern Québec to the Société des établissements de plein air du Québec (Sépaq). In Nunavik however, the operation of national parks has been delegated to the Kativik Regional Government (KRG), according to mandate B6 of the Agreement concerning the block funding of KRG.

For the Government of Québec, the creation of Parc national des Monts-Pyramides is another step in the implementation of its Plan Nord, which provides for at least 12% of the territory north of the 49th parallel to be protected by a legal protection status.

¹ This provision does not apply to beneficiaries of the James Bay and Northern Québec Agreement in parks created on its territory of application.



Introduction



1

Photo: Stéphane Cossette, MDDEP

The majestic Rivière George rises from a series of large lakes north of the Smallwood reservoir; it then flows northwards over a distance of 565 km. Writing on a beautiful August morning in 1905, on an expedition that would take her all the way to Ungava Bay, Mina Hubbard described the landscape stretching before her eyes: “Mountains ahead standing out against the clear sky with delicate clouds of white mist hanging along their sides or veiling the tops. One just at the bend is very, very fine. It reminds me of an Egyptian pyramid”². On maps today, this mountain now bears the name of Pic Pyramide. Its appearance is due to the shorelines carved by an ancient glacial lake. The Inuit and Naskapis have also recognized this feature, and call the mountain *Ulittaniujalik* and *Musuwaaw Siipiy* respectively, meaning “the area where there is high-water mark”.

² A Woman’s Way Through Unknown Labrador. An account of the exploration of the Nascaupée and George rivers. By Mrs Leonidas Hubbard (1908), p. 223.

In the past, this area was a meeting place for the Inuit and Naskapis and was of great importance for hunting caribou. Since the 1960s the beauty of the landscape and the wildlife resources have led to development focused on attracting hunters and fishers.

PROJECT OBJECTIVES

In creating Parc national des Monts-Pyramides, the Ministère du Développement durable, de l’Environnement et des Parcs (MDDEP) aims to protect a representative sample of the George River Plateau natural region (see Map 1). The park will also safeguard elements of the biodiversity of natural province L (Monts Torngat) and a small part of natural province K (Bassin de la Baie d’Ungava) as defined in the Ecological Reference Framework (Li and Ducruc, 1999). Creating the park will also facilitate discovery of the territory, while stimulating tourism in the region. Closely involved in the protection and development of the park will be the

Inuit and Naskapis, and an agreement to that effect will be concluded with the Kativik Regional Government (KRG), which will be in charge of park operations.

HISTORY OF THE CREATION OF PARC NATIONAL DES MONTS-PYRAMIDES

With the enactment of the Parks Act in 1977 and publication of the Parks Policy in 1982, Québec laid a solid foundation for developing its network of national parks. Over the period from 1980 to 1986, the Government modified the boundaries of four existing parks and created ten new national parks south of the 49th parallel, in the part of Québec where environmental pressures and the exploitation of natural resources are the most intense. To focus on consolidating and developing these parks the Government then declared a moratorium on new park creation.

In the Parks Policy of 1982, the MLCP laid the groundwork for park creation by dividing the province into 43 natural regions. It was during the characterization of the George River Plateau natural region in 1988 that the Monts-Pyramides sector was accepted as a territory of interest, representative of its natural region.

In 1989, the MLCP tabled a memorandum before the Comité ministériel permanent de l'aménagement, du développement régional et de l'environnement (COMPADRE – permanent ministerial committee on land use, regional development and environment) regarding sites of interest throughout the area north of the 49th parallel that the Ministère de l'Énergie et des Ressources (MER) should list as proposed parks in the public land use plan that was then in preparation. Among those sites were the Monts-Pyramides. The goal was to withhold representative parts of the natural regions of northern Québec, and sites with special features, from the exploitation of their forest, mineral and energy resources. This temporary measure ensured their protection until such time as the Government of Québec could accord them legal park status.

In 1990, following an inter-ministerial consultation, the COMPADRE endorsed the 18 projects submitted by the MLCP and asked the MER to include these sites in the public land use plan.

In 1992, the area designated for protecting the Monts-Pyramides region was among the second group of territories north of the 49th parallel that were set aside for park purposes.

Under a ministerial order issued by the MER (A.M. 92-170 [July 15, 1992], 1992 G.O.2., 4596, eff. 1992-06-18), they were thereby excluded from staking, cartographic representation, mining research and mining exploration. The territory concerned covered an area of 1935 km².

1992 thus marked the end of the moratorium on the creation of national parks in Québec. That same year, the MLCP unveiled an action plan entitled “La nature en héritage”, setting out its intention to create national parks in Nunavik with the close involvement of the regional community in development and management. The plan emphasized that the communities concerned would be consulted first, and that care would be taken to ensure that park projects were in line with the James Bay and Northern Québec Agreement (JBNQA).

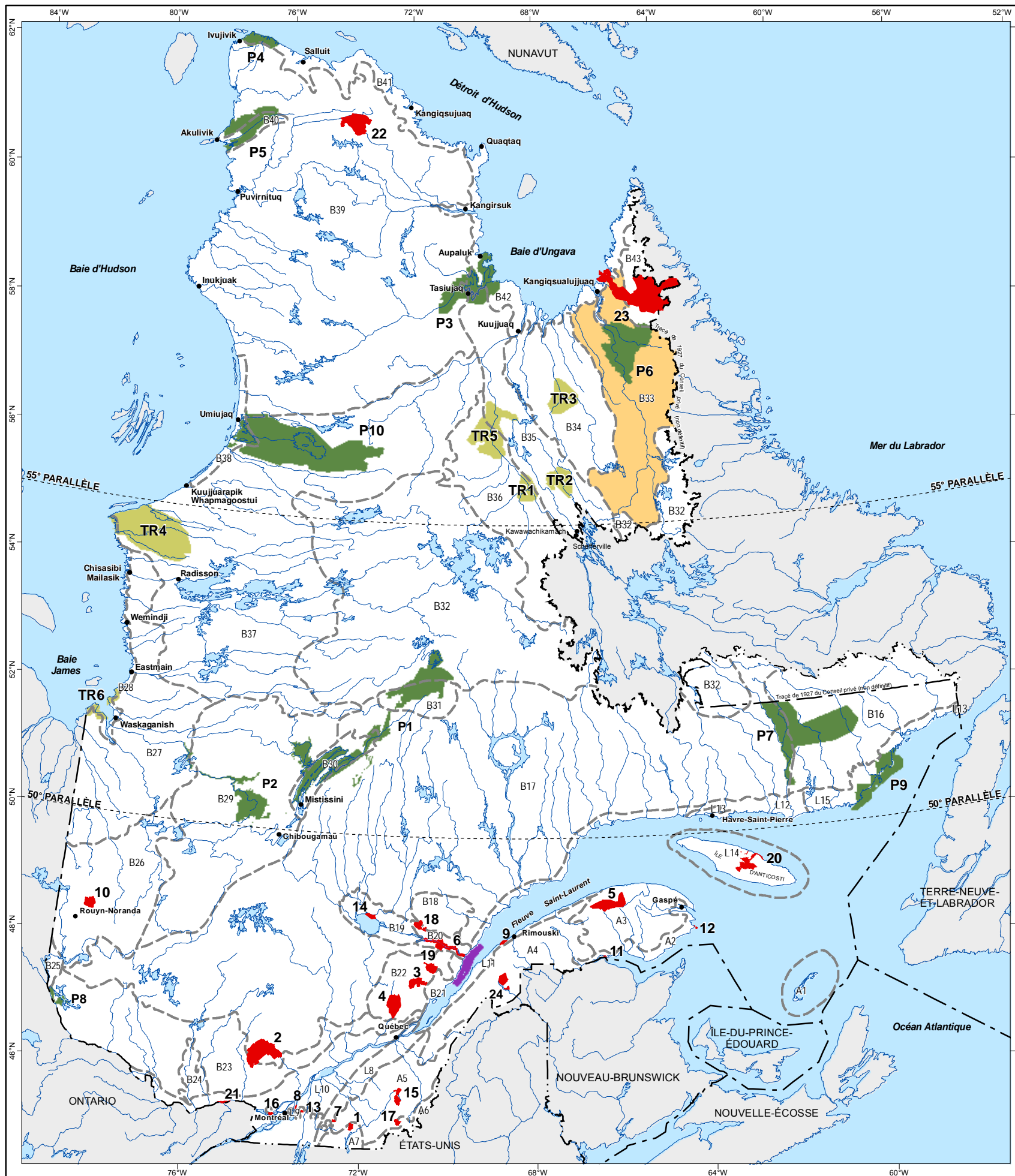
In 1996 the KRG, whose mandate includes the development of the Nunavik territory, produced the Master Plan for Land Use in the Kativik Region. Adopted by a resolution of the KRG Council in 1998, the plan lists all of the parks proposed for that part of Québec, including the Monts-Pyramides project.

In June 2000, the Government of Québec adopted the orientations of the Québec Strategy on Protected Areas. This strategy, and the action plan derived from it, set an objective of placing 8% of the area of Québec in protected areas. National park creation is one of the means by which this objective will be achieved.

In 2001, the Government of Québec modified the Parks Act. Abolishing the classification of parks into those for either recreational or conservation purposes, the revised Act established the single designation of national park, whose definition now includes the concept of biological diversity.

In 2002, the Government of Québec, represented by the Société de la faune et des parcs (FAPAQ), concluded with the KRG the Agreement respecting the Development of Parks in Nunavik. This agreement defines the respective roles of the FAPAQ and the KRG in carrying out the steps toward the creation of a park. Its implementation began with the creation of Parc national des Pingualuit in 2004, followed by that of Parc national Kuururjuaq in 2009. This agreement is now part of the mandate B6 of the Agreement concerning Block Funding for the KRG, with the MDDEP now being responsible for its application.

Map 1
**QUÉBEC'S NATIONAL PARKS
 AND NATURAL REGIONS**



NATIONAL PARK (order by creation date)

- 1, MONT-ORFORD, DU
- 2, MONT-TREMBLANT, DU
- 3, GRANDS-JARDINS, DES
- 4, JACQUES-CARTIER, DE LA
- 5, GASPÉSIE, DE LA
- 6, FJORD-DU-SAGUENAY, DU
- 7, YAMASKA, DE LA
- 8, ÎLES-DE-BOUCHERVILLE, DES
- 9, BIC, DU
- 10, AIGUEBELLE, D'
- 11, MIGUASHA, DE
- 12, ÎLE-BONAVENTURE-ET-DU-ROCHER-PERCÉ, DE L'
- 13, MONT-SAINT-BRUNO, DU
- 14, POINTE-TAILLON, DE LA
- 15, FRONTENAC, DE
- 16, OKA, D'
- 17, MONT-MÉGANTIC, DU
- 18, MONTS-VALIN, DES
- 19, HAUTES-GORGES-DE-LA-RIVIÈRE-MALBAIE, DES
- 20, ANTICOSTI, D'
- 21, PLAISANCE, DE
- 22, PINGUALUIT, DES
- 23, KUURURJUAQ
- 24, LAC-TÉMISCOUATA, DU

NATURAL REGION

- A1, MAGDALEN ISLANDS
- A2, CHALEUR BAY SLOPE
- A3, GASPÉ MASSIF
- A4, NOTRE-DAME MOUNTAINS
- A5, ESTRIE, BEAUCE AND BELLECHASSE SECONDARY RANGES
- A6, BOUNDARY MOUNTAINS
- A7, SUTTON MOUNTAINS
- L8, APPALACHIAN LOWLANDS
- L9, MONTEREGIAN HILLS
- L10, ST-LAWRENCE LOWLANDS
- L11, SOUTH SHORE OF ESTUARY
- L12, UPPER NORTH SHORE AND MID-NORTH SHORE LOWLANDS
- L13, NORTH SHORE CUESTAS
- L14, ANTICOSTI ISLAND
- L15, LOWER NORTH SHORE ROCKY COASTLINE
- B16, PETIT MÉCATINA PLATEAU
- B17, NORTHERN LAURENTIANS
- B18, MONT VALIN MASSIF
- B19, LAC-SAINT-JEAN - SAGUENAY LOWLANDS
- B20, SAGUENAY FJORD
- B21, CHARLEVOIX COAST
- B22, LAURENTIAN MASSIF NORTH OF QUÉBEC CITY
- B23, SOUTHERN LAURENTIANS
- B24, GATINEAU VALLEY
- B25, TÉMISCAMINGUE LOWLANDS
- B26, ABITIBI CLAY BELT
- B27, JAMES BAY LOWLANDS
- B28, JAMES BAY ISLANDS AND MARSHES
- B29, RUPERT PLATEAU
- B30, MISTASSINI LAKE
- B31, OTISH MOUNTAINS
- B32, CENTRAL LAKE PLATEAU
- B33, GEORGE RIVER PLATEAU**
- B34, RIVIÈRE À LA BALEINE PLAIN
- B35, LABRADOR TROUGH
- B36, CANIAPISCAU PLATEAU
- B37, HUDSON PLATEAU
- B38, HUDSON CUESTAS
- B39, UNGAVA PLATEAU
- B40, PUVIRNITUQ MOUNTAINS
- B41, HUDSON STRAIT, FJORD COAST
- B42, UNGAVA BAY COASTLINE
- B43, TORNGAT MOUNTAIN FOOTHILLS

MARINE PARK

SAGUENAY - SAINT-LAURENT, DU

NATIONAL PARK PROJECT

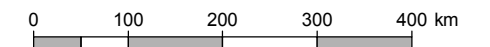
- P1, ALBANEL-TÉMISCAMIE-OTISH
- P2, ASSINICA
- P3, BAIE-AUX-FEUILLES, DE LA
- P4, CAP-WOLSTENHOLME, DU
- P5, MONTS-DE-PUVIRNITUQ, DES
- P6, MONTS-PYRAMIDES, DES**
- P7, NATASHQUAN-AGUANUS-KENAMU, DE
- P8, OPÉMICAN, D'
- P9, RÉGION DE HARRINGTON HARBOUR, DE LA
- P10, TURSUJUQ

TERRITORY RESERVED FOR THE CREATION OF A PARK

- TR1, CANYON-EATON, DU
- TR2, COLLINES-ONDULÉES, DES
- TR3, CONFLUENCE-DES-RIVIÈRES-À-LA-BALEINE-ET-WHEELER, DE LA
- TR4, LAC-BURTON-RIVIÈRE-ROGGAN-ET-LA-POINTE-LOUIS-XIV, DU
- TR5, LAC-CAMBRIEN, DU
- TR6, PÉNINSULE-MINISTIKAWATIN, DE LA

Metadata

Geodetic reference system: NAD 83 compatible with the World WGS 84 system
 Map projection: Lambert conical conserved along two standard parallels (46° and 60°)



1/8 000 000

Sources

Data	Organization
Base générale et administrative du Québec (BGAQ)	Ministère des Ressources naturelles et de la Faune
The natural regions	Ministère du Loisir, de la Chasse et de la Pêche, 1986

Realization

Direction du patrimoine écologique et des parcs
 Service des parcs
 Division de la géomatique et de l'infographie

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As new announcements brought Québec ever closer to the 8% target for protected areas, in March 2008 the Monts-Pyramides territory was added to the Québec Register of protected areas as a national park reserve. This provisional protection status would serve until the area could be given a permanent status. Also added to the register was the Rivière George land reserve for purposes of a protected area. These two territories withheld a good part of the George from the commercial development of natural resources.

In the fall of 2009, working together to implement the agreement on park development in Nunavik, the KRG and the MDDEP agreed that the next project should be the Monts-Pyramides park. In February 2010 an information session was held in Kuujuaq to present the project. This meeting resulted in the formation of a working group, which met for the first time in April 2010. It is composed of representatives of the MDDEP and various interest groups, including the KRG, the northern villages of Kuujuaq and Kangiqsualujuaq, the Kuujuaq and Kangiqsualujuaq landholding corporations, the Makivik Corporation and two representatives of the Naskapi Nation of Kawawachikamach. The working group encourages participation by local and regional organizations in advancing the project. For example, the inventory work conducted in the summer of 2010 was done in concert with the local community.

PROVISIONAL MASTER PLAN

The process that was followed to produce this document is standard practice in land use development projects. To begin the process, scientific information was collected about the biophysical, archaeological and historical resources of the study area. Also described was the future park's regional setting, in terms of access, services, conservation approaches and economic and tourist development, to ensure harmony between park developments and service offerings already available. A description of land use and tenure rounded out the study, and all this information was put together in an accompanying document produced by the KRG, entitled *Status Report* (KRG, 2011).

Through analysis of the information presented in the Status Report, fragile sectors were separated out from those more suited to development. This in turn helped to determine the optimal boundaries for the park to fulfill its purpose. Consideration of all these elements then led to the drafting of general guidelines for the conservation of natural and cultural

heritage, together with policies on the activities and services that will be offered.

Prepared by the MDDEP's Direction du patrimoine écologique et des parcs, this Provisional Master Plan reflects the recommendations of community representatives from Kuujuaq, Kangiqsualujuaq and Kawawachikamach. Importance has also been given to the participation of Inuit and Naskapis, not only those in the working group but others who regularly use the territory, in creating the development concept. This will ensure that their concerns are taken to heart regarding the presence of visitors and the activities they may practise. Moreover, their knowledge of the territory will be crucial for the identification of safe locations for park facilities.

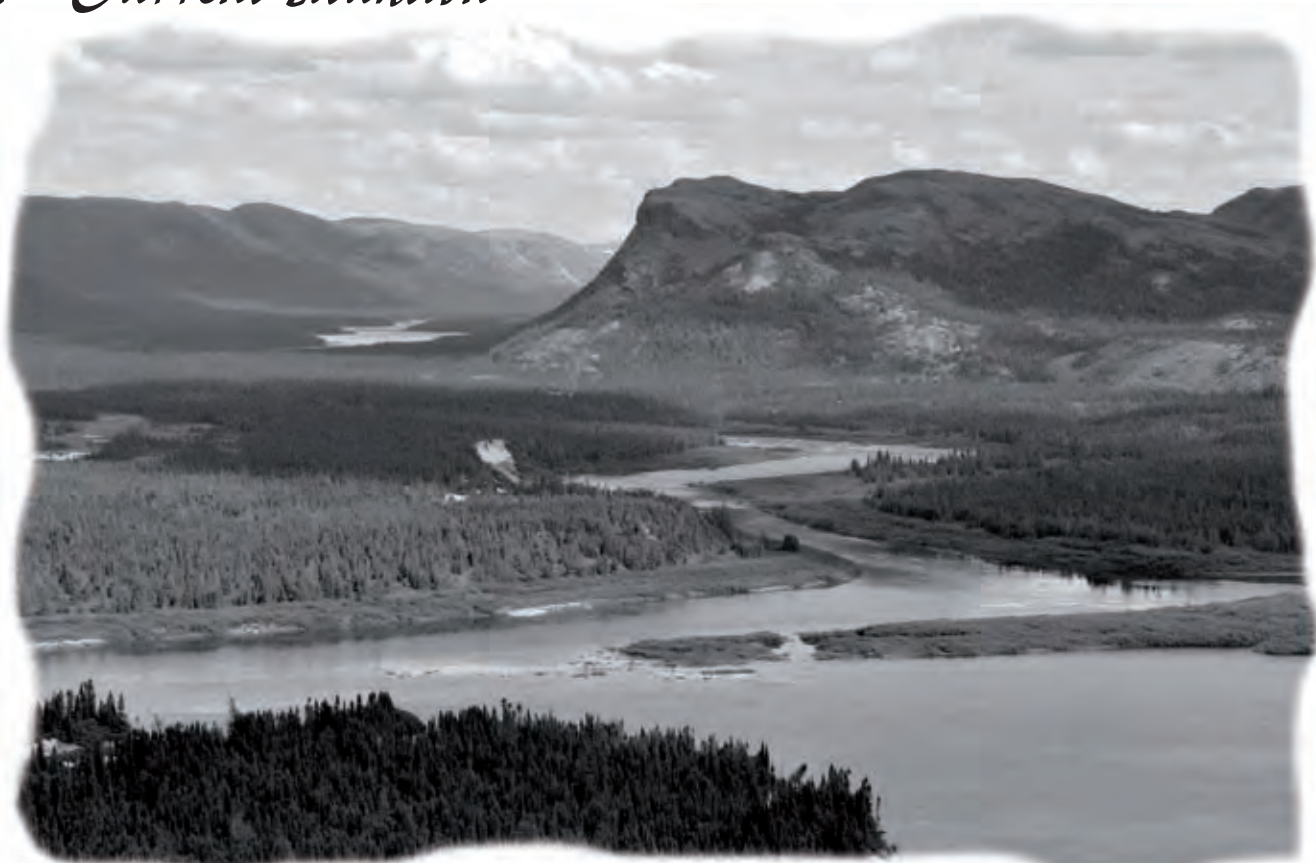
At the public hearing to be held under the Parks Act (R.S.Q., c. P 9), opinions and comments will be welcomed, for they will contribute to improving the Provisional Master Plan. Once the project is authorized by the Kativik Environmental Quality Commission, it will be submitted to the Government, which will issue an order creating the park. The final version of the Master Plan will provide a framework for the future actions of park administrators, ensuring that their prime objective is always to maintain the integrity of the natural and cultural heritage of this park.

HARVESTING RIGHTS OF JBNQA AND NEQA BENEFICIARIES

Since Parc national des Monts-Pyramides will be on land governed by these agreements, it is important to specify that under the provisions of Chapter 24 of the JBNQA as well as the *Act respecting hunting and fishing rights in the James Bay and New Québec territories* (R.S.Q., c. D-13.1), beneficiaries of the JBNQA and the Northeastern Québec Agreement (NEQA) will retain harvesting rights throughout the new park. In contrast, visitors who are not beneficiaries of the JBNQA or NEQA will be subject to the provisions of the Parks Act, which stipulates in section 7 (a) that "notwithstanding any provision of law, hunting or trapping of every kind is prohibited in a park".



1 Current situation



7

Photo: Alain Thibault, MDDEP

1.1 STUDY AREA

The centre of the study area for the proposed Parc national des Monts-Pyramides is approximately 120 km south of the village of Kangiqsualujuaq, 200 km southeast of the village of Kuujuaq, and about 330 km north of Schefferville and Kawawachikamach. The area studied covers 5511 km² and extends from 57°13' to 58°13' latitude north and from 64°25' to 66°00' longitude west (see Map 2).

The study area was defined at a meeting of the working group held on April 12, 2010. At the request of local representatives from Kuujuaq and Kangiqsualujuaq, the area set aside in 1992 was expanded to include part of the Rivière Ford along with Lac Tasirlaq. This addition permits the inclusion of a segment of the high plateaus of the Rivière George, which were not represented in the national park reserve.

1.2 NATURAL REGION REPRESENTED

The proposed park is intended to represent the George River Plateau natural region (B33). It extends from the source of the Rivière George, near Schefferville, to Baie Keglo on the east coast of Ungava Bay. The land here is a uniform plateau that gradually slopes from an elevation of 800-900 m in the east to around 400 m in the west. The Rivière George cuts through this plateau over a distance of 565 km. A particular feature of the river is that it is rarely more than a few kilometres away from the western edge of its watershed. Shrubs tundra covers the top of the plateau, while the valley bottoms contain islands of boreal forest. In terms of wildlife, the plateau was famed as the calving ground for the Rivière George caribou herd. The region as a whole provides a habitat for wolves, black bears, rough-legged hawk and the willow ptarmigan. Atlantic salmon and Arctic char are abundant in the rivers (MLCP, 1986).

1.3 REGIONAL SETTING

The administrative region of Nord-du-Québec is divided into two separate subregions, Baie-James and Nunavik. They are separated by the line of the 55th parallel, with Nunavik occupying the northern part. With a total area of 500 164 km², Nunavik comprises 1 Cree community and 14 Inuit communities scattered along the coast, as well as 1 Naskapi community. The village closest to the study area is Kangiqsualujjuaq, located about 55 km from the northern boundary of the proposed park.

1.3.1 LAND REGIME

The Nunavik region is subject to the land regime defined in the JBNQA. This regime provides for three categories of land, determining how it can be used, the responsibilities of those who manage it and the terms and conditions under which they do so. With the exception of mineral and subsurface rights, Category I lands are the property of the landholding corporations. These lands extend beyond village borders to include the zone of influence where traditional activities are practised intensively. Category II lands are lands in the domain of the state on which JBNQA beneficiaries have exclusive hunting, fishing and trapping rights. These lands were so identified due to the presence of resources accessible to the Inuit that are essential to the exercise of their harvesting rights. Lastly, the remainder of the territory is composed of Category III lands. These too are lands in the domain of the state on which the Inuit may practise hunting, fishing and trapping, but in a non-exclusive manner (Beauchemin, 1992).

The study area lies for the most part on Category III land, but does include a block of land in Category II that belongs to the community of Kangiqsualujjuaq. This block covers an area of 446.65 km², representing just 8.1% of the study area.

1.3.2 USE OF THE TERRITORY

The study area was traditionally used by the Inuit and the Naskapis. Nowadays, the territory is mostly used by the Inuit of Kangiqsualujjuaq, especially around Lacs Tasirlaq and Qamanialuk.

The territory is also used for other purposes, including recreotourism, mining exploration, logging and nature conservation. These different types of land use are governed by rights issued by the Government of Québec (see Map 3).

Outfitters

There is one lease for a permanent outfitter camp near Pic Pyramide, on the west bank of the Rivière George: *Pyramid Mountain Camp*. The study area also touches on lands used by two other outfitters, whose permanent camps are also on the Rivière George but outside the proposed park: *Wedge Hills Lodge* to the south and *Helen Falls Camp* to the north. The latter belongs to S. Annanack Enterprises Inc. and is operated by Ungava Adventures.

Mining exploration

At certain locations in the study area there are active mineral titles, primarily along the western boundary. Note however that most of the study area is excluded from mining activity.

Logging

Section 6.3.1 of the JBNQA grants exclusive community timber rights to the landholding corporations of Kuujjuaq and Kangiqsualujjuaq over lands identified in Schedule 2 of Chapter 6. One such sector lies along the Rivière George and is partially within the study area. Its total area is approximately³ 740 km², of which nearly 330 km² are in the northern part of the study area.

Conservation

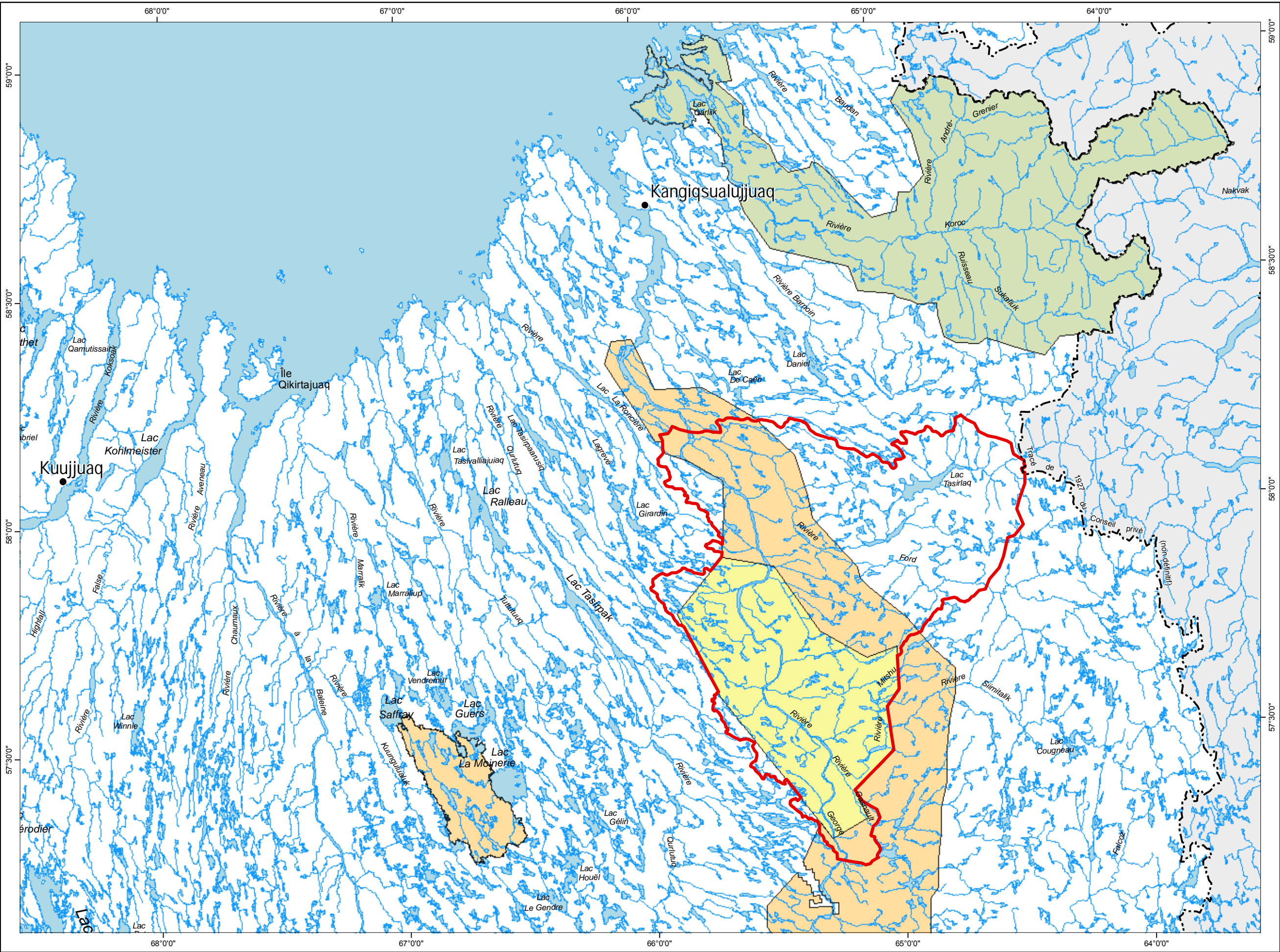
Some 1935 km² of the study area was already chosen for park creation and added to the Québec Register of protected areas. The present project also includes a 1380 km² portion of the Rivière George land reserve for purpose of a protected area. This means that 60% of the study area is currently protected by a provisional protection status.

Regionally, there are two other protected areas within 100 km of the study area: Parc national Kuururjuaq and the Rivière Marralik land reserve for purposes of a protected area. Less than 20 km separate Parc national Kuururjuaq from the study area.

³ The boundary presented on the map was redrawn using the cartographic indications in the JBNQA.

Map 2
STUDY AREA

- Study area
- National Park
- National Park Reserve
- Territory reserved for Protected area



Metadata

Geodetic reference system	NAD 83 compatible with the World system WGS 84
Coordinate system	Lambert Conic Projection with two Standard Parallels (46° and 60°)

0 5 10 20 30 40 50 Km

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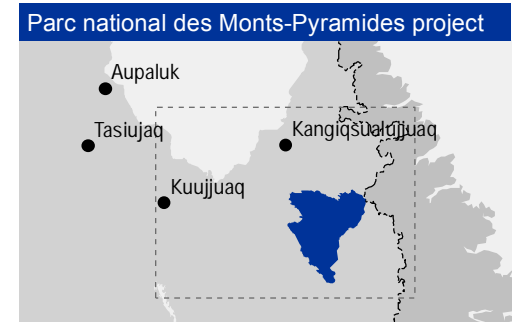
Source

Data	Organization
Base de données topographiques et administratives (BDTA) à l'échelle de 1/250 000	Ministère des Ressources naturelles et de la Faune

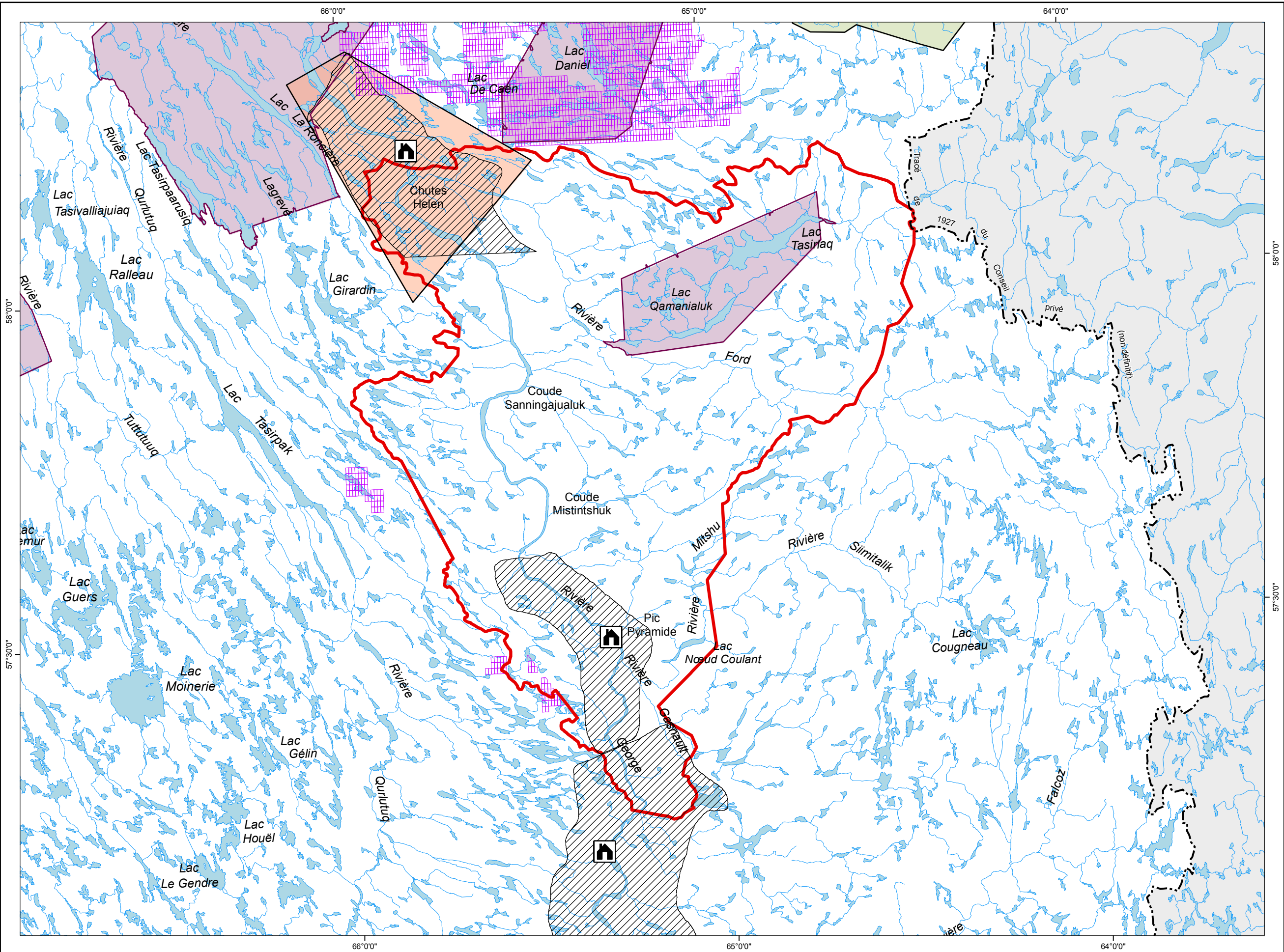
Realization

Direction du patrimoine écologique et des parcs
Service des parcs
Division de la géomatique et de l'infographie

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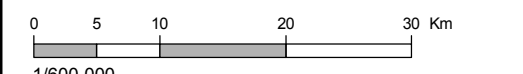
Map 3
LAND USE



- Study area
- National Park
- Category II land
- Timber rights
- Active mining claim
- Outfitter (Territory of operation)
- Outfitter (Permanent camp)

Metadata

Geodetic reference system: NAD 83 compatible with the World system WGS 84
 Coordinate system: Lambert Conic Projection with two Standard Parallels (46° and 60°)



1/600 000

Sources

Data	Organization
Base de données topographiques et administratives (BDTA) à l'échelle de 1/250 000	Ministère des Ressources naturelles et de la Faune
Category II land	Ministère des Ressources naturelles et de la Faune
Timber rights	JBNQA, chapter 6, schedule 2
Mining claims	Ministère des Ressources naturelles et de la Faune
Outfitters	Ministère des Ressources naturelles et de la Faune Direction régionale Nord-du-Québec

Realization

Direction du patrimoine écologique et des parcs
 Service des parcs
 Division de la géomatique et de l'infographie

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Parc national des Monts-Pyramides project





1.4 STATUS REPORT SUMMARY

This section summarizes the document *Parc national des Monts-Pyramides Project. Status Report* (KRG, 2011) produced by the KRG. The reader is invited to consult it for more detailed information.

1.4.1 CLIMATIC CONDITIONS

Generally speaking, the rigorous climate of Nunavik is explained by the low net solar radiation over the year and the presence of polar air masses causing low humidity and precipitation. Average annual temperatures in the region range from -5 °C to -10.8 °C.

The average temperature in the Pic Pyramide sector is 1.2 °C colder than in Kuujjuaq. This is due to the greater distance from the moderating effect of the ocean and to the higher elevation. From June to September, daily average temperatures are over 0 °C. July is the warmest month, with an average temperature of 9.3 °C, while January is the coldest, with an average temperature of -24 °C. The length of the frost-free season depends on whether you are in the valley of the George or on the high plateaus.

Despite the long summer days (18 hours, 15 minutes at the summer solstice), the growing season is relatively short, ranging from 79 to 120 days. As an illustration, in Kuujjuaq the mean annual cumulative number of degree-days over 5 °C is just 531.9, whereas in Montréal it is about 4 times higher.

Since forests are generally confined to the valley bottoms, the greater part of the study area is exposed to the wind. According to data from the Kuujjuaq airport, the prevailing winds are southwesterly, with an average speed of about 15 km/h. These winds cause a strong wind chill factor, lowering the effective temperature of the air on exposed skin.

Based on the climatological normals recorded at the Kuujjuaq airport, precipitation is most abundant in summer, with a maximum of 70.4 mm in August. Kuujjuaq receives total precipitation (including snow) of 526.8 mm per year on average, while its average annual snowfall is 257 cm. In the Pic Pyramide sector, total annual precipitation is on the order of 700 mm, of which just 30% is in the form of snow. These figures are significantly lower than what is observed in

southern Québec (e.g. 1230 mm for Québec and 978.9 mm for Montréal).

1.4.2 NATURAL HERITAGE

The natural heritage of the proposed park includes a wide range of elements that are representative of the George River Plateau natural region.

The landscapes and their formation

The study area lies on a vast peneplain that slopes gently from east to west, passing from about 800 m to less than 200 m. The maximum elevation (\pm 815 m) is found southeast of Lac Tasirlaq. The regularity of the landscape is broken by the valley of the Rivière George and the lower Rivière Ford, with the lowest point (\pm 10 m) being at the confluence of these two rivers. Slopes are generally less than 30%, except for the flanks of the George and Ford valleys and the escarpments of certain steep rocky structures.

1.6 million years ago, the region probably resembled what we see today. Superficially however the landscape was reshaped by the repeated passage of glaciers during the Pleistocene epoch, which lasted from about 1.6 million to 10 thousand years before the present (BP). Over the course of the Pleistocene, a series of glaciations alternated with longer periods free of ice.

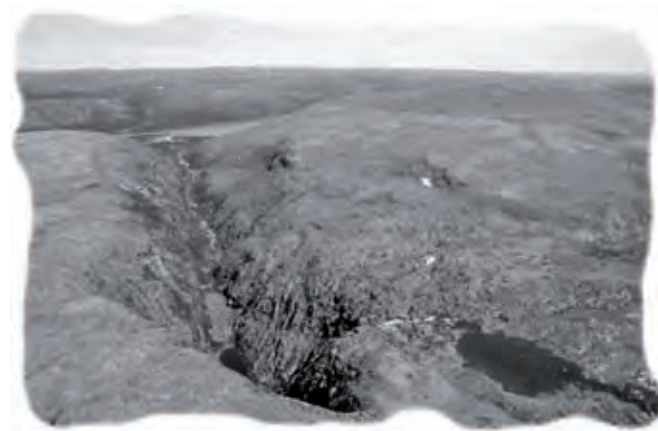


Photo: Alain Thibault, MDDEP

During the last glaciation, the land was covered by a mass of ice some 2000 to 3000 m thick, the weight of which pushed down the crust of the Earth. The slow movement of this glacial mass left its marks on the landscape, deepening the valleys, polishing the rocks and displacing loose materials.

Deglaciation began around 10 thousand years BP and by 7.6 thousand years ago a large part of Labrador was free of ice, as was the study area a few centuries later. As the ice melted, part of the glacier blocked the lower course of the Rivière George, creating a glacial lake called Lac Naskaupi between the Torngat mountains and the glacier. The presence of marine shells on the southeast coast of Ungava Bay indicates that the mouth of the George was free of ice by 7.4 thousand years BP.

Exactly when Lac Naskaupi came into being and how long it lasted are matters of conjecture. At its highest level of 550 m it covered nearly all of the study area and extended well to the south. A total of 40 different levels have been identified for this lake. Ancient shorelines are clearly visible in the study area, being responsible for the characteristic shape of Pic Pyramide. The lowest level of the lake was around 140 m, a phase during which it would have been confined to the valley of the Rivière Ford.

After the last masses of ice had melted from the lower course of the Rivière George and glacial Lac Naskaupi had emptied, the valleys were flooded again by the waters of the D'Iberville Sea. Across the region, the D'Iberville Sea reached a maximum elevation of 100 m, reaching as far as 70 km upstream on the Rivière George from the confluence with the Rivière Ford.

Vegetation

Nearly half (48%) of the study area is covered by a tundra complex on non-consolidated materials. It is a mosaic of bare deposits, scrublands, herbaceous meadows, moss cover and lichens. This type of vegetation is primarily found on the high plateaus. There is relatively little hairy lichen cover (0.3%) due in part to the grazing and trampling by caribou. The valley bottoms are mostly populated by stands of white or black spruce-moss. The sides of the valleys therefore comprise a transition zone between very different environments, passing gradually from boreal forest to scrubland, to herbaceous meadow, to moss cover and finally lichen cover. The elevation boundary for the trees is around 275 m. Bogs are relatively rare and generally small. Ombrotrophic peat bogs are in the valleys, interspersed among forest stands. Those that are best developed are in the valley of the Ford, a few being scattered with palsas.

The vascular flora of the study area is estimated at around 330 taxa. Of this number, 270 have been identified in

the study area and immediate periphery. Taxa of boreal affinity are more numerous than those of arctic affinity. 27 species in the area are considered to be calcicole, i.e. suited to calcareous soil. Their presence in an acidic geological environment is due to occasional very localized concentrations of carbonates. Two sites merit particular attention for the number of calciphile or calcicole species to be found. The first is on the south slope of a mountain about 6.5 km east-southeast of the mouth of the Rivière Ford, the second being at the foot of a large waterfall on the right bank of the George, about 7 km upstream from the mouth of the Rivière Nutillilik.

Since the study area straddles two zones of forest tundra and shrub tundra, it is not surprising to encounter species at the northern limit of their distribution range. Seven such species are found within the study area. The ubiquity of acidic rocks does not favour the presence of rare species (threatened or vulnerable in Québec, or declared or likely to be declared as such in Canada). Nonetheless, one occurrence of a species threatened in Québec, and one of a species likely to be declared threatened or vulnerable in Québec, have been discovered on the study area. They are, respectively, *Athyrium alpestre* var. *americanum* and *Alchemilla glomerulans*. There are also four species considered rare in Canada: *Carex rufina*, *Cerastium cerastoides*, *Omalotheca norvegica* and *Woodsia alpina*. Three taxa are listed by COSEWIC (Committee on the Status of Endangered Wildlife in Canada, 2010) as likely to be declared endangered: *Alchemilla glomerulans*, *Omalotheca norvegica* and *Ranunculus allenii*.

Turning to the nonvascular plants, field collections resulted in the identification of 51 liverworts, 75 mosses and 114 lichens. Since some specimens collected were not identified, the list could grow in future. This work led to the discovery of two



Photo: Alain Thibault, MDDEP



new liverworts for Québec (*Marsupella boeckii* and *Eremonotus myriocarpus*) and a major extension of the distribution range for a third, *Reboulia hemisphaerica*. Four of the liverwort species and four of the moss species are considered as rare in Québec and as priority species for conservation. They are: *Apomarsupella revoluta*, *Gymnomitrium apiculatum*, *Scapania crassiretis*, *Scapania obcordata*, *Tetradontium brownianum*, *Oligotrichum hercynicum*, *Arctoa fulvella*, and *Pohlia longicollis*.

Certain habitats offer greater diversity and a stronger likelihood of finding species of interest, particularly among the bryophytes (mosses and liverworts). Rocky escarpments, with their crevices, cold chimneys and seepage zones, are habitats of choice that can harbour several species of interest. The same is true of waterfalls, where the spray creates the particular conditions of humidity that are propitious for species of interest. Snow beds are also habitats to consider, especially for hairy lichens with a more arctic range or those requiring particular growing conditions.

Wildlife

Despite its nordic location, the wildlife found in the study area for Parc national des Monts-Pyramides project is quite diverse. Field inventories and distribution maps indicate the presence of 34 species of mammals, 97 species of birds, 11 species of fish and 4 species of amphibians.

By and large, the mammals present are typical of the region: caribou, black bear and a myriad of small mammals. The caribou are essentially those of the Rivière George herd, which in recent years has declined in numbers. According to inventories by the ministère des Ressources naturelles et de la Faune (MRNF), the population has fallen from 385 000 in 2001 to barely 75 000 in 2010. Of the other species present, four – the wolverine, polar bear, least weasel and rock vole – are listed as likely to be declared threatened or vulnerable in Québec. Harbour seals have been seen in the Rivière George, but since this is a marine species their presence in the study area must be considered anecdotal.

Among the 97 species of birds, 61 are presumed to be possible breeders here. The inventory conducted in summer 2010 confirmed the nesting of 31 species, five of which have federal or provincial protection status: the harlequin duck, golden eagle, peregrine falcon, short-eared owl and rusty blackbird. Sightings of Barrow's goldeneye, which is also endangered, have already been confirmed, but this species seems to be

very rare and apparently does not reproduce in the study area. It should be noted that 23 species are considered unusual in the area, meaning that they are not seen each year and their presence on a regular basis is unlikely.



Photo: Stéphane Cossette, MDDEP

As for fish, the lakes and rivers are dominated by salmonids (Atlantic salmon, Arctic char, lake trout and brook trout). The Rivière George has long been known as a river rich in salmon, and for some fifty years near the end of the 19th century it was even the site of a commercial fishery. The distribution of species in different environments of the study area can vary widely. While the George is home to 11 known species, in some of the poorer lakes there are only Arctic char. The great adaptability of the Arctic char explains its success in colonizing such lakes. For example, a dwarf form of Arctic char has been observed in a small lake near Pic Pyramide and in Lac Tasirlaq.

No specific inventory of amphibians or reptiles has been performed in the region of the proposed park. However, according to data from the *Atlas des amphibiens et reptiles du Québec* (2010), the American toad, leopard frog, mink frog and wood frog are likely present in the study area. None are endangered, being common throughout Québec, and some have even been observed north of the 56th parallel.

Last but certainly not least, insects and spiders are most definitely present in the study area. Mosquitoes, ubiquitous throughout the north in summer, are one species that cannot be avoided during visits to this region. A single species of mosquito was identified from the collections of summer 2010.

Also identified were 23 species of beetles, 3 species of ants and 33 species of spiders.

1.4.3 CULTURAL AND HISTORICAL HERITAGE

The prehistory of northern Québec is marked by two great cultural sequences: predecessors of the Amerindians and predecessors of the Inuit. In Nunavik, the Paleo-Eskimo and Inuit predominate. In the Monts Pyramides region there are also Amerindian sites dating back to the Archaic (8000-3000 years BP), as well as proto-historic and historic sites (Cree, Innu and Naskapi). However, archaeological sites dating back to the Archaic are very rare in this region.

Numerous archaeological sites have been identified to the north and south of the study area, those to the north being associated with the Inuit or Paleo-Eskimo tradition because they are closer to Ungava Bay. Southwards, archaeological sites are associated more with the Amerindian tradition.

Prior to summer 2010, no archaeological sites had been identified in the study area. However, the presence of Inuit and Naskapi toponyms suggests that such occupation sites do exist. Moreover, six sites were found in summer 2010, including four Inuit occupation sites on Lacs Qamanialuk and Tasirlaq. A contemporary Naskapi occupation site was identified near an old outfitter camp.

Prior to contact with Europeans, the Inuit lived in small, self-sufficient family groups. A nomadic people, they moved from place to place with the cycles of nature, seeking the marine and terrestrial mammals necessary to their survival. Caribou and seal were their main resources, not only for food but also to shelter and clothe themselves.

The Naskapis also moved in small, self-sufficient groups, but were more in the interior of the Québec-Labrador peninsula. Their movements essentially followed the migration of the caribou, their principal subsistence resource. Their dependence on the caribou makes them culturally distinct from the Cree and Inuit, but was the cause of great famines when the caribou herd declined in the early 20th century.

Even though contacts between aboriginals and Europeans in Nunavik were sporadic, they become more frequent in early 1800s. On June 24, 1811 the Moravian missionaries Kohlmeister and Kmoch, guided by an Inuit, set out on an expedition from Okak. They arrived in Kangertlualuksoak (now Kangiqsualujjuaq) on August 7, 1811 and spent several days observing the environs. After determining that there was enough wood and game to survive, and even to build a mission, they took possession of the site in the name of King George III, naming the Rivière George in his honour. The missionaries then carried on, reaching the Rivière Koksoak on August 25.

This expedition opened the way to other voyages of exploration by the Hudson’s Bay Company (HBC). In 1830 the first trading post in Ungava was created. Fort Chimo was built on the Rivière Koksoak, 50 km south of the estuary. Its purpose was to promote the fur trade and the hunting of belugas by establishing contacts with the Inuit and Naskapis. In 1838 the HBC opened a trading post on the west bank of the Rivière George (Fort George River), 16 km upstream from the present village of Kangiqsualujjuaq. The expected earnings turned out to be uneven, so there were periods when these posts were temporarily closed.



Photo: Alain Thibault, MDDEP

The trading posts brought significant changes to the lifestyle of the Inuit and Naskapis. They became dependent on products sold at the trading post such as weapons and munitions, tea, tobacco and flour. Long journeys to exchange furs for these



products interfered with the annual harvest cycles, so some families settled near the trading posts.

In 1916, in response to growing demand for supplies by the Naskapis and a strong market for marten fur, the HBC established a new trading post (Fort McKenzie) further inland, on the edge of Lac Lemoyne. This subsequently became an important place for the Naskapis and a number of families settled there.

In 1941, during World War II, the American army built an air base at the site of what is now Kuujjuaq, 5 km south of Fort Chimo. This base remained in operation until 1945 and was transferred to the Government of Canada the following year. Due to the hard living conditions of the Inuit and Naskapis in the region, a dispensary and school were built in 1948. With so much activity at the former military base, the HBC closed Fort Chimo and moved its operations there in 1958. A cooperative was set up in 1961 and the village of Kuujjuaq incorporated in 1979.

In 1952 Fort George River was closed for good. Subsequently, after a study of the region's economic potential by what was then called the Department of Indian and Northern Affairs, in 1959 the George River Eskimo Fishermen's Co-operative was created. This was the first Inuit cooperative in Canada and is known today as the Federation of Co-operatives of Northern Québec. Both the provincial and federal governments were becoming increasingly involved in the north, and in 1962 the Inuit camps scattered along the Rivière George were moved to a single location, a small cove called Akilasakallak, where the village of Kangiqsualujjuaq was created. That year, houses, a school, a power plant and a sawmill were erected. The wood used for sawmill operations was harvested along the Rivière George. Within the study area, logging was done about 100 km upstream from the village of Kangiqsualujjuaq.

By 1956 most of the Naskapis were at Fort Chimo and Fort McKenzie. With the intention of improving their living conditions, the Government of Canada decided to relocate them to the Schefferville area, where an iron mine had begun operations. To get there they travelled nearly 600 km by canoe and on foot. Initially settled at Lac John, they were later moved to the Montagnais reserve of Matimekossh in 1972, finally settling at Kawawachikamach in 1984.

1.5 DEVELOPMENT HISTORY

Outfitters have an important place in the history of the study area. Bob May, who from 1943 to 1952 managed Fort George River trading post, was the first to build outfitter camps on the river. In 1954 he set up the first camp 15 km downstream from Helen falls, moving it to the falls the following year. The camp hosted salmon fishers in the summer and caribou hunters in the fall (Fraser, 2010).

In summer 1963 Bob May set up a new camp, much further to the south this time, in front of Pic Pyramide. Like the one at Helen falls, the camp at Pic Pyramide was built by hand from trees felled nearby. Due to the abundant hunting and fishing, the beauty of the site and good management, it was an immediate success. Indeed, two satellite camps were constructed, the first being "Big Bend" about 50 km north along the river (near Coude Sanningajualuk), the second ("Little Pyramid") about 18 km to the south.

Following the example of Bob May, Willie Emudluk, an Inuk from Kangiqsualujjuaq who had worked both at Fort George River and at Bob May's camp at Helen falls, built a fishing camp on Ford island, which is in the middle of the George near the trading post. His first customers arrived in 1965, and the business was on a solid footing by the early 1970s. To extend his operating season by also offering caribou hunting, he then built a camp at Lac Qamanialuk, some 50 km southeast of Helen falls.

Nowadays, only the camps near Pic Pyramide (*Pyramid Mountain Camp*) and Helen falls (*Helen Falls Camp*) are still in operation. Due to the declining numbers of the Rivière George caribou herd and its low presence in the region, both outfitters now offer only sport fishing. The "Big Bend", "Little Pyramid" and Lac Qamanialuk sites have all been abandoned.

1.6

HERITAGE STATUS

In almost all of the study area for Parc national des Monts-Pyramides, the natural and cultural heritage is intact. However, the occupation sites of the outfitters, whether still in use or abandoned, require special attention. There are waste deposits around them, and it is not uncommon to find old fuel barrels and motor vehicle hulks. On the abandoned sites there are buildings in an advanced state of decay. The KRG started cleaning up these sites during summer 2011.



2 Situational analysis and diagnosis



Photo: Stéphane Cossette, MDDEP

Ground surveys and a review of the literature have identified elements of the natural and cultural heritage that are representative of the natural region, as well as rare or fragile elements that deserve special attention.

2.1 DEVELOPMENT POTENTIAL AND CONSTRAINTS

The study area offers abundant potential for the conservation and development of the future park. The elements comprising that potential stand out in their scale, quality, degree of representativeness or exceptional character. To identify them more effectively, the territory was subdivided into four large landscape units: the Lac Tasirlaq and Lac Qamanialuk plateau, the lower Rivière Ford, the Rivière George plateau and the valley of the Rivière George (see Map 4). Within the greater

whole of the proposed park, each of these units has its own unique characteristics.

2.1.1 THE LAC TASIRLAQ AND LAC QAMANIALUK PLATEAU

This landscape unit includes the portion of the territory where the elevation is generally over 500 m. The vegetation is typically arctic, trees being generally absent. The physiography of the northern part is completely different from the rest of the study area. The sector features a series of long, narrow hills, slightly arched, that are often edged with rocky escarpments. These hills are basically oriented south to north and southeast to northwest.

With an area of over 50 km², Lac Tasirlaq is the largest lake in the study area, and one of the largest within a radius of

250 km. Watercourses throughout this landscape unit offer numerous cascades and small waterfalls.

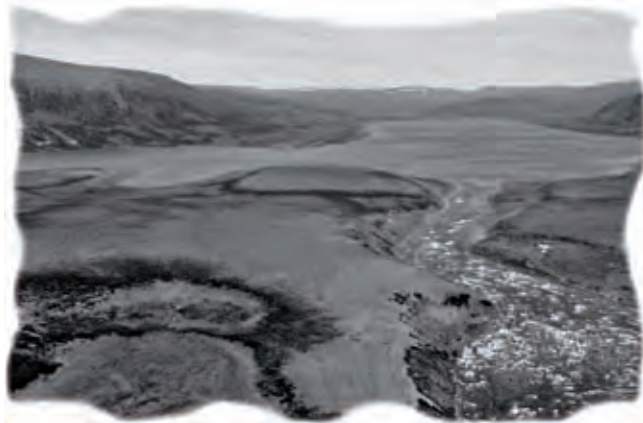


Photo: Alain Thibault, MDDEP

Glacial lake Naskaupi also left its mark on the Lac Tasirlaq and Lac Qamanieluk plateau. The highest glaciolacustrine delta within the study area can be found just north (1 km) of the eastern extremity of Lac Tasirlaq, corresponding to the highest level reached by the glacial lake (550 m). Also found in this sector is the largest fluvioglacial complex, between Lac Tasirlaq and the Québec-Newfoundland and Labrador border⁴. This 15 km-long valley features an impressive esker, numerous kettles, cryosols (frozen ground) and fan deposits from eroding slopes.

These high plateaus have long been an Inuit gathering place for hunting caribou. People came from the areas around Kuujjuaq, Kangiqsualujjuaq and the Labrador Sea to hunt there. The presence of archaeological sites on the shores of Lacs Tasirlaq and Qamanieluk bears witness to this occupation.

2.1.2 THE LOWER RIVIÈRE FORD

With turquoise waters and a course punctuated by cascades and falls, the lower Rivière Ford offers a totally different ambience from the Rivière George. From the outflow of Lac Qamanieluk, the Ford flows through a wide, forested valley dominated by spruce-moss stands. Near its mouth, bogs have formed on the left bank of the river. They feature the most extensive field of palsas and thermokarst pools in the study area.

The Helen falls are an impassable obstacle for anadromous Arctic char, so this species heads up the Rivière Ford to spawn.

⁴ 1927 Privy Council boundary. Not definitive.

For 6 km along the left bank of the Ford there is a rocky escarpment with a vertical drop of about 280 m. This type of escarpment provides an excellent habitat for birds of prey, including the rough-legged hawk, golden eagle and gyrfalcon. Also found are several species of calcicole and calciphile vascular plants. Atop the heights at the mouth of the Ford there is an outstanding panorama from which to observe the landforms and phenomena left by the passage of the glaciers.



Photo: Alain Thibault, MDDEP

2.1.3 THE VALLEY OF THE RIVIÈRE GEORGE

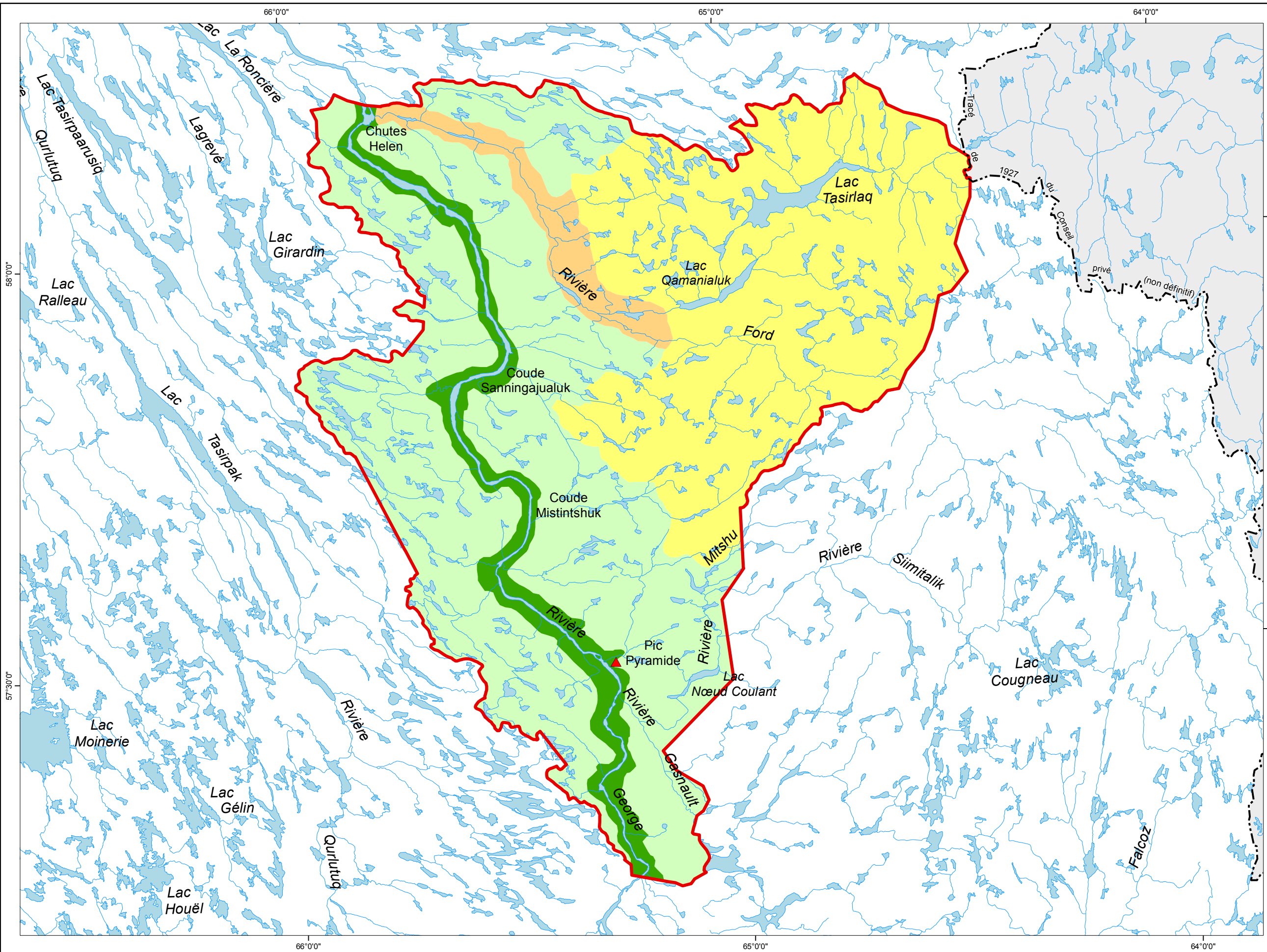
The valley of the Rivière George is a major component of the study area, completely traversing it along a north-south axis. Structural in origin, the valley was overdeepened during the great glaciations of the Quaternary. Today the sector around Coude Mistintshuk displays the characteristic U shape of a glacial valley.

From south to north, the course of the George features numerous short sections of rapids or cascades before reaching Helen falls, 5 km from the northern limit of the study area. Though their total drop is 20 m, Helen falls consists of a series of ledges 2-3 m high, spread over a distance of 3 km. Between the ledges are fishing holes that are highly prized for Atlantic salmon. As mentioned earlier, these falls do not prevent Atlantic salmon from continuing further south to spawn. They can be caught in the Pic Pyramide sector, over 100 km from Ungava Bay.

Along the banks of the George can be seen massive ice-pushed ridges and boulder tracks. The boulders are pushed up by the force of the ice during spring break-up. They form continuous lines ranging from a few hundred metres in length to over a kilometre, generally at a height of 4 to 5 m above the river. On

Map 4
LANDSCAPE UNITS

- Study area
- Lac Tasirlaq and Lac Qamanieluk Plateau
- Rivière George Plateau
- Lower Rivière Ford
- Valley of the Rivière George



Metadata

Geodetic reference system	NAD 83 compatible with the World system WGS 84
Coordinate system	Lambert Conic Projection with two Standard Parallels (46° and 60°)

0 5 10 20 30 Km
1/500 000

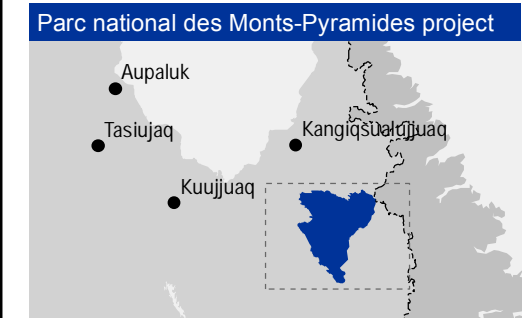
Source

Data	Organization
Base de données topographiques et administratives (BDTA) à l'échelle de 1/250 000	Ministère des Ressources naturelles et de la Faune

Realization

Direction du patrimoine écologique et des parcs
Service des parcs
Division de la géomatique et de l'infographie

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the right bank of the George at Pic Pyramide there is an ice-pushed ridge some 10 m high. This phenomenon goes to show the incredible power of the river.



Photo: Stéphane Cossette, MDDEP

The valley bottom of the George is dominated by spruce-moss and spruce-lichen forests, contrasting with the low vegetation of the slopes and plateaus. The surprising size of the trees in some places, especially white spruce, shows that growing conditions can vary significantly in different parts of the valley. There is even a stand of white birch and a small grove of balsam poplar.

2.1.4 THE RIVIÈRE GEORGE PLATEAU

Rising on either side of the valley, the Rivière George plateau is cut by several tributaries, for the most part flowing from east of the George. These are the Gasnault, Mitshu, Nutillilik, Qinnnguliup and Imaapik rivers. This landscape unit supports an arctic-alpine vegetation dominated by scrublands, herbaceous meadows, mosses and lichens.

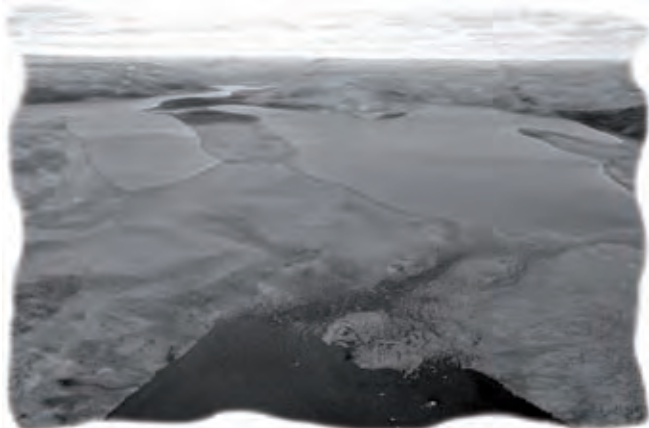


Photo: Alain Thibault, MDDEP

The landscape here is smooth, vast and uniform. Glaciolacustrine shorelines can be seen at several places in the study area, but it is at Pic Pyramide that they are most obvious. Nowadays the shores are like verdant esplanades, contrasting with the other slopes, which are more naked.

This landscape unit is also cut by fluvio-glacial gorges carved out of the rock by the melting glacier. A good example is the Rivière Qinnnguliup with a 6 km long gorge.

On all the rivers here, sudden declivities can form beautiful waterfalls. One in particular on a stream is about 7 km south of where the Rivière Nutillilik enters the George. With a height of 40 m, it plunges down the centre of a horseshoe-shaped erosion form.

An interesting feature of the wildlife on the plateau is the polymorphism in Arctic char populations in certain lakes. This is expressed by dwarf individuals as seen especially in a small lake near Pic Pyramide.

2.1.5 CONSTRAINTS ON DEVELOPMENT

Average temperatures in the study area are sufficiently cold to maintain permafrost. East of the Rivière George there is continuous permafrost on the high plateaus, while in the valley there is extensive discontinuous permafrost, and at the western extremity of the study area, sporadic permafrost.

The thickness of the active layer (the topmost layer of soil above the permafrost where freeze/thaw cycles occur) can vary depending on several factors (air temperature, vegetation cover, granulometry of loose material, etc.). With global warming the thickness of the active layer will gradually increase, as will the proportion of free water in the permafrost. The upper layers of soil will become increasingly unstable and subject to earthflows and subsidence.

Nunavik weather is highly variable, and due to the small number of weather stations, forecasts can be less precise than in the south of the province. This consideration should be borne in mind when planning activities in the proposed park. In winter, the severity of the weather does not lend itself to tourism activities, especially from December to February. This is also when the days are shortest, with just 6.5 hours of sunlight at the winter solstice.

Summer weather is more clement, but is also associated with hordes of mosquitoes and other pests. The great numbers of biting insects can lessen the quality of the tourism experience. This reality is of course not unique to the study area, but applies throughout northern Québec. Such insects are most abundant in the month of July.

The study area is far from the coast and accessible only by air in summer. Currently there is a single landing strip in operation (for bush planes) for the entire study area. Snowmobiles are the most economical means of transportation in winter, but it would take many hours to reach the study area from Kuujjuaq or Kangiqsualujjuaq. This remoteness and the difficulty of access will raise considerably not only the expense of constructing facilities, but also the travel costs for visitors.

One final constraint to development of the area concerns the mineral potential along the western boundary. There are active mineral titles in the southwestern portion.

2.2 PROPOSED BOUNDARY

After analysis of the potentials and constraints of the study area, a boundary has been proposed for Parc national des Monts-Pyramides (see Map 5). This boundary takes into account the development of activities other than conservation, as well as concerns expressed by members of the working group. Following an inter-ministerial consultation, the MRNF has expressed agreement with this boundary.

The area included is 5272.03 km², or about 240 km² less than the study area. The largest part withdrawn is the territory used for the operations of the Wedge Hills Lodge outfitter. Since inclusion of that sector would have prevented the outfitter from offering hunting to its customers, and since it has no special or unique features, the working group opted to exclude it completely.

The other noteworthy modification is on the west side, where the straight line of the national park reserve was replaced by the watershed line of the Rivière George, except in one section where the latter comes close to the river. In that area the rectilinear boundary of the reserve was replaced by a broken line that skirts the lakes to avoid including fractions of them. Active mining titles in the area are also withdrawn of the proposed boundary.

To the east and north, the proposed boundary is the same as that of the study area. To the east, the watersheds of the Mitsu and Gasnault rivers are partially included so as to include the Lac Nœud Coulant sector, as to the north, the boundary approaches a series of active mineral titles, without however abutting them. The border was drawn to follow a line of summits and the northern watershed line of the Rivière Ford. To minimize the impact on outfitters, the facilities of Helen Falls Camp downstream from Helen falls are not included in the proposed boundary.

Overall, about 70% of the proposed boundary follows the watershed lines of the George and Ford rivers, reducing the risk of contamination from any mining activities that might take place outside the park.

Map 5
PROPOSED BOUNDARY

- Proposed boundary
- Study area
- Watersheds boundaries

Metadata

Geodetic reference system: NAD 83 compatible with the World system WGS 84
 Coordinate system: Lambert Conic Projection with two Standard Parallels (46° and 60°)

0 5 10 20 30 Km
 1/500 000

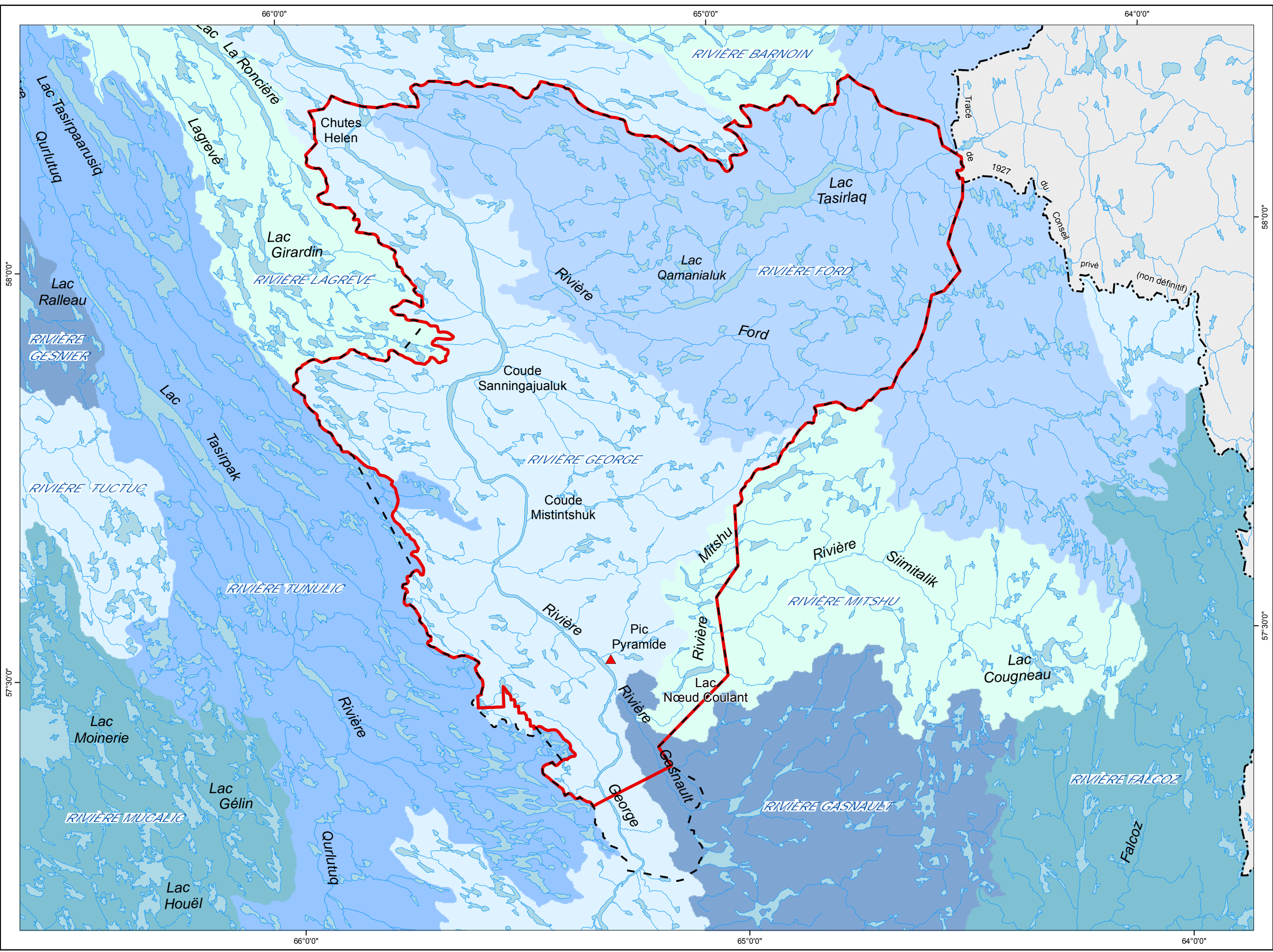
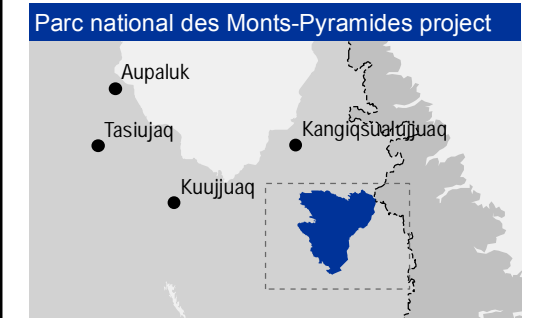
Sources

Data	Organization
Base de données topographiques et administratives (BDTA) à l'échelle de 1/250 000	Ministère des Ressources naturelles et de la Faune
Watersheds at 1/20000 scale	Ministère du Développement durable, de l'Environnement et des Parcs

Realization

Direction du patrimoine écologique et des parcs
 Service des parcs
 Division de la géomatique et de l'infographie

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2.3 CONSERVATION THREATS

In these early years of the millennium, the effects of global warming in the Arctic have caught the attention of the world's media. Nunavik has not escaped these changes. For years now there have been record-setting warm temperatures and a steady lengthening of the ice-free period.

These changes will have an impact not only on the distribution of animal and plant species in the park, but also, due to the effects of permafrost thawing, on the costs and complications of building visitor facilities.

The exploitation of mineral resources could also have a negative impact, since just outside the proposed park there are active mineral titles with exploration activities going on. Though much of the proposed boundary follows watershed lines, no watershed is completely included.

2.4 CHALLENGES

Managing a national park in a remote location is a challenge in itself, due to the difficulty of access and the expense of employee travel. Once the park is created, the managers will be faced with several challenges:

- Ensuring that the park's ecological integrity is maintained and that its cultural heritage is protected, especially where activities are developed.
- Seeing that activities and services offered in the park do not interfere with the practice of harvesting rights by JBNQA and NEQA beneficiaries.
- Applying an integrated environment management framework at the regional level.
- Promoting involvement by the Inuit and Naskapi communities in protecting the park's natural and cultural heritage.
- Offering a quality ecotourism product in which visitor safety comes first.
- Facilitating economic benefits at the local level.



3 Conservation and development concept



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Photo: Alain Thibault, MDDEP

The conservation and development concept proposed for Parc national des Monts-Pyramides is based on a variety of observations:

- The territory is little used and presents a high degree of ecological integrity.
- The territory has numerous natural attractions, physically and historically as well as in terms of plant life and wildlife.
- The territory is used by outfitters, who will continue to offer fishing activities in the park along with accommodation services.
- The buildings of Pyramid Mountain Camp constitute a valuable component of historical heritage and are worth preserving.
- Rapid climate change is having an impact on the distribution of plant and animal species, as well as on traditional Inuit activities.
- The bonds linking the Inuit and Naskapis to nature are an important dimension of this region's reality.
- The territory includes some archaeological sites, with the probability that more will be discovered.
- The JBNQA and NEQA confer harvesting rights on their beneficiaries, distinguishing this park from those in southern Québec where harvesting is prohibited except for sport fishing.
- Part of the territory is on Category II lands.
- According to JBNQA and NEAQ, though the park is located in the priority zone for Inuit, it is also in

the Caribou-Zone, so the Naskapis too can practise traditional subsistence activities there.

- The territory is remote from major centres and there are risks associated with its isolation.
- The regional tourism offerings are relatively undiversified.

In all aspects of national park management, the overriding goal is to maintain ecological integrity, meaning that one strives to preserve ecosystems and native species along with the natural processes that shape and unify them. Another goal is to maintain the integrity of other forms of heritage, particularly culture and landscape. In Nunavik, it is agreed that the goal of maintaining ecological integrity will be pursued by the KRG in accordance with the principle of conservation defined in Chapter 24 of the JBNQA.

To achieve harmonious results with no adverse effects on either the national park's most precious elements or the practice of traditional activities by JBNQA and NEQA beneficiaries, management orientations and the zoning plan will be used to carefully coordinate actions over the long term.

3.1 MANAGEMENT ORIENTATIONS

At the regional level, conservation and development of the natural and cultural heritage of Parc national des Monts-Pyramides will be under the concerted management of both park managers and the communities concerned. The principle of conservation underlying the recognized rights of the Inuit and Naskapis will have to be respected, and park management will need close collaboration from the hunters, fishers and trappers who use the region for traditional activities.

To accomplish this, the creation of the park will be accompanied by the setting up of a harmonization committee. This committee will be composed of representatives from the northern villages of Kuujjuaq and Kangiqsualujjuaq, the Qiniqtiq and Nayumivik Landholding Corporations of Kangiqsualujjuaq and Kuujjuaq respectively, the Naskapi First Nation of Kawawachikamach, the KRG, the Makivik Corporation and the MDDEP. Its role will be to discuss the results achieved and difficulties encountered in the

implementation of park-related agreements, to advise the park director on the development of activities and services, and to study proposals for scientific research projects to be conducted in the park. The committee will also play an important role in maintaining the harvesting rights of JBNQA and NEQA beneficiaries. This will be a privileged means of ensuring that activities and services offered in the park cause no interference with the traditional subsistence activities of the Inuit and Naskapis.

The management orientations presented below will guide the actions of park managers in terms of conservation, development, safety, administration and protecting the rights of JBNQA and NEQA beneficiaries.

3.1.1 CONSERVATION

While reaffirming the importance of making Québec's national parks accessible so that visitors may discover and appreciate the richness of the heritage they contain, the document *La politique sur les parcs*. Conservation (MDDEP, forthcoming) sets out three fundamental principles expressing the primacy of conservation:

- Conservation takes precedence over development.
- Heritage integrity must be maintained.
- The precautionary principle⁵ must be applied to all decisions.

The integrity of an ecosystem is considered to be maintained if:

- Its structure and functions are intact.
- Its components and natural processes are likely to continue to exist.

⁵ As defined in section 6 of the Sustainable Development Act (R.S.Q., c. D-8.1.1).



Photo: Alain Thibault, MDDEP

Application of the precautionary principle will encourage prudent management of the territory. This principle defines the attitude that a manager should adopt when it seems likely that intervention could have an impact on the heritage of the park. It is not an incitement to do nothing, but rather an encouragement to be proactive in managing risks. To ensure that management tools are effective in this regard, tools being used in more southerly parks will be adapted to apply to the northern environment. The park's conservation plan will propose concrete measures to that end.

The following general guidelines have been chosen regarding the conservation and protection of natural and cultural heritage:

- Apply the precautionary principle to all development interventions, ensuring that they respect the natural environment's carrying capacity.
- Seek greater knowledge about the park's heritage.

- Authorize wood harvesting solely for the purpose of maintaining the park's recreational potential, including accommodation and heating. Such harvesting could be authorized in services or natural environment zones, near accommodation facilities.
- Take into consideration the pressure exerted by park use as well as pressure exerted from outside the park that could threaten the park's heritage.
- Incorporate the traditional knowledge of the Inuit and Naskapis into whatever actions are undertaken.
- Put measures in place to monitor the status of the park's heritage.
- Adopt ecologically acceptable operating practices.

The managers of Parc national des Monts-Pyramides will have tools at their disposal to assist them in their efforts to conserve and protect the park's heritage, particularly with regard to research, monitoring mechanisms and environmental stewardship.

Research

Research is an indispensable function in national parks, and is the tool of choice in heritage conservation. By providing a better knowledge of the components and natural processes of a park, research can show how to best manage ecosystems and biodiversity, and how to plan harmonious development that respects ecological integrity.

The representative nature of national parks, and the high degree of protection they afford to the natural and cultural heritage, make them ideal places for research projects. Such projects may be initiated by the park itself or by institutions of learning and research. For the latter, a document will be provided indicating the steps to take to obtain authorization.

A research plan prioritizing relevant subjects for study will be drawn up, after creation of the park, by the KRG and its partners. It will take into account the Qaujisarvik network, which oversees research activities in Nunavik. The following general guidelines will be used in drafting this plan:

- Projects that could solve management problems will be given priority.

- Projects that would add to knowledge about the natural and cultural heritage will be given priority.
- Projects that would enrich the park’s educational program will be encouraged.
- Projects chosen must be supported by the communities of the region, and incorporate traditional knowledge if at all possible.

Monitoring the status of park heritage

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Ecological integrity is not a static state; its evolution can be measured. Though the state of a system can vary, it can entirely conserve its ecological integrity if the changes it undergoes are inside a natural range of variation. With that in mind, the conservation plan will target problem areas with regard to proposed activities and existing infrastructures. The same document will also enumerate the indicators that should be put in place to monitor the “state of health” of the park’s principal ecosystems, including their capacity to evolve, develop and adapt to change. Monitoring will also be done with regard to biological diversity and the ecological processes governing it, the degree of adaptation of wildlife and plant life to aggressors, and their capacity to regenerate. Lastly, the conservation plan will seek to ensure that mitigation measures taken when facilities were installed are efficient.

Using research and monitoring programs that are tailored to the north and to the various kinds of emergencies that could confront park management, visitor activities could be adjusted, modified or even prohibited in places, and restoration measures taken for disturbed habitats.

The following guidelines are aimed at supporting such monitoring mechanisms:

- Establish partnerships with competent researchers.
- Take into account the traditional knowledge of the Inuit and Naskapis.

Environmental stewardship

Governmental bodies, and national parks in particular, should always opt for environmental practices that are above reproach. Environmental stewardship will ecologize the actions of park management by encouraging the choice of efficient measures that respect the environment.

The following guidelines were chosen for Parc national des Monts-Pyramides with regard to environmental stewardship:

- Limit local greenhouse gas emissions.
- Limit the use of drinking water in toilets.
- Develop methods of wastewater treatment that are effective with small quantities and the northern climate.
- Limit garbage production by promoting the reduction, reuse and recycling of waste.
- Meet or exceed standards for acquiring, handling and storing petroleum products.
- Construct buildings that have good energy efficiency.
- Encourage the use of certified building materials, such as the Forest Stewardship Council (FSC) standard for forest products.



3.1.2 DEVELOPMENT OF THE NATURAL AND CULTURAL HERITAGE

For visitors, the mission of Québec's national parks is expressed through the activities and services addressed to them. As with other park networks around the world, that mission consists, on the one hand, of ensuring the conservation of representative and exceptional elements of the natural heritage, and on the other hand, of developing that heritage (and the cultural heritage associated with it) by offering discovery activities that respect it (Société de la faune et des parcs du Québec, 2002).

The activities and services offered in Québec's national parks are based on the following three principles:

- Activities and services must exert a minimum acceptable impact on the heritage.
- Activities and services must promote a discovery of the heritage.
- Activities and services must promote accessibility.

These three principles cannot be considered separately from each other; however, primacy is given to the first principle, thereby meeting the requirements of section 3.1.1 of this document. Thus, an activity or service that does not respect the first principle is incompatible with Québec's national parks. Note as well that for Parc national des Monts-Pyramides, besides respecting these three principles, activities and services must also avoid any conflict with the traditional activities of the Inuit.

With regard to its educational mission, the park will have an education plan that will provide a frame of reference for planning and developing educational activities. The plan will describe the clientele addressed, the objectives of educational components, the themes that should be highlighted and the educational means proposed. The education plan will also target actions to accomplish in the short and medium terms.

The program of educational and recreational activities in Parc national des Monts-Pyramides will be framed by the following guidelines:

- Educational activities will be based on both scientific knowledge and the traditional knowledge of the Inuit and Naskapis.

- Educational activities will encourage close and meaningful contact between visitors and the protected heritage, leading them to discover its diversity and the role and value of that diversity.
- Educational activities will elicit a concrete commitment on the part of visitors toward the park's conservation mission.
- Educational activities will take a recreo-educational and environmental approach.
- Educational activities will showcase the Inuit and Naskapi cultures.
- The educational program will include activities addressed to students and will be integrated with the Nunavik school curriculum.
- Educational activities will remind visitors of the importance of respecting park regulations.
- Recreational activities and services will be addressed primarily to visitors with wilderness experience, while allowing for activities and services to be offered that provide greater comfort and security.
- Recreational activities and services will be harmonized with those offered by *Pyramid Mountain Camp* and *Helen Falls Camp*.
- Recreational activities and services will depend on the fragility of the natural heritage, the distances involved and the limited number of visitors expected.

3.1.3 PROTECTION OF THE RIGHTS OF JBNQA AND NEQA BENEFICIARIES

Though it is clearly stipulated that the JBNQA and NEQA take precedence over the Parks Act, guaranteeing that beneficiaries will continue to be able to pursue traditional activities in the proposed park, visitor activities could, if uncontrolled, have an impact on the way of life of the Inuit and Naskapis. And indeed, during the planning process the Inuit of Kangiqsualujjuaq expressed concerns about the presence of visitors in certain sectors of the park.

Activities and services offered in Parc national des Monts-Pyramides will be selected in a way not to interfere with

the practice of harvesting rights by the Inuit and Naskapis. The managers of the park will be required to adjust visitor activities and services to avoid any conflict with the practice of traditional activities.

The following guidelines will be applied by park managers to ensure that the rights of JBNQA and NEQA beneficiaries are respected in the park:

- Use the harmonization committee as a consultation mechanism with all stakeholders to ensure that the rights conferred on JBNQA and NEQA beneficiaries are respected.
- Study the possibility of setting up a mechanism to monitor traditional activities.
- Advise visitors that they are likely to encounter Inuit and Naskapis practising traditional subsistence activities in the park.

3.1.4 SAFETY

The territory for the proposed Parc national des Monts-Pyramides is a place of countless natural dangers, including cliffs, wildlife, difficult weather and cold water. Due to the isolation and remoteness, even the most ordinary accident can have grave implications for survival. Even when rescue services are contacted quickly, when the weather is bad or no helicopter is available it can take many hours or even days for help to arrive.

The park's emergency measures plan will designate key players and set out the process to follow in the event of an accident where visitor safety or the quality of the environment are threatened. The following guidelines will be applied with regard to safety:

- To help avoid accidents, adopt a preventive approach.
- For visitors lacking in wilderness skills or experience, encourage the hiring of local guides.

3.1.5 ADMINISTRATION AND REGIONAL DEVELOPMENT

On April 9, 2002, with the signing of the Partnership Agreement on Economic and Community Development in Nunavik, the Government of Québec made a formal commitment to Inuit participation in developing and managing parks in Nunavik. For Parc national des Monts-Pyramides, this approach will be broadened to include participation by the Naskapis of Kawawachikamach. A new mandate will also be given to the KRG to manage the activities and services of Parc national des Monts-Pyramides, along with capital works and maintenance in the park.

Though primarily devoted to conservation, Québec's national parks have a formative effect on local economies. The following guidelines will be applied to administration and regional development:

- Encourage the hiring of people from Kuujjuaq, Kangiqsualujjuaq and Kawawachikamach.
- Draw upon local businesses for the provision of certain services or activities.
- Allocate the provision of accommodation services to outfitters in the park, along with sport fishing when it is done in areas identified on outfitter licence granted by the MRNF.
- Work together with local organizations.
- Encourage local associations, on an ongoing basis, to participate in development of the park.
- Provide training adapted to job requirements.



3.2 ZONING

A park's zoning plan is a regulatory tool that sets out guidelines as to the degree of protection and development required for each of the units comprising the park. It is the first step toward following the guidelines given in the previous section. In this regard, it is important to specify that rules and regulations associated with the zoning plan will in no way interfere with the exercise of harvesting rights by JBNQA and NEQA beneficiaries.

In drawing up the zoning plan for Parc national des Monts-Pyramides (see Map 6), a variety of factors were considered:

- The representation of elements of the natural region.
- The presence of sensitive habitats, or on the contrary, of places with greater carrying capacity.
- The presence or potential presence of floral or faunal species that are rare or at risk.
- The presence of archaeological sites or burial grounds.
- The presence of sacred areas or sites of cultural importance.
- The current use of the territory by the people of Kangiqsualujjuaq and outfitters.
- Facilities already present on the territory.
- The relative difficulty of access.
- The number of visitors expected.

The present zoning plan is based on current knowledge about the territory. As new information is acquired over time, the zoning plan could be modified to ensure that the park's conservation mandate is always fulfilled.

The proposed Parc national des Monts-Pyramides has four types of zones: a maximum preservation zone, preservation zones, a natural environment zone and services zones

3.2.1 THE MAXIMUM PRESERVATION ZONE

There is one maximum preservation zone in the proposed park, covering an area of 9.13 km² or about 0.2% of the park's total area. No activities or harvesting will be permitted in this

zone, except by JBNQA beneficiaries. Scientific research and certain educational activities could be authorized by the park director, but only on certain conditions and after presentation of a complete project description showing that the techniques employed will respect the park's conservation objectives.

This zone was so designated at the request of the people of Kangiqsualujjuaq. It is a place of cultural importance and in the past was often used as a camp site.

3.2.2 PRESERVATION ZONES

There are four preservation zones, representing a significant portion of the park, i.e. 3156.61 km² (59.9%). In a preservation zone, visitors are directed away from the more fragile elements, and no motorized travel or sport fishing are allowed. The setting up of shelters and camp sites is permitted along the backpacking route, their use being governed by a code of environmental ethics that will be defined in the conservation plan.

The three main preservation zones are intended to protect elements of each landscape unit as well as sectors with a certain vulnerability. The first, covering 2312.97 km² on the east bank of the Rivière George, includes part of the high plateaus of Lac Tasirlaq and Lac Qamanialuk and part of the Rivière George Plateau. Two other preservation zones cover the plateau west of the George and have a total area of 843.63 km². They round out the representation of the Rivière George Plateau by including plateaus of lower elevation.

Lastly, a fourth and much smaller preservation zone is on the west bank of the Rivière George, not far from the facilities of *Pyramid Mountain Camp*. Covering just 0.01 km², its purpose is to protect a stand of balsam poplar, which is rare in this region.

3.2.3 NATURAL ENVIRONMENT ZONE

Natural environment zone will be dedicated to less restrictive ways of discovering the park. Contrary to preservation zones, this type of zoning allows the use of motorized vehicles for transportation (airplane, snowmobile and boat) and the building of various types of accommodation facilities. That is why the natural environment zone covers the principal travel routes for reaching the various points of interest in the park. Sport fishing can be authorized on designated bodies of water. Its total area in Parc national des Monts-Pyramides will be 2099.78 km², about 39.8% of the territory as a whole.

Natural environment zone include the Rivière George and a strip of varying width along its banks up to where the slopes exceed 30%. The river’s popularity for sport fishing was a strong argument in favour of this zoning category. In the southern part of the proposed park, on the east bank of the George, the natural environment zone extends to the boundary so that Pic Pyramide and other hills, along with Lac Nœud Coulant and Rivière Gasnault, can also be included, thereby allowing sport fishing to be offered there. On the western plateau of the George, natural environment zoning was applied to a corridor that could potentially be used to access the park in winter. The northern part of the territory was also given natural environment zoning, primarily because it is used by the Inuit of Kangiqsualujjuaq for the practice of traditional subsistence activities, but also because part of it is covered by the timber rights for community purposes under the JBNQA.

3.2.4 SERVICES ZONES

Services zones will cover a small part of the area of the park (6.5 km²). The locations concerned were assigned this zoning because of their greater carrying capacity and their past and present use by outfitters. They will be used as the principal points of access to the park, where accommodation infrastructure could be built that offers greater amenities and services, and where equipment will be kept for park operations. There are three services zones defined for Parc national des Monts-Pyramides.

The first is on the west bank of the Rivière George in the Pic Pyramide sector, where the facilities of *Pyramid Mountain Camp* are located. With an area of 4.37 km², it covers the whole of a fluvio-glacial terrace.

The second is also on the west bank of the George, near Coude Sanningajualuk, and covers 1.96 km². It is a strategic location because it is about halfway between the facilities of *Pyramid Mountain Camp* and those of *Helen Falls Camp*. It was used in the past for outfitting operations and is known locally as “Big Bend”.

Finally, the third services zone is on the edge of Lac Qamanialuk. It will constitute the principal access point for discovering the park’s high plateaus. This location was also used in the past for outfitting operations. Though it is no longer in use for that purpose, the facilities are still there but decrepit. This services zone covers 0.18 km².

Map 6
ZONING

- Proposed boundary
- Maximum preservation
- Preservation
- Natural environment
- Service

Metadata

Geodetic reference system NAD 83 compatible with the World system WGS 84
 Coordinate system Lambert Conic Projection with two Standard Parallels (46° and 60°)



Sources

Data	Organization
Base de données topographiques et administratives (BDTA) à l'échelle de 1/250 000	Ministère des Ressources naturelles et de la Faune

Realization

Direction du patrimoine écologique et des parcs
 Service des parcs
 Division de la géomatique et de l'infographie

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Parc national des Monts-Pyramides project

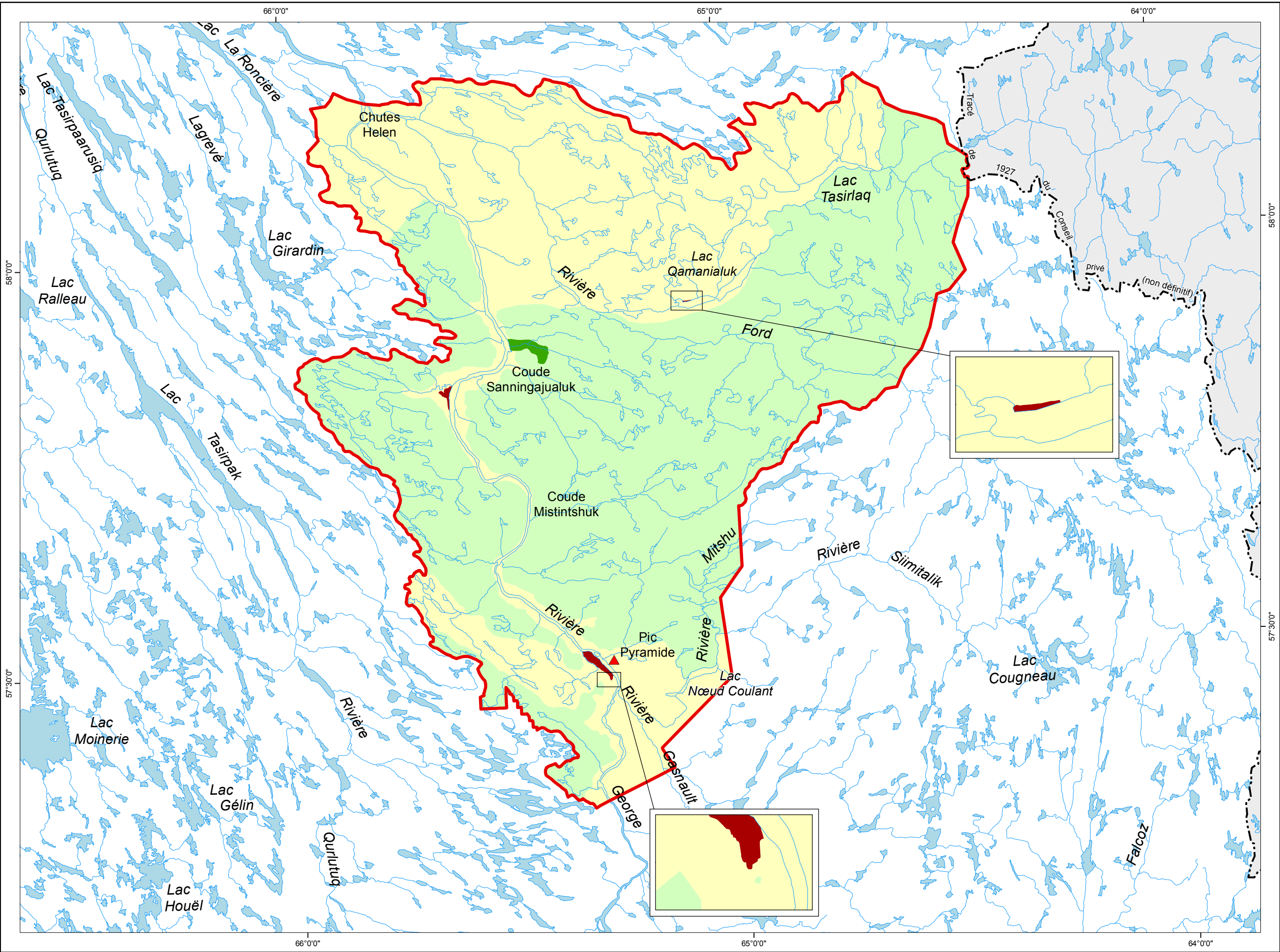




Photo: Stéphane Cossette, MDDEP

3.3 PARK DEVELOPMENT

The territory of the proposed park is characterized by a virtually unaltered natural environment. Any development must therefore be carried out with care to preserve an intrinsic wealth that is rare in this modern world. While allowing an original ecotourism product to be offered for discovering the main attractions (the Rivière George, the Rivière Ford and the Monts-Pyramides), the development concept puts the priority on conserving the natural heritage that is representative of the George River Plateau natural region. For this reason, the optimal locations for new development will be sites that have been used in the past by outfitters.

The main elements of the development concept are presented in Map 7, with the facilities needed described below.

3.3.1 VISITOR CENTRE AND SERVICES

The main service point for the proposed park will be at Kuujjuaq. It is from here that it will be easiest to access the park by airplane. Due to the river route linking Kawawachikamach and Kangiqsualujjuaq to the territory of the park, secondary service points are also planned for those two villages. The facilities built for Parc national Kuururjuaq at Kangiqsualujjuaq (garage and visitor centre) will also be used for the operations of Parc national des Monts-Pyramides.

To ensure that activities are properly controlled, and for safety reasons especially, visitors will be required to register at one of those service points before entering the park, and to indicate their exit from it when they return to a service point.

3.3.2 PARK ACCESS AND INTERNAL TRAVELLING ROUTE

Access routes into this immense territory constitute the basement of the entire development concept for Parc national des Monts-Pyramides. There are three ways of entering the area, varying with the seasons but also depending on which sectors are visited. As mentioned above, the three principal access points are the villages of Kuujjuaq, Kangiqsualujjuaq and Kawawachikamach. The first two can only be reached by airplane, from Montréal or Québec. There is a road linking Kawawachikamach to Schefferville, which can be reached by airplane from Québec and Sept-Îles or by train from Sept-Îles.

From there, the principal means of transportation for entry will be airplane and snowmobile. A helicopter could also be used, but mostly for the needs of park management. The high chartering cost and limited cabin space make helicopters less appropriate than airplanes for carrying visitors and their baggage.

There are three aerial access points, all located in the services zones. The landing strip at *Pyramid Mountain Camp* needs no redevelopment, but at “Big Bend” and Lac Qamanialuk work would be needed to bring the old landing strips up to standard. Due to its proximity to Pic Pyramide, *Pyramid Mountain Camp* will be the park’s main access point. The park will also be accessible through *Helen Falls Camp* near the northern boundary, or *Wedge Hills Lodge* near the southern boundary. Authorization to use the landing strip is needed from the owner however.

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In winter, the park will be accessible by snowmobile from Kuujjuaq and Kangiqsualujjuaq. Such excursions could be organized by local guides, who know where it is safe to travel.

The Rivière George has always provided a natural travel route. It is therefore expected that more adventurous visitors will enter the park by canoe or similar craft as they descend the George from Schefferville. Within the park it will also be possible to travel on the George by motor boat. Such trips require prudence however, knowledge of the river being essential due to the powerful current and numerous rapids.

3.3.3 ACTIVITIES

As with all Québec parks, the discovery of Parc national des Monts-Pyramides will take place through education and recreation. Education will be a privileged means of facilitating and enriching that discovery, awakening visitors to the significance of the landscapes and natural phenomena they observe.

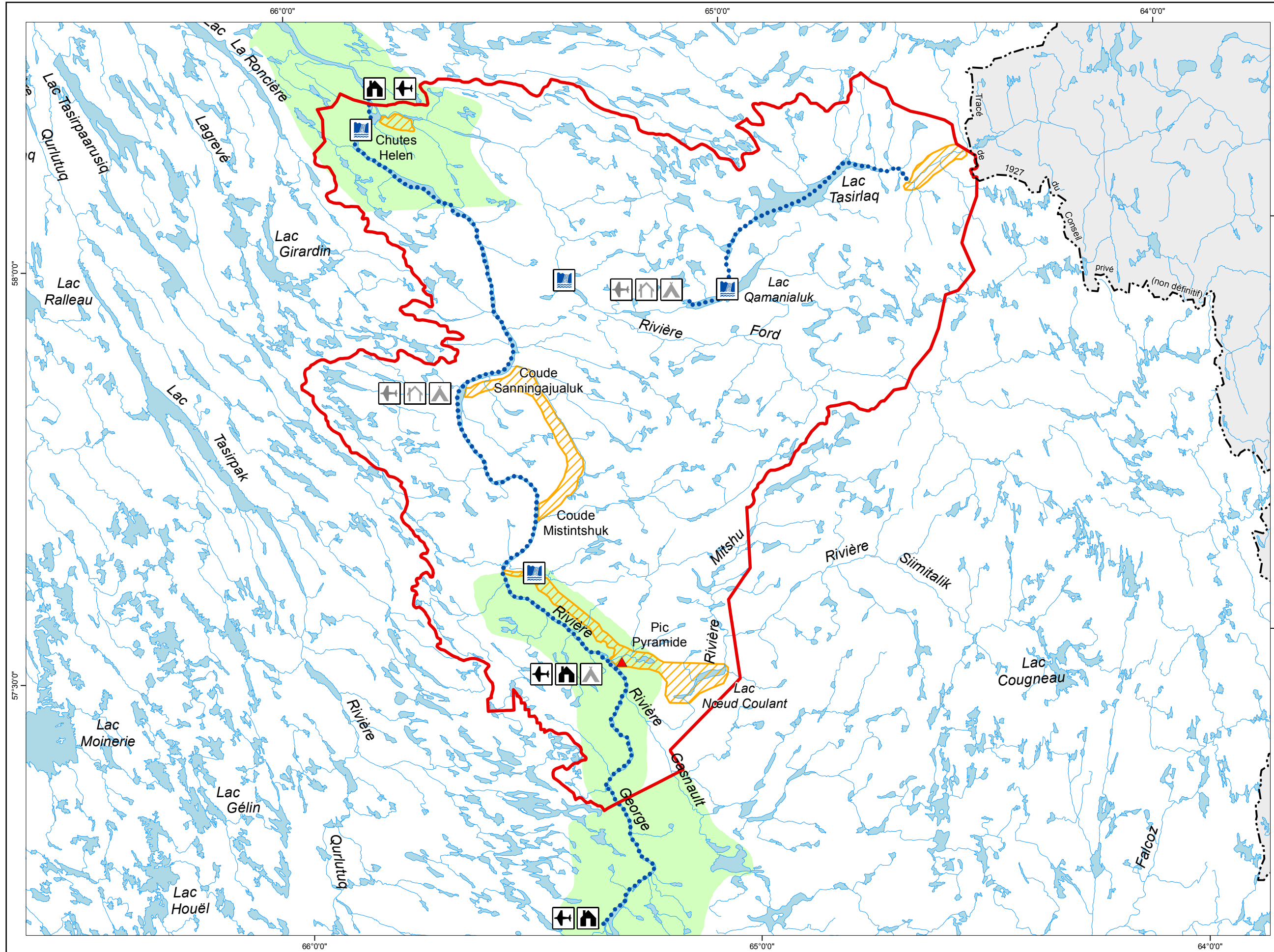
To enjoy those landscapes and discover the richness of the area’s biodiversity, visitors will practise outdoor activities that involve traversing the land to reach one or more points of interest. Since the Rivière George is the centrepiece of the development concept, nautical activities and sport fishing will be highlighted during the summer. Hiking will also be a prized activity. The territory offers an array of landscapes that are easily explored thanks to the low relief and open terrain. In winter, cross-country skiing, snowshoeing and dogsledding will make for unforgettable excursions over frozen lakes and in valleys where snow accumulates.



Photo: Stéphane Cossette, MDDEP

This Provisional Master Plan proposes to develop part of the territory for the recreational activities that seem most likely to be popular. Visitors wishing to practise other activities will be required to obtain authorization from the park director, whose decision will be based on the Parks Policy with regard to activities and services. For the practice of permitted activities, visitors will not be restricted to places indicated on the map. As long as they respect the zoning provisions, they may prepare their own itinerary to various points in the park. This type of excursion could be done either in the company of a guide or independently. Visitors entering the territory for an extended period without a guide must show that they are properly prepared to do so, in terms of both skills and having the right equipment to ensure their survival. Weather hazards, ground conditions and encounters with wild animals are all factors that can turn an excursion topsy-turvy. For this reason, to facilitate search and rescue operations in case of emergency, when visitors register they will be required to inform park staff as to their planned itinerary.

Map 7
DEVELOPMENT CONCEPT



- Proposed boundary
- EXISTING SERVICES**
- Outfitter (Permanent camp)
- Outfitter (Territory of operation)
- Airstrip
- SERVICES TO BE DEVELOPED**
- Camping with services
- Full service camp
- Airstrip
- ACTIVITIES AND ATTRACTIONS**
- Hiking area
- Canoe camping route
- Falls

Metadata

Geodetic reference system: NAD 83 compatible with the World system WGS 84
 Coordinate system: Lambert Conic Projection with two Standard Parallels (46° and 60°)

0 5 10 20 30 Km
 1/500 000

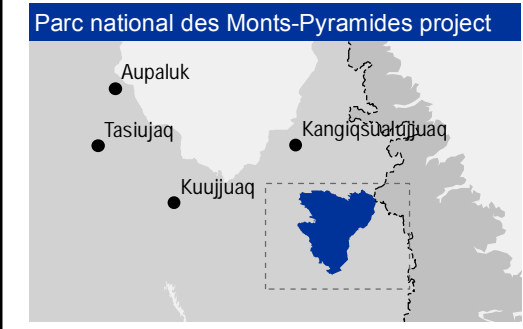
Sources

Data	Organization
Base de données topographiques et administratives (BDTA) à l'échelle de 1/250 000	Ministère des Ressources naturelles et de la Faune

Realization

Direction du patrimoine écologique et des parcs
 Service des parcs
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Education

Education will be a privileged means of allowing visitors to Parc national des Monts-Pyramides to discover and appreciate its natural and cultural heritage. A parallel purpose of education will be to sensitize visitors to the importance of contributing to heritage conservation by respecting park regulations.

Educational offerings will lead visitors to:

- Understand the objectives behind the creation of national parks and their place in Québec's network of protected areas.
- Understand and respect the way of life of the Inuit and Naskapis who use the territory for subsistence purposes.
- Open themselves to the profound beauty of the park's great spaces.
- Understand the inherent risks in practising outdoor activities in a remote region.

The residents of Kuujjuaq, Kangiqsualujjuaq and Kawawachikamach will also be addressed by the educational offerings, which will contribute to valorizing and keeping alive the traditions belonging to the Inuit and Naskapi cultures. An educational program will be created especially for young people.

The first contact visitors will have with the educational program will be in the villages of Kuujjuaq, Kangiqsualujjuaq and Kawawachikamach. The service centre will offer visitors an overview of the park's and communities major attractions.

Beyond the permanent exhibit, the managers could consider other ways to showcase park heritage: guided or self-guiding excursions, leaflets, posters in the full-service camps, talks, commented demonstrations, activities for sharing in the Inuit and Naskapi cultures, etc. As for interpretation of the historical heritage, special attention will be given to the outfitters' presence.

Canoe camping

The Rivière George is recognized as a canoeable route by the Fédération québécoise du canot et du kayak. Within the proposed park, the canoeable part of the George extends over some 130 km. Canoe camping is by far the most appropriate activity for discovering the valley of this river, which can be descended in various sorts of craft, including canoe, kayak and inflatable raft. Along the way there are rapids and drops of various levels of difficulty. To avoid waterfalls and drops and rapids where the difficulty level is too high, paddlers can easily portage. Portage routes on the Rivière George will be clearly indicated.

All along the canoeable route, markers will indicate the location of rustic camping sites. Visitors will be invited to use them whenever possible, though weather conditions and variations in the water level can sometimes make it impossible to reach the next official site before nightfall. The Rivière George offers countless beaches that can comfortably and safely accommodate a few paddlers.

Lakes Qamanialuk and Tasirlaq offer a canoe camping experience that is completely different from that of the George, not only due to the tranquil water but because of the mountains and surrounding tundra. The absence of forest cover facilitates the choice of camping sites. Since these lakes are connected to the Rivière Ford, some visitors may be tempted to descend it. Due to the large number of cascades, waterfalls and rapids, only experienced paddlers will be able to accomplish that, and at the price of numerous portages.

Hiking

Hiking will be another of the main activities by which to discover the different attractions of the park. Little specialized equipment is needed, and no particular technique. Changes in elevation are modest and the landscape fairly smooth, facilitating the practice of this activity. The presence of scrubland around bodies of water, wetlands and forests in bottom of valleys are the main constraint, but once past or bypass that the going is easy.

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Since the open landscapes encourage hikers to take whatever route they wish between points of interest, and since repeated passings over any place would have considerable impact, there are no plans to develop hiking trails. Instead, hikers will be encouraged to fan out and vary their routes when going from place to place. Visitors could also be provided with GPS devices with stored hiking routes, for safe travel on days of

dense fog. The installation of signage at strategic places (river crossings, emergency kit locations, sections of rough going) is also planned. In places with dense alder brush, like the base of Pic Pyramide, trails could be cleared to facilitate passage to where the real hiking begins.

Map 7 shows the areas that are particularly suited to this activity. These sectors would allow hikers to discover Pic Pyramide and the view up the valley of the Rivière George, Lac Nœud Coulant and the cliffs that border it, a waterfall, a fluvioglacial gorge, the magnificent landscape at the mouth of the Rivière Ford, and the immense fluvioglacial complex northeast of Lac Tasirlaq. An extended backpacking trip could get to several of these points of interest, but they could also be enjoyed on a one-day excursion using the boat service at *Pyramid Mountain Camp*.



Photo: Stéphane Cossette, MDDEP



Sport fishing

Sport fishing is a harvesting activity permitted in natural environment zones. The park director will identify bodies of water where this activity is authorized. Note however that even in the park, the director cannot offer fishing on Category II lands without authorization from the Qiniqtiq Landholding Corporation.

Since the 1960s when outfitters first began operations in the area, they have offered sport fishing for salmon. This activity will always be a favourite, and visitors who come to the park for that specific purpose will be able to enjoy it with their choice of outfitter, be it *Pyramid Mountain Camp* or *Helen Falls Camp*. Both will offer fishing within their respective operating areas.

For visitors doing canoe camping on the Rivière George, fishing may be done outside the outfitters' operating areas. Note however that fish caught must be consumed on site, and catch-and-release fishing is not permitted.

Cross-country skiing and snowshoeing

Cross-country skiing and snowshoeing will be two ways to discover Parc national des Monts-Pyramides in winter. Snow conditions will depend on exposure to the wind. In valley bottoms the snow is relatively soft and deep, but in more exposed areas the snow cover is thin and very compact, offering less grip. Good crampons are recommended.

Winter travel on the Rivière George is very risky. Due to the powerful current, there are many places where the ice is thin or nonexistent. It is strongly recommended to hire a guide who knows the territory.

3.3.4 ACCOMMODATION

Accommodation in Parc national des Monts-Pyramides has been planned on the basis of distances, existing facilities, the climatic conditions, modes of transportation, activities practised, clientele addressed and the safety of users. All accommodation structures, whatever the formula, will be rustic. To ensure that sites stay in good condition, the heritage conservation plan will set strict rules of conduct regarding,

for example, the use of drinking water and the management of garbage and wastewater.

During winter excursions, visitors using the services of a local guide could learn how to build an igloo to spend the night. That would surely be the highlight of a memorable northern experience. This activity would depend on the snow conditions, which can vary depending on the sector and of course the weather.

Pyramid Mountain Camp

Pyramid Mountain Camp has operated on the banks of the Rivière George since 1963. The log buildings were constructed using trees from the surrounding forest. Four cabins accommodating 12 people total are available to customers for lodging, along with a clubhouse where meals are prepared and served. Heat is provided by wood stoves and the cabins are lit with Coleman lamps.

This outfitter operates independently of the park. Visitors wishing to stay there must contact the owners directly.

Full-service camps

Parc national des Monts-Pyramides will include two full-service camps offering services similar to those at the outfitter camps. The first will be in the service zone near Coude Sanningajualuk, the second on Lac Qamanialuk. These camps will provide accommodation for 12 to 16 people and will include a communal kitchen, a washroom with sink and shower, and a lounge area. Full-service camps will have heat and lighting and will be supplied with water.

Camping

There will be two types of camping in the proposed park: camping with services and rustic camping, the latter being the choice for backpackers and canoe campers. Campgrounds with services will be located near the full-service camps and *Pyramid Mountain Camp*. They will offer users the basic amenities, including toilets, a shelter and a few tables.

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Rustic camping will be permitted in most of the park, except for the maximum preservation zone. Campers will be invited to choose locations with a durable surface, or sites that have been used before, and, in accordance with the principles of Leave No Trace (<http://www.leavenotrace.ca/>), must leave no trace of their passage. To avoid deterioration of the landscape along backpacking routes and the canoe camping route, there will be signage showing the way to recommended campsites. Wood platforms or lean-tos could be built if necessary. As well, depending on how visitor numbers evolve and in view of the rugged weather, consideration could be given to putting up shelters along the canoeable route.



4 Conclusion

The creation of Parc national des Monts-Pyramides will add a unique component to Québec's network of national parks. With a total area of 5272 km², the park will protect a large portion of the territory and a significant part of Québec's natural and cultural heritage.

Through its proximity to Parc national Kuururjuaq, the Torngat Mountains National Park of Canada, and the Rivière George land reserve for purpose of a protected area, this new park will join a major corridor of conservation in eastern Canada, stretching across nearly 600 km and covering nearly 27 400 km².

Recognizing the importance of protecting fragile ecosystems and respecting the traditional activities practised by the Inuit, this Provisional Master Plan advocates a prudent approach toward development. By handing management of the park to the Inuit of Nunavik, the Government of Québec is confident that the development of Parc national des Monts-Pyramides will reflect a vision and values that are deeply rooted in the land itself.



Photo: Alain Thibault, MDDEP



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