

IUCN Conservation Outlook Assessment 2017 **(archived)**

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Please note: this is an archived Conservation Outlook Assessment for Los Glaciares National Park. To access the most up-to-date Conservation Outlook Assessment for this site, please visit <https://www.worldheritageoutlook.iucn.org>.

Los Glaciares National Park

SITE INFORMATION

Country:

Argentina

Inscribed in: 1981

Criteria:

(vii) (viii)

Site description:

The Los Glaciares National Park is an area of exceptional natural beauty, with rugged, towering mountains and numerous glacial lakes, including Lake Argentino, which is 160 km long. At its farthest end, three glaciers meet to dump their effluvia into the milky grey glacial water, launching massive igloo icebergs into the lake with thunderous splashes. © UNESCO

SUMMARY

2017 Conservation Outlook

Good with some concerns

Under the World Heritage Convention, Los Glaciares National Park is specifically recognized for its exceptional scenic beauty and the impressive display of ongoing and major glaciations and related phenomena. Due to the nature of these conservation values, the large scale of the property and the remoteness of, and difficult access to, vast parts of the property there is a high degree of natural protection. The conservation status and prospects are thus good from a World Heritage perspective. However, there are some concerns about mass tourism seasonally reaching excessive levels with tourism infrastructure starting to affect the landscape beauty despite location outside of the property for the most part. At all times, introduced species of flora and fauna have been having impacts on the ecosystem, with feral cattle being one of the more obvious examples. Fire management, law enforcement as regards poaching and tourism planning and management leave much room for improvement. Moreover, hydropower dam construction outside the property could result in important impacts in the property, if it were to proceed.

Current state and trend of VALUES

Low Concern

Trend: Deteriorating

The overall concern is ranked low from a narrow World Heritage perspective as neither the grandeur of the landscape nor its extraordinary geological values are significantly threatened. Nevertheless, steady tourism growth in the absence of adequate planning and management (Despouy, 2015) has been resulting in a deteriorating trend.

Overall THREATS

High Threat

The above noted combination of a range of current threats, such as the effects of past livestock grazing, introduced plants and mammals, feral livestock, climate change, fires and poorly controlled tourism development and poaching have been causing significant and ongoing impacts on the steppes and forests. Nonetheless, the current threats remain limited from the perspective of the specifically recognized World Heritage values. However, hydropower development poses a high, even if still potential, threat as it might directly affect the iconic Argentina Lake, if it were to proceed.

Overall PROTECTION and MANAGEMENT

Some Concern

Similar to the above, protection and management of the national park has some deficits in terms of lacking strategic planning, an outdated management plan and a lack of adequate public use planning and management despite growing mass tourism in some parts of the property (Administración de Parques Nacionales, 2015). Nevertheless, it is important to understand that large areas of the property are remote and hardly accessible and thereby naturally protected. Challenges remain in terms of the restoration of areas impacted by past livestock and fires, current fire management, law enforcement and tourism management.

FULL ASSESSMENT

Description of values

Values

World Heritage values

► **Exceptional natural beauty modeled by ongoing glaciation**

Criterion:(vii)

Los Glaciares National Park is situated in the Argentine part of Southern Patagonia. The landscape is modeled by longstanding and ongoing glaciation against the backdrop of some of the most spectacular Andean peaks, such as the Fitz Roy (Chaltén) and the Torre. Extensive glacial lakes, such as the renowned Argentino and Viedma Lakes, contrast with massive glaciers fed by some of the largest inland ice fields in the world (World Heritage Committee, 2014; UNEP-WCMC, 2011). The natural beauty attracts visitors from around the world.

► **Geological, geomorphic and physiographic phenomenon caused by the advance and retreat of the glaciations**

Criterion:(viii)

Los Glaciares National Park owes its name to the countless glaciers covering roughly half of the property. The vast South Patagonian Ice Field, the most extensive South American relict of the glaciological processes of the Quaternary Period feeds many of these glaciers, while there are also impressive glaciers independent of the main ice field. The property is thereby an outstanding example of geological, geomorphic and physiographic phenomena caused by dynamic glaciation during the Pleistocene epoch of the Quaternary, as well as ongoing neoglaciations in the Holocene (World Heritage Committee, 2014; UNEP-WCMC, 2011). These events have modeled

the landscape and may be recognised by the lacustrine basins of glacial origin, the moraine systems deposited on the plateaux, or by more recent systems pertaining to the current valleys with its spectacular glacier tongues. The arguably most spectacular visual feature are several glaciers calving into the icy and milky waters of the huge Lake Argentino. These include the famous Perito Moreno Glacier, which blocks a narrow channel formed by Lake Argentino thereby temporarily raising the water level. This in turn causes regular thunderous ruptures of the glacier tongue into the lake (World Heritage Committee, 2014).

Other important biodiversity values

► Natural forests and steppes with noteworthy fauna and flora

While better known for its extraordinary scenic beauty and striking glaciation, Los Glaciares boasts a remarkable landscape diversity encompassing a large altitudinal gradient of more than 3,000 metres and very diverse ecosystems. The property is in particular noteworthy for its forests and steppes. The forests are dominated by various species of Southern Beech (*Nothofagus* sp.). Charismatic mammals include puma (*Puma concolor*) and the elusive and endangered Patagonian huemul or South Andean deer (*Hippocamelus bisulcus*). The avifauna includes the iconic Andean condor (*Vultur gryphus*, NT), the torrent duck (*Merganetta armata*, LC) in the fast-flowing clear mountain creeks, and the charismatic Magellanic woodpecker (*Campephilus magellanicus*, LC) (World Heritage Committee, 2014).

► Massive freshwater reservoir

The property is part of an enormous, largely pristine freshwater reservoir comprised of vast ice fields and glaciers on both sides of the international border between Argentina and Chile (World Heritage Committee, 2014; UNEP-WCMC, 2011).

Assessment information

Threats

Current Threats

Low Threat

From a conventional protected area perspective, the national park faces considerable threats despite the relatively remote location and sparse population density of Southern Patagonia. Intensive past livestock grazing, introduced plants and mammals, feral livestock, climate change, fires and poorly controlled tourism development and poaching have caused significant impacts on the steppes and forests, parts of which were described as severely degraded even in the nomination dossier (State Party of Argentina, 1981). As the property has been inscribed specifically for the extraordinary landscape beauty and the glaciation as a geological phenomenon, the World Heritage concerns are less severe and thus assessed as a low threat.

► Livestock Farming / Grazing

Data Deficient

Inside site, extent of threat not known

Outside site

Cattle and sheep grazing have been modifying the native steppes and forests long before the World Heritage inscription (State Party of Argentina, 1981) with detrimental effects on native flora and fauna. While some areas have since been naturally recovering, pressure continues to exist, including in some areas from feral cattle (World Heritage Committee, 2014).

► Invasive Non-Native/ Alien Species

High Threat

Inside site, widespread(15-50%)

Outside site

Non-native species include exotic plants on formerly grazed land (State Party

of Argentina, 1981), as well as European hare, feral cattle, horses, sheep, dogs and cats; rainbow and lake trout; alien species have had a significant effect in altering native habitats, and competing with local species, but there has been some recuperation of native habitats and local species in recent years (BirdLife International, 2017; UNEP-WCMC, 2011; State Party of Argentina, 1981; IUCN, 1981).

► **Habitat Shifting/ Alteration**

Very High Threat

Inside site, throughout(>50%)

Outside site

Climate change is causing the majority of the glaciers in the national park to recede with the notable exception of the Perito Moreno Glacier which continues to grow. Higher summer temperatures coinciding with decreasing precipitation increases the vulnerability of native steppes and forests to wildfires (World Heritage Committee, 2014).

► **Tourism/ Recreation Areas**

High Threat

Inside site, localised(<5%)

Outside site

Annual visitor numbers have been exceeding half a million in recent years (Administración de Parques Nacionales, 2015), compared to less than 80,000 in the early 1990s (UNEP-WCMC, 2011). Even though infrastructure expansion has for the most part been occurring outside the property, the visual impacts are striking nevertheless (UNEP-WCMC, 2011). Recent audits have suggested a major mismatch between tourism growth and corresponding planning and management (Auditoría General de la Nación, 2015; Despouy, 2015).

► **Hunting (commercial/subsistence)**

Low Threat

Inside site, extent of threat not known

Outside site

Historically, there has been intense hunting of puma, fox and guanaco. Ranches continue to operate in the surroundings of the property and both retaliation killings of predators and poaching of guanaco continues to be

reported (IUCN, 2014). This is a low threat from a World Heritage perspective due to the focus on landscape beauty and geological values. From an ecosystem conservation perspective the manipulation of the populations of predators and a large native herbivore are significant threats.

Potential Threats

High Threat

Construction of hydropower dams on the Santa Cruz River, which originates in the property, would fundamentally modify one of the last free-flowing major rivers in Argentine Patagonia and possibly affect the iconic Lago Argentino. As elsewhere in Patagonia, demand for real estate for secondary homes, investment or tourism development is high and rising and could further impact on the property's exceptional natural beauty. Given the uncertainty of the status of planning and the likelihood of definitive approval hydropower development is ranked as data deficient. Real estate development is a more tangible threat, yet it is mostly restricted to outside of the property and not likely to directly affect the specific World Heritage values.

► Dams/ Water Management or Use

High Threat

Outside site

Past plans to construct a hydropower dam on the La Leona River caused concerns about the water level of Lago Viedma and anticipated habitat changes to sensitive habitats along its shore (BirdLife International, 2017). In 2012, the hydropower plans on the La Leona River appear to have been abandoned (IUCN, 2014). There is, however, ongoing and major concern about planned construction of major dams on the still free-flowing Santa Cruz River, sometimes referred to as the Kirchner-Cepernic hydropower complex. While outside of the property, the reservoir could reach into the property according to some scenarios, thereby affecting the level of the iconic Argentino Lake and consequently both sensitive aquatic and coastal habitats but also one of the major tourism attractions. The controversial plans have caught considerable public and media attention in and beyond Argentina. The plans are subject to environmental impact assessment with final decision-making pending at the time of writing.

► **Housing/ Urban Areas, Tourism/ Recreation Areas**

Low Threat

Outside site

Real estate development in the contiguous national reserve, which serves as a de facto buffer zone, is an increasing risk due to the tourism boom and demand for secondary homes in Patagonia. In addition to conversion of habitat and disturbance (BirdLife International, 2017), there can be important visual impacts. The threat is ranked as low, as it does not directly impact on the natural values specifically recognized for under the World Heritage Convention.

Protection and management

Assessing Protection and Management

► **Relationships with local people**

Some Concern

There is some tension between nature conservation and tourism development which at times results in conflicts between the national management agency APN and actors at the provincial and local level. Similarly, livestock husbandry on adjacent private land regularly causes conflict when livestock enters the national park (Administración de Parques Nacionales, 1997). In 2002, a local Advisory Commission was established made up of representatives of national, provincial and municipal entities, NGOs, the Chamber of Commerce, the Association of Tourist Guides, a Scout Group and others. This commission provides advice to the national park on various management issues (World Heritage Committee, 2014).

► **Legal framework**

Mostly Effective

Los Glaciares National Park is a unit of the National System of Protected Areas in Argentina (Law No. 22.351). Created in 1937 (Law No. 13.895) its current boundaries were defined in 1971 (National Law No. 19.292), including the division of the area into a national park and a national reserve, as is

common on Argentina (World Heritage Committee, 2014).

► **Enforcement**

Some Concern

Ongoing reports of some poaching are one example of indications of limited law enforcement capacity.

► **Integration into regional and national planning systems**

Some Concern

The national park is an integral part of the national protected system and the local Advisory Commission provides a mechanism for regular consultations with provincial and local authorities since 2002, which is one mechanism to harmonize the various governmental levels involved in the management of the land in and around the property (World Heritage Committee, 2014). There is a need to harmonize management with adjacent private ranches.

► **Management system**

Some Concern

A preliminary management plan for the national park developed in 1997 (Administración de Parques, 1997) has been in the process of being updated over 20 years at the time of writing. Recent audits have strongly criticized the quality of strategic and operational management planning (Auditoría General de la Nación, 2015; Despouy, 2015).

► **Management effectiveness**

Serious Concern

A 2011 internal evaluation cited in Auditoría General de la Nación (2015) notes that the effectiveness of most management areas was evaluated as just or not satisfactory (Auditoría General de la Nación, 2015; Despouy, 2015).

► **Implementation of Committee decisions and recommendations**

Data Deficient

Committee decisions have not articulated concrete requests or recommendations implying follow-up on the part of the State Party.

► **Boundaries**

Some Concern

The national park boundaries have been in place for decades and are known to local inhabitants (World Heritage Committee, 2014). There are some legal question marks surrounding the exact legal land tenure status of the El Chaltén settlement within the property, as well as about the jurisdiction of some other, relatively small areas within the property (Auditoría General de la Nación, 2015).

► **Sustainable finance**

Data Deficient

No independent information is available on the adequacy of the budget allocated by the national government. Options to take advantage of the substantial revenues from seasonal mass tourism as a contribution to diversified conservation financing mechanisms deserve to be analyzed.

► **Staff training and development**

Mostly Effective

Argentina has an advanced curriculum development for rangers considered exemplary in the region. Staff have access to occasional in-service training opportunities. Seasonal staff complements the team in the peak tourism season.

► **Sustainable use**

Some Concern

The major use of the national park is tourism, the management of which has some deficits and is not in line with the large and increasing visitor numbers in the summer of the Southern Hemisphere (Auditoría General de la Nación, 2015; Despouy, 2015; UNEP-WCMC, 2011; Martin et al., 2001).

► **Education and interpretation programs**

Mostly Effective

Assisted by local organizations the national park administration has

developed and implements educational programs.

► **Tourism and visitation management**

Some Concern

Highly seasonal tourism is the major use of the national park with annual visitor number regularly exceeding half a million over the last years (Administración de Parques Nacionales, 2015). Infrastructure (hotels, lodges, campgrounds, hiking and horse trails, mountain huts, tour boat and glacier hike facilities) is well developed. However, there are some deficits in the management of the balance between nature conservation and tourism promotion (UNEP-WCMC, 2011). Auditoría General de la Nación (2015) noted an absence of up-to-date and approved public use plans.

► **Monitoring**

Some Concern

Monitoring is restricted to the status of glaciers as part of a national inventory effort and selected criteria, such as the status of the endangered huemul deer. No comprehensive monitoring program is in place (IUCN, 2014; UNEP-WCMC, 2011).

► **Research**

Some Concern

Regular studies of the glaciers are conducted as part of a national governmental effort in addition to a wealth of academic research, much of which is published in peer-reviewed journals. Partial inventories of fauna exist, with a focus on birds (see for example BirdLife, 2017) and longstanding work of the endangered huemul deer within a national programme dedicated to this species recognized as a "national monument" in Argentina. While there are neither integrated, on-going research programs for the national park nor research facilities, a Regional Office of the National Parks Administration provides scientific support for management (World Heritage Committee, 2014; UNEP-WCMC, 2011).

Overall assessment of protection and management

Some Concern

Similar to the above, protection and management of the national park has some deficits in terms of lacking strategic planning, an outdated management plan and a lack of adequate public use planning and management despite growing mass tourism in some parts of the property (Administración de Parques Nacionales, 2015). Nevertheless, it is important to understand that large areas of the property are remote and hardly accessible and thereby naturally protected. Challenges remain in terms of the restoration of areas impacted by past livestock and fires, current fire management, law enforcement and tourism management.

► Assessment of the effectiveness of protection and management in addressing threats outside the site

Some Concern

The National Park Administration is responsible for the management of both the actual national park and the adjacent national reserve effectively serving as a buffer zone despite not formally being recognized as such under the World Heritage Convention. In line with recent, critical audits (Auditoría General de la Nación, 2015; Despouy, 2015), the persistence of all major severe threats at a time of increasing tourism pressure suggests a limited management effectiveness.

► Best practice examples

One of the adjoining privately owned ranches (estancias) has been recognized as an Important Bird Area by BirdLife International (2017). A conservation management plan for the estate turns it into to a de facto extension of - or buffer zone for - the national park. Several non-governmental organizations support the initiative. The initiative serves as an example of biodiversity-friendly management of private land adjacent to governmental protected areas (UNEP-WCMC, 2011).

State and trend of values

Assessing the current state and trend of values

World Heritage values

► **Exceptional natural beauty modeled by ongoing glaciation**

High Concern

Trend:Deteriorating

The natural beauty of the property has been affected by the receding glaciers with the notable exception of the Perito Moreno Glacier which continues to advance. Impacts on the natural forest and steppe vegetation and endangered species partially predating the World Heritage inscription stem from past sheep and cattle grazing, feral livestock and exotic species like European hare, wildfires, and uncontrolled tourism development in the buffer zone (BirdLife International, 2017; UNEP-WCMC, 2011; State Party of Argentina, 1981). There is some concern that planned downstream dam construction on the Santa Cruz River could affect the lake levels in the property and thereby the visually stunning phenomenon of the calving of the Perito Moreno glacier (Aves Argentinas, 2016).

► **Geological, geomorphic and physiographic phenomenon caused by the advance and retreat of the glaciations**

Low Concern

Trend:Stable

It can be argued that climate change casts a shadow on the future of glaciation as protected today. At the same time, glaciation has been dynamic at all times and the current status represents a geological snapshot only.

Summary of the Values

► **Assessment of the current state and trend of World Heritage values**

Low Concern

Trend: Deteriorating

The overall concern is ranked low from a narrow World Heritage perspective as neither the grandeur of the landscape nor its extraordinary geological values are significantly threatened. Nevertheless, steady tourism growth in the absence of adequate planning and management (Despouy, 2015) has been resulting in a deteriorating trend.

► **Assessment of the current state and trend of other important biodiversity values**

Low Concern

Trend: Stable

The natural steppe and forest vegetation was in a degraded state even at the time of World Heritage inscription from fires and livestock grazing (State Party of Argentina, 1981). Despite partial natural recovery, tourism pressure, exotic species, feral livestock and fires continue to put pressure on flora and fauna (UNEP-WCMC, 2011). In the context of the reservoir values, despite concerns about anticipated impacts from climate change, the ice fields and glaciers continue to constitute a major and high-quality freshwater reservoir.

Additional information

Benefits

Understanding Benefits

► **Outdoor recreation and tourism, Natural beauty and scenery**

The national park attracts and inspires more than half a million of tourists per year. The latest available figures are 580,720 (2013) and 666,340 (2014) visitors, an almost 15% increase between just these two years (Administración de Parques Nacionales, 2015).



Fishing areas and conservation of fish stocks, Livestock grazing areas

Regulated, recreational fishing takes place, but plays no meaningful role in food provision. Large areas of what is today the national park and property were grazed by sheep and cattle, the feral cattle still living in the property being one reminder (State Party of Argentina, 1981).

► Sacred natural sites or landscapes, Wilderness and iconic features

The iconic peaks of Fitz Roy or Chaltén and Torre attract climbers and other outdoor enthusiasts from around the world. The name Chaltén is of indigenous origin; the highest peak of the area Chaltén continues to be considered a sacred mountain in indigenous cosmovision.

► Importance for research

The massive glaciers and ice fields of Patagonia are subject to important research, including on climate change (Consejo Nacional de Investigaciones Científicas y Técnicas, n.d.).

► Water provision (importance for water quantity and quality)

The vast transboundary ice fields and glaciers are a major freshwater reservoir (UNEP-WCMC, 2011).

► Tourism-related income, Provision of jobs

Park management and, more importantly, tourism generates income and employment opportunities (UNEP-WCMC, 2011).

Summary of benefits

Besides globally significant conservation values under the World Heritage Convention, the property conserves - and permits the natural regeneration of - important remnants of Patagonian forests and steppes. Water stands out as an overarching environmental service and benefit whereas tourism has developed into a pillar of the local economy.

Projects

Compilation of active conservation projects

Nº	Organization/ individuals	Project duration	Brief description of Active Projects
1	National Parks Administration of Argentina (APN)	From: 2017 To: 2017	Programme dedicated to the conservation of the endangered huemul deer (<i>Hippocamelus bisulcus</i>), which includes coordination and exchange with neighboring Chile (Programa de Conservación del Huemul).
2	LANIGLA-CONICET	From: 2017 To: 2017	Monitoring of the property's glaciers takes place as part of the national inventory system.

Compilation of potential site needs

Nº	Site need title	Brief description of potential site needs	Support needed for following years
1	Improved tourism management	Despite tourism being a major and increasing factor in the management equation of the property, planning and management have been assessed as very limited in the recent past (Despouy, 2015).	From: 2017 To: 2017
2	Removal of feral cattle	A number of exotic and feral species affect the vulnerable steppes and forests. While some are difficult and perhaps impossible to remove, the removal of cattle appears feasible and desirable.	From: 2017 To: 2017

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