Tikal National Park

2020 Conservation Outlook Assessment

SITE INFORMATION

Country: Guatemala
Inscribed in: 1979
Criteria: (i) (iii) (iv) (ix) (x)

In the heart of the jungle, surrounded by lush vegetation, lies one of the major sites of Mayan civilization, inhabited from the 6th century B.C. to the 10th century A.D. The ceremonial centre contains superb temples and palaces, and public squares accessed by means of ramps. Remains of dwellings are scattered throughout the surrounding countryside. © UNESCO

SUMMARY

GOOD WITH SOME CONCERNS

2020 Conservation Outlook

Finalised on 03 Dec 2020

Tikal National Park, a mixed World Heritage site and among the first inscriptions on the World Heritage List, has been conserving a particularly valuable part of the Selva Maya for many decades. The intricately linked ecological and species conservation values of the site cannot be separated from the broader Petén and the even larger transboundary Selva Maya region. The natural values of the entire region are under increasing pressure from large-scale land transformation, including deforestation, farmland encroachment, infrastructure development and intentional and accidental forest fires, all alongside increased impacts of climate change. While in a comparatively privileged position, the World Heritage site is not immune to such pressure. In recent years, tourism has locally reached levels of mass tourism without adequate management responses. However, how this will change following the COVID-19 related reduction in global travel will need to be evaluated. Besides a permanent need to effectively manage the impacts of massive tourism and address illegal activities in the site, the future management and conservation of Tikal will also depend on the effectiveness of buffering the property from the broader developments in the Petén and the wider Selva Maya. However, the Maya Biosphere Reserve and existing transboundary efforts provide promising frameworks to cooperate at the landscape level. The impact of a dramatic drop in entrance fees in 2020 due to the COVID-19 pandemic is yet to be known.
FULL ASSESSMENT

Description of values

Values

World Heritage values

► Intact ecosystem mosaic and processes  
Criterion:(ix)

Located on the southern reaches of the Yucatan Peninsula’s karst plateau, Tikal National Park is one of the core zones of the vast Maya Biosphere Reserve, which in turn is part of the forest region sometimes referred to as Maya Forest, which extends into neighboring Belize and Mexico. The Maya Forest is one of Mesoamerica’s largest and most important nature conservation gems, while also boasting an exceptional cultural heritage. The property hosts a very rich diversity of flora and fauna as a result of the ongoing evolution of species and ecological communities following the pre-Colombian collapse of the Mayan civilisation. The ongoing biological and ecological processes are conserved by the large scale of the Maya Forest, and particularly its many protected areas (World Heritage Committee, 2014).

► High diversity of endangered fauna and flora  
Criterion:(x)

Major global biodiversity priority-setting exercises have identified the Petén Region and the Maya Forest as globally significant. Tikal National Park is one of several globally important protected areas in the Maya Forest, along with Calakmul in Mexico, likewise a mixed World Heritage property. More than 2,000 higher plants, including some 200 tree species, have been recorded in the national park, including numerous species of palms, epiphytes, orchids and bromeliads in the lush forests. Many endangered, threatened, vulnerable and/or CITES listed species are found in the property. The more than 100 species of documented mammals include impressive 60 species of bats, five felids – Puma (Puma concolor), Ocelot (Leopardus pardalis), Jaguarundi (Herpailurus yagouaroundi) and the near-treated Jaguar (Panthera onca) and Margay (Leopardus wiedii); the endangered Spider Monkey (Ateles geoffroyi), Mantled Howler Monkey (Alouatta palliata), river otter (Lontra longicaudis, NT) and the endangered Baird’s Tapir (Tapirus bairdii). More than 330 bird species encompass the Ocellated Turkey (Meleagris ocellata), Crested Eagle (Morphnus guianensis) and Ornate Hawk-Eagle (Spizaetus ornatus), all near-threatened according to the IUCN Red List. Of the more than 100 reptiles the critically endangered Central American River Turtle (Dermatemys mawii) and 38 species of snakes stand out. In addition to 25 known amphibian species, there is a noteworthy freshwater fish fauna and a great diversity of invertebrates. Tikal and the broader Maya Forest are also known for the wild varieties of several important agricultural plants (World Heritage Committee, 2014).

Assessment information

Threats

Current Threats  
High Threat

The broader landscape is in a process of rapid transformation due to considerable local population growth and corresponding demand for land, pasture and natural resources. Hunting, fishing and collection of non-timber forest products for subsistence and commercial purposes, run the risk of exceeding the natural regeneration capacity. Regular wildfires of multiple origins jointly with severe weather events over the last years pose a high threat to the site and add further complexity. In recent years, tourism has locally reached levels of mass tourism raising concerns about impacts from disturbance, demand for illicit wildlife and plant products, and poorly managed sewage and solid waste. However, how this will change following...
the COVID-19 pandemic related reduction in global travel, will need to be evaluated.

▶ Hunting and trapping, Other Biological Resource Use

(*Non-sustainable levels of natural resource extraction*)

The rich and diverse forest resources have traditionally been used by indigenous peoples and local communities. Extraction of a broad range of non-timber forest products, including game and fish, is a common and much needed element of livelihood systems of indigenous peoples and local communities throughout the Maya Forest. Regulated legal harvesting of non-timber forest products occurs outside the park boundaries. While local resource use is an integral part of the longstanding human presence in the Petén, extraction is illegal in the property and harvesting levels need to be compatible with the productivity elsewhere (Ministerio de Cultura y Deportes, 2003; Parkswatch, 2002). It is clear that the use restrictions affect the relationship between local people and park management.

▶ Tourism/ visitors/ recreation

(*Tourism impacts*)

While primarily affecting the famous archaeological sites, tourism has locally reached levels of mass tourism raising concerns about impacts from disturbance, demand for illicit wildlife and plant products, and poorly managed sewage and solid waste (UNEP-WCMC, 2011; Fujisaki, 2002; Parkswatch, 2002; Trópico Verde. n.d.(c)). Even at the time of inscription, the World Heritage Committee (1979) expressed concern about tourism development and its potential impacts on the cultural and natural value of Tikal National Park. Foreign visitors exceeded national visitors from 2012 onward, and there had been an increase since 2015. It is estimated that Tikal had about 300,000 visitors in 2017 (CONAP y WCS, 2018). On the other hand, entrance fees (~USD 3 million in 2017) that fund conservation of the site, and tourism can be expected to drop precipitously due to the COVID-19 pandemic.

▶ Housing/ Urban Areas, Livestock Farming / Grazing

(*Population growth and in-migration*)

A sharp population increase in a rural, resource-dependent setting inevitably increases pressure on natural resources. According to UNEP-WCMC (2011), the population of the Petén Province (Departamento) in which the property is located, has roughly quintupled between 1970 and 2000. Accordingly, the agricultural frontier and other pressures have advanced, especially on the southern boundary of the property. The property itself is indirectly affected, as the increasing pressure translates into higher risks of illegal activities in addition to affecting the surrounding landscape.

▶ Identity/social cohesion/ changes in local population and community that result in negative impact

(*Effects of longstanding civil war*)

It is important to keep in mind that Guatemala has suffered from one of the longest and bloodiest civil wars in the region, which has deeply affected the societal fabric of the country. A peace agreement was struck only in 1996 after 36 years of war. Today, the Petén region is strongly affected by narcotrafficking and related violence (Elbein, 2016). In the western parts of the Maya Biosphere Reserve, drug trafficking organizations have been driving extensive deforestation to smuggle drugs and launder money, burning large areas of land and pressuring communities to “sell” concession lands, leading to threats and the murder of concessionaire leaders (Elbien, 2016; Devine et al., 2020). Local communities also face major uncertainty, as the government has not yet committed to renewing concession agreements (Renold and Salus, 2020). A failure to act may have devastating consequences, as community forests concessions effectively protect the Reserve’s flora and fauna (Devine et al., 2018).

▶ Fire/ Fire Suppression

(*Wildfires*)

Fires are one natural disturbance factor in the Selva Maya, but the frequency and intensity of fires today is mostly anthropogenic. Fires are intentionally set to stimulate the growth of grass on pastureland, as a hunting and poaching method, and also used in the collection of wild honey (ACOFOP, 2017; Trópico
Verde. n.d.(a). Particularly along the southern boundary of the site settlers use fire to clear land. Other fires are caused by campfires of looters of archaeological sites and during harvesting of non-timber forest products. All these types of anthropogenic fires regularly run out of control. Despite full recognition of the challenge and important efforts to address it, fires remain a permanent threat, the importance of which is likely to increase under the expected scenario of increasing temperature and more frequent weather extremes.

**Livestock Farming / Grazing**

*(Advancing agricultural frontiers throughout the Selva Maya)*

While the high-profile property provides a comparatively effective level of protection, the advancing agricultural frontier is a main driver of landscape change in the region (UNEP-WCMC, 2011; Ministerio de Cultura y Deportes, 2003; Parkswatch, 2002). Thereby, it affects the integrity of the entire region. A report on the entire Maya Biosphere Reserve (MBR) (CONAP y WCS, 2018) found net forest gain in 2017 for the first time since data collection began in 2000. This was attributed to a program of community forest concessions managing nearly 17% of the MBR's 2.1 million hectares, in a program supported by the US Agency for International development. Forests under community concessions are shown to be more effectively protected against illegal encroachment and fires (Devine et al., 2018). However, recent research has shown that narco-deforestation is now spreading eastward in MBR, taking the form of barbwire fenced cattle ranches, seemingly without cattle, to launder money, build airstrips, and claim territory along drug smuggling routes (Devine et al., 2020).

**Potential Threats**

Climate change is among the overarching potential threats to the national park and its natural values in the longer term. As it is in essence beyond the scope of site management, the best investment in preparedness and adaptation is to not only prevent forest loss and degradation in the property, but to address both at a landscape scale. The increasing road infrastructure in the Selva Maya affects the region by providing entry points for land and resource use. Further road construction or improvements of dirt roads within Tikal National Park would result in severe direct and indirect impacts. However, no recent information is available on this matter as of 2020.

**Temperature extremes**

*(Climate change)*

Forest loss and degradation across large tracts of the trinational Selva Maya increases the vulnerability of the relatively small property to the anticipated impacts of climate change. Severe weather events, such as hurricanes, are expected to increase in frequency and intensity. If so, impacts on the World Heritage site are highly likely (Ministerio de Cultura y Deportes, 2003).

**Roads/ Railroads**

*(Road construction)*

Additional road infrastructure around the World Heritage site - and even within it - has been repeatedly proposed. As well documented across the entire Selva Maya, road access to remote areas opens the door for a range of illicit activities and the agricultural frontier. This is already a challenge both on the northern and southern edges of the property (UNEP-WCMC, 2011; Ministerio de Cultura y Deportes, 2003). The most sensitive proposals for road construction are extensions of paved roads to the north: the paving the 23 kilometers of dirt road from the property’s center to the village of Uaxactun linking a road from nearby Campeche and Quintana Roo to Tikal. However, no recent information is available on this matter as of 2020.

**Overall assessment of threats**

The status of Tikal National Park as a protected area as an archaeological site simultaneously has buffered the World Heritage site from the profound landscape transformation in parts of the Petén.
region over the last decades. Nevertheless, as demand for land, pasture and natural resources is increasing so are the many threats, such as excessive poaching and harvesting, as well as fires. In recent years, mass tourism has raised concerns about impacts from disturbance, demand for illicit wildlife and plant products, and poorly managed sewage and solid waste. However, how this will change following the COVID-19 pandemic related reduction in global travel, will need to be evaluated. The threats from anticipated climate change are of further concern.

Protection and management

Assessing Protection and Management

<table>
<thead>
<tr>
<th>Management system</th>
<th>Some Concern</th>
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| Management brings together the National Council of Protected Areas (CONAP) and the National Institute for History and Anthropology (IDAEH) (González, 2007). Management is coordinated with the surrounding Maya Biosphere Reserve, of which Tikal National Park is one of several core zones (Consejo Nacional de Áreas Protegidas, 2015). Ongoing conflicts and uncontrolled land and resource use in the surrounding area indicate that the integrated biosphere reserve approach is working only partially. Guzmán (2017) noted that “rapidly changing land use has widened the gap between the official zoning scheme for the Reserve as established in the 2001-2006 Master Plan and the reality on the ground, further aggravating conflicts over land and resource use”.

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<th>Effectiveness of management system</th>
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| Numerous international and national NGOs and research institutions, as well as bilateral and multilateral cooperation efforts support the management of the cultural and natural heritage. Ongoing illegal activities indicate ongoing constraints to effective management (UNEP-WCMC, 2011). The most recent reported management plan for the site is for the period 2004-2008 (CONAP y WCS, 2018).

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<th>Boundaries</th>
<th>Some Concern</th>
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| The boundaries of the World Heritage site were designed to roughly cover what was considered the most important area from an archaeological perspective in the 1950s. The rectangular shape is arbitrary from a nature conservation perspective. While the consequences are partially buffered by other protected areas and management measures in the surroundings, the usefulness of adapting the boundaries - noted by the World Heritage Committee - remains.

<table>
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<th>Integration into regional and national planning systems</th>
<th>Mostly Effective</th>
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| The integration of Tikal National Park as one of the core zones of the much larger Maya Biosphere Reserve provides a promising platform to integrate the management of the site into the wider landscape. Supported by external projects, the government of Guatemala cooperates with neighboring Belize and Mexico on the conservation and management of the Selva Maya across national borders. While both the biosphere reserve approach and the transboundary efforts are promising, much remains to be done to realize the full potential.

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<th>Relationships with local people</th>
<th>Mostly Effective</th>
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| The main conflict between the national park and nearby local communities and indigenous peoples in the surroundings are restrictions on the use of natural resources. While local resource use is an integral part of the longstanding human presence in the Petén, extraction is illegal within the site. However, illegal activities are widespread and result in conflicts (Parkswatch, 2002). The approach of the Maya Biosphere Reserve encompassing the World Heritage site is an attempt to balance conservation and sustainable use of natural resources. Community forest concessions outside the site have created thousands of jobs and risen people out of poverty, while at the same time contributing to protecting the forest and its resources (Rainforest Alliance, 2019), but the increase of various pressures are threatening
Legal framework

Tikal National Park has a legal protection status on both nature conservation and archaeological grounds (UNEP-WCMC, 2011). The framework is per se effective, while question marks remain in terms of the configuration of the site and the harmonization of objectives for natural and cultural heritage conservation, respectively.

Law enforcement

Law enforcement suffers from under-staffing and under-financing, as well as the focus on the central tourist areas. The more remote areas are vulnerable due to law enforcement constraints (UNEP-WCMC, 2011; CONAP, 2003; Parkswatch, 2002).

Implementation of Committee decisions and recommendations

As early as 1979, the inscription decision expressed concern about the possible impacts of a tourism development project on the cultural and natural values of the property (World Heritage Committee, 1979). In 1993, the Committee noted "prospects" to expand Tikal, but this has so far not resulted in concrete attempts to do so. Follow-up to the Committee suggestion to promote sub-regional archaeological exchange is unknown and beyond the scope of this assessment. The last State of Conservation reports date to the late 1990s.

Sustainable use

Key sources of information indicate that the use of wildlife and non-timber forest products is neither effectively controlled nor sustainable (Consejo Nacional de Áreas Protegidas, 2015; UNEP-WCMC, 2011; Parkswatch, 2002). Regulated legal harvesting of non-timber forest products occurs outside the property boundaries, but within the property, resource extraction is prohibited. However, illegal activities are common and unlawful users caught by park staff are reported to have set forest fires in protest against the National Park restrictions (Ministerio de Cultura y Deportes, 2003; Parkswatch, 2002). A sharp population increase in rural areas has put further pressure on natural resources at the same time as the agricultural frontier has advanced, especially on the southern boundary of the site. The increasing pressure translates into higher risks of illegal resource use, in addition to affecting the surrounding landscape.

Sustainable finance

Finance for management of the site stems from the government budget and revenues from entrance fees partially being re-invested. Project funding complements the overall financing. Entrance fees at Tikal were more than USD 3 million in 2017. In fiscal year 2018, CONAP received a budget of approximately USD 14 million for all its work nationwide. Although the Maya Biosphere Reserve, within which the World Heritage site is located, is undoubtedly one of the most important reserves in the country, CONAP is in charge of managing all of Guatemala's protected areas, which represent 32% of the country's land area (CONAP y WCS, 2018).

Staff capacity, training, and development

Besides occasional opportunities for staff training in the framework of cooperation projects, there is no information available on a long-term training program. The management plan notes "limited staffing" due to resource constraints, which hints at challenges (Consejo Nacional de Áreas Protegidas, 2015). Though precise data are not available, in 2017 the majority of the circa 200 staff of the Institute of Anthropology and History (IDEAH) were located at Tikal and Yaxhá (CONAP y WCS, 2018).

Education and interpretation programs

Information about systematic efforts is limited. The management plan identifies the need to strengthen awareness-raising, education and interpretation on various occasions as a high priority, including as
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regards nearby communities in the context of looting of archaeological heritage (Consejo Nacional de Áreas Protegidas, 2015). The same source notes “limited realization of the educational potential” in a tourism context.

▶ Tourism and visitation management

Tourism has significantly increased after decades of civil war, with major potential for the local economy, conservation financing and visitor education. At the same time, there are important risks of pressure from mass tourism for both the cultural and natural heritage of the site. However, much remains to be done to maximize the benefits of tourism while minimizing its impacts. Since the inscription, there have been concerns about inappropriate tourism development. The impact of the COVID-19 pandemic on travel, and therefore on the entrance fees that finance management of the site, remain to be seen.

▶ Monitoring

Occasional studies conducted by research institutions and non-governmental organizations shed important light on selected conservation issues. They do not amount to systematic monitoring though. The management plan for Tikal National Park (CONAP, 2003) identified more systematic monitoring as a priority while acknowledging considerable room for improvement.

▶ Research

Over the decades, a wealth of information has been generated through numerous research projects dedicated to various aspects of both the cultural and the natural heritage. Many studies fed into the elaboration of the 2003 Master Plan for the National Park (CONAP, 2003). There is some concern that research on the natural heritage plays a secondary role compared to archaeological studies (Parkswatch, 2002).

Overall assessment of protection and management

The highly visited areas of the relatively small World Heritage site have an overall good level of management and protection even though the well-documented impacts of mass tourism to the archaeological sites remain to be addressed comprehensively. However, the impacts of the COVID-19 pandemic on travel remain to be seen. The more remote areas of the site, however, are more vulnerable to real and potential risks without adequate management responses. In the longer run, the most important challenge will be the direct and indirect effects of the land transformation of the broader Maya Forest region. The biosphere reserve model is an appropriate umbrella to address conservation and local development in an integrated fashion, but much remains to be done to translate the good intentions into practice. There is a need to update the management plan to effectively address both new and remaining pressures and threats, as well as implementing a systematic monitoring programme to assess the impact of drivers of landscape change in the region.

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

Despite important and promising efforts to work with the growing communities around the property under the umbrella of the Maya Forest and transboundary initiatives in the Selva Maya, overall forest loss and degradation remain worrisome (ACOFOP, 2017; Guzmán, 2017; Hodgdon et al., 2015; Trópico Verde. n.d.(a, b, c)). The eastern part of the Maya Biosphere Reserve, in which Tikal is located, is considered the most ecologically stable of three parts of the MBR. In 2017 the first net increase in forest cover was recorded, attributed to nine community forest concessions and two industrial forest concessions (CONAP y WCS, 2018). Forests under community concessions are shown to be more effectively protected against land grabs, fires and deforestation, as they are the source of community livelihoods (Devine et al., 2018). However, pressures from sharp population increase and encroaching agricultural frontiers has translated into illegal activities in addition to affecting the surrounding landscape. Remote areas away from the tourist hotspots are vulnerable
due to law enforcement constraints (UNEP-WCMC, 2011; CONAP, 2003; Parkswatch, 2002).

**State and trend of values**

**Assessing the current state and trend of values**

**World Heritage values**

► **Intact ecosystem mosaic and processes**

Similar to the directly linked species conservation values, the ecosystems within Tikal national park are not only better protected than the surroundings, but also better protected than many other protected areas in the region due to the high profile of Tikal in Guatemala (Parkswatch, 2002). The major concerns are thus the dynamics of the broader forest landscape and the direct and indirect effects of such processes on the World Heritage site in the longer term. In light of the projected impacts of climate change, increasing demographic pressure in the surroundings of the national park and consequently expected increases in poaching, illegal extraction, deforestation, farmland encroachment and fires, stronger efforts are needed for the management of the property itself.

► **High diversity of endangered fauna and flora**

Many of the protected areas of the Guatemalan Petén and the vast trinational Maya Forest are subject to multiple and severe threats, including the ever-advancing agricultural frontier, infrastructure development, climate change, poaching and illegal trade in species, looting and intentional and accidental fires. While Tikal National Park is not isolated from these broader trends, its national significance as a major archaeological site and the international designations make it less vulnerable to some of the threats, such as land speculation. While detailed data is scarce, the assumption is that the overall situation is in line with the overall deteriorating trend of species conservation in the Maya Forest, while Tikal National Park is one of the more effectively protected areas within the region. Thereby, the species conservation values continue to be comparatively well conserved. Nevertheless, it is clear that the future of far-ranging species with naturally low population densities, such as the large predators puma and jaguar, relies upon the fate of the larger landscape. Whitacre and Burnham (2012) confirm this for example in documenting that a range of sizes of protected areas may play different roles in conserving Neotropical lowland forest raptors.

**Summary of the Values**

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

The intricately linked ecological and species conservation values of the World Heritage site cannot be separated from the broader Petén and the even larger transboundary Selva Maya region. The natural values of the entire region are under increasing pressure from land transformation, illegal extraction, infrastructure development, forest fires, poaching and illegal trade in species. While in a comparatively privileged position, the site is not immune to such pressure. The pressure affecting the natural values is likely to increase in the future due to the growing population in the immediate vicinity of the site and increasing impact of climate change. However, the species conservation values continue to be comparatively well conserved so far. Nevertheless, it is clear that the future of far-ranging species with naturally low population densities, such as the large predators puma and jaguar, relies upon the fate of the larger landscape.
Additional information

Benefits

Understanding Benefits

Collection of wild plants and mushrooms,
Fishing areas and conservation of fish stocks,
Traditional agriculture,
Livestock grazing areas

Most local communities and indigenous peoples in the Petén largely and directly depend on natural resources for their livelihood systems. This creates conflicts in the national park, whereas the much larger biosphere reserve is an explicit umbrella for balancing strict conservation and sustainable use.

Factors negatively affecting provision of this benefit:
- Overexploitation: Impact level - High, Trend - Continuing

Sustainable resource use in areas surrounding the property is under pressure from land grabs, land speculation, deforestation, encroaching agricultural frontiers, population increase and intentional and accidental forest fires.

Outdoor recreation and tourism,
Natural beauty and scenery

Tikal is an internationally established tourism destination of national importance.

Importance for research,
Contribution to education

The property is of major significance for the understanding and demonstration of the ancient Maya civilization. From a natural sciences perspective, it is fascinating to conduct research in an ecosystem, which has been evolving since the still not fully understood catastrophic collapse of a highly sophisticated culture and civilization.

Factors negatively affecting provision of this benefit:
- Climate change: Impact level - Low, Trend - Continuing
- Overexploitation: Impact level - Moderate, Trend - Continuing

The conservation of the property is intricately linked to the state of the broader Petén and the even larger transboundary Selva Maya region, which are under increasing pressure from large-scale land transformation, including deforestation, farmland encroachment, infrastructure development, and intentional and accidental fires, all alongside increased impacts of climate change.

History and tradition,
Wilderness and iconic features,
Sacred natural sites or landscapes,
Sacred or symbolic plants or animals,
Cultural identity and sense of belonging

The cultural heritage of the property is a major reference for the local and national identity. It must not be forgotten that the indigenous descendants of the Maya continue to live in what many today call the Selva Maya. The property is home to many iconic species of cultural and spiritual importance, including in contemporary nature conservation, such as the jaguar.

Factors negatively affecting provision of this benefit:
- Overexploitation: Impact level - Moderate, Trend - Continuing
- Habitat change: Impact level - Moderate, Trend - Continuing

Cultural and spiritual values are under pressure from mass tourism, as well as large-scale land transformation and illegal activities in surrounding areas affecting many of the culturally significant
The forests of the property contribute to all common benefits and environmental associated with forests, such as carbon sequestration and soil stabilization.

Factors negatively affecting provision of this benefit:
- Climate change: Impact level - Low, Trend - Continuing
- Overexploitation: Impact level - High, Trend - Continuing

The conservation of the property is intricately linked to the state of the broader Petén and the even larger transboundary Selva Maya region, which are under increasing pressure from large-scale land transformation, including deforestation, farmland encroachment, infrastructure development, and intentional and accidental fires, all alongside increased impacts of climate change.

Across the entire Selva Maya local communities and indigenous peoples have been using timber for construction and energy, as well as a broad range of non-timber forest products for all sorts of purposes at all times. The restrictions of the national park create a dilemma in this regard.

Factors negatively affecting provision of this benefit:
- Overexploitation: Impact level - High, Trend - Continuing

Sustainable resource use in areas surrounding the property is under pressure from land grabs, land speculation, deforestation, encroaching agricultural frontiers, population increase and intentional and accidental forest fires.

The mixed property generates local income and employment opportunities in park management, research projects and tourism.

Summary of benefits
The conservation of the extraordinary cultural and natural heritage of the site and the generation of information and knowledge are the overarching benefits. Tikal is a major, globally renowned tourism hotspot with important educational and local economic benefits. Embedded within the much larger Maya Biosphere Reserve, which provide essential natural resources for the livelihood of many local communities and indigenous peoples, the site contributes to the maintenance of many environmental services of a globally important forest region.

Projects

Compilation of active conservation projects

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<th>Organization</th>
<th>Brief description of Active Projects</th>
<th>Website</th>
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<tr>
<td>1</td>
<td>Wildlife Conservation Society (WCS) and numerous partners</td>
<td>The Wildlife Conservation Society (WCS) and numerous partners began the “Strengthening Emerging Local Governance Capacity to Conserve Natural and Cultural Resources and Secure Livelihoods in the Petén, Guatemala” project in 2008 to promote the sustainable management and conservation of the natural and cultural heritage of the Petén. Major partners are the National Council for Protected Areas (CONAP), the Center for Environmental and Social Legal Action of Guatemala (CALAS), the Association of Forest Communities of Petén (ACOFOP), Asociación BALAM, and the Center for Conservation Studies of USAC (CECON).</td>
<td><a href="http://estadolarbm.org/">http://estadolarbm.org/</a></td>
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<td>2</td>
<td>Rainforest Alliance</td>
<td>Among other activities, the Rainforest Alliance has been promoting community forestry for many years in the Maya Biosphere Reserve.</td>
<td><a href="http://www.rainforest-alliance.org/articles/community-forestry-maya-biosphere-reserve">http://www.rainforest-alliance.org/articles/community-forestry-maya-biosphere-reserve</a></td>
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REFERENCES

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<tr>
<td>1</td>
<td>ACOFOP (2017). Evaluando la efectividad del control y prevención de incendios forestales en la Reserva de la Biósfera Maya. Asociación de Comunidades Forestales de Petén ACOFOP. Programa Regional de Investigación sobre Desarrollo y Medio Ambiente (PRISMA).</td>
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