Río Plátano Biosphere Reserve

SITE INFORMATION

Country: Honduras
Inscribed in: 1982
Criteria: (vii) (viii) (ix) (x)

Site description:
Located on the watershed of the Río Plátano, the reserve is one of the few remains of a tropical rainforest in Central America and has an abundant and varied plant and wildlife. In its mountainous landscape sloping down to the Caribbean coast, over 2,000 indigenous people have preserved their traditional way of life. © UNESCO
SUMMARY

2014 Conservation Outlook

Critical

The conservation outlook for the site’s values related to its scenic beauty, physiographic features, ecological processes, biodiversity, threatened species and species of particular conservation concern is encouraging. The overall level of insecurity, lawlessness, and impunity in the region until early 2011 meant that threats remained critical, and the ability to protect or manage these values extremely difficult. Since then, an Emergency Presidential Decree has put into place the elements needed to revert the situation over time, and vigorous efforts have been undertaken since. Though the situation remains critical, preliminary results are encouraging. It remains to be seen, however, if it will be possible to sustain these efforts over time.

Current state and trend of VALUES

Critical

Trend: Improving

Most of the site’s values were being degraded until early 2011 by uncontrolled and inappropriate uses such as slash and burn agriculture, deforestation, ranching, the development of illegal settlements, the indiscriminate dumping of solid wastes from local communities and the construction of dams. However, since early 2011, the Presidential Decree that designated the defense of the site a national priority, and mandated a concerted and coordinated approach to its protection and management, has put into motion numerous activities that have shown early successes. However, in the last years, the presence and regulative capacity of the governmental institutions is lower than ever and results in continuous deforestation, illegal settlements accompanied by serious conflicts between indigenous population and migrants.
Overall THREATS

Very High Threat

The general state of insecurity and impunity in the region works as a driver that keeps the level of threat very high. However, the Presidential Decree of 2011 puts into place the elements needed to revert the situation over time, and vigorous efforts have been undertaken since. The main potential threat is the planned construction of new dams. Illegal deforestation and drug trafficking also continues to severely impact the site.

Overall PROTECTION and MANAGEMENT

Serious Concern

Until early 2011, the general level of insecurity, lawlessness, and impunity in the region undermined the ability to protected or manage the site. Since then concerted and coordinated efforts have made it possible to score some early successes, but it remains to be seen if these efforts can be sustained over time.
FULL ASSESSMENT

Description of values

Values

World Heritage values

► Large, undisturbed expanses of tropical forests, savannahs, wetlands, and beaches
Criterion:(vii)

The property contains outstanding vistas of large, undisturbed expanses of tropical forests, savannahs, wetlands, and beaches as well as numerous rivers and waterfalls. These are complemented by rugged granite mountains with remarkable rock formations that produce spectacular waterfalls, and numerous rivers with scenic stretches of white water and forested river gorges. (WDPA sheet, 2011; World Heritage Site Description, World Heritage Website; Enhancing our Heritage Report, 2007).

► On-going geological processes
Criterion:(viii)

The property’s steep mountains, flat to undulating coastal plain, lagoons, and shallow marine habitats are outstanding examples of these typical physiographic features of the Caribbean coast of Central America. The on-going geological processes, which are often difficult to observe over short periods, are quite visible here, especially along the dynamic coastline, the meanders of the rivers as they hit the coastal plain, and the shifting patterns of wetlands. (WDPA sheet, 2011; World Heritage Site Description, World Heritage Website; Enhancing our Heritage Report, 2007).
Key site for the on-going evolution of ecological and biological processes for the full range of Caribbean coastal terrestrial, fresh water, marine ecosystems

Criterion: (ix)

The Río Plátano Biosphere Reserve is the largest area of undisturbed humid tropical forest in Honduras, and one of the largest in Central America. Its size, relatively undisturbed natural state, and complex of contiguous protected areas on its southern and eastern boundaries and nearby protected areas on the western boundary, make it a key site for the on-going evolution of ecological and biological processes for the full range of Caribbean coastal terrestrial, fresh water, marine ecosystems and their complex communities of flora and fauna. This site is not an isolated fragment, but rather part of a larger, relatively undisturbed natural landscape with its complex mosaic of habitats. (WDPA sheet, 2011; World Heritage Site Description, World Heritage Website; Enhancing our Heritage Report, 2007)

Diversity of habitats and species

Criterion: (x)

The full range of Caribbean tropical coastal habitats is found in the Río Plátano Biosphere Reserve. These include representative samples of five ecological zones (wetlands, pine savannah, Atlantic broadleaf forest, highland pine forest, and maritime zone) and 32 terrestrial, riverine, coastal, and maritime ecosystems. At the species level, it has 70% of the fish, 57% of the birds and 57% of the reptiles of Honduras with a total of 39 mammals, 377 birds, 200 reptiles and amphibians, and over 2,000 species of vascular plants. From conservation standpoint, the site is particularly important because of the threatened species it contains (giant anteater, ocelot, puma, margay, jaguar, jaguarondi, Central American otter, Caribbean manatee, brown caiman, red brocket deer, harpy eagle, green macaw, military macaw, king vulture, great curassow and crested guan; reptiles include green turtle, loggerhead turtle and leatherback turtle), and the in-situ preservation of the germplasm of valuable timber and medicinal plant species. (WDPA sheet, 2011; World Heritage Site Description, World Heritage Website; Report on Management Effectiveness, 2007)
Assessment information

Threats

Current Threats
Very High Threat

The general state of insecurity and impunity in the region works as a driver that keeps the level of threat very high. However, the Presidential Decree of 2011 puts into place the elements needed to revert the situation over time, and vigorous efforts have been undertaken since. Preliminary results are encouraging, though the ability to sustain these efforts over time remains to be seen. (36COM.Rio Platano.SPreport; Mission Report, 2011)

▶ War, Civil Unrest/ Military Exercises
   Very High Threat
   Inside site
   Outside site

This threat is an overall condition that has been accelerated by drug trafficking in and around the site. It severely limits management efforts, thereby feeding the current process of the rapid degradation of the site’s values. However, a 2011 Presidential Decree has assigned national priority to the protection and Management of the Rio Plátano Biosphere Reserve. This is to be achieved through the development and implementation of an integrated, inter-institutional action plan that will include specific security measures to enhance the rule of law in the region. It is still too soon to know if this initiative will be effective. (36COM.Rio Platano.SPreport.; Mission Report, 2011)

▶ Logging/ Wood Harvesting
   Very High Threat
IUCN World Heritage Outlook: https://worldheritageoutlook.iucn.org
Rio Plátano Biosphere Reserve - 2014 Conservation Outlook Assessment (archived)

Inside site
Outside site

Until early 2011, there was uncontrolled extraction of precious woods by well-connected companies, especially in broadleaf forests. As a result of the 2011 Presidential Decree, a major effort is underway to detect and prosecute transgressors, and reforest affected sites. While positive results have been achieved to date, it is too soon to know if this can be sustained over time. (36COM.Rio Platano.SPreport; Mission Report, 2011; Report on Management Effectiveness, 2007)

► Crop production, Livestock Farming / Grazing

Very High Threat
Inside site
Outside site

The general advance of the agricultural frontier, slash and burn activities of colonists, and ranching; inappropriate land use including the alteration of water courses, invasion of core areas, and lack of use permits was rampant until early 2011. Since then, these threats have been addressed aggressively and significant initial successes have been scored. It is too soon, however, to know if these efforts can be sustained and broadened over time. (36COM.Rio Platano.SPreport; Mission Report, 2011).

► Commercial hunting, Subsistence hunting

Very High Threat
Inside site
Outside site

Until early 2011, there was widespread illegal hunting, fishing and trade in wildlife by both commercial and subsistence actors. As a result of the 2011 Presidential Decree, vigorous action has been undertaken to control these activities and initial successes have been achieved. It is too early to know if this effort can be sustained over time. (36COM.Rio Platano.SPreport; Mission Report, 2011)

► Renewable Energy

Low Threat
Outside site

An environmental license was granted in early 2011 for the construction of the Patuca III dam on the Patuca River, and construction has begun. Mitigation measures have been put in place to minimize negative environmental effects on the Rio Plátano Biosphere Reserve, though it is too soon to know whether they will be effective. (36COM.Rio Platano.SPreport)

▶ Invasive Non-Native/ Alien Species

Very Low Threat
Inside site
Outside site

Some invasive species, such as tilapia fish, are common; widespread introduction of exotics by local communities. Tilapia fish introduced into lagoons compete with native fish (Report on management effectiveness, 2007).

▶ Erosion and Siltation/ Deposition

Data Deficient
Inside site
Outside site

This is a result of deforestation, a product of slash and burn agriculture, illegal settlements, ranching, and dam construction, but the level of severity and extent is undocumented (Mission Report, 2011)

Potential Threats

Data Deficient

Until the EIAs for the Patuca I and II dams are obtained, potential threats cannot be properly assessed.

▶ Renewable Energy

Data Deficient
Outside site

The Patuca I and II dams are planned, but information on their location and potential environmental impacts is unavailable.
Protection and management

Assessing Protection and Management

Management system
Serious Concern

An inter-institutional Technical Committee has been established under the 2011 Presidential Decree on a permanent basis to coordinate national and international efforts to manage and conserve the Río Plátano Biosphere Reserve. This work will be supported by a GEF project which will include the development of a new management plan for the site. This work is just beginning and it is not yet known how successful these efforts will be. (36COM.Rio Platano.SPreport; Mission Report, 2011)

Management effectiveness
Serious Concern

Evaluations of management effectiveness in 2000, 2003, 2005, and 2006 showed steady improvement in management effectiveness. However, since the property has been affected by drug trafficking and the general state of insecurity in the region, management effectiveness has decreased markedly. It is hoped that the coordinated action plan for conservation of the site will halt the decline in management effectiveness, and contribute to improvements. (36COM.Rio Platano.SPreport; Mission Report, 2011)

Implementation of Committee decisions and recommendations
Serious Concern

The 2011 Presidential Decree is a response at the highest level by the State Party to implement Committee decisions with respect to the Río Plátano Biosphere Reserve. Initial actions to implement each of the Committee decisions and the recommendations of the 2011 Mission Report are promising. However, the general state of lawlessness in and around the property remains, and re-establishment of government control and the rule of law will require many years of concerted effort to make a lasting impact.
**Boundaries**

Some Concern

A 1997 decree revised the boundaries of the Biosphere Reserve and modified zoning patterns. However, no request was made to the World Heritage Committee to modify the boundaries of the World Heritage Property to match those of the Biosphere Reserve. This has led to confusion regarding the true boundaries of the site, and how they are affected by the modified zoning of the Biosphere Reserve. In 2011, the inter-agency Technical Committee for defense of the Río Plátano Biosphere Reserve took a decision to re-nominate the property to modify the boundaries and bring them into alignment with those of the Biosphere Reserve, and to develop major programs to restore natural ecosystems in areas that have been degraded. It is early yet to determine the success of re-nomination and ecosystem restoration efforts (36COM.Rio Platano.SPreport; Mission Report, 2011).

**Relationships with local people**

Serious Concern

Efforts are underway to work in a positive way with local people in the buffer zone of the site through environmental education programs, projects to support sustainable uses, and technical assistance. However, given the general state of insecurity, lawlessness, and impunity, the relation with local people remains a serious concern (36COM.Rio Plantano.SPreport; Mission Report, 2011).

**Legal framework and enforcement**

Serious Concern

The 2011 Presidential Decree declaring the conservation of the Río Plátano Biosphere Reserve a national priority, and mandating an integrated inter-ministerial action plan for its defense, has provided important government support for law enforcement and management actions. Squatters in the core zone were evicted in 2011, their property confiscated or destroyed, and new lands for them are being identified. However, given the uncertainty about boundaries, and the general state of insecurity, effective law enforcement still remains a serious long-term concern. (36COM.Rio Platano.SPreport;
Integration into regional and national planning systems
Data Deficient

The 2011 Presidential Decree on conservation of the Río Plátano Biosphere Reserve provides some hope that an integrated plan will be developed and put into effect. Since the plan is still under development, it is too early to know whether it will be successful (36COM.Rio Platano.SPreport; Mission Report, 2011).

Sustainable finance
Serious Concern

The declaration of the Río Plátano Biosphere Reserve as a national priority by the 2011 Presidential Decree also mandated key institutions to give priority to implementation of the inter-institutional action plan for its defense. This implies giving priority to finance of the plan as required. A decision has been made to use National Emergency Funds to finance initial activities. The decree also gives the inter-agency Technical Committee the responsibility of seeking and channeling international cooperation for this purpose. On-going GEF and GIZ projects in support of the Río Plátano Biosphere Reserve will complement the finance being provided through the National Emergency Fund. The general state of lawlessness is a major problem, however, and ongoing efforts will have to be financed over many years if long-term impacts are to be achieved. It is too soon to know if these efforts are indeed effective and can be sustained over the long run. (36COM.Rio Platano.SPreport; Mission Report, 2011)

Staff training and development
Mostly Effective

Staff Training and development are underway, as part of the action plan for the defense of the Río Plátano Biosphere Reserve, to improve the capacity of national, regional and local institutions to restore the rule of law, manage natural resource use, and conserve core areas. (36COM.Rio Platano.SPreport; Mission Report, 2011)
Sustainable use
Serious Concern

Small projects to develop sustainable use of resources in the buffer zone have been overwhelmed by the illegal uses that are prevalent; on-going efforts are being made to support sustainable use practices through the provision of technical assistance in local communities, but on balance resource use is still unsustainable. (36COM.Rio Platano.SPReport; Mission Report, 2011)

Education and interpretation programs
Some Concern

Environmental education programs are being undertaken in schools and colleges to develop understanding in local communities regarding the reasons for conservation of the Río Plátano Biosphere Reserve and need to halt illegal logging, hunting, wildlife trade, and fishing activities. This work is being carried out in tandem with stepped up law enforcement efforts. (36C00M.Rio Plantano.SPReport).

Tourism and interpretation
Some Concern

The budding ecotourism industry in the region has largely been wiped out by the general insecurity in the area. (Mission Report, 2011)

Monitoring
Some Concern

Remote sensing has been useful in determining the overall status of resource use in the site. On the ground monitoring of illegal resource use is aided by reports from local communities. Overflights and field inspections are on-going to identify incursions into the core zone. Sample plots are being monitored to quantify the presence of mahogany in the core zone. (36COM.Rio Platano.SPReport; Mission Report, 2011)

Research
Data Deficient
Overall assessment of protection and management

Serious Concern

Until early 2011, the general level of insecurity, lawlessness, and impunity in the region undermined the ability to protect or manage the site. Since then concerted and coordinated efforts have made it possible to score some early successes, but it remains to be seen if these efforts can be sustained over time.

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

Serious Concern

Until the rule of law is re-established in the region, the ability to protect or manage resources in the Moskitia will be limited. Concerted and coordinated efforts to revert the situation began in early 2011, and some initial successes have been achieved. It is hoped that these efforts can be sustained over time.

State and trend of values

Assessing the current state and trend of values

World Heritage values

Large, undisturbed expanses of tropical forests, savannahs, wetlands, and beaches

Critical

Trend: Improving

The beauty and natural phenomena of the site were being degraded until early 2011 by uncontrolled and inappropriate uses such as slash and burn agriculture, deforestation, ranching, the development of illegal settlements, the indiscriminate dumping of solid wastes from local communities and the construction of dams. However, thanks to the Presidential Decree of 2011, a concerted and coordinated effort has been made to revert the situation, and has scored some early successes. It remains to be seen if these initial
successes can be sustained over time. (36COM.Rio Planato.SPreport; Mission Report, 2011)

▶ **On-going geological processes**

*High Concern*

*Trend: Improving*

Degradation of the site’s resources by illegal and inappropriate uses has a long-term effect on its physiographic features, especially through the sedimentation of watercourses. Activities to reverse this trend are being undertaken on a concerted and coordinated basis, but it is too early to tell if this can be sustained over the long run, as this is what will be needed to stabilize the change in physiographic features. (36COM.Rio Platano.SPreport; Mission Report, 2011)

▶ **Key site for the on-going evolution of ecological and biological processes for the full range of Caribbean coastal terrestrial, fresh water, marine ecosystems**

*Critical*

*Trend: Improving*

The advance of the agricultural frontier, illegal settlements, and the construction of dams was slowly but surely degrading and reducing the extent of natural habitats, and with it halting the evolution of natural communities and species. Concerted and coordinated efforts since early 2011 have scored some early successes in reverting the situation, but the viability of these efforts in the long run remains to be seen. (36COM.Rio Platano.SPreport; Mission Report, 2011)

▶ **Diversity of habitats and species**

*Critical*

*Trend: Improving*

The same forces that are halting the evolution of communities and species are at work to reduce the diversity of habitats and species. However, the efforts to revert the situation are showing some early signs of success and hopefully can be sustained over the long run. Planned ecological restoration programs will add another element that should favor the conservation of
habitats and species. (36COM.Rio Platano.SPreport; Mission Report, 2011)

Summary of the Values

▶ Assessment of the current state and trend of World Heritage values

Critical
Trend: Improving

Most of the site’s values were being degraded until early 2011 by uncontrolled and inappropriate uses such as slash and burn agriculture, deforestation, ranching, the development of illegal settlements, the indiscriminate dumping of solid wastes from local communities and the construction of dams. However, since early 2011, the Presidential Decree that designated the defense of the site a national priority, and mandated a concerted and coordinated approach to its protection and management, has put into motion numerous activities that have shown early successes. However, in the last years, the presence and regulative capacity of the governmental institutions is lower than ever and results in continuous deforestation, illegal settlements accompanied by serious conflicts between indigenous population and migrants.

Additional information

Key conservation issues

▶ General state of insecurity, lawlessness and impunity
National

The management of protected areas depends on the rule of law. This is an overarching issue, and until this is re-established in the region, management efforts will fail. Concerted and coordinated efforts since early 2011 show some early successes in reverting the situation, but it remains to be seen if this can be sustained over time. (36COM.Rio Platano.SPreport; Mission Report, 2011)

▶ Illegal or inappropriate logging
Local
Uncontrolled extraction of precious woods by well-connected companies, especially in broadleaf forests. Concerted and coordinated efforts since early 2011 show some early successes in reverting the situation, but it remains to be seen if this can be sustained over time (36COM.Rio Platano.SPreport; Mission Report, 2011; Report on Management Effectiveness, 2007)

► Illegal settlements, deforestation, and incompatible land uses
Local

The general advance of the agricultural frontier, slash and burn activities of colonists, and ranching; inappropriate land use including the alteration of water courses, invasion of core areas, and lack of use permits Concerted and coordinated efforts since early 2011 show some early successes in reverting the situation, but it remains to be seen if this can be sustained over time. (36COM.Rio Platano.SPreport; Mission Report, 2011)

► Illegal hunting, fishing and, trade in wildlife
Local

There is widespread and unchecked illegal hunting and fishing and trade in wildlife by both commercial and subsistence actors. Concerted and coordinated efforts since early 2011 show some early successes in reverting the situation, but it remains to be seen if this can be sustained over time.

► Dam construction
National

Construction of the Patuca III dam on the Patuca River began in early 2011. However, given the vagueness of the current boundaries of the property and the unavailability of the EIA, the potential effects on the property cannot be estimated

► Sedimentation of waterways
Local

This is a result of deforestation which is a product of slash and burn agriculture, illegal settlements, ranching, and dam construction, but the level of severity and extent is undocumented. Concerted and coordinated efforts since early 2011 show some early successes in reverting the contributing factors, but it
remains to be seen if this can be sustained over time. (36COM.Rio Platano.SPreport; Mission Report, 2011).

Benefits

Understanding Benefits

▶ **Outdoor recreation and tourism**

Once security has been restored in the region, the multiple attractions of the mosaic of coastal and mountain environments, significant Mayan ruins, and the traditional lifestyles of indigenous peoples will stimulate the growth of tourism.

▶ **Importance for research, Contribution to education**

Improvement of security within the region will make it possible to tap the research and education potential of the Property.

▶ **Water provision (importance for water quantity and quality)**

Sustainable development within the region depends on the maintenance of the environmental services and ecological processes that intact forest environments provide.

Projects

**Compilation of active conservation projects**

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<tr>
<th>№</th>
<th>Organization/individuals</th>
<th>Project duration</th>
<th>Brief description of Active Projects</th>
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<tbody>
<tr>
<td>1</td>
<td>GEF</td>
<td></td>
<td>Transboundary heart of the Mesoamerican Biological Corridor Project supporting the development of a revised management plan for the RPBR (last plan developed in 2000). &quot;Conservation of Biodiversity in the Indigenous Productive Landscapes of the Mosquitia&quot; implemented by UNDP</td>
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<td>№</td>
<td>Organization/individuals</td>
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<td>2</td>
<td>German Technical and financial cooperation.</td>
<td>Continuation of long-standing projects to assist with land tenure and access rights.</td>
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**Compilation of potential site needs**

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<th>№</th>
<th>Site need title</th>
<th>Brief description of potential site needs</th>
<th>Support needed for following years</th>
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<tbody>
<tr>
<td>1</td>
<td>The Inter-Agency Coordination Committee for the RPBR with the support of one or more environmental NGOs</td>
<td>Develop and implement an emergency fund for the conservation of protected areas in Honduras with priority attention to the RPBR.</td>
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# REFERENCES

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<td>1</td>
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<td>Evaluation of Management Effectiveness, 2011</td>
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<td>UNEP-WCMC Factsheet, 2011.</td>
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