IUCN Conservation Outlook Assessment 2017 **(archived)**
Finalised on 09 November 2017

Please note: this is an archived Conservation Outlook Assessment for Central Suriname Nature Reserve. To access the most up-to-date Conservation Outlook Assessment for this site, please visit https://www.worldheritageoutlook.iucn.org.

Central Suriname Nature Reserve

SITE INFORMATION

Country:
Suriname
Inscribed in: 2000
Criteria:
(ix) (x)

Site description:
The Central Suriname Nature Reserve comprises 1.6 million ha of primary tropical forest of west-central Suriname. It protects the upper watershed of the Coppename River and the headwaters of the Lucie, Oost, Zuid, Saramaccz, and Gran Rio rivers and covers a range of topography and ecosystems of notable conservation value due to its pristine state. Its montane and lowland forests contain a high diversity of plant life with more than 5,000 vascular plant species collected to date. The Reserve's animals are typical of the region and include the jaguar, giant armadillo, giant river otter, tapir, sloths, eight species of primates and 400 bird species such as harpy eagle, Guiana cock-of-the-rock, and scarlet macaw. © UNESCO

SUMMARY

2017 Conservation Outlook

Good with some concerns

Given the size and inaccessibility of the Reserve; the lack of human communities within its boundaries; the containment of the Reserve inside its own watershed, and the lack of significant threats, the Reserve is in a good state of conservation and the trend is stable for now, even though there is little on-the-ground management capacity. There is an urgent need to develop on-the-ground management capacity in order to assure that the current excellent conservation status is maintained. It is also important to put in place a monitoring system to manage the threats outside of the reserve and to avoid the negative effects of those threats within the CSNR.

Current state and trend of VALUES

Good
Trend: Stable

Given the size and inaccessibility of the Reserve; the lack of human communities within its boundaries; the containment of the Reserve inside its own watershed, and the lack of significant threats, the Reserve is in an excellent state of conservation and the trend is stable.

Overall THREATS

Low Threat

Currently there are no significant threats identified that are happening inside the CSNR, but the area bordering the reserve is impacted by gold mining and commercial logging. Increased accessibility by a road built for logging purposes in the Matawai area, east of the CSNR, is bringing the threats and the negative effects closer.

Overall PROTECTION and MANAGEMENT

Some Concern

Despite considerable effort and investment in the development of the management plan, there is very little on-the-ground capacity for management of the Reserve. A draft of a business management model for the CSNR was developed but the plan has not yet been implemented. The Suriname Conservation Fund (SCF) was established in 1999 with the support of Conservation International. Support by the GEF has helped build the Fund’s capital to more than USD18 million to support and aid the long-term development and conservation goals of Suriname, especially management of the Reserve. However, though funding is available, projects to support management of the Reserve have never been approved or implemented.

FULL ASSESSMENT

Description of values

Values

World Heritage values

► Ecological processes and variety of ecosystems

Criterion:(ix)

The Central Suriname Nature Reserve conserves a large portion of the easternmost portion of the Guiana Shield, an ancient, mineral-dense layer of the earth’s crust, formerly connected to the continent of Africa. As a geologically stable speciation centre, this region has produced a well-defined assemblage of biota including many endemics. The area of the reserve falls within one of 26 Amazonia refugia as defined in Prance and Lovejoy (1985). The site encompasses significant vertical relief, topography and soil conditions which have resulted in a variety of ecosystems. Such ecosystem variation across environmental gradients is necessary to allow organisms within these ecosystems to move in response to disturbance, adapt to change, and maintain gene flow between populations. The reserve’s size, undisturbed state (a rare condition in Amazonian forest parks) and protection of the entire Coppename watershed will allow long-term functioning of the ecosystem. (IUCN Evaluation, 2000).

► High diversity of plant life, including endemic and threatened species

Criterion:(x)

Although much basic inventory work remains to be done in the unexplored portions of the site, it is clear that the Central Suriname Nature Reserve is a major reservoir for biota of the region. The reserve is globally significant for

its high diversity of plant life (6,000 vascular plant species, 8 primate species), a number of which are endemic to the Guiana Shield and are threatened. (IUCN Evaluation, 2000)

▶ **Presence of unique habitat of a flagship species**
Criterion:(x)

The Central Suriname Nature Reserve contains the largest known lek of the Rupicola rupicola (Guianan cock-of-the-rock) with 50 – 60 active males and is one of the most accessible and well-known sites to watch the Guianan cock-of-the-rock (Ebels et al, 2014).

▶ **High diversity of terrestrial mammals, including threatened mammal species**
Criterion:(x)

A study comparing camera trapping data from seven tropical study sites, showed that the Central Suriname Nature Reserve had the highest terrestrial mammal species richness (Ahumada et al, 2011). This high number of terrestrial mammal species include threatened species, such as Lowland tapir (Tapirus terrestris; VU), Giant anteater (Myrmecophaga tridactyla; VU), Giant armadillo (Priodontes maximus; VU), White-lipped peccary (Tayassu pecari; VU) and the Oncilla (Leopardus tigrinus; VU) (IUCN Redlist, 2017). Of the 1,890 known species of vertebrates in Suriname, at least 65 are endemic to the country and likely occur within the property. Many of the species are endemic to the property or even small areas within the property, such as the ecologically and geologically remarkable individual granite inselbergs (World Heritage Committee, 2014).

Assessment information

Threats

Current Threats

Low Threat

Due to the size, inaccessibility, containment in its own watershed; and lack of human habitation, the reserve has currently low threats.

► Logging/ Wood Harvesting

High Threat
Outside site

Logging concessions and community forestry concessions bordering the Central Suriname Nature Reserve are causing fragmentation of the area bordering the reserve. Increased accessibility might stimulate poaching, noise disturbance on wildlife, illegal logging of high value species within the CSNR (IUCN Consultation, 2017).

► Air Pollution

Low Threat
Inside site, extent of threat not known
Outside site

Atmospheric transport of mercury from the small-scale goldmining activities north-east of the CSNR causes elevated levels of mercury concentrations in fish tissue and bottom sediments (Ouboter, 2015).

Potential Threats

High Threat

Potential threats from climate change are low at the moment, but the activities outside the Reserve (timber concessions, mining) are increasing rapidly and getting closer to the CSNR.

► Temperature extremes

Low Threat
Inside site

Temperatures are expected to rise slowly (1.5 ºC by 2090) and rainfall to decrease even more slowly (- 0.7 in. by 2090). Since the Reserve has

significant altitudinal differences, species are expected to be able to adapt. (McSweeney, n.d.)

► Mining/ Quarrying

Low Threat
Outside site

Several large-scale mining concessions exist or are being awarded close to the boundaries of the designated site, gold to the north and bauxite to the west. Several exploratory timber concessions are located to the north and east (WDPA, 2011). Hunting and fishing is carried out to the south (Meddens, 2011).

Protection and management

Assessing Protection and Management

► Relationships with local people

Some Concern

Designation of the Reserve is viewed in general, by both national institutions and local communities in the interior, as very positive. However, a consultation and advisory body, which was supposed to be established and include representatives of the most relevant institutions, including the neighbouring tribal communities, never was put into effect; nor is there evidence of projects being undertaken, as was originally planned, to support development of conservation compatible livelihoods as part of a process to engage local people around the Reserve. A draft of a business management model for the CSNR was developed but the plan has not yet been implemented. (UNDP, 2012; Vision, 2012; Meddens, 2011; IUCN Consultation, 2014)

► Legal framework

Mostly Effective

The Reserve was established by State Resolution, but there is little actual law enforcement capacity. Initiatives to revise the current nature protection laws are taking place. The updated laws should make alternative management

systems such as public-private partnerships and co-management with local communities possible within nature reserves (IUCN Consultation, 2017).

► Enforcement

Data Deficient

Data deficient

► Integration into regional and national planning systems

Highly Effective

The Reserve was originally established as an alternative to giving the forests in concession to Asian timber companies, and as such was part of a conscious decision by the Suriname government at the highest levels to change its development model (Meddens, 2011). CSNR is among the protected areas positioned as key in the current planning for development of Suriname (RoS, 2015).

► Management system

Some Concern

The Head of the Forest Management Service (LBB) is responsible for Reserve management. The Nature Conservation Division (NB) of LBB directs the actual management, supported by the Suriname Foundation for Nature Preservation (STINASU). NB supervises Reserve management, based on the Management Plan developed in 2004 (Vision, 2012). A Project Implementation Unit (PIU) was established in 2009 to support the NCD with implementation of the management plan. By the end of 2010 only 2 employees were still working at the PIU; the others left because of the lack of progress. Project proposals, plans and budgets are still under review by the Forest Service (Middens, 2012). The PIU is currently not functioning (IUCN Consultation, 2017).

► Management effectiveness

Some Concern

Despite considerable effort and investment in the development of the management plan, there is no on-site management capacity. In the Headquarters Area, tourist facilities have been upgraded, but the beginnings

of a visitors center stands unfinished. Tourist numbers have not increased as expected and employee homes are in deplorable condition. Although more research buildings were built and a local road improved, the number of active wildlife guards, research activities, and tourist numbers have actually decreased since establishment of the Reserve in 1998 (UNDP, 2012; Meddens, 2011).
In June 2017 the research field station at the Voltzberg was rebuilt with the necessary facilities to function as a field camp for tourists of researchers.

► Implementation of Committee decisions and recommendations

Data Deficient

No Committee decisions have been taken since inscription of the Property.

► Boundaries

Serious Concern

There are major mistakes in the coordinates describing the geographical location of the Reserve, and these have not been resolved since creation of the Reserve in 1998. (Middens, 2012). The boundaries have not been demarcated on the ground. (WDPA, 2011).

► Sustainable finance

Some Concern

The Suriname Conservation Fund (SCF) was established in 1999 with the support of Conservation International. Support by the GEF has helped build the Fund’s capital to more than USD18 million to support and aid the long-term development and conservation goals of Suriname, especially management of the Reserve which is the largest conservation unit in the country (Vision, 2012; Meddens, 2011). However, though funding is available, projects to support management of the Reserve have never been approved or implemented. (UNDP, 2012).

► Staff training and development

Some Concern

UNDP approved a project to strengthen the SCF to enable it to better support conservation management, research, awareness, advocacy, and ecotourism

activities. At the same time the government agencies responsible for protected area management were to be strengthened through the provision of financial and technical capacity building support under this project. However, evaluation of the project revealed a lack of effective implementation because of bureaucratic issues (UNDP Suriname, 2012)

▶ Sustainable use

Mostly Effective

Ecotourism and research have been defined as two uses that can maximize benefits to the larger Surinamese community as well as neighboring communities. Though there has been some improvement in visitor facilities, visitation remains at low levels. Research facilities have improved and increased research is taking place. In both cases, current levels of activities are fully sustainable. (Vision, 2012; Meddens, 2012)

▶ Education and interpretation programs

Data Deficient

No information available

▶ Tourism and visitation management

Some Concern

A tourism master plan was developed for CSNR, however, little progress has been achieved in its implementation. Management of tourism activities is only allowed by the Nature Conservation Division (LBB) and STINASU (semi-government foundation) has the right to organize tourism activities in nature reserves (IUCN Consultation, 2017).

▶ Monitoring

Some Concern

In 2004, the international monitoring and assessment program initiated by CI Washington (TEAM research project), became active in Suriname and in 2006 a research station was built in the Raleighvallen area. The TEAM program has been collecting data on climate, vegetation growth and terrestrial vertebrates since 2008 and is going on (www.teamnetwork.org) However, there is no Reserve monitoring program. (UNDP, 2012; Meddenz, 2011) A

monitoring program for the reserve was developed along with the CSNR management plan. However, the monitoring program has not been implemented and financing for research was provided to implement the global TEAM program - The Ecosystem Assessment and Monitoring Program. (IUCN Consultation, 2014).

► Research

Some Concern

Research has been undertaken in the Reserve for many years, mainly by foreign academic institutions. Studies have focused on geology, geography, tropical rainforest ecology and forest fruits, and zoological studies including work on monkeys, nightjars larger animals such as caimans and primates. (WDPA, 2011). The Raleighvallen Area, where the Reserve Headquarters are located, has been utilized for scientific study for many years. Conservation International has recently constructed a research station at the base of Voltzberg Dome and the University of Florida operates a primate research station near Raleighvallen (ISESCO, 2012; WDPA, 2011). There is no Reserve research program, however.

Overall assessment of protection and management

Some Concern

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► Assessment of the effectiveness of protection and management in

addressing threats outside the site

Some Concern

There are no management activities to address threats from outside the Reserve.

State and trend of values

Assessing the current state and trend of values

World Heritage values

► Ecological processes and variety of ecosystems

Good

Trend:Stable

Given the size and inaccessibility of the Reserve; the lack of human communities within its boundaries; the containment of the Reserve inside its own watershed, and the lack of significant threats, the Reserve is in an excellent state of conservation and the trend is stable.(Meddens, 2011; WCMC, 2012)

► High diversity of plant life, including endemic and threatened species

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Summary of the Values

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

Good

Trend: Stable

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Additional information

Benefits

Understanding Benefits

► **Importance for research**

The size and intactness of the site makes it an extremely important resource

for the generation of knowledge that requires research in pristine habitats.

▶ **Outdoor recreation and tourism**

Tourism to the site is limited, but has considerable potential for expansions.

▶ **Carbon sequestration**

With a total of 1.6 million hectares of forest, and an estimate of 212.21 MgC/ha (SBB et al, 2017), CSNR stores a large amount of carbon (approx. 339 million MgC).

Summary of benefits

Conservation and knowledge generation are superlative values for the Reserve at the international level, while the potential for development of tourism is a benefit of the Reserve valued at the national level.

Projects

Compilation of active conservation projects

№	Organization/ individuals	Project duration	Brief description of Active Projects
1	Conservation International		CIS is known for working with government of Suriname and local communities to create the 1.6 million hectare CSNR - including protected areas design and management planning through participatory stakeholder engagement - and the development and endowment of the Suriname Conservation Fund, a US$ 15 million fund established to -
2	Suriname Conservation Foundation		The purpose of the SCF is to support management, conservation and sustainable use of biodiversity in Suriname. The largest grant projects have been approved to support management of the Reserve and to establish buffer zones to the west of the Reserve. An evaluation noted the lack of success of these projects. (UNDP, 2012)

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