



WWF GEF
Project Document
Cover Page

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ACRONYMS AND ABBREVIATIONS

ASL	Amazon Sustainable Landscapes
CBD	Convention on Biological Diversity
CH&PA	Central Housing & Planning Authority
CI	Conservation International
CMRV	Community-based Monitoring, Reporting and Verification
EA	Executing Agency
EPA	Environmental Protection Agency
GEF	Global Environment Facility
GEBS	GEF Global Environmental Benefits
GFC	Guyana Forestry Commission
GGMC	Guyana Geology and Mines Commission
GHG	Greenhouse Gas
GLSC	Guyana Lands and Surveys Commission
GoG	Government of Guyana
GWCMC	Guyana Wildlife Conservation and Management Commission
VIFAD	International Fund for Agriculture Development
IPLC	Indigenous Peoples and Local Communities
IWMS	Integrated Wetland Management Strategy
KMCRG	Kanuku Mountains Community Representative Group
KMPA	Kanuku Mountains Protected Area
KNP	Kaieteur National Park
LCDS	Low Carbon Development Strategy
LULUCF	Land Use, Land Use Change and Forestry
METT	Management Effectiveness Tracking Tool
NDC	Nationally Determined Contributions
NPAS	National Protected Area System
NRDDB	North Rupununi District Development Board
NRW	North Rupununi Wetlands
NTC	National Toshias Council
PA	Protected Area
PAC	Protected Areas Commission
PAT	Protected Area Trust
PMU	Project Management Unit
PSC	Project Steering Committee
RIL	Reduced Impact Logging
TA	Technical Assistance
SAP	Strategic Action Program
SFM IP	Sustainable Forest Management Impact Program
SIDS	Small Island Developing States
SLWM	Solid and Liquid Waste Management
SWM	Sustainable Water Management
VIP	Village Improvement Plans
WWF	Worldwide Fund for Nature

SECTION 1: PROJECT BACKGROUND AND SITUATION ANALYSIS

1.1 Project Scope and Environmental Significance

Introduction to the Amazon Sustainable Landscapes Program

The Amazon Biome encompasses 6.70 million km² and is shared by eight countries (Brazil, Bolivia, Peru, Ecuador, Colombia, Venezuela, Guyana and Suriname), as well as the overseas territory of French Guiana (WWF, 2009). More than 40 percent of the rainforest remaining on Earth is found in the Amazon and it is home to at least 10 percent of the world's known species, including endemic and endangered flora and fauna. In addition, the Amazon River is the largest river basin in the world and accounts for 15% of the world's total river discharge into the oceans, flowing for more than 6,600 km¹ and with its hundreds of tributaries and streams supporting a plethora of species, including over 3,000 fish species, 427 species of mammals, 1,300 species of birds, 100,000 invertebrates and 40,000 species of plants contained within the flooded ecosystem.² More than 16,000 tree species³ within the Amazon Forest regulate temperature, precipitation and humidity, and are linked with regional climate patterns through hydrological cycles. Collectively, the Amazon contains 90-140 billion metric tons of carbon, the release of even a portion of which could accelerate climate change.⁴

To support this globally significant landscape, the Global Environment Facility (GEF) approved the Amazon Sustainable Landscapes Program (ASL) II in 2019, led by the World Bank as the GEF Agency. The program's objective is to improve integrated landscape management and conservation of ecosystems in targeted areas in the Amazon region, and includes Child Projects in Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru and Suriname. The proposed Child Project, **Securing a Living Amazon through Landscape Connectivity in Southern Guyana**, aims to strengthen landscape connectivity through improved management of the Kanuku Mountains Protected Area and North Rupununi Wetlands in southern Guyana. Interventions for sustainable land and water management will secure the ecological integrity of the KMPA (thus reducing habitat fragmentation) and the maintenance of hydrological connectivity in the NRW, which is important for fish and other species, and continued flow of ecosystem services. Interventions will also contribute to better planning decisions, thus ensuring that productive activities do not result in habitats becoming fragmented or hydrological connectivity being lost. Overall, this ensures that a large tract of contiguous land that supports forest and hydrological connectivity for key species (e.g. jaguars, fish) and local people is secured.

This will be achieved through the following four components:

1. *Integrated Protected Landscapes*: The project will focus on the Kanuku Mountains Protected Area (KMPA). It will support strengthening of the KMPA's management, in coordination with the Indigenous communities who supports its management, live around, and utilize resources of the protected area. More specifically, the project will support new infrastructure for PAC's site level operations and provide training and capacity building for PAC site level staff and local communities, and strengthen natural resource use planning in the KMPA through a participatory process and following the FPIC process.
2. *Integrated Productive Landscapes*: The project will generate baseline information for better management, decision-making, and planning. Based on this, the project will examine options for integrated management of the North Rupununi Wetland (NRW) landscape. This will inform the

¹ <https://www.thegef.org/what-we-do/topics/amazon>

² https://www.wwf.panda.org/discover/knowledge_hub/where_we_work/amazon/about_the_amazon/wildlife_amazon/

³ <https://www.theguardian.com/environment/2013/oct/18/amazon-rainforest-tree-species-estimate>

⁴ <https://www.thegef.org/what-we-do/topics/amazon>

development of an integrated wetland management planning strategy, which will include a governance framework for decision making, as well as overall goals and objectives for the landscape. Finally, the project will support implementation of sustainable land and water management strategies, including community-based resource monitoring, sustainable use of forest resources, and sustainable livelihood.

3. *Policies/Incentives for Protected and Productive Landscapes*: The project will support the revision of the PA Act through a legal review, preparation of regulatory text in consultation with all key stakeholders, and submission of Revised Act to Cabinet for Review and tabling in Parliament. This process will include recommendations for meeting Target 3 (30x30) of the Global Biodiversity Framework.
4. *Capacity Building and Regional Cooperation*: Includes monitoring and evaluation, communications, as well as cooperation with the wider Amazon Sustainable Landscapes Impact Program.

Project Scope and Environmental Significance: Guyana and the Project Areas

Guyana, the only English-speaking country in South America, sits entirely within the Amazon biome and contains a wide range of tropical ecosystems, including forests, savannas and wetlands, and considerable freshwater resources. Forests cover about 94% of the country and its deforestation rates are remarkably low (0.06% net annual change between 2010-2020), making it one of the most forested nations in the world and part of one of the world's largest remaining intact tropical forests.⁵

Guyana is also part of a Precambrian geological formation known as the Guiana Shield, home to unique ecosystems and biodiversity with approximately 15,000 species of vascular plants, of which it is estimated that up to 40% of these are endemic to the region.⁶ The Guiana Shield is also notable for its vertebrate diversity, being home to 282 species of mammals, 1,004 birds, 269 amphibians, 295 reptiles, and 1168 species of freshwater fishes. Of these species, it is estimated that over 400 species are endemic.^{7 8} The Guiana Shield hosts relatively healthy populations of megafauna that are threatened in other parts of the Amazonian Biome, including jaguars (*Panthera onca*), Brazilian tapirs (*Tapirus terrestris*), giant river otters (*Pteronura brasiliensis*), giant anteaters (*Myrmecophaga tridactyla*), arapaima (*Arapaima sp.*) and harpy eagles (*Harpia harpyja*). Many of these flora and fauna species are important sources of income, sustenance, construction materials, medicine and other uses for indigenous and local communities.

The Child Project area lies in southern Guyana, within Administrative Region 9 - Upper Takutu, Upper-Essequibo. It is a globally significant biodiversity hotspot with a unique seasonal hydrological connection to the Amazon watershed, and a significant concentration of Indigenous peoples and titled lands with current and ancestral ties to these sites. The Project comprises two sites: the Kanuku Mountains Protected Area (KMPA) and the adjacent North Rupununi Wetlands (NRW). To the north of the NRW is the Iwokrama Forest Reserve and to the south of the KMPA site are Indigenous lands, state lands and the Kanashen Amerindian Protected Area (see Figure 1). The two sites are described below.

Kanuku Mountains Protected Area (KMPA)

⁵ <https://www.fao.org/3/ca9825en/ca9825en.pdf>

⁶ Hollowell, T., and R. P. Reynolds, eds. 2005. Checklist of the Terrestrial Vertebrates of the Guiana Shield. Bulletin of the Biological Society of Washington, no. 13. <https://naturalhistory.si.edu/sites/default/files/media/file/bswa13all.pdf>

⁷ Ibid.

⁸ Vari, R. P., C. J. Ferraris, Jr., A. Radosavljevic, & V. A. Funk, eds., 2009. Checklist of the freshwater fishes of the Guiana Shield.—Bulletin of the Biological Society of Washington, no. 17.

https://www.researchgate.net/publication/255982426_Introduction_in_Checklist_of_the_Freshwater_Fishes_of_the_Guyana_Shield.

The Kanuku Mountains Protected Area is the second-largest Protected Area of the National Protected Areas System, which also consists of the Kaieteur National Park, Shell Beach Protected Area, Iwokrama International Centre for Rainforest Conservation, Kanashen Amerindian Protected Area, (the only Indigenous owned Protected Area) and the urban parks in Regions 3 and 4. The Kanuku Mountains are located in the Rupununi and are adjacent to the NRW. The enactment of the Protected Areas Act in 2011 provided the legal mechanism for the recognition and declaration of the Kanuku Mountains Protected Area (KMPA) as one of Guyana's national protected areas. It was established to conserve its high biodiversity and its environmental services so that it can contribute to the social and economic security of present and future generations of local communities, people in the wider region and further to all Guyanese. The KMPA is a densely forested protected area that combines savannah, wetlands, and mixed forest habitat, making it a biodiversity hotspot. It comprises approximately 4% of Guyana's total forested area. The Rupununi, where the KMPA is located, is considered to be one of Guyana's most ecologically diverse areas. The region is home to approximately 70% (155 species) of mammals, 53% (419 species) of birds, and 26% (1,577 species) of plant species recorded in Guyana. It is documented as having the second-highest bat diversity (89 species) of any protected area in the world and holds 70% of the 25 bird species considered to be endemic to the Guiana Shield (PAC, 2015). 99% of the KMPA's 611,000 hectares are covered in forest, making it important for carbon sequestration (10.4% of Guyana's irrecoverable carbon by mass is in PAs)⁹ and climate regulation; 1% is savannah. The Kanuku Mountains are separated into the Western and Eastern Kanukus by the north-south course of the Rupununi River. Indigenous Makushi and Wapishana peoples live in the area around the protected area and practice traditional fishing, gathering of timber and non-timber forest products, and subsistence hunting within the protected area.

North Rupununi Wetlands (NRW)

The NRW is located to the north of the Kanuku Mountains, within Administrative Region 9 - Upper Takutu, Upper-Essequibo, and encompasses approximately 9,018 square kilometers. The NRW is under a variety of land-uses (including commercial agriculture for rice, tourism, and logging) and land ownership, with a mosaic of titled community and Indigenous lands (see Figure 1 for a map of Indigenous titled lands), leased state-lands, state lands and private lands.

The NRW hosts a remarkable level of vertebrate diversity, including 70% (1,414) of all vertebrates recorded in Guyana, outrivaling estimates in other wetlands such as Botswana's Okavango and Brazil's Pantanal by 48% and 35% respectively¹⁰ and consists of a mixture of seasonal/intermittent flooded savannas and freshwater bodies, including rivers, streams, creeks, marshes and lakes. These savannas of the North Rupununi (and those of the wider Rupununi) contain the rarest ecosystem type in Amazonia - the Guianan Savanna, of which the Rupununi Savanna is the world's largest surviving example. The wetlands are recharged annually during the May to September wet season, as both rainfall and run-off from the surrounding highlands and main river channels, inundate the savannas and forests. Flooding during the rainy season creates a complex hydrological connection between the Amazon and Essequibo River systems and allows for the exchange of fauna, and it maintains water and food security for 21 Indigenous Makushi communities,¹¹ which have approximately 7,000 inhabitants. This flooding and hydrological connection replenishes fish stocks, recharges water sources, allows for the exchange of fauna, particularly freshwater fishes thereby increasing diversity, and promotes gene flow. The continuation of these processes which maintain the ecological integrity of the wetlands are important for

⁹ Noon, Monica L., et al. "Mapping the Irrecoverable Carbon in Earth's Ecosystems." *Nature Sustainability*, 2021, <https://doi.org/10.1038/s41893-021-00803-6>.

¹⁰ Watkins, G., P. Oxford, and R. Bish. 2010. *Rupununi. Rediscovering a Lost World*. Earth in Focus Editions, Arlington, VA, USA.

¹¹ Apoteri, Rewa, Crashwater, Annai, Surama, Wowetta, Rupertee, Kwatamang, Toka, Yakarinta, Massara, Kwaimatta, Ypupkari, Kaikumbe, Kwatata Katoka, Simone, Nappi, Parishara, Haiowa, and Moco-Moco

the Makushi people as they continue to rely on its resources for food, medicine, housing, income, culture, and their way of life. A 2014 assessment of wildlife usage of three adjacent Indigenous communities in the North Rupununi recorded that 73 animals (including freshwater fishes) and 164 plant species, as well as several unidentified species, were regularly used by the communities for various purposes.¹² Initial mapping of key hydrological mechanisms and flow pathways was undertaken by WWF, Cobra Collective and community members, via drone surveys and ground-truthing, but detailed understanding of species movements, water quality dynamics and how vital hydrological connections are being impacted by climate change and changes in land use are poorly understood (Cobra Collective, 2020).

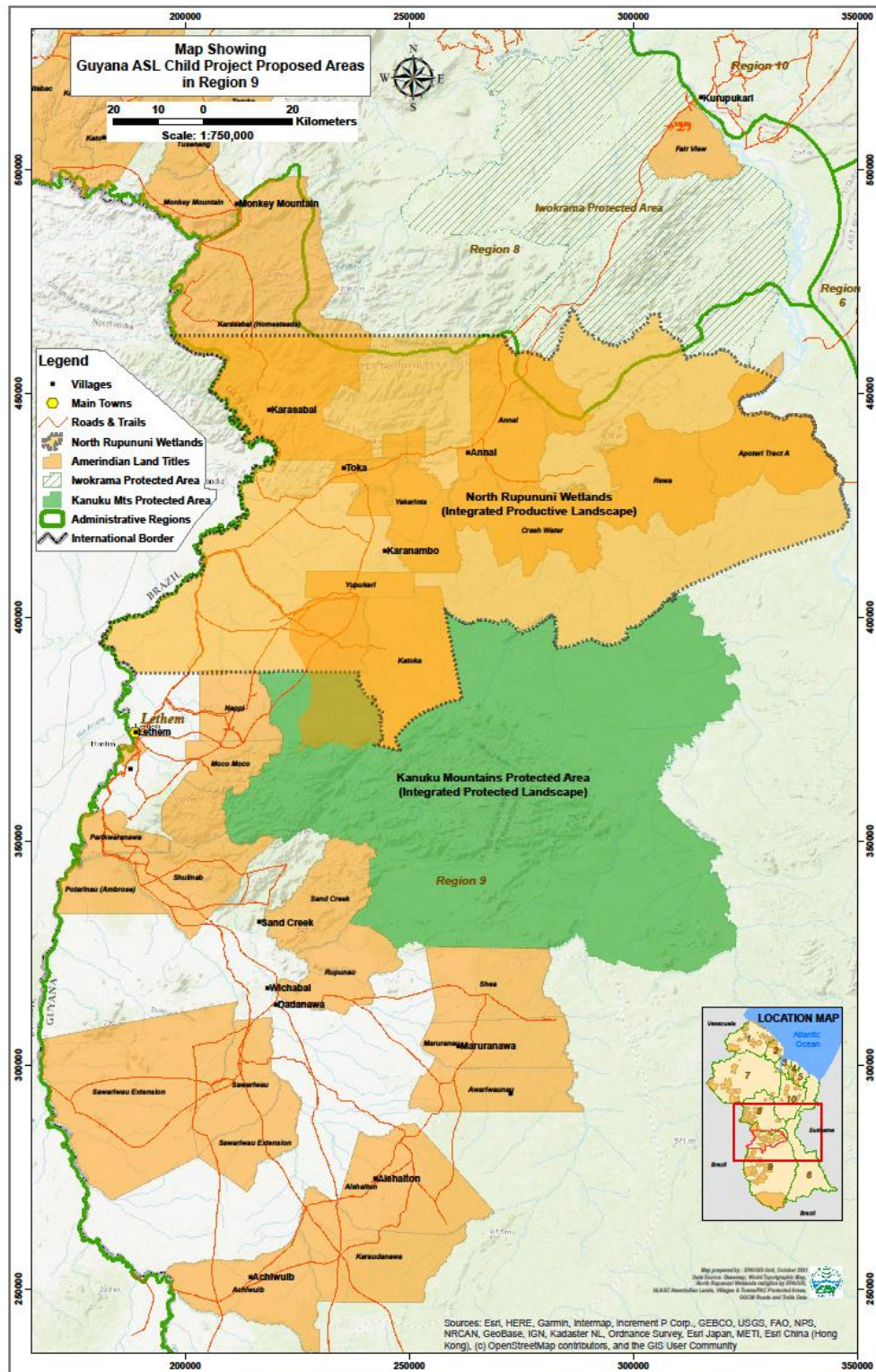
Finally, wetlands, including the NRW, are important for their role in carbon sequestration, and are effective carbon sinks.^{13,14}

¹² <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0102952>

¹³ Noon, Monica L., et al. "Mapping the Irrecoverable Carbon in Earth's Ecosystems." *Nature Sustainability*, 2021, <https://doi.org/10.1038/s41893-021-00803-6>.

¹⁴ <https://bwsr.state.mn.us/carbon-sequestration-wetlands#:~:text=All%20wetlands%20sequester%20carbon%20from,instances%2C%20over%20thousands%20of%20years.>

Figure 1: Map of Child Project Area: North Rupununi Wetlands and Kanuku Mountains Protected Area



1.2 Environmental Problem(s), Threats and Root Causes

The principal environmental problem to be addressed by this project is the cumulative negative ecological and hydrological impacts of current and potential future land-use changes and natural resource extraction activities in the NRW. These impacts include resource depletion and habitat fragmentation from infrastructure development, logging and large-scale agriculture. These impacts could compromise the project area's ability to deliver ecosystem services, notably biodiversity maintenance, hydrological services, including water supply and water quality maintenance, and carbon sequestration, which sustain livelihoods and provide economic and subsistence opportunities for the area's 21 local and Indigenous communities, and ensure resilience to potential impacts from climate change. Failure to manage these threats would lead to loss of connectivity, causing wider negative impacts at greater spatial scales, such as increased flooding, disruption of hydrological systems and decreased gene flow for key groups such as fishes. The KMPA, which is being managed by the PAC, also faces threats to its ecological integrity including degradation of forest and waterways from illegal or unsustainable resource extraction. Threats to the child project area are described in detail below.

Threats to the KMPA

The 2019 and 2020 KMPA Management Effectiveness Tracking Tool (METT) assessments reported the following threats under Table 1:

Table 1: METT 2019 and 2020 threat analysis

		Year	
		2019	2020
1. Residential and commercial development within the protected area	1.1 Housing and settlement	Low	Low
	1.3 Tourism and recreational infrastructure	Low	Low
2. Agriculture and aquaculture within a protected area	2.1 Annual and perennial non-timber crop cultivation	Low	Low
	2.3 Livestock farming and grazing	Low	Low
3. Energy production and mining within a protected area	3.2 Mining and quarrying	Low	Low
4. Transportation and service corridors within a protected area	4.1 Roads and railroads (include road killed animals)	Na	Low
	4.4 Flight paths	Low	Low
5. Biological resource use and harm within the protected area	5.1 Hunting, killing and collecting terrestrial animals	Low	Low
	5.2 Gathering terrestrial plants or plant products	Low	Low
	5.3 Logging and wood harvesting	Low	Low
	5.4 Fishing, killing and harvesting aquatic resources	Med	Med
6. Human intrusions and disturbance within a protected area	6.1 Recreational activities and tourism	Low	Low
	6.3 Research, education and other work related activities in protected area	Low	Na
7. Natural system modifications	7.1 Fire and fire suppression (including arson)	Low	Low
	7.3c Other 'edge effects' on park values	Low	Low
8. Invasive and other problematic species and genes	8.1 Invasive non-native/alien plants (weeds)	Low	Low
9. Pollution entering or generating within protected area	9.2 Industrial, mining and military effluents and discharges (e.g. poor water quality discharge from dams e.g. unnatural temperature, de-oxidants, other pollution)	Low	Low
	9.4 Garbage and solid waste	Low	Low

10. Geological events	10. Erosion and salutation/deposition (e.g. shoreline or riverbed changes) 4	Low	Low
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1. Farming in the protected area and the use of fire in clearing new farmlands. The use of lands in KMPA for subsistence farming activities by the indigenous communities is a traditional practice which under the PA Act is allowed and actively exercised by the local people. Shifting agriculture is practiced; and part of the preparatory process of creating the farms involves the use of fire to burn and clear forest and unwanted vegetation, and enrich the soil with nutrients for better growth of crops after planting. These actions under the application of the METT are categorized as a low priority threat, meaning an action that is present but having little to no impact on the protected areas. In the 2019 & 2020 METT reports, this current low impact threat to the PA was identified as an area to be closely monitored because of the potential impact that this activity can have. The number of active farms and farm clearings have steadily been increasing in the PA from 2018-2020 based on monitoring activities and reports. In 2018, four (4) active farms were observed during the annual overflight (aerial monitoring) of the PA, in 2019 the number of farms and farm clearings observed increased to six (6) and in 2020, approximately 18 farm clearings were observed within the PA from the activity (KMPA overflight report 2019 & 2020). It is also a point to note that along with the increase in the number of farms, the average sizes of farms are also increasing. The increase in farm numbers, size and the use of fire in the farming process can have a large negative impact on the values of the PA. The risk from fires that can potentially go out of control and cause larger impacts on the environment and biodiversity, as well as impacts from greatly increasing the number of farms, highlight the significance of this threat to the KMPA. During the 2020 overflight survey, the team observed active fires running at the northern boundary of the KMPA, south of Kaicumby Village, covering an area of approximately 367.32 ha (PAC, 2020). The point of origin of the fire was observed to be a land clearing suspected to be cleared for a farm. A new impact resulting from/of this threat, was identified when conducting the 2020 METT assessment, where it was mentioned by some of the participants in the exercise that the use of pesticides are now being used on crops at some farms. This claim will have to be officially investigated to verify, which will have an impact on the PA if proven true (PAC, 2020).
2. Logging and Wood Harvesting. For communities around the KMPA, as in the NRW, gathering is still the primary source of housing and other building materials, as very few villagers can afford to purchase sawn lumber for building, or zinc or other imported materials for roofing. Whether round wood or sawn boards are used, the forest is still the only source for timber and many other materials for construction. In the KMPA, these actions are allowed at subsistence levels. There are no current timber concessions in the KMPA, however, some communities adjacent to the mountains have been extracting timber from within their titled lands for commercial purposes (PAC, 2015). Edge effects due to logging activities occurring outside the PA has been reported as a potential threat in the 2019 METT assessment. A more serious issue for the protected area is preventing illegal logging; it was determined that careful monitoring is required to prevent illegal logging (PAC, 2019; PAC 2015).
3. Illegal Mining. The commercial exploitation of mineral resources in the KMPA is not permitted; however, there have been expressions of interest in the mineral and hydrocarbon potential of the area (PAC, 2015). The PAC has over the years received several reports of illegal gold mining¹⁵ activities being conducted in the KMPA. The site level team (KMPA rangers and site level coordinator) will act on these reports and investigate the alleged sites and take the necessary follow up actions. While the team has observed evidence of persons being in an area through finding abandoned camps, fuel, left

¹⁵ <https://guyanachronicle.com/2021/03/24/authorities-mull-legal-action-over-illegal-mining-and-logging/>

behind garbage, small clearings and dug pits, there was never a time the team found active mining activities occurring. The last incident to be reported and investigated in the PA for illegal activities was in 2020, where once again no active mining was found. That being said, there is enough to suggest that illegal mining within the PA is a point of interest and as such there is the need for constant monitoring of the PA to ensure that illegal mining doesn't become a significant threat to the PA. Mining activities occurring outside of the boundaries of the PA but utilizing water sources that either flow through the PA directly or feed into these water sources are a point of concern due to contamination of the water source and the aquatic resources utilized by the local people. Mineral mining operations outside of the existing boundaries in the headwaters of the Rewa Kwitaro Rivers, which pass through the PA, are already negatively impacting water quality and ecosystem regimes (PAC 2015). Water quality and mercury testing conducted in 2018 by the PAC have found elevated levels of mercury in fish found in the area. It is important to note that under the Protected Areas Act, traditional mining activities (porkknocking) is allowed by the local people.

4. Unsustainable Wildlife Harvesting Practices. Another threat identified in both the 2019 and 2020 METT analysis is unsustainable harvesting practices. This relates to the overuse of the shared resources within the KMPA and of particular concern is the use of aquatic resources. The PAC conducted a resource use mapping exercise with the 21 communities of the KMPA in 2016 where the communities were asked to identify their main hunting, gathering, and fishing resources used, and the places within the PA where these resources can be found. The community was then asked to identify the resources which they have found to be becoming scarce and the methods used to hunt, gather and/or collect the resources. The outcomes found that the majority of communities identified several aquatic species (mainly fish) as becoming scarce. The main factor behind this scarcity was found to be overfishing of rivers and ponds and the use of seines. Commercial extraction of fish by non-locals inclusive of Brazilians were also identified as causes for the threat (PAC 2016). The METT analysis 2020 identified the threat as increasing in its impact due to observations of persons from local communities being seen selling fish in the town of Lethem and reports from the local communities that persons are being seen leaving with large iceboxes of fish which suggests commercial utilization of the catch rather than subsistence use. This threat is one of the most difficult to monitor and handle because the fish will not only stay within the PA where certain unsustainable methods of harvesting cannot be utilized, but with their movement along the river they can be harvested outside the PA using this method. As a result, the threat of unsustainable wild harvesting practices is one of the main threats of the KMPA, which needs actions that will curb the current trends. A way forward to effectively deal with these issues is the development of resource use agreements with communities, which are identified as next steps from the resource use maps and reports.
5. Increased Tourism. Increased tourism into the PA which occurs without the knowledge and consent of the governing agency, PAC, was reported in the 2019 METT assessment: 'Nature tourism is growing Guyana and the KMPA offers one of the country's premier destinations for this type of tourism. While this brand of tourism causes little to no disturbance to natural environment, it is a threat and if it increases from present levels there is a possibility of a more serious impact such as disturbed habitats and ecosystems.'

Overall, based on the METT reports for 2019 and 2020, and other supporting ecological monitoring and research reports of the PAC, the KMPA has maintained its core/key ecosystem values. The PA, although maintaining its core ecological values, has activities occurring within its borders which go against the rules and regulations of the PA (illegal) and are unsustainable practices. Most of these threats currently are low

impact threats in that they are not having significant negative impacts on the PA but need to be closely monitored because of the potential they have to increase the level of effect they are having on the PA. Additionally there are signs of increasing impact and level of threat to the PA and as such highlights the need and importance for setting up the necessary systems for improved management and monitoring of the PA.

Threats to the NRW

1. Infrastructure development. Paving of the Lethem to Linden Road corridor is being planned. This would allow improved connection between Georgetown, Guyana's capital, and Brazil, increasing the movement of people, goods, and services. Already, a bridge linking both countries has been built across the Takutu River which borders Lethem and the Brazilian state of Roraima. The road which passes through the NRW site would undoubtedly result in increased access, including to the broader child project area, and consequently, potentially increase resource exploitation and land-use change (WWF, 2012). In other parts of the Amazon, road development has typically been associated with illicit secondary road networks, and influx of people that may result in increased pressure on natural resources (e.g. conversion for agriculture, or unsustainable extractive practices) – this could have potential impacts on the local communities that currently rely on these natural resources. Roads also have the potential to act as a hydrological barrier to key flow pathways which sustain the wetlands. Roads need to be properly planned and designed in order to minimize the impacts and maintain water flows (Berardi et. al., 2019). Although key hydrological pathways have been identified, determining discharge to inform suitable road culvert and bridge design is required to avoid any road construction causing irrevocable damage to the hydrological integrity of NRW (Cobra Collective, 2020). Good land management and zoning, as well as monitoring and enforcement, are important to address this potential problem.
2. Unsustainable wildlife harvesting practices. Fishing supports local livelihoods and is an economic activity in indigenous and local communities; fish is also an important part of local culture and diet in the NRW. In the past, overharvesting depleted populations of arapaima due to commercial demand (primarily from Brazil) (WWF, 2012). A management plan was later developed in an effort to reverse the decline and protect the species; however, funding challenges have impacted communities' ability to continually monitor the status of the species. The species of arapaima present in Guyana has been confirmed to be different from the species found in the rest of the Amazon, making *Arapaima arapaima* endemic to Guyana.¹⁶ According to a recent FAO report, fishers report a decline of other species of fish, which is likely the result of increased fishing intensity to satisfy commercial demands.¹⁷ Wildlife harvesting, especially for commercial use, needs to be monitored and managed. Many species have declined as a result of overharvesting; a correlation analysis¹⁸ in the area reveals a very strong positive relationship between the most frequently hunted species and those perceived to be less abundant than they were ten years ago. The following species are the most commonly and frequently hunted in the NRW communities: lowland paca, red brocket deer, red-rumped agouti (*Dasyprocta*

¹⁶ https://www.researchgate.net/profile/Donald-Stewart/publication/280684686_A_New_Species_of_Arapaima_Osteoglossomorpha_Osteoglossidae_from_the_Solim_es_River_Amazonas_State_Brazil/links/550eedd60cf21287416afb9d/A-New-Species-of-Arapaima-Osteoglossomorpha-Osteoglossidae-from-the-Solim-es-River-Amazonas-State-Brazil.pdf

¹⁷ <https://www.fao.org/publications/card/en/c/CB6659EN/>

¹⁸ Hallett, M. T., Kinahan, A. A., McGregor, R., Baggallay, T., Babb, T., Barnabus, H., ... Bankovich, B. A. (2019). Impact of Low-Intensity Hunting on Game Species in and Around the Kanuku Mountains Protected Area, Guyana. *Frontiers in Ecology and Evolution*, 7. doi:10.3389/fevo.2019.00412

leporina), collared peccary (*Pecari tajacu*), black curassow, lowland tapir, white-tailed deer, great long-nosed armadillo (*Dasyopus kappleri*). The top five preferred mammal species across the survey sites were lowland paca, red-rumped agouti, collared peccary, red brocket deer, and lowland tapir. Conservation efforts aimed at these targeted species have revived some populations, but efforts must be increased and sustained in the long term. Furthermore, a recent study¹⁹ found that even with low-intensity hunting, changes in the distribution and behavior of hunted species can cause cascading effects on non-hunted species, which can have an impact on ecosystems.

3. Large scale agriculture. There is growing interest regarding large-scale agricultural expansion in the savannas of the NRW. The Rupununi has been identified in the National Strategy for Agriculture in Guyana: 2013 – 2020 for development of mega-farms by investors. Already in parts of the North Rupununi, rice is being cultivated at commercial scales and the extensive cultivation of soya bean and other crops has been proposed. Soils in these areas are nutrient poor and require frequent inputs of fertilizers in order to maximize crop yields. The pesticides used for pest control along with the fertilizer run-off can contaminate water sources (Alonso, et.al., 2016). Such large-scale activities result in habitat conversion and will affect the hydrology and ecosystem services delivered by the NRW if their placement and management are not effectively guided. Infrastructure and associated activities, such as damming tributaries also have an impact on the functioning and services provided by the wetlands (Berardi, et. al. 2019).
4. Unsustainable Logging Practices. Small and community-based loggers are active within the landscape and are regulated by the GFC. Small community-based loggers utilize reduced impact logging practices (RIL) but they are not required to implement RIL to the extent that is required by large forest operators. This results in forest degradation and increase in greenhouse gas (GHG) emissions. Given the low-carbon trajectory being pursued by the Government at the national level, and the overall significance of small and community-based loggers' contribution to national production (70-80%), this is an important challenge to be addressed.

Threats cross-cutting KMPA and NRW sites

1. Climate Change. A recent climate change projection for southern Guyana indicates a 2 to 3°C temperature rise by 2050, decreased precipitation over the same period, and shorter and more intense rainfall (SNC, 2012). The impact of climate change has already been noted in the area as it experiences shorter, more intense rainy seasons and hotter temperatures during the dry seasons. This results in greater occurrences of both extremes of floods and droughts. Also, with rising temperatures and increased rainfall variability, the impacts on human well-being and the environment from threats identified above are likely to be exacerbated. In this context, preserving the integrity of the Rupununi Wetlands is a priority, since wetlands have been widely demonstrated to be efficient nature-based solutions to mitigate impacts of rainfall variability, floods and droughts.

1.3 Barriers addressed by the project

To manage the environmental problem and threats listed above, the project proposes to bring two important sites in southern Guyana under improved management to create a contiguous, managed

¹⁹ Ibid.

forested and wetland area in southern Guyana. Having this landscape well-managed will help to secure critical hydrological processes, biodiversity values, and livelihoods of local communities, as well as limit deforestation and wetland degradation along with the associated climate emissions.

The barriers to achieving this can be broadly grouped as: (1) barriers to strengthened protected area management in the KMPA and National Protected Areas System (NPAS), and (2) barriers to integrated management of the NRW landscape.

Barriers to strengthened Protected Areas management in KMPA and NPAS

Guyana's National Protected Areas System (NPAS) is relatively new, having only been established in 2011 with the passing of the Protected Areas Act. The KMPA is one of three recently established national PAs that is managed by the PAC. The KMPA received a METT score of 75 in 2020 (slightly lower than the 2019 score of 76.8, largely due to Covid-19 impacts). Key barriers to effective management of the KMPA, identified in the 2019 and 2020 METT report and stakeholder consultations, include:

1. Insufficient infrastructure and Capacity Building to support effective management of the KMPA. The KMPA Management Plan outlines the need for improved infrastructure in and around the PA to support implementation of management measures, particularly monitoring and enforcement exercises. While a site office and ranger station are current being constructed, this is still insufficient to effectively meet the infrastructural needs of the KMPA. Insufficient infrastructure contributes to insufficient monitoring of reports and threats in the KMPA. The KMPA Site staff currently constitutes a team of 12 persons with a view of hiring another eight persons in the coming year. There are no official rangers' quarters (accommodation) or training/multi-use center for use by the KMPA Site Team. The PAC is renting a variety of spaces in the Town of Lethem to facilitate accommodation of staff, which means rangers are dispersed, posing several challenges as it relates to maintaining a more sustainable and efficient site level presence. The KMPA 2020 METT report also indicated the need for training and capacity building of staff. While the PAC over the years has provided many opportunities to staff for training in the areas of research, life skills, commuter technology, use of vehicles and training in community related matters, there is limited training/capacity of staff in the area of day-to-day PA management. The PAC in 2018 trialed an initiative where staff of the Commission spent a week working alongside staff of the Parc Amazon, protected area in French Guiana. This proved to be very effective. There is also need for investment in specialized training of staff in key areas of protected areas management, this can be done through short professional courses and master's degree programmes.
2. Limited promotion of conservation-compatible land uses in the KMPA. The KMPA is surrounded by Indigenous Makushi and Wapishana peoples. In line with the Amerindian Act, indigenous people can access the PA for traditional practices, including fishing, gathering of timber and non-timber forest products, and subsistence hunting. However, as these communities are interested in pursuing other uses of the PA, such as tourism, the effective management of the PA means greater joint efforts to ensure both livelihoods of communities and conservation targets of the KMPA can be maintained. A key barrier to this approach is having actual resource use agreements with Communities and an approved zoning plan for the KMPA. Over the years the PAC worked with the KMPA communities to conduct Knowledge Attitudes and Practice (KAPs) surveys and Resource Use Mapping (RUM) exercises. However, it has been 4 years since this information was collected and several factors have changed including population growth, impacts of climate change on resource availability and impacts of the COVID-19 pandemic. The KAPs and RUMs should be updated to engage communities and other

stakeholders on a viable plan and agreement on resource use in and around the KMPA. Additionally, a Zoning plan for the KMPA was never done – resources are currently extracted/used in an ad hoc manner but mostly guided by traditional practices. An integrated zoning plan for the KMPA will allow for better planning and a baseline for monitoring but could also form the basis of community conservation agreements (to allow, for example, community-led tourism enterprises) that integrates sustainable use of KMPA natural resources and better oversight/monitoring from the site level authority.

3. Limited scope of PA Legislation. Gaps in the PA Act (2011) have become apparent as the PAC moves ahead with its mandate of expanding and managing the KMPA and wider NPAS. The draft 2020-2025 NPAS strategy highlights the need to address legislative gaps and the PAC has noted some areas which need further clarity, including: an amendment including a revision of penalties and clear guidelines on resource-use within PAs; revisions that give PAC the authority to manage areas with multiple land ownership regimes; broadened legislation so areas rich in biodiversity, but not covered under the formal PA system, can be under some form of conservation; and provision for co-management or total management to be designated to another body, with PAC providing oversight. Currently, these gaps are a barrier to the effective management of existing PAs, and prevent other forms of conservation/protection within the country from being established and contributing to impending 30 x 30 commitments being proposed under the CBD.

Barriers to Integrated Management of NRW Landscape

The main barriers to integrated management of the NRW, which allows for productive practices while securing the biodiversity and critical ecosystem service of the wetlands, are driven by two factors: (1) decisions based on inadequate data on hydrology (including water quality and quantity), soils, livelihoods and community use, biodiversity, etc.; and (2) decisions based on economic development rather than a more holistic integrated landscape approach that considers all social, economic and environmental impacts.

1. Limited data on ecosystem functioning, health, and natural capital for the NRW, to inform planning and decision making. Effective natural resource use and management relies on robust and updated baseline data. However, such data for the NRW – including ecosystem processes and functioning (such as hydrology), agriculture-wetland interactions, wildlife populations, livelihoods and community use, and climate change – is currently limited. Limited data, as well as monitoring, is a barrier for key stakeholders and users (agencies, communities) that are balancing productive uses in the landscape and maintenance of the wetlands. Baseline data and information can be used to inform, for example, the design and placement of roads and other infrastructure, or the siting of agricultural lands, while considering biodiversity/ecosystem functioning. Furthermore, information on the wetland natural capital can present the economic value of the wetland, in terms of providing water, water depuration and other services such as flood and drought disaster prevention and mitigation, to further support government and stakeholder planning and development options. Such information is most successful when integrated into participatory plans (see below).
2. Lack of a participatory wetland management plan and governance structure to manage multiple values/uses of the landscape. Despite its significant ecosystem values, multiple productive values and stakeholder interests within the landscape, there is not yet a cohesive wetland management plan (guided by updated baseline data) to guide land and natural resource management in the NRW. This is a key barrier to managing the wetlands in both an environmentally and economically sustainable

way. Updated baseline data, a management plan, zoning for conservation and non-conservation uses and governance structures to carry this out are key to guiding productive uses in the landscape while maintaining the integrity of the wetlands (and connectivity of the landscape as a whole). Without it, productive uses will likely be more ad-hoc: concessions may be granted in sensitive or less productive areas, and productive uses may not be balanced with long-term maintenance of the wetlands.

3. Productive practices are not always compatible with, or do not fully incorporate considerations for, wetland biodiversity and ecosystem functioning; limited livelihood opportunities to support sustainable resource use. While planning is the first step to balancing productive uses and wetland functioning by, for instance, siting concessions in less-sensitive areas, productive practices can also be improved to be both more profitable and have less impact on the wetlands and connectivity of the landscape. Logging, for instance, is an important source of livelihood in the region. However, there is limited capacity for small-scale and community- based loggers who are not required to implement reduced impact logging practices to the same extent as large loggers. This causes forest degradation and increases emissions. Overall, it is important to promote livelihood opportunities that are compatible with maintaining the health of the ecosystem. This provides for social and economic development in the wetlands while at the same time safeguarding biodiversity and ecosystem services.

Indigenous communities in the NRW have title to their lands, making them one of the largest land holders in the area. Additional resources and livelihood opportunities are needed that provides communities with the means to effectively manage resources on their own lands, whether through resource-monitoring, or species management, which can have significant impact on the health of biodiversity, freshwater, and other natural resources of the NRW. Ensuring that these options reduce emissions and are climate-smart will also help communities and the wetlands to be more resilient to climate change.

4. Loss of traditional knowledge and language. The way of life of indigenous people - for example, their traditional hunting, fishing, gathering and farming practices, has been a significant factor that has contributed to the sustainable use and management of the resources in their lands/territories. It is therefore important for focus to be placed on ensuring that traditional knowledge continues to be incorporated into current conservation efforts. Alarmingly, there are recognized threats to traditional knowledge continuity which need to be monitored and appropriate interventions pursued. The drivers of the erosion of traditional knowledge and language are a complex mix of socio-cultural and economic factors, including lack of intergenerational transmission, uninterested youth, and migration. Loss of language and traditional knowledge negatively affects biodiversity conservation, and this has been recognised by Indigenous communities, including those that live around the Kanuku Mountains (Cobra Collective, 2021) and the NRW.

1.4 National and Sectoral Context

Landscape Management

Guyana has made strong commitments to environmental and economic sustainability. The Government of Guyana (GoG) has prepared a draft Low Carbon Development Strategy (LCDS) 2030 with the aim of protecting the environment whilst expanding economic opportunities and improving the quality of life for

the people of Guyana.²⁰ Balancing the dependency of natural resources on its economy while achieving the goals of a low-carbon development agenda has been a central challenge for the Government. This challenge is well represented in the Child Project area, as it requires ensuring sustainable use of natural resources and managing areas and ecological processes important for the Amazonian Biome. Additionally, when this is considered within the context that the Child Project area is also located within one of Guyana's most critical areas for biodiversity, the need for sustainable management of land and resources becomes even more important. Specific land use policies, frameworks, and sectors relevant to this project are presented below.

Land and Resource Management Agencies and Frameworks

Guyana is governed through a unitary state structure, with principal responsibilities relating to land-use planning and management and protected areas falling under the purview of several national-level agencies.²¹ Land use planning is managed by Guyana Lands and Surveys Commission (GLSC) and supported by Regional Democratic Councils and other state agencies such as the Central Housing & Planning Authority (CH&PA), GFC, EPA, GGMC, Hydromet, GWCMC, PAC and the Ministry of Agriculture. Through their respective legislation, these state agencies lead the day-to-day management of specific state land areas and freshwater systems. For lands owned by Indigenous people, the Ministry of Amerindian Affairs, Indigenous representative groups such as the North Rupununi District Development Board (NRDDB) and Kanuku Mountains Community Representative Group (KMCRG)²², village rule, and provisions of the Amerindian Act (2006) guide land and resource management.²³ Village Improvement Plans (VIPs) have been developed or are being developed by communities associated with both the NRW and KMPA sites and these serve to guide development in indigenous villages.

Protected Areas Management

Articles 25 and 36 of Guyana's constitution require the protection of flora, fauna, water and other natural resources, while the Protected Areas Act (2011) provides the establishment, management, maintenance, promotion, and expansion of the national protected areas system. This legislation created two entities to support the system: the Protected Areas Commission (PAC), responsible for overseeing the National Protected Areas System (NPAS), and the Protected Areas Trust (PAT), responsible for raising and allocating funding for the NPAS.

The Kanuku Mountains Protected Area (KMPA), which is the focus of the Child Project, is one of five protected areas under the NPAS. Other Protected Areas in Guyana include: Iwokrama Rainforest Reserve, Kaieteur National Park (KNP), Kanashen Amerindian Protected Area (KAPA), and Shell Beach Protected Area (SBPA). The KMPA is classified as IUCN Category VI (i.e., a protected area with sustainable use of natural resources). Its management is guided by a management plan (2015-2021), which is required in accordance with Article 76 of the Protected Areas Act and whose contents are detailed in Part VI of the

²⁰ Full text of speech made by the President on the occasion of World Environment Day, 2021 can be found here:

<https://op.gov.gy/index.php/2021/06/05/president-alis-address-on-the-occasion-of-world-environment-day-2021/>

²¹ Regional governments have certain responsibilities for education, health and agriculture support, but do not have authority over natural resource use or protected areas.

²² NRDDDB and KMCRG are umbrella organizations established by indigenous communities themselves, and they serve to both ensure coordinated actions by communities

²³ Full text of the Amerindian Act can be found here: <https://www.moipa.gov.gy/wp-content/uploads/2015/02/AMERINDIAN-ACT-2006.pdf>

Protected Areas Act.²⁴ The PAC has the overall responsibility for the KMPA's management, and this is supported by the Kanuku Mountains Community Representative Group (KMCRG), an organization that represents the interests of the communities found around the KMPA. The KMCRG was established in 2006 and comprises leaders of the eleven main Kanuku Mountains Villages. The KMCRG played a leading role in the boundary delineation and management process for the KMPA.

The KMPA is being financed through the PAC, by government subvention, grants, and funds from the PAT. The Frankfurt Zoological Society supports the management of KMPA through technical support of an on-site staff and funds for mostly monitoring activities. The bulk of the finances for KMPA comes from annual Government subventions. The PAT supports some activities in the KMPA based on availability of funds. The PAT's current endowment of US\$8.5 million out of a capitalization goal of US\$65 million, financing restrictions limit funding available to each PA.

Day to day management of the KMPA is led by a Technical Director with overall responsibility for the management of the site. The Site Based Team comprises of the Site Coordinator, Senior Ranger, Protected Areas Officer and a Team of Rangers. Additionally, other technical and non-technical staff based at the Commission's Head Office provide relevant support to the Site Team. The PAC depends heavily on the support of local authorities in the Region 9 to effectively implement the KMPA management plan, inclusive of Government agencies, regional authorities, private sector and NGOs. The key and most important stakeholders are the communities located around the KMPA, who depend on these 'Mountains of Life' for their sustenance and well-being.

Management of the North Rupununi Wetlands (NRW) area

The NRW is a diverse landscape in terms of land-uses (including large-scale agriculture, tourism, and logging), and land ownership, with a mosaic of titled community and Indigenous lands, leased state-lands, state lands and private lands. As a result, the management of NRW and its resources fall under the jurisdiction of many local, regional and national bodies.

The Government agencies with a mandate to regulate activities in the area include: the EPA (responsibility for environmental issues), GGMC (mineral resources); GFC (forestry resources) GLSC (state lands), Ministry of Agriculture (inland fisheries resources, crops and livestock), GWCMC (wildlife); and Ministry of Amerindian Affairs. Applicable laws governing the NRW are varied and include the EP Act (1996), Forests Act (2009), Wildlife Conservation and Management Act (2016), Mining Act (1989), Water and Sewerage Act (2002) and the Amerindian Act (2006). There is no ministry or agency specifically responsible for wetland management.

The NRW is the traditional home of the Indigenous Makushi people, who live in twenty-one communities within the area: Apoteri, Rewa, Crashwater, Annai, Surama, Wowetta, Rupertee, Kwatamang, Toka, Yakarinta, Massara, Kwaimatta, Yupukari, Kaikumbe, Kwatata, Katoka, Simone, Nappi, Parishara, Haiowa, and Moco-Moco[1].²⁵ These communities remain highly dependent on the natural resources of the NRW. Traditional livelihood activities are still being practiced, including subsistence farming, fishing, hunting and gathering of non-timber forest products, cattle rearing, brick making, craft and hammock making. Micro-businesses have developed in many communities based on these activities and others such as Rewa and Surama have developed vibrant nature-based tourism enterprises which caters to both local and

²⁴ For the full text of the Protected Areas Act, see: <https://doe.gov.gy/published/document/5ae8f345b4d000153ca57a98>

²⁵ These include both main and satellite communities.

international markets. Small-scale commercial forestry is conducted by Surama, others such as Apoteri and Wowetta are interested.

The lands of all twenty-one communities within the NRW have been titled thus enabling communities to make decisions regarding resource use. It is important to note that communities, however, do not have ownership of sub-surface resources or to rivers and waterways, and the use of forestry produce from village lands by non-residents are subject to regulation from the GFC. Under the Amerindian Act, Indigenous people can practice traditional resource-use in areas beyond their titled lands such as state-owned lands. Titled lands are managed by Village Councils that are elected by community members to serve for a period of three years. These elections are held in accordance with the provisions of the Amerindian Act, 2006. Each elected Toshao (Village leader) represents their village's interest on a regional body - the North Rupununi District Development Board (NRDDB). The NRDDB was established in 1996 and registered as a trust in 2001. Its role and function as described in the NRDDB Constitution and Trust Deed is as follows: "NRDDB will be a fully autonomous body free of any party political, religious or other institutional affiliation. It will represent the interests of its constituent communities and will facilitate the development of these. It will be established as a non-governmental, not-for-profit, community-based organization which will act as the umbrella for convening the elected representatives of the North Rupununi communities" (NRDDB, 2021). The NRDDB provides a mechanism for community leaders to meet, discuss, and make decisions relating to the NRDDB operation, management of lands and resources, community planning and development, youth empowerment etc. It has also been a long-standing advocate for the protection and management of the wetlands. Elected Tshaos, including those that represent communities associated with the NRW, also represent their community's interest at the national level as part of the National Tshaos Council (NTC). The NTC has been established as a body corporate (under the Amerindian Act, 2006) to support good governance; protection, conservation and sustainable management of village lands and natural resources; social, cultural and economic well-being of communities; and represent the interest of communities.

The Ministry of Amerindian Affairs, through the Amerindian Act (2006) supports governance and management of indigenous communities in the areas of health, education, cultural and economic well-being, sustainable use of resources. One area of support has been enabling communities to develop their Village Improvement Plans. The plans cover a period of 10 years, up to 2027, and identifies the community's development priorities for implementation.

Management of Forest Resources

Forestry provides a source of livelihood for communities within the NRW area, and there are several small and community-based forestry operations. These operations are monitored and regulated by the GFC in accordance with the applicable laws, codes of practice and guidelines for forest operators of small concessions.²⁶ Operators implement Reduced Impact Logging (RIL) practices, for example directional felling and establishment of buffer zones, but are not required to implement RIL to the extent required from large forest operators.²⁷ Since 2015, small and community-based operations have been contributing more significantly to annual production as large operations have either ceased or scaled down. During this time, greenhouse gas (GHG) emissions from the forest sector, resulting from forest degradation, accounted for 16% to 24% of the national total – mainly driven by small and community-based

²⁶ [Guyana-MRVS-Assessment-Year-2020-Report-Final-September-2021.pdf \(forestry.gov.gy\)](#)

²⁷ [Guidelines for Forest Operations \(SMALL CONCESSIONS\)2018-3-04-SG](#)

operations.²⁸ Given the commitments under Guyana’s updated Nationally Determined Contributions (NDC) and the revised Low Carbon Development Strategy to reduce GHG emissions, strengthening sustainable practices in the forest sector is important.

The Forestry Training Center Inc. was established as an autonomous arm of the GFC to provide extension services to stakeholders on reduced impact logging (RIL), forestry inventory and other key components of sustainable forest management, in accordance with the National Forest Plan, 2018.

1.5 Baseline Scenario

The following section describes current and ongoing baseline initiatives for the project:

Baseline for the Kanuku Mountains Protected Area.

PAC administration of the KMPA: The KMPA, which covers 611,000 ha or 2.8 % of the country’s terrestrial area, is managed by the PAC as part of the NPAS and in accordance with the PA Act, 2011. A [management plan](#) (2015-2021) is in place and guides the interventions that are required for effective management. The management plan is implemented by PAC funding from the PAC, Protected Area Trust and other donor partners. A new KMPA management plan is being drafted and is expected to be finalized by the end of 2022.

The PAC is currently implementing [Guyana Protected Areas System - Phase III](#) (2018-2022), with funding from the Government of Germany, through KfW. The project is supporting three PAs (including the KMPA) and consists of the following components: infrastructure and equipment, and capacity building. Within the KMPA the PAC is now constructing a site-level office to further improve site-level presence. However, other key infrastructure such as staff quarters and a training/multi-use center are necessary to enable a permanent local presence and better delivery of services such as monitoring, training and research. Monitoring takes place through regular patrols and annual aerial surveys (METT 2020 report). In addition, a METT assessment and an accompanying report are completed each year by PAC, which helps to guide planning for management activities.

Another ongoing project is funded through the Frankfurt Zoological Society: ‘[Protection and Management of the Kanuku Mountains Protected Area.](#)’ The project has three pillars: control and monitoring (alongside PAC: training rangers, planning control posts, carrying out ranger patrols, analyzing satellite data for detection of illegal activities); biological monitoring (largely through camera traps), and; environmental education (community meetings and nature camps with local communities).

Resources management in Indigenous Communities associated with the KMPA: Twenty-one (21) Indigenous communities live adjacent to the PA and are important stakeholders and key to the overall successful management of the area. As such, the PAC is working strategically to build stronger, more inclusive partnerships in order to maintain the health of the PA as well as livelihood opportunities for communities. While Covid-19 has prevented the PAC’s annual education camps, village and stakeholder update meetings from taking place, PAC has continued its education and awareness work through environmental education materials and packages.

²⁸ 2021 TREES MONITORING REPORT – Guyana (Reporting period: 01/01/2016 - 12/31/2020)

Communities around the KMPA have organized themselves into an umbrella body - the Kanuku Mountains Community Representative Group (KMCRG) to support decision-making, planning and management of the PA, with the PAC. Conservation International-Guyana, through its [Amazonia Verde Project](#) (2021-2025), is supporting the KMCRG toward ensuring they are empowered to develop and carry out their own initiatives to conserve their forests and support livelihoods, in keeping with their local knowledge and governance systems (knowledge management and advocacy; sustainable value chains; improved management of IPLC lands; and capacity building). This support is also being extended to the NRDDDB and other IPLC groups in the wider region.

Baseline for the North Rupununi Wetlands Area.

Management of the NRW area: Management of the NRW lies with multiple government agencies including EPA, GFC, GLSC, GWCMC, Ministry of Agriculture (depending on the resource-use issue to be addressed). Indigenous communities are key to the area's overall management, but is limited to the management of resources on their titled lands. CI-Guyana has drafted a strategy as well as a joint strategy with WWF-Guianas to guide CI and WWF's efforts within Region 9; and NRDDDB is guided by an action plan (2019-2021) which covers several thematic areas including the wetlands.

Sustainable Livelihoods and Resource Management: Ongoing work in the Rupununi complements the Child Project objective of enhancing management, connectivity between habitats and livelihoods. Organizations such as WWF-Guianas and its partners, Cobra Collective and the Field Museum, have been working toward understanding the hydrological dynamics of the wetlands and identifying sensitive sites, but a comprehensive understanding is still needed. WWF-Guianas also currently supports community-based conservation and sustainable livelihoods through the Bina Hill Institute, tied to the NRDDDB.

The International Fund for Agriculture Development (IFAD) is currently financing a project, '[Hinterland Environmentally Sustainable Agricultural Development Project](#)' (2016-2023, US\$ 8.45 million), which provides support in the Rupununi for small farmers' inclusion in markets; improving small-scale farmers' access to public services, knowledge and technologies through training and technical assistance in the areas of planning and natural resources management; and food and nutrition security.

Through the [Sustainable Wildlife Management \(SWM\) Project](#) (2018-2023), funded by the European Union and implemented by GWCMC and CIFOR, communities in the Rupununi are undertaking activities which will contribute to maintaining healthy fish and terrestrial wildlife populations. In the north Rupununi, SWM is supporting the simplification of the Fisheries Management Plan, conducting awareness sessions with fishers, conducting arapaima and other fish stock assessments. The project is also collaborating with the Ministry of Agriculture-Fisheries Department, to review the National Inland Strategy for Fish and Aquaculture through a collaborative process. Finally, CI-Guyana's Amazonia Verde initiative, described in the baseline information for the PA, is also focusing on the NRDDDB and communities in the north Rupununi.

The Forestry Training Center Inc. provides critical theoretical and practical exposure to stakeholders on reduced impact logging (RIL), forestry inventory and other key components of sustainable forest management, in accordance with the National Forest Plan, 2018.

Current Field Museum projects in support of sustainable livelihoods and resource management in the NRW landscape include:

- Creating biodiversity field guides & supporting biodiversity monitoring for Rupununi ecolodges: Surama Village, Rewa Village, and Manari Ranch
- Creating a flood model of the North Rupununi Wetlands in collaboration with Cobra Collective, WWF, CI, and Dr. Robert Stallard

- Monitoring of Arapaima populations and movements with Rewa Village
- Supporting North Rupununi Wildlife Clubs.

The Iwokrama International Center for Rainforest Conservation, which manages the 371,000 ha Iwokrama forest site located just north of the wetlands, works with indigenous communities and institutions, such as the North Rupununi District Development Board and Bina Hill Institute, to support development and sustainable management of resources within the North Rupununi. Iwokrama supports community development – e.g., establishment and functioning of wildlife clubs and skills development in resource management; capacity building for the NRDD; and sustainable natural resource management (for e.g., through tourism and fisheries management).

1.6 Coordination with other relevant GEF & non-GEF Initiatives

The project will coordinate with the following projects where feasible to maximize impact and reach of project activities:

- Caribbean Small Island Developing States (SIDS) Multi-country Soil Management Initiative for Integrated Landscape Restoration and Sustainable Food Systems: Phase 1 (CSIDS-SOILCARE Phase 1) (est. 2022-2026; USD 8,135,205)– this is a regional GEF project implemented by FAO. In Guyana, the project is funded by GEF Land Degradation under Guyana’s LD allocation of US\$986,000. The ProDoc was approved by GEF on September 22, 2021. It seeks to restore targeted degraded lands and increase land productivity through Climate Smart Agriculture Model Farms and a training program for farmers. The Pilot Sites will be identified in Administrative Regions 1, 5 and 10. While not taking place in the project landscapes, this project may yield important lessons and best practices for application in the NRW such as the methodologies utilized in restoring degraded areas, implementation of climate smart agriculture farming practices, and training activities for farmers.
- Mainstreaming Sustainable Land Development and Management (SLDM) Project: The SLDM Project is under implementation for an extended period of eighteen (18) months, January 2022 to July 2023. The SLDM Project will lead to strengthened capacities of GLSC in information management, planning, land information system, geodesy, cadastre development, land degradation assessment and monitoring, and land governance for SLDM and reclamation. It will build capacities in integrated geospatial information systems, land administration, governance of tenure, planning, assessment and land monitoring. The Project will also enhance capacity in targeted areas in land governance, land planning, land management and land restoration and monitoring. This outcome will realize development and implementation of land use plans with service providers and land users/local communities for piloting improved sustainable land management, management practices and reclamation measures.
- Implementation of the Strategic Action Programme to ensure Integrated and Sustainable Management of the Transboundary Water Resources of the Amazon River Basin Considering Climate Variability and Change (2020-2024, USD 11,735,780) – this regional GEF project aims to implement the Strategic Action Program (SAP), promoting Integrated Water Resources Management (IWRM) in the Amazon basin. In Guyana, this includes strengthening national policies to enable the establishment of water authorities.

SECTION 2: PROJECT EXECUTION STRATEGY

2.1 Project Objective and Theory of Change

The project objective is ‘to strengthen landscape connectivity through improved management of the Kanuku Mountains Protected Area and North Rupununi Wetlands in southern Guyana.’ In particular, the project will work to integrate productive activities (forestry, agriculture, tourism) and sustainable land and water management considerations – so that the landscapes long-term environmental health, functioning and associated ecosystem services are secured, while at the same time ensuring the landscapes provide livelihood and productive benefits.

The project will work in two landscapes, both of which balance productive use and ecosystem management/protection. The first is the Kanuku Mountains Protected Area (KMPA). The KMPA is an IUCN Category VI Protected Area; therefore, the area promotes both the conservation of ecosystems and habitat and the use of natural resources in a sustainable manner. Local communities, including Indigenous communities, live near the PA and access the PA for traditional use. The second target landscape is the North Rupununi Wetlands (NRW). The NRW has a number of land uses (agriculture, logging, fishing, etc.) and is under a range of management regimes (indigenous titled lands, private lands, concessions granted through government agencies, state land). The wetland is also of regional and global significance, hosting important biodiversity and associated ecosystem services, as well as supporting hydrological connectivity (e.g., portals) between the Amazon and Essequibo River systems during the rainy season.

The project theory of change is that

1. For the Kanuku Mountains Protected Area

If infrastructure (rangers’ quarters and multi-use center), monitoring tools and equipment, and increased capacity of the PAC site level team (through workshops, trainings, and exchanges) is in place in the KMPA, then PAC will have a stronger site level presence and will more effectively manage threats identified in the METT;

If a resource use map and land-use plan for inside the KMPA is developed, relying on a participatory approach through community consultation Knowledge, Attitudes, and Practice surveys (which include traditional use and needs), and support from resource users and the communities, as well as training of community and government staff in holistic landscape management that incorporates traditional knowledge, environmental data etc., then the proper planning and capacity for sustainable use of natural resources inside KMPA will be in place;

If these conditions are in place, then overall the project will improve the management of the Kanuku Mountains Protected Areas (KMPA), and threats will be reduced/mitigated which decreases fragmentation and ensures habitat connectivity.

2. For the North Rupununi Wetlands

If, through a robust consultation process, an active and representative multi-stakeholder platform is formed and receives salient, up-to-date and credible socioeconomic and environmental data, then this platform can support a participatory, integrated planning process (that may include, for example, land use planning and zoning) that promotes sustainable land and water management of the NRW;

If a long-term and representative governance mechanism is in place to guide better management of productive uses while securing the integrity and functioning of the wetlands;

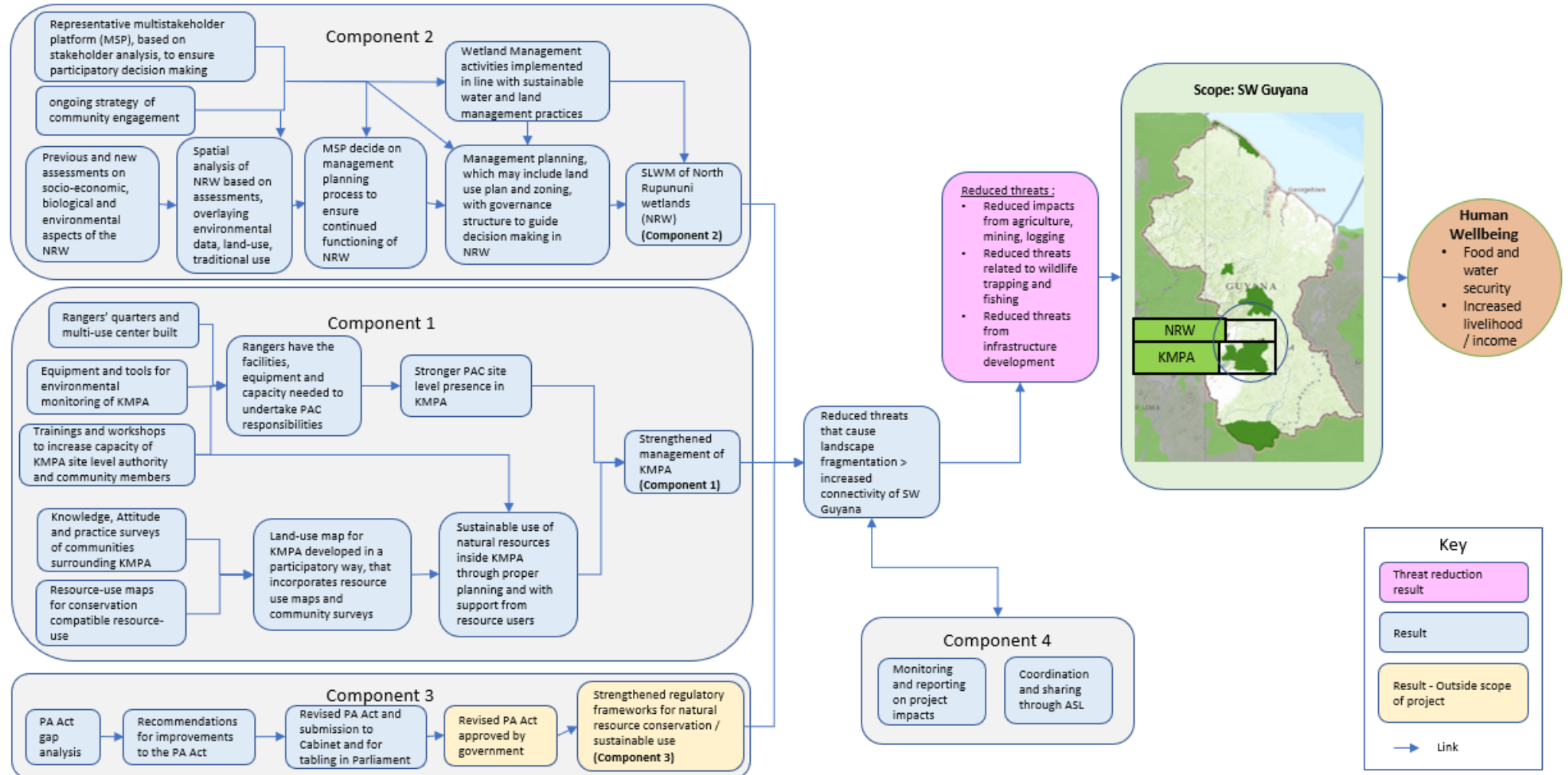
If activities can be implemented to support environmentally sustainable production and wetland functioning/management;

Then the project will improve management of the North Rupununi Wetlands (NRW) and promote productive practices that are compatible with wetland management (and integrate sustainable land and water management considerations), thereby delivering co-benefits for livelihoods and maintenance of habitat connectivity (hydrological, forest) and functioning the wetlands into the long-term.

If revisions to the PA Act are incorporated and approved by the government, then management of the NPAS will be strengthened. Finally, if the project ensures effective monitoring and evaluation, knowledge management, and communications, then the project can better incorporate adaptive management opportunities and support scaling up of project results.

The Theory of Change Diagram is presented in Figure 2.

Figure 2 Theory of Change Diagram



2.2 Project Components and Expected Outcomes

The project has been divided into four components. The first component involves improving the management of the Kanuku Mountains Protected Area (KMPA). Specifically, the project will support the strengthening of protected area management at the site level, with the involvement of Indigenous communities living around and utilizing the resources of the protected area. The project aims to accomplish this by: strengthening technical capacities of PA staff and other stakeholders; enhancing infrastructure and equipment for site-level management; enabling the continued involvement of local communities in PA management; and improving planning for sustainable natural resource-use within the PA. The second component will support improved management of the NRW landscape. Given that the landscape is allocated for productive uses by multiple stakeholder groups, the project will develop, through participatory approaches, an integrated wetland management strategy, which incorporates strategies for multi-stakeholder planning and decision-making, participatory resource monitoring, reduction of threats and pressures, and sustainable resource use practices and livelihoods. The project will also support the execution of activities in line with the sustainable management of land and water resources in the landscape, including community-based resource monitoring, sustainable use of forest resources, governance and capacity building, livelihoods and research. A well-managed wetland landscape will help to mitigate current and future threats, improve livelihood opportunities, and facilitate stakeholders to coordinate and collectively make decisions and manage multiple land uses in the area. Since the two areas (KMPA and NRW) are contiguous, improved management of both sites will strengthen ecological connectivity and maintain a large, intact area of globally important Amazonian ecosystems.

The third component will support a review of the PA Act, to identify gaps and develop recommendations for consideration by the Government. This will not only strengthen how the KMPA is managed, but also the wider NPAS. The fourth component addresses regional and national coordination, cooperation, monitoring and evaluation, and knowledge sharing of experiences and lessons learned through the wider network of ASL initiatives.

All project outcomes, outputs and activities take into account the baseline scenario presented in Section 1.5 and are designed to address the project barriers identified in Section 1.3. A summary of outcomes and outputs by component can be found in Table 2.

Table 2: Project Components, Outcomes and Outputs

Component	Outcome	Output
Component 1: Integrated Protected Landscapes	1.1. Strengthened protected area management effectiveness	1.1.1 Infrastructure, furnishing and communication equipment to support effective management of the KMPA, including ranger’s quarters and multipurpose building 1.1.2 Knowledge, Attitudes and Practices surveys, resource use map, and new land use plan for the KMPA with indigenous communities 1.1.3 South-south exchanges and courses for PA staff and community representatives for improved PA management

<p>Component 2: Integrated Productive Landscapes</p>	<p>2.1 Increased areas of forests and watersheds brought under sustainable land and water management (SLWM) Practices</p>	<p>2.1.1. Rapid assessment of existing knowledge; assessments and surveys on the socio-economic, biological and environmental aspects of the NRW will be conducted based on the gaps</p> <p>2.1.2 Spatial analysis of the NRW, incorporating ecological assessments (2.1.1), land use and ownership data, and traditional use areas, developed through a participatory process</p> <p>2.1.3 Integrated management planning for the NRW with collectively defined strategies and implementation structure</p> <p>2.1.4. Multistakeholder platform established to ensure a participatory approach for development of 2.1.2 and 2.1.3</p> <p>2.1.5 Wetland management activities with local communities and other stakeholders in North Rupununi Wetlands to support SLWM practices:</p> <ul style="list-style-type: none"> ● Small grants to strengthen livelihoods, traditional practices, capacity building, and management for SLWM ● Sustainable use of forest resources strengthened to support SLWM practices in the landscape
<p>Component 3: Policies/Incentives for Protected and Productive Landscapes</p>	<p>3.1 Strengthened regulatory frameworks for natural resource conservation/sustainable use</p>	<p>3.1.1 PA Act gap analysis and recommendations for improvements</p> <p>3.1.2. Revised PA Act, defined in consultation with stakeholders, presented to Cabinet for Review and tabling in Parliament</p>
<p>Component 4: Capacity Building and Regional Coordination</p>	<p>4.1. Strengthened monitoring and evaluation system</p> <p>4.2 ASL regional cooperation and knowledge sharing</p>	<p>4.1.1. Monitoring and Evaluation reports (e.g., project progress reports, midterm evaluation, terminal evaluation)</p> <p>4.2.1 Coordination with ASL program and ASL regional coordination project</p> <p>4.2.2 Knowledge management and communications products</p>

Component 1 – Integrated Protected landscapes

Through participatory processes involving national and regional stakeholders and indigenous communities, a management plan was developed for the Kanuku Mountains Protected Area (KMPA). This management plan serves as the strategic framework for the overall management for KMPA over a five-year period, but was extended for an additional two years due to the COVID -19 Pandemic. In this plan, infrastructure development, land and sustainable natural resource use, livelihood development and capacity building were identified as important for effective protected areas management.

Component 1 is structured to address the barriers '*Limited capacity and infrastructure to support effective management of the KMPA*'; and '*Limited promotion of conservation-compatible land uses in the KMPA*'.

More specifically, Component 1 is structured to address key needs identified in the KMPA Management Plan (2015-2019) and the 2020 METT Analysis, and builds on a significant baseline of other activities/programs being implemented according to the KMPA Management Plan. The alignment of the project strategy with the KMPA Management Plan and 2020 METT Analysis are presented in Table 3 below:

Table 3: Component 1 alignment with KMPA Management Plan and METT

Output / Activity	Alignment to KMPA Management Plan: Management Programme/ target	Alignment to METT (V4-1): Indicator/ description
1.1.1. Infrastructure, furnishing and communication equipment to support effective management of the KMPA, including ranger's quarters and multipurpose building	1. Operations – Infrastructure and communications	15. Are equipment and facilities sufficient for management needs (2020 score: 2/3)
1.1.2. Knowledge, Attitudes and Practices surveys, resource use map, and new land use plan for the KMPA with indigenous communities	2. Land use and sustainable natural resource management – Ensuring the sustainable use of natural resources inside KMPA, while supporting the development and implementation of land use plans for local communities and KMPA	7. Is there a management plan or equivalent and is it being implemented? (2020 score: 3/3) 7a. The management planning process allows adequate and equal opportunities for stakeholders to influence management 9. Do you have enough information to manage the area? (2020 score: 2/3) 30. Are indigenous people involved in management decisions? (2020 score: 2/3) 31. Do local communities living in or near the protected area have input to management decisions? (2020 score: NA)
1.1.3. South-south exchanges and courses for KMPA site level staff and community representatives	8. Capacity building – Capacity building for improving collaboration with communities for management and decision making	11. Do the people managing the area have the necessary knowledge and skills? (2020 score: 2/3)

While consultations with Indigenous communities surrounding the KMPA were not possible due to COVID-19, the activities described below were identified in the KMPA Management Plan (2015-2019), which was developed through a participatory process and in close consultation with the communities.

The Protected Areas Commission, with the support of consultants, will implement the activities in Component 1.

Outcome: 1.1. Strengthened protected area management effectiveness

Output 1.1.1 Infrastructure, furnishing and communication equipment to support effective management of the KMPA, including ranger's quarters and multipurpose building

To enable permanent local presence and effective management of the KMPA, the PAC has begun to focus on the implementation of infrastructural measures. While a site level office is being constructed in

Lethem, the main town and administrative center of Region 9, the construction and furnishing of staff quarters and a multipurpose center for research, education and training are also required to complete the infrastructural needs of the KMPA. The infrastructure will be located across from the Guyana Geology and Mines Commission (GGMC)'s building, facilitating improved intergovernmental communication and interaction with this agency. The increase in site level presence, infrastructure, equipment and services to be provided by these facilities will improve the capabilities of site level staff, responsible for the daily operation and monitoring of ecological targets, to conduct their tasks more efficiently. The PAC currently rents four separate facilities in Lethem to cater for office space and accommodation of staff; having its own facilities is expected to be more strategic for the PAC in the long-term. Appropriate simple and contextual designing and planning of infrastructure would be done in order to ensure facilities function well and have low maintenance costs.

To achieve this output, the activities will be implemented in three phases described below:

Phase 1: Designing of Infrastructure

- i. Recruitment of Architectural/Engineering consultants to review the design staff quarters and a multipurpose center which has already been prepared by the PAC. This will include review of the specifications, preparation of detailed Bills of Quantities and preliminary estimates, site technical reports including an Environmental Impact Assessment, tender documents etc.

Phase 2: Procurement of Contractors and Supervising Engineer Consultant

- i. Initiate the National Open Tender Procurement process which will include; drafting and finalization of tender documents, publishing of call for tenders, conducting pre-tender meetings and site visits, opening of tender and evaluation process, approval by Cabinet and Donor, Award of Contract, Signing of contracts and issuance of commencement order.
- ii. Recruitment of Contractors and Supervision consultant for the construction of the buildings. This will follow national procurement/tendering processes and guidelines.
- iii. Construction of the staff accommodation and construction of the multi-purpose center will be undertaken by the Contractor, with supervision from the supervisory consultant, PAC and GEF implementing agency (as necessary).

Phase 3: Construction of Buildings

- i. Commence construction of the staff accommodation and construction of the multi-purpose center to be undertaken by the Contractor/s, with supervision from the supervisory consultant, PAC and GEF implementing agency (as necessary).
- ii. Any mitigation measures outlined in the ESMP on labor and working conditions as well as community health and safety will be followed in this phase.

Phase 4: Procuring Appropriate Furnishing and Equipment

List of furnishing and equipment needs, including those for communication (e.g. radio equipment), for both buildings - staff quarters and multipurpose buildings - will be completed, including detailed specifications. Since the multipurpose center will allow for research, education and training, equipment will be procured which will enable the PAC to realize these functions. Procurement of furnishing equipment will be in line with national tendering guidelines and procedures. Monitoring equipment (e.g. GPS, etc) is being provided through the KfW project (see baseline).

Output 1.1.2 Knowledge, Attitudes and Practices surveys, resource use map, and new land use plan for the KMPA with indigenous communities

Local communities are important stakeholders in the management of natural resources in the PA. Local communities draw their livelihoods from resources in and around the protected area. The activities should happen in sustainable ways to ensure that livelihoods of communities and conservation targets of the KMPA can be maintained. Communities can also support the preservation and conservation of PAs through joint conservation efforts. In order to achieve this, there must be wider community acceptance regarding the KMPA and a better understanding of the benefits from the protected area, local land-use planning as well as the promotion of conservation compatible resource-use.

Activity 1: Knowledge, Attitude and Practices (KAP) Surveys

In order to understand the relationship between the people living within and adjacent to KMPA and their interactions with the protected area, KAP surveys will be conducted. The KAP surveys will be conducted in twenty-one (21) villages surrounding the KMPA, and will build on a previous baseline survey done during February to June 2016 by the PAC. The survey will focus on women and men's knowledge of, attitudes towards, and their practices relating to resource use within the KMPA. The information will help to identify how the way of life of the locals have changed; and how these changes have impacted their outlook on protected areas and the PAC, who is the authority responsible for its overall management. The information from the survey will therefore be utilized to inform PAC planning, and longer-term engagement approach to develop a strong cooperative relationship between PAC and communities around the KMPA. Finally, the 2016 baseline data will be used as a measure to determine how much the knowledge, attitudes and practices of the locals have changed as it relates to the PAC and KMPA over the years as follow up KAP studies are conducted. In collecting the information, an updated KAP questionnaire which incorporates questions regarding traditional knowledge and practices, will be used.

Activity 2: Development of Resource-Use Maps (RUM)

Building on these KAP surveys, so that a better understanding of land and resource use could be achieved, workshops will be held in all 21 communities associated with the KMPA. This will help to identify common goals and areas for collaboration to ensure that, together, the PAC and communities can ensure the sustainability of resources for future generations. Resource use maps will be updated and improved for all KMPA communities and will include gender-specific resource uses. Activities include:

- Community visits to update RUM
- Data entry, results analysis, report preparation and dissemination of RUM

Activity 3: Zoning/Land-Use Planning within the Kanuku Mountains Protected Area

This activity has never been done in any of the PAs managed by the PAC. As spelled out in the KMPA Management Plan, the goal is to ensure the sustainable use of natural resources inside KMPA through the development and implementation of land use plans for the KMPA. Sustainable land use can only be achieved through proper planning and with support from resource users. As such, developing land and sustainable resource use plans for inside the KMPA is important and must be done with the participation of communities.

The intention is to use baseline and updated data gathered from the KAP surveys and RUM processes to design and implement a gender-responsive land use planning process for the KMPA in partnership with local communities and other stakeholders. The data from baseline Knowledge, Attitude and Practice Surveys (KAP) will assist in the identification of the key zones including those adjacent to target

communities that should be included in land use planning. The process will be highly participatory and developed collaboratively with communities and will ensure contributions from all stakeholders, including differentiated land and resource uses by men and women, and FPIC processes with indigenous communities. The end product will be a clearly defined map and data based showing the various zones in the KMPA and the type and level of activities that will be allowed for each zone. This will be done to support more sustainable natural resource use, and will consider potential uses beyond traditional use (e.g. tourism). The Amerindian Act will continue to protect community rights to access the PA for traditional use. This activity will allow compatible activities to occur within the various zones of the PA, which reduces potential pressures on ecological values of the PA, ensures that livelihood and other benefits to communities are still maintained and strengthens the management of the PA.

Output 1.1.3 South-south exchanges and courses for staff and community representatives for improved PA management

To improve the management of the KMPA, technical capacity building for staff of the PAC, other Governmental agencies with a role in PA management, Indigenous communities/representatives and other stakeholders will be supported under the project. This training will have a broader impact on the NPAS as capacities gained by PAC staff will be applied in the management of other PAs.

Activities include:

- i. South-south exchanges for PA management; and
- ii. Online and in person short courses related to PA Management.
- iii. Targeted support for KMCRG and communities based on needs assessment conducted in first year of the project. Special consideration will be given for empowerment and capacity building (this activity will be executed with the support of EPA).

Component 2 - Integrated Productive Landscapes

Component 2 is structured to address the barriers: 'Limited data on ecosystem functioning, health and natural capital in the NRW to inform planning and decision-making'; 'Lack of participatory wetland management plan and governance structure to manage multiple values/uses of the landscape'; 'Productive practices are not always compatible with, or do not incorporate considerations for wetland biodiversity and ecosystem functioning; limited livelihood opportunities to support sustainable resource use'; and 'loss of traditional knowledge and language.' By developing an integrated management strategy for the NRW, establishing and operationalizing a multistakeholder platform for decision-making and planning in the NRW, and implementing activities on the ground that strengthen management of the NRW – such as: sustainable livelihoods, research, community-based resource monitoring and capacity building for governance, traditional knowledge building and transmission – key gaps will be addressed, thereby maintaining connectivity in the landscape and the ecological, social and economic values provided by the wetlands.

Outcome 2.1 Increased areas of forests and watersheds brought under sustainable land and water management (SLWM) Practices

Output 2.1.1 Rapid assessment of existing knowledge; assessments and surveys on the socio-economic, biological and environmental aspects of the NRW will be conducted based on gaps

The NRW is a well-known area that contributes to maintaining globally significant biodiversity and plays a substantial ecological and hydrological role in the functioning of the broader Rupununi and Amazonian

landscapes, and delivers a wide range of ecosystem services. Over the years, researchers have worked to document and understand its history, species, hydrology, and value to local Indigenous communities. However, additional research which allows for a more comprehensive understanding of the biological, hydrological, socio-economic values and status/function of the NRW is required. Data gathered under this output will inform a spatial analysis of critical zones within the NRW and guide decision making by the multi-stakeholder platform and government regarding management of the region (under 2.1.2). The design of these new surveys will take into account work already completed in order to build on past studies as well as to fill the most critical gaps. The PMU will recruit consultants and/or utilize national agencies/local stakeholders to undertake assessments and surveys. By involving local stakeholders in this component in-house capacities will be strengthened.

Phase 1: Rapid assessment of existing knowledge

- i. Desktop review of existing research and traditional knowledge in the NRW, including socio-economic, biological, and environmental aspects.
- ii. Priority areas for new assessments and surveys identified (to be addressed in Phase 2), to inform spatial analysis of the NRW (under Output 2.1.2), management strategies, and guide decision making by multi-stakeholder platform.

Phase 2: Assessments and surveys to address gaps

Proposed areas for assessments and surveys include:

- i. Biodiversity assessments in the NRW including species and habitats, migratory, endangered, threatened or vulnerable species and threats to species or habitats. In addition to broader biodiversity surveys, relevant taxa, including species of global importance and identification of critical habitats in the NRW would be assessed and surveys can potentially include a focus on specific taxa or species, such as jaguars, arapaima and river dolphins (which are characteristic of the landscape) their population status, threats, and prey abundance, as overall indicators of ecosystem health.
- ii. Factors that shape the NRW's contribution to connectivity for maintaining biodiversity and wildlife movement, including spatial analysis of the area. Given that the NRW is adjacent to several intact areas important for biodiversity, including Iwokrama, the second child project area - the Kanuku Mountains Protected Area and the wider Rupununi, determining how the various areas are connected, be it through fish migration, jaguar corridors, bird distribution and/or hydrological flows, could inform action plans to ensure connectivity and promote more effective conservation across the NRW and KMPA. As areas are likely connected culturally, spiritually, and economically as well as ecologically, these additional connections should be explored to ensure a comprehensive understanding of the relationships between these landscapes. Insights from research may also inform management in the broader Rupununi area.
- iii. Comprehensive digital elevation plans of the entire region would be developed to allow the development of accurate hydrological drainage plans. This can be achieved using drone surveys and ground-truthing.
- iv. Hydrological model for the NRW. Previous studies have identified the hydrological mechanisms for flooding and water movement across the Rupununi Portal. The next stage is to understand the hydrodynamics in terms of water levels and relate this to the hydrological mechanism model that was developed. Water level fluctuations are key to allow species movements and, in particular, are a trigger for fish spawning. The installation of water level monitoring equipment and the analysis of the data collected would allow the determination of the impacts land use change and climate change will have on the hydrodynamics of the region. Maps may also be produced to show how the hydrological model needs to be taken into consideration with road and other

developmental activities in the area; and recommendations to ensure that the hydrology of the wetland is not affected may also be proposed.

- v. Baseline water quality data. Changing land use in the wetlands area and in the wider catchment has the potential to impact on surface water and groundwater quality. Land use changes including agricultural expansion, reservoir construction and road improvements have the potential to negatively impact the flora and fauna of the region and for the local communities that rely on river water and groundwater to directly impact negatively on their drinking water source. To support the management of the NRW it is important to understand the potential impacts on water quality from land use changes within the region. The use of mobile kits to provide analysis for pH, dissolved oxygen, hydraulic conductivity etc, as well as some more detailed analysis through accredited laboratories will be done. Community monitors involved in community-based monitoring and reporting can support data collection.
- vi. Socio-economic aspects of the NRW may also be assessed including: resource-use by communities and other stakeholders and an economic valuation of the wetland to understand the value of its natural capital, to guide decision-makers making economic decisions on future developments in the wetlands.

Phase 3: Knowledge Management and communication products

- i. Document information above into a communication product(s) and information sheets.
- ii. Develop knowledge management system to ensure information is accessible and shared.

Output 2.1.2: Spatial Analysis of the NRW, incorporating ecological assessments (2.1.1), land use and ownership data, and traditional use areas, developed through a participatory process

The project will undertake a spatial analysis of the NRW, an important first step if the area is to be effectively managed. This will establish a common understanding among stakeholder groups, including those who may be involved in its management, and will make it easier for decision-makers to spatially direct management actions as proposed under output 2.1.3. There are some proposed ecological boundaries: for example, DeSouza et. al. 2020 (based on species distribution data, and their knowledge of geography, geology and connectedness of the river systems of the Rupununi), however, there generally seems to be a loose understanding of the extent of the NRW which varies between different institutions and stakeholder groups. Under this output, the project will map current land uses and ownership (Amerindian land), traditional use areas, and ecological, etc. This process will utilize data collected under 2.1.1 and will also involve consultations with communities and other stakeholders.

The process will be led by the EPA, with support from consultants and the representatives of the multi-stakeholder platform.

To achieve this output, activities will be implemented in two phases, each of which is described below:

Phase I:

- i. Development of a gender-responsive stakeholder analysis and engagement plan, including a plan for FPIC when working with indigenous stakeholders.
- ii. First community consultations to share information on the project, build awareness and seek communities' perceptions on the NRW and its importance, receive feedback from communities on potential risks, concerns, threats, opportunities for the NRW, incorporate feedback into the project design, following guidelines on FPIC.

- iii. Present spatial analysis exercise, share perceptions on the NRW and its importance, receive feedback from stakeholders on what needs to be included in the analysis and potential information to be incorporated.
- iv. Data collection and update. Existing data on mining, forestry, agriculture and other land-uses; Indigenous titled land, traditional use areas, areas of cultural significance, biodiversity, hydrology, will be collected.

Phase II:

- i. Produce first version of map of the NRW, based on the spatial analysis.
- ii. Workshop with stakeholders to present and receive feedback on the first version of the map, based on spatial analysis This will include the NRW multi-stakeholder platform and other representatives from stakeholder groups.
- iii. Produce updated spatial analysis results and obtain stakeholder feedback through a second workshop.
- iv. Final results of spatial analysis presented and shared with stakeholders including GoG and communities.

Output 2.1.3: Integrated management planning for the NRW with collectively defined strategies and implementation structure

Building on data from completed assessments under 2.1.1, data collected during the spatial analysis process and through stakeholder consultations, the multi-stakeholder platform, led by EPA and with the support of consultants, will undertake a planning process for integrated management of the NRW. The governance mechanism developed by stakeholders during the process will inform roles and responsibilities in relation to long-term management of the area.

The process to develop the management strategy will be done in phases described below:

Phase I: Stakeholder Consultation

- i. Building on the consultations and plan undertaken above, stakeholder and community consultations to present the output, discuss ongoing engagement strategies to ensure a participatory approach (informs the Stakeholder Engagement Plan), and discuss interest for some type of management planning for the NRW, including any thoughts or concerns on how this should be conducted, and following guidelines on FPIC.

Phase II: Identify options for management planning

- ii. Identify and examine options for integrated management planning for the NRW. The purpose is to undertake a planning process that will balance productive activities and key hydrological/ecological considerations, and secures traditional use and rights of Indigenous communities. This requires delivery of some sort of plan/strategy for management of the NRW (examples may include integrated management strategy/plan, zoning) and a governance framework for decision making through e.g. an inter-agency/community committee/multi-stakeholder platform along with very clear guidelines for how planning decisions are reviewed to ensure that a holistic integrated landscape approach is followed. Titled indigenous lands will continue to be managed by communities, they may freely choose to apply aspects of the planning framework within their lands.
- iii. Management planning option selected by the multi-stakeholder platform.

Phase III: Development of management plan/strategy for NRW

- iv. Initial draft of the management plan/strategy prepared based on information gathered under 2.1.1 and 2.1.2. Key components to be included in the strategy include goals, objectives, indicators, land use zoning, and governance and management structure, including roles that will be assumed by local communities.
- v. First workshop with key stakeholders to present the strategy and receive feedback. The workshop will include the members of the multi-stakeholder platform, Indigenous communities, government, and academia. Principles and guidelines for decision making which will help to inform and regulate development in the area will be a key area of discussion.
- vi. Second draft of the management strategy/plan prepared.
- vii. Second workshop with key stakeholders to present the strategy and receive feedback.
- viii. Final draft of management strategy/plan will be prepared and submitted for endorsement by the multi-stakeholder committee, based on their endorsement it will be submitted to relevant level of government for approval.
- ix. Management strategy distributed to all stakeholders.

Output 2.1.4: Multistakeholder platform established to ensure a participatory approach for development of 2.1.2 and 2.1.3

A multistakeholder platform, led by EPA and with representatives from key stakeholders (including communities and government agencies), including both women and men, will be established for the purpose of providing input and approving Outputs 2.1.2 and 2.1.3.

Key stakeholders will be identified through a participatory process based on the Stakeholder Engagement Plan developed during PPG (see Appendix II), and validated by EPA and stakeholders during Year 1 of the project (through consultations). Stakeholder representatives will be invited to join the multistakeholder platform. A Terms of Reference which outlines the roles and functions of the multistakeholder platform will be developed by EPA and agreed with all members of the platform, including a conflict resolution mechanism.

Output 2.1.5 Wetland management activities with local communities and other stakeholders in North Rupununi Wetlands to support SLWM practices

The project will support a number of strategies aimed at supporting SLWM practices in the NRW. The exact initiatives to be funded under the project will be determined during execution, based on the wetland management strategy and a set of key criteria. This output will be undertaken through the following activities:

I: Call for proposals and implementation of activities that support SLWM practices

- i. Selection criteria for wetland management activities developed and agreed by multistakeholder platform. Criteria will include considerations for impact, sustainability, cultural sensitivity, budget, documented beneficiary buy-in and support, baseline (building on existing work), and co-financing.
- ii. PMU to organize a call for proposals, incorporating the selection criteria above.
- iii. Multistakeholder Platform to select at least 2 proposals, receiving no-objection from the Project Steering Committee and WWF GEF Agency.
- iv. Proposals implemented by partners based on approved activities/budget. PMU will monitor progress and ensure compliance with gender, safeguards, and stakeholder engagement policies.

Table 4: Activities eligible to be funded under this program include:

Category	Technical Assistance / Investment	Type of Activities
Capacity building	TA	<ul style="list-style-type: none"> • Trainings and workshops with key stakeholders to strengthen management and governance practices based on the wetland management strategy and toward SLWM practices • Training and capacity building for the NRW communities on environmental monitoring, coordinating data collection, and analyzing such data to inform management decisions and actions (linked to the categories on monitoring and management, as well as planning)
Monitoring and management	TA/Inv	<ul style="list-style-type: none"> • Arapaima monitoring and management in the NRW for sensitive species (Arapaima, river dolphins, giant Amazon river turtles, black caiman, etc.) • Resource monitoring • Strengthening data management systems • Strengthening environmental management and compliance
Livelihoods	TA/Inv	<ul style="list-style-type: none"> • Trainings and/or investments to strengthen livelihoods and traditional practices, or provide alternative livelihoods, in line with SWLM
Productive practices	TA/Inv	<ul style="list-style-type: none"> • Workshops and trainings to incorporate wetland and sustainability considerations into productive practices (logging, agriculture, etc.) • Implement sustainable practices (agroforestry, tourism etc.)
Restoration	TA/Inv	<ul style="list-style-type: none"> • Training on terrestrial and hydrological restoration • Implement restoration initiatives (natural regeneration, tree planting, nature-based solutions, remove small dams in the NRW portal, bridges or culverts to reduce impacts of road development) to maintain wetland functioning
Planning	TA	<ul style="list-style-type: none"> • Technical assistance to support agencies and communities incorporate the wetland management plan into agency/community planning processes
Other	TA	<ul style="list-style-type: none"> • Incorporating traditional knowledge into the activities above; supporting traditional knowledge transmission

II: Strengthen the sustainable use of forest resources to support SLWM practices in the landscape.

The commercial harvesting of forest by small and community-based loggers is practiced within the NRW area and other forest areas surrounding the wetlands. It is an important livelihood activity, but given its impact, small and community-based forest harvesting must be designed and implemented in ways that safeguard and enhance the multiple-resource nature of the forest and reduce forest degradation. Training materials will be developed, and training and education on reduced impact logging (RIL) practices will be supported, focusing on small and community-based loggers. Training activities to pilot test the materials, including in-field training, will help to refine both the materials and training process. The GFC/FTCI can

then upscale activities across other landscapes, in the future. This will build on FTCI's already-established training staff, and the training manuals and guidelines that they have developed.

RIL will result in improved harvesting practices through the implementation of planned activities which includes directional felling of trees which reduces damage to the residual stand. These activities will support the maintenance of a low deforestation rate during logging activities. Maintaining low deforestation during harvesting is beneficial for ecosystems, which communities continue to rely on for other aspects of their livelihoods. In addition to strengthening sustainability within the forest sector, activities will also support Guyana's REDD+ initiatives through the maintenance of a low deforestation rate during logging activities. GFC/FTCI will undertake the activities below:

Development of training materials in RIL, targeting small and community-based loggers

- i. Development of a training curriculum and accompanying training manuals on RIL.
- ii. Support the development of national standards for forestry education and training on RIL. FTCI is currently seeking accreditation from the MoE.
- iii. Support provision of formal training, including those leading to certification, on RIL and REDD+.
- iv. Refine training materials based on training and capacity building sessions conducted in Activity 2.

Build capacity of forest dependent stakeholders in RIL

- i. Conduct training sessions with forest concessionaires within the landscape in RIL.
- ii. Execute capacity building sessions, targeting community groups and Indigenous Villages and Communities, that engage in commercial forest harvest activities.
- iii. Support the University of Guyana and Guyana School of Agriculture in technical exchange exercises.
- iv. Host trainings on equipment use and other assets.

Component 3 - Policies/Incentives for Protected and Productive Landscapes

Component 3 addresses the barrier 'Limited scope of PA Legislation.' Under this component, the project will support policy options and recommendations to strengthen the PA Act for facilitating more effective management across the NPAS, and consider options from a policy/regulatory side for meeting Guyana's commitments to Target 3 (30x30) of the Global Biodiversity Framework and accounting for conservation areas outside of the IUCN category system.

Outcome 3.1 Strengthened regulatory frameworks for natural resource conservation / sustainable use

Output 3.1.1 PA Act gap analysis and recommendations for improvements

The PA Act of 2011 guides the management of Guyana's National Protected Areas System (NPAS). Though effective in many respects, there is urgent need for review and strengthening of the PA Act to make it fit for purpose.

Guyana, being a signatory to the CBD, has been working towards achieving Aichi target 11 of conserving at least 17% of its terrestrial to include various types of ecosystems, water catchments areas, mangrove forests and others and at least 10% of marine and coastal ecosystems. Over the last two years countries across the world have been drafting a Global Biodiversity Framework, which now proposes conservation of 30% of earth's land and ocean by 2030. These new benchmarks are expected to be approved in the upcoming COP of the CBD. However, to facilitate this, a comprehensive governance structure must be in place which will determine and guide a clear robust management process for each site. The current PA

Act 2011 is limited in its scope in this regard. Currently, for protected areas to be considered under the NPAS, they must be classified according to the IUCN category system. Therefore, the need exists for the PA Act to be revised and strengthened to include a wide range of international and national classification criteria. Additionally, the PA Act will be reviewed and revised towards improving effective management across the NPAS.

Activities include:

- i. Conduct a legal review and gap analysis of the PA Act, 2011. The PAC has noted some areas which need further clarity, including: revision of penalties and clear guidelines on resource-use within PAs; allowance for a diverse set of management categories and governance types (to meet the Global Biodiversity Framework and Aichi target 11), and broadened legislation so areas rich in biodiversity, but not covered under the formal PA system, can be under some form of conservation; and provision for co-management or total management to be designated to another body, with PAC providing oversight.
- ii. Produce recommendations for improvements, as well as consultations with communities and key stakeholders to develop/validate these recommendations.

Output 3.1.2 Revised PA Act, defined in consultation with stakeholders, presented to Cabinet for Review and tabling in Parliament

Activities under this Output include:

- iii. Based on recommendations, preparation of regulatory text and Revised PA Act in consultation with all key stakeholders (includes public review of revised ACT).²⁹
- iv. Submission of Revised Act to Cabinet for Review and tabling in Parliament.

Component 4 – Capacity Building and Regional Coordination

Under this Component, the project will support monitoring and evaluation to track and evaluate project progress. The component will also promote coordination with other child projects under the Amazon Sustainable Landscapes Program, and support coordination and knowledge sharing more widely through a communications plan and communications products.

4.1. Strengthened monitoring and evaluation system

4.1.1. Monitoring and Evaluation reports (e.g. project progress reports, midterm evaluation, terminal evaluation)

The PMU and project partners will follow an M&E plan to monitor and report on project progress, and identify any areas where adaptive management is needed. Under this Output, the following technical reports will be drafted and delivered:

- A bi-annual Project Progress Report (PPR), including tracking against the results framework and work plan in the 12-month PPR.
- Annual Work Plan and Budget (AWP&B).
- Quarterly Financial Report.

²⁹ Regulatory text must align with WWF safeguards and be in accordance with safeguard requirements as described in the ESMF

- Annual adaptive management meeting to review project results and discuss any necessary adjustments to the project strategy.
- Independent consultants will be recruited to undertake a mid-term and terminal evaluation.

Section 2.7 Monitoring and Evaluation describes the reports and staffing in more detail.

4.2 ASL regional cooperation and knowledge sharing

4.2.1 Coordination with ASL program and ASL regional coordination project

Under this output, the PMU will ensure effective communication and coordination at the national and regional levels with the other ASL projects to support regional approaches, knowledge sharing, and help increase uptake of lessons and best practice. Activities include:

- Representative from the PMU and 1-2 key stakeholders selected by the PMU (in coordination with key stakeholders) to participate in the annual face-to-face meeting hosted by the ASL Coordination Child Project.
- Representative from the PMU and 1-2 key stakeholders to participate in at least one ASL-hosted workshop, field visit, exchange and/or study tour per year.
- Participate in other face-to-face and virtual ASL meetings.
- Periodically disseminate information to the ASL global coordination project (on request) and disseminate information shared by the ASL at the regional level.

4.2.2 Knowledge management and communications products

To ensure knowledge from the project is appropriately documented and disseminated, the project will implement a knowledge management and communications plan. This will support scaling up of project lessons and impact. The Knowledge Management and Communications Plan can be found in Appendix III. The Knowledge Management and Communications Plan will include considerations from the Traditional Knowledge Action Plan being developed by EPA, as appropriate.

The PMU will undertake the following activities:

- Develop in-depth communication strategy, coordinated with other projects in the area to ensure alignment.
- Establish a repository to ensure proper knowledge management.
- Develop knowledge products that allow the dissemination of achievements and lessons learned, targeted to specific groups.
- Package relevant knowledge above into formal communication products (including brochures, reports, videos) and disseminate through different media identified for each audience and according to the Stakeholder Engagement Plan (see Appendix II). An initial list of knowledge and communication products can be found in Appendix III.
- Provide information for inclusion on the ASL website to ensure both targeted stakeholders and interested parties have access to the knowledge and communication products.
- Organize and participate in relevant events, workshops, webinars and platforms to disseminate project results.

2.3 Institutional Arrangement

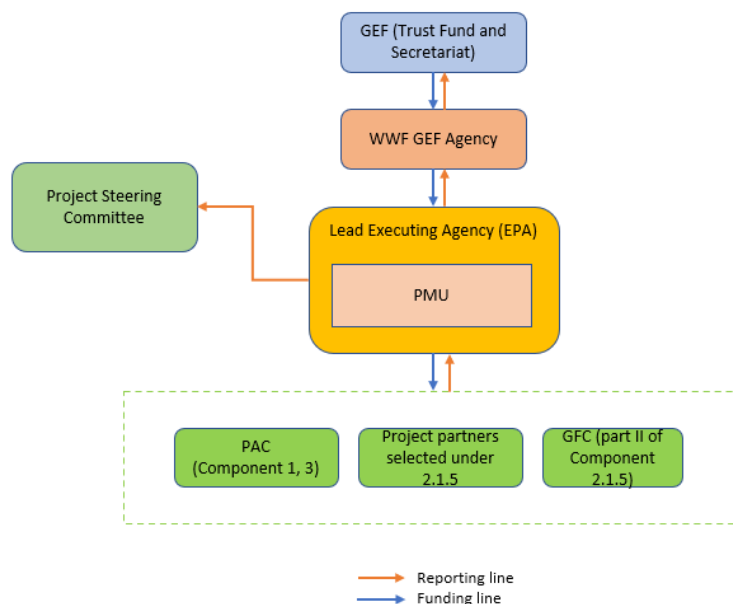


Figure 3 Governance diagram

The proposed implementation arrangement (see Figure 3) includes EPA as the lead Executing Agency (EA), PAC and GFC as project executing partners, a Project Steering Committee, and WWF as the GEF Agency.

The project will include the following institutional actors:

Project Steering Committee (PSC): A Project Steering Committee (PSC) will be formed to serve as the oversight, advisory, and support body for the project. The PSC provides overall guidance for the implementation of the project. It is responsible for approving annual work plans and budgets, and reviewing and approving any changes to the project strategy alongside WWF GEF Agency.

In terms of membership, the PSC will include representatives from the EPA (EA), Protected Areas Commission (PAC), Guyana Forestry Commission (GFC), the FTCI, Guyana Lands and Surveys Commission (GLSC), as well as a representative from the NGOs active in the area (on a rotating basis) North Rupununi District Development Board (NRDDB), Kanuku Mountains Community Representative Group (KMCRG). The PSC will be chaired by the EPA. WWF GEF Agency will maintain observer status.

The Environmental Protection Agency (EPA) will be the **Lead Executing Agency (EA)** responsible for overseeing the implementation of project activities, including disbursing and administering funds (to be confirmed pending due diligence process) to project execution partners for the implementation of specific outcomes/outputs/activities. In setting up this structure, the EA will enter into grant agreements with each executing partner. Grant agreements will outline the financial, technical, reporting, and other requirements for the executing partner.

As part of its responsibilities, the EA will establish the Project Management Unit. The **Project Management Unit (PMU)** will be responsible for the day-to-day management and coordination of project activities and fulfillment of its goals. The PMU will consist of staff identified below; a Finance Officer from the EA will be assigned to the PMU with responsibility for the financial reporting of the project.

- *Project Manager/Technical Advisor*: Oversee the project implementation (full-time basis) under the guidance of the PSC and with support of WWF.
- *Project Assistant / Monitoring and Evaluation (M&E) Officer*: Provide assistance (full-time basis) to the Project Manager/Technical Advisor in the overall implementation of the project. Responsible for the design, coordination and implementation of the monitoring and evaluation framework of the project. Provide technical assistance to EA and co-executing partners in relation to monitoring and reporting.
- *Technical Officer*: Provide assistance (full-time basis) to the Project Manager/Technical Advisor in the implementation of the project, including field-based monitoring.
- *Safeguards and Gender Officer*: Provide assistance (full-time basis) to the Project Manager/Technical Advisor on stakeholder engagement, coordination of ESS plans implementation and gender considerations.
- *Financial Officer*: Responsible for managing the financial reporting of the project (preparation of budgets, quarterly/annual reports)

WWF-GEF Agency: WWF-US, through its WWF GEF Agency, will: (i) provide consistent and regular project oversight to ensure the achievement of project objectives; (ii) liaise between the project and the GEF Secretariat; (iii) report on project progress to GEF Secretariat (annual Project Implementation Report); (iv) ensure that both GEF and WWF policy requirements and standards are applied and met (i.e. reporting obligations, technical, fiduciary, M&E, safeguards); (v) approve annual workplan and budget; (vi) approve budget revisions, certify fund availability and transfer funds; (vii) organize the midterm and terminal evaluation and review project audits; (viii) certify project operational and financial completion, and (ix) provide no-objection to key terms of reference for project management unit.

2.4 Stakeholder Engagement

The PMU will be responsible for ensuring compliance with the GEF and WWF standards on Stakeholder Engagement, specifically the WWF [Standard on Stakeholder Engagement](#) and the associated [Procedures for Implementation of the Standard on Stakeholder Engagement](#). A project-specific Stakeholder Engagement Plan (SEP) has been developed to guide stakeholder consultations during execution and can be found in Appendix II.

Stakeholder Engagement during Project Development

Stakeholder engagement took place on the initial project strategy (the initial project sites were located to the east of the current project areas). During PIF stage, WWF-Guianas consulted with government agencies, NGOs and concessionaires. During project development, a kickoff workshop was held on 18 September 2019 with representatives from government agencies, Toshaos from three indigenous communities (Rewa, Crashwater, and Apoteri), NRDDDB, KMRG, logging concessionaires and non-governmental organizations. Additional consultations were held with Indigenous communities (Crashwater, Rewa and Apoteri) and groups (NRDDDB, Fair View, KMCRG, Iwokrama); loggers; miners; and government agencies.

The project strategy was adjusted and approved by Government towards the end of 2020. Full stakeholder engagement on the revised strategy was limited due to COVID-19. While ongoing engagement was conducted with government partners throughout development of the project strategy (especially EPA, PAC, and GFC), consultation with the Indigenous communities was limited by travel restrictions and lack of teleconferencing facilities, which made virtual interviews and teleconferencing impossible in some

situations. The project therefore relied on Key Informant Interviews (KIIs) with representative groups such as NRDDDB and Iwokrama.

The following consultations took place virtually and were hosted by EPA:

- Meeting with Field Museum representative (13 September 2021): The purpose of the meeting was to share information on the project and gather feedback. Field Museum (FM) highlighted the work that is currently being undertaken (or has been done) that can inform a spatial analysis. FM has information on the hydrological/ecological portal (area that should be kept intact if the area is to function well) and is currently identifying terrestrial hotspots in Guyana using terrestrial and freshwater species. FM noted that the GoG is interested in this work in the context of LCDS. Other researchers are working on highlighting KBAs in the North Rupununi. Additional research needs include: major rapid biological and social inventory; water chemistry; flooding regime and extent of flooding. FM noted that the approach of having some kind of management of the NRW is good, and there is need to amass data to delineate areas. Updating natural resource use by communities (which is done through a consultative process with communities and which can involve spatially representing areas which communities consider as important for their needs) would be useful as this can guide the management planning process. They also recommended incorporation of capacity building needs, e.g. continued support for youth and wildlife clubs, way that local people depend on the resources, structure set up for involvement of young people, ranger training so that people could protect the area and know how to gather data.
 - Incorporation into the project: FM ongoing projects have been included in the project baseline. Ongoing work and recommendations, including capacity building, involvement of local people/youths, gathering of baseline data important for the management of the wetlands, have been incorporated into various outputs under component 2. A participatory approach will ensure the inclusion of all stakeholder groups within the landscape.
- Meeting with CI-Guyana and Iwokrama representatives (28 September 2021): The purpose of the meeting was to share information on the project and gather feedback. Iwokrama highlighted their many initiatives over the years with NR communities, including wildlife clubs, building capacity of NRDDDB through various projects, also noted the Makushi Research Unit and a State of the North Rupununi Report. Expressed the need for support in promoting greater collaboration between communities in resource management. CI Guyana suggested a focus on activities that would support management of community-owned lands (stewardship), a link to regional plans such as the Regional Development Plan, a stakeholder analysis to build collaboration mechanisms, and alignment with NRDDDB's (3yr) Action Plan and potential support development of new and more detailed strategic plan.
 - Incorporation into the project: Iwokrama's ongoing projects have been included in the project baseline. NRDDDB's 3-year action plan have been referenced in baseline. An initial stakeholder analysis has been undertaken (see stakeholder Engagement Plan in Appendix II, this will be verified during project execution to ensure a participatory multi-stakeholder platform (Output 1.1.4) to support a planning process with collaboration mechanisms. Supporting management of community owned lands and promoting greater collaboration between communities in resource management is included in the project strategy.
- Conversation with representative of North Rupununi District Development Board (NRDDDB) based in North Rupununi, Region 9 (29 September 2021): The purpose of the meeting was to share information on the project and gather feedback. NRDDDB noted the support of the Sustainable

Wildlife Management (SWM) Project, which has worked with a select number of communities – this has seen their wildlife clubs coming active again and has also supported fisheries management. The NRDDDB representative noted that more is needed, including all-around capacity building for the communities of the NRW on how to do environmental monitoring, coordinate data collection, and analyze such data to help inform management decisions and actions. The North Rupununi Adaptive Management Plan (Darwin Initiative) was also noted.

- Incorporation into the project: The SWM Project has been included in the project baseline. Suggestions for the project strategy, including capacity building for communities environmental monitoring and analyzing such data for informed management decisions and actions, is included in two places in the project strategy: there is an option for funding these activities (based on competitive process) under Output 2.1.5; the project will also support data collection and development of a participatory multi-stakeholder platform for the larger NRW planning process under Output 2.1.3-2.1.4.
- Meeting with Region 9 Regional Chairman -Mr. Bryan Allicock (18 October 2021): The purpose of the meeting was to share information on the project and gather feedback. The Regional Chairman noted that there is interest in developing a freshwater management plan at the regional level due to concerns of water pollution due to mining. Mining remains a concern for South Rupununi villages. He noted several projects that are operating in the area as well as useful projects that have closed out. He noted specifically that it would be helpful to have similar activities to what was supported under the Arapaima Management Plan programme, which helped to monitor and protect the protect species from poaching. There are three entities in the North Rupununi that participate in GFC regulated timber operations, and it was noted that most communities have informally adopted GFC timber harvesting standards for managing logging activities on their village lands.
 - Incorporation into the project: The ongoing projects mentioned for the region have been included in the project baseline. Activities on monitoring and protecting species from poaching, which Mr. Allicock suggested, is included in the list of potential activities under Output 2.1.5.
- Validation Workshop (7 February 2022): The project was presented to key stakeholders for validation before submission of the project to GEF. The objectives of the meeting were to: briefly present an overview of the final Project Document to be submitted to the GEF, provide an opportunity for any remaining comment or questions, and explain next steps after Project Document submission. Overall participants were supportive of the project and its outcomes. Feedback from participants included: (1) the project should ensure that there is coordination with ongoing activities at the project sites as this prevents communities from being ‘overloaded’ and to prevent duplication of efforts; (2) the regional government (RDC) should be a stakeholder in the project; (3) what aspects of the PA Act were being considered for revision and is co-management being considered; (4) project should incorporate Village Improvement Plans of communities into the resource-use mapping and zoning activities under component 1; and (5) the project should support the KMCRG. Appropriate changes were made to the project document. Stakeholders were informed that during the first few months of the project, consultations with communities and other stakeholders will be done in order to refine the project activities.

Stakeholder Engagement Plan for Execution

A Stakeholder Engagement Plan was developed to ensure that the views and inputs of stakeholders, including women and men in target communities, are taken into consideration throughout project

implementation. As there were limited consultations during project development (due to COVID-19), consultations with Indigenous communities in the area, as well as other affected stakeholders, will be built into the Year 1 project activities. Project outputs and activities, as well as the Stakeholder Engagement Plan itself, will be validated through this process. This will be undertaken before any of the activities described in Section 2.2 can begin. The Stakeholder Engagement Plan can be found in Appendix II and is briefly summarized below.

Table 5: Stakeholder Engagement Plan

Stakeholder Type	Name	Engagement Plan for Execution
Communities and Indigenous People	The project will engage communities in the NRW and surrounding the KMPA, which is the traditional home of the Indigenous Makushi and Wapishana people.	<ul style="list-style-type: none"> • Communities will be consulted in line with FPIC principles in Year 1 to validate the proposed project activities, adjustments will be made based on these consultations to ensure consensus and support. These consultations will take place before any on-the-ground activities begin, in order to facilitate a truly collaborative process. The specifics of the FPIC process will be agreed to with communities as outlined in a separate Indigenous Peoples Plan. • Communities will be consulted and engaged in all project Components once outputs are mutually agreed (bullet point above): <ul style="list-style-type: none"> ○ <u>Component 1</u>: PAC will engage communities to co-develop community resource maps and land use plans. Community members will be invited to trainings and capacity building workshops. ○ <u>Component 2</u>: Community representation on the multi-stakeholder platform (Output 1.1.4), community consultation throughout the NRW planning process, and, if desired, communities can apply to directly implement activities on their titled lands through Output 1.1.5. ○ <u>Component 3</u>: Communities will be consulted on potential revisions to the PA Act. • FPIC will be followed according to the safeguard plans, and activities will be in accordance with the Protected Areas Act 2011 and the Amerindian Act 2006 • Robust grievance mechanism will be in place
Indigenous representative Organization	Kanuku Mountains Representative Group; National Toshias Council; North Rupununi District Development Board and Bina Hill Institute	These organizations will be invited to have representation on the multi-stakeholder platform (with regular meetings), through which these organizations will be consistently engaged in decision-making for the NRW planning process, and will have input on the type of activities and selection of partners for activities being implemented under 1.1.5.
Government of Guyana	EPA, PAC, GFC and Forestry Training Center	EPA is the lead executing agency for the project. PAC and GFC are executing partners under the project. All three government agencies will be responsible for implementing project activities. PAC will lead activities around the KMPA and on revisions to PA Act (Component 1, 3). EPA will lead activities in the NRW (Component 2), with GFC and FTC executing some activities.

	The Government agencies with a mandate to regulate activities in the NRW include: EPA, GGMC, GFC, GLSC, MoA, GWCMC, and Ministry of Amerindian Affairs	Key government agencies will be invited to have representation on the multi-stakeholder platform (with regular meetings), through which these organizations will be consistently engaged in decision-making and participatory roles for the NRW planning process
NGOs	Iwokrama International Centre, Frankfurt Zoological Society, Conservation International – Guyana, IFAD, CIFOR, Field Museum, WWF Guianas, Cobra Collective	Key NGO’s will be invited to comment on and participate in various project components. Under Component 2, NGO’s will be invited to provide input throughout the NRW planning process. Some may be invited to join the multi-stakeholder platform. NGO’s may be able to apply under the Output 1.1.5 competitive process, especially where partnership is requested by Indigenous communities. NGO’s will also be invited to provide input into revisions of the PA Act.
Private Sector	Concession holders and private sector actors in the NRW (including for agriculture, logging, etc)	Concession holders and private sector actors will be engaged through the multi-stakeholder platform, and will be consulted throughout the NRW planning process.

A Safeguards and Gender Officer will be recruited to the PMU (under EPA) and will be responsible for ensuring implementation of the Stakeholder Engagement Plan, in line with safeguards and gender standards. PAC and GFC, as project partners, will also be responsible for stakeholder engagement within their respective activities.

2.5 Gender

The proposed project recognizes the importance of considering both women's and men’s contributions across sectors and at all levels for successful, long-term solutions. The Government of Guyana (GoG), Global Environment Facility (GEF) and World Wildlife Fund (WWF), the principal actors leading the project, are committed to mainstreaming gender in all policies and sectors.

A Gender Analysis and Gender Action Plan were conducted to ensure gender mainstreaming throughout the project cycle. The Gender Analysis is an examination of gender, the differences between men and women, their access, control and use of resources and the implications for the project goals, objectives, outcomes and outputs. The gender analysis is the basis of the gender action plan, the main tool for the mainstreaming of gender in the project.

Gender Analysis:

Men and women are viewed as equal before the law with Article 29 of the Constitution of the Republic of Guyana, and various legislative framework for women’s rights and equality in Guyana. Furthermore, Guyana’s National Gender Equality and Social Inclusion Policy 2018-2023 aims to fight all types of discrimination against women and girls, including eliminating all forms of violence, promoting economic development and inclusion, wellness and healthcare, and support education training and skill development.

Guyana has also signaled its political commitment to gender equality through ratification of several international gender frameworks, including: the United Nations Convention on the Elimination of all

Forms of Discrimination Against Women (CEDAW), the Inter-American Convention on the Prevention, Punishment, and Eradication of Violence (Belem do Para), and the International Covenant on Economic, Cultural and Social Rights. Guyana is a signatory to several MEAs, including the United Nations Framework for Climate Change (UNFCCC), the United Nations Convention on Biodiversity (UNCBD) and the United Nations Convention on Desertification (UNCD), which have related gender mainstreaming strategies. However, whilst there are no legal barriers to women's participation in society at a national level, socio-cultural norms and values limit their actual participation.

In Region 9 (the focus of this project), there are 21 local and Indigenous communities. The gender analysis provided several observations.

Division of Labour: Women in the area are limited in their ability to pursue wage-earning opportunities outside of the home. The amount of opportunities available to women and men depend on the degree of the integration of the village into the cash economy. Limitations of indigenous women to pursue wage-earning opportunities outside of the home include the household responsibilities of the child and elderly care, lack of employment opportunities in the communities and low levels of education and skills training.³⁰

Control of Resources: The fact that land is communally owned in the village offers both advantages and disadvantages to women. Advantages include that a single woman can have access to and control of land. However, for married women and women in relationships, despite the land being communally owned it is viewed as "family" property or in some cases male owned. Women are therefore limited in their ability to be able to use the land for collateral purposes. Women's interaction with the environment and natural resources of the area is largely for the extraction of non-timber forest products, which they utilize for making of crafts. Other activities include the use of other ecosystem services in the conduct of their domestic activities.

Power and Decision Making: The power structure of the villages is related to economic power and is patriarchal despite the visibility of women through voluntary and community work.

Access to Education and Training: The trend in Region 9 overall indicates higher numbers of females in secondary schools as a result of males leaving school early to engage in wage earning activities such as gold mining. There is also an issue of teenage pregnancy and teen brides which affect girl's attendance in high school.³¹

Access to Finance and Credit: Access to finance and credit is a barrier for women in Guyana and in Region 9. There are no legal barriers for either gender to access credit or financial resources. However social norms (perceptions of men as being better at business) and lack of ownership (either singly or jointly with partners and husbands) of collaterals such as land and property continue to hinder women's access to formal credit. Women in Region 9 also reported not having the confidence and fearing the loss of household capital as deterrents in accessing credit.³²

Gender Considerations and Recommendations

³⁰ UNICEF (2017) Study on indigenous women and children in Guyana. Available at: <https://www.unicef.org/guianasuriname/reports/study-indigenous-women-and-children-guyana>

³¹ Ibid.

³² Conservation International. (2016). Rupununi Innovation Fund (RIF) Gender Analysis. Conservation International

Gender considerations are applicable to all components of the project. It is critical that both men and women have equal opportunity to participate and benefit from the project activities. The strategic approach of the gender action plan is twofold:

1. Design of activities to address specific barriers to the participation of each gender and to increase their visibility and agency;
2. Design of complementary gender activities for each of the proposed activities of the project to ensure the integration of gender considerations in the entire project cycle.

The main tools of the project to achieve gender mainstreaming are the stakeholder engagement plan, the gender action plan, the grievance redress mechanism and the monitoring and evaluation mechanism.

Gender Action Plan

A detailed Gender Action Plan can be found in Appendix VIII that links outputs with tangible activities to promote gender inclusion, equality, and equity. The Gender Action Plan includes the following high-level recommendations by Component.

Gender related activities of Component 1 should:

1. Ensure men and women's agency and visibility in all stakeholder engagement options including Free, Prior and Informed Consent (FPIC) with indigenous communities. This should take into consideration the recommendations regarding increasing women's participation.
2. Ensure women's participation in PA management workshops and trainings, and the design of methods and materials used for these activities is gender-sensitive.
3. Ensure women's participation and visibility in exchange visits for government and communities on strengthened PA management. This activity should also include capacity building, taking into consideration gender inequalities in capacity to participate and may require in-house training to build foundational capacities.

In the communities, men's and women's differential roles, responsibilities and daily practices directly influence their uses of and needs for natural resources. This needs to be factored into both Component 1 and Component 2. In addition, the Gender Action Plan provides the following recommendation for Component 2:

1. Collection of gender data and sex-disaggregated data in the Rapid assessments on socio-economic, environmental, and ecological features in the productive landscape to inform regional planning.

The project will ensure that access to resources and opportunities for training, information and decision-making are equitable and transparent for all community members, including women, at the household, community, and landscape levels. The Gender Analysis recommended that, at the community level, there be a quota of 50 percent women in all projects related decision-making bodies to increase women in the project area participation in environmental decision making.

For Component 3, mainstreaming of gender in new PA Act is a necessity. The PA Act presently is gender blind. The new PA should be gender responsive in keeping with mainstreaming of gender in national legislations and policies. Women and their representative organizations should be equally consulted in the consultations for the revision of the Act. A gender expert or a legislative expert who is experienced in gender mainstreaming in legislations and PAs should be responsible for the mainstreaming of gender in the revision.

Within Component 4, the project will include a robust gender responsive Monitoring and Evaluation plan that collects both gender and sex-disaggregated data with gender-sensitive collection will be done by the project, including both quantitative and qualitative data to offer more insights into the progress and changes happening because of the project opportunities and benefits to all stakeholders. All project-level reports will include information on the implementation of the gender mainstreaming plan. Knowledge management products will include the portrayal of both men and women, with a focus on increasing women's visibility in conservation and natural resources management.

Throughout the life of the project, the stakeholder engagement plan will be implemented, and will represent one of the main mechanisms of addressing gender mainstreaming in the project. Stakeholder engagement will be conducted in a way to ensure participation of men and women, taking into account that women's participation is affected by their heavy domestic responsibilities.

2.6 Safeguards

An Environmental & Social Safeguards Screen was completed for the project. Based on this Screen, the Project has received a Categorization of "B," given that it is essentially a conservation initiative expected to generate significant positive and durable social, economic and environmental benefits. Any adverse environmental and social impacts are site specific and can be mitigated. Due to the ongoing COVID 19 pandemic, full consultations on project activities have not yet been completed, and therefore an Environmental Social Management Framework, Indigenous Peoples Planning Framework, Process Framework, and Grievance Redress Mechanism for the required Safeguards will be created prior to Project implementation. Management Plans will be created within the first year of Project implementation once activities have been finalized in consultation with local stakeholders.

The following Policies are triggered by the Project, and Management Plans will be created for use during Implementation:

- Policy on Protection of Natural Habitats: This policy is triggered as the proposed Project directly targets protecting and restoring natural habitats; including through improved PA management plans, improved logging practices, and strengthening local communities' ability to conserve the natural resources they depend on.
- Policy on Involuntary Resettlement: While the proposed Project is unlikely to cause displacement of people, the project might lead to certain access restrictions. Given that the activities proposed under the project include, but are not limited to, protected area management, improved wetlands management and changes in timber use on community lands, WWF's policy on Involuntary Resettlement is triggered because the Project will help define and thereby potentially restrict access to natural resources and livelihoods activities. WWF policies prohibit forced evictions, which include acts involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating or limiting the ability of an individual, group or community to reside or work in a particular dwelling, residence, or location without the provision of and access to, appropriate forms of legal and other protection. In addition, the project will exclude financing any activities that would lead to physical displacement and voluntary or involuntary relocation. However, economic displacement or restriction to livelihoods or access to natural resources may occur (e.g. as a result of negotiating through FPIC-based consultations the establishment of collaborative management arrangements for wetlands and the updated management plan for the

Kanuku Mountains Protected Area). This, however, will only occur with the consent of the affected people and following a decision made with all required information at hand.

- Policy on Indigenous Peoples: This policy is triggered to ensure the Project respects indigenous peoples' rights in the project areas, including their rights to FPIC processes and to tenure over traditional territories; that culturally appropriate and equitable benefits (including from traditional ecological knowledge) are negotiated and agreed upon with the indigenous peoples' communities in question; and that potential adverse impacts are avoided or adequately addressed through participatory and consultative approach. Indigenous peoples live in and/or have cultural, spiritual and economic ties all areas where Project activities will happen, and in many cases are the majority populations in those areas.
- Policy on Accountability and Grievance Mechanism: In addition to stakeholders having access to national level grievance and redress mechanisms, the WWF GEF Agency mechanism and the GEF Agency Mechanisms for Conflict Resolution and Accountability, a project level Grievance Mechanism will also be created and implemented for this Project.
- Standard on Cultural Resources: Depending on the final Project activities decided upon in collaboration with communities and other stakeholders in Year 1, this Standard may be triggered and a plan created to mitigate identified risks in partnership with potentially affected stakeholders.
- Standard on Community Health and Security: This Standard is triggered due to construction activities in Component 1. Additionally, it is triggered because of necessary safety protocols related to the ongoing COVID 19 pandemic.
- A Guidance Note on Labor and Working conditions will also be issued, due to the construction activities proposed in Component 1 of the project.

2.7 Monitoring & Evaluation

The Project will be monitored through the Results Framework (see Appendix VII: GEF Results Framework). The Results Framework includes 1-2 indicators per Outcome, and describes: frequency of reporting, who is responsible for measuring each indicator (as well as any supporting partners), and the methodology for measuring indicator targets. The baseline has been completed for each indicator along with feasible targets, set annually where relevant. Indicator targets are Specific, Measurable, Achievable, Relevant, and Time-bound (SMART), and disaggregated by sex where applicable. Component 4 of the Results Framework is dedicated to M&E, knowledge sharing and coordination.

Relevant Core indicators have been included to provide a portfolio level understanding of progress towards the GEF Global Environmental Benefits (GEBs).

The Project Assistant / M&E Officer (see TOR in

Appendix VI: Project Management Unit (PMU) Terms of Reference (TORs)) will be responsible for overall gathering of M&E data for the annual results framework tracking, and providing suggestions to the PMU Project Manager/Technical Advisor to improve the results, efficiency and management of the project.

The following table provides a summary of project reports:

Table 6: M&E Reporting

M&E/ Reporting Document	How the document will be used	Timeframe	Responsible
Inception Report	<ul style="list-style-type: none"> Summarize decisions made during inception workshop, including changes to project design, budget, Results Framework, etc. 	Within three months of inception workshop	PMU
Annual Work Plan and Budget (AWP&B)	<ul style="list-style-type: none"> Plan activities and budget for each project year 	Annual	PMU
Quarterly partner Report	<ul style="list-style-type: none"> Inform PMU PM on progress, challenges and needs of activities in field. 	Every three months	Project partners
Quarterly Financial Reports	<ul style="list-style-type: none"> Assess financial progress and management. 	Every three months	PMU F&A officer
6 Month Project Progress Report (PPR)	<ul style="list-style-type: none"> Share lessons internally and externally; Report to the PSC and GEF Agency on the project progress. 	Annually at six months into the project year	PMU
12 month Project Progress Report (PPR) with Results Framework and workplan tracking	<ul style="list-style-type: none"> Inform management decisions and drafting of annual workplan and budget; Share lessons internally and externally; Identify risks and challenges that have arisen, and propose mitigation plans or actions; Report to the PSC and GEF Agency on the project progress. 	Annuals	PMU
Project Closeout Report	<ul style="list-style-type: none"> Based on the format of the PPR Summarize project results and overall outcomes to the PSC and GEF Agency. 	One month after technical close	PMU
GEF METT Tracking Tool	<ul style="list-style-type: none"> Inform GEF SEC on progress towards outcomes/impact relating to protected areas; Assessment of the project contribution to GEBs. 	CEO endorsement, Mid-term and Close	PAC
Mid-term Project Evaluation Report	<ul style="list-style-type: none"> External formative evaluation of the project; Recommendations for adaptive management for the second half of the project period; Inform PSC, GEF and other stakeholders of project performance to date. 	Midterm	External expert or organization
Terminal Project Evaluation Report	<ul style="list-style-type: none"> External summative evaluation of the overall project; Recommendations for GEF and those designing related projects. 	Before project completion	External expert or organization

Independent formal evaluations have been budgeted by the project and will adhere to WWF and GEF guidelines and policies. The Midterm Evaluation will be conducted within six months of the midpoint of the project and the Terminal Evaluation will be completed before the official close of the project. The evaluations provide an opportunity for adaptive management as well as sharing of lessons and best practices for this and future projects. The Operational Focal Point will be briefed and debriefed before and after the evaluation(s) and will have an opportunity to comment on the draft and final report.

An annual reflection workshop has been budgeted for the PMU and project partners to review project progress and challenges to date, taking into account results framework tracking, work plan tracking, stakeholder feedback and quarterly field reports to review project strategies, risks and the theory of change (ToC). The results of this workshop will inform project decision making (i.e., refining the ToC, informing PPRs and AWP&Bs).

2.8 Budget

The total GEF project funding is USD \$5,152,753, and the total project co-financing is USD \$4,624,395. A summary budget (by outcome and output) appears below, a detailed indicative project budget is included in the submission as a separate file.

Table 7: Budget Summary

CATEGORY	TOTAL
COMPONENT 1. INTEGRATED PROTECTED LANDSCAPES	1,475,724
TOTAL OUTCOME 1.1. Strengthened protected area management effectiveness	1,475,724
Output 1.1.1. Infrastructure, furnishing and communication equipment to support effective management of the KMPA, including ranger's quarters and multipurpose building	1,063,838
Output 1.1.2. Knowledge, Attitudes and Practices surveys, resource use map, and new land use plan for the KMPA with indigenous communities	169,753
Output 1.1.3. South-south exchanges and courses for PA staff and community representatives for improved PA management	242,133
COMPONENT 2: INTEGRATED PRODUCTIVE LANDSCAPES	2,884,578
TOTAL OUTCOME 2.1. Increased areas of forests and watersheds brought under sustainable land and water management (SLWM) Practices	2,884,578
Output 2.1.1. Rapid assessment of existing knowledge; assessments and surveys on the socio-economic, biological and environmental aspects of the NRW will be conducted based on the gaps	132,550
Output 2.1.2. Spatial analysis of the NRW, incorporating ecological assessments (2.1.1), land use and ownership data, and traditional use areas, developed through a participatory process	122,196
Output 2.1.3. Integrated management planning for the NRW with collectively defined strategies and implementation structure	128,250
Output 2.1.4. Multistakeholder platform established to ensure a participatory approach for development of 2.1.2 and 2.1.3	48,883
Output 2.1.5. Wetland management activities with local communities and other stakeholders in North Rupununi Wetlands to support SLWM practices	2,452,669
COMPONENT 3. POLICIES/INCENTIVES FOR PROTECTED AND PRODUCTIVE LANDSCAPES	158,500

TOTAL OUTCOME 3.1. Strengthened regulatory frameworks for natural resource conservation/sustainable use	158,500
Output 3.1.1. PA Act gap analysis and recommendations for improvements	118,500
Output 3.1.2. Revised PA Act, defined in consultation with stakeholders, presented to Cabinet for Review and tabling in Parliament	40,000
COMPONENT 4: CAPACITY BUILDING AND REGIONAL COORDINATION	388,582
TOTAL OUTCOME 4.1. Strengthened monitoring and evaluation system	274,157
Output 4.1.1. Monitoring and Evaluation reports (e.g., project progress reports, midterm evaluation, terminal evaluation)	274,157
TOTAL OUTCOME 4.2. ASL regional cooperation and knowledge sharing	114,425
Output 4.2.1. Coordination with ASL program and ASL regional coordination project)	56,395
Output 4.2.2. Knowledge management and communications products	58,030
PMC	245,369
TOTAL PROJECT COSTS	5,152,753

SECTION 3: GEF ALIGNMENT AND JUSTIFICATION

3.1 Incremental Cost Reasoning and Global Environmental Benefits

Under the baseline of work there is a moderate level of management of the protected area and an emerging interest in planning for and management of the NRW. The GEF project will fund improved management of the PA; in the NRW, the project will establish a multi-stakeholder platform for decision making and a management process and subgrants for wetland management. Overall, this will lead to an incremental value of improved biodiversity and forest and wetland management across a large landscape, and maintaining connectivity within and between the protected areas (KMPA and Iwokrama Forest Reserve to the North) and the NRW to maintain hydrological processes and habitat for large range species such as the jaguar.

The Incremental Cost Reasoning for the proposed project is presented in Table 8 below.

Table 8: Incremental Cost Reasoning

Component	Baseline	Alternative Scenario (Project Strategy)	Global Environmental Benefits (GEB)
1. Integrated Protected Landscapes	<ul style="list-style-type: none"> KMPA management is undertaken by the PAC with support of a site level team, which is responsible for regular monitoring and control, biological monitoring, environmental education with surrounding communities, and overall implementation of the Management Plan A Management Plan is in place and is currently being revised for the next 5 years KMCRG supports decision 	<p>The project will implement several key activities to strengthen the management of the KMPA:</p> <ul style="list-style-type: none"> Construction and furnishing of KMPA staff quarters and a multipurpose center for research, education and training – this will allow for better site level management and a center for community engagement The project will undertake a process for better resource use planning with PAC and local communities to ensure the PA continues to meet the goals of both conservation and traditional use 	<ul style="list-style-type: none"> Improved forest management and biodiversity Ensuring ecological integrity of the wetlands, and maintaining hydrological processes Improved connectivity, ensuring a large tract of land (1,883,800 ha) is compatible with ecological and biodiversity

	making, planning, and management with the PAC, and is receiving support through CI-Guyana and other donors		considerations
2. Integrated Productive Landscapes	<ul style="list-style-type: none"> NRW has various land ownership: Indigenous People (titled lands), various government agencies, private land-holders NRDDB provides a mechanism for community leaders to plan and manage lands/resources Various organizations work on monitoring and biological research around NRW, agricultural support systems (IFAD), RIL (FTCI), fisheries management (SWM and Field Museum), and close work with communities (CI, WWF Guianas, etc.) 	<ul style="list-style-type: none"> Despite its status as a globally significant wetland, there is currently no overarching plan in place to ensure the integrity of the wetland alongside productive practices. Under the GEF alternative scenario, a participatory planning process will be undertaken for the NRW, along with a governance and coordination system in place to support such a strategy. In addition to improved planning, the project will support activities that support wetland management and sustainable productive activities (livelihood development) within the wetlands 	
3. Policies / Incentives for Protected and Productive Landscapes	<ul style="list-style-type: none"> PA Act in place Strong history of titled indigenous lands Commitment to MEAs, Aichi Target 11, and Target 3 (30x30) commitment under the Global Biodiversity framework 	<ul style="list-style-type: none"> The project will undertake a gap analysis of the PA Act and produce recommendations to support strengthened management of PAs and the PA system. The project will support Guyana's commitment to Target 3 (30x30) and Aichi Target 11 by assessing options for counting areas outside Guyana's formal PA system towards these commitments. 	

Through the alternative scenario presented above, the project will contribute to several GEF Core Indicators, summarized in Table 9 below and included in the Results Framework in Appendix VII: GEF Results Framework.

Table 9: GEF Core Indicator Contribution

Project Core Indicators		Target
1	Terrestrial protected areas created or under improved management for conservation and sustainable use (Hectares)	611,000 hectares
4	Area of landscapes under improved practices (excluding protected areas) (Hectares)	901,800 hectares

6	Greenhouse Gas Emissions Mitigated (metric tons of CO2e)	847,406
11	Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment	700

Core Indicator 1: The project will be strengthening the management of the Kanuku Mountains Protected Area (KMPA), which is 611,000 hectares. The baseline METT score for KMPA is 76. The project expects to increase the METT score to 83 by project close.

Core Indicator 4: The project will improve planning of the North Rupununi Wetlands by developing a plan and a decision-making structure for implementing the plan. The North Rupununi Wetlands comprise an area of 901,800 hectares and this is the area proposed to be covered under the planning process. The exact scope/hectarage will be validated by a multistakeholder group during Year 1 of the project.

Core Indicator 6: The EX-ACT tool was used to calculate this core indicator. The project is expected to improve practices in 1,800 hectares during the life of the project, contributing to 72,489 metric tons of carbon emissions mitigated. Through improved planning and management, the project is expected to contribute to 774,917 metric tons of carbon emissions mitigated,³³ this is considered ‘indirect’ as it will be achieved post-project.

Core Indicator 11: The project is expected to have 700 beneficiaries, of which 350 are women. Beneficiaries will include: PAC site level staff that will participate in trainings, and communities around KMPA and in the North Rupununi Wetlands who will benefit from planning processes, trainings, and exchanges.

3.2 Alignment with GEF Focal Area and/or Impact Program Strategies

The project is funded under the GEF Biodiversity focal area and Sustainable Forest Management Impact Program (more specifically the Amazon Sustainable Landscapes (ASL) Program). The project is aligned to the following strategies:

- **Biodiversity 1-1 (BD 1-1):** *Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors.* In the North Rupununi Wetlands, the project will undertake a planning process for the NRW to support critical biodiversity and hydrological functioning of the wetland ecosystem, while at the same time establishing systems to ensure productive practices do not occur in areas where they would undermine or degrade the biodiversity value of the ecosystem. The project will also work to improve productive practices – including in the agriculture, forestry, fisheries, tourism, and extractive sectors - to be more biodiversity-positive. The proposed project will strengthen the effective management of the Kanuku Mountains Protected Area by addressing key gaps in the METT. This includes planning for natural resource use, and building the individual and institutional capacities needed to ensure the protected area achieves conservation objectives and global environmental benefits.
- **Sustainable Forest Management Impact Program (SFM IP):** *Promoting effective coordination for sustainable forest management.* Consistent with the overall ASL II design, the project will strengthen integrated landscape management and conservation of ecosystems in key landscapes within the Guianan portion of the Amazon. It will contribute to the ASL results of

³³ This assumes that at least 1% of the NRW will change from ‘very low degradation’ to ‘none’ due to the planning process and improved management of the wetlands.

improved management of protected areas, improved management of productive landscapes, and mitigation of CO2 emissions. The project will fully participate in ASL II coordination activities.

The project will also contribute to the Land Degradation focal area and Climate Change mitigation focal areas by promoting sustainable productive practices and wetland plans which, together, will limit deforestation and (wet)land degradation (along with the associated climate emissions).

3.3 Socioeconomic Benefits

The project seeks to generate socioeconomic benefits by improving livelihoods and land/resource management to enhance the enabling environment for natural resource management, sustained ecosystem services, and a stronger long-term foundation for economic activities.

A landscape management planning strategy for the NRW will enable better and more inclusive governance as it will allow for the interconnected elements of the landscape – biodiversity and ecosystems, socio-cultural and economic – to be managed in a way that meets the range of needed goods and services; spatially rationalizing different productive activities and conservation based on evidence and knowledge of how the landscape functions and traditional indigenous use; and enabling long-term, sustained collaboration among multiple stakeholders, with the purpose of achieving the objectives of a sustainable landscape. Enhanced coordination between agencies, for example, can reduce overlapping and conflicting land-uses, and thus reduce conflict between resource users. Multi-stakeholder participation in strategy development and implementation will further reduce conflict through transparent processes to identify and balance the needs and priorities of different stakeholders. By explicitly incorporating environmental considerations into the management planning, and allowing for collective decision making among stakeholders, trade-offs can be negotiated between productive activities, cultural and spiritual uses, and ecosystem values; sector agencies can coordinate and align on monitoring and regulation of resource use; and local communities can better influence how resources are managed. This in turn will generate socioeconomic benefits through direct use values (e.g., reliable freshwater supplies and provisioning of food resources, timber as well as non-timber forest products).

The implementation of livelihood and other initiatives that strengthen sustainable land and water management practices, with local communities and stakeholders in the NRW area, will bring many positive socio-economic benefits including: livelihood development (Output 2.1.5); enabling communities build resilience to economic and environmental shocks (for e.g., Covid-19, droughts and floods); and improving local communities' connection with their land, culture and traditional practices.

Project support for sustainable management of the NRW and the Kanuku Mountains Protected Area will help maintain habitats that provide direct socioeconomic benefits. Conservation of priority forest, wetland and savannah areas will maintain natural assets that underpin livelihoods and green economic opportunities, which are particularly important in the interior of Guyana given its economic disadvantages relative to the coastal area. Notably, reducing the likelihood of habitat fragmentation, which enhances ecological connectivity, will reinforce Guyana's continuing growth as an ecotourism destination, by maintaining wildlife movements, hydrological links, and other ecosystem processes that form the basis of the sector's prospects.

3.4 Risks and proposed Mitigation Measures

The risks and proposed mitigation measures are described in Table 10 below.

Table 10: Risks and Mitigation Measures

Risk	Likelihood & Potential Impact	Risk Mitigation Measures
PAC and site-Level capacity for management of the KMPA remains low (in specific areas)	Low likelihood High impact	Technical capacity building will be provided for staff and stakeholders, along with improved technology and other facilities to build overall ability of PAC and Site-level personnel to manage PA
Key stakeholders do not participate in NRW integrated landscape management planning process	Low likelihood High impact	Comprehensive stakeholder engagement strategy; multi-stakeholder and collaborative approach for development of landscape management strategy.
Local communities reject PA activities in KMPA, and/or landscape management planning in NRW out of concern for land claims and resource access	Low / Medium likelihood High impact	The PMU will undertake a series of consultations in the first 6 months of the project to validate the project activities and adjust as needed. The activities were preliminarily agreed through the KMPA management planning process. Mitigation measures include: Clear and sustained communication along with transparent, participatory processes to ensure stakeholder engagement and FPIC; pursue management that preserves community rights and access; community involvement in management and livelihood opportunities. Given the project is designed around a participatory process, the project will be designed with communities and other stakeholders. The project will engage all affected communities to ensure their support.
Business-as-usual extractive activities continue and infrastructure development (for example, road building) proceed regardless of landscape management planning	Medium likelihood High impact	Ensure participation of relevant agencies and stakeholders in strategy process, coordination and governance within the landscape to support sustained implementation of the management strategy.
Changes in Government policy with respect to conservation, natural resource management and/or climate change commitments	Low likelihood High impact	Project documentation to highlight how integrated sustainable landscape management, livelihood development and PA management advances social, economic, and environmental objectives. The project aligns to MEAs that Guyana is party to.
Change in village leadership	High likelihood Low Impact	The project will consistently engage communities and other stakeholders in all components. This engagement will account for changes in village leadership, and ensure new leaders are properly involved.
Project baseline activities are abandoned and/or project co-financing does not materialize	Low likelihood Medium impact	Clear commitments secured during project development

Covid-19 pandemic delays and otherwise negatively impacts implementation of project	High likelihood Medium Impact	Follow national COVID-19 guidelines and adhere to any additional guidance from key stakeholders. Additional information presented in Table 11 and 12.
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Table 11: Climate Risk Summary^{34, 35}

Climate Risk	Potential Consequence	Counter Measure
<p>Temperature Fluctuation: The climate change projection for southern Guyana indicates a 2 to 3°C temperature rise by 2050.</p>	<p>Temperature changes significantly impact agriculture unless proper adaptation measures are implemented. The following are the most visible impacts of climate change in the region.</p> <p>In terms of vulnerability:</p> <ul style="list-style-type: none"> Increasing temperature. <p>In terms of emissions:</p> <ul style="list-style-type: none"> Current emissions add up to 110 Gt, the most significant being related to agriculture. 	<p>The project will consider climate risks in all project components. The project will mainstream mitigations and responses into project-developed plans, including: resource use maps and land use maps in the KMPA (to understand how resources and use may change due to climate impacts, with responses incorporated), and in management planning for the NRW (to understand potential impacts, and have strategies in place).</p> <p>The project will support activities in line with the sustainable management of land and water resources in the landscape, promoting sustainable, productive practices and wetland plans that will limit deforestation and wetland degradation along with the associated climate emissions.</p>
<p>Frequency and Intensity of Heavy Rainfall: One of the greatest threats of climate change in the KMPA and NRW is the increased precipitation variability. This will result in greater occurrences of both extremes of floods and droughts.</p>	<p>Failure to manage these threats would lead to loss of connectivity, causing broader negative impacts at greater spatial scales, such as increased flooding, disruption of hydrological systems, and decreased gene flow for key groups such as fishes.</p> <p>In terms of vulnerability:</p> <ul style="list-style-type: none"> Shorter and intense rainy seasons. Greater variability of rainfall. 	

A Climate Risk Screening was conducted for the project, and is included in Appendix IV: Climate Risk Screening.

Table 12: COVID-19 Risk Analysis

Risk category	Potential Risk	Mitigations and Plans
Availability of technical expertise	Continued or renewed efforts in COVID-19 containment are likely	The project will utilize remote working tools to support and engage with partners and stakeholders. This includes the use of virtual communication tools and platforms.

³⁴ There is limited information on the vulnerability to climate change and the quantification of current and future emissions for the project areas. In this regard, the mainstreaming process will be based on new information and awareness processes with the local population.

³⁵ Conservation International. 2021. *Vulnerability, Adaptation and options for Mainstreaming Climate Change, Mitigation and Adaptation Action in the Rupununi.*

and capacity and changes in timelines	throughout project implementation.	
	Initial screening suggests that the availability of technical staff is not majorly affected by COVID. Minimal impact is anticipated.	The Guyana Government was closely involved during PPG and expressed support for this project to move forward despite the challenges of COVID-19.
Stakeholder engagement process	COVID-19 restrictions may limit effective engagement with stakeholders – particularly local communities (as a result of, for example, travel restrictions)	<p>Consultations will only be undertaken in compliance with national and local guidelines, and with COVID-19 precautions in place. This may involve, for example, small group sizes, the use of testing, and PPE.</p> <p>The PMU will develop guidance on COVID protocols in the two project areas. In all cases, continued attention will be given to ensuring the voices of IP, women, youth, and any underrepresented community members.</p>
Future risks of similar crises.	COVID-19 impacts may lead to increased livelihood/economic challenges and isolation of the communities.	Project support for sustainable management of the NRW and the KMPA will help maintain habitats that provide direct socioeconomic benefits. Conservation of these priority forest, wetland, and savannah areas will maintain natural assets that underpin livelihoods and green economic opportunities.

Table 13: COVID-19 Opportunity Analysis

Opportunity Category	Plan
Can the project do more to protect and restore natural systems and their ecological functionality?	The project is focused on protecting and ensuring the ecological functioning of southern Guyana. The project will strengthen the management of the KMPA to preserve its ecological functioning. In the NRW, the overall project goal is to ensure the ecological and hydrological functioning of the wetlands, in harmony with productive activities. Since the two areas are contiguous, improved management of both sites will strengthen ecological connectivity to maintain a large, intact area of globally critical Amazonian ecosystems.
Can the project include a focus on production landscapes and land-use practices within them to decrease the risk of human/nature conflicts?	The project will target one productive landscape, the NRW, supporting participatory planning and execute activities to support sustainable land and water management. The goal is to balance productive use with sustainable land and water management practices to ensure the ecological and hydrological functioning of the wetlands.
Can the project promote circular solutions to reduce unsustainable resource extraction and environmental degradation?	The project will work to integrate productive activities (forestry, agriculture, tourism) and sustainable land and water management considerations – so that the landscape's long-term environmental health, functioning, and associated ecosystem services are secured while at the same time ensuring the landscapes provide livelihood and productive benefits. There are limited opportunities for circular solutions.
Can the project innovate in climate change mitigation and engage with the private sector?	The project will contribute to climate change mitigation by promoting sustainable, productive practices (e.g. Reduced Impact Logging, in coordination with small community enterprises), and limiting deforestation and (wet)land degradation (along with the associated climate emissions).

3.5 Consistency with National Priorities or Plans

The proposed project is consistent with Guyana's constitution, which promotes sustainable use and protection of flora, fauna, water and other natural resources and establishes that citizens have a duty to participate in activities designed to improve the environment. Legislation, policies and strategies that have been enacted in furtherance of these principles include:

- The revised Low Carbon Development Strategy (LCDS) which is a long-term national development strategy focusing on improving economic, social, and environmental resilience in Guyana. This revised strategy builds on the previous LCDS, and expands into environmental services, water resources management, climate resilience, biodiversity, and marine economy.
- Leader's Pledge for Nature was endorsed by Guyana in 2021. This pledge for nature is a commitment to urgent and transformational actions to address biodiversity loss, safeguard planetary safety net and ensure countries build forward better towards net positive outcomes for nature, climate and sustainable development.
- Protected Areas Act, 2011, which provides for the creation, management, and financing of the NPAS management.
- Environmental Protection Act, 1996, which provides for the protection, conservation and management of natural resources and the environment.
- Amerindian Act, 2006, which addresses conservation and resource management in indigenous territories and the exercise of traditional user-rights over resources.
- The Forests Act, 2009, which promotes sustainable management of forests, and the National Forest Plan and Policy, 2018.
- Wildlife Conservation and Management Act, 2016, which provides for the protection, conservation, management, sustainable-use, internal and external trade of Guyana's wildlife.

National plans and priorities also point to infrastructure and agricultural development in the NRW. The project will promote a participatory and integrated management approach for the NRW to balance national plans and priorities around infrastructure, agricultural development and livelihood development with environmental dimensions and natural resource management in the NRW, and in line with Guyana's MEA commitments (described below).

Protected area management, NRW management strategy and livelihood strengthening also support Guyana's obligations under several multilateral environmental agreements including: United Nations Convention on Biological Diversity (UNCBD) and Nagoya Protocol, United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, United Nations Convention to Combat Desertification (UNCCD), Convention on International Trade in Endangered Species (CITES), Escazu Agreement, Aichi Target 5 (By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced), and Aichi Target 11 (By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, are conserved...). Guyana is also committed to Target 3 (protection and conservation of at least 30 percent of the planet by 2030 – or 30x30) under the Global Biodiversity framework. Finally, Guyana is committed to the UN Sustainable Development Goals, of which Goal 5 (gender equality), Goal 12 (responsible consumption and production), Goal 13 (climate action), and Goal 15 (life on land) are of particular relevance. Building on these commitments, the proposed project will strengthen and improve landscape connectivity through sustainable management of critically important wetland areas and protected areas within southern Guyana.

3.6 Innovativeness, Sustainability & Potential for Scaling up

Innovativeness

The proposed project has several innovative aspects incorporated into the project strategy. Under Component 2, the project will undertake a participatory approach with all key stakeholders for integrated management planning for the North Rupununi Wetlands, one that balances productive use with environmental considerations. While this is not a new approach globally, and there are many lessons and best practices for the project to build on, this is the first time that such a planning process will be done in Guyana.

A second innovative aspect of the project is under Component 3. Given Aichi Target 11, and the new Target 3 (30x30) commitment under the Global Biodiversity framework, there is renewed global attention on what contributes towards 'conservation of 30% of earth's land and ocean by 2030' and how to achieve these goals– with special attention given to other effective area-based conservation measures (OECM) and indigenous lands. This project will assess options for counting areas outside Guyana's formal PA system towards these commitments.

Sustainability

Each component of the project strategy has been designed to ensure sustainability.

Under Component 1, the project builds on PAC's existing mandate and the activities the KMPA site level team performs on an ongoing basis (community engagement, implementing the management plan). The infrastructure supported by the project will be designed in such a way that ensure longevity; PAC will cover maintenance costs. In addition, the products delivered through Component 1 – e.g. resource-use map and land-use plan – will be done in a participatory way to ensure buy-in, and will be aligned with the KMPA management plan to ensure alignment with the longer-term strategy and therefore, long-term use.

Under Component 2, the project will ensure a participatory approach towards integrated planning for the NRW. This planning process will include an accompanying coordination/governance structure to provide the basis for long-term planning in the NRW. This governance structure will likely build on the multi-stakeholder platform established through the project to sustain inclusive decision-making in the NRW.

Under Component 3, a revised PA Act will be presented to government, and, if approved, would ensure a long-term enabling environment for effective management in the NPAS.

Scaling-up

There is potential for scale-up of project results nationally and regionally/globally. As noted above, the process being supported in the NRW (towards integrated management planning) is the first of its kind in Guyana. If successful, such planning could be replicated in other parts of the country. In addition, the assessments and recommendations for meeting Target 3 – in terms of regulatory and internal accounting procedures -could provide important lessons and guidance globally. This is an area of global interest, with many countries looking for examples and good approaches.

3.7 Lessons learned during project preparation and from other relevant projects

1. The project design reflects several key lessons learned during the PPG phase of this project and from other relevant GEF Projects. There exists a rich body of experience in Guyana with respect to pursuing sustainable resource management in partnership with local communities. This experience is accompanied by a widespread consensus that maintaining Guyana's forests, freshwater resources and other natural capital is a priority, for biodiversity as well as ecosystem services for Guyana's people. This reinforces the validity of the project's overarching goals ensuring effective management of protected areas and applying improved resource management tools and processes.
2. A number of lessons relate to integrated management of the NRW. First, local communities are responsive to constructive engagement as key partners, being well aware of the need for sustainable use of natural resources in general. As traditional leadership plays an important role in rural communities, engagement processes need to explicitly incorporate the role of traditional leadership, while also meeting standards for broad-based representation and participation, including gender considerations and culturally appropriate considerations for Guyana's Indigenous communities. Second, sustained collaboration and joint working among diverse stakeholders is a challenge that requires attention as early as possible in process. Third, long-term management of the NRW requires champions within government and thorough engagement and involvement of relevant actors within government as well as other stakeholder groups. Although indirectly related, previous success in the protected areas planning and management process provide informative examples of how to successfully navigate towards successful outcomes.
3. Effective communication of results to non-technical audiences requires that documentation be prepared with the specific needs of the particular audience in mind, and in a simple form of English as well as appropriate local languages. Especially in projects that pursue broad-based stakeholder buy-in, it is critical that communications and awareness materials be well tailored to specific audiences.
4. Operationally, successful project implementation relies on defining a robust M&E framework in the Project Design phase, within the overall context of a logical framework; dedicated leadership within the project management structure; and sufficient resources for training project staff in use of administrative procedures and manuals. NGO and CBO involvement is also an important ingredient in achieving lasting success. Even in the absence of strong civil society partners, specific provision for their involvement should be considered with particular attention to capacity building, as they are a key element in sustaining outcomes beyond the life of the project.
5. Some earlier projects that relied on a high-level Project Steering Committee experienced limited engagement of senior government officials over the course of the project, owing to the many priorities and demands faced by such individuals. For effective project coordination, guidance and oversight, the project governance structure should include in addition to a Steering Committee of senior/executive persons a body with less senior/more technical members who are more able to consistently allocate time to the project. Such a two-tiered structure is more likely to provide ongoing support to the Project Implementation Unit.

The project design sought to address the above-mentioned lessons: (i) support for the development of clearly defined, well-structured institutional arrangements; (ii) clear objectives and project design, including M&E framework and arrangements; (iii) participatory stakeholder processes for design and planning for sustainable management areas; (iv) a conflict resolution process and mechanism to facilitate stakeholder collaboration and consensus; and (v) a broad-based project governance structure that promotes ongoing guidance and input.

SECTION 4: TECHNICAL APPENDICES

Appendix I: Project Map(s) with geo-coordinates

- Kanuku Mountains Protected Area: 3.17682° N, -59.5957° W
- North Rupununi Wetlands: 4.035903° N, -59.311544° W

Appendix II: Stakeholder Engagement Plan

Included as a separate document with the submission package.

Appendix III: Knowledge Management and Communications Plan

The project knowledge management and communications strategy will ensure lessons and best practices are developed, stored and appropriately disseminated to ensure sustainability and uptake more broadly. Knowledge management and communications is tracked and budgeted under *Component 4: Capacity Building and Regional Coordination*.

Lessons Learned

Existing lessons and best practices were gathered relating to management of the NRW and KMPA during project development and informed project design. Lessons and best practices can be found documented in *Section 3.7 Lessons learned during project preparation*.

During execution of the Project, lessons and best practices from similar projects will continue to be collected and analyzed during project execution to inform execution of the project strategy. Lessons learned and best practices from the Project will be captured on an ongoing basis and documented in the semi-annual project progress reports (PPR) and Midterm and Terminal evaluation.

Knowledge Management and Communications Plan

A strategic knowledge management and communications plan has been budgeted for this Project and will include the following knowledge and communication products:

Component	Deliverable	Timeline
Component 1: Integrated Protected Landscapes	Knowledge, Attitudes and Practices surveys – the information will be consolidated into a report for both benchmarking progress and informing the project strategy.	Year 2
	Resource use maps and a land-use plan for the KMPA with indigenous communities will be developed and shared for guiding sustainable resource use. This is the first time a land-use plan has been done for a PA in Guyana, therefore the methodology will be documented for wider application.	Year 3 - 4
	South-south exchanges and courses for PA staff and community representatives to share best practices and lessons learned from the Project and to learn from practitioners in the same field to strengthen PA management.	Year 2 - 4

Component 2: Integrated Productive Landscapes	Knowledge of the NRW pertaining to traditional knowledge, socio-economic, biological, and environmental aspects will be collated. This information is currently disbursed; therefore a knowledge management system is needed. The information will also be shared through communication products and information sheets.	Year 1- 2
	The project will produce and share results of a spatial analysis of the NRW, defined through a participatory process.	Year 2
	The project will deliver a management plan/strategy for the NRW to guide decision making. Complementary knowledge products and information will be shared to build awareness and buy-in to the planning process.	Year 3 - 4
	Lessons and best practices from the SLWM activities under 2.1.5 will be documented and shared	Year 3 - 4
Component 3: Policies/Incentives for Protected and Productive Landscapes	A PA Act gap analysis and recommendations will be developed and shared	Year 3
	The revised PA Act will be developed in consultation with stakeholders, and will be available for public review.	Year 4
4. Capacity Building and Regional Coordination	6-monthly project progress reports	Year 1 - 4
	Midterm evaluation	Year 2 (delivered early Year 3)
	Terminal evaluation	Year 4
	Participation in annual ASL meeting	Year 1 - 4
	Participation in ASL field visits, exchanges, study yours	Year 1 - 4
	Participation in face-to-face and virtual ASL meetings	Year 1 - 4
	Inputs to ASL project website	Year 1 - 4

Alignment to Amazon Sustainable Landscape Program

The project’s knowledge management and communication plan will be closely aligned with the ASL Coordination Child Project. The ASL Coordination Child Project provides a platform for regional cooperation, including sharing of experiences, lessons, and solutions for participating countries in the ASL. Component 4 ensures budget for full project participation in ASL, including:

- Participation in an annual face-to-face meeting.
- Participation in workshops, field visits, exchanges and/or study tours.
- Participation in other face-to-face and virtual ASL meetings.
- Relevant knowledge and communication products produced by the project will be shared on the ASL website, with relevant communication products packaged by ASL, to ensure wider access and uptake.

All knowledge and communication products produced by the Project will be shared on the ASL website to ensure wider access and uptake. In addition, the PMU will share relevant documents directly with stakeholders as laid out in the Stakeholder Engagement Plan, this may include through mail, presentations at workshops, and meetings of the PSC.

Appendix IV: Climate Risk Screening

Included as a separate document with the submission package.

Appendix V: Activity Matrix and Timeline

Output	Activity	Who	Implementation of technical activities						
			6 mth	Y1		Y2	Y3	Y4	6 mth
				6 mths	6 mths				
Start-up	6 months have been allocated for start-up activities – safeguards compliance memo, recruiting PMU		X						
Close-out	6 months have been allocated for close-out activities – final financial and technical reporting, terminal evaluation								X
SEP	Consultation with key stakeholders, according to the SEP, to validate the project strategy presented in Project	PMU	X	X					
SEP	Adjustments, as needed, to the project strategy based on consultations	PMU	X	X					
1.1.1	Recruit architecture/engineering consultant to review staff quarters and multipurpose center, prepare preliminary estimates, site technical reports, tender documents	PAC			X				
	National Open Tender procurement process for contractors and supervising engineer consultant	PAC			X				
	Recruit contractors and supervision consultant	PAC			X				
	Construction of staff accommodation and construction of multi-purpose center	PAC, contractors				X	X	X	
	Procure furnishing for the buildings	PAC					X	X	
1.1.2	Conduct Knowledge, Attitude and Practices (KAP) Surveys	PAC			X	X	X		
	Development of Resource-Use Maps (RUM)	PAC					X	X	
	Develop Zoning/Land-Use Plan for KMPA	PAC					X	X	
1.1.3	South-south exchanges for PA management	PAC			X	X	X	X	
	Online and in person short courses related to PA Management for PAC staff and communities	PAC			X	X	X	X	
	Targeted support for KMCRG and communities based on needs assessment conducted in the first year of the project.	EPA			X	X	X	X	
2.1.1	Desktop review of existing research and traditional knowledge in the NRW	PMU			X				
	Identify priority areas for new assessments and surveys to inform NRW management planning	PMU			X				
	Based on priority areas identified above, undertake assessments and surveys to address gaps	PMU			X				
	Develop communication products and information sheets based on information gathered	PMU				X			
2.1.2	Inception workshop with stakeholders to present spatial analysis exercise, share perceptions on the NRW and its importance, receive feedback from	PMU				X			

	stakeholders on what needs to be included in the spatial analysis and potential information to be incorporated								
	Data collection and update. Existing data on mining, forestry, agriculture and other land-uses; Indigenous titled land, traditional use areas, areas of cultural significance, biodiversity, hydrology, will be collected.	PMU			X				
	Produce first version of a map, based on spatial analysis, of the NRW	PMU				X			
	Workshop with stakeholders (including MSP) to present and receive feedback on the first version of the spatial analysis , based on spatial analysis					X			
	Updated Spatial analysis and obtain stakeholder feedback through a workshop					X			
	Final spatial analysis results presented and shared with stakeholders including GoG and communities	PMU				X			
2.1.3	Identify options for integrated management planning for the NRW	PMU MSP				X			
	MSP agrees to management planning option and process to be undertaken – including goals and visions	PMU MSP				X			
	First draft of the management plan/strategy	PMU				X			
	First workshop with key stakeholders to present the strategy and receive feedback. The workshop will include the members of the multi-stakeholder platform, Indigenous communities, government, and academia.	PMU				X			
	Second draft of the management plan/strategy prepared	PMU					X		
	Second workshop with key stakeholders to present the strategy and receive feedback.	PMU					X		
	Final draft of the management plan/strategy presented to MSP for endorsement, then to relevant levels of government if appropriate	PMU, MSP end.						X	
	Management Strategy distributed to all stakeholders	PMU						X	
2.1.4	Develop and agree to a ToR for multistakeholder platform, led by EPA and with representatives from all stakeholders, including both women and men	PMU			X				
2.1.5	Selection criteria for wetland management activities developed and agreed by MSP	PMU MSP					X		
	Call for proposals for activities that support SLWM practices	PMU					X		
	Select at least 2 proposals, no objection from PSC and WWF GEF Agency	MSP						X	
	Selected projects implemented by partners	TBD						X	
	Develop training materials for RIL, including development of a training curriculum, training manuals, provision of formal training and certificates	GFC							

	Conduct training sessions with loggers, support technical exchange with University of Guyana and Guyana School of Agriculture	GFC							
	Support field training and host trainings on equipment use	GFC							
3.1.1	Conduct a legal review and gap analysis of the PA Act, 2011.	PAC		X					
	Preparation of regulatory text and Revised PA Act in consultation with all key stakeholders (includes public review of revised ACT)	PAC			X	X			
	Submission of Revised Act to Cabinet for Review and tabling in Parliament.	PAC					X		
4.1.1	Deliver project reporting requirements, including monitoring and tracking project progress	PMU		X	X	X	X		
	Mid-term and terminal evaluation conducted	Consultants							
4.2.1	PMU and 1-2 stakeholders participate in the annual face-to-face meeting hosted by the ASL Coordination Child Project	PMU		X	X	X	X		
	PMU and 1-2 stakeholders participate in three ASL-hosted workshops, field visits, exchanges and/or study tours per year	PMU		X		X	X		
	Periodically disseminate information to the ASL global coordination project (on request) and disseminate information shared by the ASL at the regional level.	PMU		X	X	X	X		
4.2.2	Develop in-depth communication strategy	PMU			X				
	Develop and disseminate knowledge and communication products through ASL Coordination project and to specific stakeholders	PMU			X	X	X		
	Organize and participate in relevant events, workshops, webinars, and platforms to disseminate project results.	PMU					X	X	

Appendix VI: Project Management Unit (PMU) Terms of Reference (TORs)

TOR: Project Manager / Technical Advisor

Major Function

The Project Manager will supervise staff in the Project Management Unit (PMU), coordinate with project partners, and provide day-to-day management of the project. The project manager will spend 20% time on project management, 50% time supporting the technical delivery of Component 2, and 30% time on Component 4 (monitoring and reporting, supporting ASL at the programmatic level, and supporting development of knowledge management and communications).

Responsibilities

1. Project Management:

- Day-to-day management, monitoring and evaluation of project activities and results as outlined in the ProDoc, Grant Agreement, and Annual Work Plan and Budget to achieve the project objective and targets in the Results Framework

- Hold monthly virtual meetings with project partners
- Manage the workflow for the Project Steering Committee (PSC)
- In collaboration with all project sub-grantees and partners, develop the Annual Work Plan and Budget (AWPB) for each project year, for approval by the PSC and no-objection from the WWF GEF Agency
- Provide high level oversight and monitoring of procurement and expenditure in line with the AWPB
- Review progress of work plan and monitoring plan
- Lead planning and organization for reflection workshop to identify lessons learned and propose potential changes for adaptive management to ensure project results and indicator targets are reached
- Responsible for organization of Inception workshop and other project-level workshops/meetings
- Represent the project and provide support for project supervisions and internal and external reviews/evaluations
- Oversee the preparation and disbursement of sub-grants

2. Staff management:

- Supervise the PMU staff including Project Assistant/M&E Officer, Finance Officer, Technical Officer and Safeguards and Gender Officer.
- Prepare TORs to recruit consultants, staff and sub-contracts in consultation with and for no-objection from WWF GEF Agency

3. Technical support to Component 2:

- Technically lead and advise on outputs under Component 2, including:
 - Spatial analysis of the North Rupununi Wetlands (NRW)
 - NRW planning process, including providing input into key deliverables, preparing and/or reviewing technical information and reports to inform the planning process, and overseeing the presentation and dissemination of the information
- Support the establishment of a multistakeholder platform, including: drafting the terms of reference; support the identification of organizations and participants for the multistakeholder platform; lead communication with those organizations and participants and ensure an inclusive planning process; coordinate and facilitate meetings of the multistakeholder platform
- Oversee the small grants process under Output 2.1.5, including: lead a participatory process to define the eligibility and selection criteria; organize and oversee the call for proposals (drafting the RFP, receiving proposals, leading the review/selection process); monitor the progress of selected grantees and ensure compliance with gender, safeguards, and stakeholder engagement policies

4. Reporting (Output 4.1.1):

- Formulate semi-annual Project Progress Reports and ensure timely delivery to the WWF GEF Agency
- Oversee development of quarterly financial reports and ensure timely delivery to the WWF GEF Agency
- Ensure co-finance reporting on a yearly basis

5. ASL Coordination (Output 4.2.1):

- Represent the project at ASL meetings and workshops
- Coordinate with ASL Coordination Project, providing information as needed, and ensure full alignment and participation with ASL

6. Communications and Knowledge Management (Output 4.2.2):

- Technically lead and advice on communication products
- Ensure implementation of the project's knowledge management strategy

7. Quality Assurance:

- Provide quality assurance for project activities, including in sub-grants
- Review reports and other products from consultants, staff, and sub-grantees, and ensure quality
- Ensure implementation in line with the GEF and WWF standards and policies

8. Partnerships:

- Coordinate with co-financed projects and liaise with project partners to ensure co-financing commitments are realized
- Attract additional partners and co-financing
- Ensure smooth coordination and communication among all project partners, and with the Program partners
- Manage stakeholder engagement throughout the project duration
- Represent the project, as needed, at various meetings and workshops

Qualifications and Requirements

- 5 years technical working experience, including 2 years of project management experience
- Bachelor's Degree, post-graduate degree preferred
- Experience in managing similar, complex, multi-stakeholder projects
- Experience leading a team of staff and coordinating sub-grant partners
- Ability to interact with senior government and NGO staff
- Adaptive management skills
- Experience delivering technical and financial reporting to donor agencies on large projects
- Technical experience and knowledge in the thematic area of the project
- Experience with GEF Projects and GEF knowledge an advantage

TOR: Financial Officer

Reports to: Project Manager

Major Function

Under the direction of the GEF Project Manager, manages all financial and operational aspects of the Project including project budgeting, contracting, subrecipient monitoring and evaluations, financial tracking and reporting, and administrative functions. Provides financial and administrative assistance to, and oversight of, program staff and grantees to ensure that budgets and agreements are handled in accordance with WWF policies, procedures, systems, and donor requirements.

Key Responsibilities

- Prepares, administers, and maintains the GEF project budget, ensuring that data is accurate and current. Reviews and monitors status of the budget, against the annual budget and the annual project workplan. Ensures spending levels are appropriate and coding is correct. Identifies problems and recommends corrective action, assists in the revision of budgets and communicates issues to the Project Manager. Ensures GEF Requirements are met including the

budget structure contained in the ProDoc Budget, and that all expenses are associated with the incremental costs

- Reviews all documentation received from proposed subrecipients per the WWF pre-award process, performs subrecipient risk analysis and develops a risk mitigation plan for the project.
- Coordinates and prepares financial reports for submission to the WWF GEF Agency, ensuring GEF requirements are met
- Supports, prepares and monitors grant and consultant agreements ensuring compliance with agreement terms. Ensures agreements and payments are processed timely and in accordance with WWF policy and procedures. Prepares paper work for approval, secures signatures, and distributes documents to appropriate parties
- Reviews and analyzes sub-recipient's financial reports to ensure compliance by sub-recipients with WWF-US and GEF Agency reporting requirements including project partner co-financing. Notifies grantees of any problems or discrepancies and provides technical assistance to grantees in resolving problematic issues
- Supports WWF GEF Agency Annual supervision missions by providing requested documentation and other assistance as needed
- Assists independent mid-term and final evaluations by providing all requested financial information. Provides feedback where relevant on evaluation reports and ensures that corrective actions based on the mid-term evaluation recommendations are taken when related to financial issues
- Maintains information and files pertaining to all financial and administrative aspects of the project including agreements. Regularly monitors on-going compliance with WWF reporting requirements and individual project deadlines. Ensures all project reports are acknowledged and routed to appropriate individuals for review
- Provides support to the project management and coordination of day-to-day administrative operations and special projects. Identifies, coordinates and expedites the communication of information and issues both interdepartmentally and intra departmentally, as well as externally with subrecipients, the Project Steering Committee, the WWF GEF Agency and independent evaluators as necessary
- Performs other duties as assigned

TOR: Project Assistant/Monitoring & Evaluation Officer

The Project Assistant/ Monitoring and Evaluation Officer) will act as a liaison officer to the Project Manager/Technical Advisor (hereafter 'Project Manager') under the project and will provide sound technical and administrative support and guidance, and be responsible for monitoring and evaluation activities in the planning and implementation of project outputs as well as overall project management and administration. 100% time will be dedicated to assisting the Project Manager. The Project Assistant / Monitoring and Evaluation Officer will spend 20% time on assisting the Project Manager in the administrative and technical support aspects of the project (assist in developing the multi stakeholder platform, assisting in the awareness campaign and a communication strategy, etc) and 80% time on monitoring and evaluation activities (design methodology, manage database, monitor project progress, complete the results framework and work plan tracking, complete the 6-month and 12-month Project Progress Reports, etc).

Under the supervision of the Project Manager/Technical Advisor, and in coordination with the Environmental Protection Agency, the Project Assistant/M&E Officer will have the following specific responsibilities.

Key Responsibilities

1. Administrative Services

- Provide support to the Project Manager in processes related to planning and administration;
- Liaise and follow up with the responsible parties for implementation of project activities on matters related to progress reports;
- Coordinate logistical aspects for the organization of workshops, meetings and events in coordination with the project's technical team and partners;
- Ensure permanent communication and coordination on administrative issues with the Implementing Partner and other project partners;
- Provide support to project audits and external evaluations; and
- Manage the project office (contracts, cleaning services, etc.)

2. Technical Support Services

- Provide sound technical support and guidance to the Project Manager and project specialists in planning and implementation of the project outputs, namely: Knowledge, Attitudes and Practices surveys and south-south exchanges within indigenous communities for improved PA management; development of multi stakeholder platform; and assisting in the awareness campaign and a communication strategy.

3. Monitoring and Evaluation Activities

- Work with Project Manager to design methodology for the collection of relevant data in close collaboration with all technical specialists;
- Work with field teams and implementation partners to ensure they are building and using effective monitoring systems aligned with approved logic models and work plans;
- Work with the Safeguards, Stakeholder Engagement and Gender Specialist to ensure the M&E accurately reflects these areas of work;
- Based on the M&E frameworks described above, design a database that helps maintain data collected over the course of project implementation and is transparent to all partners;
- Manage said database to ensure data is accurate and updated, with guidance to ensure consistency of measurement methodologies over time;
- Monitor application of project M&E plans, gather and analyse data, and produce quarterly, semiannual, and annual reports on project progress and impact in partnership with the Manager;
- Provide a completed and up to date Results Framework and Work Plan Tracking for the WWF-GEF Project at the end of each project year;
- Assist the Project Manager to write the 6-month and 12-month Project Progress Reports for the WWF-GEF Project, including progress, reflections, adaptive management, M&E outcomes, and project ratings;
- Proactively investigate and reflect on emerging data collection for adaptive management proposals;
- Provide input into an annual reflection workshop to inform adaptive management of the project;
- Collect and analyse additional data relevant to project from external sources;
- Troubleshoot data collection challenges;

- Monitor for data inaccuracies or inconsistencies and seek clarifications when needed.

Other

- Other tasks necessary for adequate project management; and
- Any other duties that may be assigned by the Project Manager as may be deemed necessary during the life of the project.

Functional Competencies:

Job Knowledge/Technical Expertise

- Understands the main processes and methods of work regarding the position;
- Possesses basic knowledge of organizational policies and procedures relating to the position and applies them consistently in work tasks;
- Demonstrates good knowledge of information technology and project management tools and applies it in work assignments;
- Demonstrates ability to identify problems and proposes solutions;
- Design and implementation of Management Systems;
- Uses information/databases/other management systems;
- Orientation with stakeholders, project partners, EPA, and WWF GEF Agency;
- Reports to WWF GEF Agency and EPA in a timely and appropriate fashion;
- Organizes and prioritizes work schedule to meet project needs and deadlines;
- Responds to client needs promptly;
- Promoting Accountability and Results-Based Management; and
- Gathers and disseminates information on best practice in accountability and results-based management systems.

Qualifications and requirements

Undergraduate degree with experience in management and administration.

- At least four years of technical working experience, including two years of project administration and project management;
- At least two years experience in the design and implementation of M&E systems for development or conservation projects;
- Experience in research methods, designing and implementing tools and strategies for quantitative and qualitative data collection, analysis and production of reports is preferred;
- Field experience is preferred, especially in a monitoring and evaluation role in a development or conservation context;
- Working experience in a project management setting involving GEF Projects and GEF knowledge an advantage;
- Experience in liaising and cooperating with government officials and NGO staff;
- Experience in managing similar, complex, multi-stakeholder projects;
- Experience in assisting with technical reporting to donor agencies on large projects;
- Experience in coordination and logistics for meetings, trips, and events, including per diems, and in administrative functions;

- Computer skills and experience with data processing; and
- References should be provided so as to verify past projects managed.

Responsibilities

- Work with Manager to design methodology for the collection of relevant data in close collaboration with all technical specialists
- Work with field teams and implementation partners to ensure they are building and using effective monitoring systems aligned with approved logic models and work plans
- Work with the Safeguards, Stakeholder Engagement and Gender Specialist to ensure the M&E accurately reflects these areas of work
- Based on the M&E frameworks described above, design a database that helps maintain data collected over the course of project implementation and is transparent to all partners
- Manage said database to ensure data is accurate and updated, with guidance to ensure consistency of measurement methodologies over time
- Monitor application of project M&E plans, gather and analyze data, and produce quarterly, semiannual, and annual reports on project progress and impact in partnership with the Manager
- Provide a completed and up to date Results Framework and Work Plan Tracking for the WWF-GEF Project at the end of each project year
- Assist the Manager to write the 6-month and 12-month Project Progress Reports for the WWF-GEF Project, including progress, reflections, adaptive management, M&E outcomes, and project ratings
- Proactively investigate and reflect on emerging data collection for adaptive management proposals
- Provide input into an annual reflection workshop to inform adaptive management of the project
- Collect and analyze additional data relevant to project from external sources
- Troubleshoot data collection challenges
- Monitor for data inaccuracies or inconsistencies and seek clarifications when needed
- Provide logistical and coordination support to facilitate project evaluations (by WWF-GEF Agency and external evaluators)

Qualifications

- Bachelor's degree in environmental science or management, program evaluation, or a related field
- Must have at least 4 years of relevant work experience. A Master's degree in the above mentioned fields will substitute for 2 years of experience
- Ideally 2 of those years of experience will be in the design and implementation of M&E systems for development or conservation projects
- Ability to manage multiple projects and priorities
- Strong analytical skills/expertise in analyzing data
- Strong writing skills
- Experience in research methods, designing and implementing tools and strategies for quantitative and qualitative data collection, analysis and production of reports is preferred
- Experience using statistical software, such as R or Stata, is desired
- Expertise using database software, such as Excel and Smartsheets, is preferred

- Familiarity with PPMS (Program and Project Management Standards) and results-based management principles, tools, and techniques is preferred
- Field experience is preferred, especially in a monitoring and evaluation role in a development or conservation context.

Appendix VII: GEF Results Framework

Project Outcome	Indicator	Definition	Method	Who	Disaggregate	Base	Targets			
							YR1	YR2	YR2	YR4
Objective: to strengthen landscape connectivity through improved management of the Kanuku Mountains Protected Areas and North Rupununi Wetlands in southern Guyana										
	Area of contiguous landscape under some form of management plan	Number of hectares with some form of management planning (PA management plan, IP management plan, wetland management planning process)	Count hectares of landscape that are connected to NRW and KMPA and under some form of management plan (Indigenous lands with plans in place, NRW under plan, Iwokrama, KMPA)	EPA						1,883,800 ha
	<u>Core Indicator 6:</u> Greenhouse gas emissions mitigated (metric tons of carbon dioxide equivalent)	This indicator refers to the total reduction of GHG emissions and enhancement of sinks and reservoirs reported in tons of carbon dioxide equivalent (CO2e).	GFC carbon assessment tool	GFC		0				847,406
	<u>Core Indicator 11:</u> Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment.	Direct beneficiaries are all individuals receiving targeted support from the project. Targeted support is the intentional and direct assistance to individuals or groups who are aware that they are receiving that support and/or who use the specific resources. Cumulative	Count beneficiaries of targeted support (through meeting / workshop minutes, surveys)	PMU, PAC, GFC	Gender	0		100 (40% women)	300 (40% women)	700 (40%+ women)
1.1. Strengthened protected area management effectiveness	<u>Core Indicator 1.2:</u> Terrestrial protected areas under improved management effectiveness	Number of hectares of protected area whose management has been improved	METT	PAC		-				611,000
	Total METT score of KMPA	Total METT score (GEF funding + baseline)	Calculate METT Score annually	PAC		76		78	80	83

	<p>Total score of KMPA relevant METT indicators</p> <p>7. Is there a management plan or equivalent and is it being implemented? 7a. The management planning process allows adequate and equal opportunities for stakeholders to influence management</p> <p>9. Do you have enough information to manage the area?</p> <p>11. Do the people managing the area have the necessary knowledge and skills?</p> <p>15. Are equipment and facilities sufficient for management needs</p> <p>30. Are indigenous people involved in management decisions?</p> <p>31. Do local communities living in or near the protected area have input to management decisions?</p>	Score: Score based on METT assessment of relevant indicators	Calculate METT Score annually (using METT version 4-1), out of 18 points	PAC		(2020 score: 11/15)			13	15
	Status of plans for sustainable natural resource use	Plans - resource-use map, land-use plan, to be developed in a participatory way		PAC		-		KAP survey	Resource Use map	Land use plan agreed by PAC and Indigenous Communities
	% of community members that believe they have a role in decision making	Decision making –based on KAP survey definition	KAP Survey	PAC	By gender	42%				65%
	% of community members that say they have received any benefit from the PA	Benefit: equipment/infrastructure, training and employment	KAP Survey	PAC	By community, gender	10.1%				15%

2.1 Increased areas of forests and watersheds brought under SLWM Practices	Core Indicator 4: Area of landscapes under improved practices (hectares; excluding protected areas)	This indicator captures the total area of landscapes under improved practices, including in production sectors, that lead to improved environmental conditions and/or for which management plans have been prepared and endorsed and are under implementation.	Total sub-indicators below	PMU		-				901,800
	4.1. Area of landscapes under improved management to benefit biodiversity	Landscape area being managed to benefit biodiversity, but which is not certified	Area under improved planning	PMU		-				900,000
	4.3 Area of landscapes under sustainable land management in production systems	Landscape area that is in production (e.g., agriculture, rangeland, and forests) and whose soil, air, and water are managed in a sustainable manner	Area under sustainable practices (from 2.1.5 activities)	PMU		-			500	1,800
	Status of NRW planning process	Status – advancement of planning process for NRW (Component 2)	Assess meeting minutes and plans delivered on schedule	PMU				MSP formed and operational Data gathering and assessments completed	NRW spatial analysis prepared Goals/vision agreed by MSP	Planning process complete, with governance frameworks for decision making – approved by MSP members via consensus process
	Level of representation on multi-stakeholder platform and decision-making mechanisms	Level of representation – key stakeholders are represented on the MSP, including community representatives, and government representatives	Assess representation on MSP compared to stakeholder analysis	PMU	Gender		MSP TOR incorporates gender, stakeholder analysis	100% of stakeholders prioritized through stakeholder analysis has representation on MSP	80% of stakeholder representatives attend each meeting	85% of stakeholder representatives attend each meeting
	# of priority barriers being mitigated through small grants program (Output 2.1.5)	Categories of barriers include: - Capacity building - Monitoring and management - Livelihoods - Productive practices - Degradation / restoration - Planning	Count number of barriers mitigated based on adequate reporting of results from small grant recipients	PMU		0				2

3.1 Strengthened regulatory frameworks for natural resource conservation/sustainable use	Status of revised PA Act	PA Act = revisions to PA Act based on recommendations, developed through a consultative and participatory approach	Assess gap analysis; Cabinet paper	PAC		-		Legislation gaps identified and recommendations	Draft revised texts in consultations with relevant stakeholders	Presentation of revised PA Act to Cabinet
4.1. Strengthened monitoring and evaluation system	% M&E plan implemented in a timely manner	M&E plan implemented: delivery of M&E activities on time, reporting (PPR, PIR, QFR, AWP&B, RF tracking, PCR), annual reflection workshop, Mid-term evaluation, Terminal evaluation	Assess delivery of M&E activities against M&E workplan	PMU Project Staff SEAF-DEC		0	100%	100%	100%	100%
4.2 ASL regional cooperation and knowledge sharing	Level of engagement in ASL regional project Not cumulative	Level of engagement: <u>Level 1</u> = No participation <u>Level 2</u> = Minimal participation – provide reporting documents and the provision of information for program website <u>Level 3</u> = Above, and participation in ASL training events and annual conference	Score of 1-4	PMU		1	3	3	3	3

Appendix VIII: Gender Analysis and Action Plan

Included as a separate document with the submission package.