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Government Notice … … … … … … 2014

FIRST SUPPLEMENT

LEGAL SUPPLEMENT

A. ACTS — NIL

B. SUBSIDIARY LEGISLATION — NIL

C. BILLS — NIL

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GOVERNMENT NOTICE

Protected Areas Commission
Notice to the Public

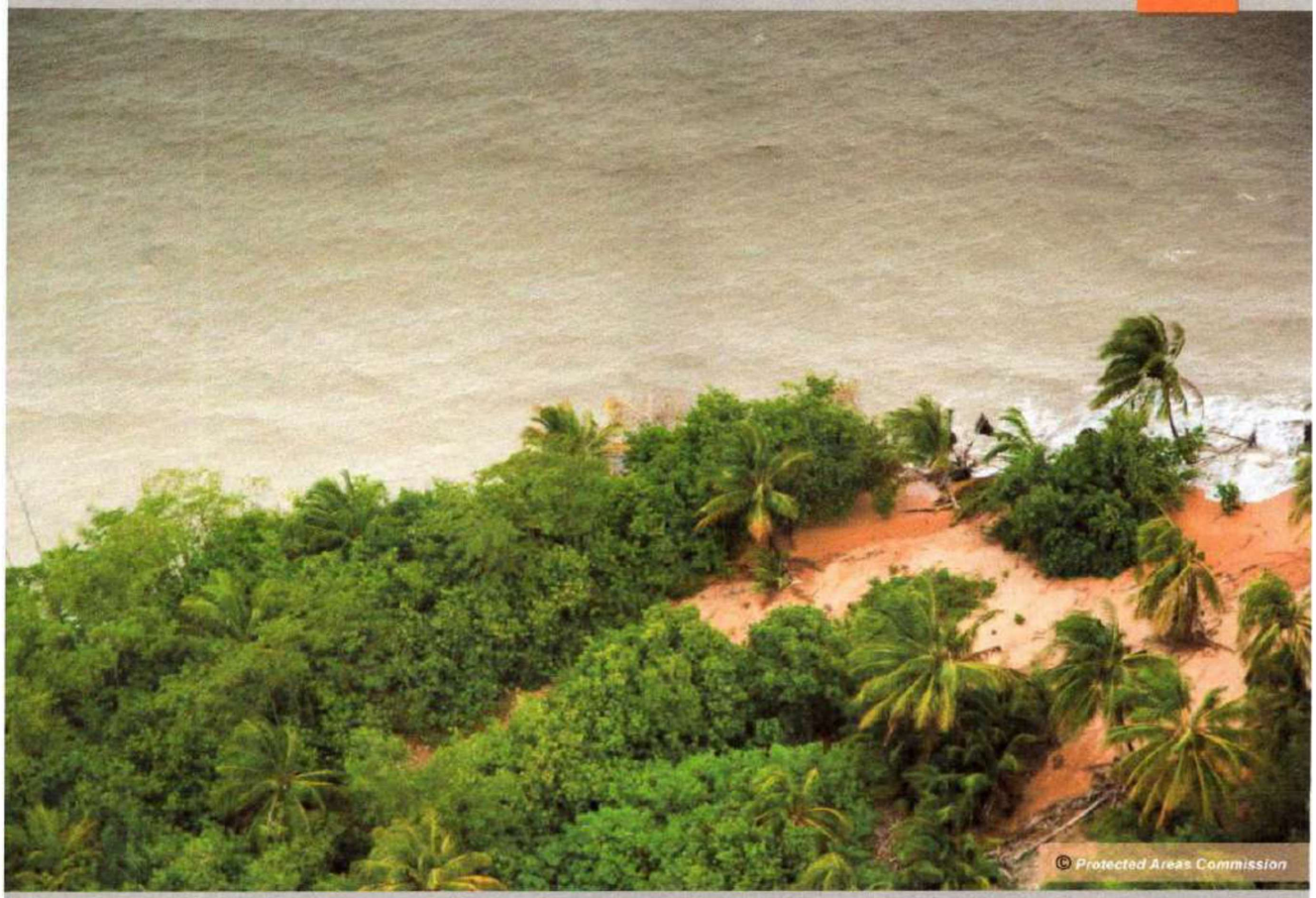
The Public is hereby notified that the draft Management Plan for the Shell Beach Protected Area, located in Region One (1), is available for public review.

In accordance with the Protected Areas Act 2011, the Protected Areas Commission hereby gives public notice to review the Draft Management Plan and submit written comments to the Protected Areas Commission by noon on **August 4th, 2024**

The Management Plan is available on the Protected Areas Commission website (https://www.pac.gov.gy/). A hard copy can also be reviewed upon request at:

Protected Areas Commission
National Park
Thomas Lands
Georgetown
Phone: 592-227-1888
Email: pac.guyana@gmail.com

2024



SHELL BEACH PROTECTED AREA MANAGEMENT PLAN 2024-2028

Protected Areas Commission

NOTE: This is the first draft of the 2024-2028 SBPA Management Plan being made available for public review. Kindly note that editing, graphics, designing, layout etc. will be applied to the final document. We encourage you to send all feedback to pacplans@gmail.com or our Head Office in the National Park, Thomas Lands, Georgetown Guyana.

Contact:
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Protected Areas Commission (PAC), Guyana
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Website: www.facebook.com/Protected-Areas-Commission

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Organizing Partners And Donors

Engagements and consultations with indigenous communities were made possible through the coordination efforts and participation of the Shell Beach Protected Areas communities. These communities are; Santa Rosa & Islands, Kumaka, Mora, Kamwatta, Wallaba, Koko, Cabora, Rincon, Parakeese, Kairie, Karaburi, Huradiah, Waramuri, Haimaracabra, Manawarin, Santa Cruz, Fathers Beach, Almond Beach, Assakata, Kwebana, Morawhanna, Three Brothers, Unity Grant and Warapoka.

The Management Planning Process was funded by the Protected Areas Trust of Guyana (PAT) with funds from the Caribbean Biodiversity Fund. The Protected Areas Trust (PAT) was established under the Protected Areas Act 2011, as a corporate body, governed by a Board of Trustees to manage a Trust Fund which was set-up to provide financing for the National Protected Areas System. The Trust Fund support programmes and activities that contribute to, or promote, the conservation and preservation of the biological diversity and maintenance of the ecosystem services of the protected areas. In particular, PAT funds are used to co-finance the implementation of protected areas management plans, strengthen monitoring and enforcement in protected areas, support sustainable community enterprises, biodiversity conservation, and environmental education and awareness.

The Caribbean Biodiversity Fund (CBF) was established as the realization of a bold vision to create reliable, long-term funding for conservation and sustainable development in the Caribbean region. Currently, the CBF is a regional umbrella environmental fund that uses a flexible structure to facilitate innovative solutions and consolidate regional conservation impacts. On the 3rd May 2022, The Caribbean Biodiversity Fund (CBF) and Guyana Protected Areas Trust (PAT) signed a Partnership Agreement to provide the PAT with additional resources to bolster its ability to support financing and management of Guyana's protected areas in line with the LCDS which sees an expansion of the protected areas system to 30% by 2030.

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Acronyms

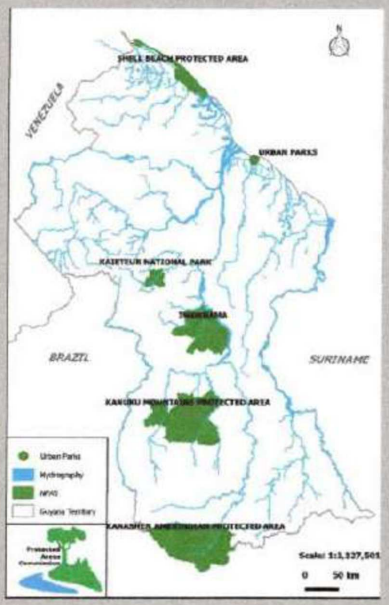
APA	Amerindian Peoples Association
CBD	Convention on Biological Diversity
CI-G	Conservation International-Guyana
EPA	Environmental Protection Agency
GBF	Global Biodiversity Framework
GFC	Guyana Forestry Commission
GGMC	Guyana Geology and Mines Commission
GL&SC	Guyana Lands and Surveys Commission
GPAS	Guyana Protected Areas System
GMTCS	Guyana Marine Turtle Conservation Society
GMCS	Guyana Marine Conservation Society
IUCN	International Union for Conservation of Nature
KAPA	Kanashen Amerindian Protected Area
KAP	Knowledge, Attitude and Perception
KfW	German Development Bank
KMPA	Kanuku Mountains Protected Area
KNP	Kaieteur National Park
LCDS	Low Carbon Development Strategy
MoAA	Ministry of Amerindian Affairs
METT	Management Effectiveness Tracking Tool
MOU	Memorandum of Understanding
NBAP	National Biodiversity Action Plan
NGO	Non-governmental Organisation
NPAS	National Protected Areas System
PA	Protected Area
PAC	Protected Areas Commission
PAME	Protected Areas Management Effectiveness
PAT	Guyana Protected Areas Trust
RDC	Regional Democratic Council
SBPA	Shell Beach Protected Area

Executive Summary

1. OVERVIEW OF GUYANA'S NATIONAL PROTECTED AREAS SYSTEM

1.1 Who we are!

Guyana's National Protected Areas System (NPAS) has been in development for over 90 years, beginning with the establishment of the Kaieteur National Park (KNP) in 1929. At that time, Guyana boasted the first national park in the Amazon Region and was one of only three countries in South America to have a protected area (PA). In 1996, the Iwokrama Rainforest Reserve was formally established, becoming the country's second-oldest PA. Since then, Guyana has steadily worked to establish and expand its Protected Areas System.



In 2011, the landmark Protected Areas Act was enacted, formally establishing the National Protected Areas System (NPAS), the Protected Areas Commission (PAC), and the Protected Areas Trust. Concurrently, two new protected areas, the Kanuku Mountains Protected Area (KMPA) and the Shell Beach Protected Area (SBPA), were declared following decades of preparatory work with local communities and other stakeholders. Additionally, four urban parks—the Botanical Gardens, Zoological Park, National Park, and Joe Vieira Park—were included in the system.

The Protected Areas Commission (PAC) became operational in 2012, fulfilling its mandate to establish, manage, maintain, promote, and expand the NPAS. To achieve this goal, the PAC immediately began hiring and developing the capacity of staff to function at the Head Office and the three hinterland protected areas managed by the PAC (Shell Beach, Kanukus, and Kaieteur). Importantly, considerable efforts were made to build and maintain relationships with local communities and stakeholders living and working in and around these protected areas.

In 2017, the PAC welcomed the first (and only) indigenous protected area into the NPAS. The Kanashen Amerindian Protected Area (KAPA) is Guyana's largest PA, owned and managed by the indigenous Wai Wai people of Kanashen Village. With this addition, Guyana now has 1,816,391 hectares under formal conservation, representing approximately 8.5% of its land area.

1.2 Why Protected Areas are Important?

A Protected Area is a clearly defined geographical space that is recognized, dedicated, and managed through legal or other effective means to achieve the long-term conservation of nature, along with associated ecosystem services and cultural values (IUCN 2008). As of 2024, over 300,000 designated protected areas cover about 15% of the Earth's land surface and around 8% of its marine areas, reflecting a global commitment to conservation.

Guyana's National Protected Areas System (NPAS) is crucial for the protection and conservation of the country's biological diversity, which holds both national and global significance. The system aims to preserve representations of all the various ecosystems and habitats that naturally occur in Guyana. Equally important, the NPAS ensures that ecosystem services—such as fresh water, clean air, food, shelter, and medicine—are adequately maintained for the benefit of current and future generations. Additionally, well-managed protected areas can contribute to economies by providing livelihoods, jobs, and income generation. For example, some protected areas serve as tourism destinations, attracting visitors and creating opportunities for local businesses. Others support sustainable activities such as research, agroforestry, and ecotourism, which can generate revenue and enhance economic development in surrounding communities.

1.3 Protected Areas and People

Historically, the relationship between protected areas and people, particularly Indigenous Peoples and Local Communities, was often combative. The policy for creating protected areas typically involved removing any inhabitants from the targeted space and preventing those displaced from utilizing the land and resources within the protected area.

However, global assessments later found that excluding people from these landscapes led to a decline in the ecological integrity of the protected spaces. Agenda 21, an action plan from the landmark United Nations Rio Earth Summit in 1992, provided an opportunity for governments worldwide to shift this policy of removal and disconnection between Indigenous/Local peoples and protected areas. The first example of this new approach in Guyana was the creation of the Iwokrama Forest. Learning from the successes and challenges of establishing Iwokrama, communities were actively engaged and consulted over several years (2005-2011), leading to the establishment of the Kanuku Mountains and Shell Beach Protected Areas in 2011.

Involving Indigenous and Local peoples in the creation and management of protected areas is important for two main reasons: 1. They have lived within these landscapes for generations, and 2. They possess valuable knowledge of the landscape and its biological processes, which can be crucial for effective management.

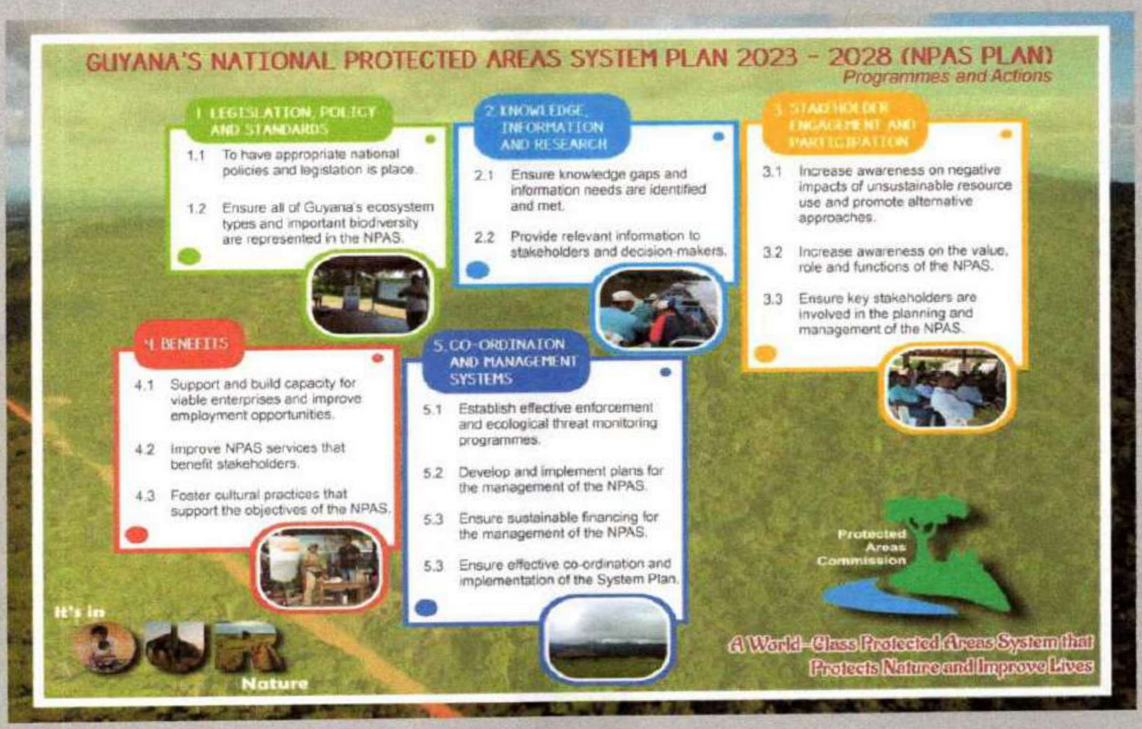
1.4 How we Work!

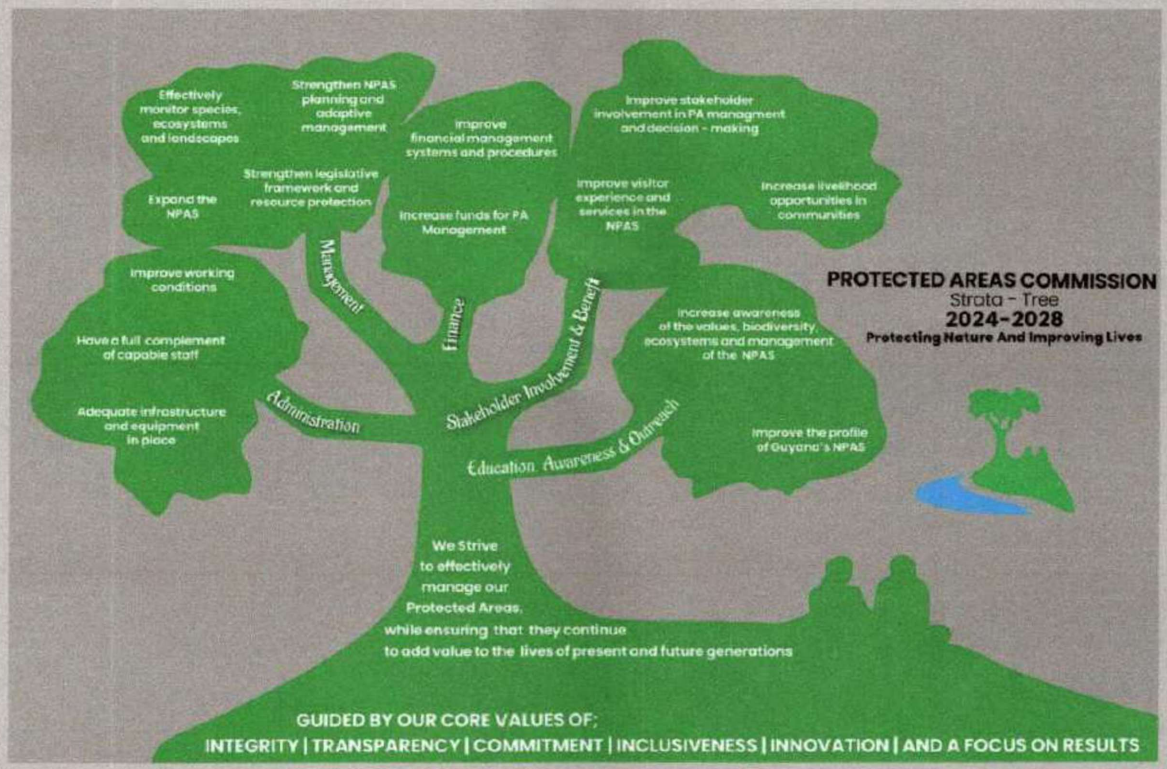
Many of the areas adjacent to Guyana's hinterland protected areas are titled Amerindian/Indigenous lands, fostering a longstanding culture of resource use by communities, including hunting, fishing, farming, and gathering. These protected areas thus play a vital role in the livelihoods and long-term developmental aspirations of local communities. Additionally, the four Urban Parks, which are part of the NPAS, have served as green spaces for relaxation, entertainment, and sports for both Guyanese residents and visitors for decades.

The management approach of the NPAS is defined by a **"Parks for People"** approach, emphasizing stakeholder participation and enhancing local benefits as core principles. Consequently, our vision is to establish a World-Class National Protected Areas System that not only **Protects Nature** but also **Improves Lives** of people.

To realize this ambitious vision, a **Protected Areas System Plan** and a **PAC Strategic Plan** have been developed. In recent years, the Government of Guyana has articulated its developmental agenda through the Low Carbon Development Strategy 2030. These plans, along with the PA Act 2011, serve as overarching guiding documents for the management of the NPAS.

The Figures below outlines a summary of the key programmes and actions of the System Plan, and the PAC Strategic Plan that includes elements of the LCDS 2030 related to PA Management.





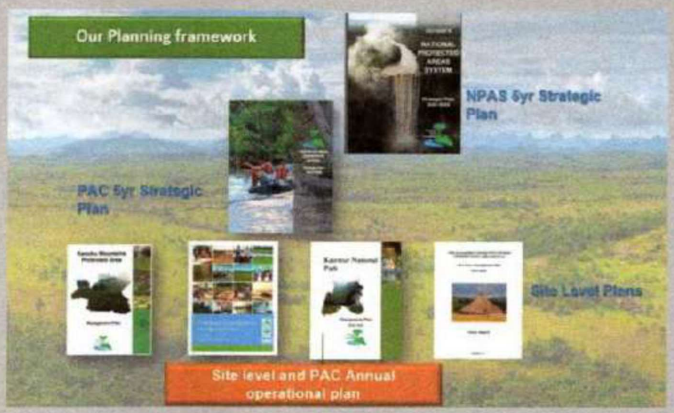
The National Protected Areas System (NPAS) stands as an important pillar of **Guyana's Low Carbon Development Strategy 2030**, charting a course towards robust economic growth by harnessing our ecosystem services and assets. The Strategy underscores the nation's commitment to enhancing biodiversity conservation and protection by fortifying and expanding the network of protected areas and other formally conserved areas. Guyana pledges to elevate its conservation efforts, aiming to increase protected areas to 17% by 2025 and further to 30% by 2030, aligning with global frameworks such as the Leaders' Pledge for Nature and the Kunming-Montreal Global Biodiversity Framework (GBF).

To achieve these objectives, the government has outlined several key actions:

- *Establishment of new protected areas in both terrestrial and marine territories through a participatory process.*
- *Identification and establishment of Key Biodiversity Areas (KBAs).*
- *Ensuring local communities' benefit from and are engaged in the management of protected areas.*
- *Establishment of science-based protected areas to safeguard a representative sample of the nation's natural treasures.*

- *Ensuring effective management of protected areas through adequate staffing, resources, and funding.*
- *Complementing the NPAS with Other Effective Conservation Measures.*
- *Diversifying the NPAS to include various categories and governance types, with a focus on areas managed by or co-managed with local peoples.*

In keeping with these guidance documents, Site Level Management Plans and Annual Operational Plans are developed. The Shell Beach Protected Areas (SBPA) Management Plan 2024-2028 is strategically aligned with the PA Act 2011, with its programs and actions complementing the strategies and objectives outlined in the System Plan and PAC Strategic Plan. Therefore, the SBPA Plan should not be viewed or implemented in isolation but as part of a comprehensive package of documents contributing to the effective management of the NPAS.



For instance, there's substantial interest from local communities and stakeholders in developing sustainable eco-tourism activities in protected areas. However, a cohesive policy framework is essential to guide the development and management of tourism across the NPAS and ensure equitable sharing of benefits. In this case the System Plan offers a holistic approach to this issue, rather than adopting a micro-level approach at individual sites.

This document outlines the Vision for the Shell Beach Protected Area (SBPA) and details the Programs and Actions planned for the next five years to achieve this vision. In developing these plans, it was essential to consider the original purpose of establishing the SBPA, its unique features, and the results of previous management efforts. By drawing on past experiences, we have made thoughtful decisions to ensure the effective implementation, monitoring, and periodic review of the new SBPA Management Plan for 2024-2028.

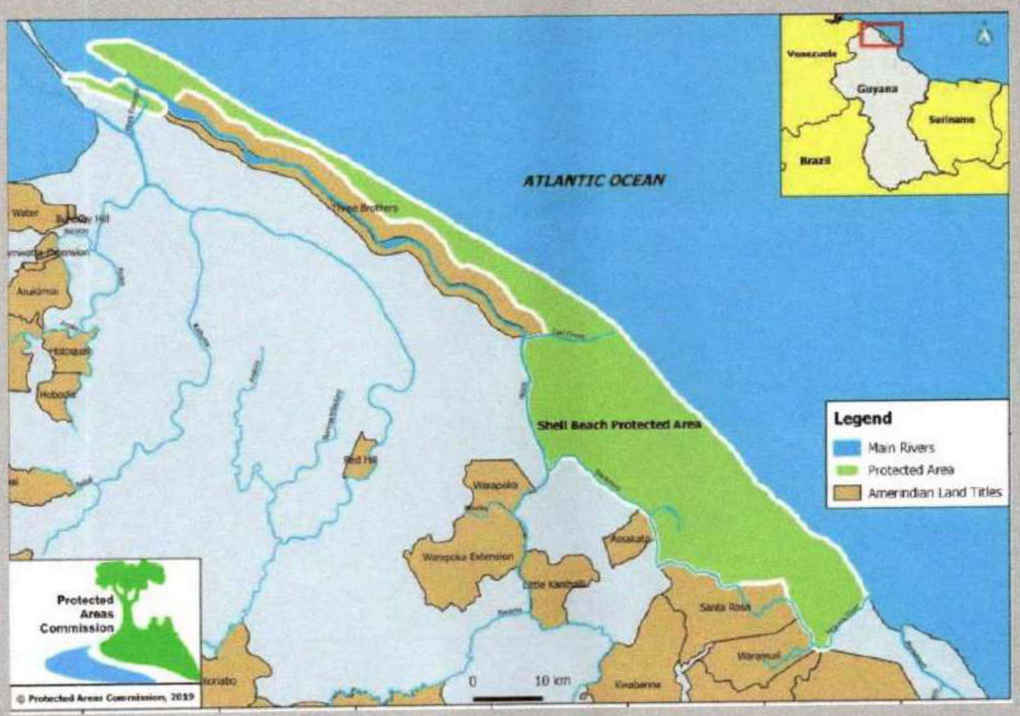
2. HISTORY OF THE SBPA

2.1 SBPA Establishment

In 1999, the Government of Guyana identified Shell Beach as a priority site for Protected Areas status in its National Biodiversity Action Plan (NBAP). This decision was driven by the area's rich biodiversity and unique ecosystems, notably its extensive mangroves and the annual nesting of four sea turtle species.

In 2000, the Government, through the Environmental Protection Agency (EPA), appointed the Guyana Marine Turtle Conservation Society (GMTCS) to lead the planning and consultation process for the proposed Shell Beach Protected Area (SBPA), due to their ongoing marine turtle conservation efforts since 1998.

In June 2009, GMTCS signed a Grant Agreement with the EPA to complete the delineation of the proposed SBPA boundaries. The project was funded by the Government of Germany through the German Development Bank (KfW). This delineation involved extensive consultations with indigenous and mixed communities, government, and non-governmental stakeholders.



migratory birds recorded in 2006[2], leading to the area's proposal as an Important Bird Area (IBA) by BirdLife International[3], which aims to protect sites vital for bird populations' long-term viability.

In terms of plant diversity, 118 species of plants have been recorded in the Waini Peninsula of the Shell Beach area, with a preliminary list[4] of 1,449 vascular plant species for the Northwest District.



[2] Mendonca *et. al.*, 2006. A Bird's Eye View: Coastal Birds of Shell Beach. Proceedings of International Conference on the Status of Biological Sciences in Caribbean and Latin American Societies.

[3] BirdLife International, (2014). Important Bird and Biodiversity Areas. http://www.birdlife.org/worldwide/programmeadditional-info/important-bird-and-biodiversity-areas

[4] Hollowell, T. H. 2009. Plant Community Structure, Fire Disturbance, and Recovery in Mangrove Swamps of the Waini number Peninsula, Guyana. Contributions to the Study of Biological Diversity 3:1–166.

In October 2011, the Protected Areas Act was enacted, officially declaring Shell Beach a National Protected Area. The Act also established the Protected Areas Commission (PAC) to manage the National System of Protected Areas, including Shell Beach. Developing the Shell Beach Protected Area Management Plan was crucial for fulfilling this mandate. Using a participatory process, the SBPA Management Plan (2016-2020) was crafted through several workshops and meetings with local and indigenous communities, government agencies, the private sector, non-governmental organizations, and civil society. The PAC Board of Directors approved the management plan, paving the way for its implementation.

2.2 SBPA Description

The Shell Beach Protected Area (SBPA) is located in Region 1 (Barima-Waini) of northwestern Guyana. Covering 123,055 hectares, SBPA includes approximately 120 kilometers of beach and mudflats. The area is named for its beach composed of fragmented mollusks, bivalved, and univalved shells. Inland from the beach, mudflats transition to mangroves, which are then followed by swamp forests. The SBPA's terrain is relatively flat, with elevations ranging from less than 1 meter to 25 meters. It is home to indigenous and mixed communities who rely on the area's resources for their livelihoods.

SBPA and its surroundings boast rich biodiversity and relatively intact, productive ecosystems. The area supports the largest and most intact mangrove forests in Guyana, mixed swamp forests, open swamps (herbaceous, typha, and saltwater swamps), mixed agriculture, coconut palms, sandy beaches, and open water. Seasonally flooded Ite (Mauritius) palm savannahs are also present. The nutrient-rich nearshore waters, influenced by the Essequibo estuary and the Orinoco Delta, enhance productivity, making the mangrove forests vital nurseries for various fish species.

Shell Beach is renowned for its marine turtle nesting sites, hosting four endangered species: the Leatherback (Dermochelys coriacea), Hawksbill (Eretmochelys imbricata), Olive Ridley (Lepidochelys olivacea), and Green turtle (Chelonia mydas), which nest annually from February to August. Ecological surveys have documented endangered species such as the West Indian Manatees (Trichechus manatus), tapirs (Tapirus terrestris), deer (Mazama americana), jaguars (Panthera onca), and various primates. A 2005[1] survey identified 28 reptilian, 13 amphibian, 27 mammalian, and 27 macro-invertebrate species. Bird diversity is significant, with over 200 species of coastal and

[1] Kalamandeen, M and DaSilva P. (2005). A Preliminary Survey of the Herpetofauna of Shell Beach. Biodiversity and Conservation Studies in Guyana: Volume 2

3. MANAGEMENT OF THE SBPA

3.1 How is SBPA Is Currently Managed

The Shell Beach Protected Area (SBPA) is an IUCN category VI "managed resource" protected area which is managed for the benefit of nature and people, by providing natural products and services to meet local needs while also protecting natural ecosystems and maintaining ecosystem services. A distinctive feature of this IUCN classification is the emphasis on sustainable use of natural resources as a means to achieve nature conservation, alongside traditional methods like resource protection.



The SBPA, like the Kanuku Mountains Protected Area, were assigned to category VI because of their long history of sustainable small-scale livelihood activities conducted by indigenous and local communities. These activities, which have minimal impact on nature, include traditional fishing, timber and non-timber forest product gathering, and subsistence hunting. The area is managed following the strategies, goals, objectives, and outputs outlined in the management plan, which is implemented by the Protected Areas Commission (PAC) in collaboration with local communities, government agencies, and other partners.

In accordance with the Protected Areas Act of 2011, a management plan was developed for the period 2016-2020 to ensure the long-term effective management of the SBPA. However, eue to the COVID-19 pandemic, the plan's duration was extended to 2022, until the new management plan process commenced.

Day-to-day activities are carried out by a Site Coordinator and a Ranger Team, primarily composed of individuals from surrounding communities. Oversight and implementation support are provided by a team of technical and administrative staff based in the Head Office. The PAC works closely with the twenty-four (24) indigenous communities found in and around the SBPA and the Regional Democratic Council Region 1, together they provided strong support to the PAC for the management of the SBPA.

3.2 Implementation of Previous Management Plan 2016-2022

The first SBPA management plan was organized under five programme areas as outlined in the figure below.



Over the period 2016 – 2022, the Protected Areas Commission, in collaboration with key stakeholders and partners were able to implement the following activities under the SBPA Management Plan.

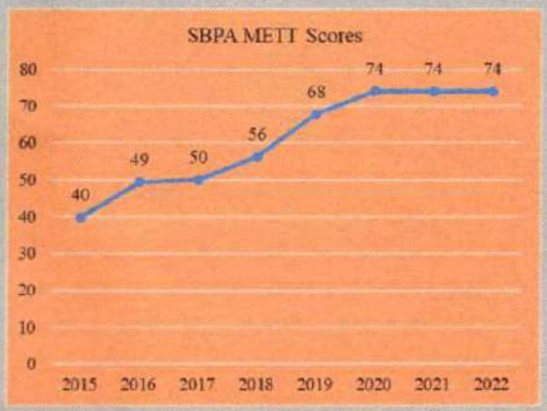
Programme Areas	Activities Implemented
Operations & Adaptive Management	**Staff** - More than 80% of the staff hired from surrounding and other indigenous communities **Infrastructure** - 2 Ranger Stations and 2 Ranger Outpost constructed. - Infrastructure at Almond Beach renovated and expanded - 3 Boats, 3 engines and 4 generators purchased - Internet installed at Almond Beach + satellite phone purchased - Several equipment purchased including flashlights, computers, beds,

	binoculars, GPS, Laptops, cameras, safety equipment **Research** - Conducted sea turtle monitoring annually from February to August - Conducted other research including camera trap, species identification, water quality testing **Monitoring & Enforcement** - The PAC partnered with the Guyana Defence Force, Guyana Police Force, Regional Democratic Council, Government Agencies and Communities to monitor illegal activities in the SBPA.
Land Use and Sustainable Natural Resource Management	- Indigenous communities continued to enjoy the benefit of using the resources in the SBPA for their traditional livelihood as provided for in the Amerindian Act 2006 and Protected Areas Act 2011. - Resource Use mapping was done in some communities.
Benefit Sharing & Livelihood Development	- Several community members hired as cooks, turtle monitors, research assistants, boat captains and boat assistants. - 95% food and other supplies were purchased in local communities and the Sub-districts of Moruca and Mabaruma. - Craft items were purchased from residents. - PAC supported the promotion of Warapoka as a tourist destination. - A Livelihood survey was conducted. - Sanitary items were provided to communities during COVID-19 Pandemic - PAC sponsored and facilitated tourism training for two community members. The training and site visits were done in Suriname.
Education, Awareness, & Outreach	- No Netting Zone (NNZ), Turtle conservation and awareness signs were designed and erected in and around the SBPA. - Knowledge, Attitude and Practice (KAP) Surveys were conducted in most SBPA communities. Sharing of information about the SBPA and PAC was also done during these surveys. - Several videos promoting the values of the SBPA were developed and shared on social media, National Television and in Schools - Many Nature Camps and School Outreaches were held in the Mabaruma and Moruca sub-districts. - The PAC supported Wildlife Clubs in some schools and collaborate with EPA to provide training for the Teachers.

	- Facilitated School tours to Almond Beach - Developed and distributed brochures, flyers, exercise books, and school supplies. - PAC held booths and participated in Villages Days, Moruca and Mabarauma Days and Indigenous Month activities. - Held an Art completion for youths in and around the SBPA - Published articles about the SBPA in the daily news papers
Capacity Building	- Several training opportunities were provided for staff, communities and local organizations including; o Ranger Training o Conflict Resolution, Environmental Education, Environmental Legislation, First Aid, River and Water Safety, Sea Survival, Tourism, Turtle monitoring, Proposal Writing,

3.3 Management Effectiveness Review

The **Management Effectiveness Tracking Tool (METT)** is one of the first tools developed to align with the IUCN Framework for protected area management effectiveness (PAME). The METT has been applied in 127 countries worldwide to assess the effectiveness of protected area management.



Since 2015, the Protected Areas Commission (PAC) has conducted METT surveys for the SBPA. This graph highlights the positive trend in the management effectiveness of the SBPA over seven years, with the baseline score increasing from 40% in 2015 to 74% in 2020 and beyond. Over time, the PAC secured more funds for the implementation of management actions. The increase in staff complement and the acquisition of key infrastructure and equipment significantly contributed to the gradual improvement in METT scores.

A **Midterm Review** of the SBPA Plan began on November 14, 2018. Workshops were conducted in various communities, culminating in a technical workshop for stakeholders on November 28, 2018, in Georgetown. During these sessions, participants received an overview of the management plan and its implementation. They discussed the relevance of the remaining actions for the 2019-2020 period. The review concluded that all objectives and management actions remained relevant and should continue to be implemented as far as possible before the plan's expiration.

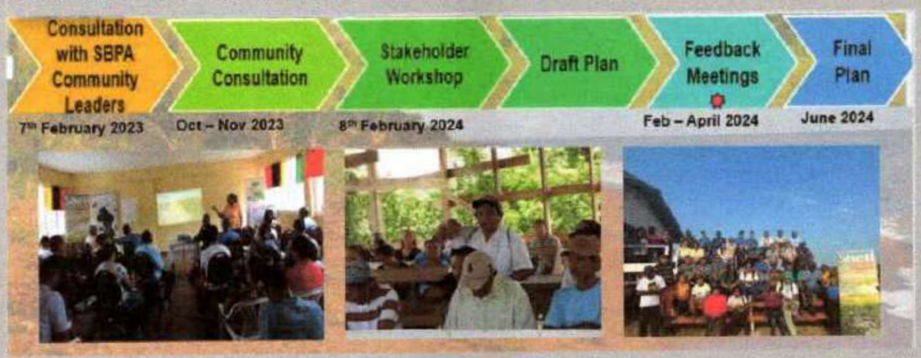
4 DEVELOPMENT OF THE SBPA MANAGEMENT PLAN 2024-2028



The primary purpose of this management plan is to outline the principles and strategies for the development and management of the Shell Beach Protected Area (SBPA) over the next five years (2024-2028).

In October 2022, the Protected Areas Commission (PAC) began designing a process to guide the development of this management plan. A Planning Team was identified and trained in management planning, workshop facilitation, community consultation, logistics planning, monitoring, and evaluation, among other necessary skills. Simultaneously, a grant proposal was submitted to the Protected Areas Trust and subsequently approved to fund the process.

The development of the plan was guided by the provisions of the Protected Areas Act 2011. A participatory process was used to engage a cross-section of stakeholders to validate the vision, update the pressures on the SBPA, and propose management programs, targets, and strategies for the next five years. An initial workshop was held with the Regional Democratic Council, Region 1 and the Leaders of the SBPA Communities on 7th February 2023 to review the old SBPA Plan (2016-2022) and discuss proposed programs and actions for the 2024-2028 period. Similar workshops were held with each of the 24 SBPA communities from October – November 2023 and with other key stakeholders in Moruca on the 8th February 2024.



Following this first round of consultations and internal discussions, a draft framework of programs and actions was prepared. Workshops were then held in the 24 SBPA communities during February – March 2024 to share these preliminary results and gather feedback. A similar exercise was conducted specifically with the Leaders of the SBPA on the 3rd April 2024. In addition, they also discussed the setup of the SBPA Oversight Committee and review the SBPA threats and pressures. After this second round of consultations, the draft framework of programs and actions was updated and circulated to all key stakeholders for further review.

In keeping with the Protected Areas Act 2011, a full draft management plan was prepared and made available for public review over a four-week period. Hard copies of the draft plan were also shared with the SBPA communities for final feedback. A public forum was held on [date], after which the plan was finalized and submitted to the PAC's Board of Directors for review and approval. The SBPA 2024-2028 Management Plan was formally approved by the Board of Directors, in accordance with the PA Act, at its meeting held on [date]. The final plan was posted on the Commission's website, and hard copies were distributed to communities during repatriation meetings to discuss Year 1 implementation of the plan.
Annex [number] outlines the [details].



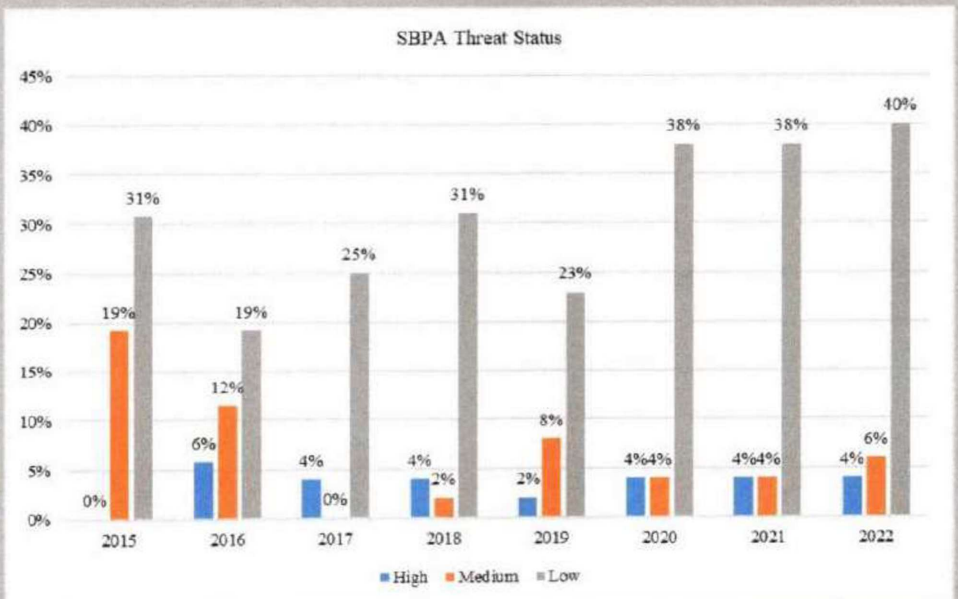
5 THE SBPA MANAGEMENT PLAN 2024-2028

5.1 Threats and Pressures

Pressures on Shell Beach's biodiversity and other natural resources have gradually increased over the years. Improved development and access in the region and continued demand for wildlife products have led to growing threats, including unsustainable wildlife hunting and trapping, overfishing using gill nets, and illegal logging and mining. Notably the increased rate of erosion of the beaches have led to loss of mangrove forests, infrastructure and displacement of residents.

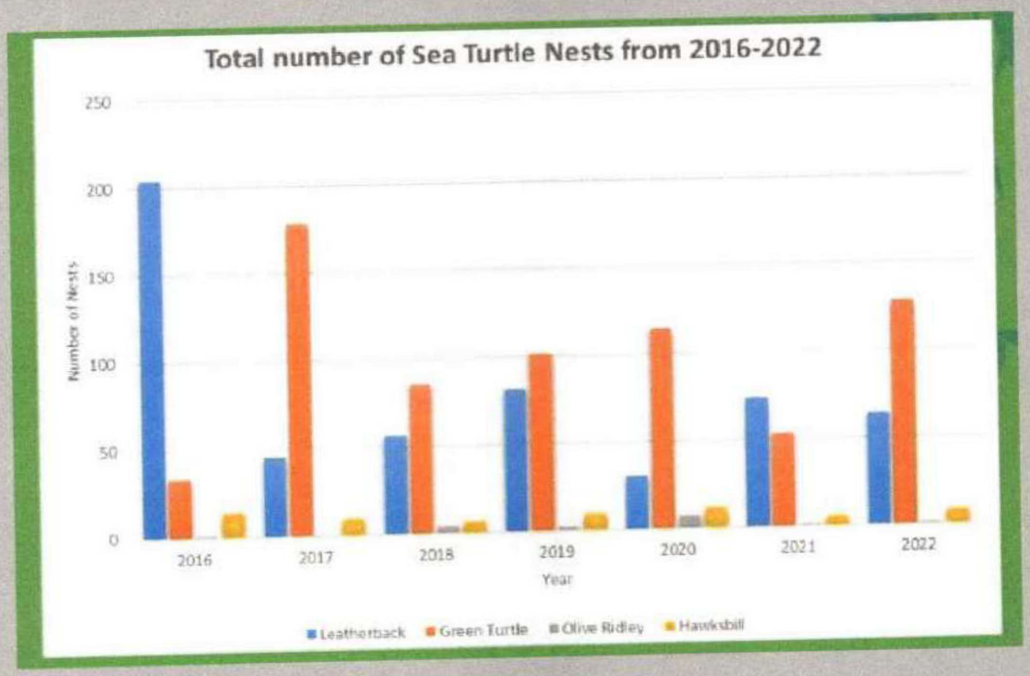
Fifty-two (52) different threats were evaluated as part of the METT assessment conducted from 2015 to 2022. The graph below indicates that between 4-6% of these threats were recorded as having a high impact include fishing, killing and harvesting of aquatic resources, invasive non-native/alien animals, and erosion of shoreline.

The percentage of threats that were deemed to affect the protected area on a medium scale reduced significantly over the years. Deliberate vandalism, destruction activities or threats to protected area staff and visitors, invasive non-native/alien animals, garbage and solid waste and habitat shifting/alteration were some of the medium impact threats that were recorded throughout the period.



The percentage of threats with low impact fluctuated over the years between 19% and 40% and while they may not have a significant impact on the values of the protected area they should be closely monitored and mitigated. In most cases more than 50% of the threats assessed were not applicable to SBPA including commercial and industrial areas, marine and freshwater aquaculture, dams, hydrological modification and water management/use, earthquakes and volcanoes among others.

The Shell Beach Protected Area serves as an important nesting ground for marine turtles and is also home to the largest area of productive mangrove forests in Guyana. Erosion and accretion are part of the natural beach cycle however, information gathered from research, overflights, coastal surveillance exercises, and analysed satellite imagery shows that Almond Beach is experiencing rapid erosion. This has affected the community of Almond Beach and caused more than 95% of the residents to migrate. The loss of beaches and change in the morphology of the coastline has also led to reduced space required for nesting and washing away of nests. The graph below shows the number of sea turtle nests at Almond Beach, SBPA during 2016-2022.





During the management plan consultation process, SBPA Leaders were engaged in discussions to determine the perceived status of ecological pressures and threats on the SBPA. Using the information presented in the 2016-2022 SBPA Management Plan, participants confirmed current threats and whether they were increasing or decreasing. They also identified areas in and around the SBPA where these threats are most likely to occur. The outcomes of this review are captured in the table below:

Threats/Pressures	Status 2016	Current status 2024	Causes
Killing of sea turtles & harvesting of their eggs	High	Medium	demand for meat and eggs still exist in Region 1 but has also extended to Region 2 Essequibo Coast Ease of access by poachers to some beaches.
Overfishing	Low	Low	Use of poison Sediments from dredging of Pomeroon River after fish catch Low Fish Stock Seaweed that affects mangrove roots which is a habitat

			for fish.
Wildlife trade	Low	Low	There is a demand for wildmeat mostly facilitated through a black market. Insufficient alternative livelihood. Inadequate enforcement of legislation
Fires	Low	High	Traditional practice, clearing of ponds and pathways, naturally occurring Lack of transmission of traditional Practices Lack of control of Fires Extreme dry weather
Pollution (water and land)	Low	Medium	Disposal of waste, waste from engine
Shell Mining	Low	Low	Used as building material, fertilizer
Illegal Logging	Low	Low	Development, revenue
Over hunting	Low	Low	Trading wild meat
Erosion (Mangroves)	Medium	Very High	Stronger waves and currents, Barnacles attacking mangrove roots
Erosion (Beach)	High	Very High	Stronger waves and currents, shell mining

Further details on the SBPA's SWOT found in Appendix 3. This SWOT analysis provides an overview of the strengths, weaknesses, opportunities, and threats associated with the SBPA, helping to inform strategic planning and management efforts.

Actively detecting and responding to ecological threats and pressures is essential for managing the Shell Beach Protected Area. This approach is crucial for safeguarding biodiversity, maintaining ecosystem services, and supporting local communities. To address these challenges specific management targets have been determined.

5.2 Management Targets

Management targets for protected areas are specific goals set to ensure the effective conservation and sustainable use of natural resources within these areas. These targets help in tracking progress, evaluating management effectiveness, and guiding actions to meet conservation objectives. Management targets can consist of conservation targets or thematic targets.

Conservation targets are biological entities or natural processes of the protected area, such as species (or groups of species), habitats/ecosystems, or ecological processes. They represent a subset of the full suite of biodiversity or natural processes that management intends to conserve or manage to achieve the management goals. It is assumed that managing these conservation targets will ensure the conservation of all native biodiversity and natural processes within the protected area. **Thematic targets,** on the other hand, are non-biological topics (themes) used to identify and select management strategies. During the management planning process, Conservation and Thematic Targets were identified to help focus and develop management strategies for the Shell Beach Protected Area. These targets are shown in the table below.

Targets SBPA	Themes	Context
Conservation Targets	**Species Protection** - Game and Threatened species - Marine Turtles	This conservation target includes several terrestrial and aquatic species that are locally hunted (mainly subsistence hunting) and/or threatened. SBPA is a nesting ground for four species of marine turtles that nest annually between February and August. It's suggested that intense wave action is resulting in rapid erosion of beaches, therefore by affecting nesting activities. Poaching of sea turtle eggs and meat is another factor affecting the conservation and protection of these species.
	Habitat Conservation - Mangrove Forest - Savannah (Forest & Wetlands) - Rivers and Water Quality	SBPA and its surroundings are rich in biodiversity which includes the largest and most intact mangrove forests, mixed swamp forests, open swamps. In some areas erosion is also decreasing the number of mangroves lining the coast, causing salt water from the ocean to enter some of the rivers and other freshwater sources within the SBPA. Fires have been the main driver for forest cover loss within the SBPA. Fires result from farming activities by communities adjacent to the PA and naturally occurring wildfires.
	Ecosystem Services - **Provisioning Services** (water supply, food, medicine, raw	The SBPA is bordered on the northeastern side by the Atlantic Ocean from the mouth of the Waini River to the mouth of the Moruca River to the southeast. SBPA plays a

	materials) - **Regulating Services** (carbon sequestration, water regulation, soil health, beach health) - **Cultural Services** (cultural heritage, ecotourism and recreation, research)	vital role in maintaining ecological balance, supporting biodiversity, and providing essential resources and services to local communities. There are concerns that climate change and resulting sea level rise is causing beach erosion along the coast and salt water intrusion.
Thematic Targets	**Sustainable resource use**	Promote the sustainable use of natural resources to ensure they are available for future generations. This includes implementing practices that prevent overexploitation and degradation of resources.
	Stakeholder Involvement	Enhance the involvement of local communities and stakeholders in the management and decision-making processes of the SBPA. This ensures that the interests and knowledge of those directly affected by the management of the area are considered.
	Sustainable Livelihoods	Develop and support livelihood initiatives that are compatible with conservation goals. This helps local communities benefit economically from conservation efforts while protecting natural resources.
	Stakeholder benefits	Ensure that benefits from the SBPA, such as revenue from ecotourism and sustainable resource use, are equitably shared among local communities and stakeholders.
	Capacity building	Provide education and training programs to build the capacity of local communities and stakeholders in areas such as sustainable resource management, conservation practices, and alternative livelihoods.
	Local and Traditional culture, practices.	Integrate and promote local and traditional cultural practices in the management of the SBPA. This helps preserve cultural heritage and ensures that traditional knowledge is used in conservation efforts.

5.3 Our Vision for the Future

Establishing a clear vision is crucial for guiding the long-term success and sustainability of a protected area. During the development of the initial SBPA Management Plan, stakeholders articulated a 20-year vision that continues to be relevant today.

Vision Statement: *"SBPA is an area in which all stakeholders protect and use natural resources wisely for the benefit of present and future generations"*

5.4 Management Programmes and Actions

By targeting the specific threats and pressures facing the SBPA and aligning management programs and actions with the overarching vision, the SBPA can ensure sustainable resource use, conserve biodiversity and ecosystem services, promote stakeholder collaboration, provide community benefits, and set a global standard for protected area management. This holistic approach guarantees the long-term success and sustainability of the SBPA.

5.4.1 Progamme 1 – Management

Management in this context encompasses the administrative and operational functions of the PAC/SBPA, including staffing, financial administration, planning, monitoring, evaluation, adaptive management, and efficient resource utilization to achieve goals. During the initial management plan, the PAC focused on building infrastructure, acquiring equipment, hiring staff, and establishing management and financial systems, which were essential during its formative phase. While many deficiencies were addressed during the previous plan, there is still a need to further enhance and strengthen these areas in the new management plan.

Objectives

- Have a full complement of capable Staff
- Meet the infrastructure and equipment needs of the SBPA
- Improve financial management systems and procedures
- Strengthen SBPA planning and adaptive management

Key Activities

- Hire, train and evaluate staff according to revised HR structures.
- Develop & implement a capacity development plan for SBPA & its stakeholders

- Conduct an infrastructure & equipment needs assessment, develop a plan and conduct procurement, construction and maintenance activities accordingly.
- Develop financial management systems and procedures.
- Mobilize finances to support SBPA management.
- Conduct work plan & management plan reviews
- Conduct annual METT analysis
- Design and implement a management planning process for the SBPA plan (2029-2033)

5.4.2 Programme 2 - Protection and Sustainable Use of Resources

The communities surrounding the SBPA rely heavily on the resources in the protected area for their livelihoods, underscoring the importance of effective conservation practices to prevent depletion and degradation. This requires robust monitoring and enforcement programs, ranger-based monitoring, and regular patrols to safeguard the area's values. The previous management plan emphasized establishing an ecological monitoring and research program to promote wise resource use and mitigate threats through frequent monitoring and ranger patrols. However, it did not prioritize supporting conservation-compatible livelihoods, developing resource use agreements with communities, or land use planning for the protected area. The new SBPA plan will focus on these areas, building on the strong foundation of resource protection established in the previous plan.

Objectives

- Effectively monitor species, ecosystems and landscapes in the SBPA
- Strengthen resource protection in the SBPA and adjacent areas.

Key Activities

- Update and implement the conservation targets, ecological threats and develop relevant plans e.g. Fire Management Plan, Turtle Management Plan etc.
- Develop and implement a Ranger – Based Monitoring Programme.
- Develop and Implement a Marine Turtle Conservation & Monitoring Plan (MTCMP) for 2024 – 2028
- Conduct annual marine turtle monitoring along the beaches of the SBPA in keeping with the MTCMP
- Conduct research in the SBPA in keeping with the NPAS Research Strategy and Priorities and make findings accessible to communities and other stakeholders.

- Support student and community-led research in keeping with priorities
- Conduct monitoring and enforcement exercises (overflights, patrols, etc)
- Develop a Land use plan for SBPA (archaeological, sacred and tourism sites etc)
- Revise and update Resource Use Plans with Communities
- Facilitate the development of resource use rules and plans
- Support the development and implementation of Village Plans and Community Conservation Plans.
- Support the development of Village Rules related to resource use
- Support community resource protection and monitoring efforts

5.4.3 Programme 3 - Stakeholder Involvement and Benefits

The third program of our management plan focuses on the importance of involving key stakeholders in managing the SBPA. Effective stakeholder involvement is crucial for success, especially in protected area management. Without the support and involvement of indigenous and local communities and other stakeholders, the PAC cannot achieve many of its goals. By understanding the perspectives, needs, and expectations of our stakeholders and using their traditional knowledge, we can make better decisions and ensure stakeholders feel included in the management process. The new SBPA plan aims to improve the benefits offered to our key stakeholders. These benefits can be positive outcomes or rewards.

Objectives

- Improve stakeholder involvement in SBPA management and decision-making
- Increase sustainable livelihood opportunities available to communities.
- Promote the equitable sharing of direct benefits from SBPA.

Key Activities

- Revise and Update the SBPA Stakeholder List
- Establish & Operationalize the SBPA Oversight Committee
- Conduct training on SBPA management planning process
- Hold meetings and public forums
- Support community-led activities
- Support community representative groups and their work
- Support & promote the involvement of stakeholders in PA management & decision making
- Conduct a review and prepare a report on potential livelihood initiatives and support the implementation for SBPA communities.
- Develop & implement a benefit sharing plan

- Advertise SBPA positions locally and employ at least 80% of staff from local communities.
- Promote & include traditional knowledge in SBPA's work
- Purchase and market local products from SBPA communities e.g. craft
- Provide full & part time employment to local residents

5.4.4 Programme 4 - Education, Awareness and Outreach

This programme area had been the cornerstone of our work in SBPA during the implementation of the previous management plan. Nature camps, school outreaches to engage children, youth and adults in and around the SBPA were conducted. Educational materials such as brochures, banners, exercise books, and videos were developed and widely distributed, highlighting the importance of conservation, protected areas, and the SBPA specifically. The environmental education program also utilized modern mediums like social media and radio. Promoting Guyana's national protected areas system and the SBPA at community-led functions, national events, and international events has raised awareness about the value of protected areas to local, national, and international audiences. Although the program has been successful, there are still opportunities for improvement.

Objectives

- To increase awareness of SBPA's values, biodiversity, and ecosystems.

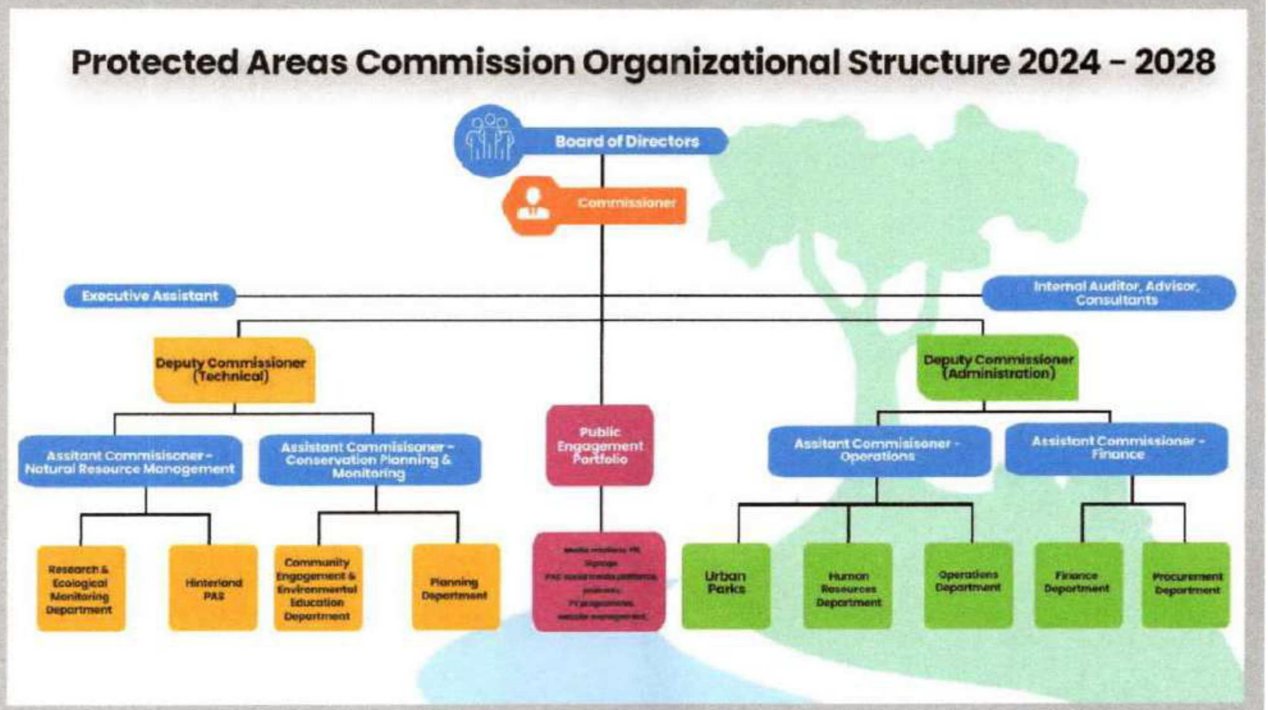
Key Activities

- Develop and implement an Environmental Education Programme for the SBPA
- Conduct Knowledge, Attitudes and Practice (KAP) Surveys
- Conduct nature camps, youth camps and education outreaches
- Establish Nature and Wildlife Clubs in schools and communities
- Facilitate Field Visits to the Beaches (for Schools/Communities Clubs/Groups)
- Support Nature and Wildlife Clubs in schools and communities
- Develop and distribute educational materials (e.g posters, brochures, books etc)
- Erect appropriate educational and awareness signage in and around the SBPA
- Promote SBPA through various forms (media, event, forums, radio programmes, workshops, conferences Expos, Heritage, Fairs, Festivals, School Graduations, signage)
- Support the integration of the traditional knowledge of the SBPA's biodiversity and ecosystems into the education system.
- Promote the SBPA at international and global events (Conferences, Workshops, COPs,

6 HOW WE WILL IMPLEMENT THE PLAN,

6.1 Governance and Management Structures

The Office of the President oversees the environmental portfolio of the country, which includes the Protected Areas Commission (PAC). The PAC is governed by a Board of Directors, which oversees its operations and approves its programs and budget. The PA Act 2011 mandates the PAC to prepare a management plan for site-level protected areas, which must be approved by the Board of Directors. For the SBPA, the PAC is the management authority responsible for day-to-day management.
The implementation of this management plan will be carried out by a Site Level Manager and a field



team employed by the PAC, supported by technical and administrative staff based at the Head Office. The Assistant Commissioner for Natural Resource Management oversees the direct management of the SBPA.

The figure below outlines the basic Human Resource Structure for the SBPA. A detailed assessment of staffing and capacity needs will be conducted during the implementation of this plan. The current staff complement of the SBPA is expected to be strengthened and increased to align with the expanded programs and actions identified for 2024-2028. The PAC will actively encourage and promote the recruitment of these site-level positions from local communities.

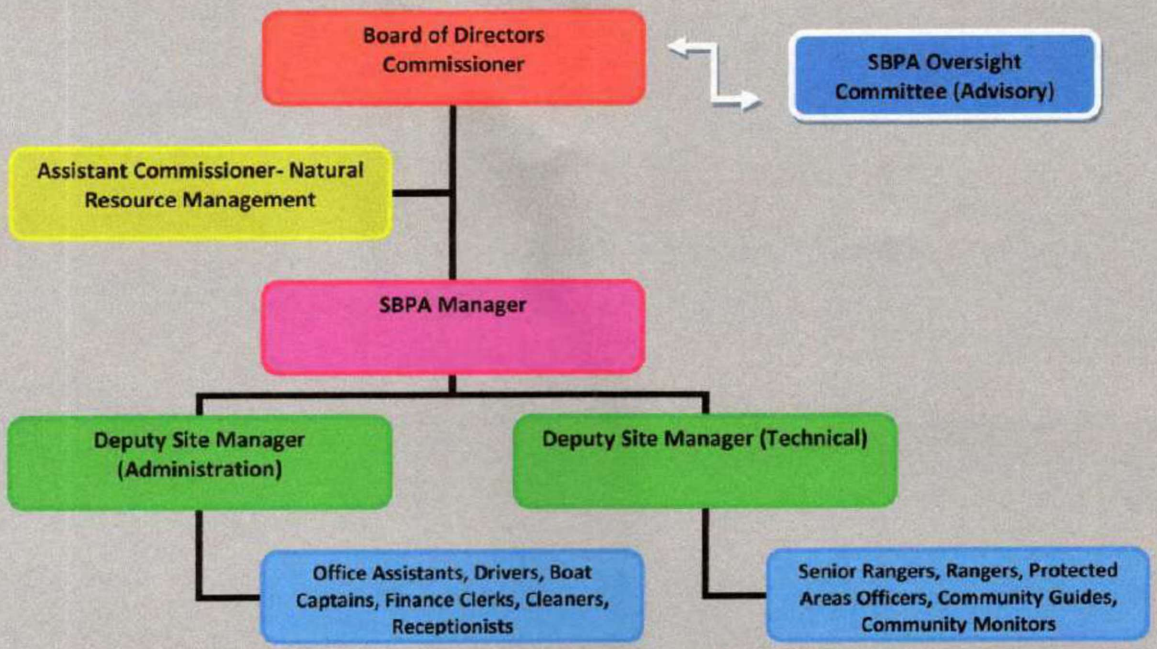


Figure 1 General HR structure for SBPA

During the management plan consultations, Community Leaders expressed support for the setup of the SBPA Oversight Committee. This committee will play a vital role in supporting the PAC's work in managing the SBPA.

Proposed Composition of the SBPA Oversight Committee

Organization	# of Representatives
Community Representative	5 **4** from Moruca Sub District and **1** to represent Three Brothers, Morawana and Almond Beach
Regional Democratic Council – RDC (Region 1)	1
Guyana Police Force - GPF	1
Guyana Geology and Mines Commission - GGMC	1
Guyana Forestry Commission - GFC	1
Environmental Protection Agency - EPA	1
Ministry of Amerindian Affairs - MoAA	1
Guyana Wildlife Conservation and Management Commission - GWCMC	1

The 24 communities around the SBPA have been a strong partner with the Government and PAC in maintaining the integrity and natural beauty of the Shell Beach Protected Area.

Notably, the Government of Germany, through the German Development Bank (KfW), has funded the construction of the Waini and Moruca Ranger Stations, the Baramani and Luri Creek Ranger Outposts and the procurement of transportation and other field equipment. The World Wildlife Fund Guianas (WWF Guianas) has pledged long-term technical and financial support towards the management of the sea turtle conservation in the SBPA. Since the operationalization of the PAC in 2012, WWF Guianas, has provided annual grants to support the implementation of the SBPA sea turtle monitoring programme.

The Protected Areas Trust of Guyana provides co-financing for the implementation of some SBPA activities while Conservation International continues to play a vital role in supporting the management of the SBPA through contributions to the Trust Fund and grants to support management plan implementation.

Local organizations like Iwokrama International Centre, Guyana Marine Conservation Society and EMC Foundation also provided support towards the management of the SBPA.

These relationships, along with other long-term partnerships, will be critical for the successful implementation of the SBPA Management Plan 2024-2028. The PAC intends to build on the gains made over the years while seeking new partnership opportunities to contribute to the long-term preservation of the SBPA's unique biodiversity and cultural heritage.

Guyana Tourism Authority - GTA	1
Ministry of Agriculture (Fisheries)	2
National Agricultural Research and Extension Institute - NARIE	
National Toshao Council - NTC	1
Amerindian Peoples Association - APA	1
Other NGOs/ Civil Societies	No Decision made
Moruca District Council	1
Guyana Defence Force - GDF	1
Protected Areas Commission - PAC	

Following discussions, it was proposed that the Oversight Committee for the SBPA be comprised of representatives from the above-mentioned organizations and agencies. Further, external experts may be called upon to provide data and support information when required. The primary functions of the SBPA Oversight Committee may include

- Supporting investigation of reports of illegal activities and overuse of resources
- Providing advice to communities about resource use.
- Supporting resolution of conflicts related to resource use in the SBPA.
- Supporting livelihood development in communities
- Ensuring the timely implementation of the SBPA Management Plan

The Committee may meet at least twice per year (statutory), with emergency and ad hoc meetings as needed. The establishment of this site-level committee will demonstrate the Commission's commitment to involving local communities, central and local governments, the private sector, non-governmental organizations, and other interest groups in the management and decision-making process of the SBPA.

6.2 Workplans

The five-year operational plan (Appendix 4) will act as the framework for activity planning. This operational plan will guide the development of annual plans and budgets ensuring that all work plans are aligned with the management plan's programmes objectives and goals. Annual plans and budgets will be developed by the site level manager, the senior management team at the PAC with input from the site level committee.

6.3 Partnerships

Partnerships are vital for leveraging resources, expertise, and support necessary for the successful management of protected areas. Over the past years, our work has focused on building partnerships and relationships to better manage the NPAS. The PAC has established good working relationships with the SBPA communities, government, and non-government players in the region.

6.4 Priority Areas for Direct Collaboration

During the management planning consultation process stakeholders were engaged in discussions to determine priority areas for direct collaboration with the PAC. The images below provide the background to each priority area and a list of questions that guided the discussion.

Priority Areas for Direct Collaboration	Background	Guiding Questions
Group 1 - Improving Resource Protection Poaching Erosion Mangrove Depletion (Dog) Predation Monitoring and Enforcement Shell Mining **GGMC, GFC, GDF, GWCMC, MNR, MARAD, GLSC, Toshaos**	There has been reports and increasing occurrences of resource threats (which are both natural and anthropogenic) at SBPA. Currently, monitoring of these resources and related threats is conducted however, enforcement actions require more inter-agency collaboration especially in addressing need for presence in remote areas.	**What mechanism can be put in place to better monitor the SBPA?** **What is the best way to coordinate an enforcement intervention?** **How can your agency/organization support these efforts? (Resources, skills, expertise)** **What data is needed? How can the PAC have access?**
Group 2 - Improving Sustainable Resource Use Overharvesting of Fish Species Overharvesting of Game Species Fire Management Overharvesting of NTFP **GWCMC, GFC, MNR, DoE, GPF, NAREI, Toshaos**	In keeping with the SBPA plan, KAP Surveys were conducted with most communities during 2016-2018. Additionally, some Resource Use Mapping was conducted in few of the communities. More recently, the PAC conducted community consultations with 23 communities. During these processes, communities have indicated, need for more collaboration in monitoring, data sharing, stopping illegal activities and more effective management of the PA. Over the next five years, the PAC intends to revise and update the KAPs and RUM as well as develop a zoning plan for the SBPA.	**What mechanism can be put in place to effectively manage the use of fish and game species and NTFPs?** **How can we manage fire in and around in SBPA?** **How can your agency/organization support these efforts? (Resources, skills, expertise)** **What data is needed? How can the PAC have access?**
Group 3 - Increase Sustainable Livelihood Opportunities Village Developments Plans and Rules Traditional Knowledge and Practices Sustainable livelihood initiatives (Ecotourism, agriculture, aquaculture, craft) Training and capacity development (hospitality, TVET, computer, catering, accounting) **MOAA, MoE, NTC, GTA, RDC, Greenheart Movement, APA, Toshaos, Mayor (Mab)**	Indigenous communities in and around the SBPA depend on resources within the PA for their sustenance and traditional practices. However, as populations continue to grow and communities further expand their plans for development, demand on these resources are increased. During recent consultations with the SBPA communities, villages stressed the urgent need for PAC and other stakeholders to support and implement alternative livelihoods to lower increasing pressures on the SBPA.	**How can you partner with the PAC to support sustainable livelihood initiatives? (Resources, skills, expertise)** **What kinds of livelihoods are you supporting in communities in and around SBPA (current or future) and what data/information can be shared with the PAC?** **What training and capacity development opportunities exist and how can they be accessed?** **What data/info on best practice and lessons learned for implementation of livelihood activities exist?**

Below are the outcomes from these discussions;

Group 1 – Improving Resource Protection	Group 2 – Improving Sustainable Resource Use	Group 3 – Increase Sustainable Livelihood Opportunities
What mechanisms can be put in place to better monitor the SBPA? Utilization of traditional knowledge of communities adjacent to SBPA on status of resources in the area. Inter-agency collaboration between PAC, GFC and NAREI for GIS/remote sensing monitoring of mangrove forest in SBPA. Multipurpose vessel (inclusive of fuel to conduct research and monitor the coastline of SBPA) Collaborate with EPA given oil and gas production. To conduct research on the geography and topography of the coastline. Align patrols with GFC to collect data and observe area. Data sharing with CI on the migrating mud banks. Collaboration between PAC and Fisheries on existing regulations on coastline fishing (potential seasonal regulation). **What mechanisms can be put in place to better monitor the SBPA?** Utilization of traditional knowledge of communities adjacent to SBPA on status of resources in the area. Inter-agency collaboration between PAC, GFC and NAREI for GIS/remote sensing monitoring of mangrove forest in SBPA. Multipurpose vessel (inclusive of fuel to conduct research and monitor the coastline of SBPA) Collaborate with EPA given oil and gas production. To conduct research on the geography and	**What mechanism can be put in place to effectively manage the use of fish and game species and NTFPs?** NTFP (manicole) – MoU with GFC for manicole monitoring and use. (use of rangers and forest officers) (deterrents price). Fish & Game Species – Management plan developed with DoF and GWCMC with community engagement for use (MNR) Training with fishermen (small & large scale)- monitoring, techniques, benefits etc. Research needed to determine if collaboration is needed for crab species. **How can we manage fire in and around in SBPA?** Interactions with the Guyana Fire Service, collaborations with MNR (compliance), GFC, Coast Guard and communities. Implement Behavioral change campaigns in Fire Awareness and include focus on the following: (Best practices, effects, benefits of prevention, protocols, issues, preventative measures, penalties enforcement, signage, local communities. The campaigns are to be done/focused in local communities, RDC. Target groups: farmers, hunters etc. Develop a fire management and analysis plan. **How can your agency/organization support these efforts? (Resources, skills, expertise)**	**How can you partner with the PAC to support sustainable livelihood initiatives? (Resources, skills, expertise)** GTA Conduct baseline assessment GTA- develop attraction ad activities based on the assessment NTC- support / provide website platform for communities to showcase/ promote livelihood projects (products) by sharing their links to their product. Example social media links. APA- provide capacity building (training) on governance, project management, communications so communities can be better equipped to implement initiatives. PAC- can be the bridge between products and activities in demand and for communities producing item to meet the demand. MDC- PAC can engage with the Moruca District Council during their meeting to engage on various livelihood projects that needs support. What kinds of livelihoods are you supporting in communities in and around SBPA (current or future) and what data / information can be shared with the PAC? GTA- Helped Warapoka village to identify products and marketing. APA – provided training and built infrastructure for tourism in Warapoka Village Three brothers Village- Coconut water bottling factory thru the LCDS grant. APA- supported Santa Rosa with tourism APA – supported Kwebana cassava processing project with electricity and equipment

topography of the coastline. Align patrols with GFC to collect data and observe area. Data sharing with CI on the migrating mud banks. Collaboration between PAC and Fisheries on existing regulations on coastline fishing (potential seasonal regulation). Collaboration between coast guard and PAC to monitor nearshore environment (especially during turtle season) **What is the best way to coordinate an enforcement intervention?** Establish proper reporting channel with wildlife commission. Empowering of SBPA staff to enforce wildlife laws and regulations under the wildlife act. Mechanisms for reporting illegal logging within the SBPA via GFC forest station under the forest act. Coordinate effectively with communities to ensure partnership and livelihoods are respected. Communities can provide human resource and skill sets to monitoring and enforcement mechanism. **How can your agency/organization support these efforts? (resource, skills, expertise)** GGMC can monitor the water quality of rivers and creek linked to SBPA. GDF practical training on boat operation (first aid, sea survival). Wildlife (compliance department) training on laws and regulations relating to wildlife act. GGMC can train staff on GPS data collection (mining school). PAC to partner with GFC training center for relevant training necessary.	**MARAD** – Licensing of fisherman to properly operate boats (makes enforcement action more likely for illegal activities). Ensuring fisherman are aware and licensed to operate in specific areas (out of NNZ). **Communities** – support actions and initiatives, provision of human resources, help to facilitate awareness campaigns, transportation, accommodation, meals. **GWCMC** – Actively playing a role in campaigns, research, development of management plans. **GFC** – assist in monitoring NTFPs (along with rangers), be apart of forest fire campaigns. **MNR** (Compliance) – Enforcement of game, fish, NTFPs and proper fire management. **DoF** -legal & inspectors' unit can assist in educational workshops for No Netting zones (Region 1,2,4) Play an active role in development of management plan (require assistance from coast guard). **What data is needed? How can the PAC have access?** NTFPs: (GFC) Manicole code of practice (cabbage company for data) Nibi and kuffa code of practice Sections of Forest Act Stock estimates of NTFP- needed Fish Species: (EMC, GMCS, ERM): (following needed) Populations, species, estimates Behaviour & trends (spanning, feeding etc) Fisherman seasonal catch size Location	What training and capacity development opportunities exist and how can they be accessed? Involve the APA in monitoring activities on the beach. There are several training opportunities available from GTA. Before any training is done a complete training assessment must be done to identify the training needs before committing. What data/ info on best practice and lessons learned for implementation of livelihood activities exist? Report on review Low Carbon Development Strategy (LCDS) Amerindian Development Fund (ADF): Village Economy Development (Phase II) under the Guyana REDD+ Investment Fund (GRIF) (ADF Phase II Project). Develop criteria for selecting participants for training. Ensure there is a Sustainability plan of the proposed projects. Ensure projects complement each other and have the village council support. When onboarding persons for activities or projects ensure they are interested and innovative Whenever there is a sustainability project it can be affected by: Change of village leaders There should be: - trust among villagers - Accountability and transparency - Development of TOR- everyone knows their role Fair selection of interested participants for training offered in communities.

Engage with APA on understanding rights-based approached to natural resource management. Request that EPA take the lead on water quality, ocean environment. **What data is needed? How can PAC have access?** MARPOL tracking system with MARAD formal request (Georgetown lighthouse) List of trappers licensed to collect wildlife in region 1 from Wildlife Commission/MOU. Open and closed season (yearly) list of quotas to be exported.	Game Species: (Same as above – Needed) Fire management: (the following is needed) Fire causes and occurrences Locations of fires Annul periods when fires occur How much of the resource use (issue) is by communities?

7 HOW WE WILL WE MEASURE SUCCESS -

7.1 Monitoring and Evaluation

Measuring the success of implementing a protected area management plan is essential to ensure conservation goals are achieved and ecosystem health is maintained. This involves evaluating various indicators and metrics that reflect the objectives outlined in the plan. By systematically measuring these indicators, protected area managers can assess the effectiveness of their management strategies and make informed decisions to enhance conservation outcomes and community benefits.

The SBPA management plan is designed to be dynamic, flexible, and adaptive to changing information, management, and community needs. The Monitoring Plan (Appendix 5) and the Log Framework (Appendix 6) provides indicators to measure success in achieving program goals, objectives, and outputs. Additionally, it offers a framework for a monitoring and evaluation (M&E) plan which identifies data collection methods and institutional responsibilities. The M&E plan will help managers to;

- Determine whether SBPA management is achieving its goals and objectives.
- Monitor the progress of management plan implementation against anticipated outputs.

This part of the M&E framework can be used in conjunction with staff performance appraisals, though it should not be the sole measure of performance

By assessing progress toward achieving goals, objectives, and outputs, SBPA management can integrate this information into annual operational plans and activities, adapting their interventions for more effective and efficient implementation. Ultimately, the implementation of an M&E plan provides managers and key stakeholders with up-to-date information on the progress and results of SBPA management interventions. An annual review of M&E results will be summarized in SBPA annual reports, and M&E activities will subsequently be incorporated into future work plans. Success will also be measured through the application of the Management Effectiveness Tracking Tool (METT). The METT was developed to help determine the effectiveness of protected area management globally. It tracks how well management programs, actions, and activities are being conducted and assesses their overall impact. The METT has been updated to its fourth version (METT-4), launched in 2021. This new version, presented as an Excel tool, facilitates implementation and result compilation. The METT-4 includes a revised handbook that offers background on management effectiveness, best practices, case studies, and guidance on using complementary tools like SMART and SAGE for enhanced assessment quality.

8 FINANCING

Resource mobilization for the Shell Beach Protected Area (SBPA) involves securing financial, human, and technical resources essential for effective management and conservation. This includes obtaining funds from governmental subventions, the Protected Areas Trust, local and international donors, NGOs, and the private sector. Capacity building, through targeted training programs, on-the-job experiences, and exchanges, will enhance the skills of staff and local stakeholders. Critical to the implementation of the plan is the involvement of local communities and other stakeholders, ensuring that benefits are realized. As part of the management plan, the Commission will develop an annual work plan with a detailed budget, which will be approved by the Board of Directors.

Currently, the majority of funds for managing SBPA come from an annual government subvention. The World Wildlife Funds Guianas (WWF Guianas) provides annual grants for sea turtle monitoring activities. Co-financing is also consistently provided by the Protected Areas Trust of Guyana through formal grant applications. Throughout the life of the plan, additional third-party donors will be approached for funding and technical support to enhance the effectiveness of SBPA 's management.

Securing sustainable financing for the National Protected Areas System is a key priority of the Commission as is iterated in the PAC Strategic Plan Programme 3 – Finances.

Programme 3 – Finances – PAC Strategic Plan	
Objective **Mobilize resources to ensure the financial sustainability of the PAC**	❖ Develop and implement a sustainable financing plan: (review current financing model; strategy to increase tourism revenue; revision of fines) ❖ Revise and implement new fee structure for services provided/use of Pas. ❖ Develop and roll-out new services and products (include payment for ecosystem services) ❖ Lobby Government to increase subvention to the PAC and increase contributions to the PATF. ❖ Engage Private Sector to contribute to the PATF through CSR, Offsetting

Indicative Management Costs

Table ..... and Table ..... show the estimated capital and recurrent costs respectively. These figures are broad estimates only and are meant to serve as a guide for management plan implementation fundraising only. More detailed and accurate management plan implementation costing will be conducted in line with annual operational plans.

Table .....: Capital cost estimates for PA management

Insert table

Table..... Recurrent cost estimates for this 5-year SBPA management plan

Insert table

LIST OF APPENDICES

Appendix 1 Management Plan Process

Appendix 2 Community Contributions to SBPA Plan

Appendix 3 SWOT Analysis

Appendix 4 Five Year Operational Plan

Appendix 5 Monitoring Plan

Appendix 6 SBPA Logical Framework

Appendix 7 Core Participants in SBPA Management Plan Development Workshops

Appendix 1 – SBPA Management Planning Process – Schedule

Insert schedule

Appendix 2 Summary of Contributions made by 24 SBPA Communities to the SBPA Management Plan

SBPA Management Planning Process
Community consultations held October 2023 – April 2024

BENEFITS	RESOURCE USE	EDUCATION, AWARNESS & TRAINING
- Develop a benefit sharing mechanism. - Support sustainable livelihood projects and small business (agro-processing, honey harvesting, aqua-culture farms, tourism, craft etc. - Conduct tours to shell beach protected area. - Hire more persons from local communities and improve staff/ranger's benefits. - Provide training for Communities e.g boat licenses. - Develop a tourism package for SBPA, with benefits towards communities. - Lobby government to provide Scholarships and sponsorship for	- Continue turtle monitoring and monitor more beaches. - Conduct more patrols by land, sea and air. - Work with villages to monitor the PA - Provide training for rangers to conduct monitoring - Conduct enforcement actions to stop illegal activities. - Employ more Rangers from the communities. - Hire more staff and have them occupy the Ranger Stations & Outposts. - Conduct research in the SBPA.	- Produce & distribute education and awareness material: (brochures, booklets, videos etc) - Host more awareness workshops and educational sessions - Share and distribute data and information on the SBPA with communities and across the country - Produce education & awareness materials in traditional language - Increase outreach with youth and children in communities. - Conduct exchange visits, nature camps, school outreaches - Establish and support wildlife clubs

children

- Support sports development in communities (infrastructure & equipment)
- Support marketing and packaging of products
- Lobby government to improve and provide better services in communities e.g water, health care, infrastructure, roads, educations, agriculture, transportation for schools, install/improve water facilities in communities.
- Improve Communication within Villages (Phone & Internet)
- Support in purchase of equipment: (solar freezers, GPS, Compasses, outboard engines, vehicles, agri-tools)
- Improve communication between PAC and communities. Share information through community groups like the Moruca District Council
- Create an SBPA hotline to support monitoring by sending reports.
- Use of drones to support monitoring
- PAC to support conservation work and projects on village lands e.g replanting of trees
- PAC needs to improve visibility in the communities (have more regular visits).
- Conduct resource use mapping and develop a limit on how much resources persons are allowed to take from the PA. e.g how many fishes.
- Conduct/support Land use planning of SBPA and Village lands.
- Youths and community members should participate in monitoring activities.
- Educate communities of the negative impacts on the use of poison in
- Incorporate information about PAC, SBPA, turtle conservation in the School Curriculum.
- Host community awareness events on the beach during easter.
- Create community group for information to be shared
- Development of a QR code that can be scanned showcasing SBPA and surrounding communities
- Promote SBPA on all media platforms e.g social media, TV, radio, print.

Support the following Training

- Tour guide, Bird identification
- Camera trapping, tree cutting
- Aquaculture, agriculture, farming practices
- Environmental education
- Sea turtle monitoring,
- Use of medicinal plants
- Financing, budgeting, tourism, hospitality

- Support the communities in development of Village Plans. - Include traditional knowledge & practices in SBPA management and ensure preservation of cultural heritage of local people.	ponds and rivers. - Support sustainable use of resources in communities. - Build a proper turtle hatchery with proper defenses against threats.	- Resource Use Mapping - Water quality testing - Tree Identification - ICT, Compass, First Aid - ATV, Boat, map reading - Hospitality, catering, house keeping - Survival and water safety - driving and maintenance of vehicles and boats

Appendix 3 – SWOT Analysis

Insert Table

Appendix 4 – SBPA Five Year Operational Plan

Programme 1: Management							
		Timeframe (Year)					
The SBPA is managed using appropriate and effective management structures and systems		1	2	3	4	5	
Objective 1.1: To have a full complement of capable Staff	1.1.1 Revise the SBPA Human Resource (HR) Structure						
	1.1.2 Hire staff in keeping with new SBPA HR Structure						
	1.1.3 Conduct Staff performance appraisals						
	1.1.4 Design and Implement a Skills and Capacity Development Plan for SBPA Staff and Stakeholders.						
Objective 1.2: SBPA infrastructure and equipment needs met	1.2.1 Assess and update infrastructure and equipment needs of the SBPA						
	1.2.2 Develop infrastructure and equipment plan for the SBPA (including maintenance plan)						
	1.2.3 Procure equipment and build structures and maintain appropriate equipment and buildings in keeping with plan.						
	1.2.4 Construct an office for the SBPA						
Objective 1.3: Appropriate financial management systems for managing SBPA are in place	1.3.1 Develop and implement internal financial management systems and procedures (including manuals, SOPs, Plans).						
	1.3.2 Mobilize financial resources for SBPA. (e,g through grants, partnerships, payment for ecosystem and other services e.g eco-tourism.						

Objective 1.4 Strengthen SBPA Planning and adaptive management	1.4.1 Prepare Annual workplan and Budget for the SBPA					
	1.4.2 Prepare quarterly Site Level Reports					
	1.4.3 Conduct Mid and End of Year review of annual workplan in line with the SBPA M & E Framework and prepare reports					
	1.4.4 Conduct METT annually and prepare reports					
	1.4.5 Conduct Mid Term review of SBPA Management Plan and prepare report					
	1.4.6 Conduct end of Term review of SBPA Management Plan and Prepare Reports					
	1.4.7 Design and implement a management planning process for SBPA Plan (2029 – 2033)					

Programme 2: Protection and Sustainable Use of Resources						
SBPA is monitored effectively and it's natural resources are used sustainably		**Timeframe (Year)**				
		1	**2**	**3**	**4**	**5**
Objective 2.1 Effectively monitor species, ecosystems and landscapes in the SBPA	2.1.1 Update the conservation targets and ecological threats and develop relevant plans e.g Fire Management Plan					
	2.1.2 Develop and implement a Ranger – Based Monitoring Programme.					
	2.1.3 Develop and Implement a Marine Turtle Conservation & Monitoring Plan (MTCMP) for 2024 - 2028					
	2.1.4 Conduct annual marine turtle monitoring along the beaches of the SBPA in keeping with the MTCMP					
	2.1.5 Conduct research in the SBPA in keeping with the NPAS Research Strategy and Priorities.					
	2.1.6 Support student research (local schools, communities and institutions) –					

	2.1.7 Support community research related to resource use (including traditional Knowledge)					
	2.1.8 Make research information and research findings accessible to communities and other stakeholders.					
	2.1.9 Conduct monitoring and enforcement exercises in the SBPA (overflights, patrols, etc)					
Objective 2.2 Strengthening Resource Protection in the SBPA and Adjacent Areas.	2.2.1 Develop a Land use plan for SBPA					
	2.2.2 Revise and update Resource Use Plans with Communities					
	2.2.3 Facilitate the development of resource use rules and plans					
	2.2.4 Support the development and implementation of Village Plans and Community Conservation Plans.					
	2.2.5 Support the development of Village Rules related to resource use					
	2.2.6 Support community resource protection and monitoring efforts					

Programme 3: Stakeholder Involvement and Benefits						
Stakeholders are involved in the management of the SBPA and receive benefits		**Time Frame**				
		1	**2**	**3**	**4**	**5**
Output 3.1: Improve stakeholder involvement in SBPA management and decision-making	3.1.1 Revise and Update the SBPA Stakeholder List					
	3.1.2 Establish and Operationalize the SBPA Oversight Committee					
	3.1.3 Conduct Training on the SBPA Management Plan and Process for New and Emerging Leaders					
	3.1.4 Hold Community Meetings (At least once per year with each Village) and give feedback about activities completed under SBPA Management Plan					
	3.1.5 Hold Public Forums					
	3.1.6 Support involvement of communities and other stakeholders in SBPA Activities (e.g Research, monitoring, training, awareness etc)					

	3.1.7 Establish and maintain good partnerships and relations with key stakeholders (including govt agencies, NGOs, conservation organizations, regional bodies, private sector)					
	3.1.8 Support Community representative groups and participate in their activities					
	3.1.9 Support and promote the involvement of stakeholders in PA management and decision-making processes (e.g Committees, strategic planning processes, Surveys and Feedback					
	3.1.10 Support Moruca Development District Board					
Objective 3.2: Increase sustainable livelihood opportunities available to communities.	3.2.1 Conduct review and prepare report on potential conservation-compatible livelihood initiatives for SBPA communities.					
	3.2.2 Support the implementation of livelihood initiatives as per report 3.2.1 (grant writing, training, marketing, branding etc)					
	3.2.3 Purchase and market craft and other products made by SBPA communities					
	3.2.4 Support and facilitate livelihood knowledge exchange programmes for SBPA communities with communities of other PAs					
Objective 3.3 Promote the equitable sharing of direct benefits from SBPA.	3.3.1 Develop and implement a benefit sharing plan for SBPA					
	3.3.2 At least 80% of the Ranger Team employed in the SBPA are from local and indigenous communities.					
	3.3.3 Advertise SBPA positions and services locally.					
	3.3.4 Provide full and part time employment to residents in and around the SBPA (cooks, guides, assistants, boat captains, hospitality and transportation services etc).					
	3.3.5 Promote and include traditional knowledge in SBPA's work.					
	3.3.6 Increase support for community and regional activities (e.g Expos, Heritage, Fairs, Festivals, School Graduations)					

Programme 4: Education, Awareness and Outreach						
SBPA, its values, biodiversity and ecosystems are known locally and internationally						
Objective 4.1 To increase awareness of SBPA's values, biodiversity, and ecosystems.	4.1.1 Develop and implement an Environmental Education Programme for the SBPA					
	4.1.2 Conduct Knowledge, Attitudes and Practice (KAP) Surveys					
	4.1.3 Conduct nature camps, youth camps and Education Outreaches					
	4.1.4 Establish Nature and Wildlife Clubs in schools and communities					
	4.1.5 Facilitate Field Visits to the Beaches (for Schools/Communities Clubs/Groups)					
	4.1.6 Develop and distribute educational materials (e.g posters, brochures, books etc)					
	4.1.7 Erect appropriate educational and awareness signage in and around the SBPA					
	4.1.8 Promote SBPA through various forms (media, event, forums, radio programmes, workshops, conferences Expos, Heritage, Fairs, Festivals, School Graduations,)					
	4.1.9 Support the integration of the traditional knowledge of the SBPA's biodiversity and ecosystems into the education system.					
	4.1.10 Promote the SBPA at international and global events (Conferences, Workshops, COPs,					

Appendix 5: Monitoring Plan

SBPA Management Impact: Achieving SBPA MP Goals and Objectives

Baseline Codes: DD = Data Deficient DP = Data in progress

Responsibility Codes: P&M = Planning & Monitoring, ERM = Ecological Monitoring & Research CEEED = Community Engagement & Environmental Education Department Admin = Administrative Department

Attribute/ Characteristics/ Incentive	Indicator	Targets	Baseline	Method of data collection	Frequency	Responsibility
GOALS	**1. Management**					
1. The SBPA is managed using appropriate and effective management structures and systems	No. of Management & administrative policies/SOPs created and/or updated.	At least one policy document/SoP developed and, or updated for all management functions of the PA. (staff, equipment & infrastructure, finance	Code of conduct HR policy document	• (management) reports; • policy documents; • SOP documents/reports.	Annually	Admin
	% of existing/developed management & administrative policies that are being implemented.	All developed/existing management & admin policies are implemented.	Approximately 20%	• Admin/HR reports • M& E report • Progress report (status update report.	Annually	Admin P&M

	% of Management programs in SBPA plan that are updated and implemented.	≥80% of management programs are updated. ≥80% of management programs are implemented.	100% Approximately 65%	• M&E report/ Status update report. • SBPA Plan • Mid-term review • Evaluation Report	2.5 years into new plan (mid-term review); 5 years.	P&M
	2. Protection and Sustainable Use of Resources					
2. SBPA is monitored effectively and its natural resources are used sustainably	Reduction in the number of high and middle level threats occurring in the SBPA.	≤ 5% of threats occurring in the PA are considered high or middle level threats.	0% of threats are high level. 2% of threats are middle level.	• METT analysis & report • ERM reports • Ranger patrol reports	Annually	P&M ERM
	Levels of resource use maintained at sustainable levels. (sustainable resource extraction levels)	Trends show stable and or increasing population numbers for resources utilized.	DD	• METT report • Research papers •	Annually	ERM SBPA site team
	Healthy SBPA Ecosystems (Ecosystem health)	High species richness & diversity. Healthy habitats & good habitat diversity. Good water quality (free from pollutants, presence of	Water quality: low mercury levels	• ERM Report • GIS data on forest cover	Annually	ERM SBPA site team

		nutrients, oxygen etc) ≥95% canopy cover for forest.				
	3. Stakeholder Involvement & Benefits					
3. Stakeholders are involved in the management of the SBPA and receive benefits.	The number of communities receiving benefits (direct/indirect) from the SBPA	All stakeholder communities receive some benefit from/through the SBPA	SBPA management plan. Site-level report	• Site-level Reports • Management plan report • Community engagement reports	Annually	CEEED
	Number of communities/ stakeholders consulted during the management planning &mid-term process	All stakeholder communities and agencies are consulted	Boundary demarcation report. 1st SBPA management plan	• Consultations report • Management plan process report.	Mid-term (2.5 years) 5 years (end review)	CEEED
	Number of villages/communities participating in (direct) income generation/livelihood activities	≥ 5 SBPA communities participating in income generation/livelihood activities	Support craft purchase from Nappi	• Site-level reports • Community engagement reports • M&E update reports.	Annually	CEEED REM SBPA site team
	4. Education, Awareness and Outreach					
4. SBPA, its values, biodiversity and ecosystems are known locally and internationally	Knowledge & awareness of the SBPA (its values & biodiversity &	≥25% increase in awareness in local stakeholders from baseline.	KAP surveys	• KAP reports • ERM reports	Annually	REM CEEED

	ecosystems increase globally.	≥25% internationally within 5 years.				
	Increase in number of international research conducted in SBPA	≥2 research activities occurring annually.	Research Reports	• Research permits. • Research reports	Annually	REM
	No. of presentations on the SBPA given at international events	≥3 events attended annually & presentations made	UN Biodiversity COP. ASL conference	• Meeting minutes • Presentation • Photos	Annually	CEEED
Attribute/ Characteristics/ Incentive	Indicator	Targets	Baseline	Method of data collection	Frequency	
Programme 1 (Goal): The SBPA is managed using appropriate and effective management structures and systems.						
Objectives						
1.1: To have a full complement of capable staff.	% of HR structure filled	≥95 % of HR structure filled.	Approx. 70% filled.	• HR records & reports • HR structure	Annually	HR
	% of Staff performance that meets or exceeds expectations	100% staff meeting or exceeding expectations	≥85% of staff meeting or exceeding expectations.	• Staff appraisals	6 months	HR
	No. of trainings provided to staff.	≥2 trainings completed annually.	Some staff receive training.	• Training reports; • pictures;	All year	HR

	% of staff receiving training	100% of staff receive at least 1 training annually.		• registration sheets; • training certificates.		
1.2 SBPA infrastructure and equipment needs are met.	% of Infrastructure & equipment needs met	≥ 80 % of infrastructure & equipment needs met	45% of infrastructure & equipment needs met	Infrastructure & Equipment needs assessment.	% of Infrastructure & equipment needs met	Admin
1.3: Appropriate financial management systems for managing SBPA are in place.	Annual planning & budgeting conducted.	One planning and budgeting session completed annually.	2023 budget and planning	• Completed budget document. • Budget report	Annually	P&M Finance
	Number of grants request granted/approved.	≥1 grant request submitted & approved annually.	PATF grant for SBPA activities	• Finance records/reports • Grant reports • Budgets reports/records	Annually	Finance
	Amount of donor/External funding received	≥ G$50 million, in donor funds received over 5 years.	CI & WWF are regular donors to the SBPA	• Finance records/reports • Budget records/reports	Annually 5 years	Finance
	Deadlines for financial actions and reporting are met.	≥ 90 % of deadlines for financial management & reporting are met.	Budgets prepared as needed per activity.	• Finance records/reports • Budget records/reports • Site- reports	Per Action Annually	
1.4: Strengthen SBPA Planning and	% of actions outlined in	≥ 90% of actions in the management	≤65% of actions	• M&E plan status update report	Annually	P&M

Adaptive Management.	management plan that are completed	plan completed.	completed from previous plan	• Site-level reports • Annual reports		
	No. of adaptive management interventions implemented.	An increase in the implementation of adaptive management interventions	Some adaptive management measures implemented	• Management plan evaluation reports • Site-level reports • Monitoring reports • METT analysis and reports	Annually	P&M
Attribute/ Characteristics/ Incentive	Indicator	Targets	Baseline	Method of data collection	Frequency	Responsible
Programme 2 (Goal): SBPA is monitored effectively and its natural resources are used sustainably						
Objectives						
2.1: Effectively monitor species, ecosystems and landscapes in the SBPA	% of Species in SBPA being monitored. % of Ecosystems in SBPA being monitored. % of Landscapes in SBPA being monitored.	At least 50% of species, ecosystems, and landscapes in SBPA are monitored	20% of species, ecosystems and landscapes monitored	Site reports ERM reports	Annually	ERM SBPA site staff

2.2: Strengthening Resource Protection in the SBPA and Adjacent Areas.	Number of adaptive management interventions implemented.	An increase in the implementation of adaptive management interventions	Some adaptive management measures implemented	Annual reports, Site level reports, Strategic planning documents	Annually	P&M
	No. of threats occurring in SBPA.	A reduction in the no. of threats occurring within the SBPA. Having adequate enforcement interventions based on threats identified.	Threats from illegal mining, logging and overharvesting of natural resources present in PAs.	METT Assessments. Ecological monitoring reports	Annually	ERM
	No. of enforcement actions/interventions conducted.	Reduction in illegal activities occurring in SBPA.	Illegal mining, logging & Over harvesting of resources especially fish occurring within PAs.	Enforcement reports REM dept report	Annually	ERM
	% increase in METT scores	METT score maintained ≥75%	METT score 77% at 2022 assessment	METT analysis and report	Annually	P&M

	Revision of the PA Act	Stronger penalties, Clear language on resource use.	PA Act, 2011	Parliament records, Cabinet document. Revised Act.	One time	Consultant Technical team
Attribute/ Characteristics/ Incentive	Indicator	Targets	Baseline	Method of data collection	Frequency	
Programme 3 (Goal): Stakeholders are involved in the management of the SBPA and receive benefits						
Objectives						
3.1 To improve stakeholder involvement in SBPA management and decision making.	No. of Stakeholder consultations conducted.	At least 1 consultation conducted with key stakeholder groups per relevant activity.	Regular stakeholder consultations are held as needed.	• Meeting minutes/reports • Registration sheets	Annually	CEEED
	No. or % of identified key stakeholders who are consulted on and involved in decision making	Involve ≥ 75% of all key stakeholders in relevant management and decision making.	Approx 40% of key stakeholders are regularly consulted.	• Meeting minutes/reports • Registration sheets • Stakeholder list	Per key activity	CEEED
3.2 To increase sustainable livelihood opportunities available that surround the SBPA.	No. of sustainable livelihood activities supported.	At least 2 livelihood projects piloted and or supported in the SBPA.	Purchase of food & other items. Permanent & temporary employment	• ERM reports • Annual reports • Site-level reports	Annually	ERM

3.3 To promote the equitable sharing of direct benefits from the SBPA.	No. of villages/ communities receiving benefits from the PA.	All stakeholder communities receive some benefit from the PA	Some communities receiving direct benefits.	• Site-level reports • KAP survey report/result	Annually	ERM
	No. of households within a community receiving benefits from the PA	Increase in the number of households benefiting from the PA between baseline and year 5.	KAP Survey data	• Site-level reports • Benefit sharing reports • KAP reports	Annually	ERM
Attribute/ Characteristics/ Incentive	Indicator	Targets	Baseline	Method of data collection	Frequency	Responsibility
Programme 4 (Goal): SBPA, its values, biodiversity and ecosystems are known locally and internationally						
Objectives						
4.1 To increase awareness of SBPA's values, biodiversity, and ecosystems.	Achieve International Accreditation (such as KBA)	SBPAs achieves some form of international accreditation.	No current accreditation	Accreditation listing Accreditation document/report PA reports	Annually	P&M
	No. of international & local institutions or individuals conducting research in SBPA.	≥1 international research conducted within NPAS annually.	There is limited research within the PA.	Research reports Research permits & findings. ERM reports	Annually	ERM

	No. of collaborations with international donors, NGOs & other organizations.	There is collaboration with at least 2 international organizations yearly.	Collaboration with: KFW, WWF, CI,	Research permits, researcher findings, research report.	Annually		P&M
	% increase in KAP scores	An increase in knowledge, attitude and perceptions of SBPA from baseline values	KAP surveys conducted in most stakeholder communities .	KAP research scores KAP report	2.5 years Every 5 years.		P&M
	Increase in Social Media interaction (Likes, shares, visits).	25% increase in social media interaction from baseline.	DD	PR Reports Social media posts & analysis	Annually		PR officer/tea m

	Increase in sponsorships and donor support	≥30% increase in financial support from donors by year 5 of plan.	Financial records of donor funds	Donor reports Financial reports & records	Annually	Finance department
	% of SBPA initiatives (Activities) supported by local people, groups, and communities.	75% of SBPA initiatives actively supported by local stakeholders by year 5	There is some Ad hoc support	Stakeholder surveys; Events reports & records	Annually	CEEED Planning

Appendix 6 – Logical Framework

Structure	Intervention	Objectively Verifiable Indicators of Achievement	Source and Means of Verification	Assumption
Programme 1: Management				
Goal	1. The SBPA is managed using appropriate and effective management structures and systems.	No. of Management & administrative policies/SOPs created or updated. % of existing/developed management & administrative policies that are being implemented. % of Management programs in SBPA plan that are updated and implemented.	SOP/policy documents & Admin reports Admin reports; Management plan evaluation report Management plan evaluation report.	Policies & SOPs will be developed and implemented. The management plan will be continuously monitored and routinely evaluated for progress.
Objectives/Outcomes	1.1: To have a full complement of capable staff	% of HR structure filled. % of Staff performance that meets or exceeds expectations No. of trainings provided to staff. % of staff receiving training	HR structure & reports Performance appraisals Training Reports Registration sheets; Training reports	A staffing needs assessment & HR structure was completed. Sufficient financing is available for all funding needs. Suitably qualified persons are available There is low staff turnover

	1.2 SBPA infrastructure and equipment needs are met.	% of Infrastructure & equipment needs met	Infrastructure & Equipment needs assessment. Photos Built structures	Sufficient funding available to procure equipment and build structures as per needs assessment.
	1.3: Appropriate financial management systems for managing SBPA are in place.	Number of grant requests approved. Amount of Donor/External funding received. Deadlines for financial actions and reporting are met.	Grant reports Donor reports Finance reports	Sufficient donor funding is available for application. There are appropriate financial systems & enough human resources in place.
	1.4: To strengthen SBPA Planning and Adaptive Management.	% of actions outlined in SBPA management plan that are completed. No. of adaptive management interventions implemented.	Management plan M&E framework. Management plan M&E Report	Management plan is updated and being implemented.
Outputs / Deliverables	1.1.1Revise SBPA HR structure. 1.1.2 New staff recruited in accordance with the new 8organisational structure. 1.1.3 Conduct staff performance appraisals. 1.1.4 Design and Implement a skills and capacity development plan for SBPA & stakeholders.	HR structure revised/updated. No. of new staff recruited. Appraisals conducted. Capacity needs assessment plan developed.	Organizational structure. HR reports/records. Staff appraisals. Capacity needs assessment document/report.	Government budget allows sufficient number of staff to be hired and trained appropriately.

	1.2.1 Carry out infrastructure and equipment needs assessment. 1.2.2 Develop infrastructure and equipment plan for the SBPA (including maintenance plan) 1.2.3 Procure equipment and build structures and maintain appropriate equipment and buildings in keeping with plan.	Needs assessment completed. Infrastructure and equipment plan developed. No. of equipment procured. No. of structures built in keeping with plan.	Needs Assessment document. Infrastructure & equipment plan. Procurement reports Photos Built infrastructure	Organizational needs assessment completed. Sufficient financing to meet all funding needs available.
	1.3.1 Develop and implement internal financial management systems and procedures (including manuals).	Payroll software acquired and implemented. QuickBooks accounting program implemented and utilized. Finance SOPs developed, disseminated & implemented.	Installed software. Finance/admin reports SOP document. Finance/Admin reports	Software available and able to be operated on current systems. The needed information to develop the SOP is readily available.

	1.3.2 Mobilize financial resources for SBPA. (e,g through grants, partnerships, payment for ecosystem and other services e.g eco-tourism.)	≥5% annual increase in Govt Subvention. ≥1 active/approved grant annually. ≥100 million dollars in donor funds by year 5 of the plan.	Annual budget & report. Donor reports Grant reports	Government subvention and donor funding is readily available.
	1.4.1 Prepare Annual workplan and Budget for the SBPA 1.4.2 Prepare quarterly Site Level Reports 1.4.3 Conduct Mid and End of Year review of annual workplan and prepare reports. 1.4.4 Conduct METT annually and prepare reports. 1.4.5 Conduct Mid Term review of SBPA Management Plan and prepare report. 1.4.6 Conduct end of Term evaluation of SBPA Management Plan and Prepare Reports. 1.4.7 Design and implement a management planning process for SBPA Plan (2029 – 2033)	Annual workplan and budget prepared. Report prepared Mid & end of year workplan review of annual workplan completed & report prepared. METT analysis and report completed. Mid-Term review of SBPA plan completed. End review & report of SBPA plan completed. New management planning process completed & implemented.	Annual workplan & budget document. Site-level report Mid & end of year review report METT report Mid-term review report End of term evaluation report Management planning process document/ report	Government subvention available. Site-level information is presented to HQ Workplan prepared and activities completed. PA management programs are implemented. Stakeholders are willing to participate Lessons learnt are applied to new process.

Structure	**Intervention**	**Objectively Verifiable Indicators of Achievement**	**Source and Means of Verification**	Assumption
Programme 2: Protection and Sustainable Use of Resources				
GOAL	SBPA is monitored effectively and its natural resources are used sustainably	% Reduction in the number of high and middle level threats occurring in the SBPA. Levels of resource use maintained at sustainable levels. (sustainable resource extraction levels). Healthy SBPA Ecosystems (Ecosystem health)	METT analysis & report ERM reports Ranger patrol reports Research Papers	Sustainable use levels are known or can be determined. Key ecosystems are known and can be tracked/monitored.
Outcomes/ Objectives	2.1: To Effectively monitor Species, Ecosystems and Landscapes in the SBPA. 2.2 Strengthening Resource Protection in the SBPA and Adjacent Areas.	% of Species in SBPA being monitored. % of Ecosystems in SBPA being monitored. % of Landscapes in SBPA being monitored Number of adaptive management interventions implemented. No. of threats occurring in SBPA. No. of enforcement actions/interventions conducted. % increase in METT scores Revision of the PA Act	REM reports. METT reports REM reports Ranger patrol reports Enforcement reports	Ecosystems, landscapes and species are well researched and known. Lessons learnt are incorporated in PA management. Threats to the PA require enforcement intervention.

			PA Act amendments	Government will to amend the PA Act. Key stakeholders willing support revision.
Outputs/ Deliverables	2.1.1 Revise and update the conservation targets and ecological threats and develop relevant plans e.g Fire Management Plan	Conservation targets and ecological threats revised & updated for SBPA. No. of relevant plans developed	Site level reports and monitoring reports. Developed plans & documents	Conservation targets and ecological threats are updated and revised; attributable to a dynamic ecosystem and climate.
	2.1.2 Develop and implement a Ranger – Based Monitoring Programme/plan.	Ranger based monitoring program developed. Marine Turtle Conservation & monitoring plan developed and implemented.	Ranger based monitoring plan; REM reports ERM reports	Essential ecological data is readily available so adaptive management decisions can be made.
	2.1.3 Develop and Implement a Marine Turtle Conservation & Monitoring Plan (MTCMP) for 2024 - 2028	No of patrols conducted.	Patrol records ERM report	Sufficient funding is available.
	2.1.4 Conduct annual marine turtle monitoring along the beaches of the SBPA in keeping with the MTCMP	No. of nests observed, marked and monitored.	Nest GPS points	
	2.1.5 Conduct research in the SBPA in keeping with the NPAS Research	Number and % of research conducted relevant to strategy and priorities. No. of student researchers supported by	REM reports Research priorities Research reports	Continuous research is being conducted within and adjacent to the protected area. Research papers conducted by students is published by PAC. Research priority list is regularly updated and is

	Strategy and Priorities. 2.1.6 Support student research (local schools, communities, and institutions). 2.1.6 Make research information and research findings accessible to communities and other stakeholders. 2.1.7 Support community research related to resource use (including traditional Knowledge) 2.1.8 Conduct monitoring and enforcement exercises with the NPAS Inter-Agency Monitoring and Enforcement Committee.	SBPA No. of research papers and findings published. % of research conducted that is presented to key stakeholders. No. of community research supported by PAC, related to resource use. # of site visits conducted # of enforcement actions taken	Research reports REM reports Research papers & reports REM reports REM Reports Research finds/papers Site Level reports, Enforcement reports and meeting minutes	accessible to members of the public. Research is conducted and findings made available. Community research is supported & conducted. NPAS Inter- agency support and commitment. There is a reduction in unauthorised activities within the SBPA and adjacent communities.
	2.2.1 Develop a Land use plan for SBPA. 2.2.2 Revise and update Resource	Land use plan developed Resource use plans revised & updated.	Land Use Plan document REM reports Stakeholder reports	All stakeholders agree to development of land and resource use plan for the PA

	Use Plans with Communities. 2.2.3 Facilitate the development of resource use rules and plans 2.2.4 Support the development and implementation of Village Plans and Community Conservation Plans. 2.2.4 Support the development of Village Rules related to resource use in and adjacent to the SBPA. 2.2.5 Support community resource protection and monitoring efforts.	No. of resource use plans developed. No. of communities where resource use plans were developed No. of village & community conservation plans development supported. No. of villages supported in developing their village rules. No. joint monitoring activities conducted on titled lands. No. of enforcement actions conducted on community lands by request.	Site-level Reports CEED reports ERM reports VSP documents Monitoring reports Enforcement reports Resource use plans Community resource plans & reports Monitoring Reports. Enforcement incident reports. Formal request correspondences.	 Communities request support for resource use plans. Communities indicate that they need help in developing VSPs. Communities willing to conduct joint monitoring & enforcement on their lands. Communities request support for resource use plans.
Structure	**Intervention**	**Objectively Verifiable Indicators of Achievement**	**Source and Means of Verification**	Assumption
Programme 3: Stakeholder Involvement and Benefits				
Goal	Stakeholders are involved in the management of the SBPA and receive benefits	The number of communities receiving benefits (direct/indirect) from the SBPA. Number of communities/ stakeholders consulted during the management	Benefits sharing reports Consultation reports CEEED reports.	Communities willing and capacitated to engage in identified opportunities

		planning/mid-term process. Number of villages/communities participating in (direct) income generation/livelihood activities		
Outcomes/ Objectives	3.1 To Improve stakeholder involvement in SBPA management and decision making. 3.2: To increase sustainable livelihood opportunities available that surround the SBPA. 3.3 To promote the equitable sharing of direct benefits from the SBPA.	No. of Stakeholder consultations conducted. No. or % of identified key stakeholders who are consulted on and involved in decision making No. of sustainable livelihood activities supported. No. of villages/ communities receiving benefits from the PA. No. of households within a community receiving benefits from the PA.	Consultation report CEEED reports. Consultation reports REM reports REM reports Survey Benefit sharing report REM reports KAP surveys	All Key stakeholders are consulted. Communities want to conduct conservation compatible livelihood activities. All communities are receiving some type of benefit from the SBPA.
Outputs/ Deliverables	3.1.1 Revise and Update the SBPA Stakeholder List 3.1.2 Establish and Operationalize the SBPA Oversight Committee 3.1.3 Hold Community Meetings (At least once per year with each Village) 3.1.4 Hold Regular Public Forums	Stakeholder list updated Site level committee established & functioning No. of community meetings held	Stakeholder list document Site Level Committee establishment report. Meetings reports Pictures	An updated list of SBPA stakeholder is available There is a functioning Site level oversight committee Regular meetings are held with communities

	3.1.5 Support involvement of communities and other stakeholders in SBPA activities (e.g Research, monitoring, training, awareness etc) 3.1.6 Establish and maintain good partnerships and relations with key stakeholders (including govt agencies, NGOs, conservation organizations, regional bodies, private sector) 3.1.7 Support Community representative groups and participate in their activities 3.1.8 Support and promote the involvement of stakeholders in PA management and decision-making processes (e.g Committees, strategic planning processes, Surveys and Feedback	No. of public forums held. No. of communities involved in key SBPA Activities. No. of stakeholders participating in SBPA activities. No. of MOUs signed with agencies/organizations. No. of work collaborations with agencies/organizations. No. of meetings attended. No. of activities supported No. of communities involved/represented in SBPA management planning process. No. of stakeholders involved in SBPA decision making processes.	Event reports Registration sheets MOUs Meeting reports. Registration sheets Pictures MOUs	Communities support SBPA management. Stakeholders/ organisations want to work with the SBPA (PAC) SBPA team is invited to participate in community group activities. Stakeholders want and willing to be involved in PA management & decision making.
	3.2.1 Conduct review and prepare report on potential conservation-compatible livelihood initiatives for	SBPA community livelihood assessment conducted. SBPA community livelihood assessment	Consultations, reports, Community meeting minutes.	

	SBPA communities. 3.2.2 Support the implementation of livelihood initiatives as per report @3.2.1 (grant writing, training, marketing, branding etc) 3.2.3 Purchase and Market Craft and other products made by SBPA communities	report completed. No. of projects developed, supported, and implemented. Amount spent to purchase craft items. No. of different products bought from communities. Number of distributors engaged by the PAC for craft.	Reports, meeting reports, pictures Receipts. Pictures. Contracts Finance records. Site-level report Community Reports	Livelihood initiatives are implemented and community members benefit. Communities have craft and other products for purchase.
	3.3.1 Develop and implement a benefit sharing plan for SBPA 3.3.2 At least 80% of the Ranger Team employed in the SBPA are from local and indigenous communities. 3.3.3 Advertise SBPA positions and services locally. 3.3.4 Provide full and part time employment to locals in keeping with work plan (cooks, guides, assistants, boat captains, hospitality and transportation services etc). 3.3.5 Promote and include traditional knowledge in SBPA work programme 3.3.6 Increase support for community and regional activities (e.g Expos,	Benefits sharing plan developed and implemented. % of SBPA positions filled by local and indigenous persons No. of advertisements completed. No. of persons permanently employed. No. of persons employed temporarily. No. of traditional knowledge practices included in SBPA management actions. No. of traditional knowledge practices included in SBPA Mng. No. of community activities	Benefit sharing plan document HR records HR reports Advertisement listings HR records & reports ERM reports	Communities agree to sharing of benefits & adhere to plan. Community members interested & apply for jobs. There are avenues to effectively advertise positions locally SBPA has a full complement of permanent staff and sufficient temporary staff employed. There are activities that can be easily included in management practices. Communities request support from the PAC.

	Heritage, Fairs, Festivals, School Graduations)	attended/supported.	Registration sheets Photos Training reports	
Structure	**Intervention**	**Objectively Verifiable Indicators of Achievement**	**Source and Means of Verification**	Assumption
Programme 4: Education, Awareness and Outreach				
Goal	SBPA, its values, biodiversity and ecosystems are known locally and internationally	Knowledge & awareness of the SBPA (its values & biodiversity & ecosystems increase globally. Increase in number of international research conducted in SBPA. No. of presentations on the SBPA given at international events	≥25% increase in awareness in local stakeholders from baseline. ≥25% internationally within 5 years. ≥2 research activities occurring annually. ≥3 events attended annually & presentations made	There is local and international interest in the SBPA.
Outcome/ Objective	4.1 To increase awareness of & support for SBPA's values, biodiversity, and ecosystems.	International Accreditation status achieved. No. of international institutions or individuals conducting research in SBPA. No. of collaborations with international donors, NGOs & other organizations. % increase in KAP scores	Event Reports Registration sheets Photos Research Permits Research findings Research report	SBPA management and ecological importance is recognised internationally. Internationally published research on data collected from SBPA An increase in collaborations with SBPAs Management body and international donors, NGOs and other organisations.

		Increase in Social Media interaction (Likes, shares, visits). Increase in sponsorships and donor support. % Increase in public awareness and understanding of PA. % of SBPA initiatives (Activities) supported by local people, groups, and communities.	PR Reports Social media posts and analysis Donor reports Financial reports and records KAP Research Data Stakeholder surveys; Events reports and records	SBPA has a continuous presence on the Commissions Social media site. General public is interested in the SBPA.
Output/ Deliverable	4.1.1 Develop and implement an Environmental Education Programme for the SBPA 4.1.2 Conduct Knowledge, Attitudes and Practice (KAP) Surveys 4.1.3 Conduct nature camps, youth camps and Education Outreaches. 4.1.4 Support Nature and Wildlife Clubs in schools and communities 4.1.5 Facilitate Field Visits to the Beaches (for Schools/Communities Clubs) 4.1.6 Develop and distribute educational materials (e.g posters,	Environmental Education programme/plan developed & implemented. KAP Survey conducted. No. of Youth Camps conducted. No. of Educational outreached conducted. No of nature & wildlife clubs supported. No. of exchange/field visits to the SBPA. No. of brochures, books & posters developed & distributed.	Environmental education plan document. KAP report. Registration sheets. Photos Camp & outreach reports. CEED reports; Annual reports Photos, Interviews, Reports Developed material e.g books, brochures.	Funding, human resources and capacity are available. All KAPs done. Willingness of schools & indigenous communities to participate. Sufficient funding Visits to the beach are allowed. There is national and

	brochures, books etc)			international interest in the SBPA.
	4.1.7 Erect appropriate educational and awareness signage in and around the SBPA.	No. of signage developed & erected.	Photos Erected signage	Funding available
	4.1.8 Promote SBPA through various forms (media, event, forums, radio programmes, workshops, conferences Expos, Heritage, Fairs, Festivals, School Graduations, signage).	No. of forums & events SBPA is promoted at.	Registration sheets. Photos Event/forum reports	There is interest in the PA across mass media sources.

Appendix 7: Core Participants – SBPA Management Plan Consultations

Communities	Other Stakeholders
Santa Rosa & Islands	Protected Areas Commission
Kumaka,	Guyana Tourism Authority
Mora	Ministry of Agriculture
Kamwatta	Ministry of Education
Wallaba	Guyana Geology and Mines Commission
Koko	Ministry of Natural Resource
Cabora	Ministry of Amerindian Affairs
Rincon	Guyana Forestry Commission
Parakeese	Guyana Lands and Survey Commission
Kairie	Regional Democratic Council
Karaburi	National Toshao Council
Huradiah	Amerindian Peoples Association
Waramuri	Guyana Wildlife Conservation and Management Commission
Haimaracabra	Protected Areas Trust
Manawarin	Environmental Protection Agency
Santa Cruz	Guyana Police Force
Fathers Beach	Guyana Defence Force
Almond Beach	Greenheart Movement
Assakata	
Kwebana,	
Morawhanna,	
Three Brothers	
Unity Grant	
Warapoka.	

NB: List to be updated before printing

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Protected Areas Commission

SBPA Management Plan 2024-2028