

A Sustainable Financing Plan for Protected Areas in St Kitts and Nevis

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Introduction

The issue of sustainable financing for protected areas management in the Caribbean and indeed, elsewhere in the developing world has had varying degrees of success and lengthy gestation periods. The few cases of sustainable financing for biodiversity conservation in the Caribbean were always initiated with government support, including subventions and large sums of money from external donors. It is the intention of the government of St Kitts and Nevis to eventually have a fully functioning system of protected areas that can be sustained with minimum dependence on direct government funding.

The purpose of this document is to provide some background on protected areas (PA) in St Kitts and Nevis, identify the financial requirements for operationalizing the national protected areas system, propose financial mechanisms options, outline the administrative and legal requirements for the PA system and to recognize some key challenges and risks that will need to be overcome for success. It is anticipated that if all of the proposed requirements are met in a timely manner, the nation of St Kitts and Nevis should be able to have a fully functional, national system of protected areas in about five years.

An earlier draft of this document was discussed with key stakeholders, especially senior government officials (Annex 1), primarily to determine if there were any errors in the information presented and if the proposed sustainable financing mechanisms were feasible and likely to get the required support from the government of St Kitts and Nevis. Based on the comments from these stakeholders the sustainable financing mechanisms outlined in subsequent sections of this report were thought to be realistic and achievable in the short term (over the next three to five years).

Protected Areas Policy

Currently, there is no specific protected areas or biodiversity policy, however, the country's National Biodiversity Strategy and Action Plan (NBSAP) for the period 2014- 2020 was intended to serve as its policy document. Its overall objective is: "... maintaining a diverse and rich biodiversity resource base as the foundation for national development". The NBSAP also provides the framework for:

- Directing specific responses and to focus the attention of relevant line ministries, departments, sectors, agencies, stakeholder groups and the wider community to consider, understand and apply the principles of sustainable development.
- Strengthening the overall implementation plan of the National Targets as well as realizing the objectives of the NBSAP.

- Bringing specific focus toward ensuring policy and action measures by the government of St Kitts and Nevis are strategically linked to business and biodiversity more visibly and based on principles of fairness and equity.
- Designing a framework that provides an enabling/facilitative environment on matters related to conservation, sustainable use, resource access and benefit sharing.
- Combining species management principles related to both invasive and alien species and focusing on identifying and eradicating pathways for their introduction.
- Raising awareness of the importance of genetic resources and traditional knowledge associated with genetic resources, and related access and benefit sharing issues.

It is unclear at this time, how this national policy document has been integrated into and guides the operations of all ministries, particularly in terms of achieving the national targets set out in the document.

Protected Areas Legislation

National Conservation and Environment Protection Act

The National Conservation and Environment Protection Act, 1987 (NCEPA) and its subsequent revisions provide for, among other things, the designation of protected areas, including the treatment of private lands as protected areas; the management of protected areas including the delegation of management to other appropriate agencies by the Minister and preparation of a management plan; and the protection of wild animals and birds. Several weaknesses in this legislation were identified in reviews since 2004 and a recommendation for the repeal of NCEPA was made by one of the legal consultants (Toppin-Allahar, 2004).

The revised legislation with regulations: “National Conservation and Environmental Management Bill”(NCEMB) has been drafted. It provides for the administration and allocation of administrative responsibilities for environmental management, conservation and sustainable use and development of biological diversity, natural resources and the natural and cultural heritage of St. Kitts and Nevis; the designation and management of terrestrial and marine protected areas; pollution prevention and control; the incorporation of international obligations with respect to environmental matters into national law and for related or incidental matters. The Bill also provides for the establishment of a National Environment Foundation (NEF) to provide a sustainable source of financing to support environmental management programmes and initiatives for the conservation and management of the environment in Saint Christopher and Nevis. The funds of the Foundation will consist of: moneys appropriated by Parliament for the purposes of the Foundation; any donation or

bequest to the Foundation from sources other than public funds; grants made by regional and international organisations; moneys generated from fines imposed under the Act; any interest accrued to the Foundation. When enacted, it will replace the NCEPA. In terms of protected areas, the NCEMB and its draft regulations provide comprehensive coverage of administrative responsibilities and management approaches, including information management and reporting.

Fisheries, Aquaculture and Marine Resources Act

The new Fisheries, Aquaculture and Marine Resources Act 2016 (FAMRA) provides for the conservation, management, development and sustainable use of fisheries, aquaculture and marine resources of Saint Christopher and Nevis, to monitor and control Saint Christopher and Nevis fishing vessels beyond the fisheries waters. This Act allows for the declaration of Marine Management Areas (a type of protected area) and priority zones within these areas. The FAMRA also establishes a trust fund to be known as the Fisheries, Aquaculture and Marine Resources Management and Development Fund. It will be managed by the Ministry of Finance and will be capitalized by moneys from licences, authorisations, registration, fines, penalties, administrative determinations, bilateral or regional arrangements, moneys and proceeds from the sale of items or property forfeited or confiscated, appropriations by Parliament and donations. This approach seems likely to better address the financial resources constraints that most government departments face from time to time.

Development Control and Planning Act

The Development Control and Planning Act 2000 provides for the orderly and progressive development of land in both urban and rural areas and for the protection of the environment and improvement of the amenities thereof; for the grant of permission to develop land and for other powers of control over the use of land; to confer additional powers in respect of the acquisition and development of land for planning purposes, and for other matters connected therewith. It also allows for the Development Control and Planning Board under the Act to make plant preservation orders to protect any plant or group of plants for amenity, environmental, landscape, scientific or other similar reasons. The Minister with jurisdiction over the Act can declare an environmental protection area within a development plan if it is deemed that the area requires special protection. The Southeast Peninsula Marine Management Area and Sandy Point Marine Management Area are designated as protected areas in the St Kitts National Physical Plan, 2005. Sea Haven Turtle Nesting Beach is also listed as a Coastal Conservation Area under the Nevis Physical Development Plan 2008. The Act however, does not specify who or how the protected plant, animal or protection area should be managed. Such decisions are likely to be made in consultation with the Department of the Environment/ Department of Marine Resources or the agency responsible for protected areas and biodiversity.

Protected Areas in St Kitts and Nevis

Before 1987 there were no legally designated protected area in the Federation of St Kitts and Nevis. The National Conservation and Environmental Protection Act (1987) declared as protected areas, the Brimstone Hill Fortress National Park but with retroactive effect from 23rd October 1985 and the Bath Hotel historic site (Nevis) with effect from 1st January, 1987. Almost twenty years later the Central Forest Reserve in St Kitts was designated a national park on 23rd October 2006. Subsequently the Basseterre Valley Aquifer was declared a national park in April 2010 and the Frigate Bay Salt Pond a protected area in May 2014. Recently, in August 2016, the government declared the St. Kitts and Nevis Marine Management Area as defined by the two (2) miles radius of sea water around the St. Kitts and Nevis' coastline including the Monkey Shoals area, to be managed by the Department of Marine Resources as the entity with jurisdiction of the Federal Waters of St. Kitts and Nevis.

Brimstone Hill Fortress National Park

Brimstone Hill Fortress National Park (BHFNP) has an area of about 15 ha and is located between the villages of New Guinea and Sandy Point along the northwest coast of St. Kitts (Figure 1). The landscape is essentially dry scrub vegetation with increasing elevation from about 40-220 m. The main features of the site is the outstanding example of a 17-18th century British stone built fortress, commanding view of the sea and costal lands, as well as the associated vegetation that is a nesting site for eight species of birds.

The site was also inscribed as a World Heritage Site by UNESCO in 1999 for its outstanding cultural and historical resource. It is currently managed by the Brimstone Hill Fortress National Park Society (BHFNPS), a not-for-profit, non-governmental organization. The BHFNPS is managed by a Council of Management, made up of elected representatives of the members and two Government nominees. The Chief Executive Officer is the General Manager. Day to day details at the National Park are administered by the Park Manager assisted by the Park Supervisor (http://www.brimstonehillfortress.org/management_intro.asp?siteid=8).

Funding for its management are raised primarily through entrance fees (US\$10.00/person), the hosting of events, and donations which are usually sufficient to take care of operational costs. However, development works such as repairs to failing walls of the fortress estimated at about US\$200,000, require the sourcing of external funding, which have not yet been obtained.

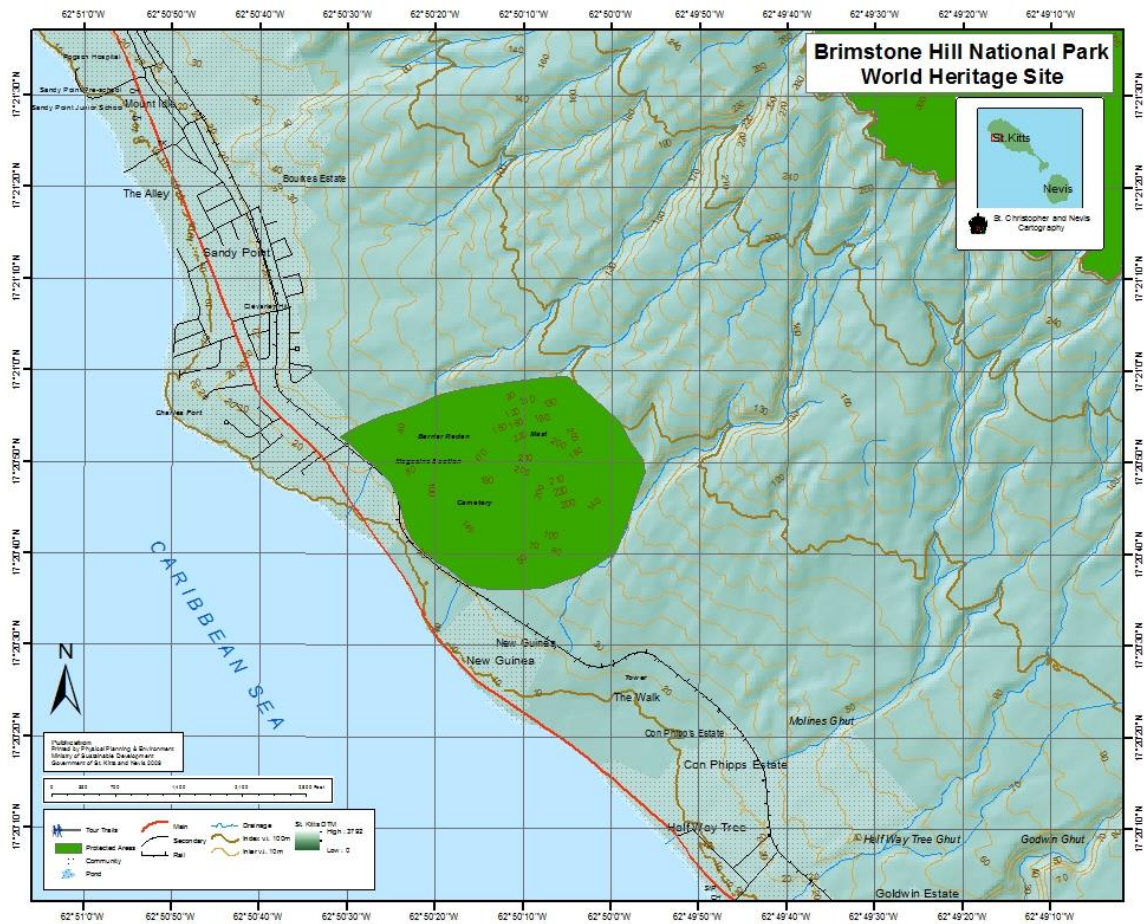


Figure 1. Map showing location of Brimstone Hill Fortress National Park (Source: Department of Physical Planning, Government of St Kitts and Nevis).

Bath Hotel Historic Site (Nevis)

This area occupies about 25 ha with key features that include the old Bath Hotel (built in 1778), the original bath house, thermal springs, and a recently constructed bath house. The area is bounded on the north by Stoney Grove Estate, on the east by Bellevue Estate on the south by Bath Estate and on the West by a public road (Figure 2). Although the site was declared in the NCEPA in 1987, it was not gazetted by the Nevis Island Administration, so it has no effect in local law. Responsibility for management of the site was delegated to the Nevis Historical and Conservation Society and had received support from the Caribbean Regional Environment Programme (CREP) in 2004-2006. CREP was funded by the European Union and executed through CARIFORUM (Gardner, 2006) and was expected to deliver:-

- Functional institutional arrangements for management of the site;
- Bath Amenity Area Management Plan developed in a participatory manner;

- Assessment of key natural, historic, social, economic and cultural resources within the amenity area and a database of key resources developed;
- Design for rehabilitation of Bath stream water quality;
- Income-generating opportunities developed, mainly guided tours through the bogs;
- Bath Estate Tourism Marketing Plan;
- Capacity building support to the Nevis Historical and Conservation Society (NHCS)– as the NGO focal point charged with responsibility for implementing the project;
- Community Outreach & Awareness Program; and
- Capacity building to implement project, mainly through training of locals as managers and tour guides.

Little evidence exists today to demonstrate active management of the Bath Historic Site and there appears to be some controversy over the use of the site, since part of the declared protected area is in private ownership. The owners were apparently not previously consulted on the declaration and use of the site.

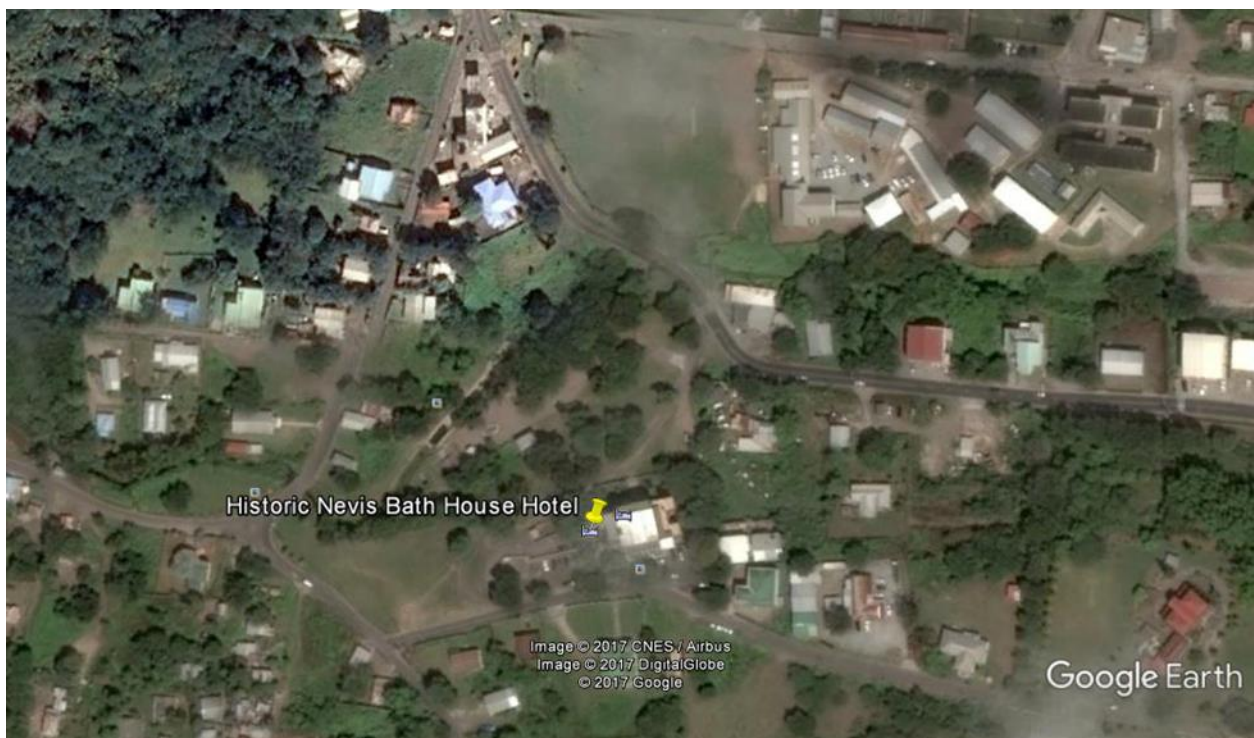


Figure 2. Location of Bath Hotel Historic Site (October 2015, Google Earth satellite image).

Central Forest Reserve National Park

The Central Forest Reserve National park (CFRNP) is the first national park to be designated for the purposes of biodiversity conservation and sustainable development. This protected area contains all lands above the 1000 foot contour and rises to a height of 1,176 m at the Mount Liamuiga crater lake (Figure 3). The CFRNP has the last remaining area of tropical forest on the island of St. Kitts and is the most important catchment area for rainfall and recharge of the aquifers on the island. There are several trails into the watershed that are used by the majority of ecotourism operators on the island. Management responsibility for this area currently falls within the jurisdiction of the Depart of the Environment. There has been no active management of the site until 2016 when four Park Rangers and a Forest Officer were recruited and paid via external funding under the Global Environment Facility for the Conserving Biodiversity and Reducing Habitat Degradation Project. Current management activities are trail maintenance, building community relationships and patrols along the more popular trails.

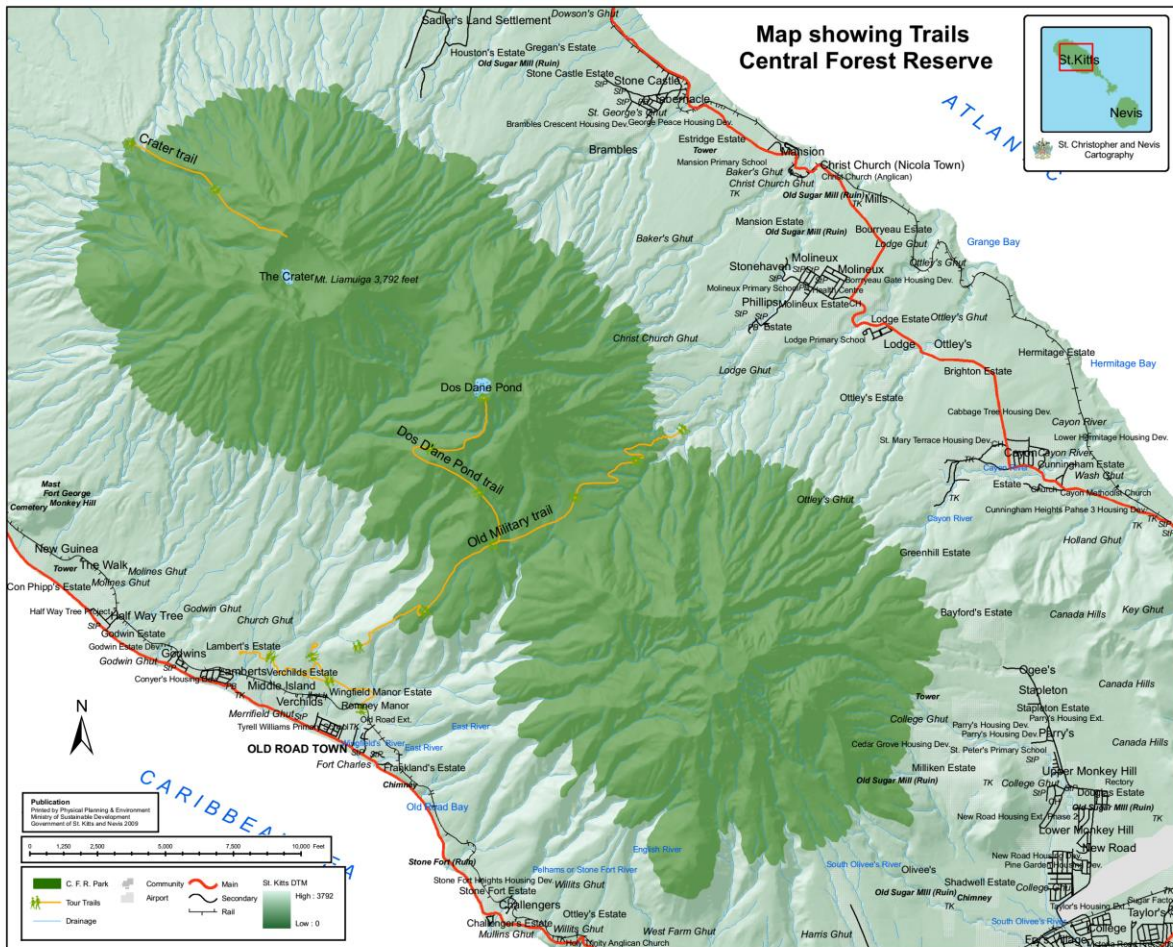


Figure 3. Map of Central Forest Reserve National Park showing location and trails (Source: Department of Physical Planning, Government of St Kitts and Nevis).

The Royal Basseterre Valley National Park

The Royal Basseterre Valley National Park is located to the east of Basseterre and occupies a flat area of about 197 ha (Figure 4), comprised mainly of abandoned sugar cane, grasses, shrubs, an agricultural demonstration plot, a solar panel farm and the Heroes Park. No large built development or polluting activities will be permitted in this area since it was allocated for the protection of the underlying aquifer and well field that supports much of the potable water for St Kitts. Management responsibility for the site has been with the Basseterre Valley Committee and the Water Services Department, but there is no active management of the site as a national park.

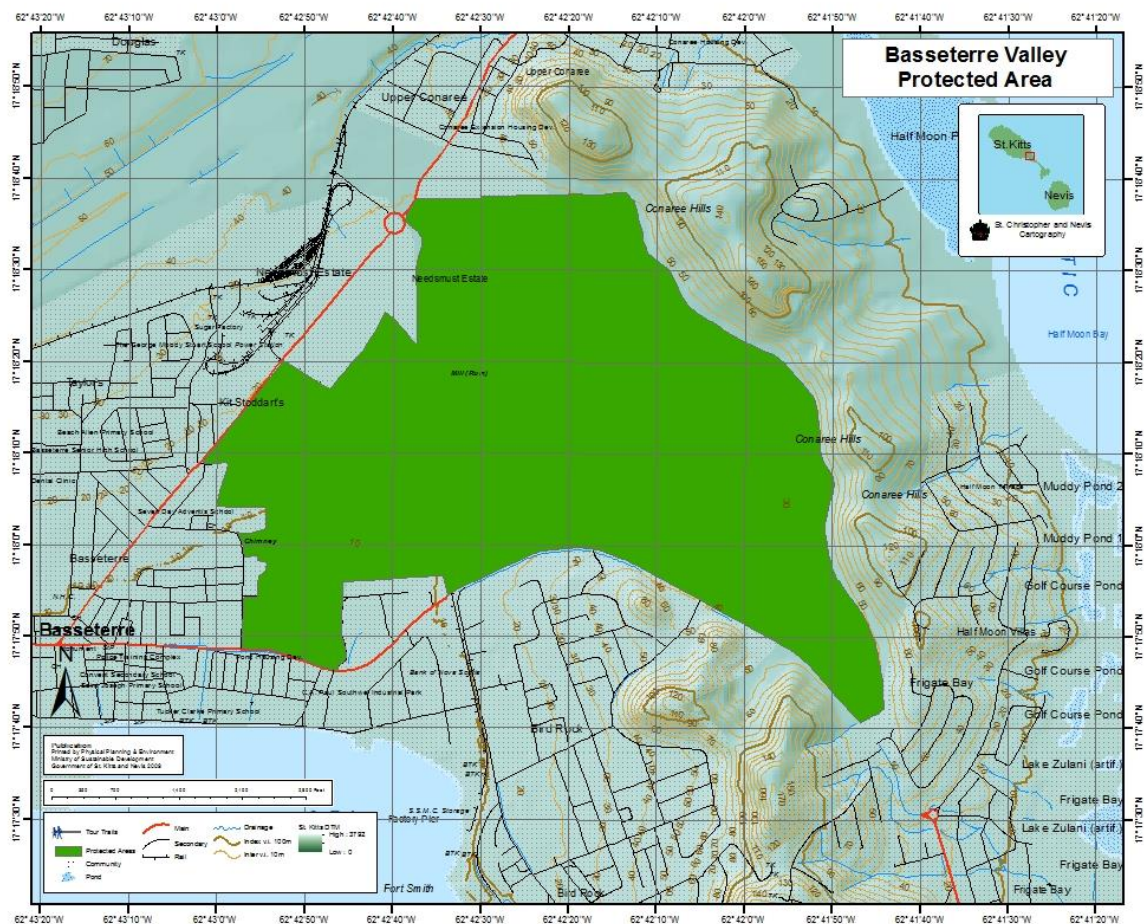


Figure 4. Map of Royal Basseterre Valley National Park showing location (Source: Department of Physical Planning, Government of St Kitts and Nevis).

Frigate Bay Salt Pond

The Frigate Bay Salt Pond is an enclosed area of saline water and fringing mangroves about 7 ha in area, located on the coast at Frigate Bay (Figure 5). This ecosystem supports a number of bird species, including three nesting species and is listed as an Important Bird Area. The area is adjacent to the popular “Strip” that has several restaurants and bars frequented by tourists and locals. Currently there is no active management or monitoring of the species and habitats at this site. Recreational and eco-tourism development were proposed for the general area in the National Physical Development Plan (2005). The Department of Environment has responsibility for management as a protected area, but development of the area falls under the jurisdiction of the Department of Physical Planning and the Ministry of Tourism.

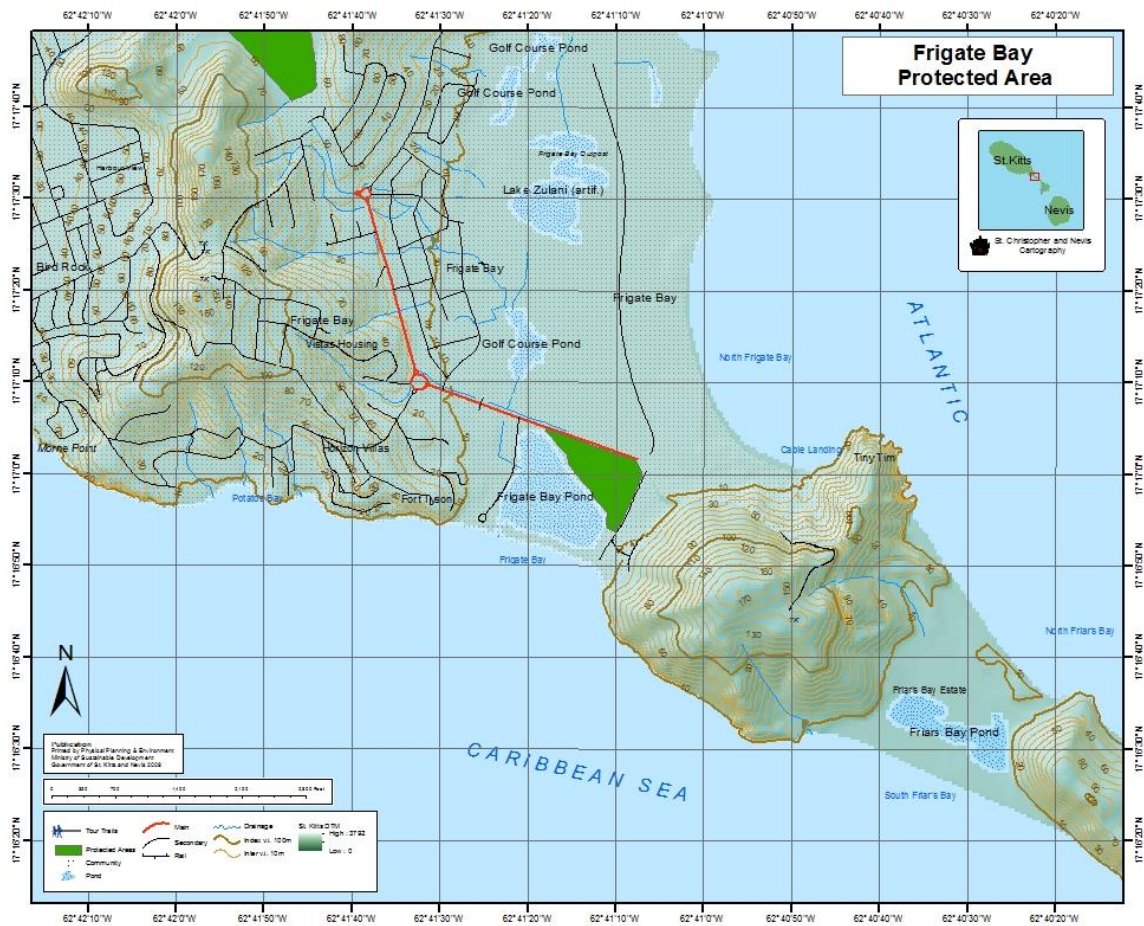


Figure 5. Map of the Frigate Bay Salt Pond Protected area National Park showing location (Source: Department of Physical Planning, Government of St Kitts and Nevis).

The St Kitts and Nevis Marine Management Area

On 18th August, 2016, the Government declared the St. Kitts and Nevis Marine Management Area (SKNMMA) as defined by the two (2) miles radius of sea water around the St. Kitts and Nevis' coastline including the Monkey Shoals area (Figure 6) to be managed by the Department of Marine Resources as the entity with jurisdiction of the Federal Waters of St. Kitts and Nevis. A critical concern here is the overlapping jurisdiction with the Department of Environment for marine protected areas under the proposed NCEMA. This new marine protected area was created to improve management of the near shore fisheries through conservation measures and regulated fishing practices, tourism activities and marine transportation. The development of specific zones for key activities as well as multiple use areas have been proposed in the legislation. It should be noted that turtle nesting beaches are not protected under this Act. The Department of Marine Resources has jurisdiction over the marine environment but the Department of Environment also has some responsibility for the establishment and management of marine reserves.

Protected Areas System Plan for St Kitts and Nevis

The Protected Areas System Plan for St Kitts and Nevis (PASP) was prepared by Ecoengineering Caribbean Ltd in 2010 as an output under the OECS Protected Areas and Associated Livelihoods Project. The plan identified 14 key sites and two categories of sites (ghauts and other historic areas) for systematic management, based on existing plans and designations as well as ecological representation and gap analysis.

A system of protected areas is an organized, purposeful structure that consists of interrelated and interdependent elements/sites that are connected in some way forming a complex whole, for example, administratively, through a set of detailed methods, procedures and routines created to carry out specific management activities. Although a Plan for a System of Protected Areas for St Kitts and Nevis was prepared since 2010, it was never approved and no such system of protected areas exists.

Although some of the recommendations of the PASP were completed since the preparation of that plan, there has been little improvement in the administration, legislative or financing conditions to allow for comprehensive management of the identified sites. The following list of key sites recommended in the PASP have not yet been designated as protected areas and are not actively managed:

- Nevis Peak National Park and Camps River Watershed (Nevis)
- Friar's Bay Salt Pond
- Halfmoon Bay Salt Pond
- Sea Haven Turtle Nesting Beach
- Keys Turtle Nesting Beach

Marine Management Area
Federation of Saint Christopher and Nevis

Series: SKNDPPE 001
Sheet: MARITIME SKN
Edition: 1-2011



Figure 6. Map showing the boundary of the Marine Management Area around St Kitts and Nevis (Source: Department of Physical Planning, Government of St Kitts and Nevis).

- Bath Bogs Protected Area (Nevis)
- Pinney’s Beach Conservation Area (Nevis)
- Historic Charlestown (Nevis)
- Other historic sites identified by the Ministry of Tourism, the St Christopher National Trust and the Nevis Historical and Conservation Society.

The implication of including all of those proposed sites and the existing declared sites into the systems plan, is that funding and staffing need to be secured for adequate management of these sites. The PASP recommended that capital and recurrent expenditures for establishing and managing the protected areas were to be sourced from grants and Government subventions, including staff salaries paid by the government agencies responsible for both marine and terrestrial parks. User/entrance fees, concession fees and grants from the then proposed Environmental Trust Fund were also identified as sources of financing.

In 2012, the St. Kitts and Nevis Sustainable Financing Mechanisms Action Plan was prepared through sectorial stakeholder consultations under a project executed by the Nature Conservancy (Hayman, 2012). It proposed five financing mechanisms that could help to capitalize a conservation fund for the country to manage its protected areas. These approaches were: site conservation fees, travellers fees, debt for adaptation swaps, water funds and developers fees. However, a discussion of the advantages and disadvantages of these options in that report suggested that the disadvantages outweighed the advantages and no opinion in the document was offered on how to proceed with these mechanisms. The document however, did outline the steps for the establishment of a National Conservation Fund, which was subsequently established in 2017 and would receive grant funding from the Caribbean Biodiversity Trust Fund.

Institutional Arrangements for Protected Areas Management

There are three types of protected areas governance systems that can be identified in the anglo-phone Caribbean, which determine the institutional arrangements that are put in place for management. These governance systems are:

Government – the government, on behalf of the State (or Crown) owns the protected area site and infrastructure and is responsible for day to day management through a State agency such as a Forestry Department (e.g. in Trinidad and Tobago, Dominica), Fishery Department (Grenada, Dominica) or a National Parks Authority (St Vincent and the Grenadines, Antigua and Barbuda). Funding for operations is through parliamentary appropriations and from external donors.

Government/NGO – the government owns the protected area site, but has delegated day to day management via a Memorandum of Understanding or through legal vesting of the site to an NGO such as a National Trust (The Bahamas, St Lucia), or to a legally registered, competent community group (Belize). The government may have some oversight of the operations at the policy level (on the Board of Directors or Council) and usually provides an annual subvention. However, the majority of operational costs is raised by the NGO from various sources and mechanisms.

Private - a private entity owns and operates the protected areas site and raises its funding through various sources, without direct government support (e.g. in Belize, Trinidad and Tobago).

What arrangement works best in any country is determined by the socio-political norms of the country as well as the commitment and caliber of senior personnel in the government and NGO. Governments in the Caribbean have generally not been able to adequately manage the protected areas under their purview due to a range of reasons including: inadequate staffing, lack of physical resources, inappropriate legislation, weak leadership and insufficient political will.

In the case of St Kitts and Nevis, management responsibility for protected areas are with the Department of Environment (terrestrial and marine), Department of Marine Resources (marine), Department of Physical Planning, Natural Resources and Environment (terrestrial Nevis), St Christopher National Trust, Nevis Historical and Conservation Society, and the Brimstone Hill Fortress National Park Society.

Gardner conducted his institutional review of protected areas management in the Federation in 2006 including the role of local NGOs, and based on the status of staffing levels, skill sets and orientation, financial resources, institutional culture and political dexterity. He concluded that: “St. Kitts and Nevis does not currently possess adequate institutional capacity to design and manage a system of protected areas”.

In 2010, Haas and Aukerman in their report on the Development of a Protected Areas Conservation Trust, System, Service and a National Capitol Park for St Kitts and Nevis concluded that:

“The Government of SKN does not have adequate legislation, management policies, and institutional capability to support (a) the management of a single protected area or national park, (b) a protected areas conservation system, (c) or a protected conservation service or agency. The Ministry of Sustainable Development does not have adequate resources (i.e., money, equipment, number of personnel, skills and competencies, training) to develop, plan and manage a protected areas system or a single land-based protected area, nor does the Ministry of Agriculture and Fisheries have the adequate resources to develop, plan and manage a protected areas system or a single marine protected area.”

Subsequently, the systems plan for protected areas completed by Ecoengineering Caribbean Ltd. later in 2010 identified the same range of weaknesses reported by Gardner and Haas/ Aukerman. Many of the recommendations in the systems plan remain largely unimplemented.

There are management plans for three sites that have been prepared over the past 10 years. Each of these proposed separate institutional arrangements and will be outlined below.

Central Forest Reserve National Park Management Plan

The Management Plan for the Central Forest Reserve 2007-2011 was prepared under the OECS Protected Areas and Associated Livelihoods Project, as one of the outputs from that project. This plan proposed a range of PA staff to be recruited and supervised by the Senior Environmental Officer who was at that time employed by the Department of Physical Planning and the Environment. These staff positions included: a Protected Area Manager, Community Coordinator/Assistant Manager, Public Outreach Specialist, Natural Resources Specialist, GIS Specialist, GPS/Mapping Technician, Educator, and Visitor Service Rangers (2 persons). Additionally, various contractors were to be hired for 6-month periods to undertake boundary demarcation and construction of sanitary facilities and signage.

This management plan was never implemented mainly due to lack of funding. A Forest Officer and four Park Rangers were recently hired (June 2016) under the Global Environment Facility for the Conserving Biodiversity and Reducing Habitat Degradation Project. They are deployed in the Department of Environment to initiate management activities in the Central Forest Reserve National Park.

Proposed Nevis Peak National Park and Camps River Watershed Management Plan

The management plan for the proposed Nevis Peak National Park and Camps River Watershed was prepared in 2009 under the OECS Protected Areas and Associated Livelihoods Project in anticipation that the site would be declared under that project. However, administrative and human resource challenges were obstacles to the declaration of protected area status for the site. The management plan recommended that:

“It is premature in the process of creating the Park to provide meaningful recommendations about how to administer it. We recommend that the project undergo a separate needs assessment at the appropriate time in the future, to better match staffing, training, infrastructure and equipment requirements to the availability of financial resources to sustain them.”

However, the plan did suggest that a Nevis Park Advisory Committee be formed to guide the management of the site. The Committee would be comprised of representation of the

appropriate Nevis Island Administration agencies, business interests, conservationists, and local stakeholders.

Proposed Protected Areas Conservation Trust, System, Service and a National Capitol Park for St Kitts and Nevis

This document among other things, proposed the establishment of the SKN Conservation Service as part of their proposed SKN Protected Areas Conservation Trust. The Service would be responsible for implementing and administering the decisions of the Board of Directors of the Conservation Trust. The Service would be comprised of trained professionals competent in protected areas planning and management, or closely related and supporting fields, and supporting staff for the routine and day to day functions associated with the planning, management, programming, maintenance, enforcement, interpretation, fee collection, monitoring, and other functions typical of managing a protected areas system.

The staffing arrangement contained in that proposal is summarized below.

Administration: Chief Protected Areas Officer, Financial Controller, Protected Areas Planner, Education/Communication Officer, Grants and Partnership Officer, Protected Areas Law Enforcement Officer, Senior Clerk, and Office Assistant (2 persons).

St Kitts National Capitol Park: Senior Park Officer, Park Law Enforcement Officer, Education/ Interpretation Officer, Agronomist Assistant, Youth/Special Events Officer, Financial Clerk, Entrance Gate/Visitor Information/Receptionist (4 persons), Janitor/Maintenance (2 persons), Park Rangers (4 persons), and Gardeners/landscape maintenance (2 persons).

Central Forest Reserve: Senior Forest Reserve Officer, Education and Community Officer, Clerk/Typist, Protected Area Rangers (4 persons), and Trail Maintenance/Janitor (2 persons).

Marine Reserves: Senior Marine Reserve Officer, Education/Interpretation Officer, Protected Area Rangers (4 persons), Clerk/Typist, and Janitor/Maintenance (2 persons).

The economic situation and current administrative framework in St Kitts and Nevis will not be able to accommodate the costly institutional arrangement proposed by Haas/Aukerman.

Community Participation in Protected Areas Management

Community participation in the management of protected areas have been encouraged globally, particularly in countries where communities depend on protected areas for their livelihoods and have strong local institutions to support meaningful participation. Consultations were held in two communities adjacent to the Central Forest Reserve and in one community within the Nevis Peak site during 16-18th May, 2017 (Annex 2). Preparations for the meetings

included liaising with the Community Development Officer for each of the areas to spread the word among the communities, distribution of flyers, and walking the streets visiting homes and businesses to encourage residents to attend the meetings. Turnout at the meetings in St Kitts were poor despite the efforts to raise awareness on the consultation.

Most community members were aware of the protected area or proposed protected area adjacent to their villages, but were not sure how the protected area could help improve their livelihoods. They needed to “see the benefits” of protected areas. The residents adjacent to the Central Forest Reserve seem more interested in getting the government’s help for more or better housing and jobs. It was alleged that some people planted illegal crops in the mountains as a source of income. Ideas for jobs suggested by the residents in both Nevis and St Kitts were related to farming, local food processing, local handicrafts or other unskilled employment. Other tourism type activities which the villagers thought could be useful were storytelling of the history and culture of their areas as well as installation of interpretative signage.

In discussion with the Community Development Officers, it was ascertained that there were no organized community groups in the areas under consideration, despite several efforts in the past to mobilise residents. Previous initiatives at forming local groups did not last long due to issues of trust, political agendas, poor leadership and lack of sustained commitment. At this time, it was not considered possible to have direct community participation in the management of the protected areas, unless significant inputs and consistent capacity building were provided for local community development and institutional strengthening.

Engagement of Key Conservation NGOs

The Brimstone Hill Fortress National Park Society (BHFNPS) has been managing its site for about 50 years with a combination of paid staffing and volunteers, without subventions from the government. The BHFNPS can potentially provide guidance to any national protected areas agency in managing historic sites based on its experience.

Both the St Christopher National Trust and the Nevis Historical and Conservation Society receive a cash subvention annually from the government (EC\$130,000 and EC\$164,300 respectively in 2016), but most of their recurrent expenditure is met through fund raising efforts, endowments and external grants. Neither of these organizations have sufficient capacity to take on management of additional protected areas or historic sites, but can potentially provide technical advice on conservation of areas designated by the government.

New Proposed Administrative Framework

A new administrative framework for managing the proposed system of protected areas in St Kitts and Nevis is being proposed here, based on discussions with senior government officials

and staff at the Department of the Environment. Additionally, the focus over the next five years will be on managing the existing declared protected areas and the proposed Nevis Peak National Park and Camps Watershed, because the details for declaration and management of other key sites in the Protected Areas Systems Plan have not yet been worked out and the government will not likely be able to hire more new staff for those other key sites over the next 5 years.

At this time, senior government officials favour the establishment of a Protected Areas Unit within the Department of Environment for the management of terrestrial protected areas in St Kitts. Discussions were ongoing between the Department of Environment and the Department of Marine Resources to determine the modality for the management of selected sites within the Marine Management Area. However, a process of negotiation was recently initiated between the government and an entity known as Blue Finance to manage the Marine Management Area. Since no details were available at this time, it is inappropriate to speculate on the jurisdiction, financing mechanisms and management approaches to be used by Blue Finance.

Terrestrial protected areas in Nevis will be the responsibility of the Ministry of Communications, Works, Public Utilities, Posts, Physical Planning, Natural Resources and Environment.

At a minimum, the following initial levels of staffing will be required in St Kitts:

- Head of Unit/Protected Areas Superintendent (K35-K39 Salary Grade)
- Administrative Assistant/Secretary (K22- K27)
- Public Awareness/Communications Specialist (K33-K38)
- Marketing Specialist (K35-K39)
- Ecologist/Biologist (K33-K38)
- Park Rangers (4) – Central Forest Reserve National Park (K22- K27)
- Park Rangers (4) – Royal Basseterre Valley National Park & Frigate Bay Salt Pond (K22- K27)
- Landscape attendants (4) - Royal Basseterre Valley National Park & Frigate Bay Salt Pond (K10- K21)
- Marine Park Rangers (4) - Sites within the Marine Management Area (K22- K27)

At a minimum, the following initial levels of staffing will be required in Nevis:

- Protected Areas Superintendent (K35-K39 Salary Grade)
- Administrative Assistant/Secretary (K22- K27)
- Public Awareness/Communications Specialist (K33-K38)
- Ecologist/Biologist (K33-K38)
- Park Rangers (4) - Nevis Peak National Park and Camps River Watershed (K22- K27)

- Marine Park Rangers (2) - Sites within the Marine Management Area (K22- K27)

It is anticipated that the Marketing Specialist should also provide assistance for sites in Nevis, until such time as the Nevis Island Administration determines that they will recruit their own Marketing Specialist.

The key roles for the protected area staff at the Unit will include:

- Administration
- Promotions and business facilitation
- Revenue collection
- Public relations
- Awareness and education
- Surveillance and enforcement
- Scientific monitoring of the resource
- Assessment of impacts on the resource
- Control of visitor use and visitor impacts
- Maintenance of park infrastructure, trails and equipment
- Preparation of technical reports.

Financial Requirements for Key Elements of the Protected Areas System

In preparing the sustainable financing plan for protected areas in St Kitts and Nevis it is essential to get an idea of how much financing is needed annually, at least in the short term (up to five years). In a review of the national Budget Estimates of Expenditures approved by the Parliament over the past five years it was clear that no money was allocated specifically for the management of protected areas. Any expenditure for previous work related to protected areas such as the OECS Protected Areas and Associated Livelihoods Project and the Caribbean Regional Environment Programme were grant funding from external sources that was managed by external agencies. No institutional capacity is evident today in St Kitts and Nevis from the outputs of those two regional projects.

Estimated Cost of Staffing for Protected Areas Management

Based on the new proposed administrative framework outlined in the previous section of this report, the cost of staffing is summarized in Tables 1 and 2 below, using the starting salary for the prescribed salary grade. It is estimated that salary increases would be 10% per annum to accommodate increments consistent with public service expectations.

Staff Position (St Kitts)	Starting Salary/month (EC\$)	Salary/year (EC\$)
Head of Unit/Protected Areas Superintendent (K35-K39)	\$4,810.00	\$57,720.00
Administrative Assistant/Secretary (K22- K27)	\$2,890.00	\$34,680.00
Public Awareness/Communications Specialist (K33-K38)	\$4,495.00	\$53,940.00
Marketing Specialist (K35-K39)	\$4,810.00	\$57,720.00
Ecologist/Biologist (K33-K38)	\$4,495.00	\$53,940.00
Park Rangers (4) – Central Forest Reserve National Park (K22- K27)	\$2,890.00 each X 4 = \$11,560.00	\$138,720.00
Park Rangers (4) – Royal Basseterre Valley National Park & Frigate Bay Salt Pond (K22- K27)	\$2,890.00 each X 4 = \$11,560.00	\$138,720.00
Landscape Attendant (4) – Royal Basseterre Valley National Park (K10-K21)	\$1,720.00 each X 4 = \$6,880.00	\$82,560.00
Marine Park Rangers (4) - Sites within the Marine Management Area (K22- K27)	\$2,890.00 each X 4 = \$11,560.00	\$138,720.00
TOTAL	\$63,060.00	\$756,720.00

Table 1. Protected areas staff costs for St Kitts.

Staff Position (Nevis)	Starting Salary/month (EC\$)	Salary/year (EC\$)
Head of Unit/Protected Areas Superintendent (K35-K39)	\$4,810.00	\$57,720.00
Administrative Assistant/Secretary (K22- K27)	\$2,890.00	\$34,680.00
Public Awareness/Communications Specialist (K33-K38)	\$4,495.00	\$53,940.00
Ecologist/Biologist (K33-K38)	\$4,495.00	\$53,940.00
Park Rangers (4) – Nevis Peak National Park and Camps River Watershed (K22- K27)	\$2,890.00 each X 4 = \$11,560.00	\$138,720.00
Marine Park Rangers (2) - Sites within the Marine Management Area (K22- K27)	\$2,890.00 each X 2 = \$5,780.00	\$69,384.00
TOTAL	\$34,030.00	\$354,444.00

Table 2. Protected areas staff costs for Nevis.

Estimated Cost of Protected Areas Operations

The costing for the operations of the key protected area sites is extracted from the management plans that were prepared for these sites or from indicative costs in the Systems Plan and summarized in Table 3 below.

Central Forest Reserve NP	Yr1 (EC\$)	Yr2 (EC\$)	Yr3 (EC\$)
• Communications	\$15,000.00	\$20,000.00	\$20,000.00
• Trail Maintenance/ Signage	\$10,000.00	\$1,000.00	\$15,000.00
• Equipment, Vehicles & Supplies	\$140,000.00	\$40,000.00	\$200,000.00
• Upgrading Office/ Visitor Centre (Provided by the Govt.)	0	\$160,000.00	0
• Training	\$30,000.00	\$15,000.00	\$20,000.00
• Revision of Management Plan	0	0	\$135,000.00
Total	\$195,000.00	\$236,000.00	\$390,000.00
Nevis Peak NP			
Yr1 (EC\$)	Yr2 (EC\$)	Yr3 (EC\$)	
• Communications	\$15,000.00	\$20,000.00	\$20,000.00
• Trail Maintenance/ Signage	\$15,000.00	\$1,000.00	\$10,000.00
• Equipment, Vehicles & Supplies	\$140,000.00	\$40,000.00	\$200,000.00
• Office/Visitor Centre	0	\$500,000.00	0
• Training	\$30,000.00	\$15,000.00	\$20,000.00
• Revision of Management Plan	\$135,000.00	0	0
Total	\$335,000.00	\$576,000.00	\$250,000.00
Frigate Bay Salt Pond			
Yr1 (EC\$)	Yr2 (EC\$)	Yr3 (EC\$)	
• Communications	\$2,000.00	\$1,000.00	\$2,000.00
• Trail Maintenance/ Signage	\$3,000.00	\$1,000.00	\$2,000.00
• Equipment, Vehicles & Supplies	0	0	0
• Office/Visitor Centre	0	0	0
• Training	\$3,000.00	\$2,000.00	\$1,000.00
• Preparation of Management Plan	\$45,000.00	0	0

Total	\$53,000.00	\$4,000.00	\$5,000.00
Marine Sites	Yr1 (EC\$)	Yr2 (EC\$)	Yr3 (EC\$)
• Communications	\$15,000.00	\$20,000.00	\$20,000.00
• Demarcation, Mooring Buoys/ Signage	\$20,000.00	\$140,000.00	\$10,000.00
• Equipment, Boat & Supplies	\$160,000.00	\$160,000.00	\$40,000.00
• Office/Visitor Centre	\$500,000.00	0	0
• Training	\$30,000.00	\$15,000.00	\$20,000.00
• Preparation of Management Plan	\$135,000.00	0	0
Total	\$860,000.00	\$335,000.00	\$90,000.00
Royal Basseterre NP	Yr1 (EC\$)	Yr2 (EC\$)	Yr3 (EC\$)
• Communications	\$15,000.00	\$20,000.00	\$20,000.00
• Trail Construction, Maintenance/ Signage	\$150,000.00	\$10,000.00	\$15,000.00
• Equipment, Vehicles & Supplies	\$140,000.00	\$40,000.00	\$200,000.00
• Office/Visitor Centre	\$500,000.00	\$160,000.00	0
• Jogging Track Construction	\$250,000.00	0	\$10,000.00
• Arboretum Establishment	0	\$200,000.00	\$160,000.00
• Car Park	\$150,000.00	0	\$10,000.00
• Training	\$30,000.00	\$15,000.00	\$20,000.00
• Revision of Management Plan	0	0	\$135,000.00
Total	\$1,235,000.00	\$445,000.00	\$570,000.00

Table 3. Indicative operational costs for key protected areas.

Note: The St. Kitts National Capitol Park (Royal Basseterre National Park) was originally a conceptual proposal for a variety of development such as trails, parking lots, train station, large rainforest arboretum and a visitor center complex which would include a three-part facility---a 90,000 square foot outdoor botanical plaza with keystone water features and a spray park, a 10,000 square foot visitor centre (two-story with administrative offices on second floor), and an outdoor amphitheater. The estimated cost was 4-5 million US dollars (about 10.4-13 million EC dollars). A scaled down version excluding the amphitheater, water features, train station and two-story administrative centre is used in determining the costs in the table above.

Estimated Annual Financial Requirements

It is assumed that within the first five years, no more than four terrestrial protected areas will be brought under active management (three in St Kitts and one in Nevis), and at least one marine area will also have some active management. It is likely that human resources and financial constraints in the short term will not be sufficient to accommodate more sites.

The costs for managing the other sites proposed in the System Plan should be worked out within three years by protected areas staff, because there is currently insufficient information to determine the details of management action, including exact spatial coverage, land tenure, and management costs. That assessment will help to identify how much additional funds will be required to bring the entire system of protected areas under active management.

Table 4 below summarises the annual estimated funding that will be needed for the management of the key protected areas identified in the previous sections of this report.

Component	Yr1 (EC\$)	Yr2 (EC\$)	Yr3 (EC\$)
Staffing	\$1,111,164.00	\$1,222,280.00	\$1,344,508.00
Operations	\$2,678,000.00	\$1,596,000.00	\$1,305,000.00
Contingencies @15%	\$568,365.000	\$422,742.00	\$397,426.00
TOTAL	\$4,357,529.00	\$3,241,022.00	\$3,046,934.00

Table 4. Annual estimated cost for managing protected areas in St Kitts and Nevis.

It should be noted that the four Park Rangers, the Forestry Officer, maintenance and fuel for one vehicle, and incidentals (a total of about XCD250,000/year) is the only funding provided directly through the government for managing protected areas in St Kitts and Nevis. This money is grant funding from the Global Environment Facility for the Conserving Biodiversity and Reducing Habitat Degradation Project, through the Ministry of Sustainable Development, Economic Affairs, Sustainable Development and Public Sector Investment Programme.

Options for Financing Protected Areas Management in St Kitts and Nevis

There are many different options that have been used to facilitate sustainable financing for protected areas around the world. Only options that are thought to be achievable in the short to medium term based on discussions with senior government officials are described. All of these options should be pursued.

Government Subventions

The government should continue to make annual allocations to the agencies that are responsible for the management of protected areas. However, the amount needs to be increased to cover the projected cost of managing key sites in the proposed system of protected areas by about EC\$4 million in the first year and about EC\$3 million in subsequent years. This increase could be funded through the following options.

1. Allocation from Budget Surplus Fiscal 2017

In the Prime Minister's Budget Address presented in parliament on 7th December, 2016 he indicated: "An Overall Surplus of \$33.4 million and a Primary Surplus of \$58.3 million is therefore anticipated for 2017". This presents an opportunity for the Ministry of Agriculture, (Dept. of Environment) to present a case to the Ministry of Finance and request that the government make a one-time allocation of EC\$5 million to be used as an endowment; the interest from which would be utilised for protected areas management. In presenting the case to the Ministry of Finance, linkages should be made to the protected areas contribution to the tourism product, employment creation and income generation. It may be strategic to request the sum in increments over three years such as 2-2-1, to improve the chances of getting the grant; since smaller annual disbursements are less burdensome on the government. The current annual rate of return on EC\$5 million by a prudent investment house can be about 6% per year. However, it is proposed that the interest continue to be reinvested with the principal for at least three years before drawdown of the funds. That should yield a compounded interest of about EC\$689,232.00. Advice from the Eastern Caribbean Central Bank could be sought on setting up and managing an endowment fund. ***This option is a high priority.***

Revenue Generation

2. Visitor Fees

Some protected area sites have greater potential for generation of income than other sites because of the physical location (convenience, ease of access or nearness to major access roads or population centres) and the quality and variety of natural features (popularity as a visitor attraction). For example, in the Central Forest Reserve National Park (CFRNP), there are several hiking trails that are popular with visitors, including: crater/volcano rim; Dos d'Ane Pond; peak

summit; radio tower/Fischorski trail¹. There is therefore an opportunity to collect entrance fees at these trails, which should be used to improve the demarcation, physical condition and safety along these trails. Many of the users and previous reviews have commented on the poor status and hazardous nature of several hiking trails, including the lack of maintenance. This issues will have to be addressed by the Park Rangers at the earliest opportunity.

The number of visitors to St Kitts and Nevis has shown a steady increase over the past few years. Table 5 provides a summary of visitor arrivals over a recent six-year period.

<u>VISITORS</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Excursionists	6,420	9,249	4,647	5,513	3,567	3,866
Cruiseship	515,787	604,445	553,072	575,049	694,671	910,238
Yachts	3,612	5,152	3,961	6,847	6,763	4,010
Stay-over	98,460	103,924	104,259	107,214	113,014	117,692
Total Arrivals	<u>624,279</u>	<u>722,770</u>	<u>665,939</u>	<u>694,623</u>	<u>818,015</u>	<u>1,035,806</u>

Table 5. Visitor arrivals to St Kitts and Nevis 2010-2015 (Source: Ministry of Tourism)

A visitor use survey needs to be conducted to determine how many people use the different trails in the CFRNP; the frequency of use, as well as what other uses or activities that occur within the national park. Equally important, is the need for a willingness-to-pay survey among users and potential users of the protected areas. The information from such a survey will help to justify the quantum of user fees that may be charged at the site. Some tour guides charge about EC\$275.00 (US\$100) per person for hikes to Mount Liamuiga Volcano². There are at least 15 tour operators in St Kitts that are advertised on the internet via Tripadvisor³.

The Park Rangers may also provide guided tours of the national parks to assist in revenue generation. The mean number of stay-over visitors in the past 5 years is 109,220. If the Park Rangers are able to conduct tours for at least 5% of those visitors per year (5,461 persons), then that could generate US\$546,100 per year (EC\$1,474,470).

The Brimstone Hill Fortress National Park recorded about 75,000 visitors in 2015 which is just over 7% of the total visitor arrivals to the country in that year. Sky Safari Tours Inc. (zip lines) located at the CFRNP site office at Wingfield Estate gets about 22,000 visitors/year, which is a conveniently located, easy to access site. Hikes through the forest in the CFRNP is a more strenuous activity than zip-lining and the upper parts of many of the trails can be moderately difficult for the average hiker. Therefore, the number of hikers are likely to be significantly less than the number of zip-liners. If we make an assumption that at least 10% of stay-over visitors/year are willing to go on a hike (10% of the 5-year mean stay-over visitors is 10,922

¹ <https://skntrails.wordpress.com/home/>

²

<https://www.tripadvisor.com/AttractionProductDetail?product=7577P1&d=147557&aidSuffix=tvrm&partner=Viat>
or

³ https://www.tripadvisor.com/Attractions-g147374-Activities-c42-t139-St_Kitts_St_Kitts_and_Nevis.html

persons), then the potential revenue capture if an entry fee of US\$10.00 is charged, (similar to Brimstone Hill Fortress National Park), will be US\$109,220 (EC\$294,894.00) per year. If the Park Rangers conduct tours for half of that number, the visitor fee will be incorporated in the tour fees, so the effective visitor fee to be collected from other tour operators will be US\$54,610 (EC\$147,447.00).

Similarly for Nevis, an assumption that at least 1% of the stay-over visitors could be encouraged to visit Nevis Peak and other nature trails managed by protected areas staff. This could generate about US\$109,200.00 (EC\$294,840.00) from tours, which will include US\$10,920 (EC\$29,484.00) in visitor fees (park entry fees). ***This option is a high priority.***

3. Coral Conservation Fee (Mooring Fees)

The key assumption here is that the Department of Environment is able to initially establish at least one marine park within the Marine Management Area for which a management plan will be developed with designated areas for a range of uses such as swimming, water sports, and mooring. When mooring buoys are installed, visiting yachts will be required to pay a fee based on the length of stay and size of the boat. There should be four categories based on size of the vessel: < 40 feet/41-70 feet/71-120 feet/> 121 feet and scheduling of mooring fees based on length of stay, should use two categories: 2 days or less and 3-7 days (Global Parks 2014 recommendations for MPA harmonized fees in six Lesser Antilles countries). This mooring fee should be called a Coral Conservation Fee to appeal to the yachters conservation ethic, as is done in the Soufriere Marine Management Area (St Lucia).

The fees proposed below are within the range of that used across the Eastern Caribbean:

- Up to 40' – US\$15 for up to two days, US\$20 for 3-7 days;
- 41-70' – US\$20 for up to two days, US\$25 for 3-7 days;
- 71-120' - US\$30 for up to two days, US\$35 for 3-7 days;
- Over 120' –US\$40 for up to two days, US\$45 for 3-7 days.

Data was not available on how many yachts in the different size classes use the marine areas of St Kitts and Nevis. Using an assumption that 20% of the mean total number of yachts that visit the country over the past five years (Table 5, visitors from yachts), will want to use the marine park and pay for using the mooring buoys for at least 3-7 days (using the lowest size class, up to 40', and assuming 3 visitors per yacht to estimate the number of yachts from the data), the minimum annual revenue to be collected could be US\$35,644.00 (EC\$96,239.00).

In Nevis, the Nevis Port Authority currently collects mooring fees from vessels that use the mooring buoys installed along the coast at Pinney's Beach, Nelson's Spring, Cades Bay, Tamarind Bay and Oualie Bay.

4. Event Hosting

The Royal Basseterre Valley National Park is a relatively flat area, ideally located on the edge of the capital to serve as a major recreation site for the people of St Kitts and Nevis as well as for visitors. It is currently undeveloped with mostly grass, shrubs and a few trees. This area could be easily developed with an interpretation centre that tells the history of the site and the story of water in St Kitts. Jogging and cycling trails (free access) and landscaped areas should also be created to accommodate national events such as weddings, agricultural exhibitions, carnival shows, or other public but temporary, events. The landscaped spaces can be rented out to entities for hosting various events, with the renters having the responsibility for cleaning up the area after use or paying the park management for cleanup. Depending on the size of the space required for each event, the park management could consider a rental at the rate of EC\$1.00/ft²/day. An annual agricultural exhibition and fair, carnival show, music festival each renting 40,000 ft² of space can yield about EC\$120,000.00 per year. Additionally smaller events like a month-end farmers and craft market, occupying about 10,000 ft² could bring in at least EC\$120,000 annually.

5. Posting of Signage and Telecommunication Towers

Space for the posting of private advertising signage and construction of telecommunication towers could be rented in specific locations in protected areas. Rental rates can be negotiated based on the location of the site and the size of the signage or tower. Standards for signage design and construction must be developed and adopted, so that the aesthetics of the site are not unduly disturbed by the signage. The income from this activity from annual rental of the space for the erection of signage (8' x 20') is estimated at about EC\$24,000/year/sign. Effective marketing of this service should target an income of at least EC\$192,000 per year, including smaller signage at reduced costs.

6. Concessionaires

The use of portions of protected areas to establish and run private businesses compatible with the government's policy and regulations should also be considered as an opportunity to contribute to revenue generation for the protected areas system. A current example is the operation of the zip-line business by Sky Safari Tours at Wingfield Estate that currently pays EC\$2,840/month. A threshold value should be established where any business entity that wants to set up its operation in a protected area, pays for the infrastructure for their business and has a visitor throughput of at least 20,000/year should pay a monthly rent of EC\$5,000.00. This will yield EC\$60,000/year from each business.

Consideration should be given to encouraging private enterprise to set up forest canopy walks/aerial tramlines (as in St Lucia) or cable car tours to and from the mountain peaks in St Kitts and Nevis. Aerial tram tours (open-air gondolas) in St Lucia cost USD80.00/person. Again,

the need for a Marketing Officer to seek out investors and serve as liaison with local authorities for such development.

The operation of a canteen and gift/souvenir shop at each site should also be considered and contracted out to private enterprise. Visitors, especially after enjoying a tour, are usually willing to purchase souvenir items and often seek food/refreshment and other visitor facilities. Such concessionaires can provide a small but steady stream of income to the park's management. Such an opportunity could potentially provide about EC\$3,000 per month as long as the marketing of the site ensures that at least 20,000 visitors pass through annually. Smaller food or craft providers could also be encouraged, setting a monthly concession fee based on the gross value of their inventory, but certainly paying no less than EC\$1,000/month.

Grants

7. SIDF Grant

The St Kitts and Nevis Sugar Industry Diversification Foundation (SIDF) is funded through the Citizenship By Investment Programme of the Government of St Kitts and Nevis. The SIDF website indicated that the Foundation provided support to government in its efforts to diversify the national economy and maintain economic stability, and to support, finance or undertake the development of new and existing industries, projects or enterprises. The SIDF may also provide grants, loans, budget support, debt forgiveness or assistance of any kind to the government or to persons or institutions that qualify for such assistance under its policies. The National Bank Trust Company is the Founder and has invested over US\$55 million (EC\$143 million) in the development of St. Kitts and Nevis by way of grants, loans and share holdings. The Foundation was the main source of funding for Capital Grants to the government in fiscal 2015.

The Ministry of Agriculture (Dept. of Environment) should make an application to the SIDF for a one-time grant of EC\$15 million to capitalise an endowment fund for protected areas management, where only the interest would be used for protected areas operational costs after three years of compounding. The potential drawdown after the third year of investment is estimated at EC\$4 million.

Protected areas are key sites for tourism and in fact, provide the amenities and sights for visitors from all over the world. Comments uploaded to Tripadvisor⁴ from tourists who visited St Kitts and Nevis, identified the main preferred activities of these visitors. Among the top 10 (of 80) activities were: visits to Brimstone Hill Fortress; scuba diving/snorkeling; motor safaris and beach tours; hikes through the forests; paddle boarding, and parasailing/paragliding. This confirmed that local biodiversity and ecosystems provided the basis for much of the top preferred recreational pursuits of these visitors. Clearly, building the argument that investing in

⁴ https://www.tripadvisor.com/Attractions-g147374-Activities-St_Kitts_St_Kitts_and_Nevis.html#ATTRACTION_SORT_WRAPPER

protected areas serve to “diversify the national economy and maintain economic stability, and supports the development of new and existing industries, projects or enterprises” should qualify an application to the SIDF. ***This option is a high priority.***

Enterprise Development

8. Protected Areas Coffee

Interviews with several stakeholders and earlier literature made reference to the cultivation of illegal crops in the CFRNP which seem not to have declined in recent years, because it provides lucrative livelihood opportunities for some communities. Perhaps a process of engagement needs to be initiated by the Department of Environment in collaboration with the Department of Agriculture to consider the replacement of the illegal crops with coffee. Coffee is the second largest commodity traded on the world market and St Kitts and Nevis currently does not produce any local coffee. Locally produced coffee could be marketed as a highly prized, specialty coffee. Communities owning abandoned or under utilised agricultural lands adjacent to the protected areas could also be encouraged to cultivate coffee. Cooperation with the Department of Agriculture would be essential in facilitating technical assistance for this venture. The Department of Agriculture would also need to ensure that the best agricultural practices are utilized to minimize any potentially adverse impacts on the environment.

Coffee processing and roasting could be managed by a separate unit in the protected areas administration, and initially sold on the local market and to hotels, restaurants and visitors. The cost of bringing one hectare of land into coffee production over three years is estimated at about EC\$25,000. Cost of processing equipment and supplies is estimated at about EC\$40,000.00. Production per hectare is approximately 400 kg (dried hulled beans). Roasted specialty coffee sells for about EC\$150.00 to EC\$300.00/kg. Therefore, from the third year of operations the protected areas coffee could generate about EC\$60,000.00/hectare.

Fund Development and Fund Raising

Raising funds for protected areas management is more than just writing proposals and hoping that potential donors will respond favourably. Generally, non-United Nations donors tend to give large sums of money to relationships that have been developed, not institutions where there is no familiarity. Giving money to worthy causes is often an emotionally motivated act where the needs of the giver is aligned with the needs of the recipient. Developing a successful fund raising culture depends on a range of conditions, especially, ensuring that the right kind of person leads and directs the targeted activities. Building relationships to facilitate the giving of human, material and financial resources as well as services, should be the major initial undertaking. But this activity will have to be supported by credible administration, legislation and operational support in the protected areas.

One critical element to help this process is to develop a good understanding of the value and benefits of biodiversity and ecosystems services to St Kitts and Nevis (and perhaps the world),

especially that provided by protected areas. It must be clear what has to be protected or managed, and why; showing defined monetary and conservation benefits that could help persuade potential investors. It would be helpful to have a full valuation exercise of key protected areas at the earliest opportunity to provide the data for decision making and marketing.

The hiring of a Marketing Specialist to lead the fund development and fund raising will be a critical element. This Specialist could also lead the development of a business plan for the protected areas coffee, so as to encourage investors in that opportunity, if the State wishes to engage private sector support for that venture.

Projected Cash Flow

Cash Receipts	Year 1	Year 2	Year 3	Year 4	Year 5
Budget surplus	\$ 2,000,000.00	\$ 2,000,000.00	\$ 1,000,000.00	\$ -	\$ -
Tours (CFRNP)	-	\$ 1,474,470.00	\$ 1,474,470.00	\$ 1,474,470.00	\$ 1,474,470.00
Visitor Fees	-	\$ 147,447.00	\$ 147,447.00	\$ 147,447.00	\$ 147,447.00
Tours (Nevis Peak)	-	\$ 294,840.00	\$ 294,840.00	\$ 294,840.00	\$ 294,840.00
Mooring Fees	-	\$ 96,239.00	\$ 96,239.00	\$ 96,239.00	\$ 96,239.00
Event Hosting	-	-	\$ 240,000.00	\$ 240,000.00	\$ 240,000.00
Signage	-	\$ 192,000.00	\$ 192,000.00	\$ 192,000.00	\$ 192,000.00
Concessionaires	\$ 60,000.00	\$ 60,000.00	\$ 60,000.00	\$ 60,000.00	\$ 60,000.00
Budget Surplus Interest	\$ -	\$ 120,000.00	\$ 247,200.00	\$ 314,832.00	\$ 318,890.00
SIDF Grant Interest	\$ -	\$ 900,000.00	\$ 954,000.00	\$ 957,240.00	\$ 957,434.00
TOTAL Cash Receipts	\$ 2,060,000.00	\$ 5,284,996.00	\$ 4,706,196.00	\$ 3,777,068.00	\$ 3,781,320.00
Cash Paid Out					
Staffing	\$ 1,111,164.00	\$ 1,222,280.00	\$ 1,344,508.00	\$ 1,478,958.80	\$ 1,626,854.68
Operations	\$ 2,678,000.00	\$ 1,596,000.00	\$ 1,305,000.00	\$ 1,305,000.00	\$ 1,435,500.00
Contingencies	\$ 568,365.00	\$ 422,742.00	\$ 397,426.00	\$ 397,426.00	\$ 437,168.60
Total Cash Paid Out	\$ 4,357,529.00	\$ 3,241,022.00	\$ 3,046,934.00	\$ 3,181,384.80	\$ 3,499,523.28

Table 6. Simplified cash flow projection showing key sources of funds and major proposed expenditures.

It should be noted that the full staffing required could be phased in over the initial three years to minimize the early cash demand. Also, the grants from the budget surplus and the SIDF will be put in an endowment fund so that the principal amounts will not be used directly for protected areas management. The interest generated from these sources as well as other cash inflows will be used for day to day management activities and staff salaries. A key assumption in Table 6 for the purpose of the calculations, are that cash receipts are stable across the 5-year period. In reality, those receipts may fluctuate either up or down, depending on market conditions and the rigour with which the protected areas staff manage the area and its visitors.

Legislative Requirements for Financing Protected Areas

The revised draft National Conservation and Environmental Management Bill (NCEMB final draft 2017) should be enacted at the earliest opportunity. The NCEMB proposes the establishment of a separate entity to manage protected areas, called the Protected Areas Agency which could be a Division of the Dept. of Environment. However, the Dept. of Environment will be generally responsible for overseeing the administration, management and monitoring of protected areas established under that Bill, when enacted. The NCEMB also provides for the Agency to be superseded by a statutory body to be established for the management of protected areas in the Federation and the Agency shall cease to exist on the effective date of the legislation establishing the new management authority for protected areas. Senior decision makers in the government currently favour the establishment of a Protected Areas Unit within the Dept. of Environment. It is therefore critical that the NCEMB be approved by the Parliament and enacted as soon as possible. It should be noted however, that protected areas in Nevis will still be the responsibility of the Ministry of Communications, Works, Public Utilities, Posts, Physical Planning, Natural Resources and Environment.

National Environment Foundation

In terms of managing funds for protected area and the environment in general, the NCEMB proposes the establishment of a National Environment Foundation (NEF). Section 91 of the NCEMB prescribes the purpose of NEF, as:

“...to provide a sustainable source of financing to support environmental management programmes and initiatives for the conservation and management of the environment in Saint Christopher and Nevis”.

Implicit in that clause is the requirement for the Foundation to have access to administrative and financial management competence either at the Council level or hired as needed. The Councillors to be appointed to the NEF should include a senior representative from: the Eastern Caribbean Central Bank, Accountant General’s Department, Tourism Authority, Department of Environment, Department of Marine Resources, Attorney General’s Chambers, Sugar Industry Diversification Foundation, a national NGO and the Nevis Island Administration (2 representatives). The Governor General may be invited to serve as the Guardian of the Foundation to boost its credibility. Funds of the NEF (as prescribed in the NCEMB) may consist of the following:

- (a) moneys appropriated by Parliament for the purposes of the Foundation;
- (b) all moneys given to the Foundation by way of gift, donation, endowments, bequests or other contribution from sources other than public funds;
- (c) grants made by regional and international organisations;
- (d) moneys generated from fines imposed under the Act;

(e) any interest accrued to the Foundation.

Since this NEF will be set up under the Foundations Act, perhaps there is no need to wait until the NCEMB is enacted. Once the NEF is established and its Council appointed, the government can start the process of allocation of funds identified in the previous section of this report, to the NEF. The assumption here, is that the government may be more comfortable depositing State generated funds into an institution established by the government (the NEF).

The articles and by-laws of the NEF will have to be drafted, as well as an operations manual to guide and support the administrative and financial operations of the NEF. These documents should be relatively easy to prepare since templates are available from existing trust funds in the Caribbean.

St Christopher and Nevis Conservation Foundation

In July 2016 the St Christopher and Nevis Conservation Foundation (SCNCF) was legally registered as a not-for-profit to engage in and carry out any activity to foster, encourage and promote the conservation, protection and maintenance of biodiversity of terrestrial and marine resources. It will serve as a trust fund for managing donations and grants, primarily from the Caribbean Biodiversity Trust Fund (CBTF). It is anticipated that there will be an annual draw down of about USD150,000 from the CBTF. The CBTF will also require the SCNCF to provide a 1:1 matching fund from its third year of establishment. Funds are intended to be disbursed for conservation projects with an initial emphasis on marine resources. The SCNCF is controlled by a board of 13 Councillors comprised of seven NGO representatives and 6 government representatives. The Founding Councillors are The Nature Conservancy, The Nevis Historical and Conservation Society, and the Ministry of Finance. The government of St Kitts and Nevis therefore has no overriding control of the Foundation which may favour the receipt of donations from the private sector and NGOs, since there is less likely to be any political influence in decision making. It is likely that funding from the CBTF will be used only for management of marine protected areas in the short term (Alastair Yearwood, Chairman SCNCF, pers. comm.) The CBTF may also receive grants from the NEF to supplement its programme.

As an alternative to the establishment of the National Environmental Foundation, the Department of Environment and the Ministry of Finance (both represented on the Council of the SCNCF) should initiate discussion at the next SCNCF Council meeting on the feasibility of the SCNCF serving the purposes of the proposed NEF in the NCEMB. The outcome of that meeting will help decide if the proposed new foundation will be needed.

Potentially, the SCNCF could set up a separate account, for finances raised from the management of the terrestrial protected area sites and to be used for further management of the protected areas system. This approach would need the legal aspects developed and addressed in the SCNCF by-laws and an MOU with the Department of Environment or Ministry

of Agriculture to ensure funds generated by the Protected Areas Unit or protected areas managing entity and managed through the SCNCF, are used solely for that purpose.

Fisheries, Aquaculture and Marine Resources Management and Development Fund

This fund has not yet been established. However, when capitalized, it seems likely that it will finance marine resources management activities that are not already funded through government subventions.

Key Next Steps

1. The Head of the Department of Environment, the Permanent Secretary in the Ministry of Agriculture and the Ministry of Finance need to discuss as a matter of urgency and agree on whether they want a separate entity the NEF or the SCNCF to manage funds for protected areas, especially terrestrial sites. The outcome of that meeting will decide on the next step.
2. If the NEF is chosen as the fund managing entity then the bylaws need to be prepared (using the articles and by-laws of the SCNCF as a model) and the Foundation established. If the SCNCF is chosen as the preferred funding, then the Dept. of Environment and the Ministry of Finance needs to meet with the SCNCF Council to work out the details of engagement.
3. The Dept. of Environment should finalise the NCEMB and lobby the Minister of Agriculture and his colleagues to get it passed in Parliament by the end of 2017.
4. The Dept. of Environment should seek to get the Sustainable Financing Plan for Protected Areas in St Kitts and Nevis approved by the government at the earliest opportunity.
5. The Head of the Dept. of Environment and the Permanent Secretary of the Ministry of Agriculture need to prepare their arguments and meet with the Minister of Agriculture and the Minister of Finance to discuss securing an allocation from the anticipated budget surplus.
6. The Dept. of Environment should prepare an application to the SIDF and lobby the Minister of Agriculture and the Minister of Finance to get their support for the application.

Annex 3 provides a 5-year action plan that rolls out the activities needed to operationalize the sustainable financing of protected areas in St Kitts and Nevis.

Steps for the Establishment and Management of the Endowment

1. An endowment fund is an instrument for putting aside funds, usually from multiple sources, which are invested to bring income to be later utilized for specific purposes. The Department of Environment first needs to meet with and get agreement from the

Permanent Secretary (Ministry of Agriculture), the Treasury Department and the Assistant Finance Secretary (Ministry of Finance) on the establishment of an endowment fund for the management of protected areas and the environment, consistent with the articles in the draft NCEMA.

2. Once there is agreement, the Department of Environment and the Treasury Department should meet with the Eastern Caribbean Central Bank to help decide on the selection of an investment manager. The manager's strategies and investment portfolios for the endowment should be acceptable to the government, in terms of historical return and risk, as well as diversification and jurisdiction.
3. The National Environment Fund (NEF) seems to be the preferred mechanism by senior government officers for overseeing the management of funds for protected areas management (based on sectoral consultations). The NEF can be established under the Foundations Act but its council members will need to be selected and its articles of association, bye-laws and operations manual developed by the Department of Environment and the Treasury Department. The operations manual will describe the financial policies and procedures for investment and disbursements. The articles of association and bye-laws of the St Christopher and Nevis Conservation Foundation or those of the Caribbean Biodiversity Trust Fund could be used as a model. Day to day operations of the NEF will require a Coordinator/Administrator and the setting up of a local bank account to facilitate financial receipts and disbursements. The annual administration cost for the NEF may involve the salary for the Coordinator/Administrator, secretarial support and incidentals is estimated at about XCD110,000.00 per year.
4. Alternately or in the short term, the Treasury Department could set up a separate account in the government's financial system for the management of receipts and disbursements, until the endowment has generated sufficient income to pay for the administration of the NEF.

Risks and Challenges

1. The major risk to the proposed financing mechanisms is the inability of the Department of Environment to convince the Minister of Agriculture (responsible for biodiversity and protected areas) and the Minister of Finance to agree to allocate the sums of money projected under the sections on **Government Subventions** and **Grants**. This risk could be minimized if the Dept. of Environment lobbies for political support to strengthen biodiversity management as a means of diversifying and improving on the tourism product, increasing tourism derived revenue, and creating employment.
2. An important risk is the decline in visitor arrivals to St Kitts and Nevis. However, this risk is considered low, since Caribbean island destinations are considered much safer than many

other localities. The impact of several hurricanes over the past two decades and the global economic downturn, have had no lasting negative effect on visitor arrivals. The direct link by air from the American eastern seaboard and from Europe results in easy, convenient and regular transport to St Kitts and Nevis.

3. The introduction of visitor fees may initially present some resistance from the tour operators who have been using the national parks for free over the past decade or so. If visitor fees are charged there will be legitimate expectations that at least proper signage and trails are put in place and maintained. Doing so will help to provide in part, the justification for the introduction of visitor fees.
4. The enactment of the NCEMB and the establishment of the National Environment Fund are critical elements for initiating implementation of the mechanisms for sustained financing of the nation's protected areas. It is not yet known where this Bill fits in on the legislative agenda of the Parliament. The Dept. of Environment needs to lobby for political support to ensure that the Bill is passed in Parliament before the end of 2017, and that measures are put in place to start preparation of the articles and by-laws for the NEF.
5. If Blue Finance is successful in its negotiation with the government and is given full management responsibility for SKN's Marine Management Area, then the Dept. of Environment and the proposed Protected Areas Unit will lose an opportunity to generate income from managing potential marine parks. It may also mean that the identified positions of Marine Park Rangers in this proposal will become redundant.

Conclusion

The options proposed for the sustained financing of protected areas management in St Kitts and Nevis are based on local sources of funds or revenue generation rather than depending on direct funding from foreign donor agencies. Based on national policies and legislation related to biodiversity, tourism and national development, St Kitts and Nevis can demonstrate further responsibility for its own development and reduce the need for external agencies to direct its conservation efforts. Indeed, at the consultation on the draft final Sustainable Financing Plan (SFP) held on 18th October, 2017, the senior government officials present were supportive of the SFP and indicated that immediate action to engage the relevant permanent secretaries and Ministers should be undertaken soon.

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ANNEX I

Officials met to discuss the Draft Sustainable Financing Plan during 16-19th May 2017

State Agencies/NGOs – Dept. of Agriculture Conference Room St Kitts, 16th May, 2017	
Name	Occupation/Agency Represented
Claudia Drew	Project Coordinator/UNDP
Phynora Ible	Project Administrator/UNDP
Rena Warner	Senior Project Analyst/Ministry of Sustainable Development
Ira Liburd	Farmer & Agro-Processor/ ST Agro-processor
Wilmot Alleyne	Enforcement Officer/Dept. of Marine Resources
Melvin Agard	Computer Technician/CUET/Gideon
Schneimman Warner	Finance Consultant/St Christopher National Trust
Ilis Watts	Coordinator/GEF Small Grants Programme
Franklyn Mitcham	Farmer/LACOS
Evetta Liburd	Budget Analyst/Ministry of Finance
Gemille Woods	Budget Analyst/Ministry of Finance

State Agencies/NGOs – Nevis Cooperative Credit Union Conference Room, 18th May, 2017	
Name	Occupation/Agency Represented
Sara Ramirez	Programme Officer/St Kitts Sea Turtle Monitoring Network
Corey Maynard	Senior Valuation Officer/Inland Revenue Dept.
Sandy Daniel-Wilkin	Asst. Controller/Inland Revenue Dept.
Walcott James	Chief Extension Officer/Dept. of Agriculture
Wentworth Smithe	Park Ranger/UNDP
Davis Lawrence	Field Assistant
Rickel Hanley	Field Assistant
Jevan Brandy	Field Assistant
Colin Dore	Permanent Secretary/Ministry of Finance
Joel Williams	Director/Physical Planning Dept.
Brian Dyer	Director/Nevis Disaster Management Dept.

Officials met to discuss the Draft Sustainable Financing Plan during 16-19th May 2017

Other Senior Officials – St Kitts, 16-19th May, 2017	
Name	Occupation/ Agency Represented
Carlene Henry-Morton	Tourism Officer/Ag. Permanent Secretary, Ministry of Tourism
Diannile Taylor-Williams	Assistant Secretary/Ministry of Tourism
Racquel Brown	CEO, St Kitts Tourism Authority
Goldha Franks	Project Development Officer, St Kitts Tourism Authority
Mark Williams	Director/Dept. of Marine Resources
Mr Calvin Edwards	Assistant Financial Secretary/Ministry of Finance
Michael Penny	Ministry of Foreign Affairs
Alistair Edwards	Permanent Secretary/Ministry of Agriculture
Sylvester Bell	Conservation Officer/Dept. of Environment
Yu-Ming Lu	Chief Project Manager/Agro-Tourism Demonstration Farm Cooperation Project (St Kitts Eco Park)

Officials Consulted on the Draft Final Sustainable Financing Plan on 18th October, 2017

Name	Occupation/ Agency Represented
Dorson Ottley	Tourism Officer/Ministry of Tourism
Diannile Taylor-Williams	Assistant Secretary/Ministry of Tourism
Avenice Thompson	Marketing Director/St Kitts Tourism Authority
Goldha Franks	Project Development Officer/St Kitts Tourism Authority
Naomi Richards	Finance Manager/St Kitts Tourism Authority
Auren Manners	Project Analyst II/Ministry of Sustainable Development
Illis Watts	Coordinator/GEF SGP
Claudia Drew	Project Coordinator/PCU-UNDP
Phynora Ible	Project Administrator/PCU-UNDP
Mizushi Satoh	Programme Analyst/UNDP
Chisa Mikami	Deputy Resident Representative/UNDP
June Hughes	Head/Department of Environment

ANNEX 2

Participants attending community meetings on the Sustainable Financing Plan

Community Consultations – Old Road Community Centre, 16th May, 2017	
Name	Occupation/Agency Represented
Dorothy Markman-Caines	Community Development Officer/Community Development
Kelvin Courtney Rogers	Farmer
G. Deslyn Richards	Teacher and Farmer
Jason Nisbett	
Steve N	
Kaloe Blake	Carpenter
Aisha Henry	Pre-school Teacher

Community Consultation – Phillips Hard Court. 17th May, 2017	
Name	Occupation/Agency Represented
Racine Liburd	Tour Guide/Greg Safari
Glenda Phillip	Agro-processor
Alicia Collins	Community Officer/Soc. Services & Comm Development
Adesupo Adetowubu	Teacher/Champions for Change Covenant Outreach Ministry
Sylvia Morris	
David Phipps	
Tarencia Connor	
Stefield Price	Farmer
Shadiah Morris	
Melisa Greene	
Melia	
Jarret Jones	
Shantel Charles	
Andre Mills	
Tessa Masse	
Emmanuel Hodge	
Vericia Allen	

Participants attending community meetings on the Sustainable Financing Plan

Community Consultations – Rawlins/Hard Times Community Centre, Nevis, 18th May, 2017	
Name	Occupation/Agency Represented
Shemica Maloney	Attorney
Paulette Pemberton	Teacher
Philicia Walters	Teacher
Marcia Liburd-Walwyn	Teacher
Alexa Liburd-Walwyn	Student
Marleigh Liburd-Walwyn	Student
Eric Evelyn	Permanent Secretary/Ministry of Agriculture & Community
Dwayne Brookes	Social Worker/Dept. of Social Services
Michael Herbert	Heb's Nature Tours
Tracy Parris	Community Development Officer
Lindsay Archibald	Forestry Officer/Agriculture Dept.
Rickel Hanley	Field Assistant
Davis Lawrence	Field Assistant
Jevan Brandy	Field Assistant
Wentworth Smithe	Park Ranger
Julie Archibald-Smith	

5. Signage design and maintenance													
6. Design and conduct valuation study of PAs													
7. Design and implement public awareness on PAs													
8. Marketing for concessionaires													
Year3 – Awareness and Fee Collection	Months 1-12												
Activity- Dept. of Environment	1	2	3	4	5	6	7	8	9	10	11	12	
1. Design visitor fee system and get approval													
2. Conduct public awareness on visitor fees													
3. Implement fee collection system													
4. Identify other PA sites for management & costs													
5. Design and implement visitor impact monitoring													
6. Marketing for concessionaires													
7. Trail and signage maintenance													
8. Marketing for events hosting													
9. Interpretation centre and visitor facilities design													
Year4 – Infrastructure Development													
Activity – Dept of Environment	1	2	3	4	5	6	7	8	9	10	11	12	
1. Interpretation centre and visitor facilities construction													
2. Visitor impact monitoring													
3. Marketing for concessionaires													
4. Marketing for events hosting													
5. Trail and signage maintenance													
6. Recruitment of staff													

7. Visitor satisfaction survey													
Year5 – Full Operation of PA System	Months 1-12												
Activity – Dept of Environment	1	2	3	4	5	6	7	8	9	10	11	12	
1. Research and monitoring													
2. Visitor management													
3. Events management													
4. Public Awareness													
5. New PAs managed													
6. Visitor use and satisfaction survey													