

**United Nations Development Programme**  
**Country: St. Kitts and Nevis**



*Empowered lives.  
Resilient nations.*

**Project Title: Conserving Biodiversity and reducing habitat degradation in Protected Areas and their areas of influence**

<b>UNDAF Outcome(s):</b>	Outcome 1 - Improved governance and regulation of environmental and energy issues for more resilient economies by 2016
<b>UNDP Strategic Plan Primary Outcome:</b> (From UNDP Strategic Plan 2014-2017)	
<b>Primary Outputs:</b> 2.3. Solutions at local level for sustainable management of natural resources, ecosystems and environmental services, for expanded jobs and livelihoods; and 3.5. Transparent and non-discriminatory legal and regulatory frameworks and policies enabled for sustainable management of natural resources, biodiversity and ecosystems (in line with international conventions and national legislation) <a href="#">[Link]</a>	
<b>Secondary Output:</b> [From <i>UNDP's Biodiversity and Ecosystems Global Framework 2012-2020</i> :] Signature Programme #2: Unlocking the potential of protected areas (PAs), including indigenous and community conserved areas, to conserve biodiversity while contributing to sustainable development. <a href="#">[Link]</a>	
<b>Expected CPD Outcome(s):</b> Outcome #1: Enhanced capacity of national, sub-regional and regional institutions and stakeholders to: effectively manage natural resources; build resilience to the adverse impacts of climate change and natural and anthropogenic hazards; improved energy efficiency and use of renewable energy; improved policy, legal, regulatory and institutional frameworks for environmental and energy governance.	
<b>Expected CPAP Output(s):</b> Output 4: Knowledge and good practices disseminated and capacity development in the areas of natural resource management, disaster risk reduction, climate change, renewable energy, energy efficiency, low carbon emissions, biosafety and adherence to international standards and norms	
<b>Executing Entity/Implementing Partner:</b> Ministry of Sustainable Development - Department of Physical Planning and Environment	
<b>Implementing Entity/Responsible Partners:</b> Department of Physical Planning, Environment and Natural Resources (Nevis); Department of Marine Resources; Nevis Department of Fisheries	

**Brief Description:** The existing system of protected areas in St. Kitts and Nevis is limited to 3 terrestrial PA units on the island of St. Kitts; of these, only the Central Forest Reserve National Park was established primarily for ecological conservation greater. There are no terrestrial protected areas on the island of Nevis, nor are there any marine protected areas anywhere in the country. In addition, apart from one historic site, there is no active management of protected areas in the country at either the system or site level. The proposed project will improve ecosystem representation in the PA system; establish / strengthen PA management operations at key sites; and strengthen institutional, policy, legal/regulatory, information, and financing frameworks at the PA system level. At the site level, the GEF investment will enable the legal establishment of five new PAs (two terrestrial and three marine) and the operationalization of these sites as well as the two existing terrestrial PAs that currently have no management. In so doing, the project will expand the PA system from two terrestrial sites totalling 5,260 hectares without any effective management, to four terrestrial sites totalling 8,810 hectares and three marine sites totalling 11,693 hectares, all of which will be actively managed. The project will specifically support: assessments of the current state (biodiversity, ecosystem functions, resource uses, etc.) of the proposed PA units; the gazetting, boundary setting and zoning of the new PA units; the preparation of management plans for each PA Unit, as well as a strategic business plan for the overall PA system; and the establishment and capacity building of PA staff at the system and site levels, as well as capacity building and collaboration with NGO, CSO and private sector partners. At the systemic level, the project will assist the Government of St. Kitts and Nevis in establishing, staffing and equipping a Protected Areas Agency, the first government unit dedicated to protected areas in the country's history, which will oversee and manage the overall PA system as well as the specific PA units. The project also will assist in the revising and updating of key laws and regulations to support PA management; the establishment of inter-institutional and multi-stakeholder coordination and information sharing mechanisms; and the creation and operation of sustainable financing mechanisms and business planning strategies that will ensure sufficient long-term funding support for management of the PA system.

**Programme Period:** 2012 – 2016  
**Atlas Award ID:** 00080909  
**Atlas Project ID:** 00090420  
**PIMS #:** 5088  
**Start Date:** Date of Signature  
**End Date:** + 4 years  
  
**Mgmt Arrangements:** NIM  
**PAC Meeting Date:** 30 July 2014

**Total Resources Required (Total Project Funds US\$): 20,511,630**  
  
**Total Allocated Resources (Grant): 20,511,630**  
 -GEF: 3,371,630  
 -Department of Physical Planning and Environment: 3,240,000  
 -Ministry of Agriculture and Marine Resources: 4,000,000  
 -Land Management Unit: 260,000  
 -Ministry of Health and Environment: 1,760,000  
 -Ministry of Justice and Legal Affairs: 100,000  
 -Water Services Department: 6,000,000  
 -Nevis Dept. of Physical Planning, Environment and Natural Resources: 1,100,000  
 -Nevis Ministry of Agriculture, Lands, Housing, Co-operatives and Fisheries: 380,000  
 -UNDP Barbados: 300,000  
  
**In-kind Contributions: 0**

Agreed by (Government):  
 Department of Environment

\_\_\_\_\_  
Date/Month/Year

Agreed by (UNDP):  
 UNDP Resident Representative

  
 \_\_\_\_\_  
 Date/Month/Year

## Table of Contents

<b>SECTION I: Elaboration of the Narrative</b> .....	<b>6</b>
<b>PART I: Situation Analysis</b> .....	<b>6</b>
Context and global significance .....	6
Socio-Economic Context.....	6
Environmental Context.....	7
Protected Area System: Current status and coverage .....	10
Institutional Context.....	12
Policy & Legal Context.....	15
Threats, root causes and impacts.....	17
Long-term solution and barriers to achieving the solution.....	21
Stakeholder analysis.....	24
Baseline analysis.....	26
<b>PART II: Strategy</b> .....	<b>30</b>
Project Rationale and Policy Conformity.....	30
Fit with GEF Focal Area Strategy and Strategic Programme.....	30
Rationale and Summary of GEF Alternative.....	31
Project Protected Areas Site Information.....	33
Project Objective, Outcomes and Outputs/activities .....	37
Indicators and Risks .....	51
Cost-effectiveness .....	56
Country ownership: Country eligibility and Country Drivenness.....	57
Project consistency with national priorities/plans .....	59
Sustainability and Replicability .....	60
<b>PART III: Management Arrangements</b> .....	<b>61</b>
Project Implementation Arrangements.....	61
<b>PART IV: Monitoring Framework and Evaluation</b> .....	<b>67</b>
Monitoring and reporting .....	67
<b>PART V: Legal Context</b> .....	<b>71</b>
<b>SECTION II: Strategic Results Framework (SRF) and GEF Increment</b> .....	<b>73</b>
<b>PART I: Strategic Results Framework Analysis</b> .....	<b>73</b>
Programmatic Links .....	73
Indicator framework as part of the SRF .....	74
<b>PART II: Incremental Reasoning and Cost Analysis</b> .....	<b>78</b>
Expected Global, National and Local Benefits .....	78
<b>SECTION III: Total Budget and Workplan</b> .....	<b>82</b>
<b>SECTION IV: Additional Information</b> .....	<b>86</b>
<b>PART I: Letters of co-financing commitment</b> .....	<b>86</b>
<b>PART II: Stakeholder Involvement Plan and Coordination with other Related Initiatives</b> .....	<b>86</b>
<b>PART III. Terms of References for key project staff</b> .....	<b>90</b>
Overview of Project Consultants.....	92
<b>Project Annexes</b> .....	<b>95</b>
<b>Annex 1: METT, Financial Scorecard, Capacity Scorecard</b> .....	<b>95</b>
1a. Summary of Management Effectiveness Tracking Tool (METT).....	96
1b. Summary of Financial Scorecard for PA System.....	97
1c. Summary of Capacity Development Assessment Scorecard .....	98
<b>Annex 2. UNDP Environmental and Social Screening (applied in April 2014)</b> .....	<b>99</b>
<b>Annex 3. Technical reports</b> .....	<b>99</b>
<b>Annex 4. Project Workplan</b> .....	<b>100</b>
<b>Annex 5. UNDP Direct Project Services</b> .....	<b>102</b>

## Acronyms

APR	Annual Progress Report
AWP	Annual Work Plan
BHFNP	Brimstone Hill Fortress National Park
BINR	Booby Island Nature Reserve
CARICOM	Caribbean Community
CBD	Convention on Biological Diversity
CCF	Country Cooperation Framework (UNDP)
CFRNP	Central Forest Reserve National Park
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CO	(UNDP) Country Office
DEA/PSIP	Department of Economic Affairs and Public Sector Investment Planning
DMR	Department of Marine Resources (St. Kitts)
DPPE	Department of Physical Planning and Environment (St. Kitts)
DPPNRE	Department of Physical Planning, Natural Resources and the Environment (Nevis)
ESSP	(UNDP's) Environmental and social screening procedure
GEF	Global Environment Facility
IUCN	International Union for the Conservation of Nature
IWCAM	Integrating Watersheds and Coastal Area Management
KBA	Key Biodiversity Area
LPAC	Local Project Appraisal Committee
MAMRCE	Ministry of Agriculture, Marine Resources and Constituency Empowerment
MCSS	Marine Conservation Society of Seychelles
M&E	Monitoring and Evaluation
MEA	Multi-lateral Environmental Agreement
METT	Management Effectiveness Tracking Tool
MoSD	Ministry of Sustainable Development
MOU	Memorandum of Understanding
MPA	Marine Protected Area
NBSAP	National Biodiversity Strategy and Action Plan
NCEMA	National Conservation and Environmental Management Act
NCEPA	National Conservation and Environmental Protection Act
NDF	Nevis Department of Fisheries (Nevis)
NGO	Non-Governmental Organization

NHCS	Nevis Historical Conservation Society
NIM	National Implementation Modality
NPDP	Nevis Physical Development Plan
NPNPCRWA	Nevis Peak National Park and Camps River Watershed Area
OECS	Organisation of Eastern Caribbean States
OPAAL	OECS Protected Areas and Associated Livelihoods Project
PERB	Protecting the Eastern Caribbean Region's Biodiversity
PIR	Project Implementation Report
PSC	Project Steering Committee
RAPPAM	Rapid Assessment and Prioritisation of Protected Area Management
RBVNP	Royal Basseterre Valley National Park
RCU	(UNDP) Regional Coordinating Unit
RTA	(UNDP) Regional Technical Adviser
SCNT	St. Christopher National Trust
SKN	St. Kitts and Nevis
SKSTMN	St. Kitts Sea Turtle Monitoring Network
TBW	Total Budget and Workplan
TNC	The Nature Conservancy
UNDAF	United Nations Development Assistance Framework
USAID	United States Agency for International Development
WSD	Water Services Department (St. Kitts)

## **SECTION I: Elaboration of the Narrative**

### **PART I: Situation Analysis**

#### **CONTEXT AND GLOBAL SIGNIFICANCE**

##### *Socio-Economic Context*

1. The total population of St. Kitts and Nevis is approximately 53,000, of which 11,000 persons reside on Nevis. Most of the terrestrial landscape of St. Kitts and Nevis has been significantly transformed by human activity, particularly in lowland areas where intensive land use has removed or transformed the natural vegetation communities. On St. Kitts, agricultural lands account for 28% of land below 1,000 ft. (though some of this area is former sugarcane land that has reverted to scrub or secondary forest), while infrastructure (residential, commercial, industrial, tourism and institutional) accounts for another 10%, with housing concentrated along the coastlines, and to a lesser extent, in small villages clustered along the island's main roads. The large Southeast Peninsula is primarily covered with scrub vegetation, while the remaining low elevation landscape is made up of rock areas, salt ponds, and beaches. Mid-level elevations are characterized by mixed uses, including grazing, farming of food and tree crops and abandoned sugarcane farms. Above 1,000 feet, the rugged uplands are predominantly covered by forest, though large swathes are secondary forests with many non-native plant species. Approximately 80% of the land on St. Kitts is owned by the Government. In contrast, on Nevis large-scale sugar and cotton production ended many decades ago, and 70% of the land is under private ownership, primarily in small land holdings (less than 2 ha.) that are becoming increasingly fragmented as they are sub-divided and sold. Most agricultural production takes place at lower elevations, while land at mid-level elevations are dominated by housing and other infrastructure development. As on St. Kitts, the areas above 1,000 feet on Nevis Peak are predominantly secondary forest.

2. SKN currently ranks 7<sup>th</sup> in the Human Development Index (2011) among Caribbean countries and 3<sup>rd</sup> in the OECS sub-region. The 2008 Country Poverty Assessment (CPA) reported a poverty level of 21.8%, and that a large percentage of the population (35.6%) is considerably vulnerable and affected adversely by economic and other shocks. The agricultural sector in St. Kitts and Nevis has undergone radical transformation in the course of the last decade. Sugarcane long dominated the landscape of both islands, but with production steadily declining for several decades, the Government officially closed the state-run sugar industry in 2005, which effectively ended sugarcane cultivation in the country. The impact of this change was enormous for SKN's environment and economy -- approximately 3,750 hectares of sugar cane fields (of a total of 5,050 hectares of agricultural land) were suddenly no longer under active management. With the decline of the sugar industry, the government established non-sugar agricultural production as a national goal, and provided incentives and land leases to support this goal. The non-sugar agricultural sector consists mainly of part-time farmers operating smallholdings of less than 1 hectare on which they cultivate root and tuber crops and vegetables for the local market; primary crops include pineapples, watermelon, papaya, tomato, white potato and sweet pepper, and there is a small livestock sector producing pigs, poultry, cows, sheep and goats. However, most former sugarcane lands have not been converted to new agricultural production, and instead have either been converted to infrastructure (homes, tourism facilities, schools, commercial & industrial sites, etc.) or remained abandoned. The conversion of sugarcane lands to other uses has created land degradation problems, with

impacts on both terrestrial and marine biodiversity. Most former sugarcane lands are characterized by slopes of 5-15% (and in some areas 25-30%) that are punctuated by numerous ghauts (watercourses) that drain into the surrounding sea. Although a mono-crop, sugarcane production protected and preserved the fragile volcanic soils of the islands. With the decline of sugarcane production, loss of fertile topsoils, flooding and land-based pollution of the sea, including coral reefs and other sensitive areas, have increased, and recharging of underground coastal aquifers (which supply over 90% of the population with potable water) has declined.

3. While agriculture has traditionally been the primary economic sector in St Kitts and Nevis, much of the country's recent economic growth has been due to the expansion of the travel and tourism sector. Cruise passenger arrivals expanded by 17.2% in 2011 and remained steady in 2012. Cruise ship arrivals were projected to pass the 650,000 passenger arrivals mark for the 2013/2014 season and then go beyond 700,000 passengers in 2014/2015. The growth of tourism over the past decade has had negative impacts on the coastal and marine ecosystems of the country, including ecosystem damage from construction of hotels and other facilities, beach erosion, pollution, and visitor impacts on coral reefs. Currently, the Government of SKN is encouraging the growth of the high-end tourism market in the country, for example at the large villa / hotel developments at Kittitian Hill and Christophe Harbour. At the same time, tourism authorities believe that the natural environment of the islands is an integral part of the tourism brand for the country; they also consider dive tourism to be one of their niche markets.

4. Fishing is an important source of employment in SKN; there are some 486 registered fishing vessels in the country. The large majority of fishing is done on reefs within 2 miles of the coastline. Fishermen on both St. Kitts and Nevis are not territorial and move freely around to where the fish are known to be congregating. Trap fishing and hand lining is done all around both islands. Overfishing in near shore areas has resulted in the decline of some targeted species, including high value lobster and conch. In 2012, the fishing sector overall recorded a slight decline in performance; fish landings were valued at US\$6.8 million, but the total of 692,780 pounds was a 3% decline from the prior year.

5. Additional information on socio-economic conditions and resource uses is provided in Part II (Project Protected Areas Site Information) and in Annex 3.

### ***Environmental Context***

6. The twin island Federation of St. Kitts and Nevis consists of two islands located in the northern part of the Lesser Antilles chain of islands in the Eastern Caribbean. The Federation of St. Kitts and Nevis has a land area of 269 sq. km.; St. Kitts is 176 sq. km. in area and Nevis is 93 sq. km. in area. The physical landscape of St. Kitts is characterised by three volcanic centres: the central northwest range, dominated by the country's highest peak Mt. Liamuiga (1,156 meters elevation), and the middle and southeast ranges, which consist of a number of irregular related peaks reaching heights up to almost 1,000 meters. Most of the flat or moderately sloped land on St. Kitts occurs near the coast, and as a result, most urban and agricultural development has occurred there. The island's coastline largely consists of cliffs, some 15-30 meters high. The island of Nevis is approximately circular and dominated by the central Nevis Peak (985 meters elevation). Windy Hill (309 meters) and Saddle Hill (381 meters) at the head and tail of the island, respectively, align with Nevis Peak to form a north-northwest/south-south-east trending spine comparable to the more pronounced spine of St. Kitts. On St. Kitts, five natural forest classes have been described: Palm Brake (between 370 and 550 meters elevation); Elfin Woodland (on peaks and ridges above 600 metres); Rain Forest (mid-level elevations); Dry Evergreen Forest (secondary forest occupying the lower margins of the forest, usually formerly cultivated); and Dry Scrub Woodland (on the Southeast Peninsula). Nevis has six vegetation zones, namely: Rain Forest and Humid Forest (limited to the north-western side of the mountain above Jessups); Elfin Woodland (summit of Nevis Peak); Montane Thicket (very thin belt located just above the rain forest); Palm Brake (band of montane forest located on very

steep slopes or areas exposed to high winds); Dry Scrub Woodland (on Round Hill and Saddle Hill; also, the most of the southern coast consists of cactus scrub woodland); and Dry Evergreen Forest (lower slopes of Nevis Peak). Cultivated land area in St. Kitts is estimated to have declined by 59% from 1945 to 2000, while seasonal evergreen, evergreen and cloud forest cover types have increased by a combined 26%. Developed land has increased significantly over the same time period.

7. The small size and insularity of the West Indies influences the number of terrestrial species that occur in the region, including the relatively high concentration of endemism and vulnerability to biodiversity loss to catastrophic events and long term human induced habitat changes or climate change. The most comprehensive list of plant species found includes 926 species (151 families and subfamilies) documented for the country; this figure includes introduced horticultural, crop and agricultural species that have been naturalized<sup>1</sup>. Forty-six plant species known to be endemic to the country or endemic to the Lesser Antilles occur in the country. 145 pteridophyte species (fern and fern-allies) are documented, of which 1 is endemic to St. Kitts and 2 are endemic to Nevis. Thirty-seven plant species are assessed by IUCN, with 1 Endangered (Small-leaved Mahogany; *Swietenia mahagoni*), 1 Vulnerable (Spanish Cedar; *Cedrela odorata*) and 1 Near Threatened (Big Pine Key Prickly-pear; *Opuntia triacantha*). The only native mammal species in the country are bats; St. Kitts has 7 species of bats documented (*Ardops nichollsi*, *Brachyphylla cavernarum*, *Monophyllus plethodon*, *Artibeus jamaicensis*, *Noctilio leporinus*, *Molossus molossus*, and *Tadarida brasiliensis*), while Nevis has an eighth species (*Natalus stramineus*)<sup>2</sup>. There are 207 bird species listed for St Kitts and Nevis, of which 104 are land birds, 159 are Migratory species, 36 are seabirds and 88 are waterbirds. There are 38 Lesser Antilles Endemic Bird Area restricted-range species (BirdLife International), of which 10 are found on both islands and none of which are endemic. There are no longer any endemic bird species on St. Kitts and Nevis. BirdLife International identifies several threatened and endangered species found in the country: 1 Critically Endangered (Jamaica Petrel), 1 Vulnerable (West Indian Whistlingduck), and 4 Near Threatened species (Semipalmated Sandpiper - *Calidris pusilla*, Piping Plover - *Charadrius melodus*, Reddish Egret - *Egretta rufescens*, and Caribbean Coot - *Fulica caribaea*). There are three Important Bird Areas in the country: the Central Forest Reserve, the South-east Peninsula, and Booby Island. The Caribbean Seabird Breeding Atlas of the Lesser Antilles identified 1,580 breeding pairs of Bridle Terns, Brown Noddy, Brown Pelican, Laughing Gull, Least Tern, Roseate Tern and Sooty Tern; these species are concentrated in the salt ponds of the South-east Peninsula, on Booby Island, and in the coastal lagoons and ponds on Nevis. There are 2 species of amphibians recorded for the country, both IUCN listed as Least Concern; the Lesser Antillean Frog (*Eleutherodactylus johnstonei*) is considered endemic to the Lesser Antilles with a widespread distribution, while the Marine Toad (*Bufo marinus*) is introduced<sup>3</sup>. Conflicting documentation exists on reptilian species recorded. Horwith and Lindsay (1999) document a total of 10 (possibly 11) species, whereas Hedges (2014) documents 14 species for St. Kitts and 11 for Nevis. Four species of gecko are documented for St. Kitts, of which *Hemidactylus mabouia* (House Gecko) and *Thecadactylus rapicauda* (Thick-tailed Gecko) are widely distributed throughout the Lesser Antilles. *Sphaerodactylus sabanus* (Northern Leeward Sphaero) and *Sphaerodactylus sputator* (Leeward Banded Sphaero) are endemic to St. Kitts and Nevis. Two species of snakes have been reported in the country; the regionally endemic Leeward Blind Snake (*Typhlops geotomus*) has a multi-island distribution and likely healthy populations, while the endangered Orange-bellied Racer (*Alsophis rufiventris*) was previously recorded for both islands but is now listed by IUCN as extirpated on St. Kitts and Nevis (Robert and Henderson 2005). Three species of reptiles -- the Ground Lizard (*Ameiva erythrocephala*), and two species of Green Lizards (*Anolis bimaculatus* and *Anolis watsi schwarti*) -- are all endemic to the St.

<sup>1</sup> Horwith and Lindsay (1999)

<sup>2</sup> Pedersen, S. C., H. H. Genoways, G. G. Kwiecinski, P. A. Larsen, and R. J. Larsen (2013). Biodiversity, biogeography, and conservation of bats in the Lesser Antilles. Pp. 62-73, 330, in Biodiversité insulaire: la flore, la faune et l'homme dans les Petites Antilles, eds. J.-L. Vernier and M. Burac. France: Schoelchers, Martinique, Direction de l'Environnement, de l'Aménagement et du Logement de Martinique et Université des Antilles et de la Guyane, 335 pp.

<sup>3</sup> Malhotra, Anita; Thorpe, Roger S. (1999), *Reptiles & Amphibians of the Eastern Caribbean*, Macmillan Education Ltd., pp. 65–68, ISBN 0-333-69141-5.



Christopher Bank (St. Kitts, Nevis and St. Eustasius). As is typical of tropical island systems, the macroinvertebrate faunas of the islands are sparse, most likely because of their oceanic origin, their small size, and the frequent disturbances to their freshwater environments<sup>4</sup>. Finally, the freshwater fish of St. Kitts and Nevis are not well studied. There are local reports of 9 species for St. Kitts, and about 5 species for Nevis.

8. The coastal and marine ecosystems of St. Kitts and Nevis include coral reefs, sea grass beds, mangroves, freshwater lagoons, rocky shores and salt ponds, all of which support a rich variety of reef and pelagic fish species, lobsters, conch, sea turtles, algae, and resident and migratory birds. Rocky shores are often associated with an impressive array of marine life from algae and snails to juvenile fishes of all description. Three coastal habitats -- freshwater lagoons, coral reefs, and sea grass beds -- are of critical importance for the health of inshore fisheries. Coral reefs play a vital role in protecting the coastline against wave action during storms, and constitute the most complex habitat, with species of coral spanning the entire spectrum of tropical coral diversity. The total area of reefs documented for St Kitts and Nevis is 160 km<sup>2</sup>. Of the 71 hard coral species (order *Sceleractinia*) known to occur in the Lesser Antilles, 53 species from 9 family taxa are identified as occurring in St Kitts and Nevis. Ten species of coral are IUCN listed. St. Kitts has only a few small patches of mangrove remaining, estimated at 79 ha<sup>5</sup>. All 5 species from the region are documented in St. Kitts, primarily around the salt ponds in the southeast peninsula. In Nevis, the two most common species of mangrove are *Languncularia racemosa* and *Conocarpus erectus*<sup>6</sup>. Resident and migratory birds are dependent upon these mangroves for feeding and nesting. Seagrass beds are found in the shallow coastal areas around both St Kitts and Nevis, and are an important nursery for juvenile fish and invertebrate species<sup>7</sup>. Dense Seagrass represents one of the twelve habitat classes that comprise the shallow water benthic habitats surrounding St. Kitts and Nevis. A relatively small ocean shelf area surrounds both islands; this small size and relatively stable annual water temperatures limits the marine biological diversity and the minimal areas of upwelling restrict nutrient supply and subsequently the offshore fisheries<sup>8</sup>. On the western side of St. Kitts, the ocean shelf drops off steeply after reaching the depth of 30 meters. Twelve habitat classes have been identified for St. Kitts and Nevis from the shoreline to shallow depths (<30m) and include 5 coral reef habitat types (*Acropora palmata* stumps; hard coral framework; flat gorgonian hardground; algal reef flat; and rugose gorgonian slope) and soft bottom habitats in seven classes.

9. There are approximately 463 species of marine fish tabulated for St. Kitts and Nevis<sup>9</sup>. Of these, 306 are reef-associated fishes. Seventeen are IUCN Red-listed (1 Critically Endangered, 2 Endangered, 8 Vulnerable, 6 Near Threatened) (Table 3) and 10 Shark, Ray and Mako species (Table 4). Reef fish populations are dominated by juveniles and small adults, with few larger fish. Large motile invertebrates including lobster and conch are now rare. Invasive lionfish (*Pterois volitans*) has been noted in several locations, but numbers were fairly low (<2/reef). Data on freshwater fish present in St. Kitts and Nevis is sparse and conflicting. Eight species of freshwater fish are listed for St Kitts and Nevis from 3 families (*Carcharhinidae*, *Mugilidae*, *Megalopidae*). All species identified excluding *Mugil cephalus* (origin questionable) are native to St Kitts and Nevis<sup>10</sup>. A conflicting report suggests that there are a total of nine

---

<sup>4</sup> Bass D. (2003b). A comparison of freshwater macroinvertebrate communities on small Caribbean islands. *BioScience* 53(11): 1094-1100. <http://www.jstor.org/discover/10.1641/0006-3568%282003%29053%5B1094%3AACOFMC%5D2.0.CO%3B2?uid=3739568&uid=2&uid=4&uid=3739256&sid=21103330443151>

<sup>5</sup> FAO (2003) Status and trends in mangrove area extent worldwide. Forest Resources Assessment Working Paper-63. In: Wilkie M, Fortuna S, editors. Roma: Forest Resources Division, FAO. Available: <http://www.fao.org/docrep/007/j1533e/j1533e00.htm>. Accessed 2014 Feb 4.

<sup>6</sup> Spalding *et al.* (2010)

<sup>7</sup> Agostini *et al.* (2010)

<sup>8</sup> Agostini, V.N., S. W. Margles, S. R. Schill, J.E. Knowles, and R. J. Blyther (2010). *Marine Zoning in Saint Kitts and Nevis: A Path Towards Sustainable Management of Marine Resources*. The Nature Conservancy.

<sup>9</sup> Fishbase (2014). [http://www.fishbase.org/Country/CountryChecklist.php?showAll=yes&c\\_code=659&vhabitat=all2](http://www.fishbase.org/Country/CountryChecklist.php?showAll=yes&c_code=659&vhabitat=all2)

<sup>10</sup> [http://fish.mongabay.com/data/Saint\\_Kitts\\_and\\_Nevis.htm#sDUwGP3hBss2JCXm.99](http://fish.mongabay.com/data/Saint_Kitts_and_Nevis.htm#sDUwGP3hBss2JCXm.99)

species freshwater fish for St. Kitts and 5 species for Nevis<sup>11</sup>. Three species of sea turtles are known to nest on the beaches of St. Kitts and Nevis: hawksbill turtle (*Eretmochelys imbricata*), green turtle (*Chelonia mydas*), and leatherback turtle (*Dermochelys coriacea*). The IUCN categorizes the leatherback and hawksbill turtles as critically endangered and the green turtle as endangered. Eleven (11) whales and four (4) dolphins are listed for St Kitts and Nevis, of which only the Sperm Whale (*Physeter macrocephalus*) is listed as Vulnerable. Of the remainder, 6 are Least Concern and 8 are Data Deficient. A large number of resident and migratory birds depend on mangrove and pond habitats for feeding and nesting.

10. Additional information on ecosystems and biodiversity is provided in Part II (Project Protected Areas Site Information) and in Annex 3.

### ***Protected Area System: Current status and coverage***

11. The existing protected areas system on St. Kitts and Nevis is relatively small and managed with very limited resources. In the terrestrial landscape, only three national park units (Royal Basseterre Valley, Central Forest Reserve, and Brimstone Hill Fortress) have been legally established. Of these three sites, only the Central Forest Reserve National Park (CFRNP), which occupies all lands above 1,000 feet in elevation on St. Kitts, is managed as an area focused on ecological conservation (i.e. biodiversity conservation; protection of water catchment and other ecosystem services; ecotourism and recreation activities). The Royal Basseterre Valley National Park (RBVNP) is managed by the Water Services Department with the primary goal of protecting the most important aquifer on St. Kitts (which supplies the drinking water for the capital city of Basseterre). The Brimstone Hill Fortress National Park (BHFNP) is a colonial-era fortress managed by the Brimstone Hill Fortress National Park Society as a historical and cultural site (this site has been a UNESCO World Heritage Site since 1999 and is the only PA in the country with a user fee system in place). Apart from the BHFNP, management of all other official protected area sites in the country is the responsibility of the Department of Physical Planning and Environment (DPPE) within the Ministry of Sustainable Development (MoSD). However, while both the Royal Basseterre Valley National Park and the Central Forest Reserve National Park have management plans, at present these plans are not being implemented, and neither site has any dedicated staff, on-site management activities or budget. Research or other initiatives at these sites that have taken place prior to and since their designation have been carried out through externally funded initiatives, including the development of the management plans, studies of species, and documentation and designation of the CFRNP as an Important Bird Area. At the RBVNP, the St. Kitts Water Services Department is carrying out activities that focus primarily on the effective management of the site's underground aquifer.

12. With regard to proposed protected area sites, in the terrestrial landscape a management plan was written for the Nevis Peak National Park and Camps River Watershed Area in 2009, but the site has not been officially declared, the draft management plan has never been formally adopted, and there are no management activities currently on-going for this site. In the marine environment, no marine protected areas have yet been established in St. Kitts and Nevis. The government is currently considering the creation of a St. Kitts and Nevis Marine Management Area (SKNMMA), which will extend for 2 miles out from the shoreline of both islands; however, the MMA is primarily a planning / zoning process that identifies "conservation zones" (as well as other categories) but does not specify associated regulations or provide resources for their management. Personnel within the Ministry of Agriculture and Marine Resources on St Kitts and the Fisheries Department on Nevis do carry out some monitoring and enforcement of fisheries regulations, including at the sites proposed as new MPAs (Sandy Point, Keys, and the Narrows). However, staff members of these agencies have not received any training in MPA

---

<sup>11</sup> Horwith, B. and K. Lindsay (1999). A Biodiversity Profile of St. Kitts and Nevis. Island Resources Foundation. Unpublished report prepared for Nevis Historical and Conservation Society and St. Christopher Heritage Society. 89 pp.

management activities, and a severe lack of equipment (including boats) prevents them from carrying out many activities at sea (although they do call on the Coast Guard to assist in urgent cases).

13. In general, conservation-related activities within existing protected areas and efforts to design and establish new protected areas in St. Kitts and Nevis are highly dependent on and subject to the funding and priorities of international financing sources, including the recent GEF-funded OPAAL project and the recent USAID-funded marine mapping project, and several on-going regional projects to establish PA financing mechanisms and a marine protected area at the Narrows. To date, none of these efforts have focused on creating a sustainable national capacity to establish, manage and finance a system of protected areas in the country.

**Table 1: Protected Areas in St. Kitts and Nevis targeted by the project<sup>12</sup>**

PA Type/Name	IUCN Category <sup>1</sup>	NCEMA Category <sup>2</sup>	Land Area (ha)	Marine Area (ha)	Total Area (ha)
<b>Terrestrial Protected Areas</b>					
Central Forest Reserve National Park	II	I	5,060	0	5,060
Nevis Peak National Park and Camps River Watershed Area <sup>3</sup> (proposed)	II/VI	I/V	3,250	0	3,250
Royal Basseterre Valley National Park	VI	I/VII	200	0	200
Booby Island Nature Reserve (proposed)	Ia	III	300	0	300
<b>Marine Protected Areas</b>					
Sandy Point Marine Park <sup>4</sup> (proposed)	IV/V/VI	III/IV/V	0	60	60
The Narrows Marine Park (proposed)	TBD	III/IV/V	0	2,702	2,702
Keys Marine Park <sup>5</sup> (proposed)	TBD	TBD	0	8,931	8,931
<b>Total</b>			<b>8,810</b>	<b>11,693</b>	<b>20,503</b>

<sup>1</sup> Information on classifications of these sites taken from 2010 Protected Areas Systems Plan. Relevant IUCN classifications: Ia (Strict Nature Reserve), II (National Park), IV (Habitat/Species Management Area), V (Protected Landscape/Seascape), VI (Managed Resource Protected Area)

<sup>2</sup> Information on classifications of these sites taken from 2010 Protected Areas Systems Plan. Relevant National Conservation and Environmental Management Act (NCEMA) classifications are provided in Table 2

<sup>3</sup> Nevis Peak National Park and Camps River Watershed Area is a single protected area; under NCEMA, the Nevis Peak area (estimated to be 2,250 hectares) will be classified as a National Park, while the Camps River area (estimated to be 1,000 hectares) will be classified as an Area of Special Concern

<sup>4</sup> Sandy Point Marine Park: Four different types of zones have been proposed for this proposed MPA: Fish stock propagation areas classified as IUCN Category IV (fishing prohibited or seasonally restricted); Turtle nesting beaches classified as IUCN Category IV; Tourism and recreation areas for snorkelling, diving, etc. classified as IUCN Category V; and Fishing areas classified as IUCN Category VI (fishing areas may be further subdivided into areas for artisanal fishing and areas for sport fishing)

<sup>5</sup> Keys Marine Park: Three zones have been proposed for this proposed MPA: Keys Beach (18 ha); Conservation Zone (5,433 ha); and a Multi Use Zone (3,480 ha)

14. The objectives for management of each protected under the NCEMA classification system are not aligned to the six IUCN protected area categories. NCEMA categories (Table 10) differ from the IUCN categories in that they are not based on management objectives, but on the features and current or proposed use, whereas IUCN categories are based on the primary objective, other objectives and distinguishing features. The proposed project, which will support updating of the NCEMA, will propose aligning the NCEMA categories with those of the IUCN, so that management objectives are more clearly understood and so that direct comparisons can be made with other similar protected areas around the

<sup>12</sup> There is one existing protected area in St. Kitts and Nevis, the Brimstone Hill Fortress National Park, which is not being addressed by the project and is not included in the table below. This site is a historic / cultural site and is not managed for conservation purposes.

world in terms of management effectiveness and contributions to the CBD Programme of Work on Protected Areas.

**Table 2:** Protected Area Categories in NCEMA (2008) Act and the proposed NCEPA Act.

<b>NCEMA Category</b>	<b>PA Type</b>	<b>Description of St Kitts and Nevis PA Categories</b>
<b>Category I</b>	National Park	An area consisting of a relatively large land or marine area or some combination of land or sea, containing natural and cultural features or scenery of national or international significance and managed in a manner to protect such resources and sustain scientific, recreational and educational activities on a controlled basis.
<b>Category II</b>	Historic Site	A place or site which is historic by reason of an association with the past and its part of the cultural or historical heritage of Saint Christopher and Nevis, and such a classification may include archaeological sites, historic landmarks, and areas of special historic or cultural interest.
<b>Category III</b>	Nature Reserve	An area containing outstanding or fragile natural features or life forms of national importance that need protection in an undisturbed state where the only permitted activities are management measures, controlled scientific research and educational study.
<b>Category IV</b>	Marine Reserve	An area as provided in Section 23 of the Fisheries Act, 1984.
<b>Category V</b>	Area of Special Concern	A place or site needing special protection and controlled use in order to stabilize or restore important ecological features or functions.
<b>Category VI</b>	Scenic Site	An area containing a scenic feature of national or local importance.
<b>Category VII</b>	Botanic Garden	A garden established for the preservation display and propagation of the national botanical resources.

## **INSTITUTIONAL CONTEXT**

15. The roles and responsibilities of the key institutions and organizations responsible for protected areas and sustainable resource management in St. Kitts and Nevis are briefly described below.

16. The Ministry of Sustainable Development (MoSD) leads the design and implementation of the country's development agenda and is responsible for ensuring that the country meets its international obligations to various bi-lateral and multilateral economic and environmental agreements, as well as securing financing from international donors/development agencies. Several departments within the Ministry play a leading role in managing environmental conservation and sustainable development in the country, and will lead the implementation of the proposed project. The Department of Physical Planning and the Environment (DPPE) functions as the lead agency for physical planning, development control and environmental management, and is the national focal point agency for the UNFCC, UNCBD and the UNCCD. DPPE has nominal responsibility for protected areas management in the country; however at present it implements few activities at PA sites (DPPE officers do conduct some educational tours of the Central Forest Reserve National Park). DPPE is also responsible for terrestrial endangered species and forest management, though again its programs are quite limited, and for the review of development applications and evaluation of EIAs. DPPE conducts some coastal marine water pollution monitoring, as well as an annual national coastal clean-up program. DPPE has tried in the past to establish beach profiling and coral reef monitoring programmes, but these have lapsed due to a lack of resources. Overall, DPPE has eight staff active in environmental management and conservation, as well as 15 other staff focused primarily on planning but also including GIS specialists; none of DPPE's staff have training specifically in protected areas management. Also within the MoSD, the Department of Economic Affairs and Public Sector Investment Programme (DEA/PSIP) functions as the GEF focal point office for the

country, and as the lead national coordinating unit for local, regional, and international projects, facilitating the coordination of requests for technical assistance, grant funding and loans between various government ministries and non-governmental institutions and external donor agencies. The Department of Lands and Surveys (DoLS) within MoSD is responsible for the design, survey and implementation of residential land subdivision schemes and cadastral plans, topographical maps, and the Land Information System to support the survey, registration, valuation and management of land. The DoLS works closely with the DPPE and other key public sector institutions to rationalize land use and land development decisions. The Development Control and Planning Board (DCPB) is responsible for the review and determination of all building and development planning applications on St. Kitts. Additionally, the DCPB is responsible for zoning, review of environmental impact assessments and the design and implementation of development plans and broader national policy instruments.

17. It is important to note that the Saint Christopher and Nevis Constitution Order 1983 gives the Nevis Island Assembly responsibility over the affairs of Nevis, and many responsibilities and functions of national level institutions are replicated and/or devolved to parallel institutions on the island of Nevis, under the auspices of the Nevis Island Administration. For example, the DPPE is mirrored on Nevis by the Department of Physical Planning, National Resources and the Environment (DPPNRE), which is responsible for land use planning, land conservation, development controls, environmental management, sustainable development, and ensuring compliance with national and international agreements. Generally, the DPPNRE works closely with the DPPE on St. Kitts with regard to the meeting country's obligations under various MEAs and other physical planning, development and environmental initiatives. At present, the DPPNRE is active in monitoring all forms of development and ensuring compliance with development regulations; beach profiling (on a quarterly basis); patrolling for illegal sand mining; and outreach and education. The DPPNRE has a Planning Officer and an Environmental Officer trained in environmental conservation (but not in PA management), as well as numerous staff working as building inspectors, physical planners, etc.

18. Within the Ministry of Agriculture, Marine Resources and Constituency Empowerment (MAMRCE), the Department of Agriculture and the Department of Marine Resources both play important roles in resource management and conservation. The Department of Agriculture (DoA) is responsible for agricultural development policies and programmes; traditionally, the DoA has focused on agricultural extension services, focusing primarily on methods of cultivation and overall crop production. Under NCEPA Section 34(1), the Department of Agriculture, specifically the Chief Agricultural Officer, holds responsibility for watershed conservation. The department also engages in the administration of the Pesticide Control Act. Although, not explicitly stated in the law, the department also monitors fertiliser use and soil erosion prevention practices associated with farming practices. The DoA also carries out IAS management for species that threaten agriculture and livestock; including a Monkey Task Force to try to study, trap and reduce the invasive Vervet Monkey population, although its activities in the field are very limited. Similarly, the Nevis Department of Agriculture is responsible for the commercial, economic, and social development of farmers including livestock and food production, including extension work on crop production, support for animal health, and marketing support to farmers.

19. The marine environment of St. Kitts and Nevis is under the jurisdiction of the Department of Marine Resources (DMR) on St. Kitts and the Nevis Department of Fisheries (NDF). Under the Fisheries Act, the DMR is responsible for the development of a Fisheries Management and Development Plan to sustainably manage the Federations' fisheries resources, and it has the authority to declare Fishing Priority Areas and Marine Reserves. The DMR has staff dedicated to aquaculture, GIS / oceanography, product development and marketing, and fisheries management and enforcement. In addition, a new Marine Management Areas and Habitat Monitoring Officer has been hired at the DMR. The Nevis Department of Fisheries responsible for assessing and regulating the fisheries resources of Nevis, promoting sustainable use of these resources, and managing the harvesting of stocks to ensure food

security. The NDF also promotes aquaculture and encourages conservation practices in the marine environment. The NDF has a staff of five persons, only one of whom has had specific training in fisheries management.

20. The Water Services Department (WSD) within the Ministry of Housing, Public Works, Energy and Public Utilities is responsible for water resources planning and development, and for the identification, upkeep, protection and distribution of water supply sources on St. Kitts. While the WSD is responsible for the supply of potable water, the Department of Agriculture is responsible for the water resources used for irrigation and for watershed conservation. The WSD, working in close collaboration with the DPPE, spearheaded the successful implementation of the GEF-funded Integrating Watersheds and Coastal Area Management (IWCAM) project, which sought to rehabilitate the lower coastal section of the Basseterre Valley area. Similarly, the Nevis Water Department is responsible for the production, distribution and quality of water for residential and commercial customers on Nevis. In addition, the department educates customers on water conservation measures, and is tasked with developing an Integrated Water Resources Management strategy. The Environmental Health Department (EHD) of the Ministry of Health ensures potable water quality standards; additionally, the Chief Environmental Health Officer is responsible for enforcing environmental controls that are deemed critical for the control of wastewater and effluent discharges as mandatory conditions of approval for any proposed development. Water quality is also affected by flooding and storm water disposal. To this end, the Public Works Department (PWD) and the National Emergency Management Agency (NEMA) are responsible for the monitoring and management of flooding. The Development Control and Planning Act (DCPA) provides the main legislative control for storm water disposal while the PWD is authorised to prevent land degradation and erosion.

21. The Ministry of Justice and Legal Affairs is responsible for formalizing policy and legislative frameworks and the administration of law and justice. Within the Ministry of Tourism and International Transport, the St. Kitts Tourism Authority is responsible for the formulation of national policies and programmes and for the co-ordination of activities for the development and promotion of tourism in the country. At present, the Ministry of Tourism does not have any specialists or a separate unit for eco-tourism or environmental tourism. The Nevis Department of Tourism plays a similar role on Nevis; its main functions are to manage and develop the Tourism Industry and to provide effective Tourism Research, Documentation, Education, Awareness and Development.

22. In addition to government institutions and agencies, a number of NGOs and community groups play an active role in natural resource management and sustainable development in St. Kitts and Nevis. The Saint Christopher National Trust (SCNT) was established in 2009 to preserve and promote the natural, historical, ecological and cultural heritage of the island of St. Christopher (St. Kitts). The main objective of the SCNT is to promote the protection, conservation, interpretation and enhancement of the natural environment of St. Kitts, including its animals and plant life. The SCNT has participated in numerous activities relevant to conservation and protected areas, including hosting and co-hosting workshops and conferences; facilitating the development of the Country Environmental Profile; supporting a medicinal plants project; producing and distributing educational and other educational material about the island's natural and cultural resources and development; and representing the local NGO community at national and international meetings and conferences. On Nevis, the Nevis Historical and Conservation Society (NHCS) was established in 1980 to conserve the natural, cultural, and historic resources of the island and adjacent marine areas. The Nevis Heritage and Conservation Trust Ordinance of 2012 transformed the NHCS into a Trust with the mandate that includes promoting the protection, conservation, interpretation and enhancement of the natural environment of Nevis, including its animal and plant life, its submarine and subterranean areas and other places of natural and historical interest and beauty. The NHCS has carried out a coastal clean-up campaign (including marine areas) for the past 11 years, and also is active in recycling, reforestation and beautification, and solid waste management. The St. Kitts Sea Turtle Monitoring Network (SKSTMN), founded in January 2003, monitors nesting sea turtle populations & acts

as an advocate for the strengthening of sea turtle protection laws. SKSTMN works with the Department of Marine Resources and a number of national, regional, and international agencies along with local citizens to develop a long-term sea turtle monitoring & protection program, including monitoring of the two primary leatherback nesting beaches (North Friars and Keys) in the country, as well as monitoring and tagging of hawksbill and green turtles at other beach sites and offshore.

23. Several community groups are active in resource management and conservation in areas adjacent to existing and proposed PA sites. The Fahies Agricultural Women's Cooperative Society (FAWCS), based in the north of St. Kitts close to the Central Forest Reserve National Park, is focused on micro agro-processing initiatives and products (jams, wines, jellies, foods etc.) and is currently working to develop projects for reforestation of plants and trees historically used for agro-processing. The Sandy Pointers Inspiring Real Improvement Throughout (SPIRIT) is a grass roots organization, which among other activities has conducted community clean-up campaigns and hurricane preparedness expos and is now the single largest funder of community development projects in the Sandy Point area. The Sandy Point Agriculture Cooperative Society Ltd (SPACS), geared towards eradicating poverty and hunger in the Sandy Point area through activities supporting food production, marketing and agro-processing, as well as agricultural tourism. The Community Upliftment & Empowerment Team (CUET) based in the Old Road community engages in environmental clean ups among other activities. Finally, the St. Kitts – Nevis Agricultural Youth Forum (SKNAYF) work with youth to develop solutions to food production problems, including organic agriculture practices; a “green house revolution” promoting the use of green houses to counteract the problems posed by Vervet monkeys and to allow farmers to grow crops year round (traditional crops are seasonal and rain dependent); the promotion of fish farming as means to reduce stress on coral reefs; and a “seafood festival” to drive commercial benefits downstream into communities.

## **POLICY & LEGAL CONTEXT**

### **Legal / Regulatory Framework**

24. The National Conservation and Environmental Protection Act (NCEPA; 1987) provides for the management and development of the natural and historic resources of St. Kitts and Nevis, including the establishment of national parks, historic and archaeological sites and other protected areas of natural or cultural importance. Although updated in the mid-2000s, the NCEPA does not reflect many of the country’s current commitments to international environmental conventions. For this reason, a National Conservation and Environmental Management Act (NCEMA) was drafted in 2009 to expand and build upon the NCEPA; the NCEMA is expected to form the primary basis for creating, managing and regulating Protected Areas in both St. Kitts and Nevis once it is enacted and proclaimed. Key objectives of the Bill include: the conservation and sustainable use of the natural heritage of Saint Christopher and Nevis (including conservation of biological diversity); the designation, continuation and management of National Parks and other protected areas; the implementation of multilateral environmental agreements; and the provision of stable, adequate, secure and sustainable funding to finance the conservation and management of the environment. With regard to protected areas, the draft NCEMA allows the Minister of Physical Planning to designate any land or marine area as a protected area. The purposes and objectives of each protected area must be gazetted; the draft bill has adopted the IUCNs’ classification of PAs. Private lands needed for a protected area may either be acquired or right of access or control of the land may be obtained through a written agreement with the private landowner. The NCEMA also calls for the establishment of a National Conservation Commission and for the creation of an Environmental Trust Fund.

25. The Development Control and Planning Act (DCPA; 2000) governs the development of all land, including permission to acquire, develop and use land, as well as protection of the environment within the

production landscape (e.g. controls on development and pollution; requiring use of EIAs). The DCPA sets out the framework for the design and implementation of a National Physical Development Plan (NPDP) to direct spatial development over time. Planning and development control functions include but are not limited to the following: 1) review of building and development applications; 2) zoning; 3) review of EIAs; and 4) design and implementation of development plans. The Nevis Development Control and Planning Ordinance (DCPO 2005) regulates development and land use planning on Nevis; the DCPO provides the legislative framework for the NIA to prepare physical development plans to guide the development and management of land use on the island. The Fisheries Act (1992) and its Statutory Rules and Orders (1995) cover all aspects of fisheries management, including establishment of a fisheries advisory committee, access agreements, licensing, research, enforcement, and registration of fishing vessels, as well as marine conservation measures (closed seasons, gear size restrictions and exact size limits), the creation of marine reserves, and coral reef conservation. The Forestry Ordinance No. 10, (1903) and subsequent amendments regulate the granting of permits for forest resource exploitation, with specific requirements for charcoal burning, control of fires and land clearing. The Ordinance declared as forest reserves all land covered with trees above the existing line of cultivation, which was generally taken as the 1,000 ft. contour line on both islands; all building activity remains restricted beyond this elevation on both islands.

### **Policy Framework**

26. The National Physical Development Plan (NPDP, 2006) provides St. Kitts with an overall strategic planning framework to guide development and capital infrastructure investment decisions. The NPDP pays specific attention to the management of protected areas, coastal areas and watersheds. With regard to protected areas, the NPDP characterizes PAs as protected and enhanced landscapes where natural assets are managed for recreation, aesthetic, economic and ecological reasons. Unique terrestrial habitats such as forests, ponds, mangroves, sand dunes, coral reefs, sea grass beds and beaches are prioritized for special designation and preservation. The NPDP proposes the development of a Park and Protected Areas System Plan; to restrict development in the Basseterre Valley Aquifer; to establish marine reserves to protect coastal resources; and to declare other national parks. The NPDP also proposes controls on developments considered inappropriate for sensitive areas, and requiring EIAs for all significant future projects. The NPDP also recognizes coastal area management as a priority because of the wealth of natural resources in coastal areas and their enormous tourism revenue potential if managed sustainably. The NPDP calls for the preparation of Coastal Zone Management Plans, designation of MPAs, control of land based sources of pollution - including long-term monitoring of near-shore marine water quality, identification and remediation of impacted areas, pollution source control and treatment, as well as the protection of mangroves, sea grass beds, coral reefs, sensitive marine areas, ponds and beaches. Regulation of access to and activities within these areas include installing designated moorings for yachts, dive boats and cruise vessels. The South-east Peninsula and Sandy Shoal coral reef are mentioned specifically for PA designation. In terms of watershed management, the NPDP recognizes that development activity is impacting on the quality of key watersheds and coastal aquifers where fresh water is extracted for drinking. A suite of watershed management measures is foreseen in the NPDP, including reforestation programmes, development control, access control, public sensitization, sustainable tree crops with commercial value and fire prevention and control. On Nevis, a draft Nevis Physical Development Plan was developed in 2008, but it has never been formally approved or implemented. The draft Plan includes policies and guidelines for sustainable development and seeks to prescribe locations of housing, industry, parks/conservation areas, hotel and tourism development with regards to land suitability and other physical and environmental attributes. Though not formally approved by the NIA, the Plan has been used as a guide to inform decision making on land use and development applications; zoning; environmental management; heritage matters; and infrastructure development.



27. The National Environmental Management Strategy and Action Plan (NEMS, 2005) was guided by the country's obligations under the St George's Declaration (SGD) of Principles for Environmental Sustainability in the OECS, 2001. The NEMS defines the specific directions and mechanisms for more effective policy implementation, as well as identifies key strategies and priority actions for environmental management in the context of sustainable development. The National Adaptation Strategy (NAS, 2006-2013) was formulated in response to the closure of the sugar industry in 2005. The NAS outlines the policy framework for restructuring the national economy around a more diversified economic base. The NAS recognizes the environment as the linchpin of any post sugar adjustment programme because the Government of SKN recognizes that maintaining environmental stability is critical to sustaining economic activities, particularly tourism, agriculture and fisheries. Management of PAs is specifically mentioned as a key adaptation strategy in the NAS, which proposes the following priority actions (among others): development of a Parks and Protected Areas Plan; restriction of development in the Basseterre Valley aquifer; declaration of areas with unique terrain, flora and fauna and high recreation potential; and establishment of marine reserves to protect biodiversity in coastal habitats. Among other priorities, the National Poverty Reduction Strategy (2012-2016) calls for reduced vulnerability of individuals and communities to the environmental challenges, and susceptibility of the population and more so the poor, to economic shocks.

28. Finally, it is important to note several recent policy and planning initiatives related to protected areas, even if these are not yet official policies of the Government of St. Kitts and Nevis. The OECS Protected Areas and Associated Livelihoods Project (OPAAL) project generated the 2010 Protected Areas Systems Plan for St. Kitts and Nevis, as well as a Management Plan for the Central Forest Reserve National Park. Although these plans were accepted generally, there was no formal approval of the plans. Similarly, in 2009 the Protecting the Eastern Caribbean Region's Biodiversity (PERB) project produced a Report on Boundary Recommendations and a Management Plan for the proposed Nevis Peak National Park and Camps River Watershed Area, which although supported by key institutions on Nevis, was never formally approved. Finally, a USAID-TNC project produced in 2010 the report Marine Zoning in Saint Kitts and Nevis - A Path Towards Sustainable Management of Marine Resources, which forms the information baseline for establishing MPAs in the country.

## THREATS, ROOT CAUSES AND IMPACTS

29. The key drivers of change in the health and sustainability of the ecosystems of St. Kitts and Nevis, and the goods and services they supply, are summarized below:

**Table 3: Threats and Drivers of Change to Terrestrial and Marine Ecosystems**

<i>Ecosystems</i>	<i>Habitat Destruction / Fragmentation</i>	<i>Habitat Degradation</i>	<i>Over Exploitation</i>	<i>Invasive species</i>	<i>Climate change</i>
<b>Terrestrial Ecosystems</b>	Historically significant; currently limited, especially at PA sites	Significant, but only limited impact at PA sites	Limited	Significant impacts throughout the country	Potential significant impacts
<b>Marine Ecosystems</b>	Highly important at coastal sites (mangroves, seagrass beds); also important impacts on coral reefs	Significant impacts, primarily from upstream sources	Very significant	Limited to date but with potential for bigger impact	Potential significant impacts

### Habitat Destruction/Fragmentation

30. Terrestrial habitat destruction and fragmentation in St. Kitts and Nevis is attributed primarily to mono-crop sugar cane agriculture (which ended in 2005); clearance of lands for residential and tourism development; farming at mid-level elevations (below the 1000 ft. contour); and squatting and unregulated

settlements. Increased infrastructure and commercial and tourism development have resulted in a shift in human settlement, historically concentrated along the coastlines, towards the upper slopes. A number of residential settlements have been established on former sugar lands directly adjoining existing or proposed protected areas; typically these developments have very poor re-vegetation practices. Unregulated settlements and squatting further contribute to land degradation, resulting in negative environmental health issues and environmental degradation including deforestation, soil erosion, and improper waste (liquid and solid) disposal in these areas. Fortunately, all of these activities are quite limited within the boundaries of the existing Central Forest Reserve National Park (CFRNP) and the proposed Nevis Peak National Park (NPNP). At least one small farm and some pasture exist within the area of the CFRNP, and it is believed that small-scale marijuana production has led to some forest clearing, but the exact amount of subsistence agricultural activities within the boundaries of the NPS are not known at this time. However, with the closure of the sugar industry a great deal of land suitable for agriculture became available at lower elevations that are less steeply sloped and have easier access to markets, and thus there is little pressure from agricultural expansion upwards towards the existing / proposed national parks. In fact, agricultural production in some areas has shifted back down to lower elevations in recent years because of the highly negative impact of the large populations of invasive Vervet Monkeys who live in the forested upper slopes of both islands and who consistently consume and / or destroy agricultural crops.

31. In SKN's coastal and marine environment, the lack of protected areas has allowed tourism development to take place in sensitive ecosystems, destroying and degrading coral reefs, mangroves, and sea grass ecosystems, and has created beach erosion and pollution of coastal waters, resulting in a decline of important fisheries species such as lobster and conch. Sand mining for building purposes has undermined many beaches and destroyed sand dunes that provide protection against tidal surges and habitat for nesting turtles. While the law strictly prohibits large-scale removal of beach sand, it is still being practiced illegally in some places on both islands. The proposed Narrows Marine Park between St. Kitts and Nevis may be affected by coastal tourism development, as the large-scale Christophe Harbour Development is dredging salt ponds and establishing infrastructure on the nearby Southeast Peninsula of St. Kitts. The Reefs at Risk Index<sup>13</sup> identifies coastal development as the most significant threat to most coral reefs in St Kitts and Nevis.

#### Habitat Degradation

32. Most former sugarcane lands are characterized by slopes of 5-15% (and in some areas 25-30%) that are punctuated by numerous ghauts (steep watercourses) that drain into the surrounding sea. Although a mono-crop, sugarcane protected and preserved the fragile volcanic soils of the islands; soils were only exposed once every 5-7 years when fields were replanted, and the St. Kitts Sugar Manufacturing Corporation (SSMC) actively managed sugar-producing lands, carrying out conservation programs on the more vulnerable lands in the sloped foothills and ghauts, and maintaining roads, drains and culverts. The end of sugarcane production has seen increased loss of fertile topsoils, flooding and land-based pollution of the sea, including coral reefs and others sensitive areas, and the recharging of underground coastal aquifers (which supply over 90% of the population with potable water) has declined. The erosion and flooding on former sugarcane lands is frequently due to the lack of appropriate drainage and soil conservation measures by farmers who have taken over the lands. In addition, overgrazing by an abundance of small ruminants and feral donkeys (particularly on Nevis) and free ranging livestock have denuded the vegetative cover in some areas and scarred the land surface. Road development without appropriate erosion prevention measures causes drainage problems and flooding during heavy rains. Sedimentation from residential development on slopes results in erosion and sedimentation. On the Southeast Peninsula, the southern portion of which drains into The Narrows, extensive erosion has

---

<sup>13</sup> Burke L and J Maidens (2004) Reefs at Risk in the Caribbean. World Resources Institute, Washington D.C., USA. 84 p.

resulted from past deforestation coupled with road development. Many of the ghauts in the country have severe erosion problems, exacerbated by squatting and farming on steeply sloping lands. Bush fires have caused damage to some landscapes (e.g. in the Basseterre Valley and on the Southeast Peninsula), thereby increasing soil erosion and sedimentation that can impact downstream marine habitats. The discharge of contaminated water and other wastes into the sea from residential and commercial areas, as well as fertilizer use and farm waste, have produced high bacterial counts at many water quality monitoring stations. Quarrying for gravel and fine aggregates takes place on both islands, though the problem is of greater concern on the island of Nevis. On St. Kitts, there is only one quarry, which is managed by the Public Works Department, while on Nevis there are six major quarries managed by private landowners that together directly impact some 27 hectares, with a further 30 hectares indirectly affected. Quarrying operations are responsible for soil loss onto the main roads and sedimentation of the coastal and marine environment. The Reefs at Risk Index identified sediment and pollution from inland sources as the second most significant threat to coral reefs in St Kitts and Nevis; the index also identified marine based sources of pollution as a significant threat to coral reef ecosystem. Another cause of marine ecosystem degradation is the dropping of anchors by diving and fishing boats, which has caused significant damage to coral reef ecosystems in some areas of the country.

### Overexploitation of biological resources

33. Overfishing is considered to be the most significant threat to the marine environment in St. Kitts and Nevis, affecting almost all reefs as evidenced by the absence of larger fish in the catch and scarcity of some of the larger species. The Reefs at Risk Index identified fishing pressure as the most significant threat to most reefs in St Kitts and Nevis. In particular, increased fishing effort in near shore areas of SKN has resulted in steady declines in economically and ecologically important reef fishes, conchs, and lobsters; these impacts are most notable at the proposed Narrows and Sandy Point Marine Parks, as well as other important sites such as Monkey Shoals. There is a major problem of over-fishing and illegal fishing; for example, many fishermen use 1 ½ inch mesh for their fish pots although regulations call for a larger mesh size; as a result, many small and immature fish are caught. Similarly, undersized lobsters are being caught with mesh wire of illegal specifications, and conch is also frequently harvested at sizes below the legal minimum and out of season. Spear fishing is often conducted out of season. Complicating the effort to sustain these species is the arrival of the Indo-Pacific lionfish. With few known natural predators in the Caribbean, the lionfish poses a major threat to coral reef ecosystems in the region by decreasing the survival of a wide range of native reef species via both predation and competition. In addition, illegal poaching of turtles for eggs, meat and oil remains a problem at numerous sites in the country.

34. In the terrestrial environment, the higher elevation forests of St. Kitts and Nevis have traditionally been used for small-scale collection of trees, plants, and plant parts for a variety of purposes, including wood for carving toys, trinkets, craft materials and furniture; charcoal production; boat building materials and construction materials for houses and joinery; sticks for traditional fish pot construction; and collection of herbs and roots for drinks and food products or for home medicinal purposes. At present, only the demand for wood for charcoal production and for fish pot construction is considered unsustainable, and then only at a few sites (within and adjacent to the CFRNP and NPNP).

### Invasive Species

35. St. Kitts and Nevis is typical of remote islands in the susceptibility of its terrestrial biodiversity to invasive alien species (IAS). One of the most significant IAS in the country is the Vervet Monkey (*Cercopithecus aethiops*), which was introduced from West Africa approximately 300 years ago and now occurs widely on both St. Kitts and Nevis. The most recent (2008) estimate by the Department of Forestry puts the overall population of the Vervet Monkey at 35,000-40,000 animals. The monkey is a

generalist that primarily eats fruit and leaves but insects as well; some researchers hold it responsible for the extinction of the St. Kitts endemic subspecies of the Puerto Rican Bullfinch (*Loxigilla portoricensis grandis*) through habitat disturbance. Some farmers are relocating away from the higher elevations because of the abundance of the Vervet Monkey in the CFRNP and the damage it does to their crops. At present, there are no control measures in place excluding occasional trapping for the veterinary school. Several other invasive mammal species are of note. The Indian mongoose (*Herpestes javanicus*), introduced in the late 1800s to control rats that infested the sugar cane plantations, the mongoose is considered a pest to wild birds and domestic poultry and is reported to have resulted in the extirpation of the Red-bellied racer snake (*A. rufiventris*); at present, control efforts through trapping are used in some locales. Both rats (*Rattus rattus* and *R. norvegicus*) and the House Mouse (*Mus musculus*) were introduced centuries ago, and are known to threaten numerous species of native wildlife. On Booby Island, an uninhabited island and designated Important Bird Area, the introduction of rats and mongoose poses a significant potential threat to nesting seabirds. With regard to invasive plants, the lack of a comprehensive floristic inventory of either St. Kitts or Nevis precludes any analysis of invasive plant species, but given the knowledge that only small parcels of original forest may remain, invasive plant species may also be drastically affecting the distribution and abundance of native species within these areas. In the marine environment, the most notable invasive alien species is the Indo-Pacific lionfish (*Pterois volitans*), which is rapidly invading the waters of the Caribbean, and was first spotted in the waters of SKN in 2010. With few known natural predators in the Caribbean, the lionfish poses a major threat to native species through predation and competition. Anecdotal evidence (interviews with fishermen and dive operators) seem to indicate that the growth of lionfish populations in shallow coastal waters has decreased, probably due to targeted fishing pressure, but the population dynamics of the lionfish in both the shallow and deeper waters of SKN remain unknown. Overall, St. Kitts and Nevis has yet to develop a comprehensive strategy for the control of invasive alien species in the terrestrial environment. Species such as the Vervet Monkey and Mongoose are spread widely across the islands and both eradication and control measures will be difficult and costly to carry out. Just as importantly, there is almost no information on the type, extent or impacts of invasive plant species on the islands. The designation of Booby Island as a Nature Reserve provides an opportunity for the Government of St. Kitts and Nevis to pilot biosecurity measures at that site in the hopes of keeping the island free of invasive mammals. Similarly, the introduction of the lionfish throughout the Caribbean provides national stakeholders with an opportunity to collaborate with other Caribbean countries in developing effective strategies for control of the species.

#### Environmental variation associated with climate change

36. Caribbean Islands are in a state of increased vulnerability to climate change. Increases in average temperature, changes in precipitations patterns, sea level rise and increased hurricane intensity all have the potential to threaten lives, property and ecological functioning. Two climate change related patterns have already been noted in St. Kitts and Nevis -- increased frequency of destructive hurricanes, and increased occurrence of prolonged drought conditions. St. Kitts and Nevis is particularly vulnerable to damage from tropical storms; since 1989, eight storms have affected the country - Hugo, Felix, Gilbert, Iris, Luis, Marilyn, Bertha and Georges. The natural cycle of hurricanes in the region results in changes in floristic composition and ecosystem health and integrity, and the effects of such events will be magnified when they occur in ecosystems that are already vulnerable due to other climate-related stresses, as well as factors such as pollution, land clearing, and over-harvesting. With increased frequency of hurricanes, the country can expect to see accelerated land degradation that is precipitated by human-induced activity in vulnerable areas, mainly in the steep interior of the island. Erosion from point sources (e.g. quarries) and non-point sources (e.g. farm lands) can be expected to increase. Erosion of coastal areas due to storm surge and battering surf can be expected to impact the country. With increased occurrence of drought events, the potential for forest fires that may defoliate and kill vegetation on hill slopes can also predispose these areas to heightened risk for land degradation. A direct impact of climate

change that is already being felt in St. Kitts and Nevis is coral bleaching, which results in the death of corals, sponges and other marine organisms. A 2012 study of the majority of the coral reefs in the country found that more than 90 percent of Giant Barrel Sponges (*Xestospongia muta*) exhibited signs of bleaching, much of which was fatal.

37. Additional information on threats at specific protected area sites is provided in Part II (Project Protected Areas Site Information) and in Annex 3.

## **LONG-TERM SOLUTION AND BARRIERS TO ACHIEVING THE SOLUTION**

38. The business-as-usual scenario for management of protected areas in St. Kitts and Nevis is one where: 1) existing PAs remain under-funded and only minimally managed for the foreseeable future; and 2) management of development and resource use in critical ecosystems in areas adjacent to or upstream from PAs will continue on an ad-hoc basis with little consideration of impacts on biodiversity and ecosystem functioning within PAs. The long-term solution is to create a functional, representative and sustainable national system of terrestrial and marine protected areas that provide effective protection for biodiversity while also reducing activities harmful to biodiversity within PAs and in landscapes adjacent to or upstream of PAs that are responsible for the degradation of protected areas. Two main barriers hamper the achievement of this long-term solution:

### **Lack of systemic approach and mechanisms for protected areas management**

39. At present, there is no central coordinating body or administrative agency to coordinate roles, responsibilities and resources for effective management of a system of protected areas, or for biodiversity conservation more generally. Multiple agencies on both St. Kitts and Nevis have responsibility for landscapes and seascapes within existing and proposed protected areas; frequently these agencies are supporting overlapping and/or competing mandates in the same area (e.g. promotion of fisheries and marine conservation; agricultural development and forest and soil conservation). Of the three existing legally established protected areas in the country, one is managed by the Department of Physical Planning and Environment (DPPE); one is the responsibility of DPPE but practically managed by the Water Services Department; and one is managed by the Brimstone Hill Fortress Society, a local NGO. This diffusion of authority for protected areas, the lack of coordination between current agencies with responsibilities related to environmental management, and the lack of community and private sector participation in PA management, has limited the visibility and public awareness about the PA sites and their functions, has constrained the pooling of resources, information and training for effective PA management, and has created uncertainty regarding the objectives and management structure for any new terrestrial or marine PAs. At the institutional level, a 2010 analysis of protected areas in St. Kitts and Nevis<sup>14</sup> found that neither the Ministry of Sustainable Development, nor the Ministry of Agriculture and Fisheries, have the personnel, skills, funding or resources necessary to develop, plan and manage a protected areas system, or even individual protected areas, for the terrestrial and marine environments respectively. Conditions have not changed significantly for PA management since 2010, and at present there are no dedicated Protected Areas staff (apart from those managing the Brimstone Hill Fortress National Park, which is not managed for conservation purposes), and in fact there are no dedicated units or staff addressing biodiversity or wildlife issues in the country. Another barrier to the implementation of an effective national system of protected areas is a lack of coordination and direction setting between internationally-funded projects and national policies and programs. For example, PA system and site planning has been supported by past projects including the OPAAL, IWCAM and PERB, but none of the plans have been implemented, in part because the documents were written purely by external consultants

---

<sup>14</sup> Glenn E. Haas, Robert Aukerman, Development of a Protected Areas Conservation Trust, System, Service, and a National Capitol Park for St. Kitts and Nevis, 2010

and did not involve or develop any in-country technical capacity to move the plans forward, or to develop the legal and policy frameworks necessary for PA management. More generally, the myriad obligations of multilateral environmental agreements and donor requirements, each of which has its own priorities and creates its own institutional architecture (committees, funds, boards etc.), has produced constant changes in direction and national stakeholder fatigue.

40. Coordination and management of a system of protected areas is also constrained by the lack of clear and effective policies and laws regarding protected areas, biodiversity, sustainable resource management, and institutional coordination. Establishment of protected areas can be done under four existing laws (the 1987 National Conservation and Environmental Protection Act or NCEPA; the 1984 Fisheries Act; the 1986 South-East Peninsula Land Development and Conservation Act; and the 2000 Development Control and Planning Act), but there is no uniform PA classification system among these different legal instruments and very few PA-related regulations supporting the laws. For example, although the NCEPA is the most comprehensive environmental law in the country and is considered the primary law governing protected areas, it has no regulations to authorize Protected Areas to collect and retain visitor/user fees, to implement controls on many types of resource use, or to establish a centralized authority for PA management. Similarly, although the Fisheries Act can support designation of marine reserves and protected areas under the Fisheries Act, nothing under the Act authorizes the implementation of specific MPA regulations or the zoning of MPAs into different use categories. Furthermore, because there are no existing marine PAs in the country, protection measures against overfishing and visitor damage (anchoring and other boat damage; taking of coral by divers, etc.) are limited to intermittent monitoring. Compounding these regulatory shortfalls is the lack of enforcement capacity; at present there is no capacity for enforcement of terrestrial PAs; while enforcement capacity in the marine environment is greatly constrained by the lack of personnel, funds and resources (including boats) among both the Marine Resources Department on St. Kitts and the Nevis Department of Fisheries (in addition, at present the NDF has no legal authority over marine areas as they are Federal waters). Capacity is also insufficient to enforce legislation that forbids large-scale sand removal from beaches or to control quarrying activities on Nevis. At the policy level, a Protected Areas Systems Plan was prepared in 2010 under the OPAAL project and could function as the primary policy document for protected areas in the country, but Cabinet has never approved the plan. Policies for effective coordination among agencies, including coordination between authorities and resource managers on St. Kitts and on Nevis, are also insufficient; the 2006 National Capacity Self-Assessment for SKN found that there are no national environmental policy documents to mandate or even guide cooperation between St. Kitts and Nevis on environmental matters. Underlying the inadequate institutional capacities to manage protected areas and to develop and enforce regulations for the PA system is the absence of adequate and sustainable funding. At present, the financing of protected areas is almost entirely dependent upon government appropriations (the Brimstone Hill Fortress National Park is the only PA with a visitor fee system in place), and to date the government has yet to allocate any funding specifically for the management of PA sites. Although potential financing mechanisms have been explored and proposed, to date no institution has taken responsibility for developing and implementing such mechanisms, in large part due to a lack of any experience in the country with PA financing.

41. Another barrier to effectively managing existing PA units, and to planning for the expansion of the overall PA system, is a lack of adequate information and mechanisms for information sharing among key agencies and organizations. Currently, there are no information management systems for protected areas, which prevents resource managers and decision-makers from sharing data and making informed decisions, and prevents St. Kitts and Nevis from consolidating and using the voluminous data that is generated by external institutions working in the country. For example, information from coral reef monitoring programs carried out by the St. Christopher National Trust has never been utilized by organizations responsible for coral reef management. More broadly, the ability to identify and manage the links between soil erosion and storm water runoff in productive landscapes adjacent to existing and

planned PAs, and negative impacts on downstream marine ecosystems, is limited by a lack of information sharing or coordinated planning and management between agencies. Inadequate information systems also contribute to a low level of awareness and understanding in the country of protected areas and their potential benefits. The 2010 Haas & Aukerman report found a low level of general public understanding of the benefits and values of a proposed SKN Protected Areas Conservation System. In addition, a lack of awareness of the linkages between land degradation and ecosystem services / habitat degradation means that most persons are unaware of the impacts that poor land / resource management in areas adjoining or upstream of PA sites have on biodiversity in PAs.

### **Insufficient geographic coverage and inadequate management of protected area units and of sources of degradation in areas adjacent to or upstream of protected areas**

42. Existing protected areas in St. Kitts and Nevis are insufficient in size and ecosystem coverage to effectively conserve the biodiversity resources of the country. In the terrestrial landscape, three protected areas exist: the Central Forest Reserve National Park, the Brimstone Hill Fortress National Park, and the Royal Basseterre Valley National Park. Of these, only the CFRNP was established with environmental conservation as the primary objective, and it is the only one of the three areas to conserve significant areas of natural habitat. The BHFNP was established as a historic / cultural site, while the RBVNP was established primarily to protect the aquifer that supplies the capital city of Basseterre with drinking water. Furthermore, all three of these sites are located on the island of St. Kitts (the island of Nevis has no protected areas whatsoever), and none of them include any coastal habitat. In the marine environment, there are no existing marine protected areas anywhere in the country. Thus, under the existing system, marine and coastal ecosystems have no official protection in the country, and protection of terrestrial ecosystems is limited to the upland forests of one island. A further constraint to the effectiveness of protected areas is the lack of implementation of management plans for PA units. Both the CFRNP and RBVNP have management plans that were created in the past 5 years, but neither one of these plans has been implemented, due to a lack of staff, infrastructure, resources and relevant information. In addition, a management plan was developed in 2009 for the proposed Nevis Peak National Park and Camps River Watershed Area, but this plan was never formally adopted and the site remains without any on-the-ground management or enforcement.

43. Underlying the inability of the Government of St. Kitts and Nevis to extend PA coverage across a greater area or to implement systemic or site level planning is a pronounced lack of capacities and resources for effective PA management. As noted above, there is no history of PA site management in the country, and therefore there are no persons with training and experience in the many activities necessary for effective PA management, including ecological conservation, monitoring and protection; visitor development and management; enforcement and community participation; business planning and development of financing mechanisms; outreach and education; etc. This lack of capacity even extends to PA management planning; previous efforts at planning, site assessment and development of management plans were funded by international donors and carried out almost entirely by foreign consultants. The lack of persons trained in PA management, or even in environmental conservation in general, is particularly urgent in the case of MPAs, as the country has no experience and very little personnel, financial resources, or equipment to develop and implement marine ecosystem conservation activities.

44. Finally, effective planning, zoning, development of resource controls, and other management activities at the PA site level is significantly constrained by a lack of information on biodiversity, ecosystem functioning, and other ecological features and conditions. In the terrestrial landscape, the last field-level biodiversity inventories in St. Kitts and Nevis were completed in the 1940s; in the 70 years since then, biodiversity assessments have been based on desk studies and a few species-specific studies (e.g. selected species of bats and birds). Information from studies and inventories of the marine environment is equally sparse; only a few field studies have been done and many of these have focused on

fisheries as a productive resource. This limited data on biodiversity prevents appropriate management planning for potential species that are globally or regionally threatened, as reliable data is needed to guide species management for healthy or vulnerable populations, as well as to address population trends and to identify and address threats. Similarly, the lack of data on biodiversity, habitats and ecosystem functioning prevents the country from planning the expansion of the PA system in a strategic manner or the effective zoning of specific PA units.

## STAKEHOLDER ANALYSIS

45. The project will be executed on behalf of the Government of St. Kitts and Nevis by the Department of Physical Planning and Environment (DPPE) within the Ministry of Sustainable Development (MoSD). Other government institutions that will play a significant role in the project, both in terms of establishing a national framework to supported the system of protected areas and in terms of the management of specific protected area units, include the Department of Physical Planning, Natural Resources and Environment (DPPNRE) on Nevis; the Department of Marine Resources (DMR); and the Nevis Department of Fisheries (NDF). The Ministry of Justice and Legal Affairs will be a critical partner in consolidating the PA legal and regulatory framework. Several environmental NGOs, including the St. Christopher National Trust (SCNT), the Nevis Historical Conservation Society (NHCS), and the St. Kitts Sea Turtle Monitoring Network (SKSTMN) will act as key partners at specific PA sites and in raising national awareness and support for the project and for the protected areas system. Local communities and resource users will be key partners in implementing PA management activities (e.g. public outreach and education activities on PAs; in working with local communities in and around buffer zone areas on conservation techniques and practices and sustainable livelihood practices; in providing input on the development of regulations in and around PAs; and in providing on-going monitoring which will complement the monitoring and enforcement activities of PA rangers).

46. During the project preparation stage, a stakeholder analysis was undertaken in order to identify key stakeholders and assess their roles and responsibilities in the context of the proposed project. The table below describes the major categories of stakeholders identified, the individual stakeholder institutions/organisations within each of these categories, and a brief summary of their specific roles and responsibilities in supporting or facilitating the implementation of project activities.

**Table 4: Stakeholder Participation in Project Implementation**

<b>Stakeholders</b>	<b>Anticipated Roles and Responsibilities in Project Implementation</b>
<b>National Government</b>	
Ministry of Sustainable Development (MoSD), including the Department of Physical Planning and Environment (DPPE) and the Department of Economic Affairs and Public Sector Investment Planning (DEA/PSIP)	The DPPE will act as the lead Executing Agency for the project. The DPPE will coordinate the inputs of government agencies and other stakeholders in strengthening the legal, policy, institutional and financial framework for a national system of protected areas (Component 1 of the project). The DPPE also will take direct responsibility for managing two of the PA sites targeted by the project (Central Forest Reserve National Park and Booby Island Nature Reserve), until such time as the Protected Areas Agency is formally established. The DEA/PSIP, which functions as the GEF focal point office for the country, will work to ensure the collaboration of co-financing agencies and other national and international partners with the proposed project. The DPPE and the DEA/PSIP will collaborate on the monitoring and evaluation of the day-to-day progress of the project.
Ministry of Agriculture and Marine Resources (MAMR), including the Department of Marine Resources	The DMR will play a key role in the updating / strengthening of laws, regulations and policies related to the management of marine resources and the establishment of official marine protected areas. The DMR, together with the NDF, will take lead responsibility for marine monitoring and conservation activities, including the establishment and management of three new marine protected areas in the country (Keys, Sandy Point, and Narrows Marine Parks), until such time as the Protected Areas Agency is formally established.



<b>Stakeholders</b>	<b>Anticipated Roles and Responsibilities in Project Implementation</b>
Nevis Department of Physical Planning, Natural Resources and the Environment (DPPNRE)	The DPPNRE will oversee the implementation of all site-specific terrestrial activities on the island of Nevis and will coordinate with their national-level counterparts on the development of plans, policies and laws / regulations at both the national level and specifically for the island of Nevis. The DPPNRE also will take direct responsibility for managing the Nevis Peak Forest Reserve National Park, until such time as the Protected Areas Agency is formally established.
Nevis Department of Fisheries (NDF)	The NDF will contribute to the updating / strengthening of laws, regulations and policies related to the management of marine resources and the establishment of official marine protected areas, particularly with regard to the marine environment around the island of Nevis. The NDF, together with the DMR, will engage in marine monitoring and conservation activities, including the establishment and management of three new marine protected areas in the country (Keys, Sandy Point, and Narrows Marine Parks), until such time as the Protected Areas Agency is formally established.
Ministry of Justice and Legal Affairs (MJLA)	The MJLA will share responsibility for ensuring that policy and legislative frameworks are in place to support all aspects of the project, in particular the creation and strengthening of laws such as the National Conservation and Environmental Management Act (NCEMA) and the Marine Resources Act, and the detailed regulations associated with those acts.
Water Services Department (WSD)	The WSD will take the primary responsibility for management activities within the Royal Basseterre Valley National Park, until such time as the Protected Areas Agency is formally established. In addition, the WSD will be a key stakeholder in providing technical information on the status of watersheds and information and water quality at sites where rivers and streams feed into the marine and coastal environment.
Ministry of Tourism and International Transport (MTIT), including the St. Kitts Tourism Authority (SKTA)	The MTIT and the SKTA will help to develop a branding and marketing strategy for the PA system, and to raise awareness among tour providers, cruise ships, and tourists themselves of the ecological, adventure, and cultural attractions of the terrestrial and marine protected areas and the new national system of protected areas.
<b>Environmental NGOs</b>	
St. Christopher National Trust (SCNT)	The SCNT will be a key partner in conservation activities at the newly established Keys Marine Park (which includes the core marine zone of the MAB), and the project will work to ensure clear modalities for collaboration between the PAA and SCNT. The SCNT will be an active participant on the St. Kitts PA Committee (sub-committee of the NEC), and will likely participate in other project activities focused on education and outreach as well as biodiversity inventories.
Nevis Historical Conservation Society (NHCS)	The NHCS is expected to be a key partner in the management of the Nevis Peak National Park and Camps River Watershed Area, in particular through active participation on the Nevis PA Committee (sub-committee of the NEC), and through education and outreach programs to local communities and schools, building on their experience with similar programs related to wetlands, beach and turtle monitoring, invasive species (lionfish), and recycling.
St. Kitts Sea Turtle Monitoring Network (SKSTMN)	The organization will continue to have lead responsibility for turtle monitoring at the Keys Beach and other turtle nesting sites in the country; it will also participate in awareness raising campaigns regarding the value in protecting turtles, and in training local tour guides in safe methods for accessing and 'watching' turtle nesting
<b>Local Stakeholder / User Groups</b>	
Sandy Pointers Inspiring Real Improvement Throughout (SPIRIT)	This group will participate in community education and awareness, identifying local knowledge useful to the project (traditional uses of plants), and working with the Project to identify specific benefits to communities from Project
Fahies Agricultural Women's Cooperative Society (FAWCS)	This group will participate in small-scale reforestation initiatives and planting / cultivation of species used traditionally for medicine and food for potential processing and promotion of small businesses.
Community Upliftment & Empowerment Team (CUET)	This group will participate in community education and awareness, identifying local knowledge useful to the project (traditional uses of plants), and working with the Project to identify specific benefits to communities from Project
Sandy Point Agriculture	This group will participate in community education on natural resource management,

Stakeholders	Anticipated Roles and Responsibilities in Project Implementation
Cooperative Society Ltd (SPACS)	contribute knowledge on how forest assets were traditionally harvested, and promote sustainable harvesting of resources
St. Kitts – Nevis Agricultural Youth Forum (SKNAYF)	The groups will engage in awareness raising of local youth on the value of natural resources (focusing on issues relevant to the protection of the Basseterre Valley aquifer), and in working with the DPPE to develop a strategy to address the problem of the invasive Vervet Monkey
Tourism operators	Tour guides / companies operating at terrestrial PA sites, and dive / snorkel and yachting companies operating at marine PA sites, will play an active role with government agencies in developing rules and protocols for their operations within PA sites, as well as in promoting visitation to the sites and safe practices among visitors
Fishermen	Fishermen will be involved in MPA planning and management decision-making, including the siting of fisheries no-take zones and/or restrictions on gear, practices and seasons; fishermen associations (such as the Sandy Point Fishermen’s Society and various groups in the village of Newcastle) will be encouraged to participate in monitoring of fishing activities
Private developers	The company Kittitian Hill Properties will act as a partner in promoting visitation and encouraging low impact behaviours in and around the Central Forest Reserve National Park, and sharing information with local residents on commercial organic food production techniques. The developers of the Christophe Harbour marina / villa development will be sought out as partners in marine conservation and public education and outreach in support of the PA system.

## BASELINE ANALYSIS

47. Under the “business-as-usual” scenario, St. Kitts and Nevis will continue to lack any marine protected areas of any kind, while terrestrial protected areas will be limited to three sites (Central Forest Reserve National Park - CFRNP, Royal Basseterre Valley National Park - RBVNP, and Brimstone Hill Fortress National Park - BHFNP), of which only the BHFNP will be actively managed (and this site is managed as a historical / cultural site rather than for environmental conservation). Both the CFRNP and RBVNP will have no dedicated staff or activities for implementing on the ground management of the sites as protected areas, while other important sites (such as the Nevis Peak and Camps River areas on Nevis) will have some protections in terms of development but no official status as protected areas. Furthermore, even though the 2010 Protected Areas Systems Plan and the 2010 St. Kitts and Nevis Marine Management Area proposal have identified several critically important sites for the establishment of marine protected areas, in the baseline scenario no MPAs will exist anywhere in the country. Funding support from government and donors will be limited because of the lack of official status for key sites, and funding that does exist will consist of irregular *ad hoc* investments with little coordination or strategic oversight. In this scenario, the majority of important terrestrial and marine ecosystems and species in the country will remain vulnerable, and increasingly threatened as tourism, fishing, and development all continue to grow. **The total baseline finance associated with the project represents \$26.18 million for the 4 years that the project is expected to last.** These are investments in various conservation programs and activities that are being implemented at sites of existing and potential protected areas and their areas of direct influence in St. Kitts and Nevis, and which are described below:

### *Component 1) With respect to Strengthening Protected Area System Framework and Capacities*

48. Several government institutions have on-going and planned activities relevant to strengthening the overall system of protected areas in the country. The Department of Physical Planning and Environment (DPPE) will provide baseline spending for the coordination of PA management activities nationwide; administration of the National Conservation and Environmental Protection Act (NCEPA) and updating of relevant legislation; and establishing financial mechanisms, information systems and outreach and education programs to support protected area; the budget for these activities during the period of project implementation is US\$0.86 million. The Department of Physical Planning, Natural Resources and the

Environment (DPPNRE), which oversees environmental management and development control activities on Nevis, will work closely with the DPPE in revising laws, policies and plans for the PA system and in establishing financial mechanisms, information systems and outreach and education programs to support protected areas; the budget for these activities during the period of project implementation is US\$0.25 million. The Marine Resources Department will provide baseline funding for the legal establishment of marine protected areas, development of financing mechanisms to support MPAs, and revisions to existing legislation relevant to MPAs and to fisheries; the budget for these activities during the period of project implementation is US\$0.88 million. The Ministry of Justice and Legal Affairs (MJLA) advises government departments and statutory bodies on civil and criminal matters, including all environment related legislation and regulations, will provide critical support for the updating and writing of new legislation such as the National Conservation and Environmental Management Act (NCEMA) and the Marine Resources Act; the budget for these activities during the period of project implementation is US\$0.1 million. The Land Management Unit (LMU) will provide baseline spending to ensure that development and public sector investment programmes in SKN take account of environmental conservation; the budget for these activities during the period of project implementation is US\$0.24 million.

49. A number of marine conservation related projects are on going in St. Kitts and Nevis. The project Improving the Management of Coastal Resources and the Conservation of the Marine Biodiversity in the Caribbean Region is a 5 million Euro (US\$6.76 million) project funded by the German Agency for International Cooperation (GIZ) and executed by the Environmental Management Unit of CARPHA on behalf of CARICOM through Caribbean Aqua-Terrestrial Solutions (CATS) Programme. The initiative will support some eight countries (Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts & Nevis, Saint Lucia, St. Vincent & the Grenadines) to address marine resources management and strengthen capacity of stakeholders through a common institutional framework for management of marine protected areas (MPA) in the Caribbean Region. The project will also provide advice to local communities and relevant public and private stakeholders in selected member countries of CARICOM. Particular emphasis will be placed on improving the resilience and adaptation capacity of communities by implementing biodiversity and ecosystem conservation measures as well as the promotion of mechanisms for sustainable use of natural resources. In St. Kitts and Nevis, the project will be implemented from 2013-2017 by the Department of Marine Resources and Caribbean Aqua-Terrestrial Solutions (CATS), with the primary focus being the establishment and operationalization of the Narrows Marine Park (NMP). The project will implement the following activities in support of the NMP: legal establishment and demarcation; writing of a management plan and business plan; monitoring and assessment of biophysical conditions; communications strategy / awareness raising; establishment of offices and purchase of equipment (vehicle, dive gear, mooring buoys); training; and livelihoods activities including promotion of Fish Aggregating Devices and aquaculture. The CATS project will carry out extensive consultation and public awareness activities in support of the establishment of the NMP and the drafting of the management plan, which is expected to be completed and submitted to Cabinet by late 2015. The budget for project activities in St. Kitts and Nevis is estimated at US\$0.60 million.

50. The Eastern Caribbean Marine Management Area Network (ECMMAN) project, implemented by The Nature Conservancy (TNC) and funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), is regional project that will run from 2013-2017 with an overall budget of 4.2 million Euros (a budget specifically for St. Kitts and Nevis has been estimated at US\$0.45 million). At the regional level, the goal of the project is to add to and strengthen MPAs in six OECS member states by establishing new and strengthening existing marine managed areas (MMAs) that contribute to the implementation of the Caribbean Challenge Initiative (CCI) commitment to effectively conserve and manage at least 20% of the near-shore marine and coastal environment by 2020; building strong constituencies for sustainable livelihoods and ocean use, including MMA co-management that includes conservation at its core in all six countries; improving and updating an Eastern Caribbean

Decision Support System that provides accessible decision making tools; and instituting sustainability mechanisms to support the MMA network, including regional political commitments and actions, regional collaboration mechanisms, and follow-on funding. At the national level in St. Kitts and Nevis, the following potential activities have been identified: assisting with zoning design and spatial planning and drafting of formal documents for the establishment of the SKNMMA; support for the design of sustainable financing mechanisms to help the Govt. of SKN to capitalize the National Conservation Trust Fund; sustainable livelihoods activities for fishermen; and outreach and education on marine protected areas.

**The total baseline finance associated with Component 1 is estimated at US\$3.29 million.**

***Component 2) With respect to Expansion of the Protected Area System and Strengthened Management of Existing and New Protected Areas***

***2a) Establishment and operationalization of terrestrial protected areas***

51. Several government institutions have on-going and planned activities relevant to establishing and operationalizing terrestrial protected areas. The DPPE will provide baseline spending for the management of terrestrial PAs on St. Kitts; the budget for these activities during the period of project implementation is US\$2.20 million. The DPPNRE will support the establishment of the Nevis Peak National Park and Camps River Watershed Area and the updating of the Nevis Physical Development Plan; the budget for these activities during the period of project implementation is US\$0.76 million. The Water Services Department will support the protection of water provision services of the natural aquifer and natural ecosystem functions in the Royal Basseterre Valley Park; the budget for these activities during the period of project implementation is US\$6.0 million.

52. With regard to terrestrial protected areas, there are few on-going projects and programs in the country outside of relevant government baseline spending. However, the St. Mary's Man And Biosphere Reserve is dedicated to the sustainable development and management of an area of significant biodiversity and cultural conservation in the St. Mary's area on the east coast of St. Kitts (this site overlaps with parts of the proposed Keys Marine Park). The St. Kitts-Nevis National MAB Committee oversees activities in the MAB Reserve, including support of sustainable development, promotion and monitoring of scientific research, capacity development of local communities in resource management and environmental protection, as well as promoting national level activities including the planning and management of Biosphere reserves, and the review and approval of Biosphere Reserve proposals. The National MAB Committee hosted a town hall meeting in Cayon in February 2014 to initiate activities at the St. Mary's MAB; approximately US\$0.04 million will be invested in 2014-2015 in education and awareness activities and materials to raise awareness about the MAB Reserve and to highlight potential community benefits derived from tourism at the site.

53. Apart from projects focused specifically on protected areas, several other baseline programs and project will support sustainable land management in areas adjacent to or upstream of existing and proposed protected areas. The Drainage Infrastructure Project, part of which will be carried out within the Royal Basseterre Valley Park, is intended to reduce flooding impacts on residents and property, ensure that local and downstream flows are stable and ecologically healthy, and ensure that minimal pollution is transmitted to the sea and bays via run-off from new developments; this project has a budget of US\$4.42 million. The Land Cadastre Project will conduct aerial photogrammetry mapping to assess land use in St. Kitts and Nevis and will complete land cadastral maps of the Southeast Peninsula and protected areas, which will increase capacity for planning in protected and environmentally sensitive areas; this project has a budget of US\$3.10 million. Finally, an erosion control project is underway in the

Charlestown and Camps Valley areas on Nevis, with funding Caribbean Development Bank; the budget for this project is unknown.

*2b) Establishment and operationalization of marine protected areas*

54. Several government institutions have on-going and planned activities relevant to establishing and operationalizing marine protected areas. The Marine Resources Department will provide baseline funding for the establishment and operation of marine protected areas, including sustainable fisheries management and coral reef monitoring and conservation; the budget for these activities during the period of project implementation is US\$3.02 million. The Nevis Department of Fisheries will provide baseline funding for the establishment and operation of the Narrows Marine Park, and will work with the MRD on sustainable fisheries management and coral reef monitoring and conservation; the budget for these activities during the period of project implementation is US\$0.29 million. The Ministry of Health will provide baseline support by conducting water quality monitoring at sites where streams feed into the marine environment and enforcing environmental controls critical for the control of wastewater and effluent discharges; the budget for these activities during the period of project implementation is US\$1.76 million.

55. The Caribbean Marine Protected Area Network and Forum (CaMPAM), funded by UNEP-Caribbean Environment Programme (CEP), is a regional partnership among managers, educators, NGOs, GOs, and other users of MPAs in the Gulf of Mexico and Caribbean region dedicated to building the capacity of MPAs to ensure their success. Activities of CaMPAM include a Training of Trainers course, an Internet distribution list, annual scientific and management technical sessions at GCFI, a Small Grants program, and a regional MPA database. As part of its Mid-Size Grant program for countries, the CaMPAM funded the project “Building Infrastructure and Development of a Framework for the Management of Marine Protected Areas in St. Kitts and Nevis”, which enabled the installation of mooring buoys to prevent damage to the coral reef areas from the anchors of boats. Looking forward, the project will help St. Kitts and Nevis to establish a framework for the management of Marine Protected Areas, building on the foundation of work recently completed under the Protected Areas System Plan. In addition, the CaMPAM project will implement a small grants program to strengthen MPAs and associated sustainable livelihoods; this program is funded through the ECMMAN project, with a budget of approximately US\$0.2 million. The Japan International Cooperation Agency (JICA) is supporting the Caribbean Fisheries Co-Management Project (CARIFICO) project (2013-2018), which is assisting in training fishermen to fish at Fish Aggregating Devices (FADs); donating gear for FADs; and training for Marine Resources and fishermen to work together to deploy the FADs. The CARIFICO project may also help with marketing of fish and training of fishermen and fisheries officers in navigation and safety. The project does not have a specific budget allocation for SKN; rather funding is provided based on specific requests from the Department of Marine Resources. The St. Kitts Sea Turtle Monitoring Network carries out turtle monitoring, habitat protection and restoration, and other conservation activities at beaches frequented by turtle species for nesting, especially the Keys Beach Turtle Nesting site. The SKSTMN also provides technical assistance on conservation techniques and raises public awareness on the importance of turtle and beach protection. Finally, the Correction of Land Slippage Project will maintain and protect the coastal areas at Pump Bay, Sandy Point (site of a proposed MPA) by constructing a sea defence wall, with a budget of US\$1.10 million.

**The total baseline finance associated with Component 2 is estimated at US\$22.89 million**

**Table 5: Baseline Finance Overview**

Component / Topic	US\$ million
Component 1	
Legal and policy frameworks; institutional strengthening; financial systems	3.29

and mechanisms; information systems; education and outreach	
<b>Sub-Total</b>	<b>3.29</b>
Component 2	
Establishment and operationalization of Terrestrial Protected Areas	16.52
Establishment and operationalization of Marine Protected Areas	6.37
<b>Sub-Total</b>	<b>22.89</b>
<b>TOTAL</b>	<b>26.18</b>

## **PART II: Strategy**

### **PROJECT RATIONALE AND POLICY CONFORMITY**

#### *Fit with GEF Focal Area Strategy and Strategic Programme*

56. The project directly addresses the outcomes and outputs of GEF Biodiversity Strategic Objective 1 - Improve Sustainability of Protected Area Systems, and specifically the BD1 Focal area Outcome 1.1 “Improved management effectiveness of existing and new protected areas” and Outcome 1.2 “Increased revenue for protected area systems to meet total expenditures required for management”. The project will expand the existing PA system through the establishment of two new terrestrial PAs and three new marine PAs (the first marine PAs in the country), and will address systemic issues by implementing key elements of SKN’s Protected Areas System Plan, including the establishment of a centralized agency for protected areas management, the creation and revision of PA site management plans, and the implementation of key conservation actions (biodiversity inventories; marine ecosystem conservation) within specific PA sites, thereby strengthening PA management capacities and the ability to reduce or eliminate threats to biodiversity including habitat destruction and over-exploitation of marine biodiversity resources. The project will increase financial resources for PA management by creating and implementing PA site-specific business plans; establishing a fee system established for all PA units, including entry fees, activity fees (e.g. diving), and tour company payments; and promoting increased national budget support for PAs. The proposed project also will also implement measures to reduce habitat degradation in areas of influence adjacent to protected areas, which are having an adverse impact on the ecological integrity on these sites. The establishment of new terrestrial and marine protected areas, combined with those that exist already in the country, will create a PA system that encompasses large areas of natural ecosystems, thereby increasing their likelihood of persisting in the face of climate change impacts such as increased temperatures and more frequent hurricanes and droughts. Large areas of protected landscapes and seascapes will also support larger populations of species, thereby increasing their chances of surviving climate change impacts, and will allow those species more area in which to find suitable habitat niches in the face of changing climatic conditions. Like many other Caribbean Small Island Developing States (SIDS), the entire country is considered a coastal zone, and therefore arresting the degradation of coastal ecosystems (coral reefs, mangroves, seagrass beds, beaches, etc.) will produce widespread benefits by increasing the country’s resilience to climate change impacts.

57. The project will contribute to the achievement of GEF’s outcome indicators under the strategic programming area as follows:

**Table 6: GEF Focal Areas**

GEF V Biodiversity Focal Area Objectives	Expected Focal Area Outcomes	Expected Focal Area Outputs	Project contribution to indicators

GEF V Biodiversity Focal Area Objectives	Expected Focal Area Outcomes	Expected Focal Area Outputs	Project contribution to indicators
BD-1	1.1 Improved management effectiveness of existing and new protected areas	Output 1.1. New protected areas (5) and coverage (15,243 hectares) of unprotected ecosystems (coverage of marine ecosystems increasing from 0 hectares to 11,693 hectares, and coverage of terrestrial ecosystems increasing from 5,260 hectares to 8,810 hectares)	METT scores for 7 PA sites will improve from an average of 22 to an average of 54  5 new Protected Areas encompassing 11,639 hectares of marine ecosystems and 3,550 hectares of terrestrial ecosystems
	1.2 Increased revenue for protected area systems to meet total expenditures required for management	Output 1.3. Sustainable financing plans (1)	Increased financing for protected areas management of US\$429,000 / year by end of project

### ***Rationale and Summary of GEF Alternative***

58. The existing system of protected areas in St. Kitts and Nevis is inadequate in two respects. First, its geographic scope is limited to 3 terrestrial PA units on the island of St. Kitts; of these, only the Central Forest Reserve National Park was established primarily for ecological conservation greater or is greater than 200 hectares in size. There are no terrestrial protected areas on the island of Nevis, nor are there any marine protected areas anywhere in the country. Second, apart from the Brimstone Hill Fortress National Park, which is managed by a NGO as a historic/cultural site, there is no active management of protected areas in the country at either the system or site level. The proposed project is designed to address both of these weaknesses simultaneously, by improving ecosystem representation in the PA system; establishing / strengthening PA management operations at key sites; and strengthening institutional, policy, legal/regulatory, information, and financing frameworks at the PA system level.

59. The GEF investment will enable the establishment of five new protected areas (two terrestrial and three marine) and the operationalization of these sites, as well as two existing terrestrial protected areas that currently have no management. In so doing, the project will increase the overall area of terrestrial landscapes under effective PA management to 8,810 hectares at four PA sites (of which 3,550 hectares will be within the two newly established PA sites), and the overall area of marine seascapes under effective PA management to 11,693 hectares (all at three new MPA sites). Furthermore, the project will assist the Government of St. Kitts and Nevis in establishing, staffing and equipping a Protected Areas Agency, the first government unit dedicated to protected areas in the country's history, which will oversee and manage the overall PA system as well as the specific PA units. The project will foster the systematic development of PA management capacities, processes and tools, including the mobilization of financial resources to support and sustain the PA expansion effort. In terms of PA finance, the project will work over the next 5 years to gradually decrease the gap between financial needs and funds actually available for PA management, including the capacity of PA units to generate their own funding through visitor and user-based revenues.

60. The significant expansion of the PA system in the country, and the establishment of the first institutions and staff dedicated to managing PA sites for conservation, represent an important advance and a significant commitment to the conservation of marine and terrestrial ecosystems and biodiversity in St. Kitts and Nevis. The scale and ambition of this program are unprecedented in the country. However, the proposed project has not been developed in isolation, and in fact the Government of St. Kitts and Nevis has given careful thought on how to integrate the project into a wider suite of current and proposed

programmes and projects related to environmental conservation and protected areas. A number of these other programs and projects are described in the Baseline Analysis (Section I, Part I) and in the analysis of Coordination with Other Initiatives (Section IV, Part II), and a description of how the project will collaborate with and complement these other programs and projects is provided in those sections as well as in the detailed descriptions of the project Components, Outputs and Activities in the following section.

61. In addition, the project was conceived and has been designed to build on past efforts at protected areas development and management in St. Kitts and Nevis, as described below. The Government of SKN has made consistent efforts in the past decade towards the establishment and management of Protected Areas. Projects for sustainable use of terrestrial and marine resources have come through international and regional (OECS) initiatives and through the implementation of multilateral environmental agreements such as the UNFCCC, UNCCD and the UNCBD. Funding for environmental conservation and sustainable development projects, including those related to protected areas, has come from the GEF, The Nature Conservancy (TNC), the United States Agency for International Development (USAID), the Food and Agriculture Organization (FAO), the German Society for International Cooperation (GIZ), and the Caribbean Community (CARICOM), among others. The proposed Project will add significant value by developing mechanisms and models for integrating activities, achievements and lessons learnt from these other projects.

62. With regard to the terrestrial environment, the proposed project will build on the regional project “OECS Protected Areas and Associated Livelihood (OPAAL)”, which ended in 2011. In St. Kitts and Nevis, the OPAAL project was implemented through collaboration between the St. Christopher National Trust and the Department of Physical Planning & Environment. The primary outcomes of the OPAAL project in SKN were the creation of the 2010 Protected Areas System Plan (PASP), which lays out a long-term vision for the expansion and management of PAs in the country, the designation of the Central Mountain Range as the Central Forest Reserve National Park (CFRNP); and the preparation of the CFRNP Management Plan. In addition, the project provided training in many aspects of PA management, including tour guiding and interpretation, systems planning, ecological gap analysis, financial management, workplan preparation, and awareness & communications, as well as capacity building for local residents in small business management and various livelihoods sub-projects. The proposed project will constitute the first focused effort to implement key priorities outlined in the PASP. In addition, the project will build on the OPAAL project by updating and implementing the Management Plan for the CFRNP; expanding on the partial BD inventory done for Central Forest Reserve under OPAAL; and implementing key recommendations of the OPAAL project, including the establishment of a national-level Conservation Commission with oversight responsibility for the entire system of protected areas, as well as the establishment of a Protected Areas Coordinating Body and a PA Management Authority.

63. With regard to the marine environment, in the past two years major steps have been taken in St. Kitts and Nevis regarding the management of marine resources. Under the Caribbean Challenge Initiative, St. Kitts and Nevis has pledged to conserve at least 20% of its near shore marine and coastal environments within national marine protected areas systems by 2020. As part of the country’s effort to meet that commitment, the Government of St. Kitts and Nevis is in the process of establishing the St. Kitts and Nevis Marine Management Area (SKNMMA), an area with a 2-mile (3.2 km.) radius around both St. Kitts and Nevis (also extending out to the Monkey Shoals reef that is 5 miles from the main islands). The design of the SKNMMA, finalized in 2010 with the support of TNC and USAID, was based on habitat mapping and extensive stakeholder meetings and consultations with fishermen, dive operators, and other stakeholders. The SKNMMA will encompass three types of zones (details on their size, location and restrictions will be decided in future public and stakeholder input meetings) as follows: Conservation Zones will be designed to protect, preserve encompass marine and contiguous diverse habitats, and are intended to provide natural spawning, nursery, and residential areas for the replenishment and genetic protection of marine and wild life; Fisheries Zones will have no restrictions on fishing but will be governed by all the rules and regulations pertaining to commercial and recreational



fishing; and Multiple Use Zones will take into consideration not just the zones mentioned above but also include Tourism and Transportation based uses. The SKNMMA identifies all of the sites proposed as future MPAs in this project (Sandy Point, Keys, and the Narrows) as conservation zones. At present, the Department of Marine Resources is preparing a memo to the Ministry of Agriculture, Marine Resources and Cooperatives for the demarcation of the SKNMMA, and it hopes to submit the documentation necessary to establish the MMA to Cabinet in late 2014, and then to carry out additional spatial planning and zoning in 2015.

64. Another prior initiative on which this project will build is the project “Marine Zoning in Saint Kitts and Nevis - A Path Towards Sustainable Management of Marine Resources”. Financed by USAID and implemented by TNC, the goal of this project was to lay the groundwork for future implementation of marine zoning in St. Kitts and Nevis by assisting in the development of a marine zoning design and providing a set of tools that could inform this and other management efforts. The primary output of this project was a 2010 report that provided the first detailed mapping and ecosystem analyses of the marine environment in St. Kitts and Nevis, including details on the proposed St. Kitts and Nevis Marine Management Area (SKNMMA) and the identification of priority “conservation zones”. The proposed project will build on this work by establishing the first marine protected areas (Marine Parks) at 3 of the conservation zones identified in the report, and will help to finalize the official recognition of the SKNMMA and its 2-mile boundary around both St. Kitts and Nevis. The proposed project also utilize lessons learned from the GEF Small Grants Programme project Towards the Sustainable Monitoring and Management of Coral Reefs in St. Kitts and Nevis, which established quantitative and qualitative databases for seven vulnerable coral reefs and carried out training in reef monitoring methodology; and the EU-funded project Future for the Reefs in a Changing Environment (FORCE), which carried out research on the status of coral reefs, including identification of reef systems that could be more resilient to climate change, and looked at the socio-economics of fishing communities

## **PROJECT PROTECTED AREAS SITE INFORMATION**

65. Following is a summary of the protected areas that will be targeted by the project. Additional details on each existing and proposed protected area site, including maps and descriptions of current status and conditions, biodiversity and ecosystem services, resource uses, activities in areas of influence, and primary threats, are provided in Annex 3.

### **Terrestrial Protected Areas**

#### **Central Forest Reserve National Park (CFRNP)**

66. The Central Forest Reserve was designated officially gazetted as a National Park by the Government of St. Kitts and Nevis on 29 March 2007. The CFRNP encompasses all lands above the 1,000 ft. contour line on St. Kitts, and this largely mountainous site has a total area of 5,060 hectares (approximately 29% of the total land area of St. Kitts). The PA harbours almost all of the remaining areas of tropical forest on the island, and its thickly vegetated watersheds collect and store rainfall critical for the national water supply. The forests within the CFRNP are secondary forests, with quite a few non-native species, but forest cover is consistent (rather than fragmented) and is not declining. All of the land within the CFRNP is crown land and there are no communities within the park boundaries (there are a small number of illegal, isolated dwellings). Biodiversity within the Central Forest Reserve remains largely undocumented with only a rapid baseline assessment carried out recently for the OPAAL project in 2011. A number of species have been recorded though their status on the island or more specifically within the reserve is poorly understood. However, documentation does suggest that within the CFRNP, there are species and natural communities of restricted extent, special habitat value, and/or of special concern (e.g. the CFRNP is an Important Bird Area due to its significance for populations of restricted-

range species, with all 10 of the Lesser Antilles EBA birds occurring at this site, a number of which are confined to these forests on the island). The most important ecosystem services within the CFRNP are water provision services; of the six freshwater springs on the island of St. Kitts, four are located within the CFRNP. The forests of the CFRNP also play a critical role in erosion control by intercepting rainfall, slowing its passage to the land surface, storing the rainfall and slowly releasing it.

67. A Management Plan covering 2007 to 2011 was prepared for this protected area but never implemented due to a lack of resources. The CFRNP is used for small-scale collection of plants, trees and plant parts for charcoal production, fish trap building, and the sale of ornamental plants, roots and herbs, though the extent of these activities not widespread at this time. The CFRNP is used by the majority of ecotourism ventures on the island, as well as local recreational and educational programmes, with estimates of 20 persons/day using the Crater trail during high season and up to 200 persons per afternoon using the Peter Manning Trail. In the areas of influence along the borders of the park, some illegal farming occurs, although this is stable or even declining due to the consumption of plants and fruits by the large population of invasive Vervet Monkeys in the park. The Kittitian Hill Development on the north-western end of the park could increase tourism impacts, as could the zip-line company operating near the park entrance at Winfield Estate, and the many tour operators who bring individuals and groups (primarily from cruise ships) for hiking trips in the park. The area is not subject to pollution / sedimentation because all agriculture, grazing, settlement and other development / industry on the island takes place at lower elevations.

68. It is important to note that the St. Mary's Man and Biosphere Reserve, established in 2013, overlaps with the CFRNP (as well as the Keys Marine Park). The MAB extends from the coastline (including the shoreline and reefs) up to some of the peaks within the CFRNP, and thus covers an area of considerable diversity, from highland forests to mangroves and reefs and including one of the most important turtle nesting sites in the country. At present, the St. Mary's MAB Reserve is not actively managed.

#### Nevis Peak National Park and Camps River Watershed Area (NPNPCRWA)

69. The proposed NPNPCRWA encompasses both the Nevis Peak National Park (all areas of Nevis above the 1,000 ft. contour line) as well as the Camps River Watershed Area, which connects the Nevis Peak area to the coastline. The total area of the proposed PA is 3,250 hectares, or 30% of the total land area of Nevis. The Nevis Peak area (approximately 2,250 hectares) is very similar to the CFRNP in terms of ecological conditions and ecosystem services. The proposed PA site harbours almost all of the remaining areas of tropical forest on the island, primarily secondary forests with consistent cover that is not declining. Biodiversity at the site remains poorly studied and understood, although desk studies and anecdotal evidence suggest that the site contains natural communities of restricted extent, special habitat value, and/or of special concern. As with the CFRNP, watershed and water sources provided by the proposed park are the site's primary ecosystem service, providing most of the island's source of water, and the forests play a critical role in reducing erosion and flooding. Perhaps the most important difference is the presence of small private landholdings above the 1,000 ft. contour line and therefore within the area of the proposed National Park. Ownership of these sites will not be affected by the designation of the NPNPCRWA; however new construction would be extremely limited and possibly prohibited completely. Cadastral surveys of the entire area have been done so that ownership boundaries are well understood, and fortunately most landholders in the area support the creation of the park in spite of potential building restrictions (in part because most of the private holdings are not suitable for construction due to topography and/or access issues). The Camps River area (approximately 1,000 hectares) is inhabited and will be managed as an "area of special concern", defined under the NCEMA as "a place or site needing special protection and controlled use in order to stabilize or restore important ecological features or functions". In this case, the primary management goal will be to reduce erosion

and flooding within the area, both for the well being of local residents and to protect coastal and marine habitats (including the proposed Narrows MPA) located downstream.

70. A management plan for the NPNPCRWA was prepared in June 2009, which proposed that the site be designated an IUCN Category IV protected area (Habitat/Species Management Area). However, this plan has never been implemented and the site has not been formally designated. At present, there is no management of this site, no facilities, no identification of key sensitive areas, and little understanding of the impacts of current activities on the site and its resources. Although it is well known in Nevis that development is not permitted above the 1,000 ft. contour line, there is nevertheless some intrusion into this area in the form of small illegal structures and small agricultural plots, as well as cutting for charcoal production, overharvesting of plants, livestock grazing, and dumping of waste. Estimates of vegetation loss within both the Nevis Peak and Camps River areas are unclear, but cutting of mature vegetation does take place, primarily for charcoal production, boat building materials, and construction materials for houses and joinery as well as for fish pots. In the Camps River areas, clearing of vegetation for houses on both steep and gently sloping lands contributes to soil erosion. Introduced invasive species continue to be present within the site, including Vervet Monkeys (*Chlorocebus sabaenus*), the Black or Tree Rat (*Rattus rattus*), the Brown Rat (*Rattus norvegicus*), the House Mouse (*Mus musculus*), the Indian Mongoose (*Herpestes javanicus*) and the Marine Toad (*Bufo marinus*).

#### Royal Basseterre Valley National Park (RBVNP)

71. An area of 200 hectares within the Basseterre Valley, a lowland valley in close proximity to the capital city of Basseterre, was declared a national park in 2011. The primary motivation for declaring this area as a National Park was the fact that it constitutes the main water supply catchment and storage area for the capital, including a large aquifer that produces some 11,365 cubic metres per day, which meets approximately 62% of the total water consumption requirements on St. Kitts. Until 2005, the entire area of the Basseterre Valley was used for the cultivation of sugar cane. Today, the RBVNP is dominated by scrubland vegetation, with significant infrastructure (including the international airport) in areas bordering the park. An ambitious Management Plan was developed in 2009 as part of the IWCAM GEF project and endorsed by Cabinet; among the goals outlined in the plan were the protection of the aquifer in the Basseterre Valley; creation of a botanical garden of native species for education and recreation purposes; and significant tourism / recreation infrastructure. However, the plan was not accompanied by any funding strategies or mechanisms and it has never been implemented. As of today, although the DPPE has official authority for the park, the Water Services Department is the only active manager in the area, focused primarily on protecting the aquifer by preventing encroachment, erosion, waste dumping and pollution, and also combatting fires. Although the park is well defined as a protected area, its location in close proximity to the capital will likely generate on-going pressure for development within the park in the coming years. Furthermore, some lands within the watershed but outside of the park boundaries are privately owned and there is an increasing trend towards medium to high density developments as well as an increase in informal settlements in these areas, all of which pose serious challenges related to solid waste disposal, municipal wastewater treatment, and urban runoff.

#### Booby Island Nature Reserve (BINR)

72. Booby Island, located between St. Kitts and Nevis within the area of the proposed Narrows Marine Park, is an uninhabited island of approximately 300 hectares with a mix of dense, brushy vegetation and rocky outcroppings. The proposed BINR would cover all of Booby Island, which is a site of particular biodiversity significance due to its importance to nesting seabirds in St Kitts and Nevis. The islands is listed as an Important Bird Area by Birdlife International and is the only remaining breeding location for a number of species including Red-billed Tropicbird (*Phaethon aethereus*), Laughing Gull (*Larus atricilla*), Roseate Tern (*Sterna dougallii*), Bridled Tern (*Sterna anaethetus*), Sooty Tern (*Sterna fuscata*),

Brown Noddy (*Anous stolidus*). At present, Booby Island has no protection status, and fishermen are known to visit the island to collect seabird eggs, especially those of Laughing Gulls. Access to the island is difficult as there are no landing sites, and although the Department of Physical Planning has nominal authority over the island, in practice there is no active management or monitoring of the sites. No evidence of introduced mammalian predators has been found on the island, but continued visits by fishing boats pose the threat of an introduction. The likelihood and potential effects of invasive predators on nesting seabirds due to egg and chick predation requires further investigation and safeguards to be put in place to ensure no inadvertent introduction occurs.

## **Marine Protected Areas**

### **Sandy Point Marine Park**

73. The Proposed Sandy Point Marine Park is an area of 60 hectares located off the northwestern coast of St. Kitts adjacent to the town of Sandy Point. The area of the Sandy Point Marine Park is designated a “conservation zone” in the proposed St. Kitts and Nevis Marine Management Area (SKNMMA). The proposed MPA has perhaps the healthiest coral reef ecosystems in the country, which support significant marine biodiversity and important fish stocks, and is an important area for dive tourism because it contains coral reefs, volcanic formations, and historic shipwrecks. The coral reefs are inhabited by myriad species of fish with many having fairly large populations; many species of damselfish, wrasse and triggerfish are abundant on the reef. Coral and rock formations provide homes for a multitude of reclusive fish species such as cardinalfish and glassy sweepers as well as nurse sharks and eels. Sandy Point Town is an important commercial and tourism centre; the Brimstone Hill Fortress National Park (a UNESCO World Heritage site) is located nearby, as are the Kittitian Hill development and other existing and planned developments. The area of the proposed MPA is used for a variety of purposes – its healthy reefs and seagrass beds provide an important nursery for fish stocks and support the livelihoods of many fishermen, and it is a prime recreational site for diving and snorkelling. Overfishing has been a problem for some species in the area, particularly due to spear fishing for reef fish, and there has been conflict in the Sandy Point area fishermen and dive operators over the impacts of fishing. Lionfish were first observed at the site in 2008; as of today they have not produced significant negative impacts. In addition, the indiscriminate dropping of anchors by both fishing vessels and dive boats has resulted in reef damage, although the recent installation of some moorings has helped to reduce this problem. Sedimentation from onshore sources has been observed in parts of the proposed MPA, as the abandonment of sugarcane lands has increased erosion and runoff; in addition, sand mining near Sandy Bay also contributes to this problem.

### **Keys Marine Park**

74. The proposed Keys Marine Park is located on the eastern coast of St. Kitts, covering a total area of 8,931 hectares. Three zones have been proposed for the MPA: Keys Beach (18 ha); Conservation Zone (5,433 ha); and a Multi-Use Zone (3,480 ha). Keys Beach is the only Key Biodiversity Area (KBA) in St Kitts and Nevis, due to its importance as a nesting site for leatherback sea turtles (*Dermochelys coriacea*); the Keys Beach area is also a proposed Area of Special Concern (NCEMA Category V) due to its importance to the conservation of this species. The area of the Keys Marine Park is designated a “conservation zone” in the proposed SKNMMA. Parts of the proposed Keys Marine Park fall within the St Mary's Man And Biosphere Reserve. In addition to providing nesting sites for turtles, the proposed MPA provides habitat for coastal avifauna and encompasses two reef systems located north and south of the Cayon River. Traditional subsistence activities in the area include fishing for reef fish, lobster and conch, and harvesting of sea grapes and sea moss. Poaching of turtles for meat, oil, and eggs also takes place in the area, although the active presence of the St. Kitts Sea Turtle Monitoring Network (SKSTMN), with volunteers and technicians monitoring the nesting of loggerhead, hawksbill, and green

turtles, helps to reduce poaching out of season. The marine area of the proposed Keys Marine Park is also an important location for research, particularly on humpback, sperm, and Byrde's whales as well as dolphin, mahi mahi, wahoo, and tuna.

### Narrows Marine Park

75. The proposed Narrows Marine Park covers an area of 2,702 hectares of the "Narrows", the passage between the southern tip of St. Kitts and the north coast of Nevis. The area of the Narrows Marine Park is designated a "conservation zone" in the proposed SKNMMA. The proposed park contains very large beds of seagrass communities, typically co-dominated by turtle grass (*Thalassia testudinum*) and manatee grass (*Syringodium filiforme*). The site also includes areas of the endangered Elkhorn coral (*Acropora palmata*), flat gorgonian hardgrounds and some hard coral framework. Both the coral reef and sea grass communities provide habitat for commercially important fish species, primarily spiny lobster and queen conch, which depend upon both habitats at certain periods in their life cycles. The site produces nutrients that are important in sustaining the life of fish species and other organism and reefs that act as barriers during periods of heavy wave attack. Sandy beaches, rocky shore and mangrove communities form the intertidal zone, further increasing the habitat diversity within the proposed protected site. Within the proposed marine park, Sea Haven beach is a nesting site for Hawksbill turtle (*Eretmochelys imbricata*), Green turtle (*Chelonia mydas*), and Leatherback turtle (*Dermochelys coriacea*). The Narrows is one of the most important fishing and recreational sites in the country, supporting numerous fishermen and significant employment and revenue from diving and snorkelling operations. A significant villa and marine development called Christophe Harbour is under construction on the Southeast Peninsula of St. Kitts; at present, only a small part of the development is expected to be built in the area directly fronting the Narrows, but the large scale of the venture presents potential impacts on the proposed MPA in terms of greatly increased boat traffic and visitation, as well as the dredging of the marina and possibly other boat landing sites. Already the dropping of anchors by fishing vessels, dive boats and yachts has caused damage to coral reefs and seagrass beds, even though mooring buoys have been put in place in some areas. However, the most important threat to the site is overfishing, particularly the intense and frequently illegal fishing pressure on lobster and conch.

## **PROJECT OBJECTIVE, OUTCOMES AND OUTPUTS/ACTIVITIES**

76. **Project Objective:** To expand and strengthen the terrestrial and marine protected area system, and reduce habitat destruction in areas of influence that negatively impact PA ecological functioning

### **Component 1: Strengthened Protected Area System Framework and Capacities**

#### **Output 1.1: Strengthened Protected Areas Laws and Regulations**

77. **1.1.1 Update and approval of draft National Conservation and Environment Management Act (NCEMA):** The project will review and update the draft NCEMA written in 2009 and support the Ministry of Sustainable Development in getting the Act enacted. The project will provide legal expertise and will facilitate focus groups and other participatory processes to review the provisions in the law. In addition to supporting the enactment of the NCEMA, the project will help in the development and implementation of specific regulations under the NCEMA related to terrestrial protected areas. Among other things, detailed regulations are necessary to establish a new Protected Areas Agency and clarify institutional roles in PA management; to authorize the collection and retention (within the PA system) of user fees and other financing mechanisms for protected areas; to ensure that the proposed National Conservation Trust Fund being developed through the Caribbean Challenge Initiative complies with the language on environmental trust funds in the draft NCEMA; and to clarify and strengthen restrictions on resource uses within protected areas and adjacent landscapes (including restrictions on mining activities,

hunting and burning of fields in upland areas, etc.). The revised NCEMA will take account of the recommendations and work of the 2010 OPAAL project, which provided a model Protected Areas System Act for OECS countries whose objectives include: 1) support for the long-term growth and sustainable development in business, tourism, recreation, education, and scientific research; 2) provide for the sustainability of biodiversity, culture, livelihoods, heritage, watershed protection and other ecosystem services; 3) protect wilderness areas; 4) facilitate the implementation of the requirements, goals, and aims of applicable international agreements; 5) assist in the mitigation of natural and anthropogenic disasters; and 6) prepare for and respond to the impacts of climate change. Finally, it is important to note that terrestrial protected areas can be established under the existing National Conservation and Environmental Protection Act (NCEPA), so that the establishment of new protected areas through this project will not have to wait for the new NCEMA to be enacted. Furthermore, if enactment of the NCEMA is delayed for political or other reasons, the specific regulations needed to support PA management can be addressed through amendments to the existing NCEPA.

**78. Creation and approval of Marine Resources Act:** Both the existing NCEPA and 2002 Fisheries Act gives the Government of St. Kitts the authority to establish Marine Protected Areas; in addition, the Fisheries Act provides the authority to enforce regulations on fishing (such as closed seasons; size and gear restrictions; etc.) in all of the country's marine territory. Various other laws and regulations allow the government to enforce regulations on other activities in the marine environment (e.g. pollution; dropping of anchors on coral reefs, etc.). However, many regulations are out of date and the jurisdiction for enforcement of various regulations is not always clear. For this reason, the Department of Marine Resources is seeking support from the FAO to update and revise its fisheries legislation, while the proposed GEF project will assist the department to update and revise legislation related to marine protected areas, with the goal of uniting this work under a new Marine Resources Act. Among other elements, the Marine Resources Act will include new language authorizing the establishment of MPAs and allowing MPAs to collect user / visitor fees; and will include additional regulations as needed to enforce restrictions on fishing effort (no-take zones for some species; gear and season restrictions; etc.), as well as regulations on diving, anchoring, marine pollution, coastal sources of marine pollution / sedimentation, etc.

## **Output 1.2: Strengthened Policy and Institutional Framework for PA System Management**

**79. 1.2.1 Strengthening of Protected Areas Policies:** As noted in the 2010 Protected Areas System Plan (PASP), as well as various recent projects (OPAAL, IWCAM, etc.) related to protected areas in St. Kitts and Nevis, a comprehensive policy framework is necessary to establish and strengthen procedures and standards for PA management. The project will support existing agencies and the new PAA in developing and adopting standard operating procedures for PA management, which will help to guide the formulation of PA management plans, enable consistent monitoring, evaluation and reporting at the site and system levels, and facilitate efforts to engage in collaborative action with local, national, and international institutions. Building on and complementing the detailed regulations developed in the new NCEMA, the project will work to get Cabinet policy guidance on the roles and responsibilities of various agencies and other stakeholders for issues related to PA management (in part because the legal framework provides some overlapping and conflicting strictures in this regard). The project will also help the Government to establish a clear policy on the jurisdiction that the government has with regard to private property within new or existing protected areas (e.g. under what circumstances are private landholders allowed to maintain inholdings and/or resource use rights; what restrictions can be placed on resource uses such as mining, grazing, agriculture, timber cutting, and development; and what added protections can be required for selected priority species or habitat; can private landholders receive any benefit or offset, such as tax benefits or conservation easements; etc.). Finally, the project will support national stakeholders in developing transparent criteria and standard procedures for the identification, assessment,

and designation of new terrestrial and marine protected areas in the future, thereby helping to prioritize activities in the on-going implementation of the PASP.

**80. 1.2.2 Establishment of Protected Areas Agency (PAA) and Capacity Building of PAA Staff:** A Protected Areas Agency (PAA) will be established as an independent, statutory body to manage all terrestrial and marine protected areas (with the exception of the Brimstone Hill Fortress National Park) in St. Kitts and Nevis. The PAA will be responsible for long-term planning for the overall PA system, including priority management actions identified in the 2010 Protected Areas Systems Plan and developing strategies for further expansion of the terrestrial and marine PA systems over the long-term; oversight, planning and management of individual PA units and their staff; developing and enforcing restrictions on resource uses within protected areas; priority setting for ecological conservation programs at the site level; coordinated system-wide capacity building for institutions and individuals; a system-wide information management system; and outreach and education programs related to the protected areas. In addition, by establishing a single agency to oversee and manage protected areas in the country, St. Kitts and Nevis will be able to coordinate and streamline the many internationally funded regional and national projects that address biodiversity conservation and protected areas. In establishing the PAA as an independent statutory body, the Government of St. Kitts and Nevis hopes to make the PAA a self-financing agency that covers recurrent expenditures with income from various sustainable financing sources (see Output 1.3); for this reason, the project will emphasize training of staff in managing the budgets and financing strategies and mechanisms for the system and for individual PA units. The national level staff assigned to the PAA, as well as potential management partners such as the Nevis Historical Conservation Society (NHCS), the St. Christopher National Trust (SCNT), and the Brimstone Hill Fortress National Park Society, also will receive training in areas such as writing protected area management plans and other planning processes and tools; developing and guiding enforcement of PA regulations; ecotourism development; community participation; and outreach and education.

**81.** It is important to note that the formal establishment of the PAA as a statutory body will take place in the last two years of the project, when consolidated PA legislation is established through the NCEMA and the Marine Resources Act, and the National Conservation Trust Fund and other financing mechanisms are generating consistent income for protected areas management. In the meantime, the PAA will be established as a Division within the Department of Physical Planning and Environment (DPPE) on St. Kitts and the Department of Physical Planning, Natural Resources and Environment (DPPNRE) on Nevis. Staff from these agencies, as well as staff from the Department of Marine Resources (DMR) on St. Kitts and the Nevis Department of Fisheries (NDF) will be assigned to implement the activities of the PAA (eventually many of these staff will either transfer or be seconded to the PAA Statutory Body once it is established). At the national level, the DPPE will support the PAA with 3 Conservation Officers; the DPPNRE with 1 Conservation Officer; the DMR with a Marine Protected Areas officer; and the NFD with 1 Fisheries Officer (additional site level staff are described under Component 2). Finally, during the period of the proposed project, the work of the PAA staff will be coordinated by a Project Coordinator (with periodic support from a Chief Technical Advisor), with support from an Administrative Assistant; both of these staff will be paid with GEF project funds. Staff of the terrestrial and marine protected areas on each island will meet on a quarterly basis to share information and explore options for resource sharing and coordination; in addition, all staff from both all PAs on both St. Kitts and Nevis will convene twice a year for the same purpose. Over the long-term, management authority for some PA sites may be granted to non-governmental partners, depending on their ability to demonstrate capacity for managing PA sites for conservation objectives (for example, the St. Christopher National Trust currently manages the Brimstone Hill Fortress National Park as well as a number of other heritage sites, some of which have important conservation value).

**82. 1.2.3 Establishment and operation of National Environmental Committee (NEC):** St. Kitts and Nevis operates under a Federal System wherein many institutions and agencies of the national

government are mirrored by similar institutions and agencies under the authority of the Nevis Island Administration. For this reason, at present there are four agencies in the country with direct authority for existing and potential protected areas: for terrestrial areas, the Department of Physical Planning and Environment on St. Kitts and the Department of Physical Planning, Natural Resources and Environment on Nevis, and for marine areas, the Department of Marine Resources on St. Kitts and the Fisheries Division on Nevis. Eventually both terrestrial and marine protected areas will come under the authority of the Protected Areas Agency, but even then these existing agencies will continue to play an important role in natural resources management that can impact protected areas (e.g. fisheries policy and enforcement; development planning; etc.). In addition, management of the Narrows Marine Park, located between St. Kitts and Nevis, will require an unprecedented level of policy agreement and inter-departmental collaboration between resource management institutions on the two islands. More broadly, many threats to biodiversity and ecosystem functioning within PAs (e.g. sedimentation and pollution; invasive species; fires) originate in the adjacent productive landscape, which is managed by numerous Ministries and agencies. For this reason, the project will support the creation of a National Environmental Committee (NEC), covering both St. Kitts and Nevis, to strengthen institutional coordination for the planning and management of activities within PAs and in the immediately surrounding landscape. The NEC will be established with formal Cabinet approval, and will include government agencies (including the new Protected Areas Agency), NGOs, community organizations and the private sector. The NEC will act as a coordinating, advisory and information sharing body overseeing a wide range of activities related to the environment. For protected areas in particular, the NEC will establish two sub-committees on Protected Areas (one for each island), with oversight over the protected areas on each island, including (among other activities): policy decision making and management planning; approval of annual workplans and budgets for each PA site; harmonization of activities among government agencies and other organizations; recommendations for disbursements under the National Conservation Trust Fund; proposals for new PA sites; and public awareness. The NEC also will serve as an oversight body for internationally-funded projects and programs related to the environment in the country; much of the funding and direction for environmental conservation programs in St. Kitts and Nevis comes from international projects, and the country would greatly benefit from a more cohesive oversight and integration of these projects so as to reduce duplication and effectively address national priorities rather than donor priorities (ideally, the NEC will function as the “project steering committee” for most PA-related projects in the country, thereby reducing the significant current demand on stakeholders to participate on numerous such committees).

**83. 1.2.4 Support for NGO Involvement in PA Management:** Two NGOs – the Nevis Historical and Conservation Society (NHCS) and the St. Christopher National Trust (SCNT) – have longstanding presence in St. Kitts and Nevis and a strong record of collaboration with the Government, and both organizations have expressed a keen interest in expanding and fulfilling the ‘conservation’ side of their mandates by collaborating with Government in the management of PA sites in the country. In the case of the NHCS, they are expected to be a key partner in the management of the Nevis Peak National Park and Camps River Watershed Area, in particular through active participation on the Nevis PA Committee (sub-committee of the NEC), and through education and outreach programs to local communities and schools, building on their experience with similar programs related to wetlands, beach and turtle monitoring, invasive species (lionfish), and recycling. The SCNT has been vested by the government with responsibilities for various national heritage and conservation sites on St. Kitts, including management responsibilities for the St. Mary’s Man And Biosphere Reserve. For this reason, the SCNT will be a key partner in conservation activities at the newly established Keys Marine Park (which includes the core marine zone of the MAB), and the project will work to ensure clear modalities for collaboration between the PAA and SCNT, as well as the St. Kitts Sea Turtle Monitoring Network (SKSTMN), which has a strong on-going program for turtle monitoring in this area. The SCNT also will be an active participant on the St. Kitts PA Committee (sub-committee of the NEC), and will likely participate in other project activities focused on education and outreach as well as biodiversity inventories. More broadly, the



project will also support the establishment of general mechanisms and protocols for NGO participation in PA management (including contracting of NGOs to take responsibility for activities such as public education and outreach, ecological conservation, and other activities as appropriate), as well as the inclusion of the NHCS and SCNT in relevant capacity building activities related to PA management.

### **Output 1.3: Financial sustainability framework for Protected Areas System**

84. **1.3.1 Development of Sustainable Financing Mechanisms and Strategies for PA System:** St. Kitts and Nevis is a signatory to the Caribbean Challenge Initiative (CCI), and within that framework is a participant in the GEF-funded WB/TNC regional project for OECS countries Sustainable Financing and Management of Eastern Caribbean Marine Ecosystem Project, which seeks to establish a regional Caribbean Biodiversity Fund (CBF) and related National Protected Area Trust Funds (NPATFs) to provide sustainable financing for protected areas in St. Kitts and Nevis and other participating countries. The Government of St. Kitts and Nevis is working towards establishing a National Conservation Trust Fund (NCTF; this will serve as the country's NPATF), which will provide the matching (on a 1:1 basis) that are required in order for the country to receive funding from the CBF. At present, the government is establishing the Board for the NCTF and revising legislation to allow the NCTF to collect fees that would otherwise go to the Treasury. Once the NCTF is established and capitalized, it will provide funding (together with the CBF) for the management of Marine Protected Areas, Terrestrial Protected Areas, and climate change adaptation programs in SKN. To generate the funds to capitalize and sustain financing for the NCTF, the Government of SKN is considering various options for financing mechanisms, and this project will assist the government in developing a strategy for this work and in operationalizing specific mechanisms. With regard to the former, the project will work to develop a sustainable financing strategy that identifies and assesses current and potential sources of funding; identifies PA stakeholders / users (e.g. tourists; hikers; fishermen; tourism operators; etc.) and their ability and willingness to pay for conservation of PA sites; assesses current and potential services at PA sites (e.g. campsites; parking; mooring sites; etc.) and their potential to generate revenue; identifies potential local, regional and international donor or partner organizations that might be willing to support a newly consolidated PA system, etc.

85. With regard to specific financing mechanisms, the project will support the establishment of a user/visitor fee system (including entry fees, activity fees such as snorkelling/diving and boat mooring, and tour company payments) for all protected areas in SKN. Ecotourism is an important and growing activity in St. Kitts and Nevis, and most of the ecotourism attractions such as diving sites; mangrove forests; waterfalls and vista points are located within the existing and proposed PAs. Specific ideas for site-level fee systems are described in Component 2. The project also will support efforts by the PAA to develop collaboration and possible funding for protected areas with key stakeholders, in particular the developers of large tourism projects in areas adjacent to protected areas. For example, the project will initiate formal discussions with the resort developer at Kittitian Hill on how that development can help to maintain its "sustainable luxury" brand (based on principles of sustainable development and environmental protection) by helping to protect the immediately adjacent Central Forest Reserve National Park (i.e. through financial support and/or maintenance of trails, ecological monitoring, etc.). Similarly, the project will seek to work with developers of the Christophe Harbour development on the southeast coast of St. Kitts, as well as dive and fishing tour operators on both islands, to garner their support for the management of MPAs (i.e. through financial support and/or logistical support in carrying out marine research and monitoring). Another approach will be to work with private sector partners to expand tourism facilities at PAs in order to increase concession revenues (as described in activity 2.1.4). Finally, it is important to note that the on-going WB/TNC regional project on sustainable financing, as well as the TNC Eastern Caribbean Marine Management Area Network (ECMMAN) project, are investigating other possible financing mechanisms for protected areas, including a national traveller's fee; water usage fees;

and Debt for Adaptation Swaps, and the proposed project will collaborate with these other projects on all issues related to PA financing.

86. **1.3.2 Financial Management Systems to support cost-effective PA management:** Apart from the Brimstone Hill Fortress National Park, there is no existing data in St. Kitts and Nevis on protected area operating costs or revenues. The project will therefore work to establish baseline information and projected long-term costs and revenues for PA management. The project will help to develop financial and administrative skills among staff in existing agencies responsible for protected areas, and eventually for the staff of the newly established PAA. The project also will create a PA System Business (Sustainable Financing) Plan that will ensure the cost effective use of resources, promote the sharing of resources and avoid the duplication of activities and costs among different sites, and manage cross-subsidization of funding between sites as needed. As noted earlier, the project also will help to revise the legal framework so that PA user and visitor fees can be retained within the PA system (at present, the law requires that all funds collected for Government must go into the consolidated budget fund). Finally, the project will work to mainstream the needs of PA financing into national development planning, and to advocate for increased government budget allocations for PAs. For example, an existing environmental levy on the importation of used cars generates approximately US\$1.4 million per year; the project will work with government to consider allocating some of this revenue to protected areas (and/or to establish separate fees on imports / visitors that are specifically targeted to support PA management). Together, these activities will help to increase the funding available for PA management, and will contribute to the funding of the National Conservation Trust Fund which will in turn help the Government of St. Kitts and Nevis to leverage additional PA funding from the regional Caribbean Biodiversity Fund.

#### **Output 1.4: Consolidated information system supporting PA management objectives**

87. **1.4.1 Development and operation of a Protected Areas Information System:** At present, information on ecological conditions and trends, priority habitat and species, threats, etc. relevant to existing and potential terrestrial and marine protected areas is maintained by a variety of agencies and in differing formats, with very little information sharing or application of information to management decisions. Under Component 2 of the project, various activities will be undertaken to increase the amount of relevant information available to decision-makers and other stakeholders. In addition, however, this activity will help the Government of SKN to establish a central information system for protected areas, with consistent data collection, formatting and sharing systems and protocols. Given budget constraints, this information system will not attempt to be a comprehensive system that centralizes all information relevant to the marine and terrestrial environment in the country. Rather, it will focus on consolidating the data most relevant to PA management decision-making (ecological conditions and trends for high priority species and habitats; identification of significant threats; protected area unit expenses and revenues; etc.), ensuring that this information is collected and recorded using standard formats, and working to make sure that PA managers and other stakeholders have easy access to the information. The PA information system will also be tasked with capturing and sharing data generated by external institutions working in St. Kitts and Nevis, which is frequently unavailable to national stakeholders. The project will contract information systems experts to look at the existing data systems of various agencies and recommend how to consolidate this information and build up a basic data management system. Where appropriate, this work will be coordinated with the work on a regional information system proposed under the OECS regional GEF-TNC Sustainable Financing project.

#### **Output 1.5: Increased Awareness and Support for Protected Areas**

88. **1.5.1 Public Education and Awareness Programs regarding the national system of protected areas:** Education, awareness, and communication will be essential to support the establishment of an effective PA management system in SKN. To date, PA management has not been a priority in the

country, nor is the wider public fully aware of the benefits of conserving biodiversity. And yet one of the most important determinants of conservation success will be the extent to which local communities closely connected to PAs, and the general public (in the case of a small country like St. Kitts and Nevis), understand and support protected area management objectives. For this reason, the project will develop and implement education and outreach programs based on the local cultural context, practices and socioeconomic conditions, designed not just to communicate information about the intrinsic value of 'biodiversity conservation' but also to change negative perceptions and indifferent behaviours, as well as to facilitate conflict resolution between competing users. To increase support for PA financing and management objectives, the project will undertake general public awareness campaigns on both St. Kitts and Nevis on themes such as the value of protected areas (for national heritage; for tourism; ecosystem services such as water provision and flood / erosion control, etc.), and the importance of healthy marine ecosystems and the impacts of invasive species (e.g. lionfish). The project will develop outreach programs to schools, which have proven to be highly effective and cost efficient for other environmental issues in the country. The project will also work with the Ministry of Tourism to develop a branding and marketing strategy for the PA systems, and to raise awareness among tour providers, cruise ships, and tourists themselves of the ecological, adventure, and cultural attractions of the terrestrial and marine protected areas, thereby increasing visitation, PA income from user and visitor fees, PA income from user and visitor fees, and incomes of local residents (e.g. tour guides; dive / fishing tour operators; etc.). At the site level, the project will carry out public education and outreach programs targeting communities in areas adjacent to MPAs, as well as resource users such as fishermen on conservation of the marine environment and the role of marine protected areas in safeguarding marine biodiversity and providing economic opportunities for fishermen, tour operators and others. Much of this work will focus on fishermen and dive operators, in particular informing them of the benefits of MPAs as well as the implications of MPA establishment for their activities. The project will target traditional fishing communities (e.g. Old Road, Dieppe Bay, Jessups) on issues related to overfishing, the advantages and mechanics of using FADs, and requirements for using mooring buoys. Similarly, at terrestrial PA sites, target audiences will include farmers (to make them more aware of the negative impacts of fertilizer and pesticide runoff), tourists (regarding their impacts when visiting PAs) and local schools and residents. At the Central Forest Reserve site, the project will engage with the developers of the adjacent Kittitian Hill resort, a high end luxury "village" whose brand identity heavily emphasizes environmental sustainability, to act as partners in promoting support for and visitation to the national park among its residents and visitors.

## **Component 2: Protected Area System Expansion and Strengthened Management of Existing and New Protected Areas**

### **Output 2.1: Establishment and Operationalization of Terrestrial Protected Areas**

89. The project will focus site-based activities in the terrestrial environment on four protected areas: the existing Central Forest Reserve National Park (CFRNP) and Royal Basseterre Valley National Park (RBVNP), and the proposed Nevis Peak National Park and Camps River Watershed Area (NPNPCRWA) and Booby Island Nature Reserve (BINR). All four of the sites will be demarcated based on boundary surveys, and in the case of the NPNPCRWA this information will be used in the process of legally establishing the National Park. Management plans will be developed and/or updated for each of the four sites. Most of the remaining activities will focus on the Nevis Peak and Central Forest sites. At these sites, basic infrastructure and equipment will be put in place (i.e. administrative offices, ranger posts), and PAA staff responsible for these sites will be trained to undertake PA management functions. Based on this training, PAA staff will carry out priority management activities at the two sites, including: monitoring and enforcement of PA regulations; infrastructure and trail maintenance; visitor management; ecotourism development; public education and outreach, and conservation programs targeting xxx species. In addition, inventories of flora and fauna (abundance / population size, distribution, range and

habitats) within the NP boundaries at these two sites will be carried out for the first time in over 40 years; these inventories will support improved conservation and will allow Protected Area managers to monitor changes in populations and habitat going forward and to adapt management strategies accordingly.

**90. 2.1.1 Establishment and Zoning of Terrestrial Protected Areas:** At the CFRNP, the project will help the PAA to demarcate the site with signage and to define and designate priority conservation zones where no entry or activities (such as animal grazing and touring) are allowed. Definition of the priority conservation zones will depend on the results of the biodiversity inventory carried out at the site during the first two years of the project. For the NPNPCRWA, the project will support a review and possible revision of the park boundaries as laid out in the draft 2009 Management Plan (i.e. including both the Nevis Peak area, which is all land above 1,000 feet in elevation, as well as the Camps River Valley, but excluding the marine component identified in that plan), as well as a zoning analysis for areas within the park (particularly to identify and properly zone private lands within the park boundaries), and all necessary signage for the park boundaries and/or zones. As with the CFRNP, the zoning analysis will depend on the results of the biodiversity inventory carried out at the site during the first two years of the project. At the BINR, the project will assist the PAA in securing the legal designation of the site as a Nature Reserve, and in putting up signs explaining the establishment of the reserve and detailing regulations regarding landings, resource harvesting, etc.

**91. 2.1.2 Development and Implementation of Terrestrial Protected Area Management Plans:** The project will support the PAA in updating and further detailing the 2007-2011 management plan of the CFRNP, including the identification of priority actions for implementation in the short to medium term. The project also will help the PAA to update and expand the draft 2009 PA Management Plan for the NPNPCRWA (this plan will be developed in tandem with the Nevis Physical Development Plan, which covers the entire island including protected and productive landscapes). Finally, the project will help the PAA to develop and implement a basic management plan for the BINR, primarily focused on establishing and enforcing rules about landing on the island, harvesting bird eggs, etc. Management plans for all of the terrestrial PA sites will incorporate planning for potential climate change impacts, including disaster management approaches given the recurring and severe impacts of tropical storms and hurricanes on forest cover, hydrological regimes, and other terrestrial ecological systems.

**92. 2.1.3 Updating, Approval and Implementation of Nevis Physical Development Plan (NPDP):** The NPDP is the overall “master plan” for the island of Nevis, covering all terrestrial landscapes including protected areas (however, the NPDP will not have details on how to manage lands that fall within protected areas; those will be covered in the Nevis Peak / Camps River National Park management plan). Various resource management agencies, NGOs and other organizations on Nevis that constitute the NPDP Committee will start revising and updating the NPDP in mid-2014 and expect to present the revised plan to the Nevis Island Assembly in early 2015. Among other activities, the project will hire an expert to work with the relevant authorities to revise the NPDP, and in particular, to ensure that the NPDP considers existing and potential threats to the National Park from activities taking place in areas adjacent to the park. The project will also provide funds for some additional mapping and the printing of the plan.

**93. 2.1.4 Development and Implementation of Site-based Financing Mechanisms for Terrestrial PAs:** The project will support the implementation of a visitor / user fee system at both the CFRNP and NPNPCRWA. At the CFRNP, park rangers based at the Wingfield PA office will take responsibility for collecting fees from visitors and/or tour operators (since many visitors to the park come on group tours from cruise ships, the project will seek to establish a system of billing of tour operators rather than collecting fees from individual visitors in these groups). In addition, the PAA will work with the company Sky Safari, which currently operates a popular zip-line attraction within the boundaries the Central Forest Reserve but does not pay any concession fee for their operations, to establish an annual fee for their operations and/or a user fee sharing system. At the NPNPCRWA, the majority of the many

hikers who visit the park to see waterfalls and/or hike to the peak typically come with independent local tour guides and use one of two entrances to the park. The PAA will work with local tour guides to establish a system for charging fees to visitors (rather than setting up a collection system at entry points). Details on the potential revenues from these mechanisms are provided in Annex 1 of the Financial Scorecard.

**94. 2.1.5 Operationalization of Terrestrial Protected Area Units:** At the CFRNP, the existing DPPE office facilities located at Wingfield will be equipped (with desk, chairs, computers, etc.) and bathroom facilities will be constructed, along with hiking trail infrastructure (e.g. trail signs, ropes, stabilization). Currently, there is no active management or staff dedicated to the CFRNP, but during the first year of the project 3 rangers will be stationed at the Wingfield offices (project funds will cover the costs of these PA staff during years 1-3 of the project, at which time the Government of SKN will take over the funding of these staff posts). The primary functions of these site level staff will be outreach to visitors and the general public, monitoring and enforcement, trail and facilities maintenance, and support to ecological inventories and conservation programs. Apart from the PA staff rangers, various contractors will be hired to undertake activities related to education, boundary demarcation, sanitary facilities, and boundary signage / demarcation; in some cases, local residents will be contracted to provide labour for these and other activities. In addition, technical experts will lead the efforts to design and implement ecological inventories, bird surveys, and any focused species studies (outputs of the surveys); these experts will be contracted on a short term basis and will be required to provide relevant on-site training for PA staff and any local residents.

95. At the NPNPCRWA, the project will construct a small Ranger Station / Interpretation Centre in the Camps River area and a small Ranger Station in the community of Rawlins. As with the CFRNP, there is no dedicated PA staff for the NPNPCRWA and no budget for conservation activities there. During the initial years of the project, the Planning Officer for Environment within DPPNRE will lead the team managing the Nevis Peak National Park and Camps River Watershed Area. This person will be directly supported by two rangers who will be hired by the project; one each based at the two ranger offices that will be constructed. During years 1-3 of the project, GEF funds will be used to pay for the two rangers; in year 4 of the project, the Government of SKN will take over responsibility for the salaries of these staff. The primary functions of the PA rangers will be outreach to visitors and the general public, trail and facilities maintenance, support to ecological inventories and conservation programs, and monitoring and enforcement (especially for illegal waste dumping, but also for overharvesting of cacao, sticks for fish pots, and wood for charcoal). The Nevis Historical Conservation Society will be a partner in some of these activities, in particular the public outreach. In addition, forestry officers from the Department of Agriculture, as well as staff of the Water Department, regularly work within the boundaries of the proposed PA and will provide additional logistical and other support, and technical staff in the DPPNRE will continue to oversee planning activities related to the area and surrounding landscapes.

96. Rangers at both the CFRNP and the NPNPCRWA will be overseen by the staff responsible for protected areas system at the DPPE and DPPNRE (respectively), and eventually, by the staff of the newly established Protected Areas Agency. These site level staff, as well as NGO and other partners, will receive capacity building in PA management functions, including training in: trail design/management; enforcement; management planning; ecology; first aid; community empowerment, outreach and dispute resolution; and development of financing mechanisms. Capacity building will be implemented primarily through on-the-job training and technical workshops; in some cases, the project may also support training through study programs and exchange visits (for example, the nearby island of St. Eustatius has a well established protected areas system and exchanges of information and training with the staff of that system should be facilitated).

97. Finally, at the RBVNP, the project will not hire any staff or develop any visitor facilities. However, the project will assist the PAA in establishing a native plant nursery (project funds will be used to purchase seedlings, pots; etc.), while the Government will establish the necessary infrastructure. Two nursery workers from the Parks & Beaches Department will be assigned to manage the nursery and will receive capacity building on the propagation of the targeted native plant species. Plants grown at the nursery will be used to facilitate the re-vegetation efforts within the RBVNP (see activity 2.1.7), as well as any ecological restoration activities that might be implemented at the CFRNP based on the results of the ecological inventories that will be carried out there during the first two years of the project (see activity 2.1.6).

**98. 2.1.6 Community Participation and Development in and around Terrestrial PA Sites:** St. Kitts and Nevis' Poverty Reduction Strategy proposes to redefine and reposition the country's tourism product in an effort to capitalise on the natural and historical assets of the islands; increase food security and self-sufficiency in agriculture and fisheries; support local entrepreneurial development in support of sustainable development; and introduce mechanisms to sustain pro-poor employment. Based on this mandate, the proposed project will seek to engage, train and create employment opportunities for the residents of communities in areas adjacent to or dependent on terrestrial protected areas. For the Central Forest Reserve site, the project will focus primarily on residents of the nearby community of Old Road / Wingfield; for the Nevis Peak site, the project will focus on communities close to and on access points to Nevis Peak, including Rawlins Village (population 500), Fountain Village (100), and Spring Hill (60). At these sites, the project will work with community groups to identify persons who can be hired as PA rangers, as well as other community members who will be contracted and trained to participate in demarcation, trail development / maintenance, leading tours (especially of school groups), and basic monitoring / inventory / research activities for terrestrial PAs. Local community members will be targeted for education and awareness campaigns (see Output 1.5) related to the benefits and opportunities offered by the PA sites; the concept of ecological carrying capacity and its relation to increased tourism or other human activities at the PA sites; and on the new guidelines and restrictions that will govern activities within the PA sites. The project also will implement some small-scale livelihoods activities (building on lessons learned from the OPAAL and IWCAM projects in St. Kitts and Nevis), including for example working with the Fahies Agricultural Women's Cooperative to implement forest management / reforestation in areas bordering the CFRNP, which can support agro-processing (breadfruit) and handicrafts (paper products; glue; arts and crafts; baskets) and also reduce pressure on the natural environment within the CFRNP.

**99. 2.1.7 Ecological Conservation and Management Programs at Terrestrial PA Sites:** The project will carry out field inventories of flora and fauna in the CFRNP and NPNPCRWA during the first two years of the project, likely using a Rapid Biodiversity Assessment model, which is a means of quickly collecting information on the species present in a given area with the aim of providing information to guide conservation action. Field surveys / inventories of biodiversity within the CFRNP and NPNPCRWA have not been carried out since the 1940s (desk studies have been carried out more recently, including under the OPAAL project). The scope of this work will focus mainly on establishing multi-taxa species lists of the species present within the park boundaries; the survey will also collect some information on habitat condition and disturbances. For most species, the project will not carry out detailed population assessments or establish conservation status; but for certain high priority species in terms of global significance and threat status, such as various reptile species in the CFRNP, and palms, lilies and medicinal plants in the NPNPCRWA, the project will support more detailed assessments in order to guide the creation of priority species / habitat conservation programs. Finally, at the BIRN, the project will undertake a survey of bird species, and possibly a survey of mammalian predators of birds. Based on the results of these ecological inventories, the project will develop and implement conservation / monitoring programs for significant and threatened species or habitats. For the CFRNP and NPNPCRWA, the inventories are critical for identifying both the types of habitats and species that are priorities for

conservation action, but also the specific sites within each park where activities should be concentrated and protections strengthened. To give one example, the Camps River area of the NPNPCRWA is believed to harbour the largest remaining area of white mangrove on Nevis Island, but this is based on anecdotal observations and there is no field data to confirm this. For the Booby Island Nature Reserve, the project will implement a monitoring and enforcement program to prevent disturbance to breeding birds and nests, primarily people landing, introducing invasive species and hunting eggs.

100. In addition to targeted conservation activities for high value habitats / species, the project also will use the information generated during the ecological inventories to identify and implement control measures for invasive species identified as significant threats to biodiversity within the CFRNP and NPNPCRWA. At the CFRNP, the project will support the development of a strategy for control of the invasive Vervet monkey (*Chlorocebus pygerythrus*); an established strategy will greatly assist the Government of SKN in seeking international funding for implementation of a program to control this species. At the BINR, the project will undertake a survey to measure the impacts of invasive mammals (e.g. rats, mice) on bird populations, and if found to be significant, the project will help the PPA to implement control measures for these invasive species. At the RBVNP, the project will support the Agriculture Department in undertaking the clearance of existing scrub vegetation and replanting with native vegetation on approximately 50 hectares, which will reduce the fire hazard in this area and provide habitat for native species. Studies carried out as part of the project “Rehabilitation and Management of the Basseterre Valley as a Protection Measure for the Underlying Aquifer” identified several dozen native plant species that would be suitable for replanting at the site (a similar list will be established for plants that could be used at the CFRNP), based on the following guidelines: 1) use an assemblage of plants that will give a relatively close-canopy or complete ground cover; 2) use many species to ensure biodiversity, which will enable some ground protection in the case of drought, hurricanes or disease; 3) avoidance of fruit or crop species that will encourage birds or mammals to colonize the area, as their faeces may impact the groundwater. Timber (good shade) and ornamental (visual aesthetic) species should be preferred given the dual tourism function of the area; and 4) limit selection to indigenous species or species that have been historically introduced. The Water Services Department, which has authority over the RBVNP, will oversee the siting of the restoration areas and will make sure there are no impacts (e.g. spread of pesticides) on the aquifer underlying the park.

## **Output 2.2: Establishment and Operationalization of Marine Protected Areas**

101. The project will focus site-based activities in the marine environment on three proposed marine protected areas: Sandy Point, Narrows and Keys Marine Parks. The proposed project will support the demarcation, zoning and boundary marking of the Sandy Point and Keys MPAs, as well as the development of management plans for those sites. MPA staff will be trained to undertake PA management functions, and based on this training, staff will carry out priority management activities, including: monitoring and enforcement of PA regulations; visitor management and operation of fee systems; ecotourism development; public education and outreach, and conservation programs. MPA staff will also be trained to facilitate stakeholder involvement and to include fishermen, dive operators and other stakeholders in MPA planning decisions and conservation and monitoring programs. The project will also support programs at these MPA sites to address the invasive lionfish and to reorient fishing pressure away from inshore coral reef ecosystems to offshore fish aggregating devices (FADs).

102. It is important to note that several other on-going programs are addressing marine conservation and the establishment of marine protected areas in St. Kitts and Nevis, and to clarify that the proposed marine-related activities of this project have been developed based on consultations with these other programs and designed to complement their activities. In addition to the on-going development of the St. Kitts and Nevis Marine Management Area (SKNMMA), both the Improving the Management of Coastal Resources and the Conservation of the Marine Biodiversity in the Caribbean Region (CATS) project and the Eastern

Caribbean Marine Management Area Network (ECMMAN) project are undertaking activities targeting marine conservation and protected areas (details on these projects are provided in the Baseline Analysis). In general, the ECMMAN project is focused on livelihoods and on continuing the process of systems planning and zoning initiated under the recent USAID-funded project, while the CATS project is focused specifically on the Narrows Marine Park (as detailed below, many, but not all, of the activities related to establishing and operationalizing the Narrows Marine Park will be undertaken by the CATS project). In addition, as noted under Output 1.3, the Sustainable Financing and Management of Eastern Caribbean Marine Ecosystem Project is developing a National Conservation Trust Fund and other activities to support financing of protected areas in the country. In this scenario, the proposed project has a critical role to play in developing the institutional structures and capacities necessary for MPA management, and in establishing MPAs other than the Narrows Marine Park (justification for the establishment of MPAs at both the Sandy Point and Keys sites is more dependent on biodiversity values than the Narrows site, whose foremost importance is as a fisheries conservation zone).

103. **2.2.1 Establishment and Zoning of Marine Protected Areas:** The project will support the activities of the Department of Marine Resources and other relevant agencies to finalize the declaration of the 3 proposed Marine Parks. Ideally this declaration will come through a new Marine Resources Act, but if this act is not enacted in a timely manner, the MPAs will be declared under the existing NCEPA or the Fisheries Act. As part of the on-going process to develop the St. Kitts and Nevis Marine Management Area (SKNMMA), which covers all marine areas from the shoreline outwards for two miles around both St. Kitts and Nevis, the boundaries of proposed “conservation zones” as well as other use zones have been defined. These boundaries, which will be included in the new Marine Resources Act, will be used as the boundaries of each of the Marine Parks established or supported under this project. In addition, the GEF project will engage in ground-truthing to more precisely define the boundaries of at least some of the MPAs (e.g. it might expand the area of Sandy Point Marine Park to include some additional areas that have cultural artefacts) and/or to establish zoning within the boundaries of a given MPA (e.g. conservation and multi-use zones within the Keys MPA). The GEF project will also undertake demarcation of both the Sandy Point and Keys Marine Parks with buoys. Finally, the project will help the Nevis Department of Fisheries and the Department of Marine Resources to assess the desirability and potential for establishing new MPAs in the future at two additional sites – Newcastle and Monkey Shoals.

104. **2.2.2 Development and Implementation of Marine Protected Area Management Plans:** The project will support the development and implementation of MPA management plans by staff of the Protected Areas Agency working with the Department of Marine Resources and the Nevis Department of Fisheries. The Sandy Point Marine Park and Keys Marine Park will each have their own management plans, which will include priority actions for implementation in the short to medium term, as well as analyses of potential revenue producing and cost savings strategies. A management plan for the Narrows Marine Park will be developed under the CATS project. Management plans for all of the marine PA sites will incorporate planning for potential climate change impacts, including disaster management approaches given the recurring and severe impacts of tropical storms and hurricanes on coral reefs and seagrass beds from wave action and increased sedimentation.

105. **2.2.3 Development and Implementation of Site-based Financing Mechanisms for Marine Protected Areas:** The proposed project will help the PAA to establish a visitor fee system whereby divers, snorkelers, sport fishermen, yachts, and other recreational users of the MPAs pay a fee per visit to participating Marine Parks (fee structures will differentiate between visitors and citizens or other residents of St. Kitts and Nevis). An appropriate system for fee collection (e.g. fees collected by tour operators and paid to the PAA, with periodic inspections of boats to confirm the # of visitors) will be established. The project will also explore the possibility of creating a license fee for boat tour operators wishing to operate within selected MPAs. Initial estimates of the fee mechanisms, and the potential revenues from these mechanisms, are provided in Annex 1 of the Financial Scorecard; these will be further developed during



project implementation, based in part of similar systems already in place in other countries in the region (e.g. Antigua; St. Eustatius).

**106. 2.2.4 Operationalization of Marine Protected Area Units:** The project will install mooring buoys at sites where boat anchoring is a significant threat to marine habitats (SKN has already installed mooring buoys at a few sites with demonstrable positive impacts for surrounding coral reefs). Under existing legislation, the Department of Marine Resources on St. Kitts has the authority to enforce fisheries regulations in all waters of the country (in addition, the Minister of Agriculture, Marine Resources and Cooperatives can delegate enforcement authority to the Nevis Department of Fisheries). Thus, once the new Marine Parks have been designated and demarcation buoys have been put in place, monitoring and enforcement activities will commence for the new MPAs, regardless of whether the new Marine Resources Act has been passed. At the Keys Marine Park, monitoring and enforcement will focus on turtle conservation and protection of the coral reefs. At the Sandy Point Marine Park, these activities will focus on the protection of lobster and finfish resources, while at the Narrows Marine Park the focus will be on the protection of conch and lobster resources.

107. The offices of the Sandy Point Marine Park will be located at the existing facilities in Wingfield (shared with the staff of the Central Forest Reserve National Park), with the boat docked at the fisheries complex in nearby Old Road. For the Keys Marine Park, the project will establish a small office and interpretive centre, rehabilitation tanks for injured turtles, and simple shelters at each end of the beach for the persons conducting turtle monitoring. The project expects to facilitate an agreement between the PAA and the St. Christopher National Trust (SCNT) and the St. Kitts Turtle Monitoring Network (SKTMN) whereby the three institutions will jointly develop and operate the infrastructure at Keys Marine Park (the SCNT will use these facilities for its management of the St. Mary's Man And Biosphere Reserve, while the SKTMN will use the facilities for its turtle monitoring program). For the Narrows Marine Park, staff will be based at existing facilities of the Marine Resource Department (in Basseterre) and/or the Nevis Department of Fisheries. The project will help to operationalize the management of the MPAs by purchasing critical equipment, including small boats (one at Sandy Point and one at the Narrows, which will also cover Keys), as well as dive equipment and research, surveillance and monitoring equipment.

108. Coordination of MPA-related activities on St. Kitts will be carried out by the MPA Officer in the Department of Marine Resources, with support from the Director and the Fisheries and Aquaculture Officer. At the site level, there will be 2 conservation officers and 1 boat captain / conservation officer at both Sandy Point Marine Park and the Narrows Marine Park; the staff at the Narrows will also be responsible for the marine environment at the Keys Marine Park. Monitoring and patrol of the turtle nesting beaches and other coastal ecosystems at the Keys, as well as outreach and education, will be carried out by 2 staff based at the Keys office / interpretive centre, with significant collaboration with the SKTMN. Until the Protected Areas Agency is established as an independent Statutory Body, staff of the Department of Marine Resources and Nevis Department of Fisheries will be responsible for monitoring and patrol, but they will continue the current practice of asking the Coast Guard to implement any required enforcement measures. During years 1-3 of the project, GEF funds will be used to pay for all of the afore-mentioned MPA staff; in year 4 of the project, the Government of SKN will take over responsibility for the salaries of these staff.

109. To facilitate the effective management of the MPA units, the project will provide technical and on the job training for environmental officers of the Marine Resource Department (DMR) and the Nevis Department of Fisheries (NDF), as well as local CSOs, CBOs and NGOs and community members, in reef monitoring (e.g. Reefchecks); zoning of marine protected areas; deploying / inspecting mooring buoys and FADs; boat safety and navigation; diving; and extension / stakeholder engagement. Staff of the DMR and NDF, together with the Coast Guard and police, will receive training in enforcement. Local fishermen will receive the training necessary to transition from inshore reef fishing to offshore FAD

fishing, including training in boat safety and navigation and in fish storage. Capacity building activities will be developed and undertaken jointly with the CATS project (which will focus primarily on staff working in the Narrows Marine Park). In addition, the DMR and NDF will work to establish an on-going capacity building partnership with the MPA authorities on the nearby island of Saint Eustatius, including receiving guidance from those partners on development of MPA management plans and other MPA operations.

**110. 2.2.5 Community Participation and Development in and around Marine PA Sites:** The proposed project will seek to engage, train and create employment opportunities for the residents of communities in areas adjacent to or dependent on marine protected areas. On St. Kitts, the project will focus on the communities of Sandy Point, Old Road, Dieppe Bay and Cayon; on Nevis, the focus will be on the communities of Charlestown, Cotton Ground, Jones Bay, Newcastle, Long Haul, and Indian Castle. The project will work with community groups to identify persons who can be contracted and trained to assist with monitoring, patrolling and basic research functions for marine PAs (primarily fishermen familiar with the various MPA sites). The project will coordinate its community outreach and participation activities with other on-going projects that are implementing community development and alternative livelihoods activities for fishing communities, namely the Eastern Caribbean Marine Management Area Network (ECMMAN) project and the CARICOM-CARPHA CATS Programme. In addition to developing employment opportunities for local residents, the project will also seek to involve fishermen in MPA planning and management decision-making. On Nevis, although there are no strong fishermen's associations, a number of fishermen have been identified who are interested in participating in MPA management activities as they believe that more effective control of fishing effort will protect their livelihoods; the project will seek to engage with similar fishermen who are active in and around the MPA sites on St. Kitts. Community involvement at marine PA sites is critical; many community stakeholders depend heavily on marine resources, such as turtle harvesting and near-shore reef fishing, for commercial purposes and in some cases cultural practices. These issues must be carefully understood and stakeholders with differing views should be integrated into the PA management decision-making, particularly through community-wide processes that allow views to be shared and to evolve and ultimately strengthen the concept of and support for MPAs.

**111. 2.2.6 Ecological Conservation and Management Programs at Marine PA Sites:** At present, information on the state of the marine environment in St. Kitts and Nevis is insufficient for effective priority setting with regard to on-the-ground conservation activities. In particular, the condition of reefs and reef species is inadequate for properly assessing the state or trends in coral reef ecosystem health. Reef survey data from 2012 (Living Oceans Foundation 2012) created a partial baseline for coral reefs upon which to base monitoring. However, detailed data for portions of the project sites is inadequate to ensure that species of global, regional or national significance are identified and to properly assess the state or trends in coral reef ecosystem health. In addition, current baseline data on fish and other marine species is not in place to properly monitor effectiveness of activities. To address this, the project will establish a system to monitor the extent and health of coral reef ecosystems and biodiversity as well as the impacts of various human activities or climate change factors over time. At the Keys Marine Park, the project will support coral reef mapping as a key input to the zoning of the Marine Park; in addition, it will carry out surveys of turtles, lobster and conch. At the Sandy Point Marine Park, the project will survey lobster, conch and finfish, as well as collecting basic data on coral reef ecology. Based on the results of the ecological inventories, the project will implement conservation programs for high priority species within the newly established Marine Parks. At the Keys Marine Park, the PAA will work in close collaboration with the St. Kitts Turtle Monitoring Network to reduce poaching and protect nesting sites from illegal sand mining and other activities. The PAA may also collaborate with the DPPE in designing and implementing a program to protect mangrove and seagrape ecosystems at the Keys Marine Park. At the Sandy Point Marine Park, the focus will likely be on programs to conserve lobster and finfish

populations, as well as to protect the country’s national heritage by preventing damage to historical shipwreck sites in the area.

112. Working with the Bureau of Standards, the project will implement water quality monitoring systems for rivers that empty into the sea where the proposed Marine Parks are located. The water quality monitoring system will examine water flow temperatures and flow rates as well as determine levels of key constituents such as sediments, dissolved oxygen, nutrients, chemicals, metals, oils, and pesticides. The project also will investigate and test various strategies for control of invasive lionfish populations to reduce their potentially devastating impact on coral reef ecosystems, primarily through building on existing outreach efforts to encourage fishermen to target this species and for restaurants and hotels to serve lionfish, and through public outreach (television, cookbooks) to increase consumer interest and demand for lionfish as a food source. Recent results from other countries (including a GEF-supported program in Jamaica) have indicated that increased market demand for lionfish can have a significant impact in reducing their populations (at least in shallow marine ecosystems).

113. **2.2.7 Fisheries Production and Pressure Reduction Strategies:** St. Kitts and Nevis initiated a program of installing Fish Aggregating Devices (FADs) in 2011 in order to reorient fishing effort from inshore coral reef ecosystems to target offshore species. To date, the country has installed nine FADs (most are located approximately ten miles from shore) and over 30 fishermen carry out their fishing at these sites; in addition to installing the FADs, the Department of Marine Resources has provided training to fishermen in this type of fishing and has implemented outreach and education programs to encourage new fishermen to fish at FADs. The project will help the DMR to install at least five more FADs in order to reduce the fishing effort on coral reef fisheries within marine protected areas, and to train fishermen in fishing at FADs.

## INDICATORS AND RISKS

114. The project indicators are detailed in the Strategic Results Framework, which is attached in Section II of this Project Document.

115. Project risks and risk mitigation measures are described below.

**Table 7: Risk Matrix**

IDENTIFIED RISKS AND CATEGORY	IMPACT	LIKELIHOOD	RISK ASSESSMENT	MITIGATION MEASURES
ORGANIZATIONAL: Current institutions have inadequate capacity or resources to manage protected areas	High	Unlikely	<b>Low</b>	The project will establish a Protected Areas Agency with authority and capacities to manage an expanded and actively managed system of protected areas. The project also will mobilise the financing necessary to strengthen human resource capacities (staffing, skills, competence levels, knowledge) of the agency.
FINANCIAL: Financial resources are not sufficient to support effective protected area planning and operations over	High	Moderately Likely	<b>Medium</b>	Several on-going projects are working towards the development of additional financing resources for protected areas in St. Kitts and Nevis. The GEF-funded regional project “Sustainable Financing and Management of Eastern Caribbean Marine Ecosystem”) is working with the Government of St. Kitts and Nevis to establish a National Conservation Trust Fund as a source of matching funds for the nascent Caribbean Biodiversity Fund; together, these two funds are expected to produce significant and sustainable revenues for the management of both

IDENTIFIED RISKS AND CATEGORY	IMPACT	LIKELIHOOD	RISK ASSESSMENT	MITIGATION MEASURES
the long-term				<p>terrestrial and marine protected areas in the country. In addition, both that project and the Eastern Caribbean Marine Management Area Network (ECMMAN) project are investigating other financing mechanisms for protected areas, including a national traveller's fee; water usage fees; and Debt for Adaptation Swaps</p> <p>The proposed project will collaborate with these other projects on all issues related to PA financing, while also seeking to develop additional sources of PA revenue and cost effective management. The project will support the establishment of a user/visitor fee system (including entry fees, activity fees such as snorkelling/diving and boat mooring, and tour company payments) for all protected areas in SKN. The project also will support efforts by the PAA to develop collaboration and possible funding for protected areas with key stakeholders, in particular the developers of large tourism projects in areas adjacent to protected areas. Another approach will be to work with private sector partners to expand tourism facilities at PAs in order to increase concession revenues. These strategies are described in more detail in activities 1.3.1 and 2.1.4.</p> <p>To promote cost effective management, the project will help to develop financial and administrative skills among staff in existing agencies responsible for protected areas, and eventually for the staff of the newly established PAA. The project also will create a PA System Business Plan that will ensure the cost effective use of resources, promote the sharing of resources and avoid the duplication of activities and costs among different sites, and manage cross-subsidization of funding between sites as needed. As noted earlier, the project also will help to revise the legal framework so that PA user and visitor fees can be retained within the PA system. Finally, the project will work to mainstream the needs of PA financing into national development planning, and to advocate for increased government budget allocations for PAs. These strategies are described in more detail in activity 1.3.2</p>
ENVIRONMENTAL: Marine and terrestrial ecosystems are not sufficiently resilient and their biological and physical integrity is incrementally compromised by the effects of global and regional climate change	Medium	Moderately Likely	Low	<p>The establishment of new terrestrial and marine protected areas, combined with those that exist already in the country, will create a PA system that encompasses large areas of natural ecosystems, thereby increasing their likelihood of persisting in the face of climate change impacts such as increased temperatures and more frequent hurricanes and droughts. Large areas of protected landscapes and seascapes will also support larger populations of species, thereby increasing their chances of surviving climate change impacts, and will allow those species more area in which to find suitable habitat niches in the face of changing climatic conditions. The four terrestrial PA sites that will be established and operational by the end of the project total 8,810 hectares, or approximately 34% of the 26,100 hectares that constitute the entire land area of the country. Furthermore, the existing and planned terrestrial protected areas on both Saint Kitts and Nevis islands will encompass the entire upland areas of each island, thus maximizing the potential for species to adapt to changed conditions by migrating to different climatic zones. The three marine PA sites that will be established and operational by the end of the project total 11,693 hectares; in addition, the on-going process to establish a St. Kitts and Nevis Marine Management Area will reduce negative impacts on marine ecosystems and increase their resiliency to climate change in an area that extends from the shorelines of</p>

IDENTIFIED RISKS AND CATEGORY	IMPACT	LIKELIHOOD	RISK ASSESSMENT	MITIGATION MEASURES
				<p>both islands out to a distance of two miles.</p> <p>In addition to creating larger areas of protected landscapes and seascapes, the project also will help to remove / reduce threats, pressures and stresses that impact on natural habitats and biodiversity, which will ensure that ecosystems are more resilient to the impacts of climate change and therefore less vulnerable to its effects (e.g. healthy coral that is not subject to other stresses like sedimentation, pollution and anchor damage is more resilient to climate-induced bleaching). The work of zoning within the PA units will take ecosystem resilience and emerging threats to biodiversity into consideration, including the threat of climate change impacts.</p>
<p>REGULATORY: Takes too long to get relevant legislation and regulations passed</p>	<p>Medium</p>	<p>Moderately Likely</p>	<p><b>Low</b></p>	<p>The process for enactment of new legislation in St. Kitts and Nevis (as in many countries) is slow and unpredictable. There is a risk that the proposed National Conservation and Environmental Management Act (NCEMA) and the proposed Marine Resources Act will not be enacted quickly (i.e. in the first two years of the project). However, the NCEMA already has a detailed draft, and thus the legal work required to prepare this for the national assembly only involves updating the existing draft information. Perhaps more importantly, passage of the NCEMA or the Marine Resources Act is not a prerequisite for implementing the planned activities of the project.</p> <p>With regard to establishing new terrestrial protected areas, these can be established under the existing National Conservation and Environmental Protection Act (NCEPA), so that the establishment of new protected areas through this project will not have to wait for the new NCEMA to be enacted. With regard to regulations to manage terrestrial PAs, if enactment of the NCEMA is delayed for political or other reasons, the specific regulations needed to support PA management can be addressed through amendments to the existing NCEPA. This is important as detailed regulations are necessary to establish a new Protected Areas Agency and clarify institutional roles in PA management; to authorize the collection and retention (within the PA system) of user fees and other financing mechanisms for protected areas; to ensure that the proposed National Conservation Trust Fund being developed through the Caribbean Challenge Initiative complies with the language on environmental trust funds in the draft NCEMA; and to clarify and strengthen restrictions on resource uses within protected areas and adjacent landscapes (including restrictions on mining activities, hunting and burning of fields in upland areas, etc.).</p> <p>With regard to establishing marine protected areas, both the existing NCEPA and 2002 Fisheries Act gives the Government of St. Kitts the authority to establish Marine Protected Areas. In addition, the Fisheries Act provides the authority to enforce regulations on fishing (such as closed seasons; size and gear restrictions; etc.) in all of the country's marine territory. Various other laws and regulations allow the government to enforce regulations on other activities in the marine environment (e.g. pollution; dropping of anchors on coral reefs, etc.), and these other legal instruments can be used to establish additional regulations as needed to enforce restrictions on fishing effort (no-take zones for some species; gear and season restrictions; etc.), as well as regulations on diving, anchoring, marine pollution, coastal sources of</p>

IDENTIFIED RISKS AND CATEGORY	IMPACT	LIKELIHOOD	RISK ASSESSMENT	MITIGATION MEASURES
<p>REGULATORY: Development activities within and near to PAs, including tourism impacts within PAs and housing and other development in areas of influence around PAs</p>	<p>Low</p>	<p>Moderately Likely</p>	<p><b>Low</b></p>	<p>marine pollution / sedimentation, etc., until such time as the Marine Resource Act is passed into law.</p> <p>Tourism visitation levels are not expected to be high enough to produce significant negative impacts in terrestrial PAs. However, in the marine protected areas there are already some problems, such as damage to coral reefs from boat anchors and trampling by divers. The project will address this issue through the installation of mooring buoys at heavily visited areas; education and outreach to boat captains and visitors; and creation of fines and enforcement capacity to dissuade unsafe practices.</p> <p>For terrestrial protected areas, the main site of concern is the Camps River area, in which conservation objectives must be balanced with local residents and productive use objectives. At that site, the establishment of the Nevis Peak National Park and Camps River Watershed Area will provide the Nevis Island Administration with the first clear legal authority to develop and implement regulations that balance these competing objectives and give both resource managers and local residents a clear vision of how to make development sustainable in the area. In addition, by supporting the updating of the Nevis Physical Development Plan, further guidance and regulations will be in place for this area. Of the other sites, both the Central Forest and Nevis Peak sites only include landscape above the 1,000 foot contour line, and it is well understood and accepted in the country that these areas are designated for conservation (there are a few private plots above the contour line at Nevis Peak, but these are generally not developed due to the difficulty of access). Similarly, the Royal Basseterre site is well known as the area that protects the aquifer for the capital city of Basseterre, and its prominent location next to the capital would make any illegal development there highly visible to all (because of its proximity to the capital, there is likely to be pressure in the coming decades to allow some development at the site, which further reinforces the strategy of this project to implement visible conservation activities within the park). Finally, Booby Island is very difficult to access and no development there is practical.</p> <p>For marine protected areas, there is the potential for significant damage to marine habitats and species from sedimentation, pollution and high levels of storm water runoff coming from the terrestrial landscape. At present, none of the three proposed MPAs suffers significant damage in this regard, but the potential exists for future developments upstream of these sites that could greatly increase such impacts. For this reason, the project will implement water quality monitoring at streams feeding into the ocean at or near the proposed 3 MPA sites. Furthermore, the project will work closely with the pending GEF-funded IWECO project to assess the practicality of replicating erosion control and other land management measures at sites upstream of marine protected areas. The project also will support enhanced coordination and information sharing between different government agencies through the National Environment Committee, with the goal of ensuring that conservation (including identification of erosion hotspots and critical habitat areas) is integrated into land use planning and especially future housing or tourism developments. Furthermore, the project Executing Agency (the Department of Physical Planning and Environment) is responsible for both protected areas and physical planning, and thus is well situated to</p>

IDENTIFIED RISKS AND CATEGORY	IMPACT	LIKELIHOOD	RISK ASSESSMENT	MITIGATION MEASURES
				<p>ensure that planning for future developments takes account of potential impacts on protected areas. Finally, there is also the possibility of negative impacts on MPAs from large-scale tourism developments in the country, the most notable of which is the Christophe Harbour development on the Southeast Peninsula of St. Kitts. At present, the marina and most of the infrastructure is slated to be situated in parts of the peninsula that do not border on the proposed Narrows MPA, but the extent of the future scope of this development is not known. Furthermore, there is some risk that the volume of boats using the marine at Christophe Harbour could produce pollution or a high increase in boat visitation in the Narrows MPA, with potential negative impacts on marine habitats. For this reason, the project will not only support work to make the Narrows a legally established and operational MPA with regulatory and enforcement capacity, but it will also seek to work with the developers of Christophe Harbour to generate a partnership to support marine conservation (e.g. through fees paid to the PA system; logistical support for marine monitoring / enforcement; public education; etc.)</p>
<p><u>STRATEGIC</u> Opposition to restrictions on fishing / access to MPA sites from local fishermen and dive / tourism operators</p>	Medium	Moderately Likely	Low	<p>During project preparation, consultations were carried out with representatives of local fishermen and dive operators. In general, these stakeholders welcome the establishment of marine protected areas, as they are concerned about the decline of valuable fish stocks (lobster, conch, finfish) and intact marine environments that attract tourism. In the view of many fishermen, the open access regime currently in place in SKN's waters, and the lack of sufficient regulations and enforcement capacity, has led to the adoption of more and more unsustainable fishing practices (including capture of many juvenile and pregnant specimens; overfishing of spawning sites; use of destructive gear; etc.). On the other hand, some percentage of the fishing community remains opposed to any sort of regulation, and here are likely to be some areas / issues of conflict as the boundaries of the MPAs are established and/or new restrictions are placed on fishing practices, gear, seasons, etc. To address these issues and reduce the potential for conflict, the project will continue to consult with and include fishermen in the processes to establish the Marine Protected Areas. In addition, the project will undertake activities to educate fishermen and tourism operators on issues of fisheries sustainability and ecosystem impacts of fishing practices, so as to make clear the economic benefits and the benefits to fish stocks and ecosystem functions that can be produced by sustainable fishing activities.</p>

**Table 8: Risk Assessment Guiding Matrix**

		Impact				
		CRITICAL	HIGH	MEDIUM	LOW	NEGIGIBLE
Likelihood	CERTAIN / IMMINENT	Critical	Critical	High	Medium	Low
	VERY LIKELY	Critical	High	High	Medium	Low
	LIKELY	High	High	Medium	Low	Negligible
	MODERATELY LIKELY	Medium	Medium	Low	Low	Negligible
	UNLIKELY	Low	Low	Negligible	Negligible	Considered to pose no determinable risk

## COST-EFFECTIVENESS

116. The project is designed to act as a catalytic investment, through the development of key partnerships and cost sharing approaches, to expand the protected areas estate in St. Kitts and Nevis and to ensure that new PA sites are effectively managed for biodiversity conservation and the preservation of ecosystem functions. The timing for expansion of the PA estate in St. Kitts and Nevis is highly advantageous for several reasons. First, the proposed project will build on recent policies and programs in the country that have laid the groundwork for an expanded and strengthened systems of protected areas. These programs include the development of SKN’s first Protected Areas Systems Plan (in 2010), the first comprehensive mapping and zoning process of the nearshore waters in the country in 2010 through the project “Marine Zoning in Saint Kitts and Nevis - A Path Towards Sustainable Management of Marine Resources”, and the pending creation of the St. Kitts and Nevis Marine Management Area to cover all nearshore waters out to 2 miles from the shore; and the drafting of legislation (the pending National Conservation and Environmental Management Act) that will enable strengthened PA management. Second, a number of regional and national projects are ongoing or about to start in St. Kitts and Nevis that will support PA management and expansion, particularly in the marine environment, and therefore provide complementary programming upon which this project can build and with which it can share costs and resources. Most notably, the GEF-funded regional project Sustainable Financing and Management of Eastern Caribbean Marine Ecosystem Project will move St. Kitts and Nevis a great distance down the road to achieving sufficient and sustainable financing resources for managing a system of protected areas. Other relevant programs include the GIZ-funded program Improving the Management of Coastal Resources and the Conservation of the Marine Biodiversity in the Caribbean Region, which will cover many of the costs to establish the Narrows Marine Park and will contribute funding for strengthening PA legal, policy and financing frameworks at the national level. Another program is the Eastern Caribbean Marine Management Area Network (ECMMAN) project, which will assist in the establishment of the SKNMMA; support the design of sustainable financing mechanisms for PAs, and implement sustainable livelihoods activities for fishermen and outreach and education on marine protected areas. Together, these and other projects represent a significant investment in protected areas establishment and strengthening in St. Kitts and Nevis, and the costs incurred in the implementation of this proposed project will relate only to those additional actions required to improve the representivity, governance, planning and operations of SKN’s protected areas system.

117. The project also is considered cost-effective for the following reasons:

- The estimated initial capital expenditure and operating costs (during the 4 years of the project) to establish effective PA management at the 7 targeted PA sites is US\$2,534,630, or approximately



US\$634,000/year. Once basic infrastructure, equipment, baseline information collecting and capacity building are in place however, the on-going capital and operational costs to maintain basic PA management are significantly reduced, to an estimated level of US\$245,000/year. Thus, a catalytic investment by the GEF in the initial start-up costs to operationalize these 7 PA units will substantially reduce the recurrent costs of managing them over the long term.

- The project’s investment in PA business planning and development of financial sustainability mechanisms will contribute to increasing and stabilizing the funding of protected areas in St. Kitts and Nevis. As a result of project investments (see GEF Tracking Tool - Financial Scorecard – Annex 1), it is projected that by the end of the project, revenues for the Protected Areas system (excluding the Brimstone Hill Fortress National Park, which is managed by a NGO and funded independently) will increase from a baseline of US\$0/year to approx. US\$250,000/year, with significant new income from user and visitor fees. In addition, once the National Conservation Trust Fund is operational, financing from that fund and the regional Caribbean Biodiversity Fund will channel another US\$429,000/year to protected areas (and possibly climate change adaptation activities) in the country. This estimate is conservative in that it does not include it does not include any estimate of increased donor funding, although the establishment of a Protected Areas Agency and the formal declaration of new protected areas, including the country’s first marine protected areas, can be expected to increase donor interest in and support for PA management.
- By improving the quality of baseline information on ecological conditions, and establishing a Protected Areas Information System, the project will help PA managers to improve the quality and cost effectiveness of their management decisions. The project also will support cost effectiveness by jointly implementing ecological baseline studies and conservation programs for PA sites on both St. Kitts and Nevis, thereby avoiding any duplication of effort and promoting the sharing of equipment, materials and other resources. Project capacity building of protected area management staff will ensure that the productivity and effectiveness of the human resources available to support each PA site is enhanced and optimally organized. Overall, the concurrent establishment and operationalization of the 7 PA units will produce significant benefits in terms of the sharing of resources and expertise among the different sites.

## COUNTRY OWNERSHIP: COUNTRY ELIGIBILITY AND COUNTRY DRIVENNESS

118. The Government of St. Kitts and Nevis ratified the United Nations Convention on Biological Diversity (CBD) on 7<sup>th</sup> January 1993. The project will assist St Kitts and Nevis in achieving the following goals of the CBD Program of Work on Protected Areas (PoWPA): 1.2 To integrate protected areas into broader land- and seascapes and sectors so as to maintain ecological structure and function; 1.4 To substantially improve site-based protected area planning and management; 1.5 To prevent and mitigate the negative impacts of key threats to protected areas; 3.1 To provide an enabling policy, institutional and socio-economic environment for protected areas; and 3.5 To strengthen communication, education and public awareness. In addition, the proposed project will assist St. Kitts and Nevis in making its contribution to the fulfilment of Aichi Targets at the national level in several ways, as follows:

Aichi Targets	Activities of proposed project
<b>Target 5:</b> By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.	The project has set targets for no net loss of the area (in hectares) of forests and seagrass beds at the proposed protected area sites. In addition, the project has set targets to maintain the health of coral reefs and selected fish stocks using various measurements of species abundance and diversity.
<b>Target 6:</b> By 2020, all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that	The project will increase the area of marine ecosystems in St. Kitts and Nevis where fishing activities are restricted / controlled and where effective monitoring and enforcement is in place from 0 hectares to 11,693 hectares by the end of the project. The

Aichi Targets	Activities of proposed project
<p>overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.</p>	<p>project also will establish baseline information on selected marine species (turtles, lobster, conch, various finfish species) to assist PA authorities to measure the health of these stocks over time and to establish sustainable management regimes for these species.</p>
<p><b>Target 9:</b> By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.</p>	<p>The project will develop a strategy for control of the invasive Vervet Monkey (<i>Cercopithecus aethiops</i>) on the island of St. Kitts, which will greatly assist the Government of SKN in seeking international funding for implementation of a program to control this species. At the three marine protected area sites, the project will investigate and test various strategies for control of invasive lionfish populations to reduce their potentially devastating impact on coral reef ecosystems, primarily through building on existing outreach efforts to encourage fishermen to target this species and for restaurants and hotels to serve lionfish, and through public outreach (television, cookbooks) to increase consumer interest and demand for lionfish as a food source.</p>
<p><b>Target 10:</b> By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.</p>	<p>By establishing three marine protected areas that constitute a significant percentage of the near shore waters around St. Kitts and Nevis, the project will help to protect vulnerable ecosystems such as coral reefs and seagrass beds from pressures associated with fishing and indiscriminate boat anchoring. Project activities to monitor and reduce sedimentation and storm water runoff into marine protected areas will also help coral reef and seagrass ecosystems to maintain normal functioning and resilience to bleaching and other climate change related impacts. In addition, the St. Kitts and Nevis Marine Management Area will designate conservation zones and multi-use zones, including marine shipping channels, which will help to reduce the potential for pollution from marine shipping and other activities to impact these ecosystems.</p>
<p><b>Target 11:</b> By 2020, at least 17 per cent of terrestrial and inland water areas, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.</p>	<p>The project will expand the area of terrestrial ecosystems under protection by 3,550 ha. at two new PA sites and the area of marine ecosystems by 11,693 ha. at three new PA sites. These new PA units encompass much of the most important areas in the country in terms of biodiversity conservation and ecosystem services. Management of these areas will be integrated into the wider landscapes / seascapes through efforts to control and reduce erosion and storm water runoff from areas adjacent to and/or upstream of PA sites, and through collaboration and information sharing between PA managers and planning authorities under the new National Environment Committee.</p>
<p><b>Target 12:</b> By 2020, the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.</p>	<p>The project will strengthen the capacities of existing and new terrestrial and marine PA sites, including: Critically Endangered species such as the Hawksbill turtle (<i>Eretmochelys imbricate</i>), Leatherback turtle (<i>Dermochelys coriaca</i>), Elkhorn Coral (<i>Acropora palmate</i>), Staghorn Coral (<i>Acropora cervicornis</i>), Atlantic Goliath Grouper (<i>Epinephelus itajara</i>), Jamaica Petrel (<i>Pterodroma caribbaea</i>, Possibly extinct); Endangered species such as the Green turtle (<i>Chelonia mydas</i>), Boulder Star Coral (<i>Montastraea annularis</i>), Small-leaved Mahogany tree (<i>Swietenia mahagoni</i>); and Endemic species including Ground Lizard (<i>Ameiva erythrocephala</i>), and two species of Green</p>

Aichi Targets	Activities of proposed project
	Lizards ( <i>Anolis bimaculatus</i> and <i>Anolis watsi schwarti</i> ).
<p><b>Target 15:</b> By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.</p>	<p>At the Royal Basseterre Valley National Park, the project will support the Agriculture Department in undertaking the clearance of existing scrub vegetation and replanting with native vegetation on approximately 50 hectares, which will reduce the fire hazard in this area and also eventually produce climax vegetation communities that will provide net carbon sequestration as compared to the existing low lying scrub vegetation. In addition, the protection of seagrass beds at 3 protected areas will provide carbon sequestration benefits.</p>

## PROJECT CONSISTENCY WITH NATIONAL PRIORITIES/PLANS

119. The project also is consistent with Government’s priorities as set out in national policy documents. The focus of the project on biodiversity conservation and protected area management supports both the National Biodiversity Strategy and Action Plan (NBSAP, 2004), which seeks to promote the conservation and management of the country’s biodiversity, and the Protected Areas Systems Plan for St. Kitts and Nevis (2010), which identifies a number of “highest priority” actions that will be addressed by this project, including enactment of the National Conservation and Environmental Management Act (NCEMA); declaration of the Nevis Peak Forest Reserve as a National Park, and creation of a Management Plan for the new Nevis Peak NP. The project is consistent with the National Environmental Management Strategy and Action Plan (2005 – 2009), which defines key strategies and interventions for environmental management in the context of sustainable development, including Prevent And Manage the Causes and Impacts of Disaster; Ensure the Sustainable Use of Natural Resources; and Protect and Conserve Biological Diversity. The project also supports the objectives of the National Physical Development Plan (NPDP), which provides an overall strategic planning framework to guide development and capital infrastructure investment decisions in the country over the next fifteen years, and which includes among its main policy interventions “protect and sustain long term use of mangroves, sea grass beds, coral reefs, ponds and beaches”, “declare areas with unique terrain, flora and fauna, and high recreational potential as national parks”, “establish marine reserves to protect biodiversity in coastal habitat... reserves are proposed at Sandy Point and the Southeast Peninsula”, and “develop and implement conservation oriented farming technologies specifically adapted to local conditions”. The Nevis Physical Development Plan similarly includes policies and guidelines for sustainable development and seeks to guide location of housing, industry, parks/conservation areas, hotel and tourism development with regards to land suitability and other physical and environmental attributes; one of the activities of the proposed project will be to help update and revise the draft plan, including consideration of protected areas to be established on the island. The project also will help SKN to achieve one of the nine objectives identified in the National Poverty Reduction Strategy (2012-2016), namely “reducing the risk to Saint Kitts and Nevis of environmental, climatic and other related natural disasters, and particularly to those who are the most vulnerable”. Finally, the Government of St. Kitts and Nevis is a signatory to the regional Caribbean Challenge Initiative (CCI), which aims to set a new course for conserving and sustainably managing the marine and coastal environment across the Caribbean. The CCI entails a commitment from the countries to: 1) effectively conserve at least 20% of their near-shore marine / coastal environment by 2020, and 2) to support and put in place a new sustainable finance architecture that will generate long-term funding for the marine and coastal environment. By supporting the establishment of the first marine protected areas in the country, and the development of sustainable financing mechanisms for protected areas, the proposed project will play a critical role in helping the Government of SKN to meet these commitments.

## **SUSTAINABILITY AND REPLICABILITY**

### **Sustainability**

120. The project has been carefully designed to maximize the potential for the long-term sustainability of the interventions in biodiversity conservation in the following areas:

121. Institutional and financial sustainability will be achieved through multiple pathways. By establishing the Protected Areas Agency (PAA) as an independent statutory body, and by revising and strengthening financial mechanisms and resources so that the PAA is able to provide at least “basic” management functions for all PA sites relying only on its own revenue sources (as opposed to on-going government budget allocations), the project will create for the first time in the country an agency dedicated specifically to PA management and sufficiently funded to ensure its effectiveness. Furthermore, the project will strengthen institutional and individual capacities in all areas critical to PA management, including management planning; developing and implementing sustainable financing mechanisms and business planning; enforcement; PA zoning and habitat mapping; monitoring and conservation of coral reefs, seagrass and upland forests; monitoring of priority species (e.g. endemic reptiles, sea turtles, lobster, conch, seabirds, etc.); stakeholder outreach and education; and community participatoin and conflict resolution. The primary recipients of this capacity building will be existing agencies / staff responsible for the areas of current and proposed PA sites (especially the DPPE, DPPNRE, MRD and NDF) as well as partners such as SCNT, NHCS and SKSTMN, and once it is established, the staff of the PAA (who will consist primarily of persons currently at DPPE, DPPNRE, MRD and NDF). As noted above, new financing mechanisms for protected areas management will provide the financial resources for St. Kitts and Nevis to actively manage protected areas over the long-term. In addition, the Government of SKN is committed to putting in place a business plan for the PA system thorough this project, and to mainstreaming the needs of PA financing into national development planning, by increasing budget allocations and visitor fee collections, and by involving new private sector partners in tourism facilities to increase concession revenues from recreation activities.

122. Environmental sustainability will be promoted through the project by developing and implementing a coordinated, multi-stakeholder approach to expanding and strengthening the system of protected areas in the St. Kitts and Nevis, set within the existing overarching strategies articulated in the St. Kitts and Nevis Marine Management Area plan and the Protected Areas Systems Plan. By establishing a Protected Areas Agency with dedicated staff who are enabled with sufficient financial and technical resources, facilities and equipment to actively manage, monitor and conserve seven PA sites, the project will greatly increase the country’s ability to protect critical marine and terrestrial habitats and preserve ecosystem functioning in areas that currently have no effective protection. Furthermore, by carrying out assessments and monitoring of key habitats and species, and implementing conservation and protection programs based on that work, the project will allow PA managers to greatly increase their ability to focus resources on the most important habitats and species and to respond to the most urgent threats.

123. Social sustainability will primarily be enhanced in the project through the processes to plan for and implement conservation and sustainable development initiatives at protected area sites. Decisions about the zoning and resource use restrictions within terrestrial and marine protected areas, including zoning for tourism and fisheries activities, will involve numerous stakeholders including environmental NGOs, CSOs, and other community groups. In addition, private sector stakeholder groups such as commercial fishermen, marine sports operators and tour guides and outdoor adventure operators, will be able to participate in decisions about PA boundary setting and zoning and the regulations adopted for conservation and sustainable use of the natural resources within terrestrial and marine PAs. The project will support PA managers in working with fishermen, tourism operators, farmers and other local residents in collaboratively seeking solutions that balance the needs of these groups and the biodiversity

conservation and ecosystem functioning objectives of the designated PA sites. The involvement of stakeholders in the ecosystem wide processes and in operational protected area planning will be guided by stakeholder engagement plans, which will include provisions for conflict management with different user groups.

## **Replication**

124. At the site level, the proposed project is focused on the establishment and/or operationalization of four terrestrial PA sites and three marine PA sites. The potential for replication at other PA sites in the terrestrial environment exists, though future sites will likely be on a much smaller scale than the Central Forest Reserve and Nevis Peak National Park sites, each of which covers a significant percentage of its islands total land area and most of the extant natural forest cover. However, expansion of the PA system to include coastal areas is certainly an important priority for the country in the future. In the marine environment, the zoning and planning work done under the St. Kitts and Nevis Marine Management Area plan has already identified numerous sites, in addition to those included in this project, for the establishment of various types of marine conservation zones. In addition to the areas of the three Marine Parks targeted by this project, the SKNMMA plan also identifies a fourth “conservation zone” in the coastal waters near Dieppe Bay off of the northeast coast of St. Kitts. The SKMNNA plan also identifies two “fishing-conservation” zones, one off the coast of each island, and seven “tourism-fishing-conservation” zones, including three off of the Southeast Peninsula of St. Kitts, three around the island of Nevis, and the Monkey Shoals area located several miles offshore of both islands. The lessons learned, legal, policy, institutional and financing frameworks established, and technical and resource capacities built by the proposed project and fine-tuned at the seven PA sites included in the project will greatly aid future efforts to replicate PA establishment and operationalization at these other sites. The potential for successful replication is enhanced by the variety of human uses and ecological conditions at the various selected terrestrial and marine PA sites, and in the case of the targeted marine sites in particular, the fact that they consist of a variety of management zones, including those for conservation, fishing and tourism uses. By selecting sites with varied conditions, potential uses, and management regimes, the project will develop PA management models that can be replicated at almost all of the other potential sites in the country.

125. More generally, each project output will include the documentation of lessons learnt from implementation of activities under the output, and the results, tools and guidance materials developed during implementation will be consolidated by the Project Coordinator, who will ensure that this information will then be made accessible to different stakeholder groups in order to support better protected areas management. Among the key technical elements that will be highly valuable for replication will be lessons learned on PA boundary setting and zoning; PA management planning; terrestrial and marine ecological inventories, habitat mapping and monitoring; and PA business planning and development and management of revenue-generating systems.

## **PART III: Management Arrangements**

### **PROJECT IMPLEMENTATION ARRANGEMENTS**

126. The project will be executed under National Implementation Modality (NIM), with execution by the Ministry of Sustainable Development, following UNDP’s Programme and Operations Policies and Procedures, per its role as implementing agency. Execution of the project will be subject to oversight by a Project Steering Committee, detailed below. Day to day coordination will be carried out under the supervision of a Project Coordination Unit and corresponding staff, also detailed below. The executing

agency will take responsibility for different outcomes/activities according to existing capacities and field realities, ensuring effective and efficient use of GEF resources.

127. The Ministry of Sustainable Development (MoSD) is the official project Executing Agency, responsible for the fulfilment of the project's results. In addition, the Government of the St. Kitts and Nevis has designated the MoSD as the official counterpart of UNDP in the country. Its main responsibilities related to the project are to:

- Lead the project implementation with the support of the Project Coordination Unit (PCU);
- Participate together with UNDP, in selecting the Project Coordinator;
- Designate a representative to act as a permanent liaison between UNDP, the Ministry of Foreign Affairs and the Project Coordinator, and to participate in the Project Steering Committee meetings, and others as required, to ensure that the necessary inputs are available to execute the project;
- Prove the technical and administrative capacity to develop the project;
- Monitor the project's work plan and progress;
- Provide the name and describe the functions of the person or persons authorized to deal with UNDP concerning the project's matters;
- Approve ToR for technical personnel and consultancies for project implementation;
- Participate in the selection process of the consultants and approve all hiring and payment request;
- Provide the name and describe the functions of the person or persons authorized to sign the project's budget and/or substantive revisions of the project.
- Coordinating the activities of all other project partners, and providing overall technical oversight of programs and outputs of project contractors and short-term consultants (with the support of the PCU).
- If necessary, to make a written request to UNDP for reports on the project;
- To approve the annual audit plan for the project and, in accordance with UNDP standards and procedures, to convene an information and consultation meeting prior to the audit;
- As required, to participate in tripartite meeting or in any follow-up or reorientation sessions.

128. The United Nations Development Programme (UNDP) is the world development network established by the United Nations with a mandate to promote development in countries and to connect them to the knowledge, experience and resources needed to help people achieve a better life. Its main responsibilities related to the project are to:

- Designate a programme officer responsible for providing substantive and operational advice and to follow up and support the project's development activities;
- Advise the project on management decision making, as well as to guarantee quality assurance;
- Be part of the project's Steering Committee and other Committees or Groups considered part of the project structure;
- Administer the financial resources agreed in the budget / workplan and approved by the project's Steering Committee; monitor financial expenditures against project budgets / workplans; and oversee the provision of financial audits of the project;
- Oversee the recruitment and hiring of project staff, the selection and hiring of project contractors and consultants; and the appointment of independent financial auditors and evaluators;
- Co-organize and participate in the events carried out in the framework of the Project;
- Use national and international contact networks to assist the project's activities and establish synergies between projects in common areas and/or in other areas that would be of assistance when discussing and analysing the project;
- Provide Support in the development and instrumentation of the project's gender strategy.

- Ensure that all project activities, including procurement and financial services, are carried out in strict compliance with the procedures of the UNDP / GEF.

129. Component 2 of the project is focused on site-based interventions at various existing and proposed terrestrial and marine protected area sites. During the first two to three years of the project, implementation of the project at these sites will be led by those agencies currently responsible for the sites, namely: the Department of Physical Planning and Environment (DPPE); the Department of Physical Planning, Environment and Natural Resources (DPPNRE); the Department of Marine Resources (DMR); and the Nevis Department of Fisheries (NDF), all of which have designated staff to lead their institutional efforts for the project. By the final year of the project, the newly established Protected Areas Agency (PAA) is expected to take over responsibility for the PA sites. Details on the roles and responsibilities of these and other potential project partners will be further elucidated during the project inception phase, based on relevant activities established in the project work plan.

130. Project implementation will be carried out under the general guidance of a *Project Steering Committee* (PSC), which will be co-chaired by UNDP and MoSD and will meet at least twice per year to review project progress and approve upcoming work plans and corresponding budgets. Other members of the PSC will include: DPPNRE; DMR, NDF; the Water Services Department on St. Kitts, the St. Christopher National Trust (SCNT), the Nevis Historical Conservation Society (NHCS) and the St. Kitts Sea Turtle Monitoring Network (SKSTMN). Representatives of other stakeholders may also be included in the PSC, as deemed appropriate and necessary (the membership of the PSC will be reviewed and recommended for approval at the project Inception Workshop).

131. The PSC will be in charge of the overall supervision of the project, providing strategic guidance for its implementation, ensuring that this proceeds in accordance with a coordinated framework of government policies and programs, and in accordance with the agreed strategies and targets laid out in this Project Document. The responsibilities of the PSC shall include, but not be limited to: (1) Review, approve and amend this project document, including the Monitoring and Evaluation (M&E) framework, the budget, and the implementation plan; (2) Monitor compliance with the Project's objectives; (3) Discuss progress and identify solutions to problems facing any of the project's partners; (4) Review and approve the AWP and the consolidated financial and progress reports; (5) During the life of the project, review proposals for major budget re-allocation such as major savings or cost increases, or for use of funds for significantly different activities; (6) Review evaluation findings related to impact, effectiveness and the sustainability of the project; (7) Monitor both the budget and the prompt delivery of financial, human and technical inputs to comply with the work plan; (8) Ensure the participation and ownership of stakeholders in achieving the objectives of the project; (9) Ensure communication of the project and its objectives to stakeholders and the public; (10) Approve the project communication strategy and public information plans prepared by the PSC; (11) Facilitate linkages with high-level decision making; (12) Convene ordinary meetings to consider the Technical Committee's proposals and recommendations, as well as the progress made by the project; (13) approve and supervise the hiring and work of project staff; and (14) Convene, if necessary, extraordinary meetings.

132. The PSC plays a critical role in project monitoring and evaluations by quality assuring these processes and products, and using evaluations for performance improvement, accountability and learning. It ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems with external bodies. In addition, it approves the appointment and responsibilities of the Project Manager and any delegation of its Project Assurance responsibilities. Based on the approved Annual WorkPlan, the PSC can also consider and approve the quarterly plans (if applicable) and also approve any essential deviations from the original plans. In order to ensure UNDP's ultimate accountability for the project results, PSC decisions will be made in accordance to standards that shall ensure management for development results, best value money, fairness, integrity, transparency and

effective international competition. In case consensus cannot be reached within the PSC, the final decision shall rest with the UNDP Project Manager.

133. The National Project Director (NPD), a senior staff member of MoSD, will be responsible for oversight of the Project and carries overall responsibility and accountability. The NPD will keep the PSC updated on project advances and challenges as needed, and will report to the PSC on progress made and issues to be resolved. The NPD will establish and provide overall guidance to the PCU, and is responsible for overseeing the work undertaken by the PCU team. The NPD will submit relevant documentation to the PSC for endorsement.

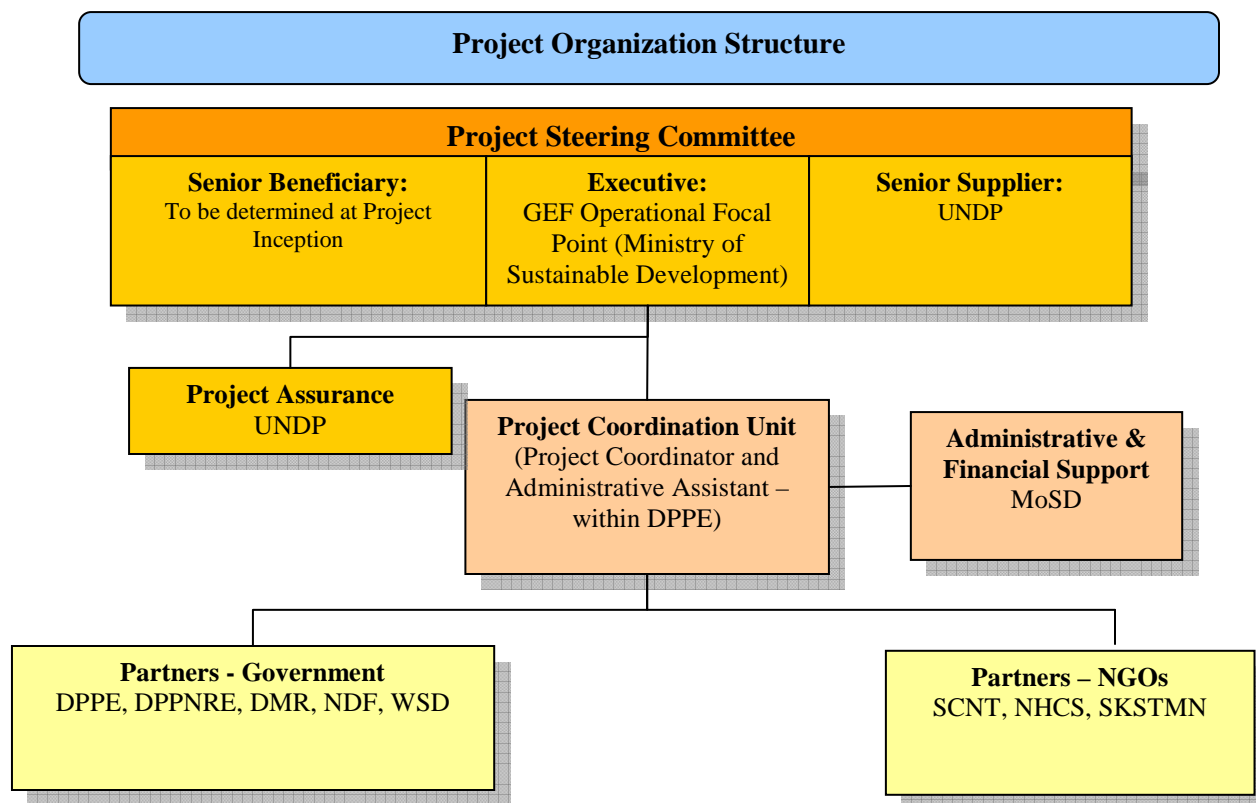
134. Day-to-day management and coordination of the project will be under the supervision of the Project Coordinator (PC). The PC will report to the NPD (Project Director). The PC will be supported by an Administrative Assistant. The PC will be responsible for the general management actions of the project, such as the preparation of consolidated annual work plans and technical and financial reports to be presented to the PSC, with the aim of ensuring that advances in relation to the goals and key milestones of the project are achieved as planned. Additional responsibilities of the PC will include: overall integration and follow-up of studies, research and project technical activities; assisting in the supervision of project implementation (liaising directly with the NPD); undertaking quarterly operational planning and providing guidance on day-to-day implementation; and ensuring institutional coordination among the project partner institutions and organizations.

135. In addition to the Project Coordinator, Administrative Assistant, and the staff of various partner institutions who will participate in specific project activities, a series of short and medium-term consultancy contracts will be necessary in order to implement some of the technical aspects of the project. Contracted companies and consultants will carry out targeted project activities under the technical supervision of the PCU and MoSD, and in coordination with relevant partners for different activities. Terms of reference will be developed jointly by the PCU and MoSD and approved by the PSC in accordance with approved work plans.

136. The figure below presents the project organogram, showing the relationships between the main institutions to be involved with project implementation and the bodies to be established by the project, as per UNDP project requirements:

- Executive (UNDP): individual representing the project ownership to chair the group.
- Senior Supplier (Ministry of Sustainable Development): Individual or group representing the interests of the parties concerned that provide funding for specific cost sharing projects and/or technical expertise to the project. The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project.
- Senior Beneficiary (To be determined): individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries.
- Project Assurance (UNDP): Supports the Project Board Executive by carrying out objective and independent project oversight and monitoring functions. The Project Manager and Project Assurance roles should never be held by the same individual for the same project. A UNDP Staff member typically holds the Project Assurance role.





*Responsible Party*

137. The project will be implemented under the NIM modality where the Implementing Partner is MoSD, following the standards and regulations of the United Nations Development Programme (UNDP), the implementing agency of this project. The Implementing Partner is the entity responsible for the project outcomes, and who is accountable for its management, including monitoring and evaluation activities, the achievement of outputs and effective use of resources. A single Implementing Partner is designated to lead each project. This Partner may establish agreements with other organizations or entities in order to support the achievement of the outputs envisaged in the project, this/these other/s instance/s is/are called: Responsible Party (ies). The Responsible Party is designated by the Implementing Partner to support the implementation, planning and / or monitoring of certain activities / components within the project’s framework, using their technical skills and management services to support the achievement of project objectives. Project partners will assume responsibility for the different outcomes and outputs expected from the project, carrying out activities related to their actual capabilities in the field, ensuring effectiveness and efficiency of GEF funding. An Implementation Agreement will be signed between the Implementing Partner and the Responsible Party during the project inception phase.

*Financial and other procedures*

138. The financial arrangements and procedures for the project are governed by the UNDP rules and regulations for National Implementation (NIM). Financial transactions will be based on direct requests to UNDP from the National Project Director and/ or Project Coordinator for specific activities (included in work plans and financial reports) and for advances for petty cash where necessary and considering the difficulties of implementation in many remote areas. The arrangements for financial reporting, requests

for transfer of funds, and the advance and disbursement of funds will, in turn, be detailed in MOUs between MoSD and its implementing partners. All procurement and financial transactions will be governed by national rules and regulations, and must be compatible with the UNDP rules and regulations.

139. Dollarization clause: "The value of any contribution received by the United Nations Development Programme as part of this Agreement, and which is made in a currency other than the U.S. Dollar, is determined by applying the operational rate of the United Nations prevailing on the date that such payment is made effective. If there is a change in the operational rate of the United Nations before UNDP uses the entire amount paid, the balance will be adjusted according to the value of the currency at that date."

140. If a loss is registered in the value of the fund balance, UNDP shall inform the Donor with a view to determining whether the donor has to provide more funding. Without having any such additional funding, UNDP may reduce, suspend or terminate assistance to the program / project. In the case where there is an increase in the value of this balance, this increase will go to the project to implement its activities, in agreement with the donor.

141. All accounts and all financial statements are expressed in U.S. dollars. The exchange rate used in each case shall be the monthly exchange rate set by the UN in the OECS. Notwithstanding the foregoing, payments to suppliers are made in local currency. In cases where the total contributions exceed the total reference amount, a budgetary review of the project will be carried out as per UNDP requirements.

#### *Direct Project Services*

142. In its role as GEF Implementing Agency (IA) for this project, UNDP shall provide project cycle management services as defined by the GEF Council (described in Annex 5). The Government of St. Kitts and Nevis shall request UNDP to provide direct project services specific to project inputs according to its policies and convenience. These services –and the costs of such services - are specified in the Letter of Agreement in Annex 5. In accordance with GEF Council requirements, the costs of these services will be part of the executing entity's Project Management Cost allocation identified in the project budget. UNDP and the Government of St. Kitts and Nevis acknowledge and agree that these services are not mandatory and will only be provided in full accordance with UNDP policies on recovery of direct costs.

#### *Audit Clause*

143. The project will be audited in accordance with the UNDP Financial Regulations and Rules and applicable audit policies. An audit to the Project is an integral part of UNDP financial and administrative management within the framework of UNDP's accountability, internally and with regards to the GEF. The project will be audited to ensure that resources are administered in accordance with the financial regulations of the project document, workplan and budget. The project's budget should contemplate the resources needed to carry out the audit. The firm selected by UNDP Barbados, through a bidding process and subjected to a rigorous evaluation within the principles of transparency, neutrality and cost benefit will take over this exercise in accountability.

#### *Communications and visibility requirements*

144. Full compliance is required with UNDP's Branding Guidelines. These can be accessed at <http://intra.undp.org/coa/branding.shtml>, and specific guidelines on UNDP logo use can be accessed at: <http://intra.undp.org/branding/useOfLogo.html>. Amongst other things, these guidelines describe when and how the UNDP logo needs to be used, as well as how the logos of donors to UNDP projects need to be used. For the avoidance of any doubt, when logo use is required, the UNDP logo needs to be used

alongside the GEF logo. The GEF logo can be accessed at: [http://www.thegef.org/gef/GEF\\_logo](http://www.thegef.org/gef/GEF_logo). The UNDP logo can be accessed at <http://intra.undp.org/coa/branding.shtml>.

145. Full compliance is also required with the GEF's Communication and Visibility Guidelines (the "GEF Guidelines"). The GEF Guidelines can be accessed at: [http://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08\\_Branding\\_the\\_GEF%20final\\_0.pdf](http://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08_Branding_the_GEF%20final_0.pdf). Amongst other things, the GEF Guidelines describe when and how the GEF logo needs to be used in project publications, vehicles, supplies and other project equipment. The GEF Guidelines also describe other GEF promotional requirements regarding press releases, press conferences, press visits, visits by Government officials, productions and other promotional items.

146. Where other agencies and project partners have provided support through co-financing, their branding policies and requirements should be similarly applied.

#### *Administrative arrangements*

147. The project will be financed by the GEF with a total amount of US\$3,371,630. The Government of St. Kitts and Nevis has committed cash co-financing to the Project to an amount of US\$17,140,000. These resources will mainly be used for salaries, travel expenses, equipment, programs and subsidies, and basic operation and management expenses of the various project partner agencies that are participating in activities related to protected areas management. To coordinate the spending of these resources with the GEF funds provided to the project, UNDP will make its installed capacity available to the Project, guaranteeing that their use is both transparent and prompt, with any services provided to the project by UNDP will be in accordance with its internal guidelines and regulations.

## **PART IV: Monitoring Framework and Evaluation**

### **MONITORING AND REPORTING**

148. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be provided by the project team and the UNDP Country Office (UNDP-CO) with support from UNDP/GEF. The Project logframe (Project Results Framework) in Section II, Part I provides *performance* and *impact* indicators for project implementation along with their corresponding *means of verification*. These will form the basis on which the project's Monitoring and Evaluation (M&E) system will be built. The following sections outline the principle components of the Monitoring and Evaluation Plan and indicative cost estimates related to M&E activities. The project's Monitoring and Evaluation Plan will be presented and finalized at the Project's Inception Report following a collective fine-tuning of indicators, means of verification, and the full definition of project staff M&E responsibilities.

149. The project will be monitored through the following M&E activities. The M&E budget is provided in the table below.

#### **Project start-up**

150. A Project Inception Workshop will be held within the first 2 months of project start with those with assigned roles in the project organization structure, UNDP country office and where appropriate/feasible regional technical policy and programme advisors as well as other stakeholders. The Inception Workshop is crucial to building ownership for the project results and to plan the first year annual work plan.

151. The Inception Workshop should address a number of key issues including:
- a) Assist all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of UNDP CO and RCU staff vis à vis the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff will be discussed again as needed.
  - b) Based on the project results framework and the relevant GEF Tracking Tool if appropriate, finalize the first annual work plan. Review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks.
  - c) Provide a detailed overview of reporting, monitoring and evaluation (M&E) requirements. The Monitoring and Evaluation work plan and budget should be agreed and scheduled.
  - d) Discuss financial reporting procedures and obligations, and arrangements for annual audit.
  - e) Plan and schedule Project Steering Committee meetings. Roles and responsibilities of all project organisation structures should be clarified and meetings planned. The first Project Steering Committee meeting should be held within the first 12 months following the inception workshop.

152. An Inception Workshop report is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

### **Quarterly**

153. Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform. Based on the initial risk analysis submitted, the risk log shall be regularly updated in ATLAS. Risks become critical when the impact and probability are high. Note that for UNDP GEF projects, all financial risks associated with financial instruments such as revolving funds, microfinance schemes, or capitalization of ESCOs are automatically classified as critical on the basis of their innovative nature (high impact and uncertainty due to no previous experience justifies classification as critical). Based on the information recorded in Atlas, a Project Progress Reports (PPR) can be generated in the Executive Snapshot. Other ATLAS logs can be used to monitor issues, lessons learned etc. The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard.

### **Annually**

154. Annual Project Review/Project Implementation Reports (APR/PIR): This key report is prepared to monitor progress made since project start and in particular for the previous reporting period (30 June to 1 July). The APR/PIR combines both UNDP and GEF reporting requirements.

155. The APR/PIR includes, but is not limited to, reporting on the following:
- Progress made toward project objective and project outcomes - each with indicators, baseline data and end-of-project targets (cumulative)
  - Project outputs delivered per project outcome (annual).
  - Lesson learned/good practice.
  - AWP and other expenditure reports
  - Risk and adaptive management
  - ATLAS QPR
  - Portfolio level indicators (i.e. GEF focal area tracking tools) are used by most focal areas on an annual basis as well.

### **Periodic Monitoring through site visits**

156. UNDP CO and the UNDP RCU will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Other members of the Project Board may also join these visits. A Field Visit Report/BTOR will be prepared by the CO and UNDP RCU and will be circulated no less than one month after the visit to the project team and Project Board members.

### **Mid-term of project cycle**

157. The project will undergo an independent Mid-Term Review at the mid-point of project implementation (February 2016). The Mid-Term Review will determine progress being made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this Mid-Term Review will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the [UNDP Evaluation Office Evaluation Resource Centre \(ERC\)](#). The relevant GEF Focal Area Tracking Tools will also be completed during the mid-term evaluation cycle.

### **End of Project**

158. An independent Final Evaluation will take place three months prior to the final Project Board meeting and will be undertaken in accordance with UNDP and GEF guidance. The final evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

159. The Terminal Evaluation should also provide recommendations for follow-up activities and requires a management response, which should be uploaded to PIMS and to the [UNDP Evaluation Office Evaluation Resource Centre \(ERC\)](#). The relevant GEF Focal Area Tracking Tools will also be completed during the final evaluation.

160. During the last three months, the project team will prepare the Project Terminal Report. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.

### **Learning and knowledge sharing**

161. Results from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation through lessons learned. The project will identify, analyse, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Finally, there will be a two-way flow of information between this project and other projects of a similar focus.

## M&E workplan and budget

**Table 9: M&E Activities, Responsibilities, Budget and Time Frame**

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team staff time</i>	Time frame
Inception Workshop and Report	<ul style="list-style-type: none"> <li>▪ Project Manager</li> <li>▪ UNDP CO, UNDP GEF</li> </ul>	Indicative cost: 3,000	Within first two months of project start up
Measurement of Means of Verification of project results.	<ul style="list-style-type: none"> <li>▪ UNDP GEF RTA/Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members.</li> </ul>	To be finalized in Inception Phase and Workshop.	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on <i>output and implementation</i>	<ul style="list-style-type: none"> <li>▪ Oversight by Project Manager</li> <li>▪ Project team</li> </ul>	To be determined as part of the Annual Work Plan's preparation.	Annually prior to ARR/PIR and to the definition of annual work plans
ARR/PIR	<ul style="list-style-type: none"> <li>▪ Project manager and team</li> <li>▪ UNDP CO</li> <li>▪ UNDP RTA</li> <li>▪ UNDP EEG</li> </ul>	None	Annually
Periodic status/ progress reports	<ul style="list-style-type: none"> <li>▪ Project manager and team</li> </ul>	None	Quarterly
Mid-term Review	<ul style="list-style-type: none"> <li>▪ Project manager and team</li> <li>▪ UNDP CO</li> <li>▪ UNDP RCU</li> <li>▪ External Consultants (i.e. review team)</li> </ul>	Indicative cost: 19,000	At the mid-point of project implementation.
Final Evaluation	<ul style="list-style-type: none"> <li>▪ Project manager and team,</li> <li>▪ UNDP CO</li> <li>▪ UNDP RCU</li> <li>▪ External Consultants (i.e. evaluation team)</li> </ul>	Indicative cost: 28,000	At least three months before the end of project implementation
Project Terminal Report	<ul style="list-style-type: none"> <li>▪ Project manager and team</li> <li>▪ UNDP CO</li> <li>▪ Local consultant</li> </ul>	0	At least three months before the end of the project
Audit	<ul style="list-style-type: none"> <li>▪ UNDP CO</li> <li>▪ Project manager and team</li> </ul>	Indicative cost: 6,000	Yearly
Visits to field sites	<ul style="list-style-type: none"> <li>▪ UNDP CO</li> <li>▪ UNDP RCU (as appropriate)</li> <li>▪ Government representatives</li> </ul>	For GEF supported projects, paid from IA fees and operational budget	Yearly
Inception Workshop and Report	<ul style="list-style-type: none"> <li>▪ Project Manager</li> <li>▪ UNDP CO, UNDP GEF</li> </ul>	Indicative cost: printing costs only, if any.	Within first two months of project start up
Measurement of Means of Verification of project results.	<ul style="list-style-type: none"> <li>▪ UNDP GEF RTA/Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members.</li> </ul>	To be finalized in Inception Phase and Workshop.	Start, mid and end of project (during evaluation cycle) and annually when required.

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team staff time</i>	Time frame
Measurement of Means of Verification for Project Progress on <i>output and implementation</i>	<ul style="list-style-type: none"> <li>▪ Oversight by Project Manager</li> <li>▪ Project team</li> </ul>	To be determined as part of the Annual Work Plan's preparation.	Annually prior to ARR/PIR and to the definition of annual work plans
ARR/PIR	<ul style="list-style-type: none"> <li>▪ Project manager and team</li> <li>▪ UNDP CO</li> <li>▪ UNDP RTA</li> <li>▪ UNDP EEG</li> </ul>	None	Annually
Periodic status/ progress reports	<ul style="list-style-type: none"> <li>▪ Project manager and team</li> </ul>	None	Quarterly
TOTAL indicative COST <i>Excluding project team staff time and UNDP staff and travel expenses</i>		US\$56,000	

\*Note: Costs included in this table are included in the UNDP Total Budget and Workplan (TBW) in the PRODOC, and not additional to it.

## PART V: Legal Context

162. Standard text has been inserted in the template. It should be noted that although there is no specific statement on the responsibility for the safety and security of the executing agency in the SBAA and the supplemental provisions, the second paragraph of the inserted text should read in line with the statement as specified in SBAA and the supplemental provision, i.e. “the Parties may agree that an Executing Agency shall assume primary responsibility for execution of a project.”

163. This document together with the CPAP signed by the Government and UNDP which is incorporated by reference constitute together a Project Document as referred to in the SBAA [or other appropriate governing agreement] and all CPAP provisions apply to this document.

164. Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP’s property in the implementing partner’s custody, rests with the implementing partner.

165. The implementing partner shall:

- a) Put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) Assume all risks and liabilities related to the implementing partner’s security, and the full implementation of the security plan.

166. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

167. The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via <http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm>. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.





## SECTION II: Strategic Results Framework (SRF) and GEF Increment

### PART I: Strategic Results Framework Analysis

#### PROGRAMMATIC LINKS

**Link to UNDP Strategic Plan (reference to the new plan – 2014-2017):** [\[Link\]](#)

**Output 1.3.** Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste

**Output 2.5.** Legal and regulatory frameworks, policies and institutions enabled to ensure the conservation, sustainable use, and access and benefit sharing of natural resources, biodiversity and ecosystems, in line with international conventions and national legislation

**Link to UNDP's Biodiversity and Ecosystems Global Framework (2012-2020):** [\[Link\]](#) Signature Programme #2: Unlocking the potential of protected areas (PAs), including indigenous and community conserved areas, to conserve biodiversity while contributing to sustainable development.

**Contribution to UNDAF Outcomes:** Outcome 1 - Improved governance and regulation of environmental and energy issues for more resilient economies by 2016

**Expected CP Outcome(s) (2012-2016):** Outcome #1: Enhanced capacity of national, sub-regional and regional institutions and stakeholders to: effectively manage natural resources; build resilience to the adverse impacts of climate change and natural and anthropogenic hazards; improved energy efficiency and use of renewable energy; improved policy, legal, regulatory and institutional frameworks for environmental and energy governance.

**Applicable GEF Strategic Objective and Program:** BD1 - Improve the sustainability of Protected Area Systems

**Applicable GEF Expected Outcomes:** 1.1 Improved management of existing and new protected areas

## INDICATOR FRAMEWORK AS PART OF THE SRF

<p><b>This project will contribute to achieving the following Country Programme Outcome as defined in CPAP:</b> Outcome #1: Enhanced capacity of national, sub-regional and regional institutions and stakeholders to: effectively manage natural resources; build resilience to the adverse impacts of climate change and natural and anthropogenic hazards; improved energy efficiency and use of renewable energy; improved policy, legal, regulatory and institutional frameworks for environmental and energy governance.</p>
<p><b>Country Programme Outcome Indicators:</b> Indicator under Outcome 1: Percent of budget allocated to environmental protection; hectares of forest cover; greenhouse gas emissions per capita; number of updated and tested contingency plans; volume of savings from reduced fossil fuel imports; multilateral environmental agreements incorporated into national legislation; energy efficiency and renewable energy policies.</p>
<p><b>UNDP Strategic Plan Primary Outcome:</b> (From UNDP Strategic Plan 2014-2017)</p> <p><b>Primary Outputs:</b> 2.3. Solutions at local level for sustainable management of natural resources, ecosystems and environmental services, for expanded jobs and livelihoods; and 3.5. Transparent and non-discriminatory legal and regulatory frameworks and policies enabled for sustainable management of natural resources, biodiversity and ecosystems (in line with international conventions and national legislation) <a href="#">[Link]</a></p> <p><b>Secondary Output:</b> [From <i>UNDP's Biodiversity and Ecosystems Global Framework 2012-2020</i>:] Signature Programme #2: Unlocking the potential of protected areas (PAs), including indigenous and community conserved areas, to conserve biodiversity while contributing to sustainable development. <a href="#">[Link]</a></p>
<p><b>Applicable GEF Strategic Objective and Program:</b> BD1 - Improve the sustainability of Protected Area Systems</p>
<p><b>Applicable GEF Expected Outcomes:</b> 1.1 Improved management of existing and new protected areas</p>
<p><b>Applicable GEF Outcome Indicators:</b></p> <ul style="list-style-type: none"> <li>- METT scores for 7 PA sites will improve from an average of 24 to an average of 54</li> <li>- 5 new Protected Areas encompassing 3,550 hectares of terrestrial ecosystems and 11,693 hectares of marine ecosystems</li> </ul>

	Indicator	Baseline	Targets	Means of verification	Risks and Assumptions
--	-----------	----------	---------	-----------------------	-----------------------

	Indicator	Baseline	Targets	Means of verification	Risks and Assumptions
<b>Project Objective: To expand and strengthen the terrestrial and marine protected area system, and reduce habitat destruction in areas of influence that negatively impact PA ecological functioning</b>	Area of terrestrial ecosystems in St. Kitts and Nevis under official protection	5,260 hectares at 2 existing sites	8,810 hectares (3,550 ha. added at 2 new sites) by end of project	Legal gazettement of 2 new terrestrial PAs	
	Area of marine ecosystems in St. Kitts and Nevis under official protection	0 hectares	11,693 hectares (11,693 ha. added at 3 new sites) by end of project	Legal gazettement of 3 new marine PAs	
	Capacity development indicator score for protected area system:			Review of Capacity Development Indicator Scorecard	
	• Systemic	50%	65%		
	• Institutional	38%	55%		
	• Individual	48%	65%		
	Improved management effectiveness of protected area units as measured by METT:		By end of project:	METT applied at Mid-Term and Final Evaluation	
	• Central Forest Reserve National Park	39	60		
	• Royal Basseterre Valley Park	28	40		
	• Nevis Peak Forest Reserve National Park	30	60		
• Booby Island Nature Reserve	6	40			
• Narrows Marine Park	14	60			
• Keys Marine Park	25	60			
• Sandy Point Marine Park	15	60			

	Indicator	Baseline	Targets	Means of verification	Risks and Assumptions
<b>Component 1: Strengthened Protected Area System Framework and Capacities</b>	Legal authority in place for the collection and retention (within the PA system) of visitor / user / concession fees and other financing mechanisms for protected areas, including the proposed National Conservation Trust Fund (NCTF)	Only 1 PA unit (Brimstone Hill NP) has authority to collect or retain fees	By end of year 2, legal authority established (under existing NCEPA and/or new NCEMA and Marine Resources Act) for all official PA units to collect and retain fees and receive allocations from the NCTF	Approved legal documents	
	Consolidated and effectively functioning institutional management of protected areas in St. Kitts and Nevis	Existing PA units and sites of proposed new PA units currently are managed by multiple government agencies and non-governmental organizations	Protected Areas Agency (PAA) formally established and actively implementing functions across PA system (planning; financing; monitoring, enforcement) by end of year 3	Cabinet memorandum establishing PAA	
	Effective coordination between institutions / personnel responsible for protected areas and for adjacent / upstream areas of influence on PA units	No coordination or information sharing mechanisms among resource management agencies are current functional in St. Kitts and Nevis	National Environmental Committee (NEC) overseeing protected areas management throughout the country by end of year 1	Cabinet memorandum establishing NEC	
	Number of PA staff with specialised training and/or skills development in the following PA management functions: <ul style="list-style-type: none"> <li>• PA planning processes and tools</li> <li>• Creation / enforcement of PA regulations</li> <li>• Ecotourism development</li> <li>• Business and financial planning</li> <li>• Database management and decision support tools</li> </ul>	0 2 (specific to fisheries) 0 0 0	Staff of PAA, as well as partner institutions (DPPE, DPPNRE, DMR, NDF), trained by end of project: 6 6 6 6 6	Project training reports Annual reports of PAA	
	Increased funding support for protected areas in St. Kitts and Nevis through the National Conservation Trust Fund (NCTF) and Caribbean Biodiversity Fund (CBF) (US\$/year)	US\$0	US\$429,000/year (50% from the NCTF and 50% from the CBF) by end of project	NCTF annual report; PA Annual Reports	
<b>Component 2: Protected Area System Expansion and Strengthened</b>	# of Protected Areas legally established and demarcated in St. Kitts and Nevis <ul style="list-style-type: none"> <li>• Terrestrial Protected Areas</li> <li>• Marine Protected Areas</li> </ul>	3 existing PA units 0 existing PA units	2 additional PA units by end of year 2 3 additional PA units by end of year 2	Legal documents and PA annual reports	

	Indicator	Baseline	Targets	Means of verification	Risks and Assumptions
<b>Management of Existing and New Protected Areas</b>	Conservation of critical habitat within the Protected Areas targeted by the project: <ul style="list-style-type: none"> <li>• Forest health at 4 terrestrial PAs, as measured by # of hectares</li> <li>• Coral reef health at 3 MPA sites, as measured by:               <ul style="list-style-type: none"> <li>• Percent live hard coral cover</li> <li>• Percent dead hard coral cover</li> <li>• Number of coral recruits (per m2)</li> </ul> </li> <li>• Seagrass bed health, as measured by # of hectares</li> <li>• Health of selected reef fish stocks, as measured by:               <ul style="list-style-type: none"> <li>• Abundance per m<sup>3</sup></li> <li>• Species diversity</li> </ul> </li> </ul>	8,790 hectares (forest)  TBD during Year 1 TBD during Year 1 TBD during Year 1  TBD during Year 1 TBD during Year 1	No net loss (in # of hectares) by end of project  No decrease by project end No increase by project end No decrease by project end  No net loss (in # of hectares) by end of project  No decrease by project end No decrease by project end	Monitoring survey reports	
	Increased PA management funds for PA units targeted by the project from visitor, user and concession fees	US\$0	US\$200,000/year for 3 marine PA sites and US\$35,000/year 2 terrestrial PA sites by end of project (targets will be validated and possibly revised during the first year of the project)	Annual reports of PAA and/or PA units	
	Number of site-level PA staff, with specialised training in PA management <ul style="list-style-type: none"> <li>• Terrestrial PA Sites (enforcement; conservation, monitoring; community empowerment, outreach, etc.)</li> </ul>	0	At least 5 trained staff managing 2 terrestrial PA sites by end of project	Project training reports Annual reports of PAA	
	<ul style="list-style-type: none"> <li>• Marine PA Sites (ecological monitoring; deploying mooring buoys and FADs; enforcement; boat safety and navigation; extension / stakeholder engagement, etc.)</li> </ul>	0	At least 6 trained staff managing 3 Marine Parks by end of project		
	Reduced impact of invasive alien species (lionfish) at targeted PA units	Baseline population of lionfish (tbd in year 1 of project)	25% reduction in lionfish population at targeted sites by end of project	Ecological survey reports of MPA units	
	Conservation of priority endemic species at terrestrial protected areas (Central Forest Reserve NP and Nevis Peak NP)	Targeted species to be determined through biodiversity inventories during years 1-2 of project	No net decline in populations of selected species by end of project	Ecological survey reports of PA units	

## PART II: Incremental Reasoning and Cost Analysis

### EXPECTED GLOBAL, NATIONAL AND LOCAL BENEFITS

169. GEF funding will secure protection to critically important biodiversity on both the islands of St. Kitts and Nevis. Activities funded by the GEF will deliver global benefits through the strengthening of two existing terrestrial PA units, and the expansion of the PA system by establishing two additional terrestrial PA units and three marine PA units, which together will enhance the protection of critical ecosystems and their ecosystem services (such as water provision, erosion control, and livelihoods services), including: Elfin Woodland, Rainforest, Montane Thicket, Palm Brake, and Riparian Forests, and the first-ever inclusion within PAs of Fringing and Deep Coral Reefs, Mangrove Systems, Turtle Nesting Beaches, Seagrass Beds and Salt Ponds (salt ponds located within the proposed Narrows MPA support a number of internationally important species and are listed as an Important Bird Area by Birdlife International). All forests above 1,000 feet in elevation on both St Kitts and Nevis will be included within the PA system, as will critical areas of coral reefs and seagrass beds and their associated fisheries. Protection of these habitats will support the conservation of 1) Critically Endangered species, including the Hawksbill turtle (*Eretmochelys imbricate*), Leatherback turtle (*Dermochelys coriaca*), Elkhorn Coral (*Acropora palmate*), Staghorn Coral (*Acropora cervicornis*), Atlantic Goliath Grouper (*Epinephelus itajara*); 2) Endangered species such as Green turtle (*Chelonia mydas*), Boulder Star Coral (*Montastraea annularis*), Small-leaved Mahogany tree (*Swietenia mahagoni*); 3) endemic species including the Ground Lizard (*Ameiva erythrocephala*), two species of Green Lizards (*Anolis bimaculatus* and *Anolis watti schwarti*), and the regionally endemic Brown Tree Frog (*E. johnstonei*); and 4) restricted-range bird species such as Bridled Quail-dove (*Geotrygon mystacea*), Lesser Antillean Flycatcher (*Myiarchus oberi*), Pearly-eyed Thrasher (*Margarops fuscatus*), as well as potential undocumented species in the forests of both islands. With the proclamation of two new terrestrial PA units, the land in St Kitts and Nevis under protected areas status will increase by 3,550 hectares, with an additional 5,260 hectares in two existing terrestrial PA units under improved management. The designation of these areas will also include two of the island's 3 Important Bird Areas (Booby Island and Central Forest Reserve National Park). The proclamation of three new marine PA units will help to protect 11,693 hectares of the marine environment around St. Kitts and Nevis. The improved land/seascape management over a large geographical area will safeguard soil and water resources on the islands, increase carbon stocks, and protect biodiversity.

170. The proposed project will have various socioeconomic benefits for the citizens of St. Kitts and Nevis, contributing to the goal of enhancing the quality of life for a nation that has been challenged in recent years by the ravages of natural disasters, rising food and fuel prices and high levels of unemployment. Like many other Caribbean Small Island Developing States (SIDS), the entire country is considered a coastal zone, and therefore arresting the degradation of coastal ecosystems (coral reefs, mangroves, seagrass beds, beaches, etc.) will produce widespread benefits by increasing the country's resilience to climate change impacts. In addition, SKN's economy is highly dependent on tourism, and the protection of upland forests and coastal and marine ecosystems will lead to improved economic revenue, food security and livelihoods. With ecotourism growing rapidly in the Caribbean generally and in SKN in particular, the country stands to benefit from a major economic boost by preventing the degradation of both terrestrial and marine ecosystems that are attractions for visitor, and generating tourism related employment and income for many Kittitians and Nevisians over the long term. In areas adjacent to and upstream of protected areas, conserving ecosystem integrity and functions will serve to maintain agricultural and forest product-related livelihoods and contribute to overall food security, will protect communities from flooding, erosion etc., and will contribute to the conservation of flora and fauna used by local communities for medicinal purposes. Improved coastal water quality, marine habitat protection, and reductions in fishing pressure in critical habitat areas (through improved regulations and enforcement, and the provision of alternative fishing options in the form of fish aggregating devices) will

enable local inhabitants to sustainably exploit near-shore coastal biodiversity resources more effectively (e.g. reduced fish catch effort) and thus provide savings in costs of operations, and will prevent the decline of fish stocks important for local fishermen, including high value species such as lobster and conch. Direct income generation will be increased for local communities through eco-tourism employment (in scuba diving / snorkelling and tour guiding), participating in PA management activities including maintenance, monitoring, research and water quality monitoring, and the sale of souvenirs, food, craft products and BD-based medicines. Generation of these socio-economic benefits for residents in areas adjacent to PA units or persons who rely directly on PA resources will benefit protected areas by increasing local support for PA conservation through the demonstration of social and economic benefits provided by PAs to local communities (as noted above), by increasing the participation of local community members in PA management related activities, and by generating increased visitation and related income for PAs from visitor and eco-tour fees.

171. In addition, individual capacities will be strengthened, producing social capital that will benefit community initiatives in other spheres (e.g. health, education). Women and youth will be particularly targeted as fundamental stakeholders of the project, through their involvement in the design and implementation of capacity building and awareness programmes to ensure their equitability and sustainability. Special attention will be paid to gender issues in developing socio-economic indicators, and socio-economic related activities will seek to build on existing information on the actual benefits women and disadvantaged communities can withdraw from ecosystems.

### *Incremental Cost Matrix*

Cost / Benefit	Baseline (B)	Alternative (A)	Increment (A-B)
<b>Benefits</b>			
<b>Global benefits</b>	<p>Under the <b>‘business-as-usual’ scenario</b>, one terrestrial national park, established for its importance for biodiversity conservation and contribution to the island’s freshwater supply (Central Forest Reserve), will remain officially protected but will be without any active management, dedicated staff, enforcement or boundary delineation. The other two existing “National Parks” do not contain significant ecological resources: the Brimstone Hill Fortress NP is a historic / cultural site, while the Royal Basseterre Valley NP was designated primarily for the protection of an aquifer and it has very little natural vegetation. There are no terrestrial protected landscapes on Nevis, and no marine protected areas anywhere in the country. The Govt. of SKN is working to establish the St. Kitts and Nevis Marine Management Area, which</p>	<p>The project will remove key barriers for the establishment, operationalization and management of new protected areas: strengthened protected area regulations, development and implementation of an institutional framework for protected area system management, expansion and strengthened management of existing and new protected areas, and conservation of endemic and endangered species. The GEF investment will enable the establishment and operationalization of five new protected areas encompassing both terrestrial and marine ecosystems: this will increase the number of operational PA units in St Kitts and Nevis from 3 to 8; the area of protected terrestrial landscape from 5,260 to 8,810 hectares, and the area of protected marine seascapes from 0 to 11,693 hectares. Thus, a catalytic investment by the GEF in the initial start-up costs to operationalize the 7 PA units targeted by the project will substantially reduce the recurrent costs of managing them over the long term. In addition, the project will help to</p>	<p>The GEF increment will strengthen protection for critically important biodiversity in St Kitts and Nevis. It will deliver global benefits through the expansion of the PA network, the reduction of erosion and storm water runoff impacting PAs, and the improved conservation of the habitat of: Critically Endangered species including Hawksbill turtle (<i>Eretmochelys imbricate</i>), Leatherback turtle (<i>Dermochelys coriaca</i>), Elkhorn Coral (<i>Acropora palmate</i>), Staghorn Coral (<i>Acropora cervicornis</i>), Atlantic Goliath Grouper (<i>Epinephelus itajara</i>), Jamaica Petrel (<i>Pterodroma caribbaea</i>, Possibly extinct); Endangered species such as Green turtle (<i>Chelonia mydas</i>), Boulder Star Coral (<i>Montastraea annularis</i>), Small-leaved Mahogany tree (<i>Swietenia mahagoni</i>); and endemic species including Ground Lizard (<i>Ameiva erythrocephala</i>), and two species of Green Lizards (<i>Anolis bimaculatus</i></p>

Cost / Benefit	Baseline (B)	Alternative (A)	Increment (A-B)
	<p>will cover all marine zones in an area extending for two miles from the shore of both islands, but this zoning effort is not accompanied by any management or enforcement activities. At present, there is no protection for the turtle nesting beaches, critical for the nesting Hawksbill turtle (<i>Eretmochelys imbricate</i>), Leatherback turtle (<i>Dermochelys coriaca</i>), Green turtle (<i>Chelonia mydas</i>). One beach, Keys Turtle Nesting Beach is within a UNESCO MAB Reserve, but has no formal government protection. The majority of remaining terrestrial and marine ecosystems and species on St Kitts and Nevis will remain vulnerable, and increasingly threatened as tourism, fisheries, coastal development and land degradation increases over time. In addition, the invasive lionfish (<i>Pterois volitans</i>) will continue to spread throughout the marine environment in the absence of any natural predators or targeted control activities.</p>	<p>establish an institutional framework for PA system management through the development of a Protected Area Agency (PAA) with strengthened PA regulations, management and enforcement. The project will also foster the systematic development of PA management capacities, processes and tools. Legal protection, demarcation of PA boundaries and on-site management will improve biodiversity conservation including the maintenance of global environmental benefits. Additional species identified through inventories in the poorly studied terrestrial National Parks (Nevis Peak and Central Forest Reserve) will potentially further global environmental benefits. To ensure a reduction in the impacts of erosion and storm water runoff on terrestrial and marine PAs, the project will work with the relevant planning authorities to reduce development in areas adjacent to or upstream of PA units, and will work with the GEF-funded IWECO project to adapt and replicate erosion control and other SLM practices at key sites that may impact PA ecosystem functioning. At the site level, additional planning tools will include the development or updating of management plans for all targeted PA units, site demarcation, basic infrastructure, equipment and training, and implementation of conservation, monitoring, and enforcement activities. The project will also reduce impacts to marine biodiversity through addressing invasive lionfish species.</p>	<p>and <i>Anolis watsi schwarti</i>). In particular, seagrass beds, coral reefs, and upland tropical forests will be conserved and impacts and threats reduced. With the proclamation of 5 new Protected Areas, the area of land in St Kitts and Nevis under protected areas status will increase by 3,550 hectares, while the area of protected marine environment will increase by 11,693 hectares, including critical nesting habitat for the Hawksbill turtle (<i>Eretmochelys imbricate</i>), and the Leatherback turtle (<i>Dermochelys coriaca</i>). The project will also include improved protection of two Important Bird Areas (Central Forest Reserve and Booby Island). The improved land/seascape management will safeguard further soil and freshwater water resources on the islands, increase carbon stocks, and protect biodiversity. The project will strengthen the national contribution to the global Aichi Targets, specifically Target 5 on habitat protection, Target 6 on marine species, Target 9 on invasive alien species, Target 10 on marine ecosystems, Target 11 on protected areas, Target 12 on species conservation, and Target 15 on climate resilience.</p>
<p><b>National and local benefits</b></p>	<p>Under the ‘business-as-usual’ scenario, efforts to strengthen and expand the national system of PAs will be limited. Implementation of existing PA planning efforts is limited by capacity and funding for effective management and protection of forest resources. Land degradation due to shifting agricultural practices (away from sugarcane in 2005) has left fragile soils prone to erosion and sedimentation with unsustainable</p>	<p>The project will engage a variety of stakeholders in processes to plan for and implement conservation, management and resource use in the PAs. By creating a Protected Area Agency and improving capacity, long term effective protection and management of the PAs is likely. Participatory planning and stakeholder engagement will ensure national and local stakeholder concerns are addressed in the national planning as well as specific site based planning. Similarly, specific stakeholder groups such as commercial and sport fishermen will be</p>	<p>The project is expected to yield national and local benefits by supporting the long-term viability of key island resources and ecosystem services (particularly freshwater provision and healthy fish stocks) and a protected landscape and seascape that will support the important tourism industry in the country. For fisheries, the project will prevent the decline of fish stocks and the destruction of important habitat for fish species, to the benefit of local</p>



Cost / Benefit	Baseline (B)	Alternative (A)	Increment (A-B)
	<p>land use practices, ultimately threatening the islands natural resources and biodiversity upon which the island is increasingly depending upon for the tourism industry as well as livelihoods, including fisheries. Soil erosion and unsustainable resource use for both terrestrial and marine ecosystems will ultimately continue to incur significant opportunity costs for the St Kitts and Nevis by damaging / destroying natural ecosystem functions and values (e.g. healthy fish stocks; tourism friendly land and seascapes). Ecosystems in areas that are not legally protected as PAs will become increasingly degraded and will cease to render essential services. Fish stocks, including those of high value species such as lobster and conch, will continue to decline, producing significant negative impacts in coastal fishing communities.</p>	<p>able to participate in decisions about management, zoning and the regulations adopted for conservation and sustainable use of the marine environment. Protected Area management will itself enhance social participation and sustainability, as the project will enable and encourage the participation of NGOs and private sectors partners. The project also will support PA managers in working with fishermen, tourism operators, and other interested parties in collaboratively seeking solutions that balance the needs of these groups and the biodiversity conservation and ecosystem functioning objectives of the designated PA sites. Employment and income will be increased for local residents in tourism (scuba diving / snorkelling and tour guiding) and through being contracted to participate in PA management activities.</p>	<p>commercial fishermen, consumers, and the recreational and sport fishing sectors. For the tourism sector, by limiting development and preventing environmental degradation, the project will ensure that tourism visitation will continue as tourists come to St Kitts and Nevis to enjoy the exceptional beauty of the country, and engage in nature-related activities such as hiking and diving. The project also will ensure that activities that benefit national and local stakeholders minimize their impact on natural ecosystem functioning and avoid critical habitat areas. In these ways, the project will engender an effective, well-planned and collaborative sustainable use of natural resources in St Kitts and Nevis.</p>

## SECTION III: Total Budget and Workplan

Atlas Award ID and Project ID	Atlas Award ID: 00080909 Project ID: 00090420
PIMS #:	5088
Business Unit:	BRB10

Project Title:	Conserving Biodiversity and reducing habitat degradation in Protected Areas and their Buffer Zones
Implementing Partner (NIM agency)	Ministry of Sustainable Development

Project Outcome / Component	Impl. Agent	Fund ID	Donor Name	ATLAS Budget Code	Atlas Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	TOTAL	Notes	
<b>Component 1: Strengthened Protected Area System Frameworks and Capacities</b>	NIM	62000	GEF	71200	International Consultants	58,750	58,750	23,750	23,750	165,000	1	
	NIM	62000	GEF	71300	Local Consultants	22,500	22,500	5,000	5,000	55,000	2	
	NIM	62000	GEF	71400	Contractual Services - Individ	10,125	10,125	10,125	10,125	40,500	3	
	NIM	62000	GEF	72100	Contractual Services-Companies	67,500	67,500	37,500	37,500	210,000	4	
	NIM	62000	GEF	72300	Materials & Goods	12,500	12,500	12,500	12,500	50,000	5	
	NIM	62000	GEF	72800	Information Technology Equipmt	30,000	30,000	0	0	60,000	6	
	NIM	62000	GEF	74200	Audio Visual & Print Prod Costs	17,500	17,500	17,500	17,500	70,000	7	
	NIM	62000	GEF	75700	Training	12,500	12,500	12,500	12,500	50,000	8	
<b>TOTAL COMPONENT 1 GEF</b>						<b>231,375</b>	<b>231,375</b>	<b>118,875</b>	<b>118,875</b>	<b>700,500</b>		
<b>Component 2: Protected Area System Expansion and Strengthened Management of Existing and New Protected Areas (Includes Monitoring and Evaluation Costs)</b>	NIM	62000	GEF	71200	International Consultants	111,000	90,000	50,000	25,000	276,000	9	
	NIM	62000	GEF	71300	Local Consultants	151,833	201,833	96,833	27,500	477,999	10	
	NIM	62000	GEF	71400	Contractual Services - Individ	148,225	180,725	150,725	30,125	509,800	11	
	NIM	62000	GEF	71600	Travel	15,000	15,000	0	0	30,000	12	
	NIM	62000	GEF	72100	Contractual Services-Companies	120,583	120,583	79,584	56,250	377,000	13	
	NIM	62000	GEF	72200	Equipment and Furniture	353,331	150,500	134,500	19,000	657,331	14	
	NIM	62000	GEF	72300	Materials & Goods	25,000	50,000	25,000	0	100,000	15	
	NIM	62000	GEF	74200	Audio Visual & Print Prod Costs	5,000	0	17,500	17,500	40,000	16	
	<b>Sub-total COMPONENT 2 GEF</b>						<b>929,972</b>	<b>808,641</b>	<b>554,142</b>	<b>175,375</b>	<b>2,468,130</b>	
	NIM	62000	GEF	71200	International Consultants	0	19,000	0	28,000	47,000	17	
	NIM	62000	GEF	74100	Professional Services	0	3,000	0	3,000	6,000	18	
NIM	62000	GEF	74500	Miscellaneous Expenses	3,000	0	0	0	3,000	19		
<b>Sub-total M&amp;E</b>						<b>3,000</b>	<b>22,000</b>	<b>0</b>	<b>31,000</b>	<b>56,000</b>		
<b>TOTAL COMPONENT 2 GEF</b>						<b>932,972</b>	<b>830,641</b>	<b>554,142</b>	<b>206,375</b>	<b>2,524,130</b>		
	NIM	62000	GEF	71400	Contractual Services - Individ	16,750	16,750	16,750	16,750	67,000	20	

	NIM	6200	GEF	74599	Direct Project Costs	20,000	20,000	20,000	20,000	80,000	21
<b>TOTAL PROJECT MANAGEMENT GEF</b>						<b>36,750</b>	<b>36,750</b>	<b>36,750</b>	<b>36,750</b>	<b>147,000</b>	
<b>TOTAL PROJECT</b>						<b>1,201,097</b>	<b>1,098,766</b>	<b>709,767</b>	<b>362,000</b>	<b>3,371,630</b>	

Mgt costs	Total mgt costs	Subtotal without Mgt Costs	% of Total costs
GEF	147,000	3,224,630	4.56%

<b>Budget Notes</b>	
1	Regional consultants to update the NCEMA and write specific regulations (30,000); regional consultants to write the Marine Resources Act and specific regulations (40,000); regional consultant to develop standard operating procedures for PA management, as well as criteria and procedures for identification, assessment, and designation of new terrestrial and marine protected areas (35,000); support of Chief Technical Advisor (50% of total effort) for implementation of activities under Component 1 (60,000);
2	National Consultant to establish a clear policy on the jurisdiction over private property within new or existing protected areas (15,000); national consultant to develop strategies for development and implementation of sustainable financing mechanisms for PAs (20,000); national consultant to help develop and implement public education and awareness programs (20,000);
3	Support of Project Coordinator (37.5% time) for implementation of activities under Component 1 (40,500);
4	Meetings and report production costs of National Environment Committee (40,000); contract company to develop and maintain Protected Areas Information System (140,000); contract company to help develop and implement public education and awareness programs (30,000);
5	Materials and Goods for public education and awareness programs (50,000);
6	Equipment for PA Information System, including ArcGIS 10.2.1 for Desktop - multi-user licence @ 4,000/year = 16,000 and ArcGIS for Tablets/Mobile - multi-user license @ 3,000/year = 12,000 and servers, computers and associated equipment for total of 60,000
7	Costs to produce and disseminate public education and awareness program materials (70,000)
8	Capacity building of PA management staff in ecotourism development and outreach and education (50,000)
9	Intl. consultant to guide updating and revision of Nevis Physical Development Plan (21,000); intl. consultant(s) to guide development and implementation of ecological / biodiversity inventories at Central Forest and Nevis Peak (80,000); intl. consultant(s) to guide ecological / BD Inventories at Keys and Sandy Point MPAs (20,000); intl. consultant(s) to develop targeted conservation / monitoring programs for significant and threatened species or habitats at Central Forest Reserve, Nevis Peak and Booby Island (20,000); intl. consultants to help design and implement capacity building in terrestrial PA management functions - trail design/management; enforcement; management planning; ecology; first aid; community empowerment, outreach and dispute resolution; financing mechanisms (50,000); Intl. consultants to help design and implement capacity building in marine PA management functions - FAD Deployment; Extension; Boat Safety & Navigation; Research & Monitoring; Enforcement (25,000); support of Chief Technical Advisor (50% of total effort) for implementation of activities under Component 2 (60,000)

10	Local consultants to work with PAA to develop management plans for Central Forest (35,000), Booby Island (5,000), Nevis Peak (25,000), Sandy Point (20,000) and Keys (20,000); local consultants to guide creation of sustainable financing mechanisms (e.g. user / visitor fees; concession fees) for Central Forest and Nevis Peak (40,000) and for MPAs (18,000); local consultant(s) to guide development and implementation of ecological / biodiversity inventories at Central Forest and Nevis Peak (120,000) and Keys and Sandy Point MPAs (40,000); local consultant(s) to develop targeted conservation /monitoring programs for significant and threatened species or habitats at Central Forest Reserve, Nevis Peak and Booby Island (35,000) and Keys and Sandy Point MPAs (20,000); local consultants to help design and implement capacity building in terrestrial PA management functions - trail design/management; enforcement; management planning; ecology; first aid; community empowerment, outreach and dispute resolution (50,000); local consultants to help design and implement capacity building in marine PA management functions - FAD Deployment; Extension; Boat Safety & Navigation; Research & Monitoring; Enforcement (25,000); local consultants to provide training for fishermen in Boat Safety & Navigation (25,000)
11	Support of Project Coordinator (37.5% time) for implementation of activities under Component 2 (40,500); Local field workers to participate in implementation of ecological / biodiversity inventories at Central Forest and Nevis Peak (80,000) and Sandy Point and Keys MPAs (20,000); local field workers to participate in targeted conservation /monitoring programs for significant and threatened species or habitats at Central Forest Reserve, Nevis Peak and Booby Island (20,000) and Sandy Point and Keys MPAs (20,000); 3 rangers at Central Forest for years 1-3 of project @ 8,000/yr per ranger (72,000); 2 rangers at Nevis Peak for years 1-3 of project @ 8,000/yr per ranger (48,000); Sandy Point MPA for years 1-3 of project 2 conservation officers @ 9,500/yr (57,000) and 1 captain / conservation officer @ 13,500/yr (40,500); at Narrows MPA for years 2-3 of project 2 conservation officers @ 9,500/yr (38,000) and 1 captain / conservation officer @ 13,500/yr (27,000); at Keys MPA for years 1-3 of project 2 monitoring and outreach staff @ 7,800/yr (46,800)
12	Travel costs (airfare, lodging, etc.) for consultants participating in ecological / BD inventories (30,000);
13	PA zoning for Central Forest (12,000) and Nevis Peak (12,000); MPA zoning / boundary setting for Sandy Point (8,000) and Keys (20,000); Training of local residents in terrestrial PA management activities (25,000) and MPA management activities (25,000); support for livelihoods activities at terrestrial PAs (20,000); Develop a strategy for control of the invasive green vervet monkey at Central Forest Reserve (30,000); Clear scrub vegetation and replant with native vegetation (will reduce fire hazard and provide habitat for native species) at Basseterre (90,000); Contract companies to carry out capacity building in terrestrial PA management functions - trail design/management; enforcement; management planning; ecology; first aid; community empowerment, outreach and dispute resolution; financing mechanisms (90,000); Train fishermen in fishing techniques associated with Fish Aggregating Devices, and implement outreach and education to encourage new fishermen to fish at FADs (45,000)
14	Signage for Central Forest (3,000), Nevis Peak (3,000) and Booby Island (1,000); equipment for ecological / biodiversity inventories at Central Forest and Nevis Peak (50,000); Demarcation buoys for Sandy Point (12,000) and Keys (20,000); Water Quality Monitoring (Field sampling equipment, 2,000); equipment for ecological / BD Inventories at Keys and Sandy Point MPAs (15,000); equipment for targeted conservation /monitoring programs for significant and threatened species or habitats at Central Forest Reserve, Nevis Peak and Booby Island (20,000) and Sandy Point and Keys MPAs (5,000); expand PA facilities at Central Forest (visitor bathrooms for \$25,000; trail signage, ropes, stabilization, maintenance, etc. for \$25,000); Small Ranger Station / Interpretation Centre (Camps River (\$15,000 + \$20,000) and a small Ranger Station in Rawlins (\$15,000); Central Forest: 1 pickup truck (30,000); patrol equipment (radios; binoculars, etc. 2,000); office equipment (computers; printers; phones; desks and chairs, 10,000); Office equipment (computers; printers; phones; desks and chairs, 10,000); uniforms (3,000); medical equipment (2,500); Nevis Peak: 1 pickup truck (30,000); patrol equipment (radios; binoculars, etc. 2,000); office equipment (computers; printers; phones; desks and chairs, 10,000); uniforms (2,000); medical equipment (2,500); establish office / interpretation centre at Keys MPA (45,000); Mooring Buoys for Sandy Point (10,000), Keys (8,000), and Narrows (8,000); Two 35-foot boats, including engines and basic navigation and safety equipment (100,000); diving equipment for MPA staff (25,000); scientific equipment for MPA staff (15,330); van (30,000) to transport stakeholders and trailer to haul equipment (5,000); Fuel for two boats (8,000/yr * 2 boats * 3.5 years = 56,000) and one van (3,500/yr * 4 years = 20,000);
15	Materials and goods for ecological / biodiversity inventories at Central Forest and Nevis Peak (40,000) and Sandy Point and Keys MPAs (10,000); materials and goods for targeted conservation /monitoring programs for significant and threatened species or habitats at Central Forest Reserve, Nevis Peak and Booby Island (25,000); Native plants nursery at Basseterre - purchase of seedlings, pots, other equipment to start nursery (25,000)
16	Costs of Nevis Physical Development Plan to produce maps (3,000) and printing of plan (2,000); costs to produce reports and outreach materials for conservation /monitoring programs for significant and threatened species or habitats at Central Forest Reserve, Nevis Peak and Booby Island (30,000) and Sandy Point and Keys MPAs (5,000)
17	International consultants to carry out Mid-Term Review at end of year 2 (19,000) and Final Evaluation at end of project (28,000)
18	Financial audits costs (2 audits at 3,000 each)
19	Costs associated with inception workshop (meeting facilities; preparation materials; etc.)

20	Project Coordinator (25% time) support for project management (27,000); Administrative Assistant (100% time) support for project management (40,000);
21	Estimated UNDP Direct Project Service/Cost recovery charges to UNDP for executing services. In accordance with GEF Council requirements, the costs of these services will be part of the executing entity's Project Management Cost allocation identified in the project budget. DPS costs would be charged at the end of each year based on the UNDP Universal Price List (UPL) or the actual corresponding service cost. The amounts here are estimations based on the services indicated, however as part of annual project operational planning the DPS to be requested during the calendar year would be defined and the amount included in the yearly project management budgets and would be charged based on actual services provided at the end of that year. See more details in Annex 5, Letter of Agreement.

### Co-Financing Summary

Sources of Co-financing	Name of Co-financier (source)	Type of Co-financing	Cofinancing Amount
National Government	Department of Physical Planning and Environment	Grant	\$3,240,000
National Government	Ministry of Agriculture and Marine Resources	Grant	\$4,000,000
National Government	Land Management Unit	Grant	\$260,000
National Government	Ministry of Health and Environment	Grant	\$1,760,000
National Government	Ministry of Justice and Legal Affairs	Grant	\$100,000
National Government	Water Services Department	Grant	\$6,000,000
National Government	Nevis Department of Physical Planning, Environment and Natural Resources	Grant	\$1,100,000
National Government	Nevis Ministry of Agriculture, Lands, Housing, Co-operatives and Fisheries	Grant	\$380,000
GEF Agency	United Nations Development Programme	Grant	\$300,000
<b>Total</b>			<b>\$17,140,000</b>

## SECTION IV: Additional Information

### PART I: Letters of co-financing commitment

*See separate file for letters*

### PART II: Stakeholder Involvement Plan and Coordination with other Related Initiatives

#### *Information dissemination, consultation, and similar activities that took place during the PPG*

172. Project design was a highly participatory process, in line with UNDP's and GEF's requirements. During the project preparation stage, numerous meetings were held with stakeholders in order to assess their interests in the project and define their roles and responsibilities in project implementation (see the Stakeholder Analysis in Section I, Part I for a description of the primary stakeholders and their expected participation in / collaboration with the project). The thematic consultancies commissioned during the PPG were specifically designed to solicit stakeholder input from an array of sources on their past experiences and priorities / goals for protected areas in the country. Field trips were carried out to all of the proposed terrestrial PA sites, as well as the proposed Narrows MPA site. Workshops were held at the national level to present the primary activities of the project and to solicit stakeholder inputs to the project design, and the project design team participated in a Town Hall meeting focused on the UNESCO St. Mary's Man in Biosphere Project. Participants at the various meetings included government resource management agencies, environmental NGOs, CSOs, private companies and local residents.

#### *Stakeholder involvement plan*

173. The project will be implemented with the participation of a wide variety of formal and informal partners. The roles of the most important of these partners are described in the Stakeholder Analysis (Section I, Part I of the UNDP Prodoc). The project's design incorporates activities and mechanisms to ensure on-going and effective participation by these and other partners in the implementation of the project:

- Project inception workshop to enable stakeholder awareness of the start of project implementation: The project will be launched with a multi-stakeholder workshop, which will provide an opportunity to share updated information on the project with relevant stakeholders. The workshop will also be used to finalize selection of the Project Steering Committee (PSC); to review and make any necessary revisions to the project work plan and budget; and to establish linkages between project staff and counterparts in relevant ministries and organizations.
- Project Steering Committee to ensure representation of stakeholder interests in project: A Project Steering Committee (PSC) will be constituted to ensure broad representation of all key interests throughout the project's implementation. The representation, and broad terms of reference, of the PSC are further described in Section I, Part III (Management Arrangements) of the UNDP Project Document.
- Project communications to facilitate on-going awareness of project: The project will develop,

implement and maintain a communications strategy to ensure that all stakeholders are informed on an on-going basis about the project’s objectives and activities, overall project progress, and the opportunities for involvement in various aspects of the project’s implementation.

- **Capacity building:** Project activities are focused on building the capacity – at the systemic, institutional and individual levels – of the institutions, NGOs, and other stakeholders to ensure the sustainability of initial project investments. Significant GEF resources are directed at building the capacities of staff within existing government agencies, and eventually within the new Protected Areas Agency, to lead the country in the design and operations of all protected areas and in coordinating PA management with the management of resources and activities in adjacent landscapes and seascapes.

174. It is recognized that the involvement of NGOs and CBOs is crucial for the successful implementation of the project. These organizations will be involved in public outreach and education activities on PAs; in working with local communities in and around the proposed PAs on conservation techniques and transitioning to sustainable livelihoods; in providing input on the development of regulations in and around PAs; in providing on-going monitoring which will complement the monitoring and enforcement activities of PA rangers; and in the implementation of eco-tourism development activities (diving / snorkelling; eco-tours; etc.). CBOs will ensure that information is disseminated at the community level and that community concerns, needs and potential replication opportunities are adequately addressed in the project. In addition, initial recommendations on how to involve and benefit local communities in the project, based on consultations with community groups and reviews of past projects (including the OPAAL project), are outlined in Table 10 below. Additional details on the interest of NGOs and CBOs in participating in the project, and recommendations on how the project can work with and engage these groups and other local stakeholders, were provided in reports submitted to the government as part of the project preparation work.

**Table 10: Capacity Building to support participatory PA management and community resource management**

Area of Capacity Development	Type of Capacity Building	Target Communities	Notes on Activities / Partners
PA Training	1) Marine PA Management (including monitoring, catch reporting, understanding of MPA planning / zoning)	Registered Fishers: St. Kitts (Sandy Point, Old Road, Dieppe Bay, East & West Basseterre). Nevis (Charlestown, Cotton Ground, Jones bay, New Castle, Long Haul, Indian Castle)	Sandy Point, Diepe Bay and Old Road to attend courses in Sandy Point. E&W Basseterre in Basseterre and Nevis courses to be delivered in Charlestown.
	2) Terrestrial PA Management (including monitoring, understanding of MPA planning / zoning)	Focus on communities close to CFRNP and NPNP	In Nevis target Rawlins Village, Fountain Village, Spring Hill Villages. In St. Kitts include Cayon.
	3) Principles of Participatory Management	All registered community stakeholders	Organized with support of Ministry of Community Development. 5 hours contact time.
	4) Purpose / objectives of NCEMA and Marine Resources Act	Open to national community	To be advertised nationally. Open attendance. 3 presentations with Q&A
	5) Participation / employment in PA Operations	Respective marine and terrestrial focus communities	Train / employ 3 persons per PA as either full time or part time / season workers
	6) Pollution Control (land based and marine)	Focus on communities affecting Basseterre Aquifer	Review IWCAM project recommendations and stakeholder

	sources, groundwater and near-shore water quality protection)	(East & West Basseterre) and those within watershed upstream of MPAs	database.
	7) General Ecology, ecosystem vulnerability, monitoring of impacts and environmental quality	All registered community stakeholders	Organized with support of Ministry of Community Development.
Alternative Livelihoods	1) Principles of organic farming and marketing/cooperative structures		Organized through Ministry Agriculture
	2) Reforestation Techniques	Target Cayon, Old Road Sandy Point, E &W Basseterre and select stakeholders in Nevis	Develop nurseries in choice communities and replant degraded areas.
	3) Traditional Methods for Basket Weaving	Advertised at community level (all)	Organized through Ministry Community Development. Products to be sold through interpretation Centre.
	4) Fish Net making	Target youth, unemployed, all fishing communities	Organized through Ministry Community Development. Teaching to include older fishers with this skill.
General Capacity Building	1) CBO development 2) Grant Writing	Objective is to have 3 CBOs emerge (1 in Nevis, 2 in St. Kitts). Groups can focus on solutions to problems affecting communities relevant to PA management (monkeys, illegal fishing, etc.)	Leadership, team building, public speaking, participatory processes. Training to be done in Nevis (Charlestown) St. Kitts (Sandy Point) and Basseterre. Success indicator is formally registered group with operating structure and support of community.
Community Contributions	Documentation of Local Knowledge (natural resource use)	Target national community	Support from Ministry Community Development
Environmental Education for Children	The value of natural resources and protected areas	National community	Organized through Ministry of Education. 4 times per term.
Down-Stream Commercial Opportunities	Cottage Tourism, Art Craft (sustainable harvesting and use of raw materials)	Cayon, Sandy Point, Old Road, Nevis	Project should ensure that participating communities be targeted for all commercial opportunities. Promote “local” campaign (over imports)
Understanding and managing tourism Impacts	Carrying Capacity of Natural Systems	Respective marine and terrestrial focus communities	This should result in community understanding ‘limits’ to access/use of specific PAs.

### *Coordination with other related initiatives*

175. Implementation of the proposed project will be carried out in coordination with several other projects, as described below. Overall, the proposed project will represent a new approach in St. Kitts and Nevis to fostering inter-sectorial coordination on biodiversity conservation in both the protected and productive land and seascapes, utilizing an integrated approach that includes ecosystems and their related services ranging from high elevation forests to the offshore marine environment. As such, the proposed project will add significant value by developing mechanisms and models for integrating activities and achievements of these and other projects.



176. The GEF is supporting several regional projects with activities in St. Kitts and Nevis that will generate impacts on the management of protected areas and adjacent landscapes in the country, and the proposed project will coordinate with the projects to ensure that actions are complementary and that resources and information are shared where practical. The most relevant and important of these other projects is the GEF-funded Sustainable Financing and Management of Eastern Caribbean Marine Ecosystem Project. The Caribbean Challenge Initiative (CCI), a historic and ambitious effort to protect at least 20% of the marine and coastal environment of the Caribbean by 2020, has secured some US\$43 million of new financial commitments from the Global Environment Facility (4 GEF grants totalling \$20m), the German government (\$13m), TNC (\$8m), USAID (\$1m) and the Italian government (\$1m). US\$15M from the secured funding will be used to capitalize the CBF. The GEF-funded WB/TNC regional project for OECS countries Sustainable Financing and Management of Eastern Caribbean Marine Ecosystem Project (2012-2016), with an overall budget of US\$8.75 million, is intended to help participating countries to meet their commitments under the Caribbean Challenge Initiative for the expansion and strengthening of their protected area systems. The project has three components: 1) Establishment of sustainable financing mechanisms, including the regional Caribbean Biodiversity Fund (CBF) to generate income to finance sustainable management activities in the PAs of Project Participating Countries, as well as establishing National Protected Area Trust Fund (NPATF) in each country; 2) Strengthening and phased expansion of Marine Protected Area Networks through the designation of new MPAs and establishing demonstration sites (none of the demonstration sites are located in SKN) to showcase best practices in the management of MPAs; and 3) Deployment of a regional monitoring and information system, including an electronic database for an eco-regional environmental information system, as well as dissemination and learning networks. The CBF currently has a target funding level for St. Kitts and Nevis of US\$4,229,174 (\$2,559,174 from KFW; \$300,000 from TNC, and \$1,440,000 from GEF). The Government of St. Kitts and Nevis is currently working towards establishing National Conservation Trust Fund (NCTF; this will serve as the country's NPATF), which will match funds allocated for the country in the CBF on a 1:1 basis, and towards establishing the Board for the NCTF and revising legislation to allow the NCTF to collect fees that would otherwise go to the Treasury. Once the NCTF is established and capitalized, it will provide funding (together with the CBF) for the management of Marine Protected Areas, Terrestrial Protected Areas, and climate change adaptation programs in SKN. The proposed GEF protected areas project will complement this regional project by supporting the development of PA management plans; expanding the national network of both new and existing terrestrial and marine protected areas, and improving on-the-ground protection at those sites, so that the funding generated by regional project will be spent in a cost effective manner. In addition, by brokering new funding sources and establishing new sustainable financing mechanisms PA, the PA project will assist the Government of SKN in providing funding for the National Conservation Trust Fund, which will allow the country to access matching funds from the Caribbean Biodiversity Fund.

177. Another relevant initiative is the pending project IW ECO - Integrating Water, Land, Resources and Ecosystems Management in Caribbean Small Island Developing States. This UNEP-GEF regional project, due to run from 2014-2018, is the follow up project to IWCAM, with a proposed budget for SKN of US\$630,000. The project objective is “the implementation of an integrated approach to water, land and ecosystems services management, supported by policy, institutional and legislative reforms, and implementation of effective appropriate technologies to accelerate contribution to global targets on access to safe and reliable water supplies and improved sanitation, and contributing to improved ecosystem functioning in the Caribbean”. Activities in SKN will be implemented through the sub-project “Addressing Impacts of Acute Land Degradation in the College Street Ghaut in St Kitts and Quarries and Sand Mining Hotspots on Nevis”, which will address land degradation through sustainable land management practices in ghauts and other sensitive areas. On St. Kitts, the project is focused on College Ghaut, and includes activities for slope stabilization, storm water management, up-stream best practice agriculture and monitoring water quality in Basseterre Bay (outflow area). On Nevis, the focus is on

quarries at roughly seven (7) locations, where the project will support improved quarry management practices to reduce erosion and run-off; slope stabilization; reforestation of denuded areas, replanting of mangroves and beach restoration. IWECO is also seeking to generate new legislation for quarry management, and will build capacity and provide for education and outreach. The proposed GEF protected areas project will liaise with the IWECO project team on activities to revise the National Conservation and Environmental Management Act (NCEMA); on the establishment of the National Environment Committee (NEC); on programs to reduce sand mining (especially in the proposed Keys Marine Park); and to measure the impacts of the SLM practices on downstream environments and to generate lessons learned for MPA management. In addition, the PA project will encourage the planning of replication the pilot activities at other sites in St. Kitts and Nevis that are responsible for erosion and storm water runoff into areas of critical marine and coastal habitat. For example, the Wash Ghaut on the eastern coast of St. Kitts creates significant sedimentation and storm water runoff into areas of the proposed Keys Marine Park, while the Camps River valley area on Nevis has similar impacts on the area of the proposed Narrows Marine Park

178. In the marine environment, the proposed project will coordinate with the pending GEF-funded project Catalysing Implementation of the Strategic Action Programme for the Sustainable Management of shared Living Marine Resources in the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+). The CLME+ is a follow-on to the project “Sustainable Management of the Shared Marine Resources of the Caribbean Large Marine Ecosystem (CLME) and Adjacent Regions” which ran from 2009-2013. While this regional project is not addressing marine protected areas specifically, the Department of Marine Resources in St. Kitts and Nevis will ensure information sharing and coordination with regard to marine conservation as needed between the CLME+ project and this project. In addition, the proposed project will seek to utilize lessons learned and best practices for near shore fisheries management and coral reef conservation developed by the first CLME project at other sites in the Caribbean, relying on fact that the project executing agency (the Ministry of Sustainable Development) for the proposed GEF PA project was actively involved on the steering committee of the CLME project.

### **PART III. Terms of References for key project staff**

179. As noted under the Management Arrangements, day-to-day management and coordination of the project will be under the supervision of the Project Coordinator, who will be based in the offices of the Department of Physical Planning and Environment. The PC will be supported by a full-time Administrative Assistant. Indicative Terms of Reference for the Project Coordinator and Chief Technical Advisor are provided below; final ToRs for the Project Coordinator and CTA, and a TOR for the Administrative Assistant, will be created during the project inception phase.

#### **1. Project Coordinator**

<b>Summary Information</b>	
Post title:	Project Coordinator
Organisation:	Based at Department of Physical Planning and Environment
Duration of Employment:	4 years; full-time basis
<b>Overview</b>	
The Project Coordinator (PC) will be locally recruited by the UNDP CO based on an open competitive process. The Project Coordinator’s prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. As such, the PC will be responsible for the overall management of the project, including the mobilization of all project inputs; supervision over project staff, consultants and sub-contractors; and acting as a liaison with the Government, UNDP, private sector partners and other	

stakeholders, and maintaining close collaboration with any donor agencies providing co-financing. The PC will report to the Project Steering Committee (PSC) on overall progress of project activities. For on-going administrative and reporting functions, the PC will report to the National Project Director (e.g. the Director of the Department of Physical Planning and Environment). The PC will be supported by an Administrative Assistant and by a Chief Technical Advisor, as well by national and international experts taking the lead in the implementation of the specific technical assistance components of the project. These services, either of individual consultants or under sub-contacts with consulting companies, will be procured in accordance with applicable UNDP/GEF guidelines.

**Duties & Responsibilities**

- Supervise and coordinate the production of project outputs, as per the project document;
- Mobilize all project inputs in accordance with procedures for nationally implemented projects;
- Lead the preparation of consultants’ and sub-contractors’ terms of reference, identification and selection of national and international sub-contractors/consultants, cost estimation, time scheduling, contracting, and reporting on project activities and budget, and supervise and coordinate the work of all consultants and sub-contractors;
- In close liaison with the implementing partners, prepare and revise project work and financial plans;
- Liaise with relevant government agencies, private partners, and all other partners for effective coordination of all project activities;
- Oversee and ensure timely submission of the Inception Report, Combined Project Implementation Review/Annual Project Report (PIR/APR), technical reports, quarterly financial reports, and other reports as may be required by UNDP, GEF, and other oversight agencies;
- Disseminate project reports and respond to queries from stakeholders;
- Report progress of project to the PSC, and ensure the fulfilment of PSC directives.
- Oversee the integration and follow-up of studies, research and project technical activities;
- Oversee the exchange and sharing of experiences and lessons learned with relevant projects nationally and internationally;
- Ensure the timely and effective implementation of all components of the project;
- Assist relevant government agencies and implementing partners with development of essential skills through training workshops and on the job training, thereby upgrading their institutional capabilities

**Qualifications and Experience**

Education:	<ul style="list-style-type: none"> <li>• A post-graduate university degree in Environmental Management or closely related field</li> </ul>
Experience:	<ul style="list-style-type: none"> <li>• At least 10 years of experience in natural resource planning and management (preferably in the context of protected area planning and management);</li> <li>• At least 5 years of project management experience;</li> <li>• Working experience with the project stakeholder institutions and agencies is desired;</li> <li>• Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all groups involved in the project;</li> <li>• Knowledge of and experience with operational modalities and procedures of UNDP and/or GEF</li> <li>• Ability to effectively coordinate a multi-stakeholder project;</li> <li>• Strong writing, presentation and reporting skills;</li> <li>• Strong computer skills</li> </ul>
Language Requirements:	<ul style="list-style-type: none"> <li>• Excellent English, both written and oral</li> </ul>

## 2. Chief Technical Advisor

<b>Summary Information</b>	
Post title:	Chief Technical Advisor
Organisation:	Based at Department of Physical Planning and Environment (when in SKN)
Duration of Employment:	10 weeks per year over the 4 years of the project
<b>Overview</b>	
<p>The Chief Technical Advisor (CTA) will be internationally recruited, based on an open competitive process. The CTA will report to the Project Manager and to the National Project Director (e.g. the Director of the Department of Physical Planning and Environment). The CTA will provide 10 weeks per year of support to the project; the amount of time spent working in St. Kitts and Nevis and the amount working from home will be determined during the project inception phase.</p>	
<b>Duties &amp; Responsibilities</b>	
<p>The CTA will be based at the offices of the DPPE so as to bring direct technical assistance to the project, as DPPE will be the agency implementing the project. The main duty of the CTA will be to provide technical guidance to the Project Coordinator and the DPPE on the overall implementation of project activities, as well as capacity building for the staff of the DPPE and other relevant institutions and partners on PA management, with specific reference to the following:</p> <ul style="list-style-type: none"> <li>• Provide overall technical guidance and advice in the planning and implementation of the technical assistance components of the project, including advising in the preparation of work plans and technical reports;</li> <li>• Capacity building in the development and implementation of PA management plans and other protected area planning processes and tools, as well as PA regulations and enforcement mechanisms;</li> <li>• Support capacity building in PA management functions, including enforcement; research and monitoring ; and community empowerment, outreach and dispute resolution;</li> <li>• PA System business plan and training in financial management;</li> <li>• Support the planning of ecological inventories and conservation programs within PA sites;</li> <li>• Assist in the implementation of other technical aspects of the project as needed.</li> </ul>	
<b>III. Qualifications and Experience</b>	
Education:	Minimum of a Masters' degree in a discipline related to environmental management
Experience:	<ul style="list-style-type: none"> <li>• Minimum of 15 years of experience in environmental management, with at least 10 years professional experience related to protected areas</li> <li>• Experience and knowledge of both terrestrial and marine conservation and protected areas preferred</li> <li>• Practical experience in similar assignments, preferably with experience in in Small Island Developing States</li> <li>• Demonstrated leadership ability and technical ability to communicate complex ideas verbally and in writing.</li> <li>• Prior UNDP/GEF project experience and knowledge of UNDP and GEF procedures and guidelines is an advantage.</li> </ul>
Language Requirements:	<ul style="list-style-type: none"> <li>• Excellent English, both written and oral</li> </ul>

## OVERVIEW OF PROJECT CONSULTANTS

All TORs will be fully developed and validated prior to the launching of recruitment processes.

**Overview of Inputs from Technical Assistance Consultants financed with GEF funds**

<b>Natl. / Intl.</b>	<b>Purpose</b>	<b>Intensity of input</b>	<b>Indicative budget (US\$)*</b>	<b>Key Tasks and Responsibilities</b>
I	Chief Technical Advisor for Protected Areas	Approximately 10 weeks per year over the 4 years of the project	120,000	Capacity building in writing PA management plans and other planning processes and tools; developing and implementing PA regulations; guidance in writing PA System business plan and training in financial management (see TOR for more details)
I	Update the NCEMA legislation and write specific regulations	Approximately 36 days of work over 8-12 months	30,000	Work with all relevant agencies to update the legislation and develop a strategy to promote its enactment; also work on detailed, specific regulations under the Act
I	Write the Marine Resources Act and specific legislation	Approximately 48 days of work over 8-12 months	40,000	Work with the DMR, NDF and other relevant agencies to write the legislation and develop a strategy to promote its enactment; also work on detailed, specific regulations under the Act
I	Guide PA system expansion planning and operating strategies	Approximately 40 days of work over 12-15 months	35,000	Develop standard operating procedures for PA management, as well as criteria and procedures for identification, assessment, and designation of new terrestrial and marine protected areas
	Updating / revision of Nevis Physical Development Plan	Approximately 30 days of work over 6-8 months	21,000	Work with the DPPNRE and other key stakeholders to update and revised the plan and develop a strategy for its approval by the Nevis Island Administration
I	Ecological / Biodiversity Inventories for Terrestrial PAs	Approximately 100 days of work over 24 months (multiple consultants)	80,000	Work with the DPPE and DPPNRE and local consultants to design and implement the ecological / biodiversity inventories at Central Forest and Nevis Peak
I	Ecological / Biodiversity Inventories for Marine PAs	Approximately 25 days of work over 12-18 months (1-2 consultants)	20,000	Work with the DMR, NDF and local consultants to design and implement the ecological / BD Inventories at Keys and Sandy Point MPAs
I	Conservation Programs at Terrestrial PAs	Approximately 25 days of work over 12-18 months (1-2 consultants)	20,000	Develop targeted conservation /monitoring programs for significant and threatened species or habitats at Central Forest Reserve, Nevis Peak and Booby Island
I	Capacity building of PA managers for terrestrial PAs	Approximately 60 days of work over 12-30 months (multiple consultants)	50,000	Help design and implement capacity building in terrestrial PA management functions, including trail design/management; enforcement; management planning; ecology; community empowerment, outreach and dispute resolution; financing mechanisms
I	Capacity building of PA managers for marine PAs	Approximately 30 days of work over 12-30 months (multiple consultants)	25,000	Help design and implement capacity building in marine PA management functions, including FAD Deployment; Extension; Boat Safety & Navigation; Research & Monitoring; Enforcement
I	External Mid-Term Evaluation of Project	Approximately 25 days of work over 2-3 months (1-2 consultants)	19,000	Produce formal Mid-Term Evaluation according to UNDP and GEF templates and requirements
I	External Terminal Evaluation of Project	Approximately 40 days of work over 2-4 months (1-2 consultants)	28,000	Produce formal Terminal Evaluation according to UNDP and GEF templates and requirements
N	Land Management Jurisdiction	Approximately 50 days of work over 6-8 months	15,000	Establish a clear policy on the jurisdiction of resource management agencies over private property within new or existing protected areas
N	Sustainable Financing Mechanisms for PA system	Approximately 65 days of work over 12-18 months (1-2 consultants)	20,000	Work with the PAA and other agencies to develop and implement sustainable financing mechanisms for the overall PA system

N	Public Education and Awareness	Approximately 65 days of work over 12-18 months (multiple consultants)	20,000	Work with the PAA and other agencies to develop and implement public education and awareness programs regarding the PA system and newly established PA units
N	PA Unit Management Plans	Approximately 350 days of work over 18-24 months (multiple consultants)	105,000	Work with PAA and other relevant agencies and stakeholders to develop management plans for 5 PA Units: Central Forest, Booby Island, Nevis Peak, Sandy Point, and Keys
N	Sustainable Financing Mechanisms for specific PA Units	Approximately 190 days of work over 18-24 months (1-2 consultants)	58,000	Working with the PAA, guide the creation of sustainable financing mechanisms (e.g. user / visitor fees; concession fees) for 2 National Parks (Central Forest and Nevis Peak) and for 3 Marine Parks (Sandy Point, Keys, Narrows)
N	Ecological / Biodiversity Inventories for Terrestrial PAs	Approximately 400 days of work over 18-24 months (multiple consultants)	120,000	Work with international consultants and national stakeholders to design and implement ecological / biodiversity inventories at Central Forest and Nevis Peak
N	Ecological / Biodiversity Inventories for Marine PAs	Approximately 130 days of work over 18-24 months (multiple consultants)	40,000	Work with international consultants and national stakeholders to design and implement ecological / biodiversity inventories at Keys and Sandy Point MPAs
N	Conservation Programs at Terrestrial PAs	Approximately 115 days of work over 24 months (multiple consultants)	35,000	Work with international consultants and national stakeholders to design and implement targeted conservation programs for significant and threatened species or habitats at Central Forest Reserve, Nevis Peak and Booby Island
N	Conservation Programs at Marine PAs	Approximately 70 days of work over 24 months (multiple consultants)	20,000	Work with international consultants and national stakeholders to design and implement targeted conservation programs for significant and threatened species or habitats at Keys and Sandy Point MPAs
N	Capacity building of staff at terrestrial PA units	Approximately 165 days of work over 24-30 months (multiple consultants)	50,000	Help design and implement capacity building in terrestrial Guide training of PA staff in trail design/management; enforcement; management planning; ecology; first aid; community empowerment, outreach and dispute resolution
N	Capacity building of staff at marine PA units	Approximately 80 days of work over 24-30 months (multiple consultants)	25,000	Guide training of PA staff in FAD Deployment; extension; boat safety & navigation; research & monitoring; enforcement
N	Training of Fishermen	Approximately 80 days of work over 12-18 months (multiple consultants)	25,000	Provide training for fishermen in boat safety & navigation (focused on fishermen who are switching from inshore reef fishing to offshore FAD fishing)

\* Budget estimates for international / regional consultants include travel and per diem costs

## Project Annexes

### Annex 1: METT, Financial Scorecard, Capacity Scorecard

*See separate files.*

<i>Scorecards applied in the project*</i>
<b>Management Effectiveness Tracking Tool (METT)**</b>
<b>Financial Sustainability Scorecard for Protected Area Systems**</b>
<b>Capacity Development Assessment Scorecard for Protected Area Systems</b>

Notes:\* Summary scores are reproduced below. \*\*METT and FS are combined into one Excel file as per GEF template.

## 1A. SUMMARY OF MANAGEMENT EFFECTIVENESS TRACKING TOOL (METT)

See Separate File for detailed METT information

Name of Protected Area	Keys Marine Park	Sandy Point Marine Park	Narrows Marine Park	Central Forest Reserve National Park	Royal Basseterre Valley National Park	Nevis Peak National Park & Camps River Watershed Area	Booby Island Nature Reserve
<b>Is this a new protected area?</b>	Yes	Yes	Yes	No	No	Yes	Yes
<b>Area in Hectares</b>	8,931	60	2,072	5,060	200	3,250	300
<b>Global designation or priority lists</b>	UNESCO MAB	None	None	None	None	None	Important Bird Area
<b>Local Designation of Protected Area*</b>	TBD	III/IV/V	III/IV/V	I	I/VII	I/V	III
<b>IUCN Category**</b>	TBD	IV/V/VI	TBD	II	VI	II/VI	Ia
<b>METT Score 2014</b>	25	15	14	39	28	30	6
<b>METT Score 2014 (% of possible)</b>	25%	15%	14%	38%	27%	29%	6%

\* Relevant National Conservation and Environmental Management Act (NCEMA) classifications: I (National Park), III (Nature Reserve), IV (Marine Reserve), V (Area of Special Concern), VII (Botanic Garden)

\*\* Relevant IUCN classifications: Ia (Strict Nature Reserve), II (National Park), IV (Habitat/Species Management Area), V (Protected Landscape/Seascape), VI (Managed Resource Protected Area)



## 1B. SUMMARY OF FINANCIAL SCORECARD FOR PA SYSTEM

See Separate File for detailed Financial Scorecard information

<b>FINANCIAL SCORECARD – PART II Summarised – ASSESSING ELEMENTS OF THE FINANCING SYSTEM</b>	<i>Current Scores 2014 FS (in GEF SOI TT)</i>	<i>GEF TT Total Possible Scores</i>	<i>% per element</i>
<b>Component 1 – Legal, regulatory and institutional frameworks</b>	<b>16</b>	<b>97</b>	<b>16%</b>
Element 1 – Legal, policy and regulatory support for revenue generation by PAs	1	6	17%
Element 2 - Legal, policy and regulatory support for revenue retention and sharing within the PA system	2	9	22%
Element 3 - Legal and regulatory conditions for establishing Funds (endowment, sinking or revolving)	0	9	0%
Element 4 - Legal, policy and regulatory support for alternative institutional arrangements for PA mgt to reduce cost burden to Gov.	4	12	33%
Element 5 - National PA financing policies and strategies	4	18	22%
Element 6 - Economic valuation of protected area systems (ecosystem services, tourism based employment etc.)	1	6	17%
Element 7 - Improved government budgeting for PA systems	2	10	20%
Element 8 - Clearly defined institutional responsibilities for financial management of PAs	0	3	0%
Element 9 - Well-defined staffing requirements, profiles and incentives at site and system level	2	24	8%
<b>Component 2 – Business planning and tools for cost-effective management</b>	<b>0</b>	<b>59</b>	<b>0</b>
Element 1 – PA site-level business planning	0	18	0%
Element 2 - Operational, transparent and useful accounting and auditing systems	0	9	0%
Element 3 - Systems for monitoring and reporting on financial management performance	0	12	0%
Element 4 - Methods for allocating funds across individual PA sites	0	2	0%
Element 5 - Training and support networks to enable PA managers to operate more cost-effectively	0	18	0%
<b>Component 3 – Tools for revenue generation by PAs</b>	<b>2</b>	<b>71</b>	<b>3%</b>
Element 1 - Number and variety of revenue sources used across the PA system	1	12	8%
Element 2 - Setting and establishment of user fees across the PA system	0	15	0%
Element 3 - Effective fee collection systems	1	11	9%
Element 4 - Marketing and communication strategies for revenue generation mechanisms	0	6	0%
Element 5 - Operational PES schemes for PAs	0	12	0%
Element 6 - Concessions operating within PAs	0	12	0%
Element 7 - PA training programmes on revenue generation mechanisms	0	3	0%
<b>Total Score</b>	<b>18</b>	<b>227</b>	<b>8%</b>

## 1C. SUMMARY OF CAPACITY DEVELOPMENT ASSESSMENT SCORECARD

See Separate File for detailed Capacity Development Assessment Scorecard information

Matrix of the Capacity Development Assessment Scorecard for Protected Area Systems (Summary)										
Strategic Areas of Support	Systemic			Institutional			Individual			Average %
	Project Scores	Total possible score	%	Project Scores	Total possible score	%	Project Scores	Total possible score	%	
(1) Capacity to conceptualize and develop sectoral and cross-sectoral policy and regulatory frameworks	3	6	50%	2	3	67%	NA	NA	NA	56%
(2) Capacity to formulate, operationalize and implement sectoral and cross-sectoral programmes and projects	4	9	44%	8	27	30%	6	12	50%	37%
(3) Capacity to mobilize and manage partnerships, including with the civil society and the private sector	4	6	67%	3	6	50%	2	3	67%	60%
(4) Technical skills related specifically to the requirements of the SPs and associated Conventions	2	3	67%	2	3	67%	1	3	33%	56%
(5) Capacity to monitor, evaluate and report at the sector and project levels	2	6	33%	2	6	33%	1	3	33%	33%
<b>TOTAL Score and average for %'s</b>	<b>15</b>	<b>30</b>	<b>50%</b>	<b>17</b>	<b>45</b>	<b>38%</b>	<b>10</b>	<b>21</b>	<b>48%</b>	<b>44%</b>

## **Annex 2. UNDP Environmental and Social Screening (applied in April 2014)**

*See separate file*

## **Annex 3. Technical reports**

*See separate file*

<i>Contents</i>
Biodiversity of St. Kitts and Nevis
Biodiversity, Ecosystem Services and Land and Resource Management at Proposed PA Sites
Maps of Proposed PA Sites

## Annex 4. Project Workplan

Outputs	2014		2015				2016				2017				2018	
	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun
<b>Component 1: Strengthened Protected Area System Frameworks and Capacities</b>																
<b>Output 1.1: Strengthened Protected Areas Laws/Regulations</b>																
1.1.1 Update and approval of draft National Conservation and Environment Management Act																
1.1.2 Creation and approval of Marine Resources Act																
<b>Output 1.2: Strengthened Policy and Institutional Framework for PA System Management</b>																
1.2.1 Strengthening of Protected Areas Policies																
1.2.2 Establishment of Protected Areas Agency (PAA) and Capacity Building of Staff responsible for protected areas																
1.2.3 Establishment and operation of National Environmental Committee (NEC)																
1.2.4 Support for NGO Involvement in PA Management																
<b>Output 1.3: Financial sustainability framework for Protected Areas System</b>																
1.3.1 Development of Sustainable Financing Mechanisms and Strategies for PA System																
1.3.2 Financial Management Systems to support cost-effective PA management																
<b>Output 1.4: Consolidated information system supporting PA management objectives</b>																
1.4.1 Development and operation of a Protected Areas Information System																
<b>Output 1.5: Increased Awareness and Support for Protected Areas</b>																
1.5.1 Public Education and Awareness Programs regarding the national system of protected areas																
<b>Component 2: Protected Area System Expansion and Strengthened Management of Existing and New Protected Areas</b>																
<b>Output 2.1: Establishment and Operationalization of Terrestrial Protected Areas</b>																
2.1.1 Establishment and Zoning of Terrestrial Protected Areas																
2.1.2 Development and Implementation of Terrestrial Protected Area Management Plans																
2.1.3 Updating, Approval and Implementation of Nevis Physical Development Plan (NPDP)																
2.1.4 Development and Implementation of Site-based Financing Mechanisms for Terrestrial Pas																

Outputs	2014		2015				2016				2017				2018	
	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun
2.1.5 Operationalization of Terrestrial Protected Area Units																
2.1.6 Community Participation and Development in and around Terrestrial PA Sites																
2.1.7 Ecological Conservation and Management Programs at Terrestrial PA Sites																
<b>Output 2.2: Establishment and Operationalization of Marine Protected Areas</b>																
2.2.1 Establishment and Zoning of Marine Protected Areas																
2.2.2 Development and Implementation of Marine Protected Area Management Plans																
2.2.3 Development and Implementation of Site-based Financing Mechanisms for Marine Protected Areas																
2.2.4 Operationalization of Marine Protected Area Units																
2.2.5 Community Participation and Development in and around Marine PA Sites																
2.2.6 Ecological Conservation and Management Programs at Marine PA Sites																
2.2.7 Fisheries Production and Pressure Reduction Strategies																

## **Annex 5. UNDP Direct Project Services**

### **LETTER OF AGREEMENT**

#### **STANDARD LETTER OF AGREEMENT BETWEEN UNDP AND THE GOVERNMENT OF ST. KITTS AND NEVIS FOR THE PROVISION OF SUPPORT SERVICES**

**Dear Ms. Lavern Queeley,  
Director - Department of Economic Affairs and PSIP, Ministry of Sustainable Development**

1. Reference is made to consultations between officials of the Government of *St. Kitts and Nevis* (hereinafter referred to as “the Government”) and officials of UNDP with respect to the provision of support services by the UNDP country office for nationally managed programmes and projects. UNDP and the Government hereby agree that the UNDP country office may provide such support services at the request of the Government through its institution designated in the relevant programme support document or project document, as described below.

2. The UNDP country office may provide support services for assistance with reporting requirements and direct payment. In providing such support services, the UNDP country office shall ensure that the capacity of the Government-designated institution is strengthened to enable it to carry out such activities directly. The costs incurred by the UNDP country office in providing such support services shall be recovered from the administrative budget of the office.

3. The UNDP country office may provide, at the request of the designated institution, the following support services for the activities of the programme/project:

- (a) Identification and/or recruitment of project and programme personnel;
- (b) Identification and facilitation of training activities;
- (c) Procurement of goods and services;

4. The procurement of goods and services and the recruitment of project and programme personnel by the UNDP country office shall be in accordance with the UNDP regulations, rules, policies and procedures. Support services described in paragraph 3 above shall be detailed in an annex to the programme support document or project document, in the form provided in the Attachment hereto. If the requirements for support services by the country office change during the life of a programme or project, the annex to the programme support document or project document is revised with the mutual agreement of the UNDP resident representative and the designated institution.

5. The relevant provisions of the Standard Basic Assistance Agreement (the “SBAA”) between the Government of St. Kitts and Nevis and UNDP signed by the parties on 30 January 1985, including the provisions on liability and privileges and immunities, shall apply to the provision of such support services. The Government shall retain overall responsibility for the nationally managed programme or project through its designated institution. The responsibility of the UNDP country office for the provision of the support services described herein shall be limited to the provision of such support services detailed in the annex to the programme support document or project document.

6. Any claim or dispute arising under or in connection with the provision of support services by the UNDP country office in accordance with this letter shall be handled pursuant to the relevant provisions of the SBAA.

7. The manner and method of cost-recovery by the UNDP country office in providing the support services described in paragraph 3 above shall be specified in the annex to the programme support document or project document.

8. The UNDP country office shall submit progress reports on the support services provided and shall report on the costs reimbursed in providing such services, as may be required.

9. Any modification of the present arrangements shall be effected by mutual written agreement of the parties hereto.

10. If you are in agreement with the provisions set forth above, please sign and return to this office two signed copies of this letter. Upon your signature, this letter shall constitute an agreement between your Government and UNDP on the terms and conditions for the provision of support services by the UNDP country office for nationally managed programmes and projects.

Yours sincerely,



Signed on behalf of UNDP  
Mr. Stephen O'Malley  
Resident Representative

\_\_\_\_\_  
For the Government of St. Kitts and Nevis  
Ms. Lavern Queeley  
Director  
Department of Economic Affairs and PSIP,  
Ministry of Sustainable Development  
[Date]

## DESCRIPTION OF UNDP COUNTRY OFFICE SUPPORT SERVICES

1. Reference is made to consultations between the Ministry of Sustainable Development, the institution designated by the Government of St. Kitts and Nevis and representatives of UNDP with respect to the provision of support services by the UNDP country office for the nationally managed project 00090420 **Conserving Biodiversity and reducing habitat degradation in Protected Areas and their Buffer Zones** (award 80909) “the Project”.
2. In accordance with the provisions of the letter of agreement signed on *Date of signature (LOA)* and the project document, the UNDP country office shall provide support services for the Project as described below.
3. Support services to be provided:

Support services* (insert description)	Schedule for the provision of the support services	Cost to UNDP of providing such support services (where appropriate)	Amount and method of reimbursement of UNDP (where appropriate)
1. Payments, disbursements and other financial transactions	During project implementation	Universal Price List	Support Services
2. Recruitment of staff, project personnel, and consultants	During project implementation	Universal Price List	Support Services
3. Procurement of services and equipment, and disposal/sale of equipment	During project implementation	Universal Price List	Support Services
4. Organization of training activities, conferences, and workshops, including fellowships	During project implementation	Universal Price List	Support Services
5. Travel authorizations, visa requests, ticketing, and travel arrangements	During project implementation	Universal Price List	Support Services
6. Shipment, custom clearance, vehicle registration, and accreditation	During project implementation	Universal Price List	Support Services

\* UNDP direct project support services will be defined yearly, and for those executed during the period, direct project costs will be charged at the end of each year based on the UNDP Universal Pricelist (UPL) or the actual corresponding service cost.

#### 4. Description of functions and responsibilities of the parties involved:

As described in the Project Document (Management Arrangements), the project will be executed under national implementation modality (NIM), with execution by The Ministry of Sustainable Development following UNDP’s Programme and Operations Policies and Procedures, per its role as implementing agency. Execution of the project will be subject to oversight by a Project Steering Committee (described in the Project Document). Day to day coordination will be carried out under the supervision of a Project Coordination Unit and corresponding staff.



As described in the Project Document, the functions of the Participants are the following:

The Ministry of Sustainable Development (MoSD) is the official project Executing Agency, responsible for the fulfilment of the project's results. In addition, the Government of the St. Kitts and Nevis has designated the MoSD as the official counterpart of UNDP in the country. Its main responsibilities related to the project are to:

- Lead the project implementation with the support of the Project Coordination Unit (PCU);
- Participate together with UNDP, in selecting the Project Coordinator;
- Designate a representative to act as a permanent liaison between UNDP, the Ministry of Foreign Affairs and the Project Coordinator, and to participate in the Project Steering Committee meetings, and others as required, to ensure that the necessary inputs are available to execute the project;
- Prove the technical and administrative capacity to develop the project;
- Monitor the project's work plan and progress;
- Provide the name and describe the functions of the person or persons authorized to deal with UNDP concerning the project's matters;
- Approve ToR for technical personnel and consultancies for project implementation;
- Participate in the selection process of the consultants and approve all hiring and payment request;
- Provide the name and describe the functions of the person or persons authorized to sign the project's budget and/or substantive revisions of the project.
- Coordinating the activities of all other project partners, and providing overall technical oversight of programs and outputs of project contractors and short-term consultants (with the support of the PCU).
- If necessary, to make a written request to UNDP for reports on the project;
- To approve the annual audit plan for the project and, in accordance with UNDP standards and procedures, to convene an information and consultation meeting prior to the audit;
- As required, to participate in tripartite meeting or in any follow-up or reorientation sessions.

The United Nations Development Programme (UNDP) is the world development network established by the United Nations with a mandate to promote development in countries and to connect them to the knowledge, experience and resources needed to help people achieve a better life. Its main responsibilities related to the project are to:

- Designate a programme officer responsible for providing substantive and operational advice and to follow up and support the project's development activities;
- Advise the project on management decision making, as well as to guarantee quality assurance;
- Be part of the project's Steering Committee and other Committees or Groups considered part of the project structure;
- Administer the financial resources agreed in the budget / workplan and approved by the project's Steering Committee; monitor financial expenditures against project budgets / workplans; and oversee the provision of financial audits of the project;
- Oversee the recruitment and hiring of project staff, the selection and hiring of project contractors and consultants; and the appointment of independent financial auditors and evaluators;
- Co-organize and participate in the events carried out in the framework of the Project;
- Use national and international contact networks to assist the project's activities and establish synergies between projects in common areas and/or in other areas that would be of assistance when discussing and analysing the project;
- Provide Support in the development and instrumentation of the project's gender strategy.
- Ensure that all project activities, including procurement and financial services, are carried out in strict compliance with the procedures of the UNDP / GEF.