



PROJECT IDENTIFICATION FORM (PIF)
PROJECT TYPE: FULL-SIZED PROJECT
TYPE OF TRUST FUND: GEF TRUST FUND

PART I: PROJECT IDENTIFICATION

Project Title:	Conserving Biodiversity and reducing habitat degradation in Protected Areas and their Buffer Zones		
Country(ies):	St. Kitts and Nevis	GEF Project ID: ¹	TBD
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5088
Other Executing Partner(s):	Ministry of Sustainable Development	Submission Date:	September 19, 2012
GEF Focal Area (s):	Biodiversity	Project Duration (Months):	48
Name of Parent program (if applicable): For SFM/REDD+ <input type="checkbox"/>		Agency Fee (\$):	337,163

A. FOCAL AREA STRATEGY FRAMEWORK:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Financing from the GEF TF (\$)	Indicative Cofinancing (\$)
BD-1: Improve Sustainability of Protected Area Systems	Outcome 1.1: Improved management effectiveness of existing and new protected areas.	Output 1.1. New protected areas (3) and coverage (7,439 hectares) of unprotected ecosystems	GEF TF	2,946,630	13,264,101
	Outcome 1.2: Increased revenue for protected area systems to meet total expenditures required for management.	Output 1.3. Sustainable financing plans (1)	GEF TF	275,000	300,000
Sub-Total				3,221,630	13,564,101
Project Management Cost ²				150,000	635,000
Total Project Cost				3,371,630	14,199,101

B. PROJECT FRAMEWORK

Project Objective: To expand and strengthen the terrestrial and marine protected area system, and reduce habitat destruction in PA buffer zones.						
Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Financing GEF TF (\$)	Indicative Cofinancing (\$)
Component 1: Strengthened Protected Area System	TA	Protected Areas Agency formally established and operating, ensuring effective conservation security over a PA estate of 12,714 ha. <ul style="list-style-type: none"> o PA Agency actively implementing functions across PA system (planning; financing; monitoring, enforcement) o Improved management effectiveness for overall PA system as measured by METT: METT scores of at least 60 for existing 	1.1 Strengthened Protected Areas Regulations: Regulations subsidiary to National Conservation and Environment Protection Act (NCEPA) approved and implemented (to establish new Protected Areas Agency, authorize PA user fees, and restrict resource uses within PAs and buffer zones -- e.g. restrictions on mining in upland areas and on fishing effort / practices) 1.2 Institutional Framework for PA System Management <ul style="list-style-type: none"> • Protected Areas Agency (PAA) established within the Ministry of Sustainable Development, responsible <i>inter alia</i> for: managing all PA units in country (with exception of the Brimstone Hill Fortress NP); 	GEF TF	675,000	2,640,000

¹ Project ID number will be assigned by GEFSEC

² GEF will finance management cost that is solely linked to GEF financing of the project

		<p>units (baseline to be determined during project preparation)</p> <ul style="list-style-type: none"> ○ Conservation of endemic species assured: Brown Tree Frog (<i>E. johnstonei</i>), 2 species of Green Lizards (<i>Anolis bimaculatus</i>, <i>Anolis watti schwarti</i>); Ground Lizard (<i>Ameiva erythrocephala</i>) 	<p>managing PA staff cadres; visitor management, and ecological resource inventories and conservation; managing PA system finances; and enforcing restrictions on resource uses within PAs and their buffer zones</p> <ul style="list-style-type: none"> ● National Environmental Committee (NEC) functioning to coordinate land use planning, management and enforcement within and outside of PAs, including mitigation of threats originating in the production landscape that negatively impact BD within terrestrial and marine PAs. <p>1.3 Financial sustainability framework for Protected Areas System: Increased national budget support for PAs brokered (40% over baseline spending); PA site-specific business plans created and implemented; user fee system established for all PA units, including entry fees, activity fees (e.g. diving), and tour company payments, with fees going to the new PAA</p>			
Component 2: Protected Area System Expansion and Strengthened Management of Existing and New Protected Areas	TA	<p>Operational PA estate is expanded from 3 to 6 PA units and from 5,275 ha. to 12,714 ha. (increase of 7,439 ha.)</p> <ul style="list-style-type: none"> ○ Legal establishment of 1 new terrestrial PA and 2 new MPAs ○ Threats facing PAs (encroachment / development, mining, invasive species, pollution / sedimentation) are reduced across an area of 12,714 ha*: ○ <i>No net loss of forest area in PAs</i> ○ <i>No net loss of mangrove, seagrass bed and coral reef areas in PAs</i> ○ <i>15% reduction in sedimentation levels at MPAs downstream of LID practices sites</i> ○ <i>25% reduction in lionfish population at targeted sites</i> ○ 6 ha. of vulnerable erosion “hotspots” conserved / rehabilitated as LID practices reduce pressures on the ecosystem 	<p>2.1 Protected Areas system expanded:</p> <ul style="list-style-type: none"> ● Nevis Peak Forest Reserve National Park and the Narrows Marine Reserve demarcated and legally established; existing Royal Basseterre Valley National Park demarcated (Note: An OECS financed regional project will demarcate & establish Sandy Point MPA) ● Management plans developed/implemented for 3 new PA sites and existing Brimstone Hill Fortress National Park; updated management plan for existing Royal Basseterre Valley National Park ● Basic infrastructure and equipment in place (i.e. administrative offices and ranger posts) <p>2.2 Management of Protected Area Units Institutionalized:</p> <ul style="list-style-type: none"> ● Updated inventory of flora and fauna within the Central Forest Reserve on St. Kitts and the Nevis Peak Forest Reserve on Nevis ● Assessment, monitoring and management programs for coral reef ecosystems within the newly established Narrows and Sandy Point MPAs, including installation of mooring buoys; implementation of invasive species (lionfish) reduction strategies; installation of fish aggregating devices (FADs), development of reef monitoring systems, including water quality (pollution and sedimentation) monitoring systems; training workshops in diving techniques, reef monitoring techniques and inspection of moorings, and public education and outreach programme for communities on coral reef conservation. 	GEF TF	2,546,630	10,924,101

	<ul style="list-style-type: none"> ○ Improved management effectiveness for individual PA units as measured by METT: METT scores of at least 40 for new units (baseline to be determined during project preparation) (* baseline and target values to be confirmed during further project preparation) 	<ul style="list-style-type: none"> • Low Impact Development (LID) practices implemented at 3 upland sites within or adjacent to the Central Forest Reserve that contribute significantly to excessive soil erosion and stormwater runoff, which directly impacts priority coastal ecosystems within MPAs • PA unit staff capacitated to undertake PA functions (PA planning; enforcement; infrastructure maintenance; visitor management; and ecological resource inventories and conservation) 			
Sub-Total				3,221,630	13,564,101
Project Management Cost ³				150,000	635,000
Total Project Costs				3,371,630	14,199,101

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (US\$)
National Government	St. Kitts Island: Min. of Sustainable Development; Min. of Agriculture and Marine Resources; Min. of Health and the Environment; Land Management Unit (LMU)	Grant	9,362,145
National Government	Nevis Island: Department of Physical Planning, Natural Resources and the Environment (DPPNRE); Ministry of Agri., Lands, Housing, Co-operatives and Fisheries	Grant	1,482,756
National Government	Wash Ghaut Slope Stabilization Project	Grant	1,104,200
Bilateral Aid Agency	Nevis Fisheries/Biodiversity Project	Grant	2,000,000
GEF Agency	United Nations Development Programme	Grant	250,000
Total Co-financing			14,199,101

D. GEF/LDCF/SCCF/NPIF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹:

GEF Agency	Type of Trust Fund	Focal area	Country name/Global	Project amount (a)	Agency Fee (b)	Total c=a+b
UNDP	GEFTF	Biodiversity	St. Kitts and Nevis	1,298,910	129,891	1,428,801
UNDP	GEFTF	Climate Change	St. Kitts and Nevis	1,818,180	181,818	1,999,998
UNDP	GEFTF	Land Degradation	St. Kitts and Nevis	254,540	25,454	279,994
Total Grant Resources				3,371,630	337,163	3,708,793

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1.1. THE GEF FOCAL AREA STRATEGIES:

1. 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 one new terrestrial PA and two 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; coral reef conservation) within specific PA sites, thereby strengthening PA management capacities and the ability to reduce or eliminate threats to

³ Same as footnote 2

biodiversity including habitat destruction and over-exploitation of marine biodiversity resources. The project will increase financial resources for PA management by ensuring increased national budget support for PAs; creating and implementing PA site-specific business plans; and establishing a user fee system established for all PA units, including entry fees, activity fees (e.g. diving), and tour company payments. The proposed project also will also implement measures to reduce habitat degradation in PA buffer areas—which are having an adverse impact on the ecological integrity of protected areas. Finally, the project will assist St Kitts and Nevis to achieve the Aichi targets—in particular target 11: By 2020, at least 17 per cent of terrestrial and inland water, 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. It supports the following goals of the CBD Program of Work on Protected Areas: 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.

A.2. National Strategies and Plans or Reports and Assessments under Relevant Conventions, if applicable

2. The project is consistent with Government's priorities as set out in national policy documents. Among these is 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 15-year Nevis Physical Development Plan (a component of the NPDP, but the draft plan has not yet been approved by the Nevis Island Assembly) 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. 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". Similarly, the project supports the goals of the Adaptation Strategy in Response to The New EU Sugar Regime 2006 – 2013, which has sought to reconfigure the economy of St. Kitts and Nevis around a more diversified economic base after the closure of the sugar industry in 2005, and identifies the need for capacity building in land management and agricultural production, and 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 focus of the project on biodiversity conservation 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 (e.g. enacting the National Conservation and Environmental Management Act (NCEMA); declaring Nevis Peak as a National Park and creating a Management Plan for the Nevis Peak NP).

B. PROJECT OVERVIEW:

B.1. The Baseline of the Project and the Problem that it seeks to Address:

Country Overview, Socio-Economic Context and Ecosystem Services

3. The Federation of St. Kitts and Nevis (SKN) consists of two islands located in the northern part of the Lesser Antilles chain of islands in the Eastern Caribbean. The two islands, separated by 3 km., have a combined land area of 269 sq. km, with St. Kitts at 176 sq. km. and Nevis at 93 sq. km. Both islands are volcanic in origin, with central mountain ranges that dominate the landscape and radiate downward to the coasts. Most flat land occurs near the coast, and as a result, most urban and agricultural developments and settlements are located there. SKN has a population of some 53,000 (2011). SKN currently ranks 7th in the Human Development Index (2011) among Caribbean countries and 3rd 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. Economic activity contracted by 2.0% in 2011 as a result of the slow recovery in the global economy.

4. Terrestrial Ecosystem / Species Diversity: St. Kitts and Nevis' flora is very diverse and characterized by high endemism. Forests contain approximately 926 plant species, 46 of which are endemic to St. Kitts and Nevis and the Lesser Antilles. There are also many species of birds and mammals found in St. Kitts and Nevis that are endemic to the Lesser Antilles. Of the 116 species of birds found in St. Kitts and Nevis, 113 are indigenous species and 3 are non-native species. Of the 72 native, non-resident species,

22 are seabirds, waterfowl or other aquatic species, 26 are shorebirds, 7 are non-passerine landbirds and 17 are passerine landbirds. The terrestrial fauna of the islands is mainly comprised of introduced animals, however SKN does have a number of endemic species, including the Brown Tree Frog (*E. johnstonei*), the Ground Lizard (*Ameiva erythrocephala*), and two species of Green Lizards (*Anolis bimaculatus* and *Anolis watti schwarti*). The only native mammals of the islands are eight species of bats, including the Velvety House Bat (*Molossus molossus*). 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 northwestern 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).

5. Coastal and Marine Ecosystem / Species Diversity: 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. 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. Mangroves are not abundant, the main and most extensive mangrove habitat in St. Kitts occurs in the Southeast Peninsula, as well as white mangrove (*Laguncularia racemosa*) stands that surround fresh and brackish water lagoons on Nevis. 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. There are 462 species of marine fish tabulated for St. Kitts and Nevis of which 16 species are deemed threatened. The Green Turtle (*Chelonia mydas*), Hawksbill Turtle (*Eretmochelys imbricata*), and the Leatherback (*Dermochelys Coriacea*) have been recorded (the first two are found throughout the two islands), all of which are listed as endangered species. Migrant mammals include the Humpback Whale (*Megaptera novangliea*), Sperm Whale (*Phystercatadon*), and bottle-nosed, rough-toothed and spinner dolphins. There are a large number of resident and migratory birds that depend on the mangrove and pond habitats for feeding and nesting.

6. Protected Areas System: The existing protected areas system on St. Kitts and Nevis is relatively small and managed with very limited resources. There are no marine protected areas yet designated in the country, while in the terrestrial landscape only three national park units (Royal Basseterre Valley, Central Forest Reserve, and Brimstone Hill Fortress) have been legally established. The Brimstone Hill Fortress National Park is an important historical site and also includes a small area of dry forest ecosystem; 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. The Royal Basseterre Valley National Park is a critical area for protecting very important ground water resources for St. Kitts, as well as providing key ecotourism attractions. The existing Central Forest Reserve National Park occupies all lands above 1,000 feet in elevation on St. Kitts and is important for protecting biodiversity, water resource provision, and supporting ecotourism and recreation activities. The Department of Physical Planning and Environment (DPPE) within the Ministry of Sustainable Development (MSD) is responsible for the management of all protected area in St. Kitts and Nevis. However, the DPPE does not have field personnel at any of the protected areas in the country to provide ongoing monitoring, and an office established at the Central Forest Reserve site in 2009 has not been assigned permanent staffing..

Table 1: Protected Areas in St. Kitts and Nevis

PA Type	Official Name	Legal / Management Status	Management Authority	Land Area (ha)	Marine Area (ha)	Total Area (ha)
National Parks	Central Forest Reserve (<i>IUCN I</i>)	Legally established; Management Plan	DPPE	5,060	0	5,060
	Brimstone Hill Fortress (<i>IUCN I</i>)	Legally established; no Management Plan	Brimstone Hill Fortress National Park Society	15	0	15
	Royal Basseterre Valley (<i>IUCN VI</i>)	Legally established; Management Plan	Basseterre Valley Advisory Committee	200	0	200
	Nevis Peak (<i>IUCN II</i>)	Does not exist yet	NA	2,250	0	2,250
Marine Resources Management Area	The Narrows (<i>IUCN VI</i>)	Does not exist yet	NA	1,690	3,490	5,180
Marine Protected Area	Sandy Point (<i>IUCN IV, V, VI</i>)	Does not exist yet	NA	0	9	9
Total				9,215	3,499	12,714

7. Legal / Regulatory Context: 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

parcs, 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 commitments to international environmental conventions. For this reason, a National Conservation and Environmental Management Act (NCEMA) was drafted in recent years to expand and build upon NCEPA; the draft NCEMA is currently being reviewed and is expected to be enacted by the end of 2012. The Fisheries Act (1992) and its Statutory Rules and Orders (1995) cover all aspects of fisheries management (establishment of a fisheries advisory committee, access agreements, licensing, research, enforcement, and registration of fishing vessels) as well as conservation measures (closed seasons, gear size restrictions and exact size limits), the creation of marine reserves, and coral reef conservation). 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).

8. Ecosystem Services & Productive Activities: Outside of protected areas, the vegetative communities in SKN have been greatly disturbed by human activity, particularly in lowland areas where intensive land use has removed the natural vegetation. 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. Approximately 80% of the land on St. Kitts is owned by the Government. In contrast, on Nevis where large-scale sugar and cotton production ended many decades ago, 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 elevation, while land at mid-level elevations are dominated by housing and other infrastructure developments. The central high elevations above 1,000 feet are predominantly forest clad—and will be included in the proposed Nevis Peak National Park.

9. 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 (sugar accounted for 16.7% of GDP in 1981, 7.44% in 1991, and 4.6% by 2005), 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 significant 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 (gullies) 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. With the decline of sugarcane production, loss of fertile topsoils, flooding and land-based pollution of the sea, including coral reefs and others sensitive areas, have increased, and recharging of underground coastal aquifers (which supply over 90% of the population with potable water) has declined.

10. 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. In 2011, tourism contributed 7.5% (direct) and 28.0% (indirect) of total GDP, and accounted for 7.4% (direct) and 26.4% (indirect) of employment in the country. After a downturn in recent years due to the global financial crisis, tourism is expected to grow rapidly in the coming years (7-10% growth in 2012, and 4.5-5% growth per year in the following decade. The growth of tourism over the past decade has had significant negative impacts on the coastal and marine ecosystems of the country, including ecosystem destruction from construction of hotels and other facilities, beach erosion, pollution, and visitor impacts of coral reefs. Fishing is an important source of employment in SKN, but overfishing in near shore areas has resulted in the decline of some targeted species.

11. **Threats to Biodiversity and Ecosystems Services** in St. Kitts and Nevis can be classified within the following categories:

- Habitat Destruction/Fragmentation: Historically, human settlement in SKN has been concentrated along the coastlines, but as available land in coastal areas has decreased, development has shifted to the upper slopes and a number of residential settlements have been established on former sugar lands directly adjoining existing or proposed protected areas. Such

development has taken place without taking account of ensuring sufficient vegetative cover (re-vegetating land after development is done), and as a result, has created significant deforestation, soil erosion, and improper waste (liquid and solid) disposal in these areas. Settlement in these areas has also increased pressure on wildlife and the threat of fires in and around PAs. In SKN's coastal zones, the lack of PAs has allowed tourism development to take place in sensitive ecosystems, thereby 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. In addition, the dropping of anchors by diving and fishing boats has caused significant damage to coral reef ecosystems in some areas of the country.

- Degradation of Land and Water Resources and Ecosystem Services: On St. Kitts, farmers have moved into higher elevations adjoining existing / planned PA sites to clear forests and engage in subsistence or small-scale commercial cultivation. However, because of the slope gradients, heavy rainfall, lack of experience in upland cultivation, and limited resources of farmers for terracing, these activities are creating significant soil erosion and pollution of streams, rivers, and coastal waters. The mining of aggregate materials for construction uses has also scarred the landscape in these areas and created new ghaunts, thereby increasing soil erosion and the degradation of freshwater ecosystems and downstream coral reefs through sedimentation.
- Overexploitation of biological resources: Increased fishing effort in nearshore areas of SKN, combined with a lack of protected breeding/nursery sites or no-take zones, has resulted in steady declines in economically and ecologically important reef fishes, conchs, and lobsters. Complicating the effort to sustain these species is the arrival of the Indo-Pacific lionfish, which are rapidly invading the waters of the Caribbean, and were first spotted in the waters of SKN in 2010. 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.
- Climate Change Threats: With increased frequency of hurricanes, St. Kitts and Nevis can expect to see accelerated habitat destruction, particularly in coastal areas and the steep interior slopes of the islands. Erosion from point sources (e.g. quarries) † and non-point sources (e.g. farm lands) can be expected to increase. With increased occurrence of drought events, the potential for forest fires that destroy native habitat and increase erosion also will increase. Along the coastlines, mining of sand for construction and destruction of coral reefs increases the level of exposure of the coastal areas to flooding from sea surges and hurricanes.

Baseline Spending & Business as Usual Scenario

12. The baseline project is costed at US\$25.44 million over 4 years. The Government provides significant baseline spending in support of the management of protected areas and sustainable land and natural resource management activities. Within the Ministry of Sustainable Development (MSD), the Department of Physical Planning and Environment (DPPE) has the primary responsibility for the management of all PAs; administration of the National Conservation and Environmental Protection Act (NCEPA); and the review of development applications and evaluation of EIAs. The annual budget for these activities is US\$810,000 per year. In the Ministry of Agriculture and Marine Resources (MAMR), the Department of Fisheries is responsible for fisheries management, and coral reef monitoring and conservation; while the Department of Agriculture oversees agricultural production, including regulations and outreach and training for farmers on agricultural and livestock production, processing and marketing. The MAMR spends US\$1,000,000 per year on activities relevant to this project, including coral reef conservation and soil erosion / water runoff control. Other relevant baseline activities include those of the Land Management Unit (LMU), which ensures that development and public sector investment programmes in SKN take account of environmental conservation, with an annual budget of US\$65,000; and the Ministry of Health and Environment, which conducts water quality monitoring with an annual budget of US\$440,000. 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. It is important to note that while all federal ministries have authority over the entire country, the island of Nevis has its own local government/assembly and has "mirror" departments, including the Department of Physical Planning, Natural Resources and the Environment (DPPNRE), which oversees environmental management and development control with an annual budget of US\$275,000; and the Ministry of Agriculture, Lands, Housing, Co-operatives and Fisheries, whose Departments of Agriculture and Fisheries have an annual budget for activities relevant to the project of approximately US\$95,000. In addition to these recurring government budget allocations, the GSKN is also providing baseline spending on various programs and projects for sustainable land and resource use and conservation that comprise some of the co-financing for this project. The Wash Ghaut Slope Stabilization Project (US\$1,104,200) is demonstrating biotechnical slope stabilization measures using living plant materials to reduce erosion in the rural community of Cayon, including simple erosion control with grass and legume seeding and more complex slope stabilization with live cuttings and other plants. The Nevis Fisheries/Biodiversity Project (funded through a grant from the Japan International Cooperation Agency) is intended to improve fisheries sector production and the distribution system for marine products, including activities to reduce the pressure on inshore fisheries through seasonal fishing regulations, and the exploration of offshore fishing options and support for product development and marketing of offshore fisheries products. US\$2,000,000 (for fishing regulations, shifting of fishing effort away from nearshore coral reefs, etc.) of this project is relevant as project co-financing.

13. Several other relevant baseline projects are ongoing in SKN although they do not constitute project co-financing. The

Drainage Infrastructure Project (US\$4,416,799), 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. The Land Cadastre Project (US\$3,104,500) 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. The Correction of Land Slippage Project (US\$1,104,200) will maintain and protect the coastal areas at Pump Bay, Sandy Point (site of a proposed MPA) by constructing a sea defense wall. The Fort Thomas Sea Defense Wall (US\$1,729,913) will maintain and protect the coastal areas at Fort Thomas, Fortlands, Basseterre through the revetment of the slope to prevent further erosion. Finally, the Upgrade of Legislation and Establishment of Dedicated Land Registry Project (US\$1,241,800) will establish a dedicated Land Registry that will promote long-term investment in land improvement and establish a basis for reliable machinery for proper land use planning.

14. Legislation authorizing the National Protected Area Trust Fund (NPATF) is scheduled to be enacted by December 2012, to become operational by mid 2013, and to begin to access funds from the Caribbean Biodiversity Fund in 2013. The NPATF is expected to provide significant additional funds for PA planning and operations at the national level and for targeted PA sites, thereby complementing the proposed project. If the NPATF is operational as scheduled by mid 2013, it will constitute additional co-financing for the proposed GEF project. Several international organizations have conservation programs in SKN. Birdlife International has designated the St. Kitts Central Forest Reserve as an Important Bird Area (IBA), and is undertaking the following activities there: IBA identification and documentation; site conservation actions in concert with community-based Site Support Groups; organizing a Caribbean Endemic Bird Festival; education and awareness initiatives; and local NGO capacity development. Conservation International collaborates with the St. Kitts Turtle Monitoring Network in the conservation of beaches frequented by turtle species for nesting by providing technical assistance on conservation techniques and raising public awareness on the importance of turtle and beach protection. Finally, St. Kitts and Nevis (SKN) is part of the Caribbean Challenge as part of CAR-SPAW-RAC to support and manage new and existing protected areas. The objective is to facilitate participating countries to protect 20% of their marine and coastal habitats by 2020. SKN has created a Marine Zoning Committee with responsibility for establishing a Marine Management Area (MMA) (in the area of “The Narrows” between the islands of St. Kitts and Nevis). The Committee will be reviewing the coordinates of the MMA boundary by October 2012 and the MMA will be fully established by 2014.

15. Despite these various programs and initiatives, 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. Three main barriers hamper the achievement of this long-term solution:

Barriers	Description of Barriers
Lack of systemic approach and mechanisms for protected areas management	Currently, the three legally established protected areas in SKN are managed by three different agencies (one government and two non-governmental). This diffusion of authority for protected areas 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. This uncertainty regarding the status of and responsibility for PAs in SKN has been compounded by the paucity of specific regulations under the NCEPA for PA management, including regulations to authorize the collection and retention of user fees, to control resource use, or to establish a centralized authority for PA management. Furthermore, because there are no existing marine PAs in SKN, reef protection measures against overfishing and visitor damage (anchoring and other boat damage; taking of coral by divers, etc.) are limited to intermittent monitoring by the Fisheries Department and the Coast Guard, while regulations to control mining activities in upland areas (i.e. within the existing Central Forest Reserve NP and the proposed Nevis Peak Forest Reserve NP) do not have sufficient specificity or provisions for penalties. Compounding these regulatory shortfalls is the lack of enforcement capacity; at present there is no capacity to monitor mining in higher elevation areas that are difficult to access; in addition, although existing legislation forbids large-scale sand removal from beaches, illegal sand removal continues. Financing of protected areas in SKN is suboptimal and heavily dependent upon government appropriations (the Brimstone Hill Fortress National Park is the only PA with a visitor fee system in place. As noted above, tourism is expected to grow rapidly in the coming decade, and eco-tourism in particular is being promoted in the country, with protected areas constituting one of the primary attractions. To date, however, this potential source of financing for protected areas remains untapped.
Insufficient geographic	To date, Saint Kitts and Nevis has established three terrestrial protected areas, all of which are located on the island of St. Kitts. However, there are no terrestrial PAs on the island of Nevis, nor are there any marine PAs at all

<p>coverage and limited management of Terrestrial and Marine PAs and inadequate management of development in areas adjacent to or upstream of protected areas</p>	<p>in the country, resulting in significant gaps in the ecological coverage provided by the existing PA units. As noted, none of the PA units in SKN have field staff, and as a result the country has very limited capacity for managing or monitoring PAs, enforcing controls on resource use, or developing and managing tourism facilities. This is particularly urgent in the case of MPAs, as the country does not have the personnel, financial resources, or equipment to develop and implement marine ecosystem conservation activities, including coral reef conservation. Planning processes for PA units are also inadequate; at present, only two PA units are operating with approved management plans (one of which needs to be updated). Effective planning and management is further constrained by a lack of information on biodiversity; St. Kitts and Nevis continues to rely on biodiversity inventories completed in the 1940s, which prevents resource managers and other planners from determining whether species are healthy, vulnerable, or extinct, and from determining the status trends for given species. Existing coordination between the various agencies with responsibility for environmental management in SKN is weak and involves very little community or private sector participation. 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 stormwater runoff in productive landscapes adjacent to existing and planned PAs and negative impacts on downstream marine ecosystems is severely limited by a lack of information sharing or coordinated planning and management between agencies. 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. Combined with poor enforcement, this lack of understanding results in unsustainable agricultural practices, poor siting of infrastructure, and the failure to revegetate slopes after infrastructure development.</p>
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B.2. Incremental /Additional Cost Reasoning (describe the incremental (GEF Trust Fund):

16. **Component 1: Strengthened Protected Area System Frameworks and Capacities:** Activities under both Components 1 and 2 will build on the project “OECS Protected Areas and Associated Livelihood (OPAAL)” (2005-2011), a regional initiative whose objective was to “contribute to conserving biodiversity of global importance in the OECS by removing barriers to the effective management of protected areas, and to increase the involvement of civil society and the private sector in the planning, management and sustainable use of these areas”. In St. Kitts and Nevis, one of the primary outcomes of the OPAAL project was the creation in 2010 of a Protected Areas System Plan for SKN that lays out a long-term vision for the expansion and management of PAs in the country, and the proposed project will constitute the first focused effort to implement key priorities outlined in the PASP. The Ministry of Sustainable Development, with support from the Ministry of Justice and Legal Affairs, will undertake activities to strengthen the entire PA system, including the establishment of a new Protected Areas Agency within the Ministry of Sustainable Development, responsible for managing all protected areas in the country (with the exception of the Brimstone Hill Fortress NP, which will remain under management of its own Society); for pushing forward the implementation of the Protected Areas System Plan; and for the creation of new regulations (under the National Conservation and Environment Protection Act) to clarify institutional roles in PA management, to authorize user fees, and to support restrictions on resource uses within protected areas and their buffer zones (including restrictions on mining activities, hunting and burning of fields in upland areas and restrictions on fishing effort for various species, seasons, etc.). Furthermore, because many of the biggest threats to BD and ecosystem functioning within PAs (e.g. soil erosion and sedimentation; invasive species; fires) originate in the adjacent productive landscape, the project will support the creation of a National Environmental Committee (NEC) to establish and strengthen institutional coordination for the planning and management of activities within PAs and in the immediately surrounding landscape. The NEC will include government agencies (including the new Protected Areas Agency), NGOs (including partners in PA management), community organizations and the private sector. To support enhanced PA management, the project will undertake several activities to complement PA funding that will be generated by the regional Caribbean Biodiversity Fund (CBF) and the National Protected Area Trust Fund (NPATF) established through an OECS project (see section B.6. for details), whose effective use will be enhanced by the project because of the improved management; increased financial and administrative skills at PA staff level. Among these activities will be to establish and implement a visitor fee system for all protected areas in SKN, whereby fees collected will go directly to the new Protected Areas Agency (ecotourism is an important and growing activity in St. Kitts and Nevis, and many ecotourism attractions such as diving sites; mangrove forests; waterfalls and vista points are located within PAs. Other financing activities will include the creation of PA site-specific business plans; working to mainstream the needs of PA financing into national development planning; increasing government budget allocations for PAs; and working with private sector partners to expand tourism facilities at PAs in order to increase concession revenues. To increase support for PA financing and management objectives, the project will undertake general public awareness campaigns on the value of PAs (for tourism; ecosystem services, etc.) as well as campaigns targeting communities in buffer zones and resource users such as fishermen. Project activities will also focus on improving national capacity for PA management, through technical instruction and on-the-job training provided to government staff (Dept. of Physical Planning and Environment, and to staff of the Protected Areas Agency once it has been established) and partners (such as the Brimstone Hill Fortress National Park Society) in areas such as protected area planning processes and tools; PA regulations; development and maintenance of trails and other infrastructure; visitor management; ecotourism development; outreach and education; and

biodiversity inventories.

17. Component 2: Protected Area System Expansion and Strengthened Management of Existing and New Protected Areas:

The project will establish at least one new terrestrial protected area as well the first two marine protected areas in the country. The Nevis Peak Forest Reserve National Park will encompass all lands above 1,000 feet elevation on the island of Nevis, including much of the remaining intact forest on the island; this area is important for protecting biodiversity, but also for water resource provision, and ecotourism and recreation. Establishment of this NP will increase the coverage of key ecosystems types including Elfin Woodland, Rainforest, Montane Thicket, Palm Brake, and Riparian Forests. The Narrows Marine Reserve will encompass coastal areas on the northwest coast of Nevis and the southeast coast of St. Kitts, as well as the marine area linking the two islands, an area that includes coastal mangrove forests, seagrass beds, and significant coral reefs. The second MPA will be established at Sandy Point on the northwest coast of St. Kitts, an area with attributes similar to the Narrows including high levels of marine biodiversity and important fish stocks (for this site, the OECS regional project will demarcate and establish the area). Establishment of these two MPAs will increase coverage of key ecosystems types including Fringing and Deep Coral Reefs, Mangrove Systems, Turtle Nesting Beaches, Seagrass Beds and Salt Ponds. Each of these three sites (and their buffer zones) will be demarcated and legally established. Management plans will be developed and implemented by this project for all three of the new PA sites, as well as for one existing PA (Brimstone Hill Fortress National Park) that does not have a management plan, and for another existing PA (Royal Basseterre Valley) that needs to update its current management plan. The project also will complete updated inventories of flora and fauna (abundance / population size, distribution, range and habitats) for SKN's two forest reserves (the Central Forest Reserve on St. Kitts and the Nevis Peak Forest Reserve on Nevis), which are largely untouched and have the country's highest concentrations of native flora and fauna. For the Central Forest Reserve, the project will build on the partial inventory carried out under the OPAAL project. These inventories will support improved conservation and will allow Protected Area managers to monitor changes in populations and habitat going forward and adapt management strategies accordingly. At the site level, PA rangers, trail guides and wardens will receive on the job training in eco-tourism development, outreach and education on PAs and conservation techniques, PA management (regulation and enforcement), trail development, infrastructure maintenance, and ecological resource inventories.

18. The project will establish a Coral Reef Conservation and Resilience Programme at the newly established Narrows and Sandy Point MPAs. At present, information on the condition of reefs and reef species is inadequate for properly assessing the state or trends in coral reef ecosystem health. To address this, the project will establish a system to monitor the extent and health of coral reef ecosystems and the impacts of various human activities or climate change factors on the reefs over time. The project will install mooring buoys where boat anchoring is a significant threat (SKN has already installed mooring buoys at a few sites with demonstrable positive impacts for surrounding coral reefs); investigate and test various strategies for control of invasive lionfish populations to reduce their potentially devastating impact on coral reef ecosystems, including building on existing outreach efforts to encourage fishermen to target this species; and install at least 5 fish aggregating devices (FADs) to reduce the fishing effort on coral reef fisheries within protected areas (building on lessons learned from previous such efforts in the country). The project will implement water quality monitoring systems for rivers that empty into the sea where coral reefs are located, including those watersheds where LID practices are implemented, as well as important watersheds for human use (such as the Royal Basseterre NP). 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. To enable these coral reef conservation efforts, the project will provide technical and on the job training for environmental officers of DPPE and the Department of Fisheries, as well as local CSOs, CBOs and NGOs and community members, in diving techniques, reef monitoring techniques, and inspection of moorings, which will establish a knowledge base for the long-term sustainability of the coastal zones around St. Kitts and Nevis. The project also will carry out a public education and outreach programme for communities on coral reef conservation, targeting 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. Finally, the project will reduce the impact of soil erosion on MPAs through the implementation of Low Impact Development (LID) practices. SKN suffers from significant soil erosion during heavy rainfall events, particularly in "hotspot" areas (e.g. ghauts and other steep slopes) where a high percentage of sediments are washed away and deposited in near shore areas significant negative impacts on coral reef health, marine biodiversity and fisheries resources. The project will implement LID practices such as grassed contours, grassed swales, pervious pavements and bioretention areas, in order to reduce stormwater flows and increase retention of sediments at selected hotspots. Project activities will take place at 3 upland sites within or adjacent to the Central Forest Reserve that contribute significantly to excessive soil erosion and stormwater runoff that directly impacts priority coastal ecosystems: Wash Ghaut (3 ha.); College Ghaut (2 ha.) and Westbourne Ghaut (1 ha.). At each site, implementation of LID practices will include the installation of automated rain gauges/weather stations and the technical training and field level participation of environmental officers from the Dept. of Agriculture and the Ministry of Health and Environment, CSOs, CBOs and NGOs, and local farmers and other community members, thereby establishing the data and local capacity necessary for the participatory design and implementation of LID practices. The data collected and analyzed at the demonstration sites will be utilized to develop a feasibility template for the replication of LID practices at other sites, with design parameters specific to St. Kitts and Nevis.

19. Global Benefits

Global environmental benefits arising from the project derive from the added security vested in biodiversity. Specific benefits will include:

- Expansion of the PA system through establishment of three new PA units, providing increased protection for 3,940 hectares of terrestrial ecosystems and 3,499 hectares of marine ecosystems and a managed buffer area of 4,742.4 acres;
- Inclusion of critical ecosystems within the protected areas system, including increased coverage of 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)
- Recovery in populations of important plant and animal species, including: the endemic Brown Tree Frog (*E. johnstonei*), the Ground Lizard (*Ameiva erythrocephala*), and two species of Green Lizards (*Anolis bimaculatus* and *Anolis watti schwarti*); eight species of native bats, including the Velvety House Bat (*Molossus molossus*), and the endangered Green Turtle (*Chelonia mydas*), Hawksbill Turtle (*Eretmochelys imbricata*), and the Leatherback (*Dermochelys Coriacea*)

B.3. Socioeconomic Benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits.

20. The proposed project will have various immediate socioeconomic benefits for the Federation 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 etc.) is crucial to reducing the vulnerability of the country to climate change impacts. In addition, because SKN’s economy is highly dependent on tourism centered on coastal/marine areas, protection of coastal 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 conserving both terrestrial and marine ecosystems that are attractions for visitors. In the area of PA buffer zones, reducing erosion and conserving ecosystem functions will serve to maintain agricultural and forest product-related livelihoods and contribute to overall food security, particularly soil stabilization through LID practices that will protect communities from flooding, erosion etc., and also contribute to the conservation of flora and fauna used by local communities for medicinal purposes. Improved coastal water quality, creation of FADs, and fisheries habitat protection, 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. Income generation will be increased for local communities through eco-tourism employment (in scuba diving / snorkelling and tour guiding, and participation in LID practices and water quality monitoring) and the sale of souvenirs, food, craft products and BD-based medicines. Generation of these socio-economic benefits in the buffer zones will benefit protected areas by increasing local support for PA conservation by demonstrating the social and economic benefits that PAs provide to local communities (as noted above); by increasing the participation of local community members in PA management related activities (e.g. water quality monitoring, LID practices, etc.); and by generating increased visitation and related income for PAs from visitor and eco-tour fees.

21. Individual capacities—including local farmers and women’s groups—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.

22. Institutional and Financial Sustainability: Institutional capacities will be strengthened for protected areas planning and management through participation in development of management plans, biophysical inventories, coral reef conservation and monitoring, and Low Impact Development practices. 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 financial sustainability 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, by developing site-specific business plans, and by involving new private sector partners in tourism facilities to increase concession revenues from recreation activities.

B.4. Indicate Risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:

23. The main risks and their mitigation measures are:

Risk	Rating	Mitigation Measures
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Current institutions have inadequate capacity or resources to manage protected areas	Medium	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 resources are not sufficient to support effective protected area planning and operations over the long-term	Low	Ongoing efforts by the Government of St. Kitts and Nevis to establish a National Protected Areas Trust Fund and to participate in the new Caribbean Biodiversity Fund (through the regional project Sustainable Financing and Management of Eastern Caribbean Marine Ecosystem), combined with the establishment of a PA user fee system through this project, are expected to provide sufficient funding for greatly enhanced and effective PA management. In addition, the project intends to build upon already existing community and privately led initiatives that will support PA management objectives, including existing coral reef and sustainable fisheries management activities and tourism concessions within PA units. Furthermore, the project will increase awareness among policymakers and the general public on the environmental and socio-economic benefits produced by protected areas, thereby increasing support for government budgetary allocations for the new Protected Areas agency and the PA sites under its management.
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	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 native ecosystems, thereby increasing their likelihood of persisting in the face of climate change impacts such as increased temperatures and more frequent hurricanes and droughts. Furthermore, existing and planned terrestrial protected areas on both Saint Kitts and Nevis islands will encompass the entire upland areas of each island, thus maximizing both the potential for species to adapt to changed conditions
Tourism and housing development in PA buffer zones	Low	The main concern from tourism activities is damage to coral reefs. The main concern from housing and tourism development is insufficient planning to ensure proper drainage and excessive removal of vegetative cover during construction. To mitigate these risks, the project will undertake a number of measures: <ul style="list-style-type: none"> • Effective dissemination of information on coral reef conservation through various media: posters, radio/tv, blogs, social networking sites, etc.). • Training of boaters on mooring techniques; increased monitoring, enforcement and outreach to boaters (tourists; dive boats; fishermen, etc.) on mooring • Strengthened enforcement of existing building regulations and continuous inspection of development sites; enhanced coordination and information sharing between different government agencies to ensure that conservation (including identification of erosion hotspots and critical habitat areas) is integrated into land use planning and especially future housing or tourism developments

B.5. Key Stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

24. The key stakeholders involved in implementation of the project are:

Stakeholder	Expected Role in Project Implementation
Ministry of Sustainable Development (MSD)	The Department of Physical Planning and Environment (DPPE) within the MSD will have the lead responsibility for project implementation, and will have direct responsibility for the protected areas elements of the project (until such time as a new Protected Areas Agency is established). The Department of Economic Affairs and Public Sector Investment Planning within the MSD will ensure that policy and legislative frameworks are in place to support all aspects of the project.
Ministry of Agriculture and Marine Resources (MAMR)	The MAMR will share responsibility for ensuring that policy and legislative frameworks are in place to support all aspects of the project. Within the MAMR, the Department of Fisheries will take lead responsibility for coral reef monitoring and conservation.
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 institutional coordination efforts for protected areas and sustainable resource management in surrounding buffer zones.
Water Services Department	This department will take the lead role on the implementation of Low Impact Development practices and will be a key stakeholder in providing technical information on the status of watersheds.
Nevis Island	The NIA and DPPNRE will oversee the implementation of all site-specific activities on the island

Administration (NIA) and Nevis Department of Physical Planning, Natural Resources and the Environment (DPPNRE)	of Nevis and will coordinate with their national-level counterparts on the development of national plans, policies and laws / regulations addressed by the project
Non-Governmental Organizations (NGOs), Community-Based Organizations (CBOs), and Civil Society Organizations (CSOs)	The involvement of NGOs and CBOs is crucial for the successful implementation of the project – these organizations will ensure that information is disseminated at the community level and that community concerns and needs are adequately addressed by this project, and they will be involved in monitoring to ensure the conservation of the natural resources at the community level. Primary partners are the St. Kitts National Trust, the Nevis Historical and Conservation Society, the Brimstone Hill Fortress National Park Society, the St. Kitts Sea Turtle Monitoring Network (for coral reef conservation), and the Environmental Beautification Group and St. Kitts - Nevis Grassroots Environmental Recycling Systems for forest management / reforestation and LID practices. NGOs, CBOs, and CSOs will be key stakeholders in creating the new PAs and also in the PA buffer zones. They will be involved in 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. As noted above, CSOs also will be partners in the implementation of eco-tourism development activities (diving / snorkelling; eco-tours; etc.), in outreach and education on PAs and conservation techniques etc., and in the implementation of LID practices.
Private sector	The private sector as well as academia will be involved in and benefit from training workshops and dissemination activities. Small businesses that utilize the country's natural resources for their livelihoods, such as farmers, taxi/tour operators, dive operators, beach bar owners, water sports companies, will benefit from the implementation of the project measures and aid in awareness of the project benefits.
Statutory Bodies	The Chamber of Industry and Commerce will disseminate information to its members and the private sector more generally, as well as the general public.

25. The Department of Physical Planning and Environment (DPPE) and the Department of Economic Affairs and PSIP (DEA/PSIP) are both departments within the Ministry of Sustainable Development, which plays a crucial role in the social, physical, economic and environmental advancement of St. Kitts and Nevis. The DPPE and DEA/PSIP will collaborate on the monitoring and evaluation of the day-to-day progress of the project. On-going discussions and planning will be undertaken with the various Line Ministries on both St. Kitts and Nevis. For example, the Ministry of Agriculture and Marine Resources and the Water Services Department on St. Kitts and the the Nevis Island Administration and the Nevis Department of Physical Planning, Natural Resources and the Environment on Nevis will play leading roles in many buffer zone activities, including LID practices, water quality monitoring, and marine resource conservation and monitoring. The Ministry of Justice and Legal Affairs will be a critical partner for the Department of Economic Affairs in consolidating the PA legal and regulatory framework. Government agencies responsible for housing and tourism development will be consulted closely on the development of new development regulations and guidelines. Most or all of these agencies will participate in the project steering committee, which will meet on a quarterly basis in order to coordinate project activities, clarify queries and formulate solutions to any problems in a timely manner.

B.6. Outline the Coordination with other Related Initiatives:

26. 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-sectoral coordination on biodiversity conservation and sustainable land management 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:

- **Sustainable Financing and Management of Eastern Caribbean Marine Ecosystem Project:** GEF/WB/TNC project for US\$8.75 million has the objective to “contribute to enhancing the long-term sustainability of Protected Area networks in the Participating Countries”, with 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 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. This regional project is expected to play the critical role in enhancing the financial sustainability of SKN's PA system and allowing for its expansion with new PA units; the proposed GEF 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; and by brokering new funding sources and establishing a PA fee collection system.

- St. Kitts and Nevis is a participating state in the project Sustainable Management of the Shared Marine Resources of the Caribbean Large Marine Ecosystem (CLME) and Adjacent Regions (2009-2013). This GEF-funded project is being executed by UNDP, with UNESCO-Intergovernmental Oceanographic Commission as the co-executing agency. The overall objective of the project is the sustainable management of the shared living marine resources of the Caribbean LME and adjacent areas through an integrated management approach that will meet the WSSD target for sustainable fisheries. The proposed project will seek to utilize lessons learned and best practices for nearshore fisheries management and coral reef conservation developed by this project at other sites in the Caribbean, relying on fact that the project executing agency (the Ministry of Sustainable Development) for the proposed GEF project was actively involved on the steering committee of the CLME project.
- Implementing Integrated Land, Water & Wastewater Management in Caribbean SIDS project (2012-2016) with GEF funding of US\$20.4 million. In St. Kitts and Nevis, the lead agencies are the Ministry of Sustainable Development and Ministry of Agriculture on Saint Kitts, and the Nevis Island Administration on Nevis. Activities in SKN will include: 1) sustainable land management in various locations on the island that were formally under intensive sugarcane cultivation; management of the Basseterre Aquifer to reduce wastewater discharges into the environment; and land, forest and water conservation measures within critical locations on Nevis that have been identified as potential degradation hotspots, including wastewater management control; 2) develop and apply national IW related indicators and strengthen the scientific basis for effective monitoring and assessment in the LD and related BD Focal Areas, by developing improved methods for multi-scale assessment and monitoring of LD trends, and for impact monitoring of GEF investment in SLM and ecosystem services maintenance; 3) policy, legislative and institutional reforms and capacity building for IWRM / SLM, including reforms that address lack of financing and policy, tools and guidelines for the future sustainable use of water resources and sustainable forest management, waste-water management, and protection from drought; as well as coordination among relevant national sectors and strengthening and expansion of National Inter-sectoral Committees (NICs), harmonization with national plans, and implementation of programmes of cross-sectoral sensitization and awareness raising, along with training and capacity building in the identified national institutions and private sector; and 4) Knowledge Exchange, best-practices, replication and stakeholder involvement to identify and share best practices and lessons in relation to water resource management/use methodologies; consultative dialogues to ensure engagement of relevant policy, sectoral, local community and expertise (scientific, technical, etc.), ensuring input from local communities and associated structures (for instance fishers associations, farmers associations, NGOs, CBOs and local government). The proposed project will add value to initiative by addressing protected areas and their buffer zones that are not covered by the regional project; coordination between this project and the proposed GEF project will be facilitated by the Ministry of Sustainable Development, which is an Executing Agency for both projects.

C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

C.1. Indicate the Co-financing amount the GEF agency is bringing to the project:

27. UNDP will provide US\$250,000 in direct co-financing to this project in the form of a grant.

C.2. How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

28. UNDP has a major biodiversity and ecosystem programme, and protected areas are one of UNDP's signature programmes. The agency manages a large portfolio of PA projects globally and across Latin America and the Caribbean – designed to strengthen the management effectiveness and financial sustainability of protected area systems. Responding to the challenges of biodiversity, climate change and land degradation are central themes under the United Nations Development Assistance Framework (UNDAF) and the Country Program Document (CPD). The document calls for “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 improve energy efficiency and use of renewable energy.” The specific call by the UN Secretary General for all UN agencies to “deliver as one”, allows for coordinated resource flows which will redound to accelerated improvements in the quality of life for the partners engaged in a cooperation framework with UNDP. UNDP is also an active partner in efforts to achieve the Millennium Development Goals (MDGs) by 2015 as well as all other Internationally Agreed Development Goals (IADGs). The proposed project ranks very high on UNDP's development agenda. Under the Sub-regional (Barbados and the OECS) UNDAF, Thematic Area No. 1 is Environment, Energy, Climate Change and Disaster Risk Reduction. Here UNDP is placing emphasis on biodiversity management, climate change mitigation and sustainable land management all of which are fundamental tenets of this proposed project. Expected outcomes agreed upon are: Enhanced capacity of national, sub-regional and regional institutions and stakeholders


to: 1) effectively manage natural resources; 2) build resilience to the adverse impacts of climate change and natural and anthropogenic hazards; and 3) improve policy, legal, regulatory and institutional frameworks for environmental governance. UNDP Barbados office is organized in four clusters based on the following topics: 1. Poverty Reduction and MDG Achievement; 2. Democratic Governance; 3. Environment, Energy & Climate Change 4. Disaster Risk Reduction. The Environment, Energy and Climate Change unit has a Program Officer, Programme Assistant and Programme Finance Associate. Additional implementation support for Human Resources and Finance will be provided by other staff members: Operations Manager, Procurement team, and HR Associate. The Environment, Energy and Climate Change cluster has experience in terms of capacity development and strengthening regional, national and local government planning and in GEF project design and implementation and works closely with the other clusters.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT AND GEF AGENCY

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT:

NAME	POSITION	MINISTRY	DATE (MM/DD/YYYY)
Lavern Queeley	Director, Economic Affairs and PSIP/GEF Operational Focal Point	Ministry of Sustainable Development	August 03, 2012

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation.					
Agency Coordinator, Agency name	Signature	Date (MM/DD/YYYY)	Project Contact	Telephone	Email Address
Yannick Glemarec, GEF Executive Coordinator, UNDP		September 19, 2012	Jose Troya, RTA, EBD	507-302- 4636	jose.troya@undp.org