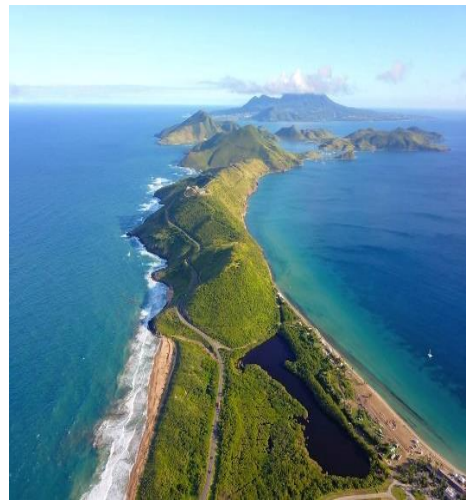
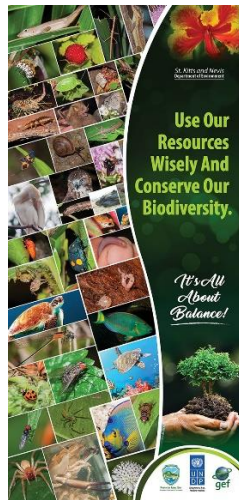




Country Biodiversity Profile

St. Kitts and Nevis



Government of St. Kitts and Nevis 2018

Sixth National Report to the Convention on Biological Diversity



It is my pleasure to share with you this profile of the biodiversity of St. Kitts and Nevis (SKN). This profile is updated every four years when, in keeping with our commitment as a signatory to the Convention on Biodiversity, we prepare our National Report to the Secretariat of the Convention. St. Kitts and Nevis views the exercise of preparing the Sixth National Report (6NR) to the Convention not simply as meeting a requirement to the CBD but as an important input to the preparation of our next National Biodiversity Strategy and Action Plan (NBSAP) and to provide inputs into the Fifth Global Biodiversity Outlook and the Global Biodiversity Strategy 2020 – 2030. This Country Biodiversity Profile provides a snapshot on what SKN is doing to conserve our biodiversity and how effective we have been in our efforts. The report describes progress made since our last report in 2014, challenges we are encountering, and some ideas about what we can do to be more effective. A more detailed accounting is provided in the online report accessible at www.chm.dbd.int.

The exercise to prepare this report was spearheaded by the Department of Environment. A wide variety of stakeholders were consulted during the preparation of this report including Government entities, private sector companies, Non-Governmental organizations, youth organizations, academic and scientific institutions, projects coordinating units working on relevant issues, and individuals with knowledge about biodiversity. The technical assistance of an international consultant on biodiversity was secured through funding from the GEF and administered by UNDP.

The development of our nation depends on a healthy environment. Maintaining the diversity of our native flora and fauna and intact land and sea ecosystems on which we depend for our livelihoods is a challenge we must all work towards together. There is no time to lose. Let us take this report for what it is, a description of our limited understanding of our biodiversity and an honest assessment of where we are and where we need to go from here to conserve it for our own benefit and for the benefit of all life.

Ms. June Hughes
Director
Department of Environment

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1.0 About this Report

This Country Biodiversity Profile is updated every four years when, in keeping with The Federation's commitment as a signatory to the Convention on Biological Diversity (CBD), St. Kitts and Nevis (SKN) prepares its National Report to the Secretariat of the Convention. This 2018 update of the Country Biodiversity Profile provides a snapshot on what St. Kitts and Nevis is doing to conserve its biological diversity and the effectiveness of our efforts. The report describes progress made since submission of our Fifth National Report to the CBD in 2014. The report further highlights some of the challenges being encountered, and some recommendations and ideas about what can be done to be more effective.

An attempt has been made to present as much relevant quantifiable data as possible in this updated Country Biodiversity Profile. However, where hard data is not available, the personal observations of those most familiar with a situation are presented. Wherever satellite or other spatial data is available, this has been included. Whenever data is not available in country but available elsewhere, we have sought to include it.

This report is the result of consultations undertaken between June and November 2018 in which more than forty diverse individual or group stakeholders were consulted (*See Annex 3*).

The National Project for preparing the Sixth National Report (6NR) to the CBD was spearheaded by the Department of Environment with funding assistance of a grant from the Global Environment facility (GEF), administered by the United Nations Development Programme (UNDP). It is intended that the 6NR will provide important inputs for the development of the next National Biodiversity Strategy and Action Plan (NBSAP) for St. Kitts and Nevis.

2.0 A Brief History of NBSAPs

The first National Biodiversity Strategy and Action Plan (NBSAP) for St. Kitts and Nevis was prepared in 2004 and included information on socio-economic issues; tourism and biodiversity; marine and coastal biodiversity; and agricultural and forest biodiversity. As part of a global project, an updated NBSAP was prepared ten years later (in 2014). The updated NBSAP was particularly relevant in recognition of the fact that the targets, principles and priorities of the first NBSAP would have changed significantly given: 1) the closure of the sugar industry in 2005 and 2) the transformation of the country's physical and economic landscapes from sugar-based agriculture to tourism and services related industries. The new NBSAP also encouraged considering biodiversity in development decisions. It focused on stronger institutional integration and identified how various provisions of key legislative, regulatory and policy instruments could be more biodiversity friendly. It also focused on broad sectorial participation (including public-private partnerships); strengthening implementation; providing an enabling environment for conservation, sustainable use of biological resources; controlling invasive species; raising

awareness of biological resources and related access and benefit-sharing issues.

The supporting Action Plan to the revised NBSAP included 5 objectives and 16 Actions and “presents issues to be addressed at the policy level that will lead to the success of the strategies which in turn will realize the national and international targets and the national objectives and goals that have been established”.

In line with the global AICHI Biodiversity Targets, SKN developed twelve “national targets” related to biodiversity conservation which were included in the NBSAP 2014-2020. Additionally, new biodiversity indicators were described for each national target to allow for monitoring of progress towards meeting the national targets.

According to our Fifth National Report to the CBD (submitted in 2014), SKN achieved mixed results in implementation of the NBSAP and the provisions of the Convention. The main accomplishments according to the report included: better recognition of the value of traditional plants for medicinal purposes; the revision of the Solid Waste Management Act 2009; the development of policies to promote the orderly use of land including improved enforcement of the requirements for Environmental Impact Assessments (EIAs) for certain development projects; and reduction of overgrazing on the South East Peninsula of St. Kitts.

In the course of preparing this report, it became clear that the 2014-2020 NBSAP has not been used as a practical action plan for biodiversity conservation initiatives. Additionally, few decision makers in Government and few of those working in biodiversity-related fields are even aware of the Action Plan and the 12 National Biodiversity Targets. One reason is that no specific system was put in place to monitor implementation or impact of priority actions which had been identified in the NBSAP.

3.0 St. Kitts and Nevis National Biodiversity Targets

As part of the review process for preparation of the 6NR to the CBD, it was recognized that not all National Targets (NTs) were clearly elaborated or well described in the revised NBSAP. Moreover, not all of the NTs have actions associated with them in the NBSAP Action Plan. Further, many of the indicators described for the NTs are not considered as S.M.A.R.T. (Specific, Measurable, Achievable, Results-Focused, Time-Bound) and are therefore not useful. Finally, the Fifth National Report (5NR) did not fully report on progress made towards the NTs. This might have been due to the fact that the 5NR and Revised NBSAP were being prepared at the same time.

The recommendation therefore is for both National Targets and indicators to be revised during preparation of the next NBSAP to ensure these are meaningful and can truly be used to monitor progress toward biodiversity conservation.

Despite the foregoing shortcomings, since national targets and indicators were set forth in our

last report, it is our duty to the Convention to report on progress made toward these as best as we can. As such, we have done so in the online 6NR. Nevertheless, if this 6NR focused exclusively on reporting on progress made towards the national targets and indicators, it would have omitted some relevant and important information. Therefore, in an effort to make the report more meaningful we have also reported on what we know to be threats to biodiversity and on actions taken (both positive and negative) that affect biodiversity whether or not these are related to any of the targets or “Actions” described in the last NBSAP.

Three reference baselines were used for all spatial data included in the 6NR. These are: 2005 – the oldest satellite imagery data available in the Department of Physical Planning); 2014 – the date of submission of the 5NR); and, 2017 – the most recent data available in the DPP. Where more recent data is available regarding SKN but not available in country, this data is also included.

4.0 About Our Biodiversity

4.1 Terrestrial and Marine Biodiversity Studies

Several studies have been done over the years to classify and describe both terrestrial and marine biodiversity of St. Kitts and Nevis. These include:

- 1949: (*Beard, J. S.* The natural vegetation of the Windward and Leeward Islands).
- 1990: the "Country Environmental Profile: St. Kitts and Nevis", prepared by the Caribbean Conservation Association and Island Resources Foundation.
- In 1992: Dr. Milton Whittaker described the medicinal plants of St. Kitts and Nevis (Whittaker, M.C. 1992. Medicinal Plants of St. Kitts & Nevis).
- 1999: the UNDP/GEF Small Grants Programme funded a study on the vegetation of SKN (A Vegetation Classification of St. Kitts and Nevis: Implications for Conservation, Kevel Lindsay and Bruce Horwith, Island Resources Foundation). A biodiversity profile for St. Kitts and Nevis was prepared during that same year (1999) and revised in 2000.
- A study in 2008 (see attached) estimated the extents of land cover and protected forest by formation for five islands including SKN and assessed how land cover had changed over the second half of the 20th century.
- 2014, a technical report on Conserving Biodiversity and reducing habitat degradation in Protected Areas in SKN and their Areas of Influence was prepared for the Ministry of Sustainable Development and the United Nations Development Programme (Rusk, 2014). This represents the most comprehensive and up-to-date report on the biodiversity of SKN to date. Nevertheless, it should be noted that no comprehensive inventories of terrestrial or marine biodiversity had been done at that time.
- 2017: The first comprehensive inventory of SKN biodiversity, including both terrestrial and marine environments, began with funding from the GEF under the Conserving

Biodiversity Project. The field inventories, consisting of dives and video drops for the marine surveys and transects and plots for the terrestrial surveys were completed in 2018. Reports are not yet available thus the important information contained within those reports is not included in this updated country biodiversity profile. The reports are expected to be available by early 2019 and will certainly be reflected in our next updated country biodiversity profile. This new information represents a significant advance in our knowledge about our terrestrial and marine biodiversity.

4.2 Key Threatened & Endangered Species

Sea Turtles

Some progress has been made but significant challenges still remain related to the conservation of Sea turtles in SKN. Three species of sea turtles; Leatherback, Hawksbill, and Green nest on the beaches of SKN. All three species are globally endangered.

There has been a massive decline in the number of Leatherback turtles nesting on St. Kitts beaches over the past three years and a continual decline since 2012. When monitoring of Leatherbacks first started in SKN about 15 years ago, 350 nests were counted on the main nesting beach in St. Kitts. In 2018 there were only 11 turtles nesting on this same beach. Since 2003, a total of only 259 female leatherback turtles have been identified in SKN. The North West Atlantic Leatherback Working Group of IUCN has proposed changing the status of the North West subpopulation from vulnerable to endangered. For some unknown reason, Leatherback turtles nesting on St. Kitts beaches have a very low hatch success rate (18.7%) compared with the global average (50%).

Whereas comparatively more Leatherback turtles nest on St. Kitts beaches, Hawksbill turtles nest mostly on Nevis beaches. Hawksbills are listed as '*globally critically endangered*'. Green turtles nest both on Nevis and SK beaches. They are listed as endangered. Green turtles forage exclusively on sea-grass and algae therefore it is important that conservation measures be implemented to ensure the health of our sea-grass ecosystems.

St. Kitts and Nevis is one of only 5 countries in the Caribbean (Dominica, Haiti, Montserrat, and Saint Lucia) that still allows hunting of turtles. However, according to the St. Kitts Turtle Monitoring Network, SKTMN conservation group, there is an estimated 2 turtle hunters and less than 100 turtles harvested per year in SKN. This number is significantly down from data of the previous reporting period.

The Department of Marine Resources (DMR) as the competent authority for monitoring fish catch does not have any current data on the number of turtles being harvested. No data is kept by the DMR and no harvest limits are set. With regards to restrictions on turtle harvesting, turtle hunting season is limited to the five month period from October to February. Additionally it is illegal to bother turtles while they are on the beach, to collect turtle eggs or to kill turtles unless they are at least 300 yards offshore.

Enforcement of regulations related to sea turtle harvesting have improved over the years due to enhanced public awareness, improved regulations and increased patrolling and monitoring efforts by organizations such as the SKTMN and Ross University. Where incidents have been reported, these have been thoroughly investigated and charges levied on the perpetrators by authorities.

Recognizing the need to strengthen existing regulations related to sea turtles, the DMR is proposing new regulations which will be submitted to Cabinet as part of the proposed amendment to the Fisheries Act 2016. These regulations would prohibit hunting of Leatherbacks and Loggerheads (the latter are only very rarely found in our waters) and would also prohibit tagging or feeding turtles for tourism purposes. The new regulations would require stock assessments to be done on an annual basis. Harvest limits would be established based on the stock assessments. The new regulations would also compel turtle hunters to inform the DMR about the number of turtles they intend to kill and to names of potential buyers.

The most active sea turtle conservation efforts in SKN are organized by two NGOs, the St. Kitts Turtle Monitoring Network (SKTMN) and the Sea Turtle Group (Nevis).

Important advances have definitely been made in terms of public awareness regarding sea turtles, primarily as a result of the efforts of the SKTMN and the Sea Turtle Group/Nevis over the past 15 years. Although fully informed that it is against the law to bother turtles on the beach, people interviewed by the 6NR team expressed surprise that SKN law still allows hunting of sea turtles. Most assumed it was against the law to kill them and would support legislation which would protect them from being hunted or killed incidentally. This is a case where public awareness is seemingly ahead of our legislation.

Queen Conch

Queen conch populations are declining across their range but in St. Kitts the population appears to be stable and healthy. In SKN, regulations regarding minimum lip size for conch to be harvested



are in place. The DMR is monitoring the water depth at which fishers are catching the conch. According to the DMR, since fishers are still catching them in waters shallower than 100 feet, (usually at 60 feet or less), there does not appear to be a problem.

4.3 Invasive Species

Our native biodiversity is threatened by several exotic species which have invaded habitats and are out-competing some of our native species for resources and some invasive species are actual predators. Key invasive species include:

Lionfish – First seen in our waters only five years ago but populations have increased quickly. Lately, we have seen an apparent decrease in shallow waters but a possible increase in deeper waters.



An invasive species of Seagrass – This invasive appears to have been brought in during the construction of the Christophe Harbour Development Project. So far it has choked out some native seagrass beds spanning an area of approximately 4 miles (of the total of 36 miles). According to Tussenbroek, B. I. Van, “Seagrasses comprise 78 species and are rarely invasive. But the seagrass *Halophila stipulacea*, firstly recorded in the Caribbean in the year 2002, has spread quickly throughout the region”. We have no control mechanism in place and we are not actively monitoring the spread of this species.

Green Vervet Monkey (Chlorocebus aethiops) – This species of monkey was brought to SKN over three centuries ago. It quickly spread across both islands. It is considered primarily an agricultural pest and has negatively affected agricultural production on both islands. Some control interventions such as electric fencing of agricultural plots seems to be working but is not affordable to all and requires regular maintenance.



Attempts were made to reduce the population including through contraception. Monkeys are also captured and taken to biomedical research facilities for research purposes. Possible action: From what has been studied thus far, it would seem the most cost-effective action to control the impact of monkeys on agriculture would be to both fence and allow guard dogs to be free-ranging rather than tied (as is the normal practice on SKN) within the fenced area. It is stressed that although this may be effective in reducing agricultural losses, it will not have the effect of reducing growing populations or the impact of monkeys on the other biodiversity of SKN.

Indeed, if monkeys are more confined to the forest areas (rather than agricultural fields), their impact on native biodiversity is likely to be greater. A trap and release intensive spay/neuter program should be considered and funding and volunteer support for this sought from animal rights groups. This type of project might also be supported by the GEF SGP as new local livelihoods could also be generated.



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Feral Donkeys (*Equus asinus*) – Like many invasive species, donkeys were purposefully introduced to SKN. They were used primarily in the sugarcane industry. Now that sugarcane is no longer produced, donkeys are no longer highly needed and have gone feral. Feral donkeys are especially considered a problem on Nevis. There are humane solutions to control the population but they are costly and would require reaching out to groups that are interested in humane treatment of animals and others to obtain the needed financing and volunteer help. PZP, a

contraception that can be given remotely (via dart) is used to control wild horse populations in the United States. A study done to see if PZP would also work on donkeys showed that it would. (Porcine and recombinant zona pellucida vaccines as immuno-contraceptives for donkeys in the Caribbean².

According to the Ross University School of Veterinary Medicine, Basseterre, St Kitts and Nevis). The Wild Horses of America Foundation has expressed willingness to share information on how to set up a darting program on Nevis. Cost will be the main consideration. The Wild Horses of America Foundation also provided the following information. “If a female has not been treated previously, she requires two doses, separated by at least a few weeks, to be fully treated (in horses, it's claimed to be in the 90%+ effective range). Each dose costs about \$26, plus a dart that costs about \$2, so a total of about \$56 for the first year. Thereafter, she only needs to be treated once per year at a cost of \$26 plus the dart, or about \$28 for subsequent years. It's pretty cost effective, particularly if you have local volunteers who are trained to administer the dart. The cost of the delivery device (gun) depends on the style. The CO² pistol is about \$795



Mongoose. “The mongoose was brought to the Caribbean (Jamaica) in 1872 to control rats in sugar cane fields. It then spread to other islands of the Caribbean, including SKN. It has been linked to the extinction of five endemic species in Jamaica (Kairo et al. 2003) and affects number of our own native species of birds and other animals.

Guinea Grass. Particularly on the island of St. Kitts, the closure of the sugar industry in 2005 resulted in large acreage of unmanaged lands. The exotic, invasive guinea grass has invaded much of this area. Although exotic and invasive, guinea grass is not considered to be a problem in SKN because it is primary forage for livestock. Forage quality of this grass is nevertheless not high. Guinea grass is also susceptible to fire. Bush fires threaten breeding and nesting sites for birds, lizards and other fauna.



4.4 *SKN Efforts to Control Invasive Species:*

- 2002 – NEVIS National Caribbean Amblyomma (ticks) Project (Department of Agriculture)
- 2003 – Biological Control for Pink Hibiscus Mealybug in SKN (around 2003)
- 2010 – Hernández conducted an estimate of the Vervet Monkey population via a population count at different points on St Kitts and Nevis between November 16th, 2009 and May 13th, 2010.
- 2016 – A Colombian team of primatologists undertook an exploratory mission in 2016 and recommended that a *primate census* to estimate the primate population on both islands be undertaken.
- 2007 – A project between the Department of Agriculture/Nevis and a NGO to try to encourage Vervet monkeys to go back to the forest and leave agricultural areas through the establishment of feeding stations. The same project also put cottonseed out in feed for monkeys as a natural contraceptive. This project ended in 2007 when the persons working with the NGO returned to their homeland.
- Ongoing – Efforts to control Lionfish by encouraging fishers to target them and encouraging restaurants to offer Lionfish on their menus

Invasive species are not only a problem on St. Kitts and Nevis but throughout the Caribbean region. 552 Invasive Alien Species were found in the insular Caribbean (Kairo et al. 2003). According to Kairo et al, “Invasive species are known to disperse quickly within the Caribbean for various reasons. For instance, the *Hibiscus mealybug* moved from Grenada to almost the entire region over a period of about seven years!” There have been several initiatives to try to identify and control invasive species in the region including:

- 2002/03 – CABI in collaboration with The Nature Conservancy (TNC) undertook the ‘Invasive Species Threats in the Caribbean Region’ project.
- 2003 – Three Caribbean countries (Bahamas, Dominican Republic and Jamaica) participated in an inter-American initiative, the IABIN Pilot Project, which developed the Invasives Information Network to begin exchanging information on invasive species in the Americas.
- 2008 to 2011 – UNEP/GEF funded project was underway to mitigate the threats to biodiversity of Invasive Alien Species in the insular Caribbean including terrestrial, fresh water and marine ecosystems. That project was executed by CABI-Caribbean.
- Caribbean Invasive Species Working Group (CISWG). Decisions/Actions. The CARICOM Council for Trade and Economic Development (COTED) formally recognized, and mandated, CISWG to develop regional strategies for managing Invasive species
- The Invasive Species Specialist Group of the IUCN/Species Survival Commission (ISSG)

- A CABI Invasive Species Compendium was developed

Section 6 of this report presents additional measures for control of invasive species.

4.5 *Our Ecosystems*

Our ecosystems are not only important for biodiversity but the wellbeing of our economy depends on their health. Wetlands/ponds, seagrass beds, mangroves, coral reefs, and forests should all be considered commercially important ecosystems because our economy is based in part on their health and wellbeing. We depend on our seagrass beds to act as nurseries for many of our commercially important fish which must spend part of their young life in these areas. We depend on our mangroves to help protect our shores and coastal infrastructure against violent storm surges and also to act as nurseries for our fish stocks. We depend on our coral reefs for the livelihoods of those who depend on tourism-based recreation including snorkeling and scuba diving and to provide habitat for many marine species. We depend on our forests for fresh air, for the diversity of species (large and small) which they house, for helping to stabilize climate, and for numerous timber and non-timber forest products. Finally, we depend on our ponds and wetlands for hosting a great diversity of shorebirds including many migratory birds.

4.5.1 Coral reefs

According to a TNC report, SK and Nevis have a total of 53 Km² of coral reefs (about 13,000 acres). An assessment of the health of the coral reefs in six Eastern Caribbean countries was conducted by TNC in 2016. Each Country received a “Report Card” which included information on Key Habitats (location and extent of coral, mangrove, seagrass), Reef Health Index (a measure of the health of four key coral reef indicators), and Marine Managed Areas (size and location of designated and proposed areas).

According to the study, the national Reef Health Index for SKN was only 2.3 (out of 5). This is the lowest score (shared with Antigua and Barbuda) of the countries included in the study. The score is based on four indicators. Fleshy macro-algae received a score of “critical” (the lowest possible score), commercial fish received a “poor” score, and both coral cover and herbivorous fish received a “fair” score although the size of the herbivorous fish was small. No indicator received a good or very good rating. The highest score received was “fair”.



The report indicates that “coral cover could support larger fish populations if these reefs were protected. Fleshy macro-algae could be reduced if herbivorous fish, especially parrotfish, were

protected. Low commercial fish biomass was due to few large predatory fish. Although clearly our score was not good indicating we have some serious problems, the report went on to say in essence that it is not too late and that implementing proposed management plans would allow fish populations to increase. The key findings of the report were that: i) “New healthy colonies of endangered Elkhorn and Staghorn corals provide hope for recovery; ii) Mountainous star corals are at a tipping point of recovery or decline; iii) The lack of large Parrotfish and Diadema urchins has caused algal overgrowth; iv) Lack of large-sized fish means less fish and food for the future, and; v) Lobster and conch were absent or rare at most coral reef sites.

4.5.2 Mangroves

SKN has less than 1 Km² (220 acres) of mangroves. “Small mangrove stands are found at St. Kitts’ South East Peninsula (red, black and white mangroves) and Sandy Point (white mangroves). According to the Head of the Department of Fisheries Nevis, the island has a few small stands in bays with only white mangrove/buttonwood stands left (e.g., Bogs Area, Pinney’s Ponds).”

4.5.3 Seagrass Beds

SKN has 34.6 Km² (8,500 acres) of seagrass beds. An exotic, invasive species of seagrass was seen for the first time in the waters around St. Kitts in 2013, around the time the new marina was being built at Christophe Harbor on the South East Peninsular. This invasive species takes over native seagrass beds, choking them to death. According to personal observations of the Director of the DMR, approximately 4 of the 36 miles of native seagrass beds around the island of St. Kitts have died over the past 5 years as a direct result of this invasive species. No official monitoring is being done. No actions are being taken at this time to attempt to control the situation. The Nevis Fisheries Department is not monitoring seagrass beds but has not observes any significant changes in their seagrass beds.

4.6 What satellite images/aerial photographs tell us about our ecosystems?

4.6.1 Establishment of Protected Areas

Since the submission of the last National Report (5NR 2014) to the CBD, there have been many advances in mapping and in GPS technologies available in country. New (2017) high-resolution maps are now available. Whereas the best resolution available used to be 30 meters, SKN now has 1 meter resolution maps. These are a combination of satellite and airplane maps. Because they are both high resolution and current, these maps can be used for many purposes, including aspects of Protected Area (PA) management.

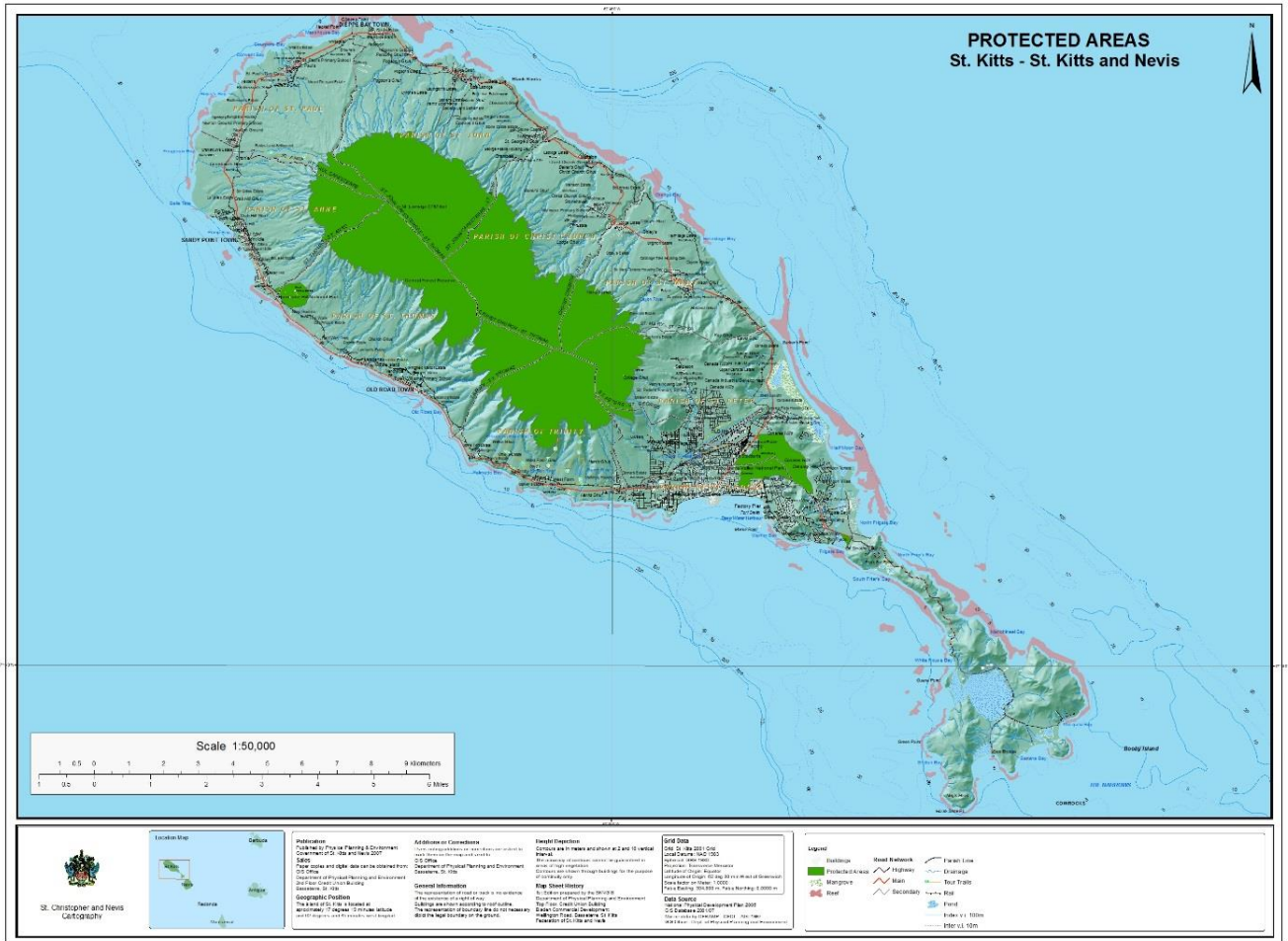


Figure 1 Map of Protected Areas in St. Kitts (DPP – St. Kitts)

Training has been conducted for Protected Areas Rangers in using GPS for monitoring and for search and rescue purposes. GPS navigation using handheld units has also been used to map new trails and to identify points of interest in our National Parks and other protected areas. Some older trails had become dangerous and almost impassable so this technology helped to identify newer, safer trails. The GPS handheld units allow the Rangers to calculate the length, time and attitude of trails. Although not yet in place the Department of Environment has tentative plans to post hiking trail routes for interested visitors who could purchase the route tracking devices in order to be able to hike without a guide. Tracking hikers could also enhance safety by allowing the Rangers to know where hikers are and when rescue may be needed. This would also be part of the sustainable financing plan.

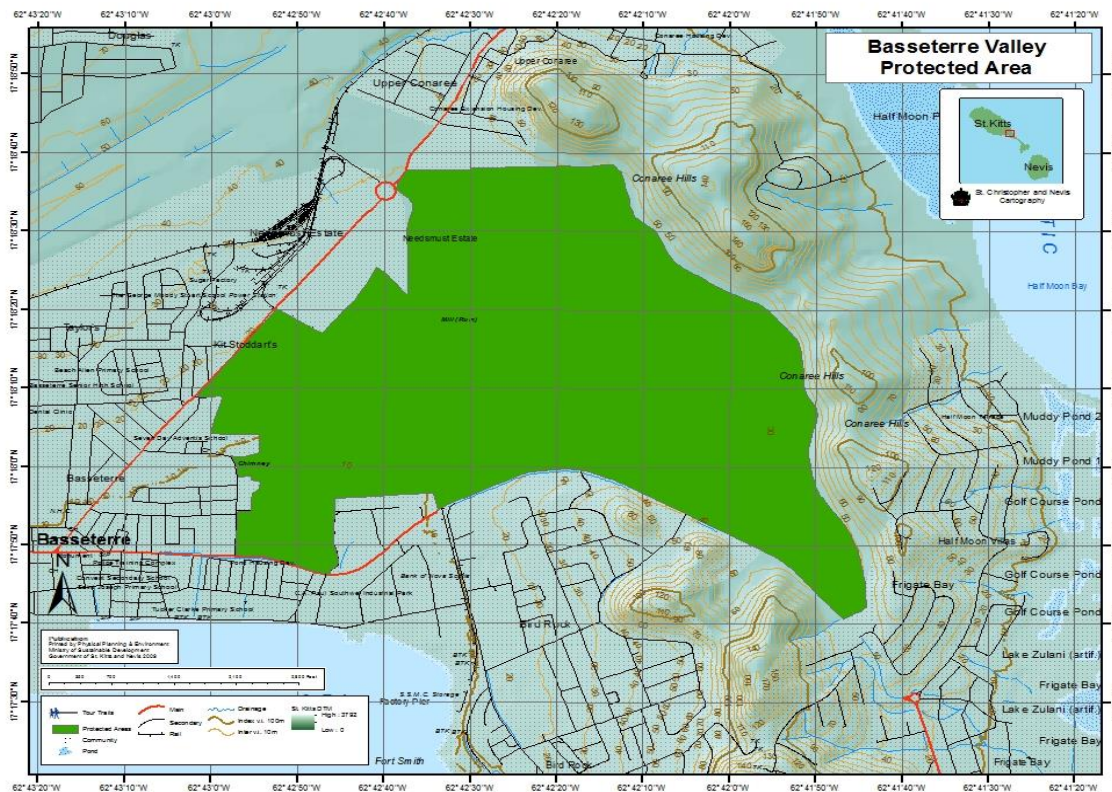


Figure 2 Royal Basseterre Valley Aquifer Protected Area (DPP – St. Kitts)

Although not yet used in this way, the new maps could also be used to identify “problem areas” within PAs where illegal activities are taking place such as livestock grazing, agriculture or squatting. With limited PA staff and vehicles for patrolling, use of the maps to target areas where patrols should be focused can make patrolling more efficient and effective. The maps can be used to bring together stakeholders in innovative and participatory approaches to resolve conflicts within PAs. Those engaged in illegal activities can be invited to sit together with Rangers and others to view the detailed maps and to discuss impacts of the activities being undertaken as well as possible solutions.



Figure 3 Frigate Bay Protected Area – St. Kitts (DPP – St. Kitts)

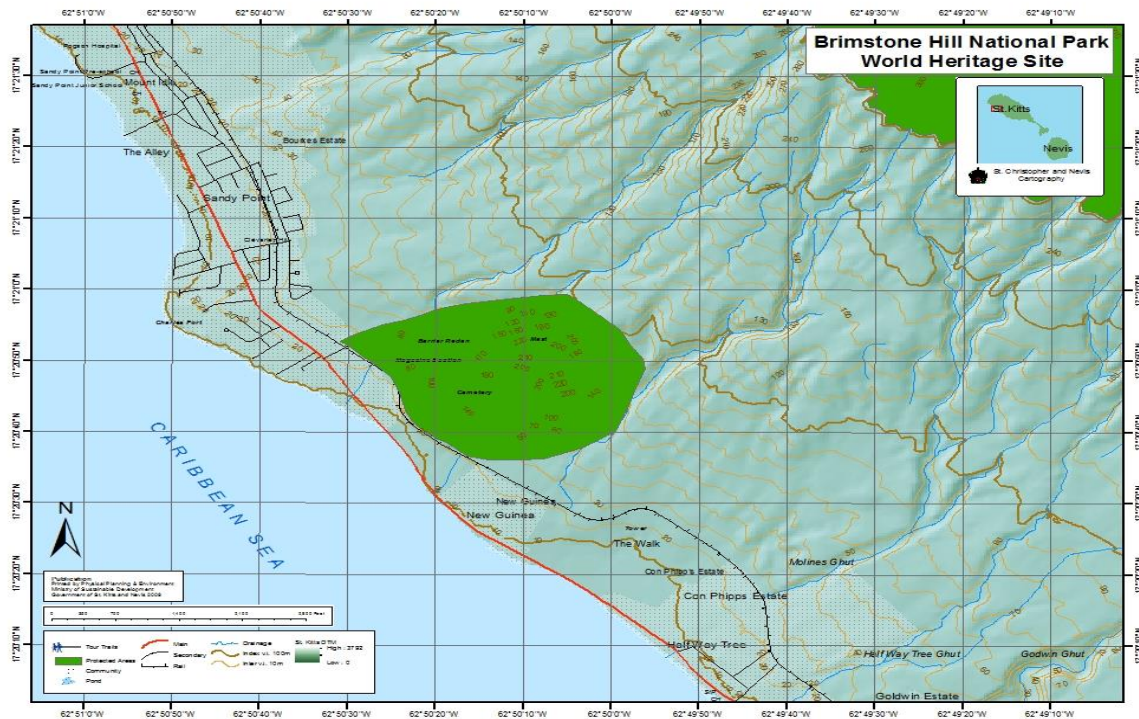


Figure 4 Brimstone Hill Fortress National Park- Protected Area (DPP - St. Kitts)

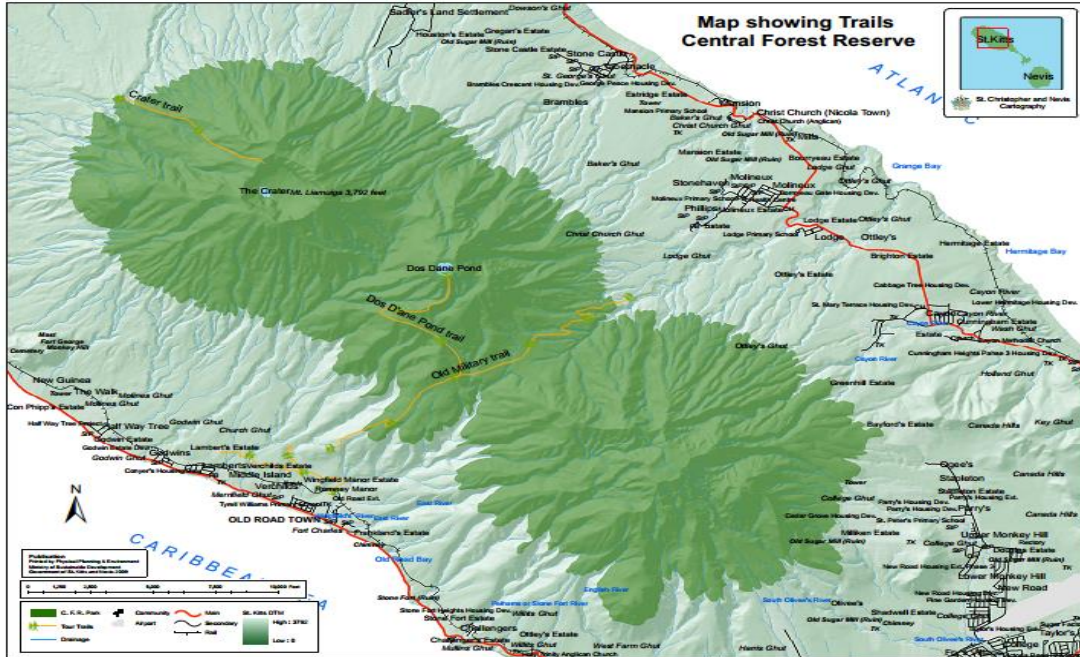


Figure 5 Central Forest Reserve National Park Protected Area- St. Kitts (DPP – St. Kitts)

4.6.2: Biodiversity Marine Ecosystems – St. Kitts and Nevis

The following maps provide an indication the changes in the coverage of ecosystems over in St. Kitts and Nevis for 2001 and 2017. The maps clearly show significant differences in mangrove coverage and in coverage of wetlands and ponds. Much of the wetlands and mangroves that existed in 2005 no longer exist. This is due primarily to developments of hotels/resorts that have been permitted in these areas, even when EIAs have been done and the cost to the wetlands and mangroves is known.

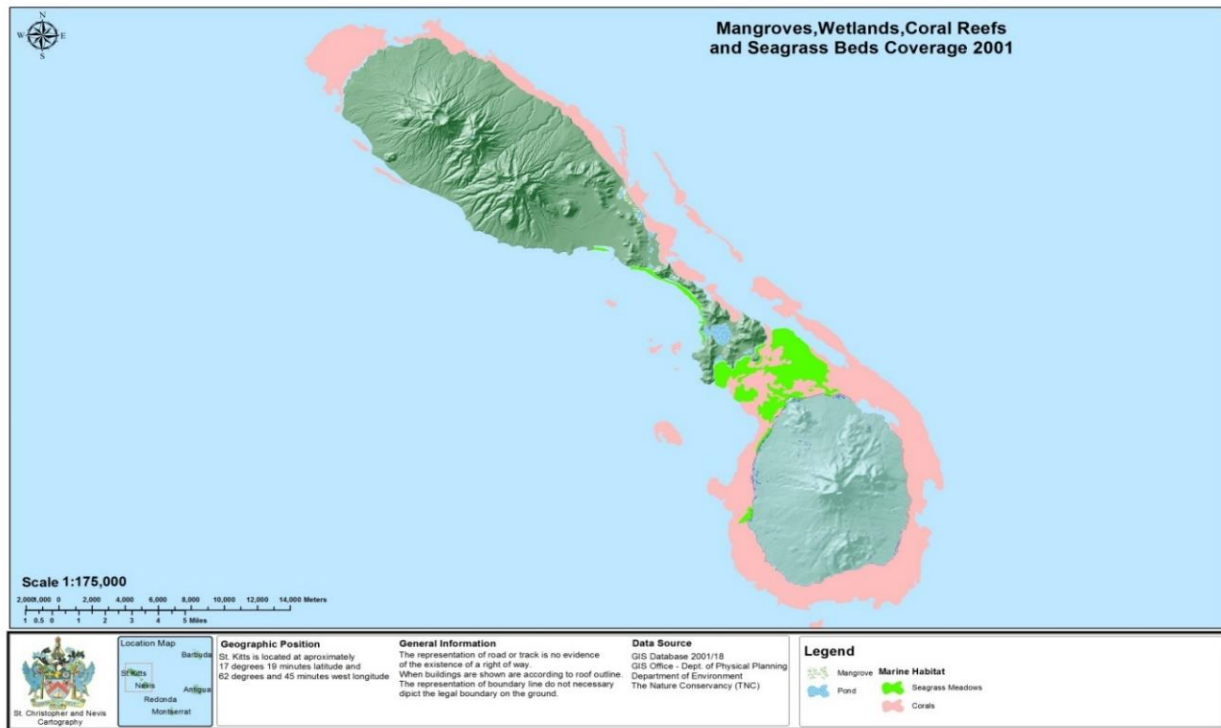


Figure 6 Mangrove, Wetlands, Coral Reefs, and Seagrass Beds Coverage, 2001 (DPP – St. Kitts)

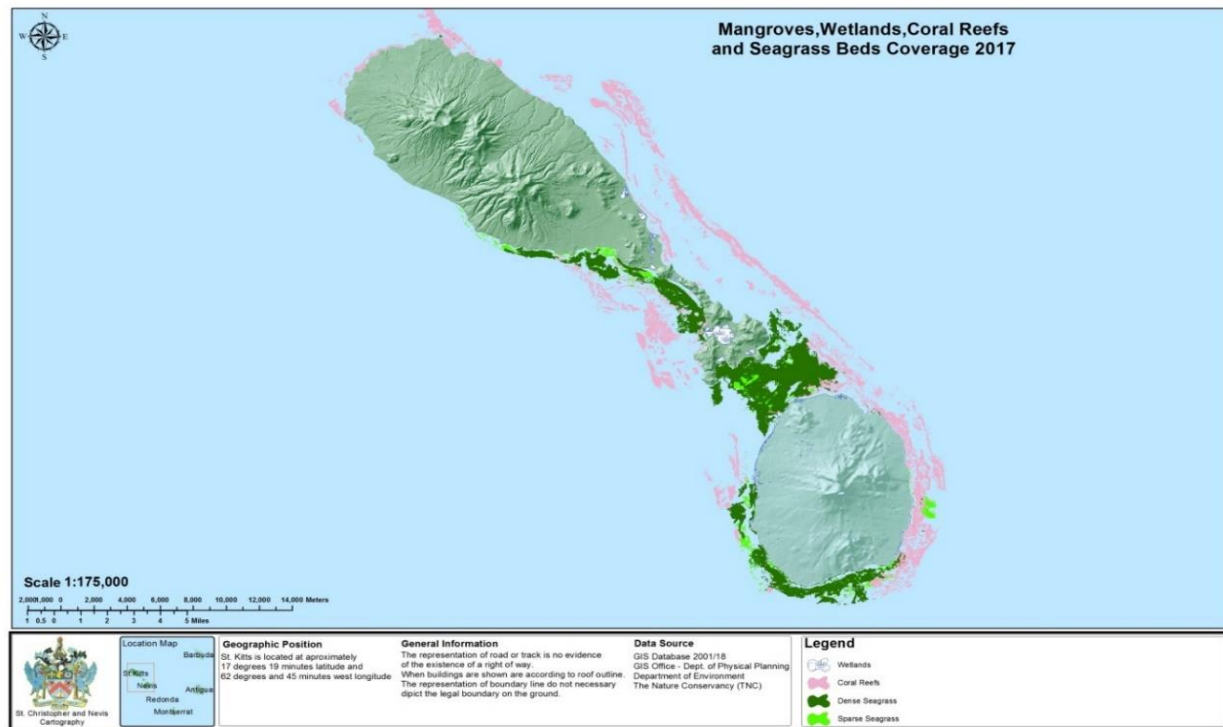


Figure 7 Mangrove, Wetlands, Coral Reefs, and Seagrass Beds Coverage, 2017 (DPP – St. Kitts)

5.0 Threats to our Biodiversity

No matter how little we know about our biodiversity, it is clear that certain threats to biodiversity exist. The ten main threats to biodiversity in St. Kitts and Nevis are:

- ✚ Development projects such as hotel, resort and housing developments that do not adequately consider biodiversity values and impacts;
- ✚ Invasive exotic species that threaten native/indigenous species and local livelihoods;
- ✚ Pollution from excessive use of single-use plastics, lack of recycling opportunities, inadequate solid and liquid waste management, pollution originating elsewhere coming to our shores;
- ✚ Lack of adequate regulation of recreational activities (destruction of coral reefs from anchoring yachts and other boats in inappropriate areas, erosion due to heavy foot traffic on trails in the forest)
- ✚ Illegal sand mining

- ✚ Gravel quarries
- ✚ Unsustainable harvesting of natural resources (fish, forest products)
- ✚ Lack of adequate protection for endangered species
- ✚ Overgrazing
- ✚ Natural hazards and climate change (coastal erosion, loss of coral reefs)

6.0 Key measures we are taking to conserve our biodiversity

In 2014, as part of the Project for Development of a Revised NBSAP 2014 – 2010, St. Kitts and Nevis decided on 12 National Biodiversity Targets, These are:

Target 1 – By 2020, an increased percentage of Kittitians and Nevisians are aware of the values of biodiversity, and understand the steps they can take to conserve and use biodiversity sustainably. (ABT 1, 14, 19)

Target 2 – By 2020, St. Kitts and Nevis would have completed an evaluation of its biodiversity resources. (ABT 2, 14)

Target 3 – By 2020, the Ministry of Sustainable Development will have an increased role in the granting of incentives to activities based on biodiversity related sustainability principles. (ABT 3)

Target 4 – By 2020, fish and invertebrate stocks and aquatic plants are managed, harvested sustainably and the Marine Management Area has been formally declared. (ABT 6, 9, 10)

Target 5- By 2020, areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity. (ABT 7, 11)

Target 6- By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity and appropriate Waste Management Plans are developed. (ABT 8)

Target 7 – By 2020, invasive alien species and pathways are identified and prioritized and measures are in place to manage pathways to prevent their introduction. (ABT 9)

Target 8 – By 2020, the anthropogenic pressures on coral reefs and other vulnerable coastal ecosystems impacted by climate change are minimized. (ABT 10)

Target 9 – By 2020, at least one marine and one additional terrestrial area will be formally declared and appropriate management plans are operationalized. (ABT 11) 16

Target 10 – By 2016, St. Kitts and Nevis would have signed on to the Nagoya Protocol on ‘Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization’. (ABT 16, 19)

Target 11 – By 2015, the revised National Biodiversity Strategy and Action Plan (NBSAP) has been completed and adopted as a policy instrument and is been implemented with broad sectorial participation. (ABT 17)

Targets 12 – By 2015, the financial resources for supporting the revised NBSAP implementation have been identified including direct budgetary allocations. (ABT 20)

St. Kitts and Nevis has undertaken important measures to conserve our biodiversity over the past four years, since we submitted our last report to the CBD. Some of these relate to our National Targets while others may not. Measures include introducing new regulations to protect our environment and our natural resources; improving enforcement of these regulations; establishing systems of protected areas; enhancing the management of our protected areas and development of PA management systems, hiring and training of PA staff; implement measures and projects for controlling invasive species; implementation coastal stabilization projects, ; building our capacity to conserve biodiversity; increasing our awareness about biodiversity; assessment studies and monitoring of our biodiversity. A few of these key measures are described below.

Measure: *Environmental Impact Assessments requirements for certain proposed development projects.*

All development projects which are deemed to possibly have significant environmental impacts must undergo an environmental impact assessment. Although it’s good we have this law, we need to improve the application of the EIA process to ensure our biodiversity is protected. Our practice has been to approve all proposed developments while requiring that the negative environmental impacts of those developments be mitigated as much as possible considering costs and other factors. But the way the EIA process is supposed to work is that there is an equal chance that following an EIA, the project will not be pursued if the environmental cost is judged to be too high. That is, an EIA is not intended to simply tell us what needs to be done to minimize environmental damage, but to give us the information to enable us to determine whether we should go forward at all with the proposed development. Since the requirement for EIAs was established in 2006, no project has been rejected based on environmental impact assessment. Some projects have however been delayed.

Measure: *Beat Plastic Pollution Campaign*

One of the biggest challenges is that even though plastic reduction campaigns are being

promoted there is no legislation in place to ban or reduce plastic use and alternatives are not as cheap or readily available. Another issue is the lack of incentives for consumers to use alternatives and the lack of disincentives to continue to be plastic dependent. For example, supermarkets do not charge for plastic packaging for groceries.

Measure: *"It's All About Balance" Campaign*

The theme "It's all about balance" was part of the Department of Environment's 2017 awareness campaign for sustainable use and conservation of biological diversity. The campaign proved so effective that one only has to say the jingle and everyone knows that it refers to the sustainable use of biodiversity. Nevertheless, awareness does not necessarily translate into action. We still need to take many more concrete actions to show that we really understand that "it's all about balance".

Measure: *Regulate Sand Mining*

St. Kitts

Sand mining for construction purposes is a regulated activity in St. Kitts and Nevis. There are several sand mining sites in SK, however during the period under review for this report only one site was legally approved at Keys Village. Due to depletion the site has been scheduled to be closed. Alternate sites are being assessed for future use. The course sand mining site is in close proximity to the Key Bay which is a primary nesting beach for Leatherback turtles. The DOE is responsible for approving new sites and for setting the closure date of this sand mining site.

Over the period under review, illegal sand mining for construction purposes continued to pose a significant challenge for regulatory authorities. This is particularly so on St. Kitts. Illegal course-sand mining typically takes place in ghauts (water courses) and often leaves large areas exposed and prone to flooding and erosion. There are approved sites (Belle-tate) for bay-sand mining; however, a significant amount of bay-sand is mined illegally from various beaches on St. Kitts. Other environmental problems associated with sand mining include:

- removing dunes, causing sea water to come further up on the beach and inland
- beach erosion
- increased sediments washing into the sea
- negative impacts on turtle nesting sites

Although DOE has investigated number of cases of illegal sand mining, over the past two years, documented cases have not been prosecuted. This is primarily due to weakness in legislation and the unavailability of alternate legal sites for sand mining. Attempts are being made by DOE and other agencies to enhance awareness regarding the negative environmental impact of illegal sand mining and to improve its regulatory functions. For example, The Draft National Conservation and Environmental Protection Act outline the improved requirements for the mining of sand for construction purposes. Currently, Sand mining is regulated under the National Conservation and Environmental Protection Act 1989 (NCEPA). Monitors are hired by the Public Works Department to regulate the procurement of sand legally. This includes a payment and

ticketing system as well as a site monitoring process. To ensure sand miners are aware of the regulations, the DOE has convened a series of dialogue with miners/contractors and has done radio spots regarding sand mining.

Nevis

The Nevis Island Administration has had a long-standing “no sand mining” policy. Some small-scale illegal sand mining does occasional occur (i.e., pickup loads). The DPP has not had any report of sand mining over the past year. The two areas where sand mining does occasionally occur is the Indian Castle area where occasionally backhoe trucks take large amounts of sand at night (last incident seen in 2016), and to a lesser extent at the Long Point area. Most sand for construction purposes is imported.

The situation on Nevis seems to be improving with very few reported incidents of illegal sand mining there. The Director of the Sea Turtle Group for Nevis, , indicated that he rarely now sees evidence of beach sand mining and when he does notice any such incident it is usually small scale and on the back side of the dunes. *Importing sand, even though we live on an island (surrounded by sand), seems our best solution as we need to protect our beaches which are already getting smaller due to climatic events. Wildlife species including globally endangered ones like sea turtles depend on beaches. Our economy also depends in part on our beaches.*

Measure: *"One Thing" Campaign for Water Conservation*

The One Thing campaign is to encourage people to do one thing to conserve water. The campaign is undertaken in partnership with the Water Service Department who attempts to monitor the consumption of those who took the pledge to do one thing to conserve water. The measure has only been partially effective. How is water related to biodiversity? Water is life. Biodiversity is life. They are inseparable. They are “one thing”.

Measure: *Introduction of FADs to enhance sustainable fishing and reduce pressure on coral reefs*

Fish Aggregating Devices (FADS) were introduced by the Department of Marine Resources (DMR) in 2012. It should be noted that the Sargassum that has entered our marine and coastal area since 2016 also acts like many natural FADs. The introduction of FADs has enticed fishers to target larger species (tuna and mahi-mahi). This has relieved pressure on the coral reefs as fishers are going further out to sea and no longer wasting their time fishing in coral reef areas. The FADs appear to be effective in promoting sustainable harvest as well as in reducing the pressure on coral reefs as demonstrated by the 30 lb/fish/day caught on coral reefs.

No coral reef monitoring has been done by the DMR in the past in part because the DMR did not have a boat to enable them to do this. The DMR now has two boats (acquired in 2018). One of the boats will be used to do coral reef monitoring (amongst other things). There is no specific coral reef monitoring protocol in place at this time although it has been agreed that the Atlantic

and Gulf Rapid Reef Assessment (AGRRA) Protocol guidelines will be used. Although it has been decided to use AGRRA as the coral reef monitoring protocol and the DMR now has the means (the boat) to undertake monitoring, the DMR does not have all of the necessary training to do the monitoring. There is need to enhance capacity in this regard. Meanwhile, the Nature Conservancy did an assessment of the health of coral reefs in six Caribbean countries a couple of years ago. Each country got a coral reef report card. What grade did we get and how did it compare with the other Caribbean countries?

Measure: Fishers target Lionfish and restaurants serve it

Lionfish are not native to our waters. They come from the Indian Ocean and the Red Sea. They have become a major predator of our native species including many that are harvested for commercial purposes.

Fishers have been encouraged by the DMR to target lionfish. The DMR has also encouraged the creation of a market for lionfish by encouraging restaurants to serve it. Personal observations of fishers and others whose livelihoods depend on the sea like indicate that the number of lionfish seems to have decreased since 2014 in shallow waters but may have increased in deeper waters. There are no actual statistics regarding this phenomenon and there is no information as to the reason why this apparent change may have taken place. Given the extremely high reproductive rate of this fish species it is still not known if targeting lionfish can significantly control the population of this exotic invasive. A single lionfish can lay 2 million eggs per year!

Measure: Increasing the Institutional Capacity of the Department of Marine Resources

The institutional capacity of the DMR has been enhanced by more than doubling the number of DMR staff (from 9 people in 2014 to 20 people in 2018) including a Fisheries Enforcement Officer. The partnership between the DMR and the SKN Coast Guard also strengthens the capacity of these institutions to monitor activities in the coastal and marine areas and to more effectively enforce regulations. For example, the use of fishing nets is not allowed within a 3 mile radius of the coast. The new Fisheries Aquaculture and Marine Resources Act entered into force in 2016.

Measure: Increasing the Institutional Capacity of Academic Institutions and their contribution to Biodiversity Conservation

In addition to the measures described above, we are also increasing the institutional capacity of academic institutions on SKN to contribute to the conservation of our biodiversity.

Clarence Fitzroy Bryant College (CFBC), our local College, established a two-year Associate Degree level Environmental Science programme about twelve years ago. They currently have 50 students enrolled in the programme. This represents a 50% decrease in enrollment since 2014 (the decrease is attributed to a new requirement for acceptance into the program of a geography course). The programme includes modules on Ecological Principles, Sustainable Use of Natural

Resources, Population and Food Sources, Sustainable Agriculture, Pollution of the Environment, and Renewable Energy. All students undertake student-based research but little is done with the research results as there is no clearinghouse for the research and no research unit at the College.

In addition to the Environmental Science programme, the CFBC also offers a Biology Programme (approximately 25 students enrolled), as well as a Biogeography Programme (approximately 15 students enrolled), and an Agricultural Studies Programme (which has dwindled to about 10 enrolled students).

The Ross University now offers a Master of Science degree and a PHD degree in Conservation Medicine. The Center for Conservation Medicine and Ecosystem Health at Ross University has continued to grow since its establishment in 2012 and now includes population monitoring and other research related to shorebirds and corals. To date, all the corals around St. Kitts and Nevis have been mapped and research is being done on diseases that may be affecting them including a study on the pathology of spot bleaching in elliptical star coral *Dichocoenia stokesii* and a study on pathology of staghorn coral *Acropora cervicornis* during a thermal bleaching event. Studies are ongoing on the prevalence and progression of macroscopic abnormalities in annular (*Orbicella annularis*) and mountainous (*O. faveolata*) star corals in St. Kitts).

Other useful studies on biodiversity include: Sponges, eagle rays to assess population numbers; Vervet monkeys – tracking habitat assessment on the human-animal interface to see if they are carrying parasites that could be moved over to people; sea urchins – histological and parasitic assessment of white sea urchins *Tripneustes ventricosus* in St. Kitts; conch – Health survey of queen conch *Lobatus gigas*, in St. Kitts; seaturtles – Pathology of embryo and hatchling mortality in Caribbean Leatherback sea turtles *Dermochelys coriacea* and contaminants associated with embryo mortality in St Kitts’ leatherback sea turtles; spiny lobster – Connectivity, aging, and diseases of St. Kitts’ Caribbean spiny lobster *Panulirus argus*) and; fish – Microparasite-associated pathology in invasive lionfish, Pterois spp. from St. Kitts. University students participate in the various research projects and many of our schools now have environmental science clubs.

7.0 Further actions needed to conserve our biodiversity

This 6NR will serve as an important input to the development of the next NBSAP starting in 2019. All of us must decide how we will use the information presented in this report to make decisions that will determine the fate of our biodiversity as we move forward. In order to be involved in that process we must all be informed. The communications strategy (Annex 2) outlines steps to help make our citizenship more aware of this report so that they may contribute to conservation directly and indirectly by participating in the process of developing our next NBSAP.

7.1 Support mechanisms that enable and enhance implementation of our NBSAP

Several key elements are required to enable and enhance implementation of our NBSAP including enabling legislation, adequate and sustainable financing, capacity-building, coordination

between Government entities and between Government and the private sector, and mainstreaming biodiversity conservation considerations within our development plans. Some of these “support mechanisms” were included in our last NBSAP. Annex 1 provides a brief overview of what we have done and some areas we may need to focus on more.

7.1.1 Sustainable Financing

During the period reported on in the Fifth National Report (5NR), the country was in the process of identifying financial resources for supporting implementation of the revised NBSAP, including the development of a National Financial Strategy for NBSAP implementation. There was also a plan to include a budget line for NBSAP implementation in the budgetary allocations of the Ministry of Sustainable Development. To date, no national financial strategy for NBSAP implementation has been developed and no budget line for NBSAP implementation has been established. Nevertheless, the Government budget assigned to the various Departments that are most directly involved with biodiversity conservation and the management of our natural resources as well as the threats to these resources (such as the DOE, the DMR, SWMA, DEH) has increased since 2014.

Other than core government resources to pay staff of these various institutions, SKN still largely depends on external project funds to cover costs of conservation activities. By far the single most important source of financing has been the Global Environment Facility (GEF). Over the past five years, there has been no real change in the dependence on this one funding source. Diversification of financial support for biodiversity conservation projects is important as dependence on a single donor source may not be sustainable in the long-term.

A financial sustainability plan for PAs has been developed (still in draft) through the GEF-supported “Conserving Biodiversity Project”. It is too soon to know if this plan will be pursued and if it will indeed result in the financial sustainability of protected areas in SKN.

8.0 Monitoring our Biodiversity

8.1 Mechanisms for Monitoring and Implementation

Mention was made in the 5NR that the Government of SKN intended to develop an NBSAP Implementation Plan to address various challenges to implementation. Since part of the NBSAP is an action plan, it is assumed that the implementation plan referred to a more detailed work plan. No such work plan has been developed to date. In addition to a work plan, a monitoring and evaluation framework to monitor the implementation of the NBSAP and the impact the measures were having was also to be developed. This was not developed. Nevertheless, indicators were identified for each of the twelve National Targets that were defined in the NBSAP. As described elsewhere in this report there were certain shortcomings with the indicators, many of which do not qualify as being S.M.A.R.T.

9.0 Where to go from here?

Our next NBSAP will need to include a detailed, concrete action plan as well as a practical means of monitoring its implementation. Over the past four years Kittitians and Nevisians have become more aware and knowledgeable about biodiversity. As such, we have identified specific actions which need to be taken to conserve it. Our action plan and our monitoring framework should reflect this.

The National Biodiversity Targets need to be updated and the indicators for these need to be revised and should relate to specific elements of biodiversity targets that are measurable.

Prepared by:

Department of Environment

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Annex 1.
Update on Implementation of the NBSAP

The objectives and actions outlined in our last National Biodiversity Action Plan are presented below along with an assessment of progress made to date and an assessment regarding the need for further action.

Objective	Action	Brief Overview of What has been Done	Assessment of Progress & Need for Action
To ensure that the biological resource of SKN remains rich and diverse	Conduct inventory of biological diversity resources	Inventories of marine and terrestrial biodiversity conducted in 2017/18. Final reports will be available in early 2019.	Good progress made. The focus henceforth should be on identifying those marine and terrestrial species/ecosystems that require careful monitoring and develop and implement monitoring of those elements of biological diversity
	Establish baseline for agreed National Biodiversity Targets	No baselines were established for national targets although some were known.	New National Targets will need to be agreed in the next NBSAP. Work on the next NBSAP will begin in late 2019. Baselines for the new NTs should be established at the time those are agreed.
	Strengthen quarantine efforts and enforcement legislation	Quarantine efforts have been strengthened. Enforcement efforts have been strengthened. There has been no change in relevant legislation.	Progress made. Continue effort.
To reduce or eliminate the potential risks from	Coordinate policy on food security, technology	Discussions are underway but no national policy exists	Progress made. Continue effort.

the use of biotechnology and its by-products		as of yet. Biosafety regulations have been developed.	
Objective	Action	Brief Overview of What has been Done	Assessment of Progress & Need for Action
	Reduce the conflict between traditional agriculture and organic farming.	There has been a significant uptake of organic farming and a reduction in the use of agrochemicals.	Progress made. Continue effort.
	Expand public awareness on biosafety issues	No change	Action required.
To reduce and/or minimize the loss of terrestrial and marine biodiversity	Amend or create new legislation and regulations to improve biodiversity conservation	New legislation and regulations have been established and more are being proposed	Good progress has been made. Focus on officially adopting proposed new legislation/regulations and on enforcement.
	Direct CARDI to function as a first level genetic pool	This has not happened	This may not be necessary. Consider options.
	Strengthening and enforcing permitting system for harvesting forest resources	Some progress has been made but this is still ad-hoc	More attention required.
	Establish biodiversity knowledge network within secondary schools using the EduNET	The Dept. of Environment has conducted some public awareness activities in schools but EduNET is not being used	It may not be necessary to use EduNET to establish biodiversity knowledge networking. Schools with the support of Dept. of Environment may consider other options.
	Bring agricultural sector in line with BDC, Climate Change and SLM principles	Some progress has been made. There has been more cross-sectoral coordination now	Progress made. Continue effort.

		that both Departments have come under the same Ministry. New crops being planted are less vulnerable to climate change.	
Objective	Action	Brief Overview of What has been Done	Assessment of Progress & Need for Action
	Expand the network of Protected Areas	The network of PAs has been significantly expanded with the addition of the first Marine Managed Area and three new Terrestrial Protected Areas	Good progress made. Focus should now be on enhancing the management of the existing PAs.
To ensure that the basis for development is through the sustainable use of terrestrial and marine biological resources	Seek agreement among farmers for the regulating of pesticide use in support of organic farming.	Discussions have taken place with farmers to encourage farming within these principles. One of the largest farmers on SKN has reduced his pesticide use by 50%.	Good progress made. Continue effort.
	Develop economic accounting system for BD resources	Nothing has been done in this respect	Action required
To ensure the equitable and sustainable distribution of social and economic benefits from the use of terrestrial and marine biological resources	Promote partnership between government and the private sector	No agreements have been made between Government and private land owners such as conservation easements to support BDC and no conservation incentives have been put in place for	More attention required

		them.	
	Training of farmers and fishers in resource management	Training has been provided to both farmers and fishers. No training manual on BDC has been prepared.	Progress made. Continue effort. It may not be appropriate to develop a training manual on BDC as indicated in the expected outputs. Rather key positive and negative actions related to specific farming or fishing practices can be prepared in simple laminated brochures and shared according with the relevant resource users.

Annex 2.

Communicating the Sixth National Report to the Public

All key stakeholders were consulted during the process of preparing the Sixth National Report (6NR) to the Convention on Biodiversity (CBD) not only to obtain needed information but also to help ensure transparency and to promote broad awareness of the exercise undertaken to prepare the 6NR and of the contents of the report

St. Kitts and Nevis decided to use the online reporting tool to prepare and submit its National Report. Although in principle this should make it more easily available to any interested party it is generally acknowledged that the format of the report does not lend itself to ease of usability.

St. Kitts and Nevis however, understands the benefit of having a standard format and the relative greater ease of collating country information into a global report by using the online reporting tool. Nevertheless, given that the general public will be less inclined to view the report in this format, the Department of Environment has prepared this updated Country Biodiversity Profile as a reference document to the 6NR. The Biodiversity Profile which also forms part of the 6NR will be made available on the Department's local website for ease of reference and accessibility.

The following actions are planned to help in communicating the Sixth National Report:

- St Kitts and Nevis Information Service, SKNIS to include publish a copy and appropriate web link on the existence of the 6NR and how to access the updated Country Biodiversity Profile.
- The Department of Environment will sponsor a monthly "Nature Quiz" in partnership with local primary and secondary schools. Participating schools will be added to a "QUIZMAIL" list for future reference and activities.
- Utilize environment-related events and forums to build awareness of the 6NR and the Country Biodiversity Profile.
- Bring back a YouTube equivalent of the popular TV skit "We Just Love This Place" from the 1980's with "Papa George" that helped bring environmental awareness to so many children and youth in SKN. Use the 6NR for information to present in the skits.

Finally, key stakeholders consulted for the 6NR will be invited to provide input into the development of the next 2020-2030 NBSAP.

ST KITTS AND NEVIS
NATURE
Q U I Z

TEST YOUR KNOWLEDGE ABOUT OUR BIODIVERSITY

1. How many pounds of trash were collected during our annual beach cleanup in *(insert year)*?



2. What was the single most common trash item found on our beaches?



3. Are there really ghosts fishing in our waters?

4. What can be done so fish don't get trapped in lost fish pots?

5. Are street lights and sea turtles really related?



6. How many legal anchoring areas are there in Basseterre harbor?



7. What should you always take to the store with you?



OR



OR



8. How many plastic bags did one supermarket on St. Kitts import last year?



9. How many species of sea turtles nest on our beaches?



10. How many babies can a lionfish have in one year?



Does your school want to participate in the monthly nature quiz starting January 2019?

It's easy!

- Just contact the Department of Environment at 869-466-8535 and ask to be added to our QUIZMAIL list.
- Each online monthly quiz has 10 questions.
- Participating schools have 10 days to submit their answers.
- The two schools which win the most monthly quizzes will go on live radio for the final "*BIODIVERSITY QUIZATHON*" to determine which school knows our biodiversity the best!
- All primary and secondary schools on St. Kitts and Nevis are eligible to participate.
- All answers can be found in the Sixth National Report to the Convention on Biodiversity at www.chm.dbd.int and in other sources you identify.

Happy reading!

Annex 3. The Participatory Process Undertaken in Preparing the 6NR

Over 40 key stakeholders were consulted during the preparation of the 6NR which took place during the five month period from July to November 2018. Stakeholders consulted include a variety of Government entities, non-governmental organizations, private sector entities and knowledgeable individuals not associated with any institution. In addition to those obvious stakeholders, some less obvious ones were consulted such as, the Port Authority, the Solid Waste Management Authority and the electricity company. Gender equality was considered during the consultation process, as such, efforts were made to seek inputs from entities such as the Department of Gender Affairs and youth organizations. There does not seem to be any major gender discrepancy across the stakeholder organizations involved in the consultations.

Key Stakeholder – 6NR Consultation

	Stakeholder	Contact
1.	Ms. June Hughes Senior Environment Officer Department of Environment	869 466-8535 Ext. 1213 june.hughes@gov.kn ccodoe@sisterisles.kn
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3.	Ms. Cheryl Jeffers Conservation Officer Department of Environment	869 466-8535 Ext. 2031 cheryl.jeffers@gov.kn
4.	Mr. Evin Parry Environmental Scientist ABS Protocol National Focal Point Department of Environment	869 466-8535 Ext. 2034 eavin.parry@gov.kn
5.	Mr. Joshua Salter Conservation Officer Department of Environment	869 466-8535 Ext. 2034 joshua.salters@hotmail.com
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	GIS Unit	
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15.	Mr. Greg Pereira Owner, Greg Safaris Nature Tour Operator	869-662-6002 gregssafaris@gmail.com greg@gregsafaris.com
16.	Mr. Vaughn Sturge, Dive Master, Dive Shop at Oualie Beach, Nevis & Fisheries Officer, Dept. of Fisheries/Nevis	Contact at the dive shop or through fisheries Dept.
17.	Mr. Lemuel Pemberton Director Dept. of Fisheries - Nevis (Member of the Nevis Turtle Group)	869 469-5521 Ext. 2088 cocolabauvifera200@gmail.com nevisturtle@yahoo.co.uk
18.	Dr. Kimberly Stewart St Kitts Sea Turtle Monitoring Network	869 764-6664 cturtlegirl@gmail.com
19.	Ms. Pauline Ngunjiri Director, Nevis Historical and Conservation Society, Nevis	469-5786, 661-4148 pngunjiri@nevisheritage.org
20.	Ms. Rhyllis Percival Executive Director, St. Christopher National Trust	869 465-5584 schs@sisterisles.kn

21.	Ms. Vanessa Webbe Dept. of Tourism, Nevis	869 669-8455, 869 469-5521 Ext 6447 vanessa.webbe@niagov.com
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Considerations Given to the Establishment of a National Steering Committee for the Sixth National Report to the Convention on Biodiversity

Careful consideration was given to establishing a National Steering Committee (NSC) for the Sixth National Report (6NR) to the Convention on Biodiversity (CBD) but it was ultimately decided that given the huge number of existing committees in SKN and the “committee fatigue and overload”, it would be best to simply ensure that all key stakeholders were consulted during the process of elaborating the 6NR. This would not only enable obtaining the needed information but would also help ensure transparency and broad awareness of the exercise undertaken to prepare the 6NR and of the contents of the report. The online draft report was shared with all key stakeholders for review, comments and inputs before finalization. The review period was specified and adhered to. All comments received during the three week review period were considered and incorporated into the final 6NR as appropriate.

An Overview of the Key Stakeholders Consulted for the 6NR

1. Department of Environment, St. Kitts
2. Department of Physical Planning, St. Kitts
3. Department of Physical Planning & Environment, Nevis
4. Ministry of Sustainable Development
5. Department of Marine Resources (DMR)
6. Department of Maritime Affairs
7. Port Authority, Marine Division
8. Department of Fisheries-Nevis
9. Department of Environmental Health
10. Solid Waste Management Authority
11. Ministry of Youth
12. Caribbean Youth Environment Network
13. Clarence Fitzroy Bryant College (CFBC)
14. Center for Conservation Medicine and Ecosystem Health, Ross University
15. Department of Agriculture, St. Kitts
16. Department of Agriculture – Nevis
17. Ministry of Tourism, St Kitts
18. Ministry of Tourism, Nevis
19. Nevis Historical & Conservation Society
20. St. Christopher National Trust
21. St Kitts Sea Turtle Monitoring Network
22. Sea Turtle Group, Nevis
23. Representative of an international NGO (The Nature Conservancy)
24. Representative from a Dive Shop on St. Kitts (Kenneth of Kenneth’s Dive Shop)
25. Representative of a Dive Shop on Nevis (Vaughn Sturgis)
26. Representative of a Tour Operator on St. Kitts (Greg Pereira of Greg’s Safaris)
27. Representative of a Tour Operator on Nevis (Lynelle Liburd of Sunrise Tours)
28. Ministry of Community Development, Gender Affairs and Social Services
29. Representative from FAD fisher’s group