



THE BAHAMAS ENVIRONMENT, SCIENCE
AND TECHNOLOGY COMMISSION
Ministry of the Environment

REF: MTE/BEST/GEF/

SENT VIA FACSIMILE

8 June 2011

Mrs. Monique Barbut
GEF Secretariat
1818 H Street, NW
Washington, DC 20433
USA
Fax: (202) 522- 3240/3245
Email: secretariat@thegef.org

RE: The Bahamas National Portfolio Formulation Exercise (NPFE)

Dear Mrs. Barbut:

The Bahamas has completed its National Portfolio Formulation Exercise (NPFE) with resources provided by the Global Environment Facility (GEF). Please find the appended results of the NPFE consultation; The National Portfolio Formulation Document (NPF) for The Bahamas.

Please note that the report will be published as an e-document with the appropriate illustrations and we will advise upon completion for posting to the GEF website.

I take this opportunity to again thank the GEF Secretariat for the support offered in facilitating The Bahamas' access to the resources needed to undertake this exercise.

Kind Regards,

Philip S. Weech
DIRECTOR
OPERATIONAL FOCAL POINT FOR THE GEF

cc: Ms. Diana Lightbourne
Permanent Secretary (Acting)
Ministry of the Environment



Global Environment Facility

National Portfolio Document for
The Bahamas

Prepared by The Ministry of The
Environment

Bahamas Environment Science and
Technology (BEST) Commission.

June 2011

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Acronyms

ABS	Access and Benefit Sharing
BCCEC	Bahamas Chamber of Commerce and Employers Confederation
BEC	Bahamas Electricity Corporation
BEST	Bahamas Environment, Science & Technology Commission
BHA	Bahamas Hotel Association
BNPAS	Bahamas National Protected Area System
BNT	Bahamas National Trust
BSE	Bahamas Society of Engineers
CBD	Convention on Biological Diversity
ECLSP	Exuma Cays Land and Sea Park
EE	Energy Efficiency (or energy efficient)
EIA	Environmental Impact Assessment
FAO	Food and Agricultural Organization
FSP	Full-Sized Project
GEF	Global Environment Facility
GEF-5	Fifth Replenishment of the Global Environment Facility
GIS	Geographic Information System
IDB	Inter-American Development Bank
MEAs	Multilateral Environmental Agreements
MSP	Medium-Sized Project
NBSAP	National Biodiversity Strategy and Action Plan
NCSA	National Capacity Self-Assessment
NEMAP	National Environmental Management and Action Plan
NIP	National Implementation Plan (for POPs)
NISP	National Implementation Support Partnership
NPFD	National Portfolio Formulation Document
NPFE	National Portfolio Formulation Exercise
OTEC	Ocean Thermal Energy Conversion
POPs	Persistent Organic Pollutants
PoWPA	Programme of Work on Protected Areas
PSAs	Public Service Announcements
RARE	Rare Conservation (formerly the Rare Center for Tropical Bird Conservation)
RE	Renewable Energy
SCCF	Special Climate Change Fund
SGP	Small Grants Programme
STAR	System of Transparent Allocation of Resources
TCPF	Technical Cooperation Programme for Forestry
UNCCD	United Nations Convention to Combat Desertification and Drought
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme

Bahamas National Portfolio Formulation Document (NPF)

26 May 2011

Executive Summary

Through stakeholder consultations and review of national strategies and plans, the Bahamas National Steering Committee for the GEF National Portfolio Formulation Exercise (NPFE) has developed a priority listing of project concepts. These concepts will be submitted to the GEF Secretariat as priorities for the country's STAR allocation under the Fifth Replenishment of the GEF. A summary of the STAR allocation priority projects are listed below in Table 1.

Table 1 – Summary of Bahamas GEF-5 Priority Projects

Focal Area	Project
Land Degradation* (with linkages to Biodiversity, Climate Change, and Sustainable Forest Management)	Integrating forest biodiversity into land use planning Priority: High
Climate Change (Mitigation)	Renewable energy (RE) technologies Priority: High
Climate Change (Mitigation)	Transformation of the public transport system through low-carbon technologies Priority: High
Biodiversity	Abaco National Park development Priority: High
Biodiversity	Stock assessment of fishery species Priority: High
Climate Change (Mitigation)	Energy efficiency market penetration in the tourism and business sectors Priority: High

Climate Change (Mitigation)	Establishing a Net Zero Community in the Family Islands of The Bahamas Priority: Medium
Biodiversity	Development of a legislative and operational framework for access and benefit-sharing of genetic resources Priority: Medium

*FAO has indicated its willingness to provide co-financing in the amount of \$150,000 for this project as a Technical Cooperation Programme for Forestry (TCPF) with the Forestry Unit of the Ministry of the Environment. This co-financing will be utilized to implement a pilot forest management project.

1 National Steering Committee

The Bahamas National Steering Committee for the GEF National Portfolio Formulation Exercise (NPFE) is chaired by Mr. Philip Weech, GEF Operational Focal Point and Director of the BEST Commission, Ministry of the Environment. Mr. Weech is supported by Mrs. Stacy Lubin-Gray, Project Manager, BEST Commission, Ministry of the Environment and Mrs. Stacey Moultrie, National Report Project Consultant, HD Wells.

The Steering Committee operates through four thematic groups, focusing on the areas of biodiversity, climate change, land degradation/sustainable forestry management and chemicals. Members and their affiliations are detailed in Annex 1 of this document.

Workshops comprising all member of the National Steering Committee were held firstly on December 14th and 15th, 2010 and then on April 12th, 2011. Thematic group meetings were held as follows:

- Biodiversity – Thursday, February 3rd, 2011
- Climate change – Tuesday, February 8th, 2011
- Land degradation/Sustainable forestry management – Wednesday, February 9th, 2011
- Chemicals – Friday, February 11th, 2011

2 National Consultations

The NPFE involved consultations with the following GEF agencies:

- United Nations Environment Programme (UNEP)
- Inter-American Development Bank (IDB)
- Food and Agricultural Organization (FAO)

Public consultations involved presentations to the following agencies which include of organizations and individuals in both the public and private sector:

- Pan-American Health Organization (PAHO)
- Bahamas Chamber of Commerce and Employers Confederation (BCCEC)
- Bahamas Hotel Association (BHA)
- Bahamas Society of Engineers (BSE)
- Rotary Club of East Nassau
- Joint meeting of BHA and BCCEC

3 Global Environmental Challenges

3.1 Biodiversity

The Bahamas signed the Convention on Biological Diversity (CBD) on the 12th of June, 1992, and ratified it on the 2nd of September, 1993. In the Convention of Biological Diversity that came into force on December 29, 1993, the term biological diversity (biodiversity) is defined as “the variability among living organisms from all sources including inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; that includes diversity within species, between species and ecosystems”. Therefore, biodiversity is intrinsically linked to the other three thematic areas. Climatic change, land degradation and wetland destruction all have potential significant adverse implications for biodiversity.

The main objectives of the CBD are the conservation of biodiversity; sustainable use of its components; and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

The Bahamas faces the following key challenges related to biodiversity, particularly as they relate to meeting its commitments under the Convention on Biological Diversity:

- The depletion of Bahamian ecosystems and species: The Convention stresses conservation of the total portfolio of biological diversity to maintain the structure and function of ecosystems. Many Bahamian ecosystems and species are already depleted and under threat of further degradation and /or endangerment for example coral reefs, pinelands, and iguanas.
- The depletion of Bahamian natural resources: The Convention stresses sustainability of resource use. Many Bahamian resources are already depleted, for example, several species of commercial fish, and valuable coppice forest species, and are under threat of further degradation.
- The damage or fragmentation of natural habitats: Wildlife and fish habitats such as those provided by pine forests and coral reefs, respectively, are damaged or fragmented by economic development occurring on land and in or near water.
- The introduction of invasive alien species to The Bahamas, accidentally or intentionally, threatens the survival of native species.

The National Biodiversity Strategy and Action Plan (NBSAP) identified the following activities as priorities for action to achieve implementation of the CBD:

- National Consultative Process was to determine the specifics of which species, ecosystems and locations are targeted for conservation activities and to create an awareness among citizens and residents of The Bahamas of the value of biodiversity to the economy and to societal well-being, and of their individual and collective responsibilities under the CBD;
- Preparation of bioregional guidelines, position papers and policy statements with respect to bioregions, major ecosystems, and critical species in The Bahamas and the role of the agriculture, fisheries and forestry sectors in conservation biodiversity;
- Planning for a system of national parks and protected areas;
- Development of monitoring and evaluation methodologies; and
- Protection or rehabilitation of threatened or degraded ecosystems and of threatened species.

Over the past 12 years, action has been taken on all of these, but efforts will need to continue as the tasks are significant.

The Master Plan for The Bahamas National Protected Area System identifies the following priority activities for action in order to implement the Programme of Work on Protected Areas (PoWPA):

- Completion of mapping and groundtruthing for BNPAS and integrate protected areas into land use planning efforts of all Government agencies;
- Economic valuation for more protected areas – a recent study has been completed for the Exuma Cays Land and Sea Park (ECLSP) and the Retreat Gardens;
- Study on connectivity between island for major marine species – this includes use of latest tools for incorporating connectivity and ecological corridor principles into protected area declaration and management;
- Completion of conservation area plans for priority protected areas;
- Infrastructure development for national parks and marine reserves;
- Legislative gap analysis and reform; and
- Communication and marketing campaign for the BNPAS.

Some of these activities are being addressed by the current GEF Full-Sized Project on the Sustainability of Marine Protected Areas in The Bahamas.

3.2 Climate Change

The UN Framework Convention on Climate Change (UNFCCC) was opened for signature in Rio de Janeiro in June 1992 and entered into force on 21 March 1994. It sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. It recognizes that the climate system is a shared resource whose stability can be affected by industrial and other emissions of carbon dioxide and other heat-trapping gases. The Bahamas signed the UNFCCC on June 12, 1992 and ratified it on June 2, 1994. To respond to its obligations under the Convention, a National Climate Change Committee was established in 1996.

In the Bahamas National Policy for Adaptation to Climate Change, the Government recognized that as a Small Island Developing State (SIDS), the country is characterized by:

- Vulnerability to sea level rise and changes in marine conditions due to its archipelagic nature and extended coastline as well as low elevations;
- Limited human and economic resources to address adverse impacts;
- Location of human settlements and critical infrastructure in coastal low lands; and
- Location in the North Atlantic hurricane belt.

The goals and objectives of the National Policy include:

- Fostering the development of plans, processes and strategies to avoid, minimize, adapt to or mitigate the negative impacts of climate change on The Bahamas' natural environment and economic activities;
- Encouraging efficient use of energy, reduce dependency on imported fossil fuels and develop the use of renewable energy (RE) sources; and
- Fostering the development of appropriate institutional systems and management mechanisms to ensure effective planning for and responses to climate change.

The First National Communication on Climate Change for The Bahamas identified sectors of the economy that were vulnerable to the direct and indirect impacts of climate change. These included:

- **Tourism:** A rise in sea level would result in beach and coastal erosion. Since most of the tourist hotels are located along the coast, they could be directly affected. Climate change is also expected to introduce additional stresses to coral reefs. Coral reefs, an important aspect of marine tourism, are also a significant source of food and shelter for many marine life-forms and form physical barriers to storm surges and ocean waves.
- **Health:** It is generally believed that increases in temperature are likely to increase the incidence of certain tropical diseases such as dengue and malaria.
- **Agriculture:** Many of the short-term crops grown in the Family Islands are seasonal, and any significant shift in climatic conditions could affect productivity. Sea level rise and inundation from storm surges will result in the loss of agricultural land due to salt water intrusion and salinization of the soil.
- **Fisheries and biodiversity:** Damage to coral reefs and coastal wetlands could adversely affect fish spawning. Likewise, terrestrial biodiversity will be impacted by the increase in incidence of coastal flooding.

The current GEF Medium-Sized Project to develop The Bahamas' Second National Communication on Climate Change involves important activities inclusive of:

- Vulnerability and adaptation assessment;
- Development of appropriate mitigation measures;
- Development of baseline climate models to aid in mitigation planning in the energy sector as well as infrastructure planning for adaptation; and
- Public education and outreach activities on climate change, particularly the development of a comic book for children aged 8 – 14 years.

3.3 Land Degradation

The UN Convention to Combat Desertification and Drought (UNCCD) came into force on December 26, 1996. As defined in the Convention, desertification is a process of “*land degradation in arid, semi-arid, and dry sub-humid areas resulting from various factors; including climatic variations and human activities*”. The Convention establishes a framework for national, sub-regional and regional programmes to counter the degradation of drylands, including semi-arid grasslands and deserts.

The Bahamas National Action Programme for Combating Land Degradation notes that economic development, particularly in the tourism sector, has led to an increase in the demand for land. Large tracts of land have been cleared for tourism and urban development projects. Moreover, the requirement to provide the infrastructure, such as potable water supply and sewage management, transportation and communication systems, to service these new developments adds to the pressure on the relatively scarce land resources. Other economic sectors, such as agriculture and construction have also increased the pressures on land, resulting in abuse and degradation that is often compounded by natural disasters, such as hurricanes.

Sand mining can have a negative impact on beaches and coastal areas, reducing their ability to buffer against storms. Illegal mining occurs at unknown rates and volumes. Of particular concern are activities that have destroyed sand dunes and scarred beaches. The negative effects of sand mining on coastlines and mangrove ecosystems are apparent in several islands of The Bahamas. Illegal quarrying also has negative effects, specifically the defacing of hills and ridges that subsequently contribute to erosion and higher levels of surface run-off during storm events. Clearcutting of property to build homes and other buildings is a common practice that results in loss of native plants, destruction of habitat for important native and migratory bird species as well as loss of quality soils that are already scarce in The Bahamas.

Historically, agricultural practices involved slash-and-burn (see Figure 7), inadequate crop rotation and intensive tillage of the soil. Some present-day practices are still of environmental concern. Those impacting adversely on agricultural lands include the mixing of chemicals close to wells, open trench wells for irrigation, open application of fertilizers to the ground and the indiscriminate application of fertilizers.

There are also several environmental considerations associated with commercial farming. Commercial farming involves large-scale water consumption. As a result of the mismanagement of various factors, such as frequency of rainfall versus irrigation scheduling and water extraction versus recharge rate, has contributed to land degradation, and as a consequence, loss of agricultural productivity.

The islands of The Bahamas are confronted with dangerous hazards from hurricanes and the associated consequences, such as storm surges and flooding. These consequences cause the salinization of soils, which destroys crops and delays the planting season. They may also negatively impact freshwater resources. In 2004, Hurricanes Frances and Jeanne, in addition to destroying properties valued over US\$200 million, severely compromised the freshwater reserves in Andros as well as in Grand Bahama. The aquifers were inundated with salt water from the storm surges associated with these hurricanes. This resulted in water shortages in Nassau, as over 50% of the New Providence potable water were supplied by the freshwater wellfields on Andros.

Other negative impacts from severe storms include leaching of chemical fertilizers from flooded soils and salt intrusion of agricultural lands. Pine forests are also affected by salt intrusion. Salt intrusion exasperates conditions of forest floors during the dry season. The forests essentially become dry, and sometimes scorched. This, in turn, raises the risk of forest fires. During the first quarter of 2005, uncontrolled fires in several islands burned on a daily basis, causing damage to much of the pine and coppice vegetations.

3.4 Other

Other challenges facing The Bahamas are outlined below:

- Chemicals – With no proper management framework or tracking system for chemicals being imported into the country, inclusive of the proper handling, use and disposal of such materials, the potential for many deleterious effects to the environment and human health may exist. Potential effects may include contamination of groundwater resources, soils, and potable water supplies resulting in human illness and loss of productive landscapes and

natural habitats. Proper management of Persistent Organic Pollutants (POPs) is a priority for The Bahamas which is seeking to complete its National Implementation Plan under the Stockholm Convention.

- Capacity development – The National Capacity Self-Assessment (NCSA) and several national reviews have identified capacity development needs at the systemic, institutional and individual levels throughout the country. These include the need for legislative reform, development of environmental regulations, adequate staffing for Government agencies tasked with environmental management, training of staff within Government agencies, appropriate budgetary allocations for agencies to accomplish their tasks and national training programs to increase labour force available to address the myriad of environmental challenges facing the country.

4 STAR Allocation and Priority Projects

The Bahamas’ STAR allocation for each focal area is as follows:

- Biodiversity \$4.26 Million
- Climate Change (Mitigation) \$2 Million
- Land Degradation \$1.48 Million

The total STAR allocation is \$7.74 Million.

The Bahamas qualifies for the scheme of limited flexibility (see GEF/C.38/9 GEF-5 Operational Procedures for the STAR) meaning that at least 90% of the funding allocated for a particular focal area should be used for that focal area.

Co-financing for the priority projects will need to be identified as the project concepts are further detailed. For the land degradation project, FAO has indicated its willingness to provide co-financing in the amount of \$150,000 for this project as a Technical Cooperation Programme for Forestry (TCPF) with the Forestry Unit of the Ministry of the Environment. This co-financing will be utilized to implement a pilot forest management project.

Table 2 outlines the priority projects eligible under GEF-5 for which The Bahamas intends to seek support.

Table 2 – Bahamas GEF-5 Priority Projects

Focal Area	Project	Description
Biodiversity	Development of a legislative and operational framework for access and benefit-sharing of genetic resources Priority: Medium Preferred Agency: TBD	Development of legislation and regulations to govern scientific research in The Bahamas, particularly as it relates to collecting samples of natural resources and/or their genetic material. Development of an operational framework to govern this sector inclusive of bio-prospecting protocol, inventory of bio-prospects,

	Indicative Amount: MSP	permitting system, enforcement, monitoring and control, sustainable financing mechanism, and benefits to local communities.
	Abaco National Park development Priority: High Preferred agency: UNEP Indicative Amount: FSP	This project will involve the development of park infrastructure including integration of green technologies; predator control; habitat management and possible improvement or alteration; support of the park as a wildlife corridor and intact vegetative habitat particularly for native and migrant bird species; potential for species relocation from the park to other islands of The Bahamas.
	Stock assessment of fishery species Priority: High Preferred Agency: FAO Indicative Amount: FSP	Species to be assessed include grouper, snapper, conch and lobster. This project would involve assessment of stocks. The Fisheries Improvement project may be included in this. The Abaco RARE Pride Campaign may be used as a template for national public education and outreach activity.
Climate Change (Mitigation)	Transformation of the public transport system through low-carbon technologies Priority: High Preferred Agency: UNEP/IDB Indicative Amount: FSP	This project would include completion of a comparative study of the public transport system before and after the introduction of low-carbon technologies. It will involve building on reform of this sector which is currently underway (including the New Providence Road Improvement Project and Downtown Revitalization Project, together with previous study on the public transport sector). It will require policy, legislative and institutional reform as well to facilitate introduction of these technologies. There will also be a capacity building component of the project for staff involved in operation and maintenance of the new transport system. It will require making the transportation system more effective, so that it will serve the population of New Providence more efficiently on a daily. One of the project goals will be to increase use of the public bus system, thus reducing use of private vehicles, lowering carbon emissions due to transport, decreasing traffic congestion, and contributing to improved respiratory health and reduced stress levels. This project can be an integral part of the process of improving urbanization in New Providence. It can be replicable on the Family Islands. The SCCF may be another possible source of funding for this project.

<p>Energy efficiency market penetration in the tourism and business sectors</p> <p>Priority: High</p> <p>Preferred Agency: UNEP/IDB</p> <p>Indicative Amount: MSP</p>	<p>Approval of the National Energy Policy would facilitate implementation of this project in the tourism and business sectors in The Bahamas. The project would involve introduction of energy efficient (EE) technologies and systems into large and small hotels and businesses throughout The Bahamas. The project will build on an existing IDB project which provided an energy audit of 17 hotels in the country, but there is a need to analyze the results of the studies and what activities, if any, these hotels have done since.</p> <p>The project will involve various activities including:</p> <ol style="list-style-type: none"> 1) a survey and national conference on energy and water efficiency and waste in the tourism and business sectors; 2) an analysis of the technologies currently in use; 3) the development and implementation of EE and RE standards and credentials for businesses and hotels; 4) the provision of financing for up-front costs of EE and RE activities with a focus on small hotels in the Family Islands; and 5) Building code modifications will be required, with a special emphasis in the project on the construction industry. <p>The project will involve capacity building components of training and certification of line staff in monitoring, maintenance and promotion of these systems and activities, as well as a public education and outreach component.</p>
<p>Renewable energy (RE) technologies</p> <p>Priority: High</p> <p>Preferred Agency: IDB</p> <p>Indicative Amount: FSP</p>	<p>Approval of the National Energy Policy would facilitate implementation of this project. The project involves introducing RE technologies for use by Bahamas Electricity Corporation (BEC) to the national grid system, which will result in reduced national dependence on imported fossil fuels. This builds on an existing IDB projects BH-T1012 Strengthening the Energy Sector in The Bahamas and BH-T1016 Promoting Sustainable Energy in The Bahamas. As a result of these projects, baseline data exists. The project will comply with national sustainable energy initiatives. The project would involve implementing pilot</p>

		<p>projects of chosen RE technologies throughout the country to study their efficacy and economic efficiency, and potentially developing new RE technologies suitable for the Caribbean. These technologies would then be replicable throughout the nation and region. The project will necessitate a new electricity sector framework (including an updated regulatory and legislative framework) as proposed under the IDB project BH-T1016. The project can expand distribution and installation of solar water heaters and solar panels which will be connected to the national grid, through the use of end-user incentives and resulting in net metering. BEC is currently conducting pilot projects with these technologies.</p> <p>Other possible RE technologies that can be introduced to the sector for hotels to manage or on other Family Islands would be waste-to-energy, biodiesel for vehicles and OTEC. In order to facilitate RE technologies there would have to be regulatory and legislative reform and modifications to the Building Code.</p>
	<p>Establishing a Net Zero Community in the Family Islands of The Bahamas</p> <p>Priority: Medium</p> <p>Preferred Agency: IDB</p> <p>Indicative Amount: MSP</p>	<p>This Program build on the existing project GRT/FM-11832-BH: Implementing Sustainable Energy Projects in The Bahamas, whereby solar water heaters and photo voltaic solar panels will be introduced to a community to make it more sustainable and less fossil fuel dependent, creating a net zero community. This would be a pilot project to demonstrate the utility of renewable energy technologies such as OTEC, wave and solar to power a reverse osmosis plant in the family island that would purify and sterilize water for community consumption.</p> <p>A pilot activity will include the use of solar technology for air and water purification and sterilization and for energy production.</p>
<p>Land Degradation (with linkages to Biodiversity, Climate Change, and Sustainable</p>	<p>Integrating forest biodiversity into land use planning</p> <p>Priority: High</p> <p>Preferred Agency: UNEP/FAO</p> <p>Indicative Amount: FSP</p>	<p>Habitats would include pine forests, coppice and wetlands (coastal mangroves, swamps, marshes and ponds). The focus would be on the 4 Pine Islands: Grand Bahama, New Providence, Abaco and Andros</p> <p>The project would involve:</p> <ol style="list-style-type: none"> 1. Assessment - development of a forest estate, resource inventory and

<p>Forest Management)</p>		<p>representative maps as well as development of a GIS database of forestry lands. Maps would show agricultural lands in relation to forestry lands as well as settlement boundaries and buffer zones for forests. Previously completed Ecological GAP Analysis would be an important baseline for geospatial data on the 4 islands. The project will also assess carbon sequestration potential of national forestry resources</p> <ol style="list-style-type: none"> 2. Creation of protected areas - creation of new protected areas as a part of the national system and restoration of impacted forest areas. Restoration would be inclusive of invasive species removal. 3. Management – The project will also include forest certification and verification of forestry stewardship. Public education and outreach mechanisms will involve development of PSAs and poster series on forest habitat types. Capacity building will include training workshops on habitat identification, sustainable harvesting technologies, forest fire management and development of training manuals on habitat types, and GIS course to increase capacity to map these resources through the College of The Bahamas Continuing Education Division. Promoting sustainable livelihoods will be an important component of the project by encouraging sustainable forestry management through use of non-timber forestry products, such as silver thatch palm and medicinal plants. Demonstration community forestry projects could include Cascarilla bark management in Acklins/Crooked Island or land crab coastal habitat preservation in Andros.
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5 Priority Projects in Focal Areas outside the STAR

Table 3 outlines the priority projects eligible under GEF-5 for which The Bahamas intends to seek support in focal areas outside the STAR.

Table 4 outlines the priority projects that have been identified for submission to the UNDP Small Grants Programme (SGP).

Table 3 – Bahamas GEF-5 Priority Projects Outside of STAR

Focal Area	Project	Description
Chemicals	Reducing POPs in the Bahamian environment Preferred Agency: UNEP Indicative Amount: MSP	Project will involve identification of point sources of POPs and reduction of exposure to POPs in the following areas – agriculture, industrial effluent, waste by-products including consumer items like refrigerators and air conditioning units. Project activities will include the review of current reporting requirements in place for various conventions to which The Bahamas is a signatory (including the Montreal Protocol and the draft Mercury Convention now being negotiated), to design a model system to ensure that all chemicals are properly inventoried and can be tracked. The project will build on activities completed under the National Implementation Plan (NIP).
	Development of a national tracking system for transboundary movement of chemicals Preferred Agency: UNEP Indicative Amount: MSP	Project would involve development of a system for inter-agency classification and identification of chemicals so that these substances could be tracked during transportation across international and national boundaries. Promotion of sound chemicals management would be an important component within this system. Project will utilize the existing World Customs Union Harmonized Custom Coding System operated by Bahamas Customs Department to : 1) Improve upon current manual system for international reporting by creating an automated database; 2) Create specific inventories for relevant international Agreements; 3) Link to relevant National Authorities or Focal Points of International Agreements addressing chemicals for reporting, monitoring and any required evaluation. The project will build on activities completed under the NIP.
Climate	Modeling the impact of rising sea	The project will involve collection of baseline data

Change (Adaptation)	<p>levels on The Bahamas</p> <p>Preferred Agency: National Agency (accreditation for Ministry of Finance)</p> <p>Indicative Amount: Adaptation Fund</p>	<p>related to different water tables and rainfall variations for various habitats throughout the country. The data will then be used to model environmental and socio-economic changes resulting from rising sea levels and changes in precipitation. It is envisioned that this model will be replicable for other SIDS. The model will be beneficial to planning for future infrastructure and economic development, agriculture, forestry, water resource use, and inter-island migration.</p>
Enabling Activity	<p>Third National Communication on Climate Change</p> <p>Preferred Agency: National</p> <p>Indicative Amount: Up to \$500,000</p>	<p>This is a reporting requirement under the UNFCCC. This will build on the work completed on vulnerability, adaptation and mitigation under the Second National Communication on Climate Change.</p>
	<p>Technology Needs Assessment for Climate Change</p> <p>Preferred Agency: National</p>	<p>This will enable an assessment of the national technology needs of The Bahamas to mitigate for and adapt to climate change.</p>
	<p>Revision of National Biodiversity Strategy and Action Plan (NBSAP) and Fifth National Report</p> <p>Preferred Agency: National/Regional</p> <p>Indicative Amount: Up to \$500,000</p>	<p>These are reporting requirements under the Convention on Biological Diversity (CBD). The NBSAP was completed in 1999 and while it has been reviewed, it has not been revised since then. The Bahamas completed its Fourth National Report on Biodiversity in 2010. The Fifth National Report is due in March of 2014.</p>
	<p>Implementation of the 2005 National Capacity Self Assessment (NCSA) Report</p> <p>Preferred Agency: UNEP</p> <p>Indicative Amount: Up to \$1 Million</p>	<p>The NCSA project resulted in the development of a National Environmental Management and Action Plan (NEMAP). The NEMAP outlines the various steps the Government of The Bahamas needs to pursue to fulfill its obligations under the various MEAs it is a Party to. Some steps have been taken including adoption of the National Environmental Policy, enactment of Subdivision and Planning Act and creation of the Ministry of the Environment.</p> <p>Potential activities for this project would include drafting and enactment of priority legislation, development of an environmental public education and outreach program, formalization of existing EIA guidelines and creation of new ones, development of sustainable financing mechanisms</p>

		for environmental management, development of an environmental management training program and development of an environmental/natural resource database to improve inter-agency communication.
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Table 4 – Bahamas UNDP GEF Small Grants Project Concepts

Focal Area	Project	Description	Indicative Amount from STAR Allocation Transferred to SGP
Biodiversity	Creation of a virtual natural history museum and herbarium	As space and maintenance continue to be a challenge, a virtual natural history museum would give users access to detailed images of plant and animal specimens without the need for a facility to house them. This project would involve repatriation of information with key institutions like the American Museum of Natural History, Smithsonian Institute and Fairchild Botanical Gardens. Due to the high rate of endemism in plants, such as orchids, in The Bahamas, a virtual herbarium would be a key feature of the museum with a focus on promoting protection of endemic plant species.	\$50,000
	Stock structure assessment of Atlantic bottlenose dolphins	Potential to tie this in with International Waters with Cuba and Turks & Caicos or another marine corridor or connectivity project	\$50,000
Climate Change	Support for Public Education and Outreach on Climate Change	The existing public education and outreach subcommittee of the National Climate Change Committee has a variety of short term and medium term projects which it would like to implement, the first one being the printing and publication of a comic booklet on climate change as an educational tool for Bahamian students. The funding would also help in developing strategic communications to promote climate change projects to inform and educate the public.	\$50,000
Land Degradation	Agricultural innovation prize for Bahamian youth	This project would look to provide seed funding for a national innovation competition for young	\$50,000

		Bahamians in creating new technologies (including agro-forestry technologies) or systems to enable greater compatibility between agriculture and the natural environment.	
Multi-Focal (Climate Change and Land Degradation)	Small enterprise creation for promotion of composting	This project would seek to develop a cottage industry for a non-profit organization, such as Abilities Unlimited, to construct composting bins for sale to local homeowners. The project would have a public education and outreach component to inform persons of the benefits of composting in reducing waste and producing a green alternative to fertilizing their gardens.	\$50,000

6 Priority Areas for Regional Collaboration

Regional projects of interest for The Bahamas include:

- Assessment of the flamingo population in the Wider Caribbean – This project would involve The Bahamas, Bonaire, Cuba, Turks & Caicos, the Yucatan and several other countries. One project goal would be to determine the inter-connectivity of the flamingo population across the region.
- Expansion of the Integrated Watershed and Coastal Area Management (IWCAM) project to other demonstration sites. Past project involved development of a land and sea use plan for the island of Andros and construction of a sewage treatment plant at Elizabeth Harbour in Great Exuma.
- Implementation of national biosafety frameworks for Living Modified Organisms – The Bahamas is interested in any global or regional activities that would support continuation of its efforts under implementation of the Cartagena Protocol on Biosafety.

7 Other Project Concepts

There were a number of project concepts that were considered, but were not selected for inclusion as priority projects for a number of reasons. These included:

- Determining carbon sequestration in the Bahamian marine environment towards entering the carbon market – this was deemed too speculative and would require a level of expertise that is not currently in The Bahamas.
- Renewable energy technologies – this project involved expansion of an existing used oil processing facility. It was determined that this concept would be better suited for application to the International Finance Corporation through one of its funding window, perhaps the Earth Fund.

8 Fulfillment of Conventions' Obligations

Table 5 outlines how implementation of these projects will contribute to the fulfillment of obligations to the Convention on Biological Diversity (CBD), United Nations Convention to Combat Desertification and Drought (UNCCD), United Nations Framework Convention on Climate Change (UNFCCC), and other Multilateral Environmental Agreements (MEAs).

Table 5 – The Bahamas Fulfillment of Convention Obligations

Convention/MEA	Project	Obligation Fulfilled	Supporting Initiatives
Convention on Biological Diversity	Legislative and operational framework for ABS	Articles 13, 15 & 19 Nagoya Protocol Aichi Targets 13 & 16	
	Abaco National Park	Articles 8 & 13	National

	development	Programme of Work on Protected Areas Aichi Target 11	Implementation Support Partnership (NISP)
	Integrating forest biodiversity into land use planning	Articles 6, 7, 8, 10, 11, 12 & 13 Aichi Target 5,7 & 15	National Implementation Support Partnership (NISP)
	Revision of NBSAP and Fifth National Report	Articles 6, 13 & 26 Aichi Target 17	National Biodiversity Committee activities
	Stock assessment of fishery species	Articles 7, 8, 10, 12 & 13 Aichi Target 6	National Implementation Support Partnership (NISP)
	Virtual natural history museum and herbarium	Articles 9 & 13 Aichi Targets 13 & 19	
	Stock structure assessment of Atlantic bottlenose dolphins	Articles 7, 8, 12 & 13 Aichi Target 6	Marine Mammal Survey
United Nations Framework Convention on Climate Change	Transformation of public transport system	Articles 4(1)(c) & 6	Public transport reform initiative funded by the IDB
	Integrating forest biodiversity into land use planning	Articles 4(1)(d) & 6	
	Energy efficiency market penetration in tourism and business sectors	Articles 4(1)(f) & 6	IDB energy projects
	Renewable energy technologies	Articles 4(1)(f) & 6	IDB energy projects
	Establishing a net zero community in the Family Islands of The Bahamas	Articles 4(1)(f) & 6	IDB energy project
	Support for public education and outreach on climate change	Articles 4(1)(i) & 6	Second National Communication
	Small enterprise creation for promoting of composting	Articles 4(1)(f) & 6	
	Third National Communication	Article 12	Second National Communication
	Technology Needs Assessment	Article 12	Second National Communication
United Nations Convention on Desertification and Drought	Integrating forest biodiversity into land use planning	Articles 4(2)(a), 4(2)(d), 8(1), 10(2)(a), 10(2)(c) & 19	National Action Programme
Stockholm Convention on Persistent Organic Pollutions	Chemicals project concepts	Articles 1, 3, 5, 10, 11 & 15	National Implementation Plan project
Cartagena Convention for the Protection and	Stock assessment of fishery species	Articles 4(1) & 10	

Development of the Marine Environment of the Wider Caribbean Region			
Ramsar Convention on Wetlands	Integrating forest biodiversity into land use planning	Articles 3(1) & 4(1)	National Wetlands Committee activities

References

Bahamas Fourth National Report to the Conference of the Parties to the Convention on Biological Diversity (2010)

Bahamas National Biodiversity Strategy and Action Plan (1999)

Bahamas National Environmental Management and Action Plan (2005)

Bahamas National Policy for Adaptation to Climate Change (2004)

Cartagena Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region www.cep.unep.org/cartagena-convention

Convention on Biological Diversity www.cbd.int

First National Communication on Climate Change

Fourth National Report to the Conference of the Parties to the Convention on Biological Diversity (2010)

Ramsar Convention on Wetlands www.ramsar.org

Stockholm Convention on Persistent Organic Pollutants chm.pops.int

United Nations Framework Convention on Climate Change www.unfccc.int

United Nations Convention to Combat Desertification www.unccd.int