Grenada’s

National Protected Areas System

Capacity Development

Final Draft Plan

July 2007

Prepared by:
Paige Mac Leod

"This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID) and The Nature Conservancy through the Award No EDG-A-00-01-00023-00 for the Parks in Peril Program. The contents are the responsibility of YWF-Kido Foundation and do not necessarily reflect the views of The Nature Conservancy, USAID or the United States Government."

This document was produced under contract number EC-GR013007
# Table of Contents

List of Tables ........................................................................................................................................ 4  
List of Maps ........................................................................................................................................ 4  
Acronyms ................................................................................................................................................ 5  

1. EXECUTIVE SUMMARY ..................................................................................................................... 6  

2. METHODOLOGY ................................................................................................................................. 8  

3. OVERVIEW OF THE PROTECTED AREAS SYSTEM ........................................................................ 9  
   3.1 Ecological Gap Analysis Recommendations .................................................................................. 11  

4. PROTECTED AREAS MANAGEMENT EFFECTIVENESS ASSESSMENT ..................................... 13  

5. PROTECTED AREAS MANAGEMENT EFFECTIVENESS ASSESSMENT RESULTS ......................... 15  
   5.1 Site Level Effectiveness .................................................................................................................... 15  
   5.1.1 Planning ...................................................................................................................................... 15  
   5.1.2 Inputs .......................................................................................................................................... 18  
   5.1.3 Processes .................................................................................................................................... 23  
   5.1.4 Outputs ...................................................................................................................................... 26  
   5.2 System Level Effectiveness ............................................................................................................. 27  

6. CAPACITY DEVELOPMENT PLAN ...................................................................................................... 31  
   6.1 Capacity Development Action Plan ............................................................................................... 32  
   Strategic Direction 1: Inter-sectoral Integration .................................................................................... 32  
   Strategic Direction 2: Management Planning ....................................................................................... 34  
   Strategic Direction 3: Law Enforcement ............................................................................................... 35  
   Strategic Direction 4: Research and Monitoring .................................................................................. 36  
   Strategic Direction 5: Resilience ........................................................................................................... 37  
   Strategic Direction 6: Integrated Coastal Zone Management ............................................................... 38  
   Strategic Direction 7: Land Use Policy ................................................................................................. 39  
   Strategic Direction 8: Political Will ....................................................................................................... 40  
   Strategic Direction 9: Legislation Review ............................................................................................. 41  
   Strategic Direction 10: Protected Areas Designation .......................................................................... 41  
   Strategic Direction 11: Environmental Education and Awareness ..................................................... 42  
   Strategic Direction 12: Human Resource Capacity ............................................................................. 43  
   Strategic Direction 13: Sustainable Financing ..................................................................................... 44
6.2 DISCUSSION ON STRATEGIC DIRECTIONS ............................................. 45
   Strategic Direction 1: Inter-sectoral Integration among relevant actors ........ 45
   Strategic Direction 2: Management Planning ............................................ 45
   Strategic Direction 3: Law Enforcement .................................................. 46
   Strategic Direction 4: Research and Monitoring ........................................ 46
   Strategic Direction 5: Resilience ............................................................. 47
   Strategic Direction 6: Integrated Coastal Zone Management ....................... 47
   Strategic Direction 7: Land Use Policy ..................................................... 47
   Strategic Direction 8: Government Policy .................................................. 48
   Strategic Direction 9: Legislative Review .................................................. 48
   Strategic Direction 10: Protected Areas Designation ................................ 48
   Strategic Direction 11: Public Awareness and Advocacy ............................. 49
   Strategic Direction 12: Human Resource Capacity .................................... 49
   Strategic Direction 13: Sustainable Financing .......................................... 49

7. RECOMMENDATIONS ................................................................................. 50

8. LESSONS LEARNED ............................................................................... 51
List of Tables

Table 1. Summary of Site Level Planning - Objectives pg. 16
Table 2. Summary of Site Level Planning – Legal Security pg. 17
Table 3. Summary of Site Level Planning – Site Design pg. 18
Table 4. Summary of Site Level Inputs - Staffing pg. 19
Table 5. Summary of Site Level Inputs – Comm. & Information Sharing pg. 20
Table 6. Summary of Site Level Inputs - Infrastructure pg. 21
Table 7. Summary of Site Level Inputs - Finances pg. 22
Table 8. Summary of Site Level Processes - Management pg. 23
Table 9 Summary of Site Level Processes – Decision Making pg. 24
Table 10. Summary of Site Level Processes – Research & Monitoring pg. 25
Table 11. Summary of Site Outputs pg. 26
Table 12. Summary of Protected Area System – Policy & Legal Framework pg. 28
Table 13. Summary of Protected Area System – Planning Mechanisms pg. 29
Table 14. Summary of Protected Area System – Human & Financial Resources pg. 30

List of Maps

Map 1. Current Protected Areas in Grenada pg. 10
Map 3. Proposed expanded Protected Area System in Grenada pg. 12
## Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP</td>
<td>Conservation Area Planning</td>
</tr>
<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
</tr>
<tr>
<td>CBO</td>
<td>Community Based Organisation</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>GEF</td>
<td>Global Environment Facility</td>
</tr>
<tr>
<td>MEA</td>
<td>Multilateral Environmental Agreements</td>
</tr>
<tr>
<td>MOU</td>
<td>Memorandum of Understanding</td>
</tr>
<tr>
<td>MPA</td>
<td>Marine Protected Area</td>
</tr>
<tr>
<td>NAWASA</td>
<td>National Water and Sewage Authority</td>
</tr>
<tr>
<td>NEMS</td>
<td>National Environmental Management Strategy</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Government Organisation</td>
</tr>
<tr>
<td>NISP</td>
<td>National Implementation Support Partnership</td>
</tr>
<tr>
<td>OECS</td>
<td>Organisation of Eastern Caribbean States</td>
</tr>
<tr>
<td>OPAAL</td>
<td>OECS Protected Areas and Associated Livelihoods (Project)</td>
</tr>
<tr>
<td>PM</td>
<td>Prime Minister</td>
</tr>
<tr>
<td>PS</td>
<td>Permanent Secretary</td>
</tr>
<tr>
<td>PA</td>
<td>Protected Area</td>
</tr>
<tr>
<td>PAS</td>
<td>Protected Area System</td>
</tr>
<tr>
<td>TNC</td>
<td>The Nature Conservancy</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>UWI</td>
<td>University of the West Indies</td>
</tr>
</tbody>
</table>
1. EXECUTIVE SUMMARY

During the Seventh Conference of the Parties of the Convention for Biological Diversity (COP-7) held in Malaysia in February 2004, the signatories reached a historical agreement to promote the establishment and management of national systems for protected areas. The agreement is articulated within a Program of Work on Protected Areas (PoWPA) that includes a series of specific activities that the signatories, as well as the Governments of Grenada and St. Vincent and the Grenadines, are committed to implementing within clearly defined time frames. As a signatory to the Convention for Biological Diversity (CBD), Grenada has committed to protecting 10% of its terrestrial area by the year 2010 and 10% of its near-shore marine areas by the year 2012. In March of 2006 at the Convention for Biological Diversity (COP-8) held in Rio, Grenada went even further by publicly committing to effective management of 25% of its near-shore marine and 25% of its terrestrial natural resources by the year 2020. The Capacity Development Plan details the internal structures and processes required by the Protected Areas System to meet this commitment.

In 2006 a Management Effectiveness Assessment was conducted to determine critical management challenges for Grenada’s Protected Areas System. Assessment results were reviewed and revised by members of the National Implementation Support Program (NISP), then used in conjunction with the results of the 2007 Ecological Gap Analysis as the foundation for creation of this Capacity Development Plan. To complement the Management Effectiveness Assessment, a literature review was also conducted to ensure all capacity related areas were considered. This document details the Capacity Development Plan, including prioritized strategic directions, goals, objectives and actions to guide implementation by in-country agencies. It also provides a brief overview of the Management Effectiveness Assessment results, including the challenges faced by Grenada’s Protected Areas at both the site and system levels.

The Capacity Development Plan addresses establishing the processes and structures required to address the 13 critical strategic directions identified for effective protected areas management in Grenada. All efforts are predicated on the premise of acquiring sufficient funding and staffing, in conjunction with coordination between the seven primary agencies and three Ministries involved in protected areas management. This directly correlates with highest priority being assigned to strategic directions addressing Inter-sectoral Integration, Human Resource Management, Sustainable Financing, and Government Policy.

The 13 critical management capacity strategic directions were determined to be:

- **Inter-sectoral Integration** - Establishing formalized processes to coordinate work between agencies involved in protected areas management, including joint work planning and budgeting, defining agencies roles and responsibilities, and complementary implementation actions between agencies.
• **Government Policy** – Garnering widespread government support, evidenced through provision of resources required for implementation of current and future protected areas plans (workplans, management plans, etc.).

• **Human Resources** - Establishing appropriate staffing levels for protected areas management.

• **Sustainable Financing** - Implementing the Sustainable Finance Plan to generate EC$4.6M in additional funding/year for protected areas management.

• **Management Planning** - Establishing site specific management plans to address priority threats and guide work at the site level. Six management plans will be developed for priority sites by 2012, with remaining sites establishing management plans by 2020.

• **Law Enforcement** - Establishing capacity to effectively curb infractions in the protected areas, including training for enforcement officials, adequately equipping enforcement personnel, researching community or volunteer lead enforcement, and improving awareness within the general public.

• **Research and Monitoring** – Developing and implementing a research and monitoring programme, including an electronic information database, hard copy library, and global information system to better guide decision making.

• **Resilience** – Develop and implement a plan to improve the protected areas’ ability to withstand natural disasters.

• **Integrated Coastal Zone Management** - Promoting development and implementation of an Integrated Coastal Zone Management Plan to curb development threats and negative impacts on the protected areas.

• **Land Use Policy** – Establishing recommendations to be integrated into the national Land Use Policy to maximize environmental, social and economic benefits through sustainable use of the protected areas.

• **Legislation Review** – Conducting a review of existing legislation and making recommendations for revisions to legislation to improve overall management of the protected areas system.

• **Protected Areas Designation** – Documenting the procedural process of establishing protected areas, and establishing four new protected areas.

• **Promoting Public Awareness and Advocacy** - Promoting public involvement in protected areas management at the public, private, organizational and individual levels.
2. METHODOLOGY

The capacity plan for Grenada’s Protected Areas System was developed through a series of workshops, telephone interviews and literature review. An initial workshop was held on February 20, 2007 with 13 individuals represented ten agencies and non-profit organizations (Appendix 1), in their role as members of the National Implementation Strategy Program (NISP) committee. Workshop participants reviewed the results of the Protected Areas Management Effectiveness Assessment conducted in 2006, and developed an initial set of priority issues with corresponding goals, objectives and actions in the form of a Capacity Action Plan to address those priority issues. The draft Capacity Action Plan was then refined by the consultant to include additional questions or issues the group needed to consider based on the results of the literature review. The literature review included an examination of protected areas related plans, studies and reports on topics ranging from expansion of the Fisheries Division to the National Environmental Strategy. A full list of reviewed documents is contained in Appendix 2.

A second draft Capacity Action Plan was then circulated to participating stakeholders, and follow-up phone call interviews were conducted with key individuals to fill information gaps and discuss some of the key issues arising from the literature review. On May 10, 2007 a second workshop was held with twelve individuals representing nine agencies and non-profit organizations (Appendix 1) to further review and revise the draft plan.

A draft Capacity Development Plan (including the Capacity Action Plan) was circulated for review by key stakeholders and workshop participants in late May, with follow-up from the Grenada National Implementation Strategy Program (NISP) coordinator to solicit feedback on the Development and Capacity Plan. Participant feedback then was incorporated into the final document.
3. OVERVIEW OF THE PROTECTED AREAS SYSTEM

Grenada is a tri-island state comprised of Grenada, Carriacou and Petite Martinique. It is located at the southern end of the Lesser Antilles island chain. Grenada is considered the mainland as it is the largest of the three islands with a population of approximately 90,000 residents. The country is 312 sq km and boasts 121 km of coastline.

The protected areas system consists of five designated terrestrial protected areas and two marine protected areas. These were established under 8 different legislative acts, commencing in 1906 with the Grand Etang Forest Reserve Act (refer to Figure 1). This was followed by a series of legislative acts for a Wild Animal and Bird Sanctuary, Forest, Soil and Water Conservation, Fisheries, National Heritage Protection, Water and Sewerage Authority and Physical Planning and Development Control. In 1990 the National Parks and Protected Areas Act, provided for establishment of a National Parks Authority, National Parks Advisory Council and a National Parks Development Fund.

Under its current structure, the protected areas system is managed by multiple, overlapping agencies and ministries, each guided by its own mission and priorities. The Forestry Department and Fisheries Division (Ministry of Agriculture) have traditionally been tasked with natural resource management responsibilities. The Ministry of Tourism is responsible for aspects related to tourism infrastructure and activities within the protected areas. The Environmental Services Unit is tasked with managing compliance with the country’s international environmental commitments. The National Water and Sewerage Authority is responsible for watershed management. The Coast Guard and Police Department are charged with enforcing protected areas laws and regulations. In addition, the Physical Planning and Agency for Reconstruction and Development are also peripherally involved in some aspects of protected areas management.

The Organization of Eastern Caribbean States (OECS) conducted a protected areas policy, legal and institutional framework review in November of 2006 under the OECS Protected Areas and Associated Livelihoods (OPAAL) project. The OECS review, 2005 National Environment Policy and Management Strategy and TNC sponsored 2007 Sustainable Finance Plan for the Protected Areas System all recommended revision of the current management structure to facilitate improved management, including:

- Enhancing regulations and mechanisms required to fully operationalise the National Parks and Protected Areas Act
- Harmonizing site legal designations and eliminating multiple designations to eliminate conflicts between the overlapping management agencies
- Coordinating roles and responsibilities of the different involved protected areas management agencies
3.1 Ecological Gap Analysis Recommendations

In 2006 The Nature Conservancy conducted a Ecological Gap Analysis to determine the biological diversity within Grenada’s protected areas and throughout the country as a whole. The analysis indicates Moist Forest, Dry Forest, Freshwater Systems, and limited Marine Ecosystems are currently represented within established protected areas. Analysis results were reviewed in February of 2007 by a working group of in-country protected areas management agencies and organizations, leading to recommendations for inclusion of additional areas in the protected areas system to allow Grenada to fulfil its commitment to the Convention on Biological Diversity and wider Grenada Declaration commitment of protecting 25% of both its terrestrial and near-shore marine resources by the year 2020.

The final portfolio of priority sites selected by the working group included all existing protected areas and was expanded to create linkages between sites, and new sites with particularly high biodiversity or threat levels. These included the Southern Grenada Bays and Estuaries, The Grande Anse Marine Area, The Levera Marine and Coastal, The Isle D’Rhonde Complex, The White, Saline and Frigate Islands Complex, The Sandy Island/Oyster Bed Marine Protected Area, The Petite Dominic Marine Area, Mt. Hartman, Mt. St. Catherine, The Northeast Grenada Mangroves, and the Southeast Grenada Watershed Corridor.

The sites were prioritized based on ecological importance, threat level and feasibility level, and timelines where created for achieving the CBD commitments of 10% of terrestrial resources by 2010 and 10% of the Marine Resources by 2012, as well as the 25% of both by 2020 made through the Grenada Declaration. Highest priority was given to the South Coast Marine Protected Area. High priority was given to Grand Anse, Richmond Hill, Mt. Hartman, Grand Etang, Annandale, Sandy Island and the High North. Medium priority was given to the Watershed Corridor, Mount Moritz, the Northeast Mangroves, Levera, Isle de Rhonde, White/Saline/Frigate and the Carriacou Ridge.
4. PROTECTED AREAS MANAGEMENT EFFECTIVENESS ASSESSMENT

Management effectiveness evaluation is the assessment of how effectively protected areas are being managed – primarily the extent to which they are protecting resources. Management effectiveness assessment should be an integral component of the management cycle. It should be used to enhance how management is conducted in the future, serving as a means to assist management through an adaptive learning process. The term management effectiveness reflects three main “themes” in protected areas, specifically:

- Design issues related to both individual sites and protected area systems
- Adequacy and appropriateness of management systems and processes
- Delivery of protected area objectives, including conservation of valued resources

Rapid Assessment and Prioritization of Protected Area Management Tool
The Rapid Assessment and Prioritization of Protected Area Management (RAPPAM) tool was utilized in this assessment. The RAPPAM methodology is currently the most widely used approach used to conduct rapid assessments of the management effectiveness of protected area networks, providing policy makers and protected area authorities a relatively quick and easy method to identify major trends and issues that need to be addressed to improve management effectiveness in any given system of protected areas (Ervin 2003). Although it can be applied to a single protected area, the tool is not designed to provide detailed, site-level adaptive management guidance to protected area managers (Hockings et al. 2006). Neither does it provide detailed information about conservation outcomes.¹

The RAPPAM tool is designed for broad-level comparisons among many protected areas that together make a protected areas network or system. It can:
- Provide a broad overview of the most pressing management issues being faced
- Provide an overview of how the system as a whole is functioning and performing

This type of assessment should be a primary tool to assist protected areas managers to identify both strengths and weaknesses:
- Lead to better management in a rapidly and continually changing environment
- Assist in effective resource allocation (especially where resources are limited)
- Promote accountability and transparency
- Help involve the community, build constituency and promote protected areas values

The tool also allows authorities to:
- Identify management strengths and weaknesses

• Analyse the scope, severity, prevalence and distribution of a variety of threats and pressures
• Identify areas of high ecological and social importance and vulnerability
• Identify the urgency and conservation priority for individual protected areas
• Aid in development and prioritizing of appropriate policy interventions and follow-up steps to improve protected area management effectiveness
• Agree on needed corrective steps that will lead to improved system-level management effectiveness
5. PROTECTED AREAS MANAGEMENT EFFECTIVENESS ASSESSMENT RESULTS

5.1 Site Level Effectiveness
Management challenges at the site level were determined by assessing the current status of sites’ planning, inputs, processes and outputs. The priority challenges, barriers and constraints are detailed below. All areas were assessed using a 0 to 5 scale, with 0 indicating no capacity for the indicator and 5 indicating full capacity for the indicator. Tables 1 – 11 represent a synthesis of the management evaluation.

5.1.1 Planning
Criteria used to assess site level planning included established conservation objectives, legal security and site design. Major issues identified here include lack of specific biodiversity objectives, law enforcement, linkages between protected areas and buffer zone land practices.
Objectives

Grenada’s protected areas have fairly strong management objectives guiding overall implementation at the site level. The two areas demonstrating weaknesses are lack of specific biodiversity objectives for 11 of the 14 sites, and lack of management policies at half of the sites. While management objectives exist, site specific needs based on scientific analysis do not, directly correlating with lack of management plans at most of the existing sites. In addition, while community support was rated quite high at all sites, it was recognized as an area that will require continual improvement for effective management.

Table 1: Summary of Site Level Planning - Objectives
Legal Security

Law enforcement is one area where all sites require increased emphasis. Existing laws are not fully understood by the general public, and those tasked with implementing them are not fully aware of the policies or procedures for doing so. Insufficient staff to disseminate and enforce laws is a key factor. For marine conservation areas, the Fisheries Department has one person assigned to protected areas management, and although the Coast Guard is tasked with this job its primary focus on drug enforcement. Major infractions within MPAs include poaching of white sea eggs (white sea urchins), turtles and lobsters, and waste dumping in the mangroves. In terrestrial protected areas, police officers have not been sufficiently trained to patrol for natural resource management infractions, and the number of rangers is insufficient to effectively enforce existing legislation. Major infractions include poaching of opossum, armadillos, manicou, monkeys and ramie.

Unsettled disputes are an issue at 2/3 of the sites, primarily due to agricultural incursions into the protected areas. Established sites have been demarcated and gazetted, while new sites are working through this process. However, based on recent events where gazetted/demarcated parks have been conveyed to private interests (Mt. Hartman), and recent legislation allowing the transfer of protected areas to private interests for development, there is growing concern regarding the long term legal stability of protected areas in the country.

Table 2: Summary of Site Level Planning - Legal Security
Site Design

Through both the Capacity Assessment and Gap Analysis processes, Protected Areas linkages were identified as a relative weakness. Land use of areas surrounding the PAs is of concern, particularly due to waste disposal, sewage, fire, and encroachment from adjacent lands. It should also be noted the Grand Etang, Mt. Catherine, Mt. Hartman and Mt. Gazo adjacent lands help to optimize biological conservation.

Table 3: Summary of Site Level Planning – Site Design

![Site Level Design Chart]

5.1.2. Inputs

Assessment criteria for inputs included staffing, communication, infrastructure and finances for site level activities. Several critical issues have been identified, including almost all staffing and finance related areas. Insufficient finances have greatly affected protected areas infrastructure, which is insufficient to effectively manage the sites.

Staffing

Overall staffing is one of the most critical challenges for the protected areas system. Responsible agencies are grossly understaffed, and the government’s moratorium on hiring has left existing and new positions unfilled. The Forestry Department currently has positions that have been vacant for more than five years. The Fisheries Department has assigned responsibilities for protected areas management to a single staff person as it is unable to hire additional staff to fill its needs. Existing staff do not necessarily have the training and skills required to successfully manage the areas under
their supervision, and find themselves continually overextended in the geographical and thematic areas where they are working.

Work conditions are often considered sub-par, particularly at the Forestry Department offices which have not been repaired post Hurricane Ivan (2004). While not a component of the assessment, it should also be noted there is a general perception the protected areas staff are demoralized and frustrated with the current political environment, which they feel is hampering their ability to conduct daily operations.

Table 4: Summary of Site Level Inputs - Staffing
Communications

Overall this was also a critical area at both the site and system level. **Multiple agencies are responsible for different actions within the protected areas, but there is no formalized communication or coordination mechanism to facilitate joint implementation.** Existing data is not centralized, and no research or monitoring program/policy in place to provide data needed for management and decision making. Slightly more than half the sites are sharing information at the local level, while remaining sites have little influence/involvement from local parties.

Table 5: Summary of Site Level Inputs – Communications and Information Sharing
Infrastructure

With the exception of visitor facilities, most sites do not have sufficient facilities or equipment to effectively manage the areas. This is especially true for field equipment and maintenance, with transportation remaining an ongoing issue for the majority of sites.

Table 6: Summary of Site Level Inputs – Infrastructure

![Site Level Infrastructure Diagram]
Finances
Funding was determined to be the most critical of all assessment criteria. **Current funding is insufficient to effectively manage the protected areas, as has been the case for several years.** There have been instances when staff have prepared proposals for external funding sources, only to become mired down and stuck within the government agency responsible for submitting such proposals. A sustainable finance plan for Grenada’s Protected Area System was completed in 2006, detailing a five year action plan to fill the GAP between available funding and the amount necessary to effectively manage the system (Sector, 2006). This plan is currently awaiting final review, approval and implementation.

Table 7: Summary of Site Level Inputs – Finances
5.1.3 Processes

Assessment criteria for processes included management planning, decision making and research and monitoring. Critical areas included all aspects of management planning and research and monitoring, along with community and staff communication (as noted above in communications).

Management Planning

Traditionally Grenada’s protected areas have functioned with annual workplans and strategic plans rather than more comprehensive, site specific, multiple year management plans. While several agency staff feel management plans would be worthwhile, limited financial and human resources have greatly limited the importance being placed on a more detailed management planning process. In turn, annual work plans do not necessarily allow for systematic analysis of threats, threat prevention activities, restoration targets, periodic and regular monitoring or civic participation (NGO/private sector involvement). Notwithstanding, management plans are currently being developed for the Grand Etang and Annandale Forest Reserves and Sandy Island and Oyster Beds Marine Protected Area, and will begin shortly for the Grand Anse Marine Protected Area. Forestry staff are currently receiving in-depth Conservation Area Planning methodology training with TNC to allow this team to develop site-specific management plans. The first product of this training will be a conservation based management plan for the Preserverence Dove Sanctuary.

Table 8: Summary of Site Level Processes – Management Planning
Decision Making

Based on the methodology used, decision making was seen as a relative strength for Grenada’s protected areas. Management decisions are widely consulted and shared within each agency, and the internal structure exists to facilitate this type of communication. However, it should be noted while decision making within agencies is considered adequate this indicator did not take into account decision making at the policy and/or legislative levels (which are considered below levels necessary to support effective PA management). In addition, this indicator did not take into account lack of relevant scientific data required for effective Protected Area decision making. Areas requiring additional emphasis include local collaboration and participation.

Table 9: Summary of Site Level Processes – Decision Making
Research and Monitoring

Limited research has been conducted within the protected areas, and has primarily involved participation of external universities and researchers. However, research priorities for the different protected areas or the system as a whole have not been identified. Research results are not always readily available, and often include only raw data rather than analyzed findings. On-going monitoring has not been a priority.

Table 10: Summary of Site Level Processes – Research and Monitoring
5.1.4 Outputs

Ten criteria were used to assess protected areas site level outputs. The most significant outputs have been in the areas of visitor management, staff evaluation and training. Within specific Protected Areas, the Ministry of Tourism has placed emphasis on establishing tourist related infrastructure and services. This has translated into visitor centres, visitor interpretation, sanitary and concession facilities, and maintenance of buildings and trails at Fort Frederick, Fort George, Grand Etang Forest Reserve, Annandale Forest Reserve, Camerhogne Park, the Botanical Gardens and Bathway/Levera. In addition, while there are significant issues with staffing (as noted under section 5.1.2 Inputs, Staffing), structures currently exist for staff evaluation and training mechanisms. However, while mechanisms may exist, insufficient funding has not allowed for effective and/or methodical training programs to be run. Understaffing and other related issues have a greater effect on low staff moral than the positive effects that may be seen from consistent evaluations processes.

Critical outputs include those related to management planning (wildlife management, threat prevention and site restoration), infrastructure and research and monitoring, as noted above in sections 5.1.1 on Planning, 5.1.2 on Inputs and 5.1.3 on Processes.

Table 11: Summary of Site Level Outputs

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>threat prevention</td>
<td>3</td>
</tr>
<tr>
<td>site restoration</td>
<td>2</td>
</tr>
<tr>
<td>wildlife management</td>
<td>1</td>
</tr>
<tr>
<td>community outreach</td>
<td>4</td>
</tr>
<tr>
<td>visitor management</td>
<td>5</td>
</tr>
<tr>
<td>infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>management planning</td>
<td>2</td>
</tr>
<tr>
<td>staff evaluation</td>
<td>5</td>
</tr>
<tr>
<td>training</td>
<td>3</td>
</tr>
<tr>
<td>research and monitoring</td>
<td>2</td>
</tr>
</tbody>
</table>
5.2 System Level Effectiveness

System level issues are the enabling conditions for system wide management and include PA System-Level Design, Policies and the Policy Environment. Assessment of system level management effectiveness involved a review of the Policy and Legal Framework, System Institutional Planning and Structure, Staffing and Resources. All areas were assessed using a 0 to 5 scale, with 0 indicating no capacity for the indicator and 5 indicating full capacity for the indicator. Tables 12 - 14 represent a synthesis of the institutional level evaluation. It should be noted there was little variation between the site level versus system level results as the different sites are not individually managed, but rather managed by the same sets of agencies.
The Policy Environment
Strengths identified through the assessment criteria include a clear vision and demonstrated commitment among those tasked with protected areas management. Civil society is increasingly being integrated into the planning and management process, however more needs to be done to promote greater participation of the public, NGOs and private sector.

Notwithstanding, policy issues are among the most critical for Grenada’s protected areas system. Those tasked with protected areas legislation and providing financial support do not necessarily fully understand management needs or overall importance of the system for the country or the region. Laws do not complement protected areas objectives, and do not promote sustainable use of resources or conservation mechanisms. Efforts are being made to ensure environmental concerns are incorporated into land use policies, but existing environmental policies are rarely enforced. Multiple agencies are tasked with different portions of protected areas management but do not necessarily coordinate or communicate on priorities, work plans or implementation. In addition, recent legislation legalizing the sale or conveyance of protected areas to private interests could potentially undermine the entire protected areas system.

Table 12: Summary of the Protected Area System - Policy and Legal Framework
System Level Planning

Strategic and annual planning are institutionalized and on-going in Grenada’s protected areas system. Civic participation mechanisms were seen as relative strengths while actual civic participation remains a relative weakness. Critical weaknesses centred on resource usage and components of a comprehensive management plan (restoration targets, gap analysis, monitoring, data). As noted in section 5.1.3 Processes under the Management Planning section, while many staff recognize the importance of management planning, it has not been given the highest priority due to lack of staff and funding.

Table 13. Summary of the Protected Area System - Planning Mechanisms
Structure, Staffing and Resources
Relative strengths include an existing National Environmental Management Strategy, and recently completed sustainable finance plan for protected areas (Sector, 2006). The finance plan will require review, possible revisions, and implementation, but the sustainable financing framework has been articulated and a proposed plan outlined. As noted under site level challenges, staffing and resources are among the greatest challenges facing the protected areas system.

Table 14: Summary of the Protected Area System - Human and Financial Resources.
6. CAPACITY DEVELOPMENT PLAN

Based on the review of the Management Effectiveness Assessment which identified current strengths and weaknesses within managing the Protected Areas System, and literature review of other related protected areas capacity assessments, studies and reports, the following strategic directions were identified as those most critical to improve overall effectiveness at both the site and system levels. Key goals, objectives and actions geared towards increasing management capacity have been developed for these critical strategic directions. The objectives are based on the key capacity areas needed for Protected Areas Management, Sustainable Development, Policy and System Level Management. The most critical strategies were determined to be Inter-Sectoral Integration, Government Policy, Human Resource Capacity and Sustainable Financing. The Capacity Development Plan and Action Plan address the following Strategic Directions:

<table>
<thead>
<tr>
<th>Protected Areas Management</th>
<th>Sustainable Development</th>
<th>Policy</th>
<th>System Level Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Law Enforcement</td>
<td></td>
<td>11. Environmental Education and Awareness</td>
<td></td>
</tr>
<tr>
<td>4. Research and Monitoring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Resilience (from Natural Disasters)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


6.1 Capacity Development Action Plan

A. PROTECTED AREAS MANAGEMENT
GOAL: Protected Areas are managed in a holistic, participatory manner, with involvement of all key stakeholders.

**Strategic Direction 1: Inter-sectoral Integration (critical strategy)**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Actions</th>
<th>Performance Indicators</th>
<th>Duration</th>
<th>Responsible Agency/Unit</th>
<th>Responsible Party/ies</th>
<th>Resource Requirements</th>
</tr>
</thead>
</table>
| Established Inter-sectoral linkages are in place and agencies are working together on a formal basis. | 1. Develop and present a White Paper recommending development of formal mechanisms to promote inter-sectoral integration and information sharing between relevant PA agencies.  
- Hold regular NISP committee meetings  
- Develop a Position Paper with recommendations for inter-institutional collaboration, including defined Roles and responsibilities of involved agencies and establishment of the National Parks and Protected Areas Council (outlined under current NPPA law)  
- Develop the White Paper and present to Cabinet  
- Coordination with the Multilateral Environmental Agreements (MEA) Committee | White paper submitted and approved | 2008 | NISP Coordinator  
Forestry Department  
Fisheries Division  
Health, Physical Planning, Foreign Affairs  
MEA Committee  
CBD Focal Point (Spencer Thomas)  
Permanent Secretaries of each Ministry | Forestry recommended to lead  
NISP Committee with assistance from the NISP Coordinator | NISP Coordinator to organize and write the White Paper |
<table>
<thead>
<tr>
<th>Objective</th>
<th>Actions</th>
<th>Performance Indicators</th>
<th>Duration</th>
<th>Responsible Agency/Unit</th>
<th>Responsible Party/ies</th>
<th>Resource Requirements</th>
</tr>
</thead>
</table>
| 2. Conduct integrated planning for protected area management with all involved actors  
   Conduct joint planning meetings during last quarter of financial year (via NISP)  
   • Hold annual symposium for information sharing  
   • Launch a web based list serve for information sharing | Joint plans developed and efficiently managed  
   NISP Committee meetings of the NISP held | October (annually) for joint planning meetings | NISP Coordinator  
   Forestry Department  
   Fisheries Division  
   Health, Physical Planning, Foreign Affairs | NISP Coordinator  
   NISP Committee  
   NISP Coordinator to organize list serve | TNC to organize first symposium |
| 3. Conduct integrated implementation for protected area management | Improved collaboration and policy integration between agencies | Sep '07 | NISP Coordinator  
   Forestry Department  
   Fisheries Division  
   Health, Physical Planning, Foreign Affairs | Funding for implementation |
## Strategic Direction 2: Management Planning

<table>
<thead>
<tr>
<th>Objective</th>
<th>Actions</th>
<th>Performance Indicators</th>
<th>Duration</th>
<th>Responsible Agency/Unit</th>
<th>Responsible Parties</th>
<th>Resource Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Establish timelines for roll out of management planning process</td>
<td>Timeline established</td>
<td></td>
<td>Fisheries Division</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Forestry Department</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Establish appropriate management committee to develop standards, review prioritization of sites, review proposed plans and provide technical support</td>
<td># management plans completed</td>
<td>May 2007-2010</td>
<td>Ministry of Finance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td># of stakeholders involved</td>
<td></td>
<td>Physical Planning</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td># of management committee/sectoral planning committee meetings</td>
<td></td>
<td>Ministry of Tourism</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Identify and secure resources needed to develop management plans (personnel, information)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Identify, secure and delegate funding for development of management plans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Preserverence management plan completed |                |                                             |                     |                                            |

Funding for:  
- personnel, 
- staff, 
- local level work, 
- field work, 
- workshops, 
- public awareness
### Strategic Direction 3: Law Enforcement

<table>
<thead>
<tr>
<th>Objective</th>
<th>Actions</th>
<th>Performance Indicators</th>
<th>Duration</th>
<th>Responsible Agency/Unit</th>
<th>Responsible Parties</th>
<th>Resource Requirements</th>
</tr>
</thead>
</table>
| Capacity exists by 2010 to enforce Protected Areas laws | 1. Build capacity of enforcement agencies and stakeholders (park rangers, fisheries officers, police, coast guard, agricultural officers), including training on laws and enforcement procedures.  
   - Identify priority training needs  
   - Identify participants (stakeholders, police, rangers, coast guard, agricultural officers)  
   - Conduct 2-3 training sessions per year  
   - Increase numbers of enforcement staff  
   a. Agency staff  
   b. Research creative staffing alternative options  
   i. Volunteers  
   ii. Community lead enforcement | # of staff trained in key areas  
Priorities and actors identified  
# of sessions held  
Increased # of enforcement staff | 2010 | Fisheries Division  
Forestry Department  
Police  
Physical Planning Unit | TBD | Funding to conduct  
- Training  
- Awareness |
| | 2. Empower enforcement personnel and key stakeholders  
   - Education and awareness program developed for the judiciary  
   - Strengthen infrastructure for enforcement personnel (patrol vehicles)  
   - Provide support through education and awareness programmes  
   - Identify other appropriate enforcement tools/systems | # of arrests  
# of impounds | | | Infrastructure (vehicles, equipment) |
# Strategic Direction 4: Research and Monitoring

<table>
<thead>
<tr>
<th>Objective</th>
<th>Actions</th>
<th>Performance Indicators</th>
<th>Duration</th>
<th>Responsible Agency/Unit</th>
<th>Responsible Party/ies</th>
<th>Resource Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective and efficient Protected Areas research and monitoring programme is developed and implemented</td>
<td>1. Develop Research programme, including:  • Targets  • Indicators  • Baseline Data – (fish stocks, conch stock, sea urchin stock, mangrove health, seagrass bed health, …)  • Reporting mechanisms  • Schedules  • Training  • Acquire equipment  • Research policies and procedures  • Strengthen existing linkages and create new partnerships with regional and international research agencies  • Delegation of monitoring and other activities in critical areas to local government agencies  • Conduct consultations to prioritize research activities</td>
<td>Ability to report on  • MGDs  • SGD</td>
<td>2010</td>
<td>Fisheries Division  Forestry Department  IWCAM, National Climate Change Committee (Ministry of Finance)  WINDREF Int’l</td>
<td>TBD</td>
<td>Coordinating body to develop programme  Partnerships with external research agencies  Funding to facilitate programme development and implementation</td>
</tr>
<tr>
<td></td>
<td>2. Seek Funding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Implement Research and Monitoring Programme</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Prepare a comprehensive electronic database and hard copy library of documents relevant to sustainable development and environmental management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Develop feedback mechanisms to track and record research outcomes (including obtaining results from external researchers)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Design and implement an integrated Geographic Information System that involves key agencies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| | Infrastructure for Geographic Information System | Funding to Implement Programme |
| | Infrastructure for electronic database | |
## Strategic Direction 5: Resilience

<table>
<thead>
<tr>
<th>Objective</th>
<th>Actions</th>
<th>Performance Indicators</th>
<th>Duration</th>
<th>Responsible Agency/Unit</th>
<th>Responsible Party/ies</th>
<th>Resource Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective planning for protected areas resilience in the event of disturbances by 2010</td>
<td>1. Select appropriate Protected Areas for inclusion in the resilience plan based on the ability to effect changes that will decrease threats from natural disturbances</td>
<td>Resilience plan exists and is being implemented</td>
<td>2010</td>
<td>Forestry Department</td>
<td>TBD</td>
<td>Coordinating body to develop resilience plan</td>
</tr>
<tr>
<td></td>
<td>2. Seek full protection for selected areas</td>
<td></td>
<td></td>
<td>Fisheries Division</td>
<td></td>
<td>Funding to implement plan</td>
</tr>
<tr>
<td></td>
<td>3. Establish a seed bank</td>
<td></td>
<td></td>
<td>Physical Planning Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Include biodiversity offsets in environmental planning and forestry regulations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Analyze revised protected areas layout to ensure consideration for resilience principles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Establish disturbance response Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B. SUSTAINABLE DEVELOPMENT

Goal: Grenada's resources are used in a sustainable manner

**Strategic Direction 6: Integrated Coastal Zone Management**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Actions</th>
<th>Performance Indicators</th>
<th>Duration</th>
<th>Responsible Agency/Unit</th>
<th>Responsible Parties</th>
<th>Resource Requirement</th>
</tr>
</thead>
</table>
| Integrated Coastal Zone Management Plans developed, implemented and enforced by 2012 | 1. Develop ICZM Management Plan  
- Identify Key Stakeholders/Stakeholder consultations  
- Delegation of coastal zone boundaries  
- Incorporate into land use policy  
- Establish a steering committee  
- Establish key stakeholder groups | Plan developed through a participatory process | 2010 | Physical Planning, Unit Forestry Department Fisheries Division Ministry of Tourism Board of Tourism | Steering Committee Meetings | Stakeholder consultations |
| | 2. Conduct clear enforcement of management strategies  
- Environmental Impact Assessments (EIAs) before construction approved  
- construction should not begin before all factors are agreed to | Enforcement is conducted  
EIAs conducted prior to construction | | | | Steering Committee Meetings |
| | 3. Conduct monitoring of implementation/results,  
- implementation of mitigation recommendations,  
- possibly monitoring committee (?) for EIAs and construction | Monitoring is conducted on a regular basis | | | Funding to conduct monitoring |
## Strategic Direction 7: Land Use Policy

<table>
<thead>
<tr>
<th>Objective</th>
<th>Actions</th>
<th>Performance Indicators</th>
<th>Duration</th>
<th>Responsible Agency/Unit</th>
<th>Responsible Party/ies</th>
<th>Resource Requirements</th>
</tr>
</thead>
</table>
| 1. Establish guidelines for PA resources usage | • Conduct inventory on species and resources (linked with Strategy 3 – Research/Monitoring)  
• Research current use patterns  
• Research current land use planning initiatives to determine gaps/needs  
• Determine appropriate policies to harmonize protection and livelihood opportunities | PA Land Use Policy recommendations presented to Land Use Policy makers | 2010 | Physical Planning, Unit Ministry of Health and Environment | Key stakeholders | Study on current natural resource use patterns and land use Training |
| 2. Integrate with PA Management Planning (Strategy 2) | • Review and recommend appropriate PA Management Plan(s) recommendations for alternative livelihood practices | PA Land Use Policy recommendations presented to Land Use Policy makers | | | | |
| 3. Incorporate a PA representative into Local Area Plan/Action Plan Steering Committees | | | | | | |
| 4. Conduct Education and awareness (linked with Strategy 10) | | | | | | |
| 5. Train appropriate individuals on protected area land use recommendations for policy development | | Training conducted | | | | |
C. POLICY

Goal: Supportive intent, processes, mandates and resources exist for Protected Areas management

**Strategic Direction 8: Government Policy (critical strategy)**

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Actions</th>
<th>Performance Indicators</th>
<th>Duration</th>
<th>Responsible Agency/Unit</th>
<th>Responsible Party/ies</th>
<th>Resource Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources are provided to implement existing and future protected areas plans (annual work plans, management plans, etc.)</td>
<td>1. Develop coordinated, joint budgeting for PA management with relevant agencies (as detailed in Strategic Direction 1 – Inter-sectoral Integration)</td>
<td>Government provides adequate “counterpart” funding to secure external donor/project funding</td>
<td>Sept. 2007</td>
<td>Fisheries Division</td>
<td>NISP Coordinator</td>
<td>NISP Coordinator</td>
</tr>
<tr>
<td></td>
<td>2. Present budget and workplans to Ministries (including fundraising from external sources)</td>
<td></td>
<td>On going</td>
<td>Forestry Department</td>
<td>Department and Division Directors</td>
<td>Printed materials</td>
</tr>
<tr>
<td></td>
<td>3. Coordinate in conjunction with Public Awareness/Advocacy (Strategic Direction 11) at public and government ministry levels, including information dissemination for Ministers on importance of PAs.</td>
<td></td>
<td>2007</td>
<td>Willem Hamilton – Forestry</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Strategic Direction 9: Legislation Review

<table>
<thead>
<tr>
<th>Objective</th>
<th>Actions</th>
<th>Performance Indicators</th>
<th>Duration</th>
<th>Responsible Agency/Unit</th>
<th>Responsible Party/ies</th>
<th>Resource Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing legislation is reviewed, proposed changes presented to Cabinet to facilitate PA management</td>
<td>1. Review existing legislation</td>
<td>Legislation reviewed and updated</td>
<td>2008</td>
<td>Fisheries Division</td>
<td>NISP Coordinator</td>
<td>OECS PA Legislation support</td>
</tr>
<tr>
<td></td>
<td>2. Make recommendations for changes, including potential new management regulations and/or legislation</td>
<td>Recommendations presented to Cabinet</td>
<td>2008</td>
<td>Forestry Department</td>
<td>NISP coordinator</td>
<td>NISP coordinator</td>
</tr>
<tr>
<td></td>
<td>3. Legislated environmental committees and councils are convened and meet regularly</td>
<td>Councils/committee s meet regularly</td>
<td>2007</td>
<td>Legal Affairs</td>
<td>Workshops and meetings for public consultations</td>
<td>Workshops and meetings for public consultations</td>
</tr>
</tbody>
</table>

### Strategic Direction 10: Protected Areas Designation

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Actions</th>
<th>Performance Indicators</th>
<th>Duration</th>
<th>Responsible Agency/Unit</th>
<th>Responsible Party/ies</th>
<th>Resource Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processes are in place to facilitate Protected Areas designation</td>
<td>1. Document the procedural plan for designating Protected Areas</td>
<td>Procedural plan documentation completed</td>
<td>2008</td>
<td>Fisheries Division</td>
<td>Fisheries Division – Jerry Mitchell</td>
<td>Fisheries MPA Manager</td>
</tr>
<tr>
<td></td>
<td>2. Distribute the plan to relevant agencies and individuals</td>
<td>Plan distributed</td>
<td>2009</td>
<td>MPA Management Committee</td>
<td>Forestry Division – Jerry Mitchell</td>
<td>Consultant to facilitate designation of new PAs</td>
</tr>
<tr>
<td></td>
<td>3. Identify areas to be designated</td>
<td>5 new PAs designated</td>
<td>2010+</td>
<td>Forestry Department</td>
<td>Forestry Department – Augustus Thomas</td>
<td>Meetings, workshops</td>
</tr>
<tr>
<td></td>
<td>4. Designate 5 new protected areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Funding for Implementation</td>
</tr>
</tbody>
</table>
### Strategic Direction 11: Environmental Education and Awareness

<table>
<thead>
<tr>
<th>Objective</th>
<th>Actions</th>
<th>Performance Indicators</th>
<th>Duration</th>
<th>Responsible Agency/Unit</th>
<th>Responsible Party/ies</th>
<th>Resource Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>A culture of environmental appreciation exists and the public advocates for environmental efforts</td>
<td><strong>Education - Schools</strong>&lt;br&gt;1. Develop a Public Education and Awareness Campaign&lt;br&gt;   • Identification of topics&lt;br&gt;   • Identification of audiences&lt;br&gt;   • Teaching tools/resources</td>
<td>• Materials developed&lt;br&gt;   • Teaching tools developed&lt;br&gt;   • Interactive games/tools exist&lt;br&gt;   • Curricula exists</td>
<td>Ongoing</td>
<td>Fisheries Division&lt;br&gt;Forestry Department&lt;br&gt;Ministry of Education, Environmental Education Unit</td>
<td>Education Coordinator&lt;br&gt;Education Coordinator</td>
<td>Bus – mobile lab/teaching centre&lt;br&gt;Workshops for teachers&lt;br&gt;Education materials</td>
</tr>
<tr>
<td></td>
<td>2. Integrate Environmental Education into secondary school curriculum</td>
<td>• EE taught in Secondary Schools</td>
<td>2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Integrate Environmental Education into primary school curriculum</td>
<td>• EE taught in primary schools</td>
<td>2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Awareness – General Public</strong>&lt;br&gt;1. Develop and implement public awareness campaign&lt;br&gt;   • Determine baseline awareness levels and identify information gaps&lt;br&gt;   • Identification of audiences&lt;br&gt;   • Develop resource materials and/or utilize what is available&lt;br&gt;   • Acquire Audio Video Aids&lt;br&gt;   • Conduct public consultative processes to share information on specific projects/activities&lt;br&gt;   • Research results are included in Environmental Education and Awareness</td>
<td>• Public advocacy&lt;br&gt;   • Co-management&lt;br&gt;   • Public is aware of issues&lt;br&gt;   • Research results are included in Environmental Education and Awareness</td>
<td>Ongoing</td>
<td>PR Coordinator</td>
<td>PR Coordinator</td>
<td>$$ for materials and implementation</td>
</tr>
</tbody>
</table>
D. MANAGEMENT

Goal: Efficient and Effective Protected Areas Management (institutional support)

**Strategic Direction 12: Human Resource Capacity  (critical strategy)**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Actions</th>
<th>Performance Indicators</th>
<th>Duration</th>
<th>Responsible Agency/Unit</th>
<th>Responsible Party/ies</th>
<th>Resource Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate, competent and effective staff</td>
<td>1. Conduct staffing assessment to determine existing staffing levels and capacity needs (including an inventory of students being trained in related areas).</td>
<td>Existing job vacancies are filled</td>
<td>2008</td>
<td>Department of Human Resources</td>
<td>Heads of Departments</td>
<td>Funding to hire staff</td>
</tr>
<tr>
<td></td>
<td>2. Fill critical vacant positions in relevant agencies</td>
<td>Identified staffing needs are filled.</td>
<td>2008 - 2009</td>
<td>Heads of Fisheries Division</td>
<td>NISP Coordinator</td>
<td>Funding to train staff</td>
</tr>
<tr>
<td></td>
<td>3. Identify and recruit volunteer opportunities to fill specific needs</td>
<td></td>
<td>2008</td>
<td>Division and Forestry Department</td>
<td></td>
<td>Consultant to conduct staffing and training needs assessment</td>
</tr>
<tr>
<td></td>
<td>4. Work in conjunction with relevant agencies to hire new staff</td>
<td></td>
<td>ongoing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Develop and implement a training program, and include it in annual workplan budgets (incorporate with Central HR agency)</td>
<td></td>
<td>2008 - 2009</td>
<td></td>
<td></td>
<td>HR Consultant to develop pay scale matrix</td>
</tr>
<tr>
<td></td>
<td>6. Develop and implement a professional pay scale matrix</td>
<td></td>
<td>2009</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Strategic Direction 13: Sustainable Financing (critical strategy)

<table>
<thead>
<tr>
<th>Objective</th>
<th>Actions</th>
<th>Performance Indicators</th>
<th>Duration</th>
<th>Responsible Agency/Unit</th>
<th>Responsible Party/ies</th>
<th>Resource Requirements</th>
</tr>
</thead>
</table>
| Sustainable Finance Plan is implemented | 1. Disseminate the Sustainable Finance Plan with relevant agencies  
   - Sectoral review and revision of document  
   - Cabinet approval  
   - Gazetting | Plan is approved by cabinet | 2008 | Forestry Department  
   Fisheries Division  
   Ministry of Finance  
   Ministry of Tourism  
   National Trust | Heads of Department  
   Finance Plan Coordinator | TNC and other partners to assist with implementation  
   Funding to implement detailed actions  
   Logistical support (printing, meetings, etc.)  
   Finance Plan Coordinator |
| | 2. Implement the Sustainable Finance Plan, according to the proposed 5 year work plan | Plan is implemented | 2008+ | | | |
6.2 DISCUSSION ON STRATEGIC DIRECTIONS

The need for a holistic approach to management cannot be overemphasized. There are multiple layers of inter-connectedness between threats, challenges, and actions taken for capacity development. Most of the strategic directions are inter-connected, relying on completion of actions from other strategic directions in order to move forward. It is critical that these actions are implemented in a framework that ensures constant communication between all protected areas management actors. All strategic directions presume the sustainable finance plan will be implemented and funds and staff available to implement these priority actions.

**Strategic Direction 1: Inter-sectoral Integration among relevant actors**

“There is a need for new and improved, efficient and effective institutional arrangements based on the principles of collaboration, social participation and partnerships. In particular, new arrangements should be established to improve coordination and to assist with the integration of environmental matters and concerns into all relevant sectors and programmes. There is also a need to promote the sharing and decentralization of environmental management responsibilities whenever desirable and feasible.” (NEMS, 2005)

Coordination between agencies is currently managed on the basis of personal and informal relationships between agency employees rather than through established guidelines or defined roles and responsibilities. A formalized system of linkages between agencies is required to allow all involved parties to better determine the overall implementation framework and how each component can complement other agencies ongoing activities. A White Paper will be drafted for submission to Cabinet and circulated among relevant actors, detailing this formalized coordination process. This would include joint annual work planning sessions between agencies, determination of each participant’s roles/responsibilities within the protected areas, coordination with local entities (both public and private), and a participatory management planning process that involves all relevant actors.

The National Implementation Support Project (NISP) Coordinator is the proposed interim actor to play this coordination role, and facilitate meetings/communication between all involved actors to capitalize on their different areas of expertise. Key actors include the Fisheries Division, Forestry Department, Environmental Unit, Land Use Planning, National Water Authority, Coast Guard, local community groups and NGOs.

**Strategic Direction 2: Management Planning**

Management plans have not been given a high priority thus far, as agencies traditionally work from a department or division Strategic Plan and/or annual work plans. While this has proven somewhat effective for short-term management, it has left many of the
protected areas with limited long-term direction on key management needs. To promote formalized mechanisms for integrated and comprehensive site level management, detailed management plans need to be developed to guide identification of key threats, threat prevention activities, restoration targets, periodic monitoring, and provisions for civic participation. Management planning requires integration with all other strategic directions to ensure a viable, implantable product.

Comprehensive management plans are currently being developed for the Grand Etang and Annandale Forest Reserves and are expected to be completed by August of 2007. These plans are being facilitated through the OECS Protected Areas and Associated Livelihoods Project, with involvement of key agencies and stakeholders. With assistance from TNC, a management plan is in final stages of development for the Sandy Island Marine Park, in conjunction with local organizations and national agencies. Management planning has also been proposed for the Grand Anse MPA. These will serve as a guide for development of future plans within Grenada’s protected areas system.

**Strategic Direction 3: Law Enforcement**

While laws currently exist for protected areas and species conservation, they are generally not well understood or enforced. Addressing this area requires a greater public awareness of existing laws, coupled with training and empowering those tasked with enforcement on how to do so. Given limited staffing within responsible agencies, it may be necessary to develop alternative implementation schemes, such as community or volunteer enforcement. Integral to enforcement is garnering political support at the higher levels to assist with enforcement priorities.

**Strategic Direction 4: Research and Monitoring**

“Environmental management cannot be successful in the absence of relevant, accurate and up-to-date information. Because of the complexity and diversity of environmental issues, data and information are needed from a range of sources and disciplines. This information must be accessible to all those who need to formulate environmental management decisions, including public sector agencies, private sector bodies, civil society and individual citizens. Environmental data and information must also be managed efficiently and effectively, and they need to be used to inform policy and management.” (NEMS, 2005)

Grenada’s protected areas have served as the laboratory for many research projects, but protected areas managers have not necessarily benefited from research results that could potentially guide management practices or decisions. In addition, Hurricane Ivan physically destroyed or damaged documents and research collections. Development of a comprehensive research and monitoring programme is essential to prioritize conservation actions, guide future work, and monitor ongoing progress. In addition, information needs to be collected and centrally housed to ensure access for decision making, including an electronic database and hard copy library for sustainable development and environmental management related issues, and a national Global Information System clearinghouse.
The Forestry Department, Fisheries Division and Physical Planning Unit are expanding and integrating their respective GIS capacity and resources.

**Strategic Direction 5: Resilience**

“In the wake of devastation Hurricane Ivan wreaked upon Grenada in 2004, much emphasis is being placed on implementing environmental deterrents for future natural disasters. The impacts of this disaster on the economy and on society have been enormous and severe, and they require a response that seeks to repair and mitigate the negative impacts and destruction while also take advantage of the opportunities created by the event.” (NEMS, 2005)

Protected areas provide a prime location for a significant portion of resilience work, given the nature of conserving resources that can help mitigate negative effects of natural phenomena. The protected areas can capitalize on this nationally recognized need to conserve and restore forests within its borders (as a means to decrease landslides). Proposed plans for expansion of the protected area sites are partially based on the need for increased area to promote resiliency.

**Strategic Direction 6: Integrated Coastal Zone Management**

“Environmental management is a critical requirement for sustainable economic and social development. Too often, environmental concerns are perceived as antagonistic to economic and social development imperatives. There is now a need to reconcile the objectives of economic and social development and environmental management, by integrating these central dimensions of human development. This integration must take place at the level of policies, but also at the level of programmes, projects and actions.” (NEMS, 2005)

Unsustainable construction and development along coastal areas is wreaking havoc on the marine protected areas. Buildings are erected in close proximity to streams, rivers, and coastlines, with resulting issues from improper solid and liquid waste and runoff. Efforts will be made in priority areas to involve all relevant stakeholders to enforce existing standards and policies, including requirements for Environmental Impact Assessments prior to construction, implementation of mitigation recommendations, and ongoing monitoring to minimize negative impacts on protected areas. Actions here are closely linked with both waste management and land use policies.

**Strategic Direction 7: Land Use Policy**

To adequately effect change in current land use practices affecting protected areas, managers must first determine appropriate resource use. Much of the work here will require research on current natural resource usage practices, along with scientific research to determine the quantity and extent of those resources. Once the data has been gathered, it will be incorporated into a set of guidelines to be integrated into Grenada’s Land Use Policy.
Strategic Direction 8: Government Policy

“The management of Grenada’s environment requires radical changes in many of the behaviours and attitudes of people and institutions. In particular, there is a need to develop a greater sense of ownership of and responsibility towards the environment, to increase understanding of issues, causes and possible solutions, and to encourage and reward positive attitudes and adequate behaviour at all levels.” (NEMS, 2005)

Support from the various government agencies and levels has proven one of the greatest challenges within protected areas management in Grenada. Responsible personnel are overwhelmingly frustrated at what is perceived to be a lack of commitment to facilitate daily operations required to reach conservation outcomes. Inadequate funding and the current political climate support this assumption. The government’s hiring freeze during the last few years has greatly hampered many agencies’ ability to achieve on the ground outcomes. The Forestry Department is grossly understaffed, with eight of its twenty positions vacant. The Fisheries Division is slightly better off, with three vacancies out of its fourteen positions. Infrastructure, equipment, vehicles, and offices are inadequate for the proposed work load, especially in light of Grenada’s stated commitment to protect 25% of its terrestrial and near-shore marine resources by the year 2020. Recent legislation allowing for de-classification of national parks and protected areas if the government deems it appropriate to sell the lands to private interests is particularly disturbing for the long-term viability of protected areas in the country.

Efforts will focus on interacting with key government officials to help influence both political and budgetary needs. Actions here are intricately connected with the Environmental Education and Awareness strategic direction, whereby a more informed and active public can help influence necessary changes.

Strategic Direction 9: Legislative Review

The OECS OPAAL Project recently completed a review of existing legislation. Recommendations include rationalising existing laws and regulations to decrease conflicts between agencies and duplication of efforts among agencies and actors. This information should be widely shared with and reviewed by agency staff and stakeholders to help draft new legislation and management regulations. In addition, environmental committees and councils will be convened, as detailed under current legislation, to develop guidelines and regulations to implement existing laws.

Strategic Direction 10: Protected Areas Designation

There is no current structure, process or responsible entity to designate new protected areas. To better facilitate and streamline the proposed expansion of the protected areas system, it is imperative to determine appropriate procedures to efficiently guide those tasked with promoting the expansion within the government. Responsible parties will be identified to both develop the procedures and implement the designation of the new protected areas. A total of five new protected areas are proposed for designation by the year 2012, including insert exact names from the GAP Analysis report.
Strategic Direction 11: Public Awareness and Advocacy

“People need to adopt behaviour and consumption patterns that minimize negative environmental impacts and promote sustainability in livelihood strategies and resources use patterns.” (NEMS, 2005)

Public participation is a critical component of effective protected areas management. Education programs will reach tomorrow’s decision makers by teaching them of the importance of protecting the country’s resources from an early age. This will be done by integrating environmental education into both primary and secondary school curricula, providing teaching tools and materials, and educating those tasked with the responsibility of instilling a culture appreciative of our natural resources. A public awareness campaign will be designed to reach current resource users and better educate them on the value of the resources they rely upon, the importance of protecting them, and the need to become involved in managing them.

Strategic Direction 12: Human Resource Capacity

A thorough staffing assessment will be conducted to determine the current protected areas staffing levels and capacity within the various agencies. This will allow agencies to determine staffing needs, and need for additional support at the Fisheries Division, Forestry Department, Environmental Unit, and any other involved agencies. The eight vacant positions at the Forestry Department and the three vacancies at the Fisheries Division require filling, and all efforts should be made to do so as quickly as possible. Given the current funding situation, agencies may need to explore alternative staffing sources through volunteers or “loaned” employees from international agencies or universities.

Under the OECS Protected Areas and Associated Livelihoods Project (OPAAL), a capacity building assessment was conducted on Grenada’s protected areas system. The report detailed recommendations for training needed at the site, system and local community level to improve park management. These results can be used as a starting point for a more in-depth assessment of individual staff training needs to determine where and how to provide priority training to existing staff and how trained staff can share lessons learned through training within their agency. This training needs assessment should then be incorporated into the Central Human Resource Agency plans to obtain government support for its implementation. To further retain professional employees, a professional pay scale matrix should be developed to clearly detail professional levels and corresponding compensation.

Strategic Direction 13: Sustainable Financing

All the strategic directions rely upon implementation of the sustainable finance plan as the necessary component in order to move forward. If agencies and departments continue with the current level of inadequate funding, it will be impossible to achieve the proposed Convention on Biological Diversity goal or the commitment to protect 25% of both
terrestrial and near shore marine areas by the year 2020. Review, revision and completion of the plan should receive immediate priority.

The draft Sustainable Finance Plan contemplates funding needs to support agencies tasked with protected areas management, along with potential funding needs for the expansion of the protected areas system to reach the proposed biodiversity and 25/25 2020 commitment. The finance plan should be revised to ensure it contains sufficient resources to accommodate both the proposed expansion of the protected area system as detailed through the GAP Analysis work conducted in February, 2007, and this capacity development plan.

7. **RECOMMENDATIONS**

- The largest single action required to consolidate the Protected Areas System is to formalize and coordinate inter-institutional arrangements for all involved protected areas management agencies, as detailed in Strategic Direction 1 of the Capacity Action Plan. This includes joint planning sessions between agencies, defining roles and responsibilities, and improved communications between all actors. For this action to prove successful, a coordinating body or individual will need to step forward to take on the role of bringing actors together. At this time the role may be temporarily filled by the National Implementation Strategy Project (NISP) Coordinator, but this is only a stop gap measure until a government agency employee steps forward to fill this role.

- The actions detailed in the Capacity Action Tool should be incorporated into corresponding agencies’ annual workplans. This will ensure the various agencies are working towards the same goals and objectives in terms of consolidating protected areas management, and the work done to define needs and priorities will be implemented.

- Attaining the stated goals, objectives and actions in the Capacity Action Plan will require a substantial amount of work and coordination by multiple individuals and agencies within the protected areas system. While an initial prioritization was made during development of the Capacity Action Plan, further prioritization may be required to more accurately reflect what can be achieved during the next three to five years with available resources.
8. LESSONS LEARNED

- The capacity assessment and capacity planning processes should be conducted over a relatively short time period of no more than 1 – 3 months. In Grenada, there was close to a 12 month lag time between the initial assessment and completion of the capacity plan. The context governing the protected areas system changed considerably during that time period, including legislation changes allowing the sale of protected areas to private interests. During each step of the capacity planning process it was necessary to review previous work and revise previous decisions and conclusions, partly due to the time lag between different components in the process.

- In the case of Grenada there was little distinction between the conclusions for site level versus system level capacity needs. This was probably due to the same agencies tasked with similar responsibilities across multiple sites rather than site specific staff. The system level capacity criteria produced similar results to the site level criteria, leading to some level of redundancy. When applying this tool in other protected area systems with a somewhat similar decentralized structure, it may not be necessary to conduct separate site specific and system level assessments.

- The Grenada Protected Areas System has been the beneficiary of multiple studies, assessments and reports during the past four years. While the Capacity Assessment provided a slightly deeper analysis of specific criteria, not surprisingly the conclusions and resulting Capacity Action Plan closely mirror recommendations from previous protected area system analysis. What makes the Capacity Action Plan different is the participatory aspect of involving local actors in determining priorities and actions rather than a report detailing a third party’s opinion of priorities and proposed actions. It would be worthwhile to review the implementation results of the proposed Capacity Action plan and compare them with results from other proposed assessments and reports to determine if the participatory process produces any different or improved long term results or impacts.
Appendix 1

Protected Areas Management Strategies Workshop Attendees

<table>
<thead>
<tr>
<th>Attendee</th>
<th>Agency or Organisation</th>
<th>Attended February 21</th>
<th>Attended May 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Martin Barriteau</td>
<td>Forestry Department</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Tyron Buckmire</td>
<td>RARE</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Kelvin Dotten</td>
<td>Ministry of Health</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Aden Forteau</td>
<td>Forestry Department</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Wilson Hamilton</td>
<td>Forestry Department</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Crafton Isaac</td>
<td>Fisheries Division</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Anthony Jeremiah</td>
<td>Forestry Department</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Michael Jessamy</td>
<td>Tourism</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Alan Joseph</td>
<td>Forestry Department</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Christopher Joseph</td>
<td>Environment</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Carl Lloyd</td>
<td>Ocean Spirits</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Claudia Mark Benjamin</td>
<td>Ministry of Foreign Affairs</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Rickie Morain</td>
<td>Agency for Reconstruction and Development</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Clare Morrall</td>
<td>St. George’s University</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Stephen Nimrod</td>
<td>WINDREF</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Gordon Patterson</td>
<td>Forestry Department</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Paul Phillip</td>
<td>Fisheries Division</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Fabian Purcell</td>
<td>Physical Planning Unit</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Augustus Thomas</td>
<td>Forestry Department</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Appendix 2

Literature Review

The following national and site specific documents were reviewed to assist with the development of the Capacity Planning Action Plan:

*Capacity Building for Protected Areas Planning and Management and Associated Livelihoods*, OECS Protected Areas and Associated Livelihoods Project, January 2007.

*Review of the Policy, Legal and Institutional Frameworks for Protected Areas Management in Grenada*, OECS Protected Areas and Associated Livelihoods Project, November 2006.


*National Environmental Policy and Management Strategy for Grenada*, Ministry of Health, Social Security, the Environment and Ecclesiastic Relations, April 2005

*The St. George’s Declaration of Principles for Environmental Sustainability in the OECS*, November 2000

*Biodiversity Strategy and Action Plan*, July 2000 (for the Convention on Biological Diversity)

*The WWR-World Bank Alliance’s Scorecard to Assess Progress in Achieving Management Effectiveness Goals for Marine Protected Areas* adapted for Protected Areas of the Organisation of Eastern Caribbean States