

CENTER FOR PARK MANAGEMENT

Situation Analysis of Jamaica's Protected Areas System Plan

Submitted by:
Charlie Brown
Scott Edwards

December 15, 2005

Center For Park Management
1300 19th Street NW • Suite 300
Washington DC 20036
Phone 202-454-3396 • email: center@npca.org



Table of Contents

Table of Contents	3
List of Acronyms	4
Executive Summary	6
Historical analysis of the protected area system	7
History of Protected Areas System Plan (PASP) project and actions moving forward ...	10
Objectives of protected area stakeholders	11
GOJ current priorities and how protected areas falls within these	13
Institutional capacity for protected areas system	15
Review of international environmental commitments	16
Define preliminary scope of the Protected Areas System Plan (PASP) project	18
Short Term, January – June 2006, recommendations and action steps	19
Bibliography	22
List of Persons Interviewed	26

Appendices

Appendix 1: List of 1997 <i>The Policy for Jamaica's System of Protected Areas</i> series of goals for the Jamaica protected areas system	28
Appendix 2: Summarized list of 1997 <i>The Policy for Jamaica's System of Protected Areas</i> series of assumptions for the Jamaica Protected Areas System	29
Appendix 3: Forest Conservation Agreement 12 priority sites (protected areas).....	30
Appendix 4: International/Regional Agreements to Which Jamaica is a Party	32
Appendix 5: Brief Overview of Key International Environmental Commitments ...	33
Appendix 6: Original Project Description from PASP Project Proposal to EFJ	35
Appendix 7: Proposed Conceptual Framework for the System of Protected Areas and Template for the System Plan	36
Appendix 8: Example of planning and implementation of pilot project for contracted management	39

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

List of Acronyms

BJCMNP	=	Blue and John Crow Mountains National Park
CANARI	=	Caribbean Natural Resources Institute
CBD	=	Convention on Biological Diversity
CDM	=	Clean Development Mechanism
CITES	=	Convention on International Trade of Endangered Species
CPM	=	Center for Park Management
DEMO	=	Development of Environmental Management Organizations
EFJ	=	Environmental Foundation of Jamaica
FCA	=	Forest Conservation Agreement
GDP	=	Gross Domestic Product
GEF	=	Global Environment Facility
GOJ	=	Government of Jamaica
IUCN	=	International Union for Conservation of Nature and Natural Resources – World Conservation Union
JCDT	=	Jamaica Conservation and Development Trust
JERP	=	Jamaica Eco-regional Planning
JET	=	Jamaica Environmental Trust
JNHT	=	Jamaica National Heritage Trust
JNPTF	=	Jamaica National Park Trust Fund
MBMP	=	Montego Bay marine Park
MLE	=	Ministry of Land and Environment
NEPA	=	National Environmental and Planning Agency
NEST	=	National Environmental Societies Trust

NFMCP	=	National Forest Management and Conservation Plan
NGO	=	Non Governmental Organization
NBSAP	=	National Biodiversity Strategy and Action Plan
NRCA	=	Natural Resource Conservation Authority
PARC	=	Protected Areas Resource Conservation
PASP	=	Protected Areas System Plan
SPAW	=	Specially Protected Areas and Wildlife in the Wider Caribbean Region
TNC	=	The Nature Conservancy
USAID	=	United States Agency for International Development
UTECH	=	University of Technology, Jamaica
UWI	=	University of the West Indies

Executive Summary

Over the past twelve years there have been several attempts to develop an effective management structure for Jamaica's protected areas system. The latest attempt resulted in the Protected Areas System Plan (PASP) project that was based, in part, on an initiative that was started by the Jamaica Conservation and Development Trust (JCDDT) in 1992. The most recent PASP process has been hampered by numerous obstacles and challenges resulting in the failure to complete the project by the original May 2004 deadline.

As a result, the Center for Park Management (CPM) was contracted by The Nature Conservancy (TNC) in partnership with the National Environment Societies Trust (NEST) and the National Environment and Planning Agency (NEPA) to assess the current situation with the PASP process and develop a strategic roadmap for the next steps. This document includes a set of short-term recommendations that will lay the logical, feasible and achievable path to the successful completion of the PASP.

The situation analysis is based on an extensive literature review, a series of interviews with protected areas stakeholders and experts, and numerous stakeholder focus group meetings. From this analysis a series of protected areas successes and challenges were identified, many of which had been recognized in previous reports. Many of the barriers impeding effective management of the protected areas system are similar to those that hampered the PASP process including: lack of central leadership and coordination, misalignment of stakeholders' objectives and roles, and a protected area management jurisdiction beyond existing capacity.

While challenges have been recognized, the PASP process has lacked a prescribed short-term roadmap to overcome these barriers and achieve effective protected areas management. Based on our analysis, CPM has developed a set of short-term (January – June 2006) actions that will lay the groundwork for leadership development, capacity building and the creation of the enabling environment for a successful protected areas system. With the current challenges in mind, the action steps below represent goals achievable within the protected areas current capacity. The recommended short-term actions are:

1. Identify two pilot sites (areas of biological importance) to build management experience and models.
2. Complete business plans for these two protected areas.
3. Begin pilot program for contracted protected areas management.
4. NEPA takes full responsibility for the development of the PASP that focuses on the 12 protected areas identified in the Forest Conservation Agreement (FCA).
5. Create a central management institute through Jamaica Protected Areas Trust (JPAT).
6. Review process of implementing overarching protected areas act beginning with the Wildlife and Protected Areas Act.
7. Increase system capacity through partnerships to fill immediate management gaps.

8. Establish communications/marketing program initially focused on protected areas managers and decision makers.
9. Enlist assistance of objective third party to provide monitoring and evaluation for short-term action plan.
10. Focus on Action.

It is the intention that these short-term actions will build confidence and experience for stakeholders, creating a foundation to achieve the mid- to long-term objectives of the protected areas system.

Historical analysis of the protected area system

Protected areas have been a part of Jamaican history for over 100 years starting with the Morant and Pedro Cays Act of 1904 marking protected areas earliest legislation.

From 1937 – 1975 a number of legislative acts went into law forming three conservation agencies, including the Forestry Department, and three protected areas and forest reserves. The acts represented the government’s goal to curb “... rapid deforestation and its negative effect on watershed areas, wildlife and soil...”¹

The establishment of agencies such as the Forestry Department were also viewed as ways to promote and manage Jamaica’s lucrative logging industry. While these acts remained mostly aspirational they continued to set the stage for a Jamaica conservation movement.

<u>Key GOJ Action from 1937 to 1975</u>
• Forest Act (1937)
• Wildlife Protection Act (1945)
• Beach Control Act (1956)
• Watershed Protection Act (1963)
• Provisional National Parks Committee established (1970)

In 1977 Jamaica joined the Convention on International Trade of Endangered Species (CITES) initiating its entrance into the international arena of environmental conservation. While CITES was Jamaica’s second international environmental obligation it marked the first serious commitment to conserve Jamaica’s natural resources to the global community. To date Jamaica is party to 18 international/regional agreements including the important Convention on Biological Diversity (CBD) (see *Review of International Commitments...* on page 17 for greater detail).

International engagement expanded in the late 1980s with the beginning of direct international aid for the creation of a protected areas system. In 1989 the Protected Areas Resource Conservation (PARC) I project was initiated through United States Agency for International Development (USAID) to “... integrate conservation of biological diversity with sustainable economic development”². The PARC I project resulted in Jamaica’s first major action to take protected areas beyond paper by building the infrastructure for the protected areas system and creating the Montego Bay Marine Park (MBMP) and Blue

¹ Jamaica Conservation and Development Trust. (1992, November). A Plan for a System of Protected Areas in Jamaica. p. 1.

² Caribbean Natural Resources Institute (CANARI). (2001, December). Review of Jamaica’s Protected Areas System and Recommendations on the Way Forward. p. 4.

and John Crow Mountains National Park (BJCMNP). While the selection of those particular park sites has produced debate, all consider the initial creation of the first marine and terrestrial parks a significant moment in Jamaica's history.

During PARC I the Natural Resources Conservation Authority (NRCA) Act introduced new legislation in 1991 that empowered NRCA to establish and "... maintain an effective regime for protection and conservation of Jamaica's natural resources."³ This act streamlined existing legislation and gave NRCA clear responsibility for the establishment, coordination and management of the national protected areas system (which did not include forest reserves, fisheries and wildlife reserves).

As a recommendation of PARC I the JCDT completed *A Plan for a System of Protected Areas in Jamaica* in 1992 that outlined an approach for the creation, management and selection of protected areas in Jamaica. In analyzing management capacity the plan determined that no one government agency had the ability to manage the entire protected areas system and also proposed a management partnership with JCDT. This proposal reflected an international trend by governments to seek partnerships with NGOs for protected areas management authority. Ultimately, JCDT was delegated management responsibility, which marked the beginning of NRCA's management partnerships, relinquishing day-to-day supervision of its sites. Over time this approach suffered from poor selection of delegation partners, lack of planning and supervision, and inadequate funding. The plan also made several recommendations including the use of IUCN categorization and definitions, the establishment and capitalization of a national parks trust fund, and drafting and adoption of support legislation.

To develop long term funding for the protected areas system PARC I initiated the Jamaica National Park Trust Fund (JNPTF). Established in 1992 through the proceeds of Jamaica's first debt-for-nature swap, JNPTF was intended to become the primary funding source for the park system. The debt-for-nature swap capitalized JNPTF at J\$12.3 million and was to be funded with J\$5 million per annum from the Government of Jamaica. The JNPTF only received the initial payment from the Ministry of Finance and by 1993 began dipping into its capital, ahead of schedule, to pay the salaries for park employees. This led to a depletion of the endowment and its eventual inability to serve its initial long-term purpose.

An evaluation of the PARC I project by the Island Resources Foundation deemed the PARC I project a success as two parks were running beyond expectations with trained full time staff and community participation. PARC I then set the stage for a second USAID funded project, PARC II. The Island Resources Foundation's analysis of PARC II outlined the need to separate the regulatory and management functions of protected areas and centralizing day-to-day management.

The 1993 PARC II project and its umbrella project, the Development of Environmental Management Organizations (DEMO), were intended to "strengthen the capability of

³ Jamaica Conservation and Development Trust. (1992, November). *A Plan for a System of Protected Areas in Jamaica*. p. 5.

public and private environmental organizations to manage Jamaica's most economically important natural resources."⁴ The goal of the five year, US\$7.75 million project was to continue the PARC I efforts and build capacity for the system through lead institutions and the creation of clear environmental and economic management goals.

PARC II suffered from a series of problems stemming from USAID's decision to change project implementation from local staff to international consultants, which created strong mistrust from PARC I stakeholders. Many of the project goals were never realized including the creation of a National Parks Institute to coordinate the protected areas activities and strengthen financial resources. Ultimately, PARC II served as a damaging set back for the entire system.

In 1997 *The Policy for Jamaica's System of Protected Areas* was approved by the Cabinet, which designated six types of protected areas and a series of goals (Appendix 1) for the system. The policy was later criticized for coming late in the planning process and for making a series of inaccurate assumptions (Appendix 2), which were crucial to the successful implementation of the NRCA legislation. Notable among those inaccurate assumptions were that NRCA had the jurisdiction to formulate a system plan for all protected areas (including forest reserves, fisheries and wildlife sanctuaries) and that they had the necessary human and financial resources available.

Throughout 1998 and 1999 four new protected areas were declared (including Portland Bight, the largest protected area to date covering 187,615 hectares) and management delegation to NGOs was proposed. The new protected areas stretched the already limited resources leaving protected areas management close to nonexistent.

During this period there was limited success in developing financial mechanisms and a centralized leadership for a protected areas system that had grown beyond management capacity. Throughout this phase international commitments to environmental conservation continued, seven in total between 1995 and 1998 (Appendix 4), without the allocation of additional resources or a plan to meet the obligations.

In 2001 the National Environment and Planning Agency was created, through the NEPA Act, as a merger between NRCA and the Town and Planning Rural Physical Planning Departments. In that same year the Forest Policy and National Forest Management and Conservation Plan (NFMCP) were approved by Cabinet, which clarified government agency jurisdictional responsibilities and increased resources to assist with protected areas management (notably BJCMNP, which is also a forest reserve).

In 2002 the Caribbean Natural Resources Institute (CANARI) developed the *Review of Jamaica's Protected Areas System and Recommendation on the Way Forward*, which produced an analysis of the previous ten years of protected areas management and a road map for moving forward. This document led to the new PASP project being funded by the Environmental Foundation of Jamaica (EFJ) and the Canada/Jamaica Green Fund.

⁴ Caribbean Natural Resources Institute (CANARI). (2001, December). *Review of Jamaica's Protected Areas System and Recommendations on the Way Forward*. p. 7.

The goals of the project were to develop a new system plan using current protected areas legislation, make recommendations for the establishment of additional protected areas and build on the experiences of the protected areas system since 1992. The project has suffered from a lack of management and poor methodology and was not able to meet its original June 2004 deadline.

History of the current Protected Areas System Plan (PASP) project and actions moving forward

The original PASP began in 1992 with the creation of *A Plan for a System of Protected Areas in Jamaica* by JCDT that outlined an encompassing approach to the creation, management and selection of all protected areas in Jamaica. Two notable outcomes from the report included 1) the proposal for management partnerships with NGOs, such as JCDT, to be adopted for the management delegation of protected areas and 2) NRCA ultimately did not have the jurisdiction to develop a plan for protected areas such as forest reserves and wildlife sanctuaries.

The plan served as an initial guide for the protected areas system and yet, unfortunately, many of the recommendations were started but never completed. Ultimately, this has led to a lack of on the ground management for the protected areas and a fragmentation among the partners and stakeholders within the process.

In 1997 the *Policy for the National System of Protected Areas* was developed which outlined the legal responsibilities, structure and management for Jamaica's protected areas. "The policy concluded by stating that, 'In order to facilitate the further development of the system a protected area system plan will follow this document. This plan will outline the steps and actions to be taken over a particular time period.' However, this system plan has not yet been developed and there is no structured framework within which protected areas planning, establishment and management can proceed. Subsequently, the linkages between protected areas, their relation to national priorities and integration into other relevant planning strategies such as those for tourism, agriculture, mining, etc. is not clear".⁵

Following the 1997 policy no attempt was made to develop a new or updated system plan until the release of CANARI's 2002 *Review of Jamaica's Protected Areas System* report. While CANARI's recommendations resonated well with and had strong support from many stakeholders they were not used to develop the new PASP. Another NGO, the National Environmental Societies Trust (NEST) took up the task of developing the proposal to the EFJ and Canada/Jamaica Green Fund. The project was approved and received a combined J\$8 million in June 2003 with a May 2004 deadline. NEST started the project by soliciting several individual consultants to complete discrete sections of the plan. Not all consultants were hired at the beginning of the project and some began working on sections while others were never hired to complete other sections.

⁵ National Environmental Societies Trust. Protected Areas System Plan Proposal to Environmental Foundation of Jamaica. p. 3.

The challenges experienced in developing the PASP project to date are, in general, very similar to those of the protected areas system in general:

- *Lack of central leadership* – Consultants worked without strong leadership to supervise their work. For the PASP process NEST assumed the lead role but failed to provide an effective methodology or management for individual consultants. NEPA, due to funding restrictions by EFJ, assumed a supporting role to NEST and developed a fifteen person Steering Committee that was later deemed too large to effectively oversee implementation of the project. NEPA at no time had full control of the process. Protected areas stakeholders have pointed to this arrangement as analogous to NEPA’s shortfall in protected areas management.
- *Lack of coordination and clarity of roles* - Of the three sections of the PASP completed, two of the consultants discussed the difficulty in accomplishing their tasks due to a lack of coordination and guidance from NEST. This lack of clarity was the result of poor project management that was unable to lead the consultants as an integrated team with a defined role for each consultant to capitalize on the synergies of the group.
- *Scope beyond existing resources* – The scope of the current PASP project presented a situation that was not only beyond the capacity of the selected consultants but also for the actual management capabilities of the protected areas system itself. To create a PASP that will serve as a guide to existing protected areas management it must focus on current capacities that can lead to a set of aspirational goals. This translates to starting small through the 12 protected areas identified within the FCA⁶.

When the project failed to meet its original deadline, a no-cost extension was sought and received from the EFJ to allow NEST and NEPA, with the assistance of The Nature Conservancy (TNC), to define a new approach to complete the project by December 2005. Even this approach has been frustrated by a lack of central leadership and continued poor management by NEST.

A new strategic approach must be taken that realigns all the supporting stakeholders and facilitates a synergistic process for the ultimate completion of a successful plan. In this case NEPA must lead the development of a new PASP.

Objectives of protected area stakeholders

The objectives of protected area stakeholders are, for the most part, very similar in that all have expressed a desire to protect Jamaica’s natural resources and build a strong system of protected areas. However, aspects of organizational capacity and mandate adversely affect the way in which each is able to positively contribute to the overall system. Ultimately, the objectives of each of the various stakeholders can build a strong

⁶ A full description of the FCA priority sites can be found in Appendix 3.

network of potential partners that are in need of a clear and unified path forward that aligns their capacities, skills and efforts into a functional protected areas system.

An analysis of protected areas management stakeholders in Jamaica starts with the NRCA Act, which has the objective to protect and conserve Jamaica's natural resources and mandates NEPA to lead the process. The legislation guides government policy decisions whose current key objectives center on economic development and crime mitigation. New legislation is currently in the works but will take considerable time to implement.

The Ministry of Land and Environment (MLE) is responsible for the creation, management and evaluation of a range of natural resource management legislation and policy. MLE, who oversees NEPA, currently recognizes the need to revamp protected areas legislation to reflect the proposed PASP as a priority. MLE is also working on the implementation of a revised protected areas act and serves other functions such as the Focal Point for a number of international conventions, including the Convention on Biological Diversity (CBD).

NEPA is given the overall responsibility of regulating and managing the protected areas system. While legislation clearly puts NEPA in the lead role for the protected areas system, its lack of institutional support, financial and human, leave it unable to fulfill its primary obligation. Instead the agency, divided into various branches, is left to focus much of its attention on planning, permitting and licensing. While these functions are important to NEPA's objectives, other functions such as environmental monitoring and evaluation are neglected. Therefore, planning and guidance for the existing protected areas are often based on assumptions rather than scientific processes. This very premise is highlighted by the fact that NEPA is unable to assess the current biological target levels for the present protected area system.

NEPA's jurisdiction does not include areas under management by the Forestry or Fisheries Departments. These, each managed by their respective agencies, are either led under their own management plans, under agreement by NEPA, or in partnership with a local delegated manager. As an example, the BJCMNP where the delegated manager, JCDT, works with both NEPA and the Forestry Department, is the most successful to date. In particular, the partnership between NEPA and the Forestry Department highlights a situation that can be replicated throughout the 12 protected areas identified within the FCA. While, in essence, the objectives of each agency are highly complimentary, it does not alleviate the problem of the lack of a central lead agency that can take final responsibility and delegate roles for the management of Jamaica's protected areas system. Currently, Fisheries and Forestry are both taking initiative to pursue their direct mandates by realigning resources and designating crucial functions as priorities. Forestry is guided by their 2001 management plan and beginning to work in close partnership with NEPA.

Over the years, NGOs have taken a lead role in protected areas management through management delegation agreements with NEPA and other GOJ agencies. The original concept envisioned a single lead management partner, JCDT, but management authority

extended to other organizations as the system grew beyond JCDT's capacity in the mid to late 1990s. Currently, only five of the NGOs have been delegated management authority for a protected area while several others are looking to obtain delegated status. NGO managers stated, during recent one-on-one interviews, that their priorities are research, monitoring, and environmental management through a delegated management agreement. Surprisingly, the same NGOs reported, during focus group meetings held in October of 2005, that their current priorities centered on public education, community engagement and fundraising. Institutional capacity assessments of the existing NGO partners, commissioned by The Nature Conservancy in 2004 noted an acute lack of core competencies among all of them.

The above organizations make up the core of protected areas management in Jamaica but it is important to recognize that other stakeholders such as private landowners, buffer zone communities and private industry also have an important role to play. Each of these stakeholders' economic objectives and level of resource capacity has the potential to impact the protected areas system in both positive and negative ways, and success will require a strong level of engagement.

Financial survival and sustainability is ranked among the highest priorities. Achieving financial sustainability has no easy solution but can be assisted by the development of financial mechanisms and better allocation and coordination of responsibilities. At present there is little coordinated fundraising and almost no revenue generation within the protected areas system. A huge opportunity now exists for a more business-like approach, which has been successfully implemented by other countries.

Each of the stakeholders does have a unique skill set to provide, even while their described objectives may lead them in different directions. For the protected areas system to move forward it is imperative for all stakeholders to revisit their current objectives and determine whether they are in line with their core competencies. This process will need to be guided by a lead organization and by key decisions on the future management structure of protected areas in order to realign the current stakeholders and insure a more effective management system.

GOJ current priorities and how protected areas falls within these

Economic issues and crime reduction have and will continue to take center stage of the GOJ's short- to mid-term priorities. Consequently, the protected areas system will unlikely receive any additional funding for protected areas management in the near future. However, this situation does provide an opportunity to determine the economic value of protected areas to the country and capitalize on Jamaica's largest industry – tourism, to place protected areas at the forefront of GOJ priorities.

Much of Jamaica's economic woes center on public debt, which in 2004 was roughly 146% of GDP. Other external factors such as Hurricane Ivan in 2004 have "set back the

government's growth, inflation, and balanced budget plans.”⁷ In 2004 anticipated GDP growth was 50% of expectations and inflation rose to 12%. In an effort to boost economic growth and maintain debt payments the GOJ is focused on two key sectors – tourism and mining/extraction. The country also depends on foreign remittances, which are estimated over US\$1.5 billion in 2004, making it one of the largest contributors of foreign exchange.

Economics plays directly into the most pressing social problem, the continued rise in crime and violence. “Jamaica is likely to experience one of its bloodiest years, with murders reaching close to 1,500 by the end of last year, a remarkable statistic for a country of 2.6 million people.”⁸ Many associate the rise in violence with an increase in organized crime centered on the illicit drug trade and the overall lack of economic opportunity. The lack of economic opportunity is highlighted by the figures for unemployment, that in 2004 hit 15%, and underemployment, which was considered to be even higher. Until employment levels are improved and organized crime reduced it is doubtful whether Jamaica will see much change in the level of crime and violence. The focus to curb crime is central to both Jamaica’s rule of law as well as its ability to attract foreign investment and become internationally competitive.

With the two central factors for the GOJ being economic development and curbing crime, the immediate opportunity for increasing GOJ support for environmental conservation, or other social issues, becomes extremely limited. In fact this puts Jamaica’s natural resources under increasing threat. Many international donor agencies are pushing the GOJ towards creating an enabling environment for the private sector to take the lead role in Jamaica’s future, which can be seen as increasing pressure for neo-liberal economics but also a potential opportunity for tourism in protected areas.

The GOJ has pinpointed tourism as a key growth sector to revive the economy. 2004 saw a record number of cruise ship arrivals and while most visitors to Jamaica are centered around all-inclusive resorts, there is a growing trend for outside excursions to experience Jamaica’s culture, rural communities and places of natural beauty. The development of a strong business approach to protected areas management can result in a significant increase to the number of visitors who are searching for a more diverse vacation experience while still conserving the most important biological resources.

To capitalize upon this opportunity the protected areas system will need to put in place a strategy that outlines its objectives and approaches to tourism. A beginning step is business planning for protected area sites that later build into a system-wide plan. This could lead to protected area partnerships with private tour operators and the development of a centralized tour system that allows visitors a single outlet for information and tour bookings.

⁷ USAID. (2005). Democracy and Governance in Jamaica. Retrieved October 22, 2005 from the World Wide Web: http://www.usaid.gov/our_work/democracy_and_governance/regions/lac/jamaica.html

⁸ USAID. (2005). Democracy and Governance in Jamaica. Retrieved October 22, 2005 from the World Wide Web: http://www.usaid.gov/our_work/democracy_and_governance/regions/lac/jamaica.html

In combination with the above, an assessment of the protected areas current and potential economic value to Jamaica should also be conducted. This will provide key data that will allow protected areas to be represented in the economic terms understood by public and private sector decision makers. The goal should be to turn the issue of environmental conservation into one that can be understood in simple dollar and cents terms from Cabinet Members to the man in the street.

Institutional capacity for protected areas system

In reviewing the objectives of the GOJ it has become very clear that the heavy debt burden carried by the country has made funding for social programs, including environmental protection, scarce to non-existent. Until debt is relieved there is little hope for greater financial support from the GOJ to its various natural resource management agencies. This makes it all the more important to begin to build the economic case for protected areas by promoting their importance and contribution to Jamaica's economy.

An examination of the existing financial resources of NEPA's protected areas branch shows the highest level of annual funding at an estimated J\$5 million. Despite the minimal financial resources allocated by the government to protected area agencies, current financial capacity does provide an opportunity to maintain core management functions that can help rebuild the system. The protected area administrators need to identify these mission critical functions to be fulfilled through the limited funding available to realize the protected areas objectives.

There is capacity for greater coordination among GOJ agencies to maximize synergies of their resources and responsibilities. Examples have already been displayed in the BJCMNP where NEPA and the Forestry Department have developed a partnership with JCDT, leveraging their combined resources. It is quite likely more of this can be done with not only Forestry and Fisheries but also with other agencies, academic institutions, NGOs and the private sector. This process will be crucial in obtaining greater resources and creating ownership for environmental protection by all potential stakeholders.

In the past partnerships have focused on the delegation of management functions to NGOs. This approach has not taken into consideration the capacity for these NGOs to fulfill their partnership obligations. Through focus group research and institutional self-assessments it does not seem that NGOs in Jamaica have the resources or experience to manage entire protected areas. At the moment JCDT is the most successful at managing their protected area, but that success has been limited. NGOs instead have expressed their capacity, and perceived competency, in the areas of community outreach and engagement. Due to a lack of leadership from NEPA, capacity and objectives of the NGOs are not fully aligned.

Many NGOs, as with all managing agencies in the protected areas system, have stressed the lack of financial resources to meet their objectives. In particular, the NGOs have expressed the need for management delegation to provide credibility to their fundraising, community outreach, and other efforts. Historically, NGOs have shown limited success

at raising funds for their work, even within the current structure of management delegation. Management delegation, versus successful project implementation, has become a barrier for the system and NGOs efforts to build financial capacity. A shift in roles and responsibilities is necessary for the short- and long-term survival of the environmental NGOs. Instead of seeking *carte blanche* management delegation they must reevaluate their true competencies and focus on their strengths and seek to work more closely with the GOJ as partners. It is likely that this approach will allow them to become separated from a poor performing management system and develop a fresh approach that will not only attract potential donors but also develop a strong series of accomplishments to build upon.

Existing financial resources are also more available than many have assumed. An example is the EFJ who has the mandate to fund environmental projects but has spent considerable amounts on youth focused projects with an environmental component. It is crucial for all protected areas system stakeholders to work closely with the EFJ, and similar organizations, not only to understand but also to influence their funding decisions. The same should apply to international donors as well. Increasing funding for the protected areas system requires a coordinated effort by all stakeholders to develop very strong working relationships with all potential donors.

It should also be noted that while there is current potential human and financial capacity to be maximized it is not enough to manage the entire protected areas system. With the current size of terrestrial and marine protected areas it would be incredibly difficult to manage this area with the limited amount of experience in existence. Instead there is an opportunity to identify the key biological and business resources that need to be best protected and capitalized upon. This set of activities needs to be completed very soon to guide the future planning process of the protected areas system. Its outputs can then guide the selection of one or two key sites to begin active management. By narrowing down the short-term focus, the system can then build capacity through a coordinated management process in both the biological and business areas that can be replicated at subsequent sites.

Overall, the major shortfall of management capacity in the current system comes down to the lack of implementation and action. This is most clearly displayed in the wealth of reports and planning that has occurred over the past thirteen years, with little result. Each outlines a positive direction forward for protected areas, yet are subject to inertia due to their long-term focus. Improving this single factor on short-term objectives would allow the development of successful projects that build the confidence of the protected areas managers. This is the most important aspect of the existing protected areas system capacity to act upon.

Review of international environmental commitments

International environmental commitments serve as a guide towards a globally agreed upon direction for protected areas and a timeline for Jamaica's responsibilities regarding protected areas management. These commitments serve as not just an obligation but also

an opportunity to provide a clear direction and definition of Jamaica’s protected areas strategy and establish international recognition as a leading protected areas system.

Of the international environmental commitments made to date, those of critical importance are the Specially Protected Areas and Wildlife in the Wider Caribbean Region (SPAW) Protocol, the Ramsar Convention, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Cartagena Convention and the Convention on Biological Diversity (CBD). A short description of each obligation can be found in Appendix 5 and a full list of international environmental commitments can be found in Appendix 4. Of this set, the CBD serves as an overarching obligation of international commitments and sets a clear timeline of responsibilities for countries. The CBD was developed to assume that a country had no protected areas to serve as a guide for new programs and an evaluation tool and guide for existing systems. This obligation alone should serve as the key guiding set of responsibilities for Jamaica’s protected areas strategy and a tool to integrate other obligations.

In 2004 the CBD parties developed the *Programme of Work on Protected Areas* to guide protected areas managers to achieve the three CBD objectives of conservation, sustainable use and equitable sharing of benefits from the country’s biological resources. An example of a key goal is CBD Target 1.1 that aims by 2010 to have “... at least 10% of each of the world's ecological regions effectively conserved.”⁹ This indirectly requires Jamaica to effectively protect at least 10% of the islands most important ecological areas by 2010. A list and time table of potential outcomes is shown below that provides general guidance to each of the three phases of CBD’s *Programme of Work*.

PHASES OF THE PROGRAMME OF WORK ¹⁰	
PHASES	POTENTIAL MAIN OUTCOMES OF EACH PHASE
PHASE I (2004 – 2006)	<ul style="list-style-type: none"> • “Master plan” for protected areas. Completing, in effect, a “master plan” for the system of protected areas (key elements include, for example: plans for filling ecological gaps; securing financial resources; building capacity; promoting governance arrangements; and addressing policy, legislative and institutional barriers). • Studies and assessments, for input into “master plans”, covering, for example, socio-economic contributions of protected areas, ecological gaps in protected areas systems, and types of governance arrangements. • New protected areas. Establishment of new protected areas where urgent action is required.

⁹ Convention on Biological Diversity. 2010 Goals and Sub-targets. Retrieved November 14, 2005 from the World Wide Web: <http://www.biodiv.org/2010-target/goals-targets.aspx>

¹⁰ Dudley, Mulongoy, Cohen, Stolton, Barber and Gidda (2005). Towards Effective Protected Area Systems. An Action Guide to Implement the Convention on Biological Diversity Programme of Work on Protected Areas. Secretariat of the Convention on Biological Diversity, Montreal, Technical Series no. 18, p. 1.

PHASES OF THE PROGRAMME OF WORK ¹⁰	
PHASE II (2007 – 2008)	<ul style="list-style-type: none"> • Threats. Mechanisms in place to address key threats. • Financial Resources. Sufficient Financial Resources secured. • Indigenous and local communities. Policies and mechanisms to support indigenous and local community participation and equitable sharing of costs and benefits. • Standards. Standards adopted for all major aspects of protected areas.
PHASE III (2009 – 2015)	<ul style="list-style-type: none"> • Effective systems of protected areas. Comprehensive, ecologically representative, and effectively managed systems of protected areas. • Integration of protected areas into wider land and seascapes.

Additional charts are provided by the CBD outlining all targets and goals and can be found on the CBD website as well as in the referenced CBD Technical Series No. 18 action guide pages 2 through 5. To date Jamaica has begun the process of meeting the CBD goals and has produced the *National Biodiversity Strategy and Action Plan* (NBSAP) which outlines key actions to take over the coming years. It must be noted that while the CBD is a powerful and overarching convention, the specifics of all commitments must be closely analyzed and should be integrated into the CBD approach.

Jamaica is signatory to various other international commitments beyond those listed above that define the key responsibilities of Jamaica’s protected areas. These other conventions should not be overlooked. In particular the Law of the Sea, Marine Dumping, Marine Life Conservation and Ship Pollution and the Millennium Development Goals create a strong opportunity to work with other government agencies to stop potential pollutants from entering marine parks and protected areas and enhance living conditions for the island’s most vulnerable citizens. Attention should also be paid to the Climate Change-Kyoto Protocol where developing countries may benefit from the use of the clean development mechanism (CDM) to offset greenhouse gas production from large emitters.

Define preliminary scope of the Protected Areas System Plan project

Past outlines of the PASP scope have all included the general broad guidance for a successful plan. What has been neglected is defining the actual breadth of “protected areas” and taking into consideration current capacity to operate under the plan’s direction. The PASP should serve as the broad strategy and structure for the protected areas and provide guidance as to the growth of the system.

Starting with the most recent attempt at developing the PASP, a series of items were listed in the proposal to the EFJ that outlined what should be included in the PASP. These can be found in Appendices 6 and 7 and one can see that these provide the broad guidance needed for a successful plan. Missing are two key factors – what protected areas are included in this plan and a representation of current and necessary management capacity.

In regards to what should be included in “protected areas” it has long been the consideration that all forms of protected areas - including forest reserves, fisheries, wildlife sanctuaries and heritage sites, should be included in the PASP. At a visionary stage this is most likely correct but it does not take into account existing jurisdiction or capacity of each protected areas agency to undertake this venture. While this is the ideal outcome, NEPA and Forestry should start at a reasonable level where the PASP covers the 12 protected areas identified within the FCA. It is important that the two agencies work in partnership while NEPA takes the lead on completing the PASP.

By taking this short-term approach the PASP has the opportunity to become a document that can lead the system today and still have a visionary approach to the future. Therefore, a strategy should be implemented that outlines a baseline approach to management of the protected areas system. This would include a starting point that defines the roles and responsibilities of all stakeholders representing existing capacity to perform and maintain these functions. From this point a series of tiered goals would be outlined that guides the development of the process. In other words, the PASP would start with what is the basic capability of today’s system and lead the stakeholders through a series of steps and goals to reach the desired outcome that has been the recommendation of past reports and attempts at the PASP.

This type of strategy also allows for the PASP and protected areas to start focusing on the accomplishment of goals rather than an obligatory timeline of five or ten years for updates and reviews of the system. The outcome will be a shift towards action rather than planning that will ultimately limit the ability of partners to use, extended time frames as a crutch or excuse.

The PASP should be a document that represents intelligent design with clear roles and responsibilities for each stakeholder. By allowing the plan to be guided by a series of goals and achievable next steps, stakeholders should be provided with incentives to succeed in implementing effective management for protected areas.

Short Term, January – June 2006, recommendations and action steps

A set of short-term (January – June 2006) actions have been developed based on the history of the protected areas system and long-term vision created by the current stakeholders. The recommendations are intended to establish the building blocks for a protected areas system. This will require taking small, achievable steps over the next six months and building them into the foundation for the longer-term management and financial structure for protected areas. Of the recommendations listed below several will continue well beyond June 2006 while others will set the stage for replicating the recommendations to expand capacity. Most of all, it is imperative to work through all the recommendations to build confidence and visibility for the protected areas system. Starting immediately it is recommended that NEPA and partners:

1. Identify two areas (within the 12 protected areas identified in the FCA) of biological importance to develop “model protected areas” for the development of focused management experience and methodology. This decision will be guided by TNC’s biological assessment and reinforce the need for the completion of the Ecoregional Plan and Gap Analysis. This process will also identify key gaps in scientific data needed and will lead to the development of site specific management plans to inform the PASP. It is important to recognize that the goal is not to identify the two absolute most valuable areas but two of the most valuable that are already within protected area borders and can be acted upon today, not tomorrow.
2. Complete business planning for the same two areas (chosen in action 1) and begin implementation. This process will also identify key gaps in financial data needed, avenues to obtain additional funding and test a methodology for eventual business planning replication. The initial two business plans will lead to the development of a system-wide business plan and identify opportunities for financial sustainability and improved management effectiveness.
3. Begin pilot program for “model protected areas” to build management experience in the two specific sites on a contractual basis where bids are requested for small, defined projects. The management sites may be a portion of each protected area chosen in action one. This pilot process will focus on building a management system that is clear and defined, and thus empowering, rather than overwhelming, management partners. The goal of the process is to build experience and management capacity for the system.
4. NEPA, taking lead responsibility through a participatory process that includes guidance from the heads of protected area agencies, begins writing PASP. The PASP process will use input from the Ecoregional Plan and Gap Analysis, management experience from the two initial sites, and business planning. The PASP should focus on the 12 protected areas identified in the FCA and establish a set of small management milestones that can be implemented from day one. A series of mid- to long-term milestones are then used as ‘triggers’. Once met, these triggers signal the beginning of a broader management scope through the replication of strategy to additional protected area sites and inclusion of the Fisheries Department, Jamaica National Heritage Trust (JNHT) and private land management.
5. Create a central management institution that is flexible, transparent and less bureaucratic through the existing Jamaica Protected Areas Trust (JPAT). JPAT will serve as a central coordinating body that can work as embedded capacity within protected area agencies to focus on capacity building and creating the enabling environment for long-term success. The long-term goal will be to develop capacity and hand this over to the government once it is deemed successful. Funding for JPAT could come from key partner institutions, such as EFJ, and capitalization by additional debt-for-nature swaps.

6. Review process of implementing overarching protected areas act. This should focus on clarifying NEPA's leadership role and addressing coordination among the four key protected areas agencies. The review may result in the creation of instructions for new policy. This should initially focus on a review of the Wildlife and Protected Areas Act.
7. Develop partnerships to create greater capacity and enabling environment. Two partnerships should be developed to build partnership experience. A partnership is suggested with: 1) Jamaican Universities such as UWI who can fill gaps in scientific data and, 2) government agencies who can assist in protected area enforcement. Other potential partners to be explored include tour operators who can monitor high impact areas, private landowners and large tourism attractions such as cruise lines and all-inclusive resorts. It is important that capacity to complete this task be assessed immediately and if necessary a consultant hired to provide assistance.
8. Use the above actions to develop unique communication strategies for each targeted audience (GOJ decision makers such as the MLE Minister, protected area managers, protected area communities, donors, private sector, general public, etc.). The strategies should begin with a very simple communication tool for an internal audience focused on protected area managers. This should expand over time and ultimately incorporate a social marketing program for the general public and GOJ decision makers. Assistance will likely be needed to accomplish this task and a short-term consultant should be considered.
9. Enlist the assistance of an objective third party to provide monitoring and evaluation of short-term (January – June 2006) action plan. The person or organization will provide accountability and guidance to each point person for the recommendations listed above. An output will be a monthly update to all stakeholders on the progress of actions.
10. Focus on Action. The past thirteen years have seen more plans than implementation and this has to change. Milestones must be set that are achievable in the short-term and incorporated into management stakeholders work plans. The system and its stakeholders will respond to visible results. The only way to make protected areas relevant is to be visible and the only way to be visible is through action.

Bibliography

- Caribbean Natural Resources Institute (CANARI). (1998). Financing Protected Area Management: Experiences from the Caribbean.
- Caribbean Natural Resources Institute (CANARI). (1999, February). Community Based Tourism in the Caribbean.
- Caribbean Natural Resources Institute (CANARI). (1999). A Guide to Teaching Participatory and Collaborative Approaches to Natural Resource Management.
- Caribbean Natural Resources Institute (CANARI). (2001, December). Review of Jamaica's Protected Areas System and Recommendations on the Way Forward.
- Caribbean Natural Resources Institute (CANARI). (2004, February). CANARI Policy Brief: Markets for Watershed Protection Services Challenges and Opportunities.
- Convention on Biological Diversity. 2010 Goals and Sub-targets. Retrieved November 14, 2005 from the World Wide Web: <http://www.biodiv.org/2010-target/goals-targets.aspx>
- Emmanuel and Griffith. (2005, January). Protecting Heritage and Culture: Its Role in the Protected Areas System Plan and Impact on National Development.
- Fisher, Elaine. (2004, October). Thematic Assessment: Convention on Biological Diversity and the Cartagena Protocol on Biosafety.
- Forest and Fisher. (2005, September). National Action Plan: National Capacity Self-Assessment Project (NCSA).
- Government of Jamaica. (1993). The Beach Control Act.
- Government of Jamaica. (2004, September). Forest Conservation Agreement.
- HD/USDA Forest Service. (2005, May). Jamaica Protected Areas Trust: The Business of Jamaican Conservation with Best Practice Global Models.
- Jamaica Conservation and Development Trust. (1992, November). A Plan for a System of Protected Areas in Jamaica.
- Jamaica Conservation and Development Trust. (2005). Draft Blue and John Crow Mountains National Park Management Plan 2005 – 2010.
- Jamaica Forest Department. (2002, September). Assignment Between the Forestry Department and Natural Resources Conservation Authority.

- Jamaica Forest Department. (1996). The Forest Act.
- Jamaica National Environmental Planning Agency. (2003, July). National Strategy and Action Plan on Biological Diversity in Jamaica.
- Jamaica National Environmental Planning Agency and Ministry of Land and Environment. (2000). Towards a National Policy and Strategy on Environmental Management.
- Jamaica Natural Resources Conservation Authority. (1991). The Natural Resources Conservation Authority Act.
- Jamaica Protected Areas Network . (2004, December). Report on Training Outcomes: Institutional Development with the Jamaica Protected Areas Network.
- Jones Williams, Margaret. Biodiversity in Development Project Case Studies Series, 9. Jamaica – Negril Coral Reef Preservation Project
- Lee, David. (2003, September). South Coast Development Plan: Guidelines for Protected Areas Management Plans.
- Mahlung, Clifford Anthony. (2004, November). Thematic Assessment: United Nations Framework Convention on Climate Change.
- McCalla, Winston. (2004, November). Protected Areas System Plan Legal Framework.
- National Environmental Societies Trust. (2003). Protected Areas System Plan Proposal to Environmental Foundation of Jamaica.
- National Environmental Societies Trust. (2003). Terms of Reference Protected Areas System Plan Project Legal Consultant.
- National Environmental Societies Trust. (2003). Terms of Reference Protected Areas System Plan Project Management Consultant.
- National Environmental Societies Trust. (2003). Terms of Reference Protected Areas System Plan Project System Plan Consultant.
- Nigel Dudley, Kalemani Jo Mulongoy, Sheldon Cohen, Sue Stolton, Charles Victor Barber and Sarat Babu Gidda (2005). Towards Effective Protected Area Systems. An Action Guide to Implement the Convention on Biological Diversity Programme of Work on Protected Areas. Secretariat of the Convention on Biological Diversity, Montreal, Technical Series no. 18, 108 pages.
- Robinson, Lincoln. (2004, December). National Consultations and Public Awareness Strategy for Jamaica's Protected Areas System Plan.

- Spence, Sinclair and Hayman. (2005, November). Report of Stakeholders Participation in Focus Groups for the Protected Areas System Plan.
- Stair, Marjorie. (2004, October). Thematic Assessment – United Nations Convention on Combating Desertification (Land Degradation).
- The Nature Conservancy. (2004, July). Institutional Self-Assessment: Caribbean Coastal Management.
- The Nature Conservancy. (2004, July). Institutional Self-Assessment: Dolphin Head Trust.
- The Nature Conservancy. (2004, July). Institutional Self-Assessment: Friends of the Seas (FOTS).
- The Nature Conservancy. (2004, July). Institutional Self-Assessment: Jamaica Development and Conservation Trust – Green Jamaica.
- The Nature Conservancy. (2004, July). Institutional Self-Assessment: Montego Bay Marine Park.
- The Nature Conservancy. (2004, July). Institutional Self-Assessment: Negril Area Environmental Protection Trust (NEPT).
- The Nature Conservancy. (2004, July). Institutional Self-Assessment: Negril Coral Reef Preservation Society Executive Summary.
- The Nature Conservancy. (2004, July). Institutional Self-Assessment: Portland Environment Association Executive Summary.
- The Nature Conservancy. (2005, October). Jamaica Ecoregional Planning Presentation.
- United Nations Millennium Development Goal. UN Millennium Development Goal #7. Retrieved November 14, 2005 from the World Wide Web:
<http://www.un.org/millenniumgoals/#>
- United Nations Food and Agriculture Organization and Government of Jamaica. (2004, March). Development of a Policy Framework and Strategic Plan for Sustainable Fisheries in Jamaica.
- USAID. (2005). Democracy and Governance in Jamaica. Retrieved October 22, 2005 from the World Wide Web:
http://www.usaid.gov/our_work/democracy_and_governance/regions/lac/jamaica.html
- Wilson, Scott. (2002, November). South Coast Sustainable Development Plan Final Report.

World Bank. Jamaica Cockpit Country conservation project preparation report annex – institutional and financial aspects.

List of Person Interviewed

- August 14: Terry Williams, The Nature Conservancy
- August 15: Carla Gordon, Protected Areas Branch, NEPA
Winsome Townsend, NEPA
Christine Sutherland, NEPA
Devon Blake, NEST
- August 16: Roy Cruise, Financial Consultant
Trevor Spence, Stakeholder Analysis Consultant
- August 17: Peter Espeut, Caribbean Coastal Area Management Foundation
Brendan Hay, Caribbean Coastal Area Management Foundation
Ingrid Parchment, JPAN and Caribbean Coastal Area Management Foundation
Susan Otoukon, Executive Director JCDT
Anne Sutton, The Nature Conservancy
- August 18: Janet Hyde, NEPA
Roger Williams, NEPA
Andre Kong, Fisheries Department
Stephen Smikle, Fisheries Department
Dayne Buddo, Institute of Jamaica
Rohan Richards, MLE
Alli Morgan, Forestry Department
Keith Porter, Forestry Department
Althea Johnson, Ministry of Tourism
Lt. Aldred, JDF
Lola Ricketts, TPDCo
- September 27: Leonie Barnaby, MLE
Carla Gordon, NEPA
Christine Sutherland, NEPA
Anne Sutton, The Nature Conservancy
- September 28: Marilyn Headley, Conservator of Forests
Keith Porter, Forestry Department
Thera Edwards, NISP Consultant
Andre Kong, Fisheries Department
Stephen Smikle, Fisheries Department
- September 29: Peter Wilson Kelly, Coastal Integrated Watershed and Zone Management
NEPA
- October 26: Debbie Thomas, Professor of Caribbean Studies at Duke University

November 1: Gina Green, former TNC Caribbean Director
David Smith, Programme Specialist Environment & Disaster Management

November 4: Mark Nolan, PARC I Director
Carla Gordon, Protected Areas Branch NEPA
Donna Blake, MLE
Robert Kerr, former National Parks Manager and founder Sun Ventures

November 5: Susan Otoukon, Executive Director JCDT

November 6: Lucy Gentiles, Education Director JCDT
Waterford Community Action Group

November 8: Dr. Elaine Fisher, Biodiversity Consultant
Terry Williams, The Nature Conservancy

November 10: Mark Nolan, PARC I Director

November 14: Bondi Ogolla, Program Officer of Legal Affairs, Secretariat of the
Convention on Biological Diversity Social, Economic and Legal Affairs

APPENDICES

Appendix 1: List of 1997 *The Policy for Jamaica's System of Protected Areas* series of goals for the Jamaica PA system¹¹

- Economic development: expand and diversify Jamaica's natural resource base economy.
- Environmental Conservation: conserve Jamaica's heritage as represented by its biodiversity, scenic landscapes and cultural resources.
- Sustainable Resource Use: protect ecological systems which provide goods and services
- Recreation and Public Education: provide recreational and educational opportunities to improve the quality of life for all Jamaicans and visitors.
- Public Participation and Local Responsibility: promote local interest, commitment and support for protected areas
- Financial Sustainability: achieve and maintain financial sustainability for the protected area system

¹¹ Wilson, Scott. (2002, November). South Coast Sustainable Development Plan Final Report. P. 5-6.

Appendix 2: Summarized list of 1997 *The Policy for Jamaica's System of Protected Areas* series of assumptions for the Jamaica Protected Areas system

- NRCA has the financial and human resources to preserve the major natural resources of Jamaica
- NRCA has the responsibility (which would inherently include jurisdiction) to formulate a financial policy for the system
- The Ministry of Finance will contribute J\$5 million per year to the Jamaica National Parks Trust Fund
- The creation of the Jamaica National Parks Institute
- All stakeholders and contributing partners understood their role in the system
- NRCA will create a long term mechanism to encourage local participation, monitoring and evaluation of the system
- There will be a “common planning platform” for the system
- The NRCA and partners will coordinate all activity

Appendix 3: Forest Conservation Agreement 12 priority sites (protected areas)¹²

EXHIBIT 1.1(c)

Description of Priority Sites

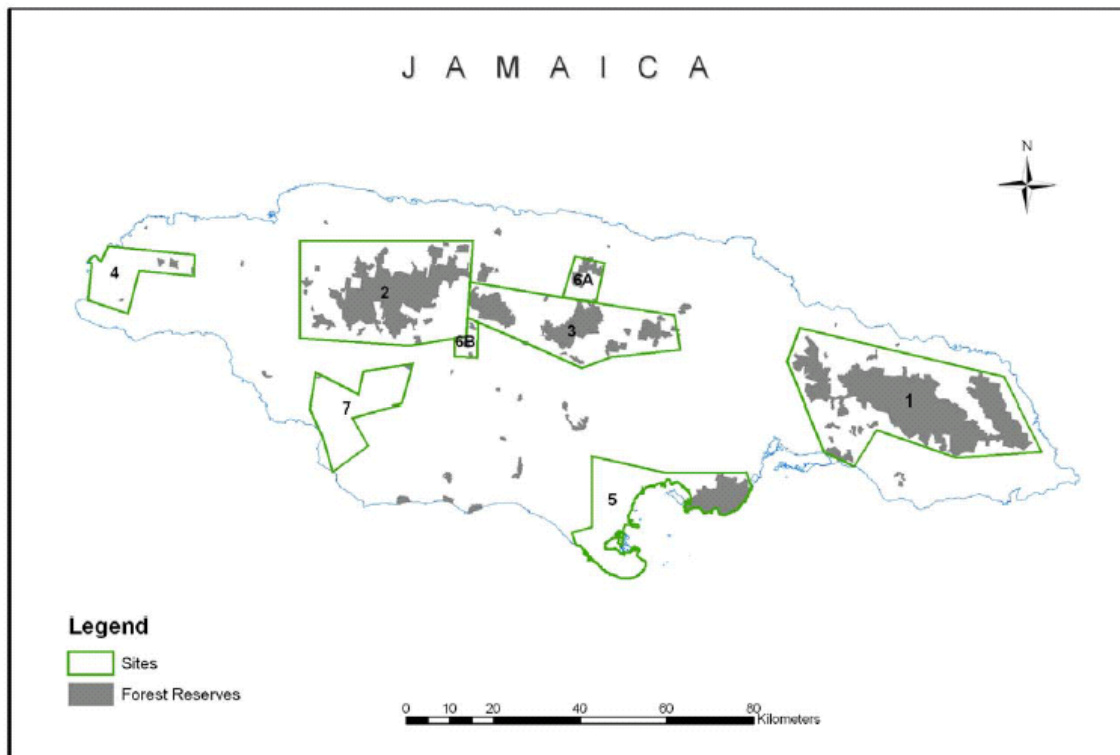
Site #	Description	Boundary Descriptions by Coordinates
1	Blue and John Crow Mountains National Park (Blue Mountain Forest Reserve), adjacent National Water Commission lands, plus buffer areas of unprotected closed broadleaf forest in the Rio Grande, Swift River, Buff Bay, Morant, Yallahs, Hope and Wag Water watersheds	From 18°13'21"N, 76°47'37"W to 18°07'15"N, 76°20'56"W to 17°58'06"N, 76°16'00"W to 17°57'22"N, 76°27'05"W to 18°00'53"N, 76°37'32"W to 17°56'19"N, 76°40'32"W, to 17°58'02"N, 76°44'22"W to 18°09'11"N, 76°49'15"W to 18°13'21"N, 76°47'37"W
2	Cockpit Country Forest Reserve, plus outlying Forest Reserves, and adjacent areas of closed broadleaf forest	From 18°24'12"N, 77°52'48"W to 18°24'13"N, 77°30'16"W to 18°12'20"N, 77°31'09"W to 18°12'09"N, 77°38'28"W to 18°12'04"N, 77°52'48"W to 18°24'12"N, 77°52'48"W
3	Litchfield Matheson's Run and Stepheney-John's Vale Forest Reserves, adjacent Crown lands, outlying Forest Reserves (Bull Head and Mount Diablo) extending into the upper portions of the Rio Minho, Rio Cobre and Rio Bueno/White River watersheds, Crown lands in the Dunn's River watershed, and the Dry Harbour Mountains	From 18°19'02"N, 77°30'39"W to 18°14'55"N, 77°03'58"W to 18°10'39"N, 77°03'10"W to 18°09'42"N, 77°12'08"W to 18°08'20"N, 77°16'00"W to 18°10'42"N, 77°21'29"W to 18°14'38"N, 77°30'57"W to 18°19'02"N, 77°30'39"W
4	Inland portion of Negril Protected Area, plus the forested area in and around Dolphin Head Mountains (Retirement, Raglan Mtn., Geneva and Bath Mtn., Quasheba Mtn. and Baulk Pen) and Burnt Savannah	From 18°23'27"N, 78°17'51"W to 18°22'25"N, 78°06'34"W to 18°19'45"N, 78°06'36"W to 18°20'22"N, 78°13'49"W to 18°15'04"N, 78°15'16"W to 18°16'46"N, 78°20'28"W to 18°21'16"N, 78°20'00"W to 18°21'34"N, 78°20'30"W to 18°22'18"N, 78°19'41"W to 18°21'32"N, 78°18'49" to 18°23'27"N, 78°17'51"W

Exhibit 1.1(c)
Page 2

5	Portland Bight Protected Area, Terrestrial portion of the Portland Bight Sustainable Development Area located in the lower Rio Minho and Rio Cobre watersheds	From 17°46'26"N, 77°16'46"W to 17°47'59"N, 77°17'19"W to 17°48'43"N, 77°14'41"W to 17°57'31"N, 77°14'42"W to 17°55'25"N, 77°04'59"W to 17°55'31"N, 76°54'31"W to 17°53'37"N, 76°53'47" along the coast to 17°46'26"N, 77°16'46"W
6A & B	Other forest reserves and Crown lands managed by the Forestry Department such as Gourie, Ballintoy Forest Reserve, Hellshire and Lowe River Forest Reserves	6A - From 18°22'19"N, 77°16'51"W to 18°21'27"N, 77°13'01"W to 18°16'34"N, 77°14'08"W to 18°17'15"N, 77°18'31"W to 18°22'19"N, 77°16'51"W 6B - From 18°14'38"N, 77°30'57"W to 18°14'03"N, 77°29'31"W to 18°09'40"N, 77°29'40"W to 18°09'47"N, 77°32'34"W to 18°12'04"N, 77°32'36"W to 18°12'19"N, 77°31'07"W to 18°14'38"N, 77°30'57"W
7	Spring Vale and Bogue Forest Reserves plus the Upper and lower Black River Morasses	From 18°07'46"N, 77°50'44"W to 18°05'06"N, 77°45'10"W to 18°07'57"N, 77°44'29"W to 18°08'51"N, 77°38'02"W to 18°04'01"N, 77°39'31"W to 18°02'16"N, 77°45'59"W to 17°58'48"N, 77°43'52" to 17°55'34"N, 77°48'30"W to 17°59'50"N, 77°49'48"W to 18°03'21"N, 77°51'30" to 18°07'46"N, 77°50'44"W

NEWYORK 4003111 v19 (2K)

¹² Government of Jamaica. (2004, September). Forest Conservation Agreement. Exhibit 1.1 (c).



Appendix 4: International/Regional Agreements to Which Jamaica is a Party¹³

Instrument	Status
International Plant Protection Convention, Rome, 1951	Accession: 24 November, 1969
United Nations Convention on the Law of the Sea, Montego Bay, 1982	Ratification: 21 March, 1983
Convention Concerning the Protection of the World Cultural and Natural Heritage, Paris, 1983	Acceptance: 14 June, 1983
Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, Cartagena de Indies, 1983	Ratification: 1 May, 1987
Protocol Concerning Cooperation in Combating Oil Spills in the Wider Caribbean Region	Entry into Force: 1 May, 1987
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (as amended), London, Mexico City, Moscow (Washington), 1972	Ratification: 22 March, 1991
International Convention on the Prevention of Pollution from Ships, London, 1973	Ratification: 13 June, 1991
Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, London, 1973	Ratification: 13 June, 1991
London Amendment to the Montreal Protocol on Substances that Deplete the Ozone layer, London	Ratification: 31 March, 1993
Vienna Convention for the Protection of the Ozone Layer, Vienna, 1985	Accession: 31 March, 1993 Entry into Force: 29 June, 1993
Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, 1989	Instrument of Accession Deposited: 6 January, 1995 Effective: 5 April, 1995
United Nations Framework Convention on Climate Change, New York, 1992	Instrument of Accession Deposited: 6 January, 1995 Entry into Force: 5 April, 1995
Convention on Biological Diversity, Rio de Janeiro, 1992	Instrument of Accession Deposited: 6 January, 1995 Entry into Force: 5 April, 1995
Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)	Accession: 7 November, 1977 Entry into force: 4 February, 1998
The Copenhagen Amendment to the Montreal Protocol on Ozone Depleting Substances.	Accession: 7 November, 1997 Entry into Force: 4 February, 1998
Convention on Wetlands of International Importance especially as Waterfowl Habitats (RAMSAR Convention)	Accession: 7 October, 1997 Entry into Force: 7 February, 1998
Convention to Combat Desertification	Accession: 12 November, 1997 Entry into Force: 16 March, 1998
Kyoto Protocol to the United Nations Framework Convention on Climate Change	Ratification: 28 June 1999 Entry into Force: 16 February 2005

¹³ Ministry of Land and Environment, 1999; Updated by Center for Park Management, 2005

Appendix 5: Brief Overview of Key International Environmental Commitments¹⁴

Convention on Biological Diversity (1992) – objective is the conservation of the world’s biodiversity, sustainable use of its components, and a fair and equitable sharing of its benefits.

- Obligations:
 - A National Biodiversity strategy and action plan
 - Under Article 7 parties are required to identify processes and categories of activities which may have significant adverse impacts on the conservation and sustainable use of biological diversity.
 - Environmental impact assessment obligations are set out in Article 14

Convention on International Trade in Endangered Species (CITES) (1973) – controls trade in endangered and threatened species

- Obligations:
 - CITES parties must identify species that are, or may be threatened by trade, and may become threatened unless trade is regulated

Convention on Wetlands of International Importance Especially as Waterfowl Habitat, RAMSAR (RAMSAR Convention) (1971) – Aims to stem the progressive encroachment on and loss of wetlands.

- Obligations:
 - RAMSAR parties are to designate at least one national wetland of international importance when signing the Convention or when depositing its instrument of ratification or accession (Jamaica designated the Black River Lower Morass in 1998)
 - Parties are required to establish wetlands nature reserves and cooperate in the exchange of information for wetlands management
 - Assess impacts of any change in use of identified wetlands sites
 - Take responsibility for conservation, management and wise use of migratory stocks of waterfowl.

United Nations Convention to Combat Desertification in those Countries experiencing Serious Drought and/or Desertification, Particularly in Africa (1994) - aims to promote effective action to mitigate the degradation of land in arid, semi-arid, and dry sub-humid areas caused primarily by human activities and climatic variations.

- Obligations:
 - Establish strategies and priorities to combat desertification and mitigate the effects of drought.
 - Promote awareness and facilitate participation in efforts to combat desertification.

¹⁴ Adapted from: McCalla, Winston. (2004, November). *Protected Areas System Plan Legal Framework*.

Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (Western Hemisphere Convention) – main objectives are the preservation and protection of flora and fauna, as well as protection of significant natural areas, parks, and cultural scenic sites.

- Obligations:
 - Establish protected areas
 - Adopt laws for the protection of flora and fauna
 - Protect migratory birds
 - Prohibit taking of species of special concern
 - Regulate trade in protected species
 - Cooperate to promote the objectives of the treaty

Appendix 6: Original Project Description from PASP Project Proposal to EFJ¹⁵

The preparation of a National System Plan for Protected Areas in Jamaica, which will provide a structured framework within which protected areas will be managed by the relevant government agencies and NGO's. ... The plan will identify the linkages between protected area management and external factors, which the IUCN describes as major threats to conservation in many countries.

- Public awareness and consultations
- Strategy for building public support
- Definition of categories of protected Areas and criteria for selection
- Legal and enforcement issues
- Management Issues
- Institutional arrangements for individual protected areas
- Financial sustainability
- Monitoring and evaluation
- Oversight and coordination
- Development of the system
- Plan Preparation

The focus of the system plan should be on optimizing the contribution of protected areas to Jamaica's sustainable development. It should:

- Define the policy framework for Jamaica's system of protected areas
- Describe the management requirements for a system that includes all protected areas established under law (including the NRCA Act of 1991, Forest Act of 1996, Jamaica National Heritage Act of 1985, and Fishing Industry Act of 1975), or through contractual agreements with private landowners
- Provide guidance for involving government agencies, non-governmental organisations, community groups, landowners, and the private sector in management partnerships that make optimal use of the resources and skills of all partners
- Address the question of sustainability in terms of financing the system and its expansion, building public support, responding to the capacity needs of management partners, and monitoring and evaluating effectiveness and impact.

¹⁵ National Environmental Societies Trust. Protected Areas System Plan Proposal to Environmental Foundation of Jamaica. P. 4-5.

Appendix 7: Proposed Conceptual Framework for the System of Protected Areas and Template for the System Plan¹⁶

Proposed Conceptual Framework for the System of Protected Areas

The 1997 policy envisioned an integrated protected area system that involved a wide range of public and private actors. However, without a plan to operationalise the policy, the modalities for collaboration were not spelled out; the scope of the system was not explicitly defined (and the policy essentially provided guidance only for protected areas established under the NRCA Act); and the links were not made to other aspects of national development, making it impossible to achieve some of the policy's goals. Given the general directions provided by the policy, and the present context and needs, the following basic framework for the system is proposed:

1. The system should include, and the plan should provide guidance for, all protected areas established under law, including the NRCA Act, Forest Act, Fishing Industry Act, and Jamaica National Heritage Trust Act, or through a contractual agreement between a private landowner and Government.
1. The system should be seen as one component, or tool, in a larger national strategy of ecosystem-based management for sustainable development. Other related and mutually supporting tools would include regulations under development control laws such as the Town and Country Planning Act and Beach Control Act; environmental education and public awareness programmes; incentives for private conservation and improved land use; and voluntary environmental management activities of businesses, private landowners, community groups and NGOs.
2. The agencies responsible for implementing the law under which a protected area was established would maintain overall responsibility for managing the area and authority under the law. If permitted under their guiding legislation, these agencies could delegate specific responsibilities to others under contractual agreements. The responsibilities delegated would be negotiated on the basis of the area's management plan.
3. Areas composed of a diversity of natural and cultural resources may require protection under more than one legal instrument (for example, protection of portions of the area as forest reserve under the Forest Act and adjacent or overlapping portions as a national park under the NRCA Act), as well as agreements, contracts or covenants with private landowners. Such areas, which fall within the NRCA Act's definition of Environmental Protection Areas, would require mechanisms for collaborative planning and coordination of management activities.
4. The management arrangements for all areas would include provision for equitable, democratic, and meaningful stakeholder participation in management decisions.
5. New areas would be added to the system on the basis of their importance to the achievement of Jamaica's sustainable development and larger ecosystem-based management objectives and the results of local and national cost-benefit analyses. In establishing new areas, the options for protection under all relevant legislation should

¹⁶ National Environmental Societies Trust. Protected Areas System Plan Proposal to Environmental Foundation of Jamaica. P. 2-4 appendix, 3.

be explored in order to employ the most efficient legislative instrument for cost-effectively meeting management objectives.

6. The system plan would include a detailed and realistic financial sustainability plan incorporating a range of strategies and instruments. Any instruments requiring government action would be negotiated with appropriate agencies and finalised as part of the system planning process.

Template for the Protected Areas System Plan

The plan should be dynamic and flexible, not set in stone. It should be possible to update any portion of the plan whenever necessary, and there should also be a regular process of review and revision to assure that no aspects of the plan become outdated and that guidance can be added on new issues related to management of the system as they arise. The main components of the plan should be reviewed periodically, but should initially include:

1. Context
 - 1.1 The overall policy context for national development, environmental management, and natural resource conservation
 - 1.2 The place of a system of protected areas within that context (including the goods and services it is expected to provide)
 - 1.3 Goals and objectives of the national system of protected areas
 - 1.4 The national patrimony: a broad assessment, summarising the main findings of the National Biodiversity Strategy and Action Plan and other relevant documents, of the critical cultural and biological assets and ecosystems which require protection or special management in order to achieve the goals of national sustainable development and of the system of protected areas
2. Legal and institutional framework: summary of the main laws and international conventions governing the management of protected areas and a map of how they inter-relate, with reference to the agencies responsible for their implementation
3. Policy framework
 - 3.1 General approach to achieving ecological, social, economic, and other objectives
 - 3.2 Management approach: approach to issues such as land acquisition, rights of existing users, compliance and enforcement
 - 3.3 Management arrangements: whether centralised or decentralised, single authority or partnerships, government management or devolution.
 - 3.4 Stakeholder participation: identification of stakeholders and description of how and to what extent they will be involved in management
4. Management framework
 - 4.1 Classification: the categories of protected areas within the system and their management objectives and characteristics
 - 4.2 Management standards, against which to measure effectiveness of management of protected areas
 - 4.3 Guidelines for participatory management planning processes for protected areas
 - 4.4 Template for management plans for protected areas
 - 4.5 Guidelines on the use of incentives to encourage the participation of individuals, communities, and the private sector in managing protected areas

- 4.6 Procedures and arrangements for the enforcement of laws and regulations within protected areas
- 4.7 Research agenda for the system
- 4.8 Guidelines for setting research priorities and conducting research in individual protected areas
- 5. Institutional arrangements
 - 5.1 Government management agencies: definition of their legal authority and responsibilities by virtue of relevant Acts
 - 5.2 Management agents: definition of those management responsibilities that can be legally delegated to agents
 - 5.3 Delegation instruments and other management contracts: guidelines for their negotiation, including the setting of management fees, and templates for their preparation
 - 5.4 Cooperative agreements and memoranda of understanding among management partners: guidelines for their negotiation and templates for their preparation
 - 5.5 Agreements with private landowners: guidelines for negotiating agreements for the inclusion of private lands within protected areas
 - 5.6 Stakeholder participation: strategies and mechanisms for ongoing stakeholder input into protected area management
 - 5.7 Conflict management: guidelines for the resolution of conflicts involving government agencies, government and management agents, management agencies and stakeholders, and partners in co-management arrangements
- 6. Financial sustainability plan
 - 6.1 Analysis of the costs of managing the system and individual protected areas
 - 6.2 Income sources: identification, description, and analysis of their contribution
 - 6.3 Administrative arrangements for collection, disbursement, and accounting
- 7. Sustaining and expanding the system
 - 7.1 Criteria and procedures for selecting, prioritising, and establishing new areas
 - 7.2 Strategies for building public support
 - 7.3 Capacity needs of management partners and strategies for addressing them
- 8. Monitoring and evaluation plan: definition of methods and procedures for monitoring the implementation of the system plan and for periodically evaluating of its effectiveness in meeting objectives, its efficiency in the use of human, technical and financial resources, and its national and local ecological, social and economic impacts
- 9. Arrangements for oversight and coordination
 - 9.1 Mechanism to provide oversight
 - 9.2 Arrangements for coordination among the main actors
 - 9.3 Arrangements for administration
 - 9.4 Procedures for review and revision of the plan

Appendix 8: Example of planning and implementation of “model protected areas” pilot project for contracted management

The pilot project for contracted management of protected areas is established to take a new approach towards building capacity and creating the enabling environment for effective protected areas management through two “model protected areas”. To begin this pilot project for contracted management NEPA and the Forestry Department, in consultation with TNC to utilize information from JERP, will choose two protected areas from the 12 identified in the FCA, for business planning and contracted management. The contracted management will focus on a small portion of the two protected areas overall size. Below is an example of how the pilot project may proceed and some potential outcomes (*in italics*) that may occur during the process for one of the two sites.

Selecting the site: The selection of the site is determined by utilizing a small set of criteria that should include:

- Contains biologically and financially important natural resources
- Lies within an existing protected area and on government owned land
- Has access to potential contracted managers (including current delegated managers)
- Includes a diverse set of management components (buffer zones, monitoring, enforcement, etc.)
- Will not create animosity amongst stakeholders
- Some current management capacity and institutional Knowledge on the ground
- Significant revenue generation opportunities
- Recent management plan

Using this small set NEPA and the Forestry Department heads choose a terrestrial area.

Identifying management functions and creating requests for proposals (RFP): During the business planning process and site selection a series of management functions and goals will be identified. An example is the monitoring and management of flora and fauna, which could include rehabilitation of endangered endemic species and eradication of exotic invasive species. Other aspects identified will also include concessions where the contractor would pay for the use of the site. NEPA (taking a lead role), with potential assistance from an organization such as JPAT, will then assemble the management functions and goals into a series of RFPs for contractors to bid upon. It is recognized that the management aspects identified will be a start for the pilot project. The main goal is to have this set of experiences build capacity and identify gaps to be addressed in the future. Together, these will form the foundation for the revised management plans.

In selecting the terrestrial site, NEPA outlines three potential contracts for the terrestrial site.

Secure funding: With the management functions documented NEPA and the Forestry Department will be able analyze the potential costs for each contract. With potential assistance from an organization such as JPAT, fundraising may begin which will include discussions with EFJ. With a clear set of management needs, donors will not only see

where the money is needed but exactly how it would be used and have the ability to clearly evaluate results. The goal should be twelve months of funding.

Within two months, funding was secured for two of the contracts, leaving the remaining to be covered through existing funding from GOJ and key partners.

Selecting contractors: With the management needs outlined, potential contractors can be solicited once it is most likely that funding will be secured. RFPs should be advertised and current partners solicited. This process should move quickly through the use of a clear set of criteria for contractors, or what could be called “management partners”.

Criteria includes:

- Environmental management experience
- Long-term partnering potential
- Available skill sets
- Strong references

The selection of this group is not only important to the success of the pilot project but also to other stakeholders who look to this group as an indication of the future expectations of the program.

To the surprise of some, not all contracts were bid upon. This showed a clear gap in capacity and identified an area where partnerships needed to be developed or NEPA and the Forestry Department must choose to manage on its own. Contractors were chosen for two of the three management functions and contracts finalized that included clear milestones that must meet in order for the management partners to be paid.

Beginning management: Management will require time from both agencies, and their potential partner JPAT, to field questions from the new management partners and others. Although time consuming, it will indicate a sign of engagement by stakeholders and an opportunity to build strong relationships. After two months an update and evaluation will be done with each management partner based on the milestones in their contracts. This same information should be utilized within the communications strategy to inform key decision makers of the successes being made and their control of the system by recognizing management problems in a timely manner.

At month two, it was found that of the two management partners, one was ahead of schedule and one was behind. Time was taken to learn why one was achieving their goals and apply those lessons to the second contractor. JPAT facilitated this process and in the end concluded that the some of the milestones were too stringent for the second contractor and the contract was readjusted. For other aspects of the milestones the second contractor was given a warning, which after three warnings warranted negating their contract. All was put in writing and agreed upon.

Looking ahead: Over time the bi-monthly updates and evaluations will paint a clear picture of the direction to be taken forward, likely around month eight. With this information, planning should begin for selection of the next two sites based on the

completed JERP by TNC. This allows JPAT, who will already be working on donor development, to move on new fundraising for continuation of the existing two sites and expansion to two more.

At the end of the year new contracts were allocated, one to current contractor who expanded their organization, for the next two sites and a training was held bringing the existing and new contractors together. The successes were a new path forward for stakeholders and exciting new step for the protected areas system. The program, while not perfect, provided a strong management plan for protected areas.