

Jamaica's Protected Area System Plan

BIODIVERSITY REPORT

Working Paper 1

CATEGORIZATION OF PROTECTED AREAS IN JAMAICA

First Draft

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List of Abbreviations

EFJ	Environmental Foundation of Jamaica
HTA	Heritage Trust Act
IUCN	World Conservation Union
JCDT	Jamaica Conservation and Development Trust
JNHT	Jamaica National Heritage Trust
NEPA	National Environment and Planning Authority
NEST	National Environment Societies Trust
NRCA	Natural Resources Conservation Authority
TCPA	Town and Country Planning Authority
TNC	The Nature Conservancy
UDC	Urban Development Corporation
UNESCO	United Nations Education, Science and Culture Organization

1. INTRODUCTION

Jamaica's protected areas system plan is currently being revised under a project funded by the Environmental Foundation of Jamaica and implemented by the National Environment and Planning Agency with the National Environmental Societies Trust. The first system plan was developed in 1992 by the Jamaica Conservation and Development Trust (Conrad Douglas 1992; JCDDT 1992), to help guide the country to a more integrated way to manage its natural heritage sites and their resources.

The categorization system is integral to the update of the system plan, as it provides the basic framework. This document (which was based on a comprehensive literature survey and interviews with experts) proposes a system of categories that combines international standards with domestic needs. Beginning with an analysis of the current system of categorization, which is subdivided between government entities, it highlights the need for revising the categories, makes recommendations for a new system, and provides a strategy for making the necessary changes.

The definition of the term "protected area" is itself problematic. As well as being used in the general sense as an over-arching category (including all types of areas set aside for conservation) it has specific legal definitions under the Forest Act and the Natural Resources Conservation Act (see below).

The generic term also requires definition. It is suggested that for the purpose of the system plan Jamaica should follow Article 2 of the Biodiversity Convention, which includes the following definition:

"Protected area" means a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives"

or more specifically the IUCN definition:

"An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and natural and associated cultural resources, and managed through legal or other effective means."

These definitions are consistent, differing mainly in the more detailed elaboration of conservation objectives in the latter.

Using either of these definitions in conjunction with a definition of conservation as "wise use" there are currently 19 types of protected area in Jamaica, administered by five government agencies in three ministries (Table 1). Some of these (e.g. public parks and gardens, the foreshore and protected watersheds) are not generally considered to be protected areas, but they are included here because they offer actual and potential legal mechanisms for biodiversity conservation and should therefore be taken into account when the system is rationalized.

The protected areas policy for Jamaica (1997) proposed that Jamaica's system should be made consistent with the IUCN definitions but did not suggest a mechanism for implementing the changes. No steps have been taken since 1997 to address this issue.

Table 1: Existing categories of protected areas in Jamaica

CATEGORY	RESPONSIBLE AGENCY:MINISTRY	LAW	EXAMPLES
National Park	NEPA (NRCA): Ministry of Land and Environment	NRCA Act	Blue and John Crow Mountains National Park
Marine Park	NEPA (NRCA): Ministry of Land and Environment	NRCA Act	Montego Bay Marine Park; Ocho Rios Marine Park
Protected Area	NEPA (NRCA): Ministry of Land and Environment	NRCA Act	Portland Bight Protected Area, Coral Spring/Mountain Spring
Environmental Protected Area	NEPA (NRCA): Ministry of Land and Environment	NRCA Act	Negril Environmental Protected Area
Game Sanctuary	NEPA (NRCA): Ministry of Land and Environment	Wild Life Protection Act	Includes all crown lands (e.g. Forest Reserves)
Game Reserve	NEPA (NRCA): Ministry of Land and Environment	Wild Life Protection Act	Various, includes public and private areas declared under the Act e.g. West Harbour, Amity Hall, Canoe Valley etc.
Tree Preservation Area	NEPA (Town and Country Planning Authority, parish councils): Ministry of Land and Environment, Ministry of Local Government	Town Planning Act	San San/Blue Lagoon Negril Royal Palm Reserve Fern Gully Bush Cay
Conservation Area	NEPA (Town and Country Planning Authority, parish councils): Ministry of Land and Environment	Town Planning Act	Specified areas in gazetted Development Orders
Protected Watershed	NEPA (NRCA): Ministry of Land and Environment	Watershed Protection Act	Whole island
Marine Protected Area	NEPA (Beach Control Authority): Ministry of Land and Environment	Beach Control Act	Ocho Rios, Port Royal
Ramsar site	NEPA (NRCA): Ministry of Land and Environment		Black River Lower Morass
Foreshore	NEPA (Beach Control Authority): Ministry of Land and Environment	Local Improvements Act	One mile from coast around island
Forest Reserve	Forestry Department: Ministry of Agriculture	Forestry Act and Forest Rules	Various
Protected Area	Forestry Department: Ministry of Agriculture	Forestry Act and Forest Rules	
Fish Sanctuary	Fisheries Division: Ministry of Agriculture	Fishing Industry Act	Bogue Islands, Montego Bay
Morant and Pedro Cays	Fisheries Division: Ministry of Agriculture	Morant and Pedro Cays Act	Morant and Pedro Cays
Protected National Monument	Jamaica National Heritage Trust: Ministry of Education and Culture	Jamaica National Heritage Trust Act	Some examples include: Clarendon; Mason River, God's Well Portland: Nanny Town

			St. Ann: Harmony Hill –caves and arawak carvings; Chesterfield caves; Dunn’s River Falls, Fern Gully St. Catherine: Mountain River Cave; White Marl arawak midden St. Elizabeth: Black River Spa, Bamboo Avenue, YS Falls St. Thomas: Judgement Cliff Trelawny: Windsor Caves; Glistening Waters
Protected National Heritage	Jamaica National Heritage Trust: Ministry of Education and Culture	Jamaica National Heritage Trust Act	Various, examples including natural and built heritage include Marshall’s Pen
Public Parks and Gardens	Superintendent of Gardens: Ministry of Agriculture		Fern Gully, Bamboo Avenue

2. JAMAICA’S CURRENT SYSTEM OF PROTECTED AREAS

Jamaica currently lacks a comprehensive system of classification of protected areas. This reflects the *ad hoc* growth of the system under at least five Acts, each of which contains provisions that are relevant to protected area classifications (Table 1). The four main governmental agencies whose legislation defines protected areas are:

- Department of Forestry
- Fisheries Department
- National Environment and Planning Agency
- Jamaica National Heritage Trust

The types of areas administered by these agencies and the legal definitions are described below.

2.1 Department of Forestry

The Forestry Department, under the Forestry Act, maintains three categories of resource protection - forest reserves, forest management areas, and protected areas.

2.1.1 Forestry Act and Forest Rules

a. Forest Reserves - Declared by the Minister to be established on either Crown land, or private land.

“Forest reserves ... may be used for conservation of naturally existing forests, establishment of forest plantations, generation of forest products, conservation of soil and water, recreation, and protection of flora and fauna.” (Forestry Act)

b. Forest Management Areas - The Minister of Agriculture may

“Declare any land not in a forest reserve to be a forest management area, including private land if he is satisfied that the use of the land should be controlled for the protection of the national interest. ...Forest management areas may be used for conservation of naturally existing forests, establishment of forest

plantations, generation of forest products, conservation of soil and water, recreation, and protection of flora and fauna.”(Forestry Act)

c. Protected Areas - The Minister, on the recommendation of the Conservator, also may declare crown land (or private land if the owner requests such a declaration) to be a protected area if required for a number of purposes specified in the Act, including flood and landslide protection, soil protection, erosion, maintenance of water supply and protection of amenities, flora and fauna. In protected areas, the following land uses will be prohibited or strictly regulated:

- Cultivation
- Grazing
- Burning
- Clearing of Vegetation.

2.2 National Environment and Planning Agency – NEPA

NEPA is an amalgamated executive agency, formed in 2001, out of the National Resources Conservation Authority, Town Planning Department, and the Land Development and Utilization Commission. Three acts within NEPA help guide its ability to designate, manage and categorize protected areas; those Acts are the Natural Resources Conservation Authority Act, the Wild Life Protection Act, and the Beach Control Act. Each Act uses different terminology to define protected areas.

2.2.1 Natural Resources Conservation Authority Act

a. National Park - “any area of land ... to be maintained for the benefit of the public”

b. Protected Area - “any area of land or water ... which may ... preserve any object (whether animate or inanimate) or unusual combination of elements of the natural environment that is of aesthetic, educational, historical or scientific interest.”

c. Marine Park - “any area of land lying under tidal water and adjacent to such land or any area of water.”

2.2.1 Wild Life Protection Act

The Wild Life Protection Act provides for two categories of protected areas - Game Sanctuaries and Game Reserves.

a. Game Sanctuaries are government lands which are specified in the First Schedule of the Wild Life Protection Act. The First Schedule dictates that any area that was designated as a Forestry Reserve would adopt the same regulations outlined under section four of the Wildlife Protection Act. Thus all Forestry Reserves are also Game Sanctuaries. Under Section 4 (1) it is illegal to:

- (a) “hunt any animal or bird in a Game Sanctuary; or
- (b) take the nest or egg of any bird in a Game Sanctuary; or
- (c) be within a Game Sanctuary under circumstances showing that the person was hunting any animal or bird or taking or intending to take the nest or egg of any bird or
- (d) take any dog into or knowingly permits any dog to enter or be in a Game Sanctuary; or
- (e) carry in a Game Sanctuary any gun, catapult or other weapon capable of being used to hunt animals or birds.”

b. Game Reserves are “Established by the Minister, Game reserves are areas of land, which maintain such restrictions as noted in Section (4), however, the site’s Order may modify these constraints as the

Minister sees fit. A game reserve is further defined as “an area in relation to which an order is in force under this Reserve”. (Wild Life Protection Act)

2.2.3 Beach Control Act

The Beach Control Act provides for the declaration of marine protected areas but does not offer any special definitions.

2.2.4 Town Planning Act

The Town Planning Act provides for the declaration of Tree Preservation Orders but does not provide any specific definitions.

2.3 Fisheries Division

2.3.1 Fishing Industry Act

The Act states that the Minister of Agriculture may declare an area a fish sanctuary, which would be considered a protected area.

a. Fish Sanctuary - A fish sanctuary is protected from all fishing pressures, as any person who fishes or attempts to fish in any area declared by the Minister to be a fish sanctuary shall be guilty of an offence.

2.3.2 Morant and Pedro Cays Act

This act protects the birds and turtles of the Morant and Pedro Cays, and limits access, making the areas *de facto* protected areas.

2.4 National Heritage Trust

The National Heritage Trust (JNHT) is guided by the National Heritage Trust Act which provides for protection of historic structures as well as areas and species of heritage value.

2.4.1 National Heritage Trust Act

a. National Monument - Any building, structure, object or, other " work of man or of nature or any part or remains thereof whether above or below the surface of the land or the floor of the sea within "the territorial waters of the Island or within an area declared in an order made, under subsection (2) to be within the maritime resource jurisdiction of the Island; or any site, cave or excavation, or any part or remains thereof.

b. Protected National Heritage - Any place name; or any species of animal or plant life; or any place or object (not declared by the Trust to be a national monument), designated by the Trust to be a protected national heritage; "the Trust" means the Jamaica National Heritage Trust established under section 3 of the JNHT Act.

2.5 Areas protected under international agreements

Several other types of protected area relate to international conventions that Jamaica has signed and ratified, or might sign or ratify in the future. It is important that any new set of categories should be able to accommodate such new additions.

2.5.1 Ramsar Site

Jamaica has signed and ratified the Ramsar Convention on Wetlands. Black River Lower Morass has been designated, but it has no legal status beyond the convention.

2.5.2 World Heritage Site

Jamaica has signed but not ratified the World Heritage Convention which is administered by the United Nations Educational Scientific and Cultural Organization (UNESCO). The convention provides for the declaration of World Heritage sites, which may be sites of cultural importance or natural sites.

2.5.3 Specially Protected Areas and Wildlife Protocol

Jamaica has signed but not ratified the Protocol on Specially Protected Areas and Wildlife of the Cartagena convention.

“The objective of the Protocol is to protect rare and fragile ecosystems and habitats, thereby protecting the endangered and threatened species residing therein. The Caribbean Regional Co-coordinating Unit pursues this objective by assisting with the establishment and proper management of protected areas, by promoting sustainable management (and use) of species to prevent their endangerment and by providing assistance to the governments of the region in conserving their coastal ecosystems.” (from SPAW website).

2.5.4 Biosphere Reserves

Biosphere Reserves are declared under the Man and the Biosphere (MAB) programme of UNESCO. Jamaica does not currently have any sites.

“A biosphere reserve is a unique concept which includes one or more protected areas and surrounding lands that are managed to combine both conservation and sustainable use of natural resources.

- Each biosphere reserve conserves examples of characteristic ecosystems of one of the world's natural regions, managed for their protection and study.
- It is a land and/or coastal/marine area in which people are an integral component, and which is managed for objectives ranging from complete protection to intensive yet sustainable production.
- It is a regional centre for monitoring, research, education and training on natural and managed ecosystems.
- It is a place where government decision makers, scientists, managers and local people cooperate in developing a model programme for managing land and water to meet human needs while conserving natural processes and biological resources.
- Finally, each biosphere reserve is a symbol of voluntary cooperation to conserve and use resources for the well being of people everywhere.”

3. MAJOR ISSUES RELATED TO CATEGORIES UNDER THE PRESENT SYSTEM

The current system of categorization of protected areas was developed on an *ad hoc* basis over a hundred years, to address the needs of specific agencies, therefore it is not surprising that it is in need of reform. The main issues are:

- The same terms (e.g. protected area) are used in several laws, with the same terms being used for different purposes, and having overlapping jurisdictions.
- Some categories are too vaguely defined to be of much comparative use, especially in the international context (e.g. national park and marine park as defined under the NRCA Act, see above).
- Some strategies for protected area conservation that have been developed for use in Jamaica are not well supported by the existing categories (e.g. Portland Bight).

3.1 Protected area: The term Protected Area is used in the NRCA Act, Forest Act and NHT Act potentially leading to confusion. The NRCA Act and NHT Act overlap - both can protect almost anything (species, natural and historical areas) while under the Forest Act, Protected Areas appear to be aimed at preventing or mitigating natural disasters.

3.2 Marine Park and Fish Sanctuary: The term Marine Park is used in both the NRCA and the Beach Control Act. This may no longer be a problem as the NRCA Act supercedes the Beach Control Act, and the two areas that were previously declared under this act (in Port Royal and Ocho Rios) have been subsumed into larger protected areas under the NRCA Act. In addition the NRCA Act's definition of Marine Park (which protects the land beneath the water) overlaps with the provisions of the Fisheries Industry Act, which deems a Fish Sanctuary as a no-take zone for fish. The establishment of no-take zones for fish is one of the most important management tools available for marine protected area managers.

3.3 Game Sanctuary, Game Reserve, Fish Sanctuary, Protected National Heritage: These categories are oriented towards protection of specific resources (e.g. game birds and fishable resources) rather than integrated habitat management. The areas are generally small and unsustainable except as zones within larger protected areas.

3.4 Forest Reserve and National Park or Protected Area: Some existing Forest Reserves have already been additionally designated as National Parks (Blue and John Crow Mountains) or Protected Areas (Hellshire and Peake Bay). This reflects the addition of new management layers in these areas, accompanied by the delegation by NRCA to NGOs of power to enforce the Acts that fall under its jurisdiction. As such the designations do not conflict, but in practice the situation is complex, especially where Forestry Department has a legal claim to the land, through arrangements with the Commissioner of Lands, while the NGO has no such arrangement. The institutional and legal implications of these double designations require more detailed evaluation.

3.5 International recognition: Discussion of the advantages and disadvantages of using international definitions such as that developed by the IUCN has continued over many years. Early attempts to define a protected area system used uniquely Jamaican definitions (e.g. TCPA 1974). It was argued that the peculiarities of the Jamaican condition (in which few if any areas are pristine, and precluding human use is rarely an option except in the most inaccessible places) made it impossible to apply international definitions that were developed for large homogenous areas with low population pressure. In the absence of an agreed set of definitions the Jamaican system has evolved in an *ad hoc* fashion. The result is vague and overlapping, lacks a national perspective, and is difficult to relate to the IUCN categories. This makes it difficult to compare Jamaica's protected areas with those in other countries. This in turn impedes access to international support and funding. Several reports have recommended that Jamaica should adopt the IUCN system (e.g. Government of Jamaica 1988; JCDT 1992; Government of Jamaica 1998).

3.6 Sustainable development: The ecological sensitivity of island ecosystems in general and Jamaican coastal ecosystems in particular, has been widely recognized. The Government of Jamaica recognized this issue in through the use of Development Orders under the Town

Planning Act and in its holistic approach to integrated development of the south coast of Jamaica. Various reports and plans have been prepared based on this approach including the Urban Development Company's South-west Coast Development Plan (UDC 1988), the South Coast Sustainable Development Plan (Halcrow 1998; Scott Wilson 2002), the St. Elizabeth Environmental Policy Framework (Massa 1999) and the Draft Management Plan for the Black River Protected Area (Massa 1999). These documents all pointed to the need for new approaches to protected areas and integrated development planning in order to improve the economy of the south coast while enhancing environmental quality. The existing south coastal protected areas, including Negril and Portland Bight have led the way in seeking means to have development integrated into protected areas rather than excluded from them. The declared areas in both sites include government and private lands. This has led to controversy as it has been argued that the Jamaican constitution requires that private land owners should be compensated if the government takes action that actually or potentially decreases land values. The proposed new category would be designed to take this issue into account, and would stress incentives for appropriate development and means to encourage and promote appropriate economic activity in the context of a soundly protected environment. Hurricane Ivan has illustrated the need for this type of approach, if the types of devastation seen in Haiti are to be avoided.

4.0 RECOMMENDATIONS

It is recommended that Jamaica should seek to coordinate and standardize its multiple categories of protected areas, identifying a national system of definitions which would encompass the existing ones, focus on management objectives, and which would also be internationally recognized.

The IUCN has developed a standard set of categories that provide a comprehensive framework for protected area categorization. These categories focus on the management objectives of each area, therefore producing a system which can be used to frame Jamaica's current system. The IUCN categories and their applicability to actual and proposed Jamaican protected areas are discussed in Annex 1. One basic problem which arises from the application of these categories is that several existing protected areas include natural areas with adjacent commercial and industrial enterprises whose operations affect the natural areas. Such areas are excluded from the IUCN categories but Jamaican protected area managers and designers have felt the need to seek mechanisms for integrated management (e.g. in Portland Bight and Negril). Jamaica's protected areas issues therefore require the development of a new, category that addresses its specific issues. This new category would be titled a "sustainable development area" and some of the zoning attributes present in the United Nations Educational, Scientific and Cultural Organization's (UNESCO) biosphere reserves¹. It would encompass large tracts of land and sea, which would be managed in an integrated fashion to sustain appropriate economic activities while conserving natural resources.

The proposed new "sustainable development area" category would be an over-arching category, within which other categories could be included. Sustainable development areas would be designated to operate as an integrated whole over a broad area, including human settlements, industry and plantations, to promote conservation and minimize environmentally degrading

¹ Attachment 2 details the criteria present under the new category – Category 7.

practices while promoting economic development. The current Portland Bight Protected Area, as conceived by Caribbean Coastal Area Management Foundation would fall under this new category.

The issue of private land conservation should not be a problem under the proposed system. As noted previously, the proposed categorization system is management-based. Thus whether protected land is private or not has no bearing on the category of protection it falls under, which is determined by the objectives of the management authorities. Similarly Ramsar sites would be classified into the appropriate category, based on their required management regime. Biosphere Reserves would fall under the proposed new category of Sustainable Development Area.

5.0 INTEGRATION OF THE NEW SYSTEM

5.1 Long-term measures

In the long-term (probably 3-5 years at least) proposed comprehensive revision and consolidation of environmental legislation under the new NEPA Act provides a unique opportunity to revise the protected area legislation, as many of the overlapping laws are administered by NEPA (Table 1). However many laws would still remain outside the new Act, so it will be necessary to explore the relationships between the new categories and the old and make the relationships explicit in the new Act. Therefore, it is recommended that the new, proposed, system of protected area categorization be adopted legislatively within the new act. Similarly, as the Fishing Industry Act is being revised and it would be prudent to investigate the best way to harmonize the legislation related to fisheries management and conservation (especially no-take zones) with the proposed new legislation. It is likely that the revision of NEPA legislation will take at least four or five years. Therefore short-term measures will also be needed.

5.2 Short-term measures

These include:

- Revision of the protected areas policy to include the additional category of sustainable development area.
- Development of consensus among management agencies on the proposed new category system, and voluntary compliance among agencies.
- Once categories have been agreed, use a workshop process to allocate existing and proposed areas into the new categories.
- Development of regulations that reflect the proposed new categories, as necessary.
- Allocation of existing and proposed protected areas into the new categories.

6.0 CONCLUSIONS

A proposed system of classification has been constructed that meets – and uses – international standards, while being tailored to Jamaica’s unique protected area classification needs. The proposed new NEPA Act and the revision of the Fishing Industry Act provide an important opportunity to integrate the new system into legislation. However in the meantime it should be possible to overlay the prior system on the new system. This will form the basis for a system of protected areas that is better integrated and managed, as well as locally and internationally recognized.

The next steps include:

- Stakeholder discussions and refinement leading to acceptance of the proposed new categories.
- Adoption of an interim system.
- Lobbying for appropriate changes to other related acts, as necessary, possibly through the establishment of an interagency working group on protected area legislation.

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Annex 1

PROPOSED PROTECTED AREA CATEGORIES

The following are based on IUCN Categories 1-6 (IUCN 2002)

1. Strict nature reserve/wilderness protection area managed mainly for science or wilderness protection

a. Scientific Reserve

An area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring.

Management Objectives:

- Preserve habitats, ecosystems and species in as undisturbed a state as possible;
- Maintain genetic resources in a dynamic and evolutionary state;
- Maintain established ecological processes;
- Safeguard structural landscape features or rock exposures;
- Secure examples of the natural environment for scientific studies, environmental monitoring and education;
- Including baseline areas from which all avoidable access is excluded;
- Minimize disturbance by careful planning and execution of research and other approved activities;
- Limit public access.

Guidance for Selection:

- The area should be large enough to ensure the integrity of its ecosystems and to accomplish the management objectives for which it is protected.
- The area should be significantly free of direct human intervention and capable of remaining so
- The conservation of the area's biodiversity should be achievable through protection and not require substantial active management or habitat manipulation (e.g. Category 4)

Organizational Responsibility

Ownership and control should be by the national or other level of government, acting through professionally qualified agency, or by a private foundation, university or institution, which has an established research or conservation function, or by owners working in cooperation with any of the foregoing government or private institutions. Adequate safeguards and controls relating to long-term protection should be secured before designation. International agreements over areas subject to disputed national sovereignty can provide exceptions (e.g. Antarctica).

Applicability to Jamaica:

This is one of the IUCN criteria that is hard to apply in Jamaica because of the stringent criteria relating to large size, ecological integrity, lack of human intervention and low needs for management. Although the Protected Area Policy (1998) suggested that Discovery Bay, Bowden Shell Bed, Mason River Scientific Reserve would qualify under this category, it is hard to see how any of these examples meet the criteria of size, quality, lack of human impact and management needs. Possible areas include the undisturbed parts of the northern slopes of the Blue Mountains, and the inaccessible core of the Cockpit Country, but generally this category is not particularly useful in the local context.

b. Wilderness area - protected area managed mainly for wilderness protection

Large area of unmodified or slightly modified land and/or sea, retaining its natural characteristics and influence, without permanent or significant habitation, which is protected and managed to preserve its natural condition.

Management Objectives

- Ensure that future generations have the opportunity to experience understanding and enjoyment of areas that have been largely undisturbed by human action over a long period of time
- Maintain the essential natural attributes and qualities of the environment over the long-term
- Provide for public access at levels and of a type which will serve best the physical and spiritual well-being of visitors and maintain the wilderness qualities of the area for present and future generations
- Enable indigenous human communities living at low density and in balance with the available resources to maintain their lifestyle.

Guidance for Selection

- The area should possess high natural quality, be governed primarily by the forces of nature, with human disturbance substantially absent, and be likely to continue to display those attributes if managed as proposed.
- The area should contain significant ecological, geological, physiogeographic, or other features of scientific, educational, scenic or historic value.
- The area should offer outstanding opportunities for solitude, enjoyed once the area has been reached, by simple, quiet, non-polluting and non-intensive means of travel (i.e. non motorized).
- The area should be of sufficient size to make practical such preservation and use

Organizational Responsibility

Ownership and control should be by the national or other level of government, acting through professionally qualified agency, or by a private foundation, university or institution, which has an established research or conservation function, or by owners working in cooperation with any of the foregoing government or private institutions. Adequate safeguards and controls relating to long-term protection should be secured before designation. International agreements over areas subject to disputed national sovereignty can provide exceptions (e.g. Antarctica).

Applicability to Jamaica:

The requirements for large size and absence of human impact mean that there are no areas in Jamaica that qualify for this category.

2. National Park – protected area managed mainly for ecosystem protection and recreation

Natural area of land and/or sea designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

Management Objectives

- Protect natural and scenic areas of national and international significance for spiritual, scientific, educational, recreational or tourist purposes
- Perpetuate, in as natural a state as possible, representative examples of physiographic regions, biotic communities, genetic resources, and species, to provide ecological stability and diversity.
- Manage visitor use for inspirational, educational, cultural and recreational purposes at a level which will maintain the area in a natural or near natural state
- Eliminate and thereafter prevent exploitation or occupation inimical to the purposes of designation
- Take into account the needs of indigenous people, including subsistence resource use, in so far as these will not adversely affect the other objectives of management

Guidance for Selection

- The area should contain a representative sample of major natural regions, features or scenery, where plant and animal species, habitats and geomorphological sites are of special spiritual, scientific, educational, recreational and tourist significance
- The areas should be large enough to contain one or more entire ecosystems not materially altered by current human occupation or exploitation

Organizational Responsibility

Ownership and management should normally be by the highest competent authority of the national having jurisdiction over it. However, they may also be vested in another level of government, council of indigenous people, foundation or other legally established body which has dedicated the area to long-term conservation.

Applicability to Jamaica:

The requirements that exploitation should be eliminated from the area excludes Jamaica's sole declared National Park - the Blue and John Crown Mountains National Park, while the existing Montego Bay Marine Park is excluded by the requirement that the protected area should include entire ecosystems not materially altered by current human occupation. It is difficult to identify Jamaican areas that qualify under this category, except parts of the Cockpit Country Forest Reserve, and possibly other forest reserves.

3. National monument – protected area managed mainly for conservation of specific natural features

Area containing specific natural or natural/cultural feature(s) of outstanding or unique value because of their inherent rarity, representativeness or aesthetic qualities or cultural significance

Management Objectives

- Protect or preserve in perpetuity specific outstanding natural features because of their natural significance, unique or representational quality, and/or spiritual connotations
- To an extent consistent with the foregoing objective, to provide opportunities for research, education, interpretation and public appreciation.
- Eliminate and thereafter prevent exploitation or occupation inimical to the purpose of designation
- Deliver to any resident population such benefits as are consistent with the other objectives of management.

Guidance for Selection

- The area should contain one or more features of outstanding significance (appropriate natural features include spectacular waterfalls, caves, craters, fossil beds, sand dunes and marine features, along with unique or representative fauna and flora;; associated cultural features might include cave dwellings, cliff-top forts, archaeological sites, or natural sites which have heritage significance to indigenous peoples).
- The area should be large enough to protect the integrity of the feature and its immediately related surroundings

Organizational Responsibility

Ownership and management should be by the national government or with appropriate safeguards and controls, by another level of government, council of indigenous people, non-profit trust, corporation or exceptionally, by a private body, provided the long-term protection of the inherent character of the area is assured before designation.

Applicability to Jamaica:

This category would apply to many Taino sites, parts of Port Royal, Port Morant Lighthouse, Bog Walk Gorge, Fern Gully, Dunn's River Falls, God's Well. Natural areas declared under the Heritage Trust Act would fall into this category.

4. Habitat/Species Management Area – protected area managed mainly for conservation through management intervention

Area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats to meet the requirements of specific species

Management Objective

- Secure and maintain the habitat conditions necessary to protect significant species, groups of species, biotic communities or physical features of the environment where these require specific human manipulation for optimum management
- Facilitate scientific research and environmental monitoring as primary activities associated with sustainable resource management
- Develop limited areas for public education and appreciated on the characteristics of the habitats concerned and of the work of wildlife management
- Eliminate and thereafter prevent exploitation or occupation inimical to the purpose of designation
- Deliver such benefits to people living within the designated area as are consistent with the other objectives of management

Guidance for Selection

- The area should play an important role in the protection of nature and the survival of species, (incorporating as appropriate, breeding areas, wetlands, coral reefs, estuaries, grasslands, forests or spawning areas, including marine feeding beds).
- The area should be one where the protection of the habitat is essential to the well-being of nationally or locally-important flora, or to resident or migratory fauna
- Conservation of these habitats and species should depend upon active intervention by the management authority, if necessary through habitat manipulation (e.g. Category 1a)
- The size of the area should depend on the habitat requirement of the species to be protected and may range from relatively small to very extensive.

Organizational Responsibility

Ownership and management should be by the national government or, with appropriate safeguards and controls, by another level of government, non-profit trust, corporation, private group or individual.

Applicability to Jamaica:

This category is flexible enough for the Jamaican protected area system, specially for zoning of areas of special importance for wildlife in larger protected areas. Game Reserves and Sanctuaries, Forest Reserves, Many areas potentially fall into this category, including Goat Islands, the core iguana habitat in Hellshire Hills, central Cockpit Country, Canoe Valley, as well as proposed micro-reserves for plant biodiversity such as Quacko Rock.

5. Protected Landscape/Seascape – protected area managed mainly for landscape/seascape conservation or recreation

Area of land, with coast or sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biodiversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.

Management Objectives

- Maintain the harmonious interaction of nature and culture through the protection of landscape and /or seascape and the continuation of traditional land uses, building practices and social and cultural manifestations
- Support lifestyles and economic activities which are in harmony with nature and the preservation of the social and cultural fabric of the communities concerned
- Maintain the diversity of landscape and habitat, and of associated species and ecosystems.
- Eliminate where necessary, and thereafter prevent, land uses and activities which are inappropriate in scale and/or character
- Provide opportunities for public enjoyment through recreation and tourism appropriate in type and scale to the essential qualities of the areas
- Encourage scientific and educational activities which will contribute to the long-term well-being of resident populations and to the development of public support for the environmental protection of such areas
- Bring benefits to, and to contribute to the welfare of, the local community through the provision of natural products (such as forest and fisheries products) and services (such as clean water or income derived from sustainable forms of tourism).

Guidance for Selection

- The area should possess a landscape and/or coastal and island seascape of high scenic quality, with diverse associated habitats, flora and fauna along with manifestations of unique or traditional land-use patterns and social organizations as evidenced in human settlements and local customs, livelihoods, and benefits
- The area should provide opportunities for public enjoyment through recreation and tourism within its normal lifestyle and economic activities.

Organizational Structure

The area may be owned by a public authority, but is more likely to comprise a mosaic of private and public ownerships operating a variety of management regimes. These regimes should be subject to a degree of planning or other control and supported, where appropriate, by public funding and other incentives, to ensure that the quality of the landscape/seascape and the relevant local customs and beliefs are maintained in the long-term.

Applicability to Jamaica:

This landscape level category has great potential for Jamaica's south coast, e.g. the Pedro Plains of St. Elizabeth, as well as scenic routes and undeveloped coastal highways (e.g. parts of Portland/St. Thomas coast). Despite Jamaica's dependence on tourism, the value of landscape is not appreciated and the importance of implementing measures to conserve visual amenities is rarely discussed.

6. Managed Resource Protected Area – protected area managed mainly for the sustainable use of natural resources

Area containing predominantly unmodified natural systems, managed to ensure long-term protection and maintenance of biological diversity, while also providing a sustainable flow of natural products and services to meet community needs.

Management Objectives

- Protect and maintain the biological diversity and other natural values of the area in the long term
- Promote sound management practices for sustainable production purposes
- Protect the natural resource base from being alienated for other land-use purposes that would be detrimental to the area's biological diversity
- Contribute to regional and national development

Guidance for Selection

- The area should be at least two-thirds in a natural condition, although it may also contain limited areas of modified ecosystems; large commercial plantations would not be appropriate for inclusion
- The area should be large enough to absorb sustainable resource uses without detriment to its overall long-term natural values

Organizational Responsibility

Management should be undertaken by public bodies with an unambiguous remit for conservation, and carried out in partnership with the local community; or management may be provided through local custom supported and advised by government or non-governmental agencies. Ownership may be by the national or other level of government, the community, private individuals, or a combination of these.

Applicability to Jamaica:

The size requirement means that some potential areas such as game reserves and fish sanctuaries cannot be included. However some forest reserves and the Morant and Pedro are candidates.

ANNEX 2: PROPOSED NEW CATEGORY

7. Sustainable Development Reserves – Area designated to apply sustainable development principles through the incorporation of commercial and urban zones and protected areas.

Area under statutory mandate to holistically apply principles of sustainable development by incorporating various zones of economic and social development as well as numerous types of protected areas to entirely offset the negative externalities of industrial and commercial development.

Management Objectives

- Diverse network of planned regulatory development zones that include commercial and industrial bodies as well as urban areas with the primary goal being to eliminate the environmental footprint
- Long-term regional and local biodiversity protection and the ecological systems that affect the area's flora and fauna species
- Develop sound policies that guide a diverse group of stakeholders to collectively manage their natural resources while promoting sustained economic growth
- Absorbing the negative environmental externalities associated with large-scale industry or agriculture.
- Strong community involvement and knowledge of environmental processes and impacts.

Guidance for Selection

- The area should be large enough to encompass entire ecological systems, while including agricultural, urban and industrial sites
- A minimum of (10%) the reserve area should exclude human intervention, and be left as a Category 1 protected area, however the protected area could have previously suffered a relatively slight amount of past human intervention (i.e. could have been previously logged, but has since experienced full regrowth and restoration)
- Widespread community acceptance and knowledge of the guiding concepts of the reserve and the potential restrictions they may face to fulfill its goals

Organizational Responsibility

The entire area must be formally designated as a reserve, as well as the including protected areas, and statutorily codified in the legal system by all relevant governmental entities. The Government of Jamaica will remain the primary administrator of the area as a whole, however independent administrative and thematic designation could be transferred to an established NGO with a proven record of site management or a local community organization with unambiguous ties to the impacted population.

Applicability to Jamaica: Most of proposed and existing protected areas fall most appropriately into this category. It could also accommodate Biosphere Reserves if they were to be declared in Jamaica.

