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MARINE PROTECTED AREAS REPORT: LEGAL AND POLICY FRAMEWORK

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Table of Contents

List of Tables

Acronyms

ACLSNP	Admiral Cockburn Land and Sea National Park, TCI
BASEL	Convention on the Transboundary Movement of Hazardous Wastes and Their Disposal
CANARI	Caribbean Natural Resources Institute
CBD	UN Convention on Biological Diversity
CCD	UN Convention to Combat Desertification
CEP	Caribbean Environmental Programme
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CNP	Cabrits National Park, Dominica
CRMP	Coastal Resources Management Project, TCI
CSNP	Chalk Sound National Park, TCI
DECR	Department of Environmental and Coastal Resources, TCI
FCCC	UN Framework Convention on Climate Change
FD	Fisheries Department
GEF	Global Environmental Facility
GRMR	Glover's Reef Marine Reserve, Belize
HCMR	Hol Chan Marine Reserve, Belize
IMO	International Maritime OrganisationUNE
LAMA	Local Area Management Agreement
LBSMP	Pollution from Land-Based Sources and Activities
LOS	UN Convention on the Law of the Sea
MARPOL	Convention on the Prevention of Marine Pollution from Ships
MBMP	Montego Bay Marine Park, Jamaica
MBMPT	Montego Bay Marine Park Trust
MEA	Multi-lateral Environmental Agreement
MOU	Memorandum of Understanding
MPA	Marine Protected Area
MRAG	Marine Resources Assessment Group Ltd
NCA	Natural Conservation Authority, St Lucia
NCRPS	Negril Coral Reef Preservation Society
NEPA	Natural Environmental Protection Agency, Jamaica
NEPT	Negril Environmental Protection Trust, Jamaica
NGIALPA	Negril Green Island Area Local Planning Authority
NMP	Negril Marine Park, Jamaica
NRCA	Natural Resources Conservation Authority, Jamaica
OECS	Organisation of Eastern Caribbean States
ORMP	Ocho Rios Marine Park, Jamaica
ORMP	Ocho Rios Marine Park
OZONE	Convention for the Protection of the Ozone Layer and Montreal Protocol on Substances that Deplete the Ozone Layer
PALSNP	Princess Alexandra Land and Sea National Park, TCI
RAMSAR	Convention on Wetlands of International Importance
SMMA	Soufriere Marine Management Area, St Lucia
SMMI	Soufriere Marine Management Inc., St Lucia
SPAW	Specially Protected Areas and Wildlife of the Marine Environment of the Wider Caribbean Region
SSMR	Soufriere-Scottshead Marine Reserve, Dominica

TCI	Turks and Caicos Islands
TPDCO	Tourism Product Development Company
UN	United Nations
UNEP	UN Environmental Programme
UWI	University of the West Indies

EXECUTIVE SUMMARY

- A critical step in protecting biological communities is the establishment of legally designated and policy supported protected areas. Legislative, institutional and policy arrangements may not by themselves be sufficient to ensure protection but they are often a necessary starting point in the process.

- Regulatory protection of terrestrial ecosystems dates back to at least the 18th century, and these protected areas have become the established recipients of internationally funded project activities. By contrast, marine protected areas (MPAs) have proliferated throughout the Wider Caribbean Region only within the past two decades or so.

- The reasons for this belated regulatory interest are not entirely clear. Some rationale may be found in the mistaken belief, which persisted until recently, that the assimilative capacity of the oceans was infinite and therefore foreclosed upon the necessity for paternal intervention. A second possible explanation relates to the general reluctance of common law systems to regard marine resources and ecosystems as capable of ownership.

- At all events, what is clear is that the global movement for the protection of the environment has generated a number of global and regional multilateral environmental agreements of direct relevance to marine protected areas. Participation in these agreements should be, and in many cases has been, a primary catalyst for the development of the sound legal and policy frameworks governing marine protected areas.

- There are presently over 200 MPAs existing throughout the wider Caribbean region and there is clearly a correlation between their functionality and the existence and use of regulatory institutions and policy instruments. Three basic typologies may be identified. Reliance may be placed upon traditional resource conservation laws; *ad hoc* legislation relating to the creation and operation of specific marine protected areas; and generic regulations providing a framework for the designation of such areas whilst injecting some degree of flexibility into the management arrangements applicable to specific marine protected areas.

- As a rule, dependence upon the incidental relevance of legislation provides neither a coherent nor an effective means of regulating usage of marine spaces. Legislation specific to marine protected areas tends to better protection on the whole, particularly where there is a requirement for establishment and operation of a management plan. At the same time there are systemic problems of inconsistent application of standards and procedures across the entire range of marine protected areas located within the country.

- As a conceptual proposition, general legislation setting up the regime for a system of protected areas, including marine protected areas, whilst allowing for flexibility in the individual operation of specific areas, provides the most sophisticated regulatory and policy approach. Flexibility may be attained for example, through idiosyncratic

management plans, and/or the devolution of management to locally based individuals and groups, whilst maintaining central policy directives.

- However, the correlation is not linear. Research demonstrates that numerous variables, not directly apparent from the legal and policy typologies, may affect and even determine the long-term success of the MPA. These variables include development of systems to implement specific international obligations, rationalization and clarification of governance structures, the articulation and effective operation of area-specific policies to guide administrative action in respect of all activities impacting the protected area, availability and effective deployment of human and material resources, and meaningful community participation.

- In sum, the legal and policy framework must include or be supplemented by governance structures specific to the marine protection area in question, in order to ensure MPA functionality and viability.

- When reference is made to functionality, the authors intend to convey two separate but related ideas. First the degree of existence of a coherent regulatory framework, which would typically include appropriate legislative and policy initiatives. Secondly, the degree to which the framework is being used to effectuate the objectives for which the marine protected area was established. Whilst these concepts may be rated separately, it is the qualitative assessment of their combined effect that gives the MPA a final rating. This rating may be **low**, **low-moderate**, **moderate**, **moderate-high**, or **high**.

1 PART 1: THE INTERNATIONAL DIMENSION

As in many other developing countries, Caribbean environmental protection legislation is driven primarily by developments in international law and policy. It has been suggested that 'the ancestor to virtually every recent piece of environmental legislation has been the acceptance of a' multilateral environmental agreement.[1] It follows that an important starting point for understanding the Caribbean legislative and policy framework for the management of marine areas concerns Caribbean acceptance of relevant international agreements. Vigorous participation in multi-lateral environmental agreements (MEA) is, from an environmental viewpoint, a strategy with certain well-documented advantages, including the following:[2]

- Compelling changes in domestic laws and institutions to deal with environmental problems in accordance with the MEA obligations;
- Gaining access to funding through the treaty regime, such as funding from the Global Environmental Facility (GEF) or other related international funding organizations, such as the World Bank or the Caribbean Development Bank, to carry out the treaty purpose;
- Gaining access to technical and scientific resources, information, technologies, and training;
- Education of governments and the general public concerning environmental problems, thus assisting with the task of enforcement of rules regarding environmental management;
- Provision of the opportunity for the deepening of participatory democracy; and
- Creating mechanisms that allow for global or regional responses to environmental problems which cannot be dealt with unilaterally.

1.1 Global Agreements

Most of the relevant international agreements have been negotiated and concluded at the global level. These include but are not restricted to:

- The United Nations Convention on Biological Diversity, 1992 (CBD)
- Convention on International Trade in Endangered Species of Wild Fauna and Flora, 1973 (CITES)
- Convention on the Transboundary Movement of Hazardous Wastes and Their Disposal, 1989 (BASEL)
- Convention for the Protection of the Ozone Layer, 1985 and Montreal Protocol on Substances that Deplete the Ozone Layer, 1987 (OZONE)
- United Nations Framework Convention on Climate Change, 1992 (FCCC)

[1] Winston Anderson, 'Implementing MEAs in the Caribbean: Hard Lessons from Seafood and Ting' (2001) Vol. 10 (2) *Review of European Community and International Environmental Law* 227

[2] Winston Anderson, 'MEAs: Facilitating Negotiation and Compliance – Options For Reform' (Report for the Organization of Eastern Caribbean States, Natural Resources Management Unit (OECS/NRMU)), 2001.

- United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, 1994 (CCD)
- The Convention on Wetlands of International Importance, 1971 (RAMSAR)
- Convention Concerning the Protection of the World Cultural and Natural Heritage 1972 (HERITAGE)
- United Nations Convention on the Law of the Sea, 1982 (LOS)
- Convention on the Prevention of Marine Pollution From Ships, 1973, 1978 (MARPOL)

The CBD recognizes the intrinsic value of biological diversity; that special provision is required to meet the needs of developing countries, particularly small island states; and expresses its first objective as the conservation of biological diversity. Emphasis is placed upon *in-situ* conservation, that is, conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings.

For this purpose each contracting party 'shall, as far as possible and as appropriate … establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity' (Article 8 (1)). A related obligation is to develop, where necessary, guidelines for the selection, establishment and management of protected areas or areas where special measures need to be taken to conserve biological diversity (Article 8 (2)).

CITES recognizes that wild fauna and flora in their many beautiful and varied forms are an irreplaceable part of the natural systems which must be protected for this and generations to come. Accordingly, the Convention seeks to reduce the risk of exploitation leading to the extinction of such species by imposing a strict system of international control in endangered species.

As regards marine protected areas the primary importance of the Agreement is that endangered species cannot be exported in contravention of local conservation laws. This means that relevant species harvested in violation of the laws regulating a marine protected area cannot be exported and this reduces the economic incentive for the violation of the laws in the first place.

BASEL is relevant in that it restricts trade in hazardous waste and other harmful substances. In particular, a Caribbean country cannot allow importation of such waste or substances without the demonstrated capacity to handle the waste or substance in an environmentally sound manner. Adherence to the Convention therefore reduces the risk that harmful waste will find its way from foreign jurisdictions into Caribbean marine areas.

OZONE, including the supplementary Montreal Protocol, is tangentially relevant in that these instruments place very strict limits on the production and consumption of ozone depleting substances. Emission of these substances could cause modification of the ozone layer and consequent adverse effects on sensitive marine ecosystems from increased solar radiation.

Likewise, FCCC, (and the fledging Kyoto Protocol) will limit the emission of green house gasses and thereby reduce the incidence of sea level rise that would otherwise be detrimental to near-shore marine resources. The CCD seeks to protect against the adverse impacts of desertification and drought; drought in particular is important in the Caribbean context where, for example, Jamaica has one of the highest rates of deforestation in the world.

The RAMSAR Convention is of immediate relevance to marine protected areas because it requires the designation of at least one wetland in each state party. A wetland may include areas of marine water the depth of which does not exceed six meters. Several marine related wetlands have been declared in Caribbean countries, and in relation to these there are international obligations for their proper designation, promotion of conservation, and wise utilization.

HERITAGE is important in a similar way to the RAMSAR convention, in that it anticipates the designation of areas considered as 'natural heritage'. These areas consist of natural features composing physical and biological formations or groups of such formations, which are of outstanding universal value from an aesthetic or scientific point of view. Alternatively they may be natural sites of or precisely delineated areas of outstanding universal value from the point of view of science, conservation or natural beauty. In relation to areas so designated on their territory, contracting parties come under specific international obligations to ensure that effective and active measures are taken for their protection, conservation and integration into the social life of the community.

It is specifically relevant to the objectives of the present project that state parties undertake to adopt a general policy which aims to give natural heritage a function in the life of the community and to integrate the protection of that heritage into comprehensive planning programmes. In other words, consideration of livelihoods and the economic contributions of marine protected areas are legitimate objectives under the HERITAGE convention.

LOS provides for a comprehensive system of regulating marine spaces and resources. For present purposes, the most important provisions are, first, those affirming a general obligation on all states to protect and preserve the marine environment (PART XII). More in point are those provisions giving coastal state sovereignty over a maximum 12-mile territorial sea and sovereign rights over a maximum 200-mile exclusive economic zone, or exclusive fisheries zone. Within these areas the coastal state may establish special protective zones and areas to preserve vulnerable or fragile ecosystems. Special measures regarding the passage of ships, fishing, and emissions of pollutants, are applicable in these LOS permitted protected areas.

MARPOL is relevant in a similar way. Special protective areas may be established in order to divert shipping and discharge of pollutants into sensitive ecological systems. Establishment of such areas requires consultation with the International Maritime Organization (IMO), which is the organization responsible for international shipping as relates to safety, navigation, and pollution.

Table 1.1 details the acceptance by the Caribbean of these global conventions.

Table 1.1 Global marine protected areas related conventions[3]

STATE	CBD	CITES	BASEL	OZONE	FCCC	CCD	RAMSAR	HERITAGE	LOS	MARPOL
Ant & Bar	*	*	*	*	*	*		*	*	*
Bahamas	*	*	*	*	*		*		*	*
Barbados	*	*	*	*	*	*		*	*	*
Belize	*	*	*				*	*	*	*
Dominica	*	*	*	*	*	*		*	*	
Grenada	*	*		*	*	*		*	*	
Guyana	*	*						*	*	*
Jamaica	*	*	*	*	*	*	*	*	*	*
St. K & N	*	*	*	*	*	*		*	*	*
St. Lucia	*	*	*	*	*	*		*	*	
St. V & G	*	*	*	*	*	*			*	*
T & T	*	*	*	*	*		*		*	

[3] *Legend:*

STATES

A & B = Antigua and Barbuda
Bahamas
Barbados
Belize
Dominica
Grenada
Guyana
Jamaica
St. K & N = St. Kitts and Nevis
St. Lucia
St. V & G = St. Vincent and the Grenadines
T & T = Trinidad and Tobago

CONVENTIONS

CBD = United Nations Convention on Biological Diversity, 1992
CITES = Convention on International Trade in Endangered Species of Wild Fauna and Flora, 1973
BASEL = Convention on the Transboundary Movements of Hazardous Wastes and their Disposal, 1989 especially as Waterfowl Habitat, 1971
OZONE = Convention for the Protection of the Ozone Layer, 1985, and Protocol on Substances that Deplete the Ozone Layer, 1987
FCC = United Nations Framework Convention on Climate Change, 1992
CCD = United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, 1994
RAMSAR = Convention on Wetlands of International Importance
HERITAGE = UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage 1972
LOS = United Nations Convention on the Law of the Sea, 1982
MARPOL = Convention on the Prevention of Marine Pollution from Ships, 1973, 1978

PARTICIPATION

* = Acceptance (ratification or accession)

1.2 Regional Agreements

There are four regional multilateral environmental agreements that have been adopted under the Caribbean Environmental Programme of UNEP (CEP/UNEP), and which have significance for the protection of marine areas.[4]

- The Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, 1983 (CARTAGENA).
- Protocol Concerning Co-operation in Combating Oil Spills in the Wider Caribbean Region, 1983 (OILSPILL).
- Protocol Concerning Specially Protected Areas and Wildlife of the Marine Environment of the Wider Caribbean Region, 1990 (SPAW).
- Protocol Concerning Pollution from Land-Based Sources and Activities, 1999 (LBSMP). Not yet in force.

The CARTAGENA Convention provides a general legal framework within which Caribbean states are to co-operate in protecting and preserving the Caribbean Sea. Article 10 makes specific provision for the establishment of protected areas in which all appropriate measures are to be taken to protect and preserve rare or fragile ecosystems. Within these areas the habitat of depleted threatened or endangered species are to be safeguarded.

The Convention is supplemented by protocols. The OILSPILL protocol makes provisions for preventing and responding to oils spills and discharges that could adversely affect the marine environment. LBSMP imposes detailed obligations to take appropriate measures to prevent, reduce and control pollution from land-based sources and activities specified in the Protocol.

But it is the SPAW that carries forward the mandate of Article 10 of CARTAGENA. The protocol calls for the creation of 'protected areas' with a view to sustaining their natural resources. It specifies that the protected areas shall be established in order to conserve, maintain and restore, in particular:

a) Representative types of coastal and marine ecosystems of adequate size to ensure their long-term viability and to maintain biological and genetic diversity;
b) Habitats and their associated ecosystems critical to the survival and recovery of endangered, threatened or endemic species of flora or fauna;
c) The productivity of ecosystems and natural resources that provide economic or social benefits and upon which the welfare of local inhabitants is dependent; and
d) Areas of special biological, ecological, educational, scientific, historic, cultural, recreational, archaeological, aesthetic, or economic value, including in particular, areas whose ecological and biological processes are essential to the functioning of the Wider Caribbean ecosystems.

The specific protection measures to be taken include:

a) The regulation or prohibition of the dumping or discharge of wastes and other substances that may endanger protected areas;

[4] See generally, Winston Anderson, *Law of Caribbean Marine Pollution*, (Kluwer Law International, 1997).

b) The regulation or prohibition of coastal disposal or discharges that emanate from coastal establishments and developments, outfall structures or any other sources within their territories;
c) The regulation of the passage of ships, of any stopping or anchoring, and of other maritime activities, that would have significant adverse environmental effects on the protected area, without prejudice to the rights of innocent passage, transit passage, archipelagic sea-lanes passage and freedom of navigation, in accordance with international law;
d) The regulation or prohibition of fishing, hunting, taking or harvesting of endangered or threatened species of fauna and flora and their parts or products;
e) The prohibition of activities that result in the destruction of endangered or threatened species of fauna or flora and their parts and products, and the regulation of any other activity likely to harm or disturb such species, their habitats or associated ecosystems;
f) The regulation or prohibition of the introduction of non-indigenous species;
g) The regulation or prohibition of any activity involving the exploration or exploitation of the sea-bed or its subsoil or a modification of the sea-bed profile;
h) The regulation or prohibition of any activity involving a modification of the profile of the soil that could affect watersheds, denudation and other forms of degradation of watersheds, or the exploration or exploitation of the subsoil of the land part of a marine protected area;
i) The regulation of any archaeological activity and of the removal or damage of any object which may be considered as an archaeological object;
j) The regulation or prohibition of trade in, and import and export of threatened or endangered species of fauna or their parts, products, or eggs, and of threatened or endangered species of flora or their parts or products, and archaeological objects that originate in protected areas;
k) The regulation or prohibition of industrial activities and of other activities which are not compatible with the uses that have been envisaged for the area by national measures and/or environmental impact assessments pursuant to Article 13;
l) The regulation of tourist and recreational activities that might endanger the ecosystems of protected areas or the survival of threatened or endangered species of flora and fauna; and
m) Any other measure aimed at conserving, protecting or restoring natural processes, ecosystems or populations for which the protected areas were established.

With regard to the planning and management regime for protected areas, SPAW lays down very detailed and specific obligations. In order to maximize the benefits from protected areas each party is required to adopt and implement planning, management and enforcement measures for its protected areas. In this regard, each Party shall take into account the guidelines and criteria formulated by the Scientific and Technical Advisory Committee to the Protocol. The measures adopted such include:

- The formulation and adoption of appropriate management guidelines for protected areas;
- The development and adoption of a management plan that specifies the legal and institutional framework and the management and protection measures applicable to an area or areas;

- The conduct of scientific research on, and monitoring of, user impacts, ecological processes, habitats, species and populations; and the undertaking of activities aimed at improved management;
- The development of public awareness and education programmes for users, decision-makers and the public to enhance their appreciation and understanding of protected areas and the objectives for which they were established;
- The active involvement of local communities, as appropriate, in the planning and management of protected areas, including assistance to, and training of local inhabitants who may be affected by the establishment of protected areas;
- The adoption of mechanisms for financing the development and effective management of protected areas and facilitating programmes of mutual assistance;
- Contingency plans for responding to incidents that could cause or threaten to cause damage to protected areas including their resources;
- Procedures to permit, regulate or otherwise authorize activities compatible with the objectives for which the protected areas were established; and
- The development of qualified managers, and technical personnel, as well as appropriate infrastructure.

The record of acceptance of regional multilateral agreements of particular significance to marine protected areas is presented in Table 1.2.

Table 1.2 Regional marine protected areas related conventions[5]

	CARTAGENA	OILSPILL	SPAW	LBSMPP
Antigua & Barbuda	S&R	R	S	
Bahamas				
Barbados	S&R	S&R		
Belize	R	R		
Dominica	R	R		
Grenada	S&R	S&R		
Guyana				
Jamaica	S&R	S&R	S	
St. Kitts & Nevis				
St. Lucia	S&R	S&R	S&R	
St. Vin & Grenada	R	R	S&R	
Trinidad & Tobago	R	R	S&R	

[5] *Legend:*
S = signed; R = ratified
CARTAGENA = Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, 1983
OILSPILL = Protocol Concerning Specially Protected Areas and Wildlife in the Wider Caribbean Region, 1983
SPAW = Protocol Concerning Specially Protected Areas and Wildlife in the Wider Caribbean Region, 1990
LBSMP = Land-Based Sources of Marine Pollution Protocol, 1999

2 PART 2: MEA IMPLEMENTATION: LEGISLATIVE AND PROGRAMMATIC

Caribbean legislation protective of the environment in general, and of marine protected areas in particular is, largely, a response to obligations undertaken in various multilateral environmental agreements. At the same time, there is no invariable correspondence between treaty acceptance and development of appropriate legislative and policy frameworks. The establishment of suitable regulatory structures and processes for MEA implementation is multi-faceted and multi-layered, but at a minimum requires development of effective implementing mechanisms. Included here may be adoption of implementing legislation, identification of a national implementing agency and focal point for implementing activity, and the availability of resources and stimulation of project-based implementing activity. In the context of the present project, discussion of implementing legislation and associated policies is especially germane.

The law of the Caribbean for the most part knows nothing, generally speaking, of self-executing treaties: the operating assumption is that legislation is required to give the force of law to environmental treaty obligations. This is the basis for the decision given, for example, by the Court of Appeal of Jamaica in the *Natural Resources Conservation Authority v. Sea Food and Ting (1999)* in respect of the Convention on International Trade in Endangered Species of Flora and Fauna (CITES).[6]

Given that treaty law generally has no force in Caribbean law without implementing legislation, it might be expected that when a Caribbean State takes the solemn decision to become a party to a treaty, implementing legislation would follow as a matter of course. This logic was not reflected in British practice, which is replete with treaties that have not been followed by enacting legislation, or followed only after a long hiatus.

The speed of legislative response to the international obligation to enact enabling statutes could be a function of the typology of legislation adopted. In basic terms enabling legislation may implement a MEA by re-enactment; i.e., by repeating verbatim or by paraphrase, the substantive provisions of the treaty to which the State is party. The Act excludes those substantive treaty provisions in respect of which the State entered a reservation. Implementation by re-enactment is the traditional Caribbean approach and places a premium on State possession of legislative drafting resources, familiarity with the nuisances of international treaty law, and sensitivity to the translation of "soft law" treaty obligations into "hard law" legislative rights and duties.

An alternative to the traditional implementation by re-enactment is the more modern approach of incorporation by reference, a good example of which is provided by the *National Conservation and Environment Protection (Amendment) Act, 1996* of St Christopher and Nevis.[7] There are many variations on incorporation by reference but the classic form comprises a short statute whose central provision is that the treaties listed (and sometimes reproduced in a schedule) have “the force of law” in the country concerned. Incorporation in this way represents an economy of legislative competence and facilitates speedier Parliamentary response to the responsibility for legislative action.

[6] (1999) 58 W.I.R. 269.
[7] No. 12 of 1996.

Correspondingly, other difficulties may be presented in terms of actual implementation and compliance.

Significant programmatic implementation of multilateral environmental agreements is evident in the Caribbean. For example, important regional activity to protect biological diversity is carried on under the Caribbean Environmental Programme, which forms the core of the UNEP's Regional Seas Programme in the Caribbean. Conservation of biological resources falls within the objective of the SPAW Protocol and overlaps considerably with the CBD.

Notwithstanding, UNEP has engaged in a number of activities designed to stimulate action towards the bio-diversity conservation. Most directly a Memorandum of Cooperation between CBD and the Cartagena Convention and its Protocols was agreed in 1997. The Memorandum covers Institutional Cooperation (Article 1); Exchange of Information and Experience (Article 2); Coordination of Programmes of Work (Article 3); Joint Conservation Action (Article 4); Consultation, Reporting and Further Guidance (Article5); and Review of the Agreement (Article 6). Whilst significant flaws have been identified the Agreement is generally saluted as being an innovative step in the rationalization of overlapping treaty requirements. CEP has the responsibility of identifying appropriate mechanisms to initiate cooperation with CBD and UNEP/RCU has welcomed inputs and comments from Government, NGOs and relevant organizations.

CEP encouragement for implementation of SPAW is based upon the SPAW sub-programme focussing on protection of ecologically sensitive areas and wildlife that constitute a key resource for important economic activities such as tourism and fisheries. CEP activities have included a regional workshop designed to facilitate legislative implementation of the SPAW Protocol in the Commonwealth Caribbean countries of CEP.

The direct impact of these regional activities upon national implementing efforts may be characterized as average. Traditional regulatory activities in such sectors as fisheries and forestry involving the taking of measures for the conservation of biological resources have evolved along separate lines. Admittedly, the widespread adoption of CBD and the increasing acceptance of the SPAW Protocol have encouraged a spate of recent activities. With GEF support virtually all of our Caribbean countries have prepared or are preparing individual biodiversity strategy and action plans and a related first report to Conference of Parties to the Biological Diversity Convention.

Funding from other external agencies sometimes demonstrate a preference for private sector-led initiatives. For example, the Montego Bay Marine Park Trust benefited from a US$25,000 grant from USAID. The Trust was the first local community group to be delegated authority for the management of park resources. The grant was used to establish basic administrative systems and equipment needed to strengthen the Trust's administrative capabilities as it prepared to assume the official responsibility for the Marine Park's sustainable management.

Similarly, the private sector oriented BEST Commission in the Bahamas secured IADB funding for institutional review and strengthening. Also the National Wetlands Committee of Trinidad and Tobago, a Cabinet appointed inter-sectoral committee, responsible for formulating a wetlands policy through which the wise use the country's wetlands can be achieved, has attracted external funding. Much of the policy formulated by the

Committee was in compliance with the guidelines listed in the RAMSAR Convention but obviously also facilitate the conservation of biological resources.

3 PART 3: LEGISLATIVE TYPOLOGIES

At the risk of oversimplification it may be said that the marine protected areas of interest to this project are located in countries that adopt one of three basic legislative typologies.

3.1 Traditional Conservation Laws

The notion of 'traditional conservation laws' is used to describe legislation that provides for the protection or conservation of specific environmental components but which does not expressly include marine protected areas. Typically, these statutes would have been enacted before the modern proliferation of marine protected areas, although subsequent amendments may make some provisions for protection of such areas.

In evaluating the success of the MPA established and operated under traditional conservation laws, it becomes necessary to further describe the four categories of legislation may be readily identified in this grouping.

3.1.1 Beach Protection Act or Beach Control Act

The *Beach Control Act* or *Beach Protection Act*, which first appeared within Caribbean legal systems in the late 19th century, is an obvious example of traditional conservation laws. In its original form the Act prohibits the digging and removal of sand, stones, shingles and gravel from the foreshore, and the fouling of the foreshore by deposit of offal, garbage, or other waste. This provided the basic legal foundation for protection of marine areas that properly fall within the definition of beaches.

A recent illustration of the statute's continuing utility is provided by the case of *NEPA v Half Moon Bay Limited* decided in the Montego Bay Resident Magistrates Court, Jamaica, in 2002. The defendant hotel was found guilty of breaching the Beach Control Act on two counts whose particulars included digging and dredging sand from the foreshore and the floor of the sea and also dumping of large small boulders on the foreshore of the sea. A six-month prison sentence, suspended for one year, was handed down to the Company's Financial Controller, and the Company was admonished.

3.1.2 Town and Country Planning Act

The *Town and Country Planning Act*, prevalent throughout the region, provides the second example. This Act provides a framework for the granting of permission for the development of land and for exercising other powers of control over the use of land. An important consideration is that planning authorities may make provisions for nature reserves and for sanctuaries for wildlife in the development plan. Where such provisions are made in respect of marine protected areas, Caribbean authorities suggest that development may still be permitted within these areas, provided only in coming to this conclusion, the planning officials considered the provisions of the development plan 'and all other material considerations.'

3.1.3 Traditional Fisheries Act

A popular basis for the regulatory framework of marine protected areas continues to be the Fisheries Act. The primary purpose of this legislation is the sustainable utilization of fishery resources. Pursuant to this objective, it authorizes the creation of marine reserves. These reserves are generally to facilitate the protection of fauna and flora within the area, natural breeding grounds and habitat of aquatic life. The natural regeneration of life, the promotion of scientific study and research, and the preservation and enhancement of natural beauty, are other relevant considerations.

The severity of the penalties for infractions vary in relation to the time when the Act was passed or revised but the range includes fines, custodial sentences, and forfeiture of property used in, connected to, or resulting from the infractions.

Although several of the MPA of interest to this study were in fact established under the Fisheries Act, it is arguable that the measures that may lawfully be taken in such a marine reserve must be made to relate back to the purposes and objectives of the Act. Otherwise such regulations may be vulnerable to the charge of being *ultra vires* the statute. At minimum, the sectoral nature of the parent legislation normally constitutes a significant psychological hurdle to be surmounted before holistic protection can be achieved.

3.1.4 Traditional National Parks and Protected Areas Act

With the National Parks and Protected Areas Act the evolution of traditional conservation laws reaches it zenith. The Act specifically provides for the creation and operation of protected areas for general purposes. Several of the marine protected areas of interest to this project were established under National Parks and Protected Areas Act. But the Acts are included in this first category of legislation because they do not generally make any special mention of marine parks or marine protected areas. The original and continuing area of primary interest is clearly a terrestrial parks protection system, and this can compromise the vitality of the legal base it generates for MPA protection.

As regards traditional resource conservation legislation, an analysis by regional experts published in 1992 had this to say:

> ‘Much of the resource legislation in the Commonwealth Caribbean region lacks adequate environmental and institutional focus. Such environmental-related legislation as exists, is, more often than not, inherited from the British, and is often fragmented and dispersed over several enactments. Responsibility for administering applicable legislation is likewise distributed among several government departments, unsupported by appropriate institutional arrangements to coordinate and direct relevant initiatives.’[8]

It follows that marine protected areas established pursuant to these kinds of laws and fragmented institutional structure are likely to fall within the category of low management or non-operational, unless other factors are at work to enhance the functionality of such

[8] Caribbean Law Institute, *Environmental Laws of the Commonwealth Caribbean* (1992), at 1.

areas. In this context, the functionality of the Soufriere-Scottshead Marine Reserve (SSMR) and the Cabrits National Park (CNP) in **Dominica**; and the Soufriere Marine Management Area (SMMA) in **St. Lucia** will be examined in the light of their respective regulatory frameworks.

3.2 Ad Hoc MPA Legislation

A second and more modern approach is MPA designation established on a network of small MPAs so that separate legislation and regulations govern each. There is some question as to whether this is the route taken in **Belize.** The Hol Chan Marine Reserve (HCMR) and the Glover's Reef Marine Reserve (GRMR) were established under the same piece of legislation, namely, the Fisheries Act, but research suggests that they operate under quite separate institutional frameworks.[9]

In formal terms this is undoubtedly an advance over the traditional conservation laws, but it lacks the facility to provide for consistency in standards applicable to marine protected areas across the country. It is also difficult to integrate marine protected areas into a more general system of national parks protection.

As a rule, therefore, the management level expected of parks established under *ad hoc* marine protection legislation may, *prima facie*, be expected to be **moderate**, but as will be demonstrated, the variables at work could enhance or reduce this status.

3.2.1 Generic MPA Legislation

From a conceptual viewpoint the most satisfactory approach is the use of a generic regulatory framework for the creation and management of marine parks. This allows for consistency of standard setting whilst permitting some flexibility in local management arrangements. A comprehensive regulatory base has the distinctive advantage of facilitating integration of marine protected areas into a national parks system for all types of ecosystem protection.

Accordingly, the initial expectation is that marine protected areas regulated in this way may be classified has having **high** management levels.

Use of generic legislation is the tool of choice in **Jamaica** (where a single legislative framework applies to Negril Marine Park (NMP), Montego Bay Marine Park (MBMP), and Ocho Rios Marine Park (ORMP)). This is also the approach adopted in the **Turks and Caicos Islands** in which the Princess Alexandra Land and Sea National Park (PALSNP), Admiral Cockburn Land and Sea National Park (ACLSNP), and Chalk Sound National Park (CSNP) are located.

St. Lucia is a special case in that although generic legislation exists for marine park creation and operation, the SMMA was established and is regulated under what may be regarded as traditional conservation laws.

[9] See note 11below.

4 PART 4: MPA PROFILES BY COUNTRY

4.1 DOMINICA[10]

Protections of marine areas in Dominica are organized in line with the first and lowest level theoretical level of management. No legislation speaks purely to the protection or preservation of the marine environment, or invites designation of protected marine spaces for general purposes. The two marine protected areas studied, Soufriere-Scottshead Marine Reserve and The Cabrits National Park, fall under two separate pieces of legislation: the Fisheries Act of 1987 and the National Parks and Protected Areas Act of 1975 respectively.

This approach is consistent with the a priori assumption of **non-operational** or at best **low** management. The Cabrits National Park is, indeed, **non-operational**, but the Soufriere-Scottshead Marine Reserve may be classified as having **low-moderate** management.

4.1.1 Soufriere-Scottshead Marine Reserve

The Soufriere-Scottshead Marine Reserve (SSMR) is located in the South of Dominica and is approximately 6-7 square kilometers in size. The Reserve is a multiple use MPA whose primary habitat is coral reef but the Reserve is also important for turtles, seabirds, whales, and dolphins.

The SSMR was established under provisions in the Fisheries Act that give power to the Minister to declare ‘an area as a local fisheries management area’ and to declare ‘any area of the fishery waters and as appropriate, any adjacent or surrounding land, to be a marine reserve.’ The Local Area Management Agreement (LAMA) is the Fisheries Management Authority of the SSMR and is basically an organization of the various stakeholder interests.

Establishment under a traditional conservation law entails an in-built bias against focused and effective management for modern environmental purposes. In some regards the objectives of conservation clash with what may reasonably be contained within the purview of the parent statute, the Fisheries Act. For similar reasons, management of the Reserve has difficulty in regulating development on the fringes of the Reserve, where such development fall outside of the authority derived from the Fisheries Act.

It is also the case that although Dominica is party to several relevant international law treaties, these treaties have yet to be transformed into local law and none of them

[10] See generally, Mechelle Best, “A Review of Legislation, Policy and Institutional Arrangements, Assisting or Constraining, The Implementation of Marine Protected Areas in Dominica and The Turks and Caicos Islands” (A Research Paper Submitted in Partial Fulfilment of the Requirements for the Degree of Master of Science in Natural Resources Management, UWI, 2001). The Profile of the marine protected areas in Dominica is drawn heavily from the findings of this research paper.

directly influenced the establishment of the SSMR or, indeed, how the MPA operates. In fact, there are indications of conscious resistance to implementation of these treaties, since there is a perception that these agreements are aimed more at satisfying the interests of developed countries and are difficult to implement in the special context of small-island developing states.

Be that as it may, several features of the actual operation of the SSMR explain how these formal disabilities have been overcome to the extent that the Reserve may properly be regarded as having **low-moderate** management.

- Policies adopted in the Dominica National Environmental Action Plan and the Biodiversity Strategy have been used to further marine protection.
- The composition of the management agency, LAMA, ensures widespread public participation in the running of the Reserve.
- SSMR has a legally binding management plan. The MP has stated reasons for the establishment of the Reserve and a clear and comprehensive statement of management objectives; a recommendation has been made to amend the Fisheries Act to ensure complete coverage of these objectives.
- LAMA has contracted a manager for SSMR.
- Wardens of SSMR are designated as authorized officers for the purpose of upholding the law and any special measures instituted by LAMA.
- Community participation was used extensively in the establishment of SSMR and continues to be used in the operation of the MPA, and is probably the single most important factor contributing to the success of the Reserve.

4.1.2 The Cabrits National Park

The Cabrits National Park (CNP) is located on the northwest coast of Dominica and is a terrestrial park with a significant marine component (approximately two-thirds of the 260 hectares comprising the Park).

CNP was established under the National Parks and Protected Areas Act, which even in its amended form, makes no mention of marine parks or marine protected areas. Dominica's ratification of marine-related environmental conventions had no direct impact upon the designation or operation of the Park.

CNP is the classical case of a marine park established under traditional conservation laws without any ameliorating influences. There is little or no management in the marine park, no management plan, and consequently, no specific management objectives. The Park falls under the management of the Forestry and Wildlife Division of the Ministry of Agriculture, but that Division, by virtue of tradition and human resource capabilities, is only active in the management of the terrestrial component. The absence of marine-specific regulations means that all kinds of marine activities are carried out in the park unregulated. Community participation was not used in the creation of the CNP and is not a feature of the operation of this MPA.

The CNP may therefore be considered **non-operational**.

4.2 ST. LUCIA

St. Lucia has generic legislation under which any marine area may be designated for protection. The National Conservation Authority Act 1999 (No. 16 of 1999) establishes a National Conservation Authority to be led by a General Manager and supported by appointment of other staff. The functions of the NCA are, among others, to

- Conserve the natural beauty and topographical features of the country;
- Control, maintain or develop a beach or protected area or a public access to a beach or protected area;
- Protect the coastline from erosion or encroachment by the sea; and
- Advise the Minister on an area to be declared as a protected area.

In relation to the latter function it is worth noting that the legislation specifies power in the Minister to 'declare an area of land or water in Saint Lucia to be a protected area for the purpose of … creating a marine park' (sect. 3 (1) (c)).

Unfortunately, the NCA is operational at present and but focuses mainly upon beautification activities so that little effective marine protection management takes place under its aegis. The marine protected areas in St. Lucia are therefore not under the umbrella of this comprehensive Act but fall under the regulation of sectoral statutes, concerned with the creation of marine parks for specific purposes. In particular, the Fisheries Act 1984 (10/1984) is the primary legislation for the establishment and operation of such areas. The Beach Protection Act 1967, the St. Lucia National Trust Act 1975, the Town and Country Planning Ordinance, and the Wild birds Protected Act 1980 provide supplementary regulation.

4.2.1 Soufriere Marine Management Area

The Soufriere Marine Management Area (SMMA) was officially established in 1995 based after an intensive two-year process of participatory planning and conflict resolution involving a wide range of groups and institutions concerned with the conservation and management of coastal and marine resources in the area. It was the first attempt to establish on a large and permanent scale a system of collaborative management for multiple uses of coastal and marine resources in St. Lucia. And there is evidence that the prolonged discussions between the stakeholders actually facilitated the arrival at solutions and enabled implementation of the agreed policies.

The SMMA was established under the Fisheries Act 1984 pursuant to the power of the Minister to declare any area of fishery and adjacent areas upon the land to be a marine reserve. Such a declaration is made where the Minister considers that special measures are necessary to protect and preserve habitats, the fauna and flora and natural beauty of the area. Within the marine reserve, the Fisheries Act prohibits unauthorized fishing, destruction of flora and fauna, dredging of sand or discharges of polluting wastes, and the construction of buildings. Upon summary conviction, an offender may be fined by up to $5,000.

As the SMMA falls under the auspices of the Department of Fisheries, that Department is heavily involved in its management. But central control lies with the Soufriere Marine Management Authority, and put on a formal footing by a 2001 agreement between

Cabinet and the Soufriere Marine Management Inc. (SMMI), a company not for profit formed for the purpose of management of the SMMA. The Agreement contains a statement of objectives and guiding principles. There are provisions on the geographical delimitation, zoning, for various uses such as fishing, diving, snorkeling, public access and recreation, yacht mooring sites, scientific research.

Management of the SMMA may be classified as **high**. This is a function of the clarity of the legislative and policy framework as outlined in the Fisheries Act and the 2001 Agreement. Where necessary, other relevant laws provide additional regulation such as the Beach Protection Act, Environmental Levy Act, St. Lucia National Trust Act 1975, the Town and Country Planning Act, and the Wildlife Protection Act 1980.

The membership of the SMMI is broad-based and representative of both public and private sector stakeholders. There are consultations to resolve use conflicts, and the functionality of the SMMA is reviewed regularly by the Department of Fisheries. Sensitivity to the fulfillment of international obligations is definitely an important aspect of the objective and management of the area. There is some indication that these features have helped the SMMA to realize many of its objectives and the initiative remains the leading illustration of a successful co-management arrangement in the OECS.

4.3 BELIZE[11]

Belize experiences relatively few environmental problems, given the comparatively low levels of stress the country's small population exerts on its surroundings. But fishery resources suffer from bad harvesting habits, over exploitation and pollution. Increasing usage of marine areas, such as the 260 km long barrier reef, as tourist attractions, has the potential to occasion significant injury to the marine environment. Belize law allows for a full range of management options for marine areas, from strict protection to multiple uses but those measures, as they stand, are dispersed among several statutes.

Essentially, the approach to marine protected areas is to establish a network of small MPAs so that separate institutional arrangements govern each; there is no dedicated marine protection that provides an overarching legislative framework of basic rules affecting all such areas. Primary responsibility lies with the Belize Fisheries Department, but the Forestry Department and the Department of the Environment have limited authority and responsibility for marine governance.

This approach is consistent with a *prima facie* **moderate** management level. Although the two marine protected areas studied were established under the Fisheries Act 1977, which in conceptual terms may be regarded as a traditional conservation law, this designation may be defended on the ground that the recency of the statute and its amendment twice during the 1980s (1983 (No. 1), 1988 (No. 12)), has allowed for the infusion of modern protection objectives. Reserves may be designated by the Minister where extraordinary measures are necessary within any area within the fishing limits of Belize, and may be un-designated by him where circumstances warrant.

[11] See generally, Rohan Richards, "A Review of National Policy and Legislation Contributing to or Constraining successful Marine Protected Areas Implementation in Belize and Jamaica", (A Research Paper Submitted in Partial Fulfilment of the Requirements for the Degree of Master of Science in Natural Resources Management, UWI, 2001). The Profile of the marine protected areas in Belize is drawn heavily from the findings of this research paper.

Moreover, the Act is supported and its operation integrated into a number of other modern legislative initiatives.

- National Parks Systems Act 1981 (No. 5) which provides for the Ministerial declaration of national parks to protect and preserve national and scenic values of national significance; nature reserve to protect biological communities and the maintenance of natural processes in an undisturbed state; and wildlife sanctuaries.
- The Wildlife Protection Act 1981 (No. 4) legislates for the conservation, restoration, development and regulation of wildlife resources; specifically manatees, dolphins and other marine mammals are protected from unregulated capture.
- The Marine Areas Act 1992 (No. 1) establishes the areas of national jurisdiction within which marine protected areas may be established.
- The Environmental Protection Act 1992 (No. 22) is an umbrella statute that establishes a Department of the Environment to ensure the protection and rational use of natural resources. The Act contains extensive provisions on the control of pollution as well as wetlands ecosystems management and utilization.
- The Coastal Zone Management Act 1998 (No. 5) established the Coastal Zone Management Authority and Institute to facilitate development and proper utilization of resources of the coastal and marine environment of the country. The Coastal Zone Management Institute has the responsibility to study multiple uses of the sea and coastal zone and to seek to minimize possible conflicts that may result from such uses.
- The Protected Areas Conservation Trust Act 1995 (No. 15) provides for the establishment of a Board with responsibility for national parks, wildlife, marine protected areas, and fisheries.

4.3.1 Glover's Reef Marine Reserve

Glover's Reef Marine Reserve (GRMR) is located on an atoll about 45 km east of the mainland of Belize. Designation of the Reserve was made under the Fisheries Act, and subsequently, the Fisheries (Glover's Reef Marine Reserve) Regulations 1996 were passed outlining four management zones for the purpose of the regulation and control of the reserve. Zones exist for general use, conservation, wilderness, and seasonal closure. The Ecosystem Management Unit of the Fisheries Division is responsible for the day-to-day operation of the Reserve.

On balance, the level of management of GRMR may be said to retain its initial categorization as **moderate**.

There are numerous variables affecting the practical operation of the Reserve that could affect the preliminary classification, but which in the end more or less cancel out each other. On the plus side, the Reserve is being managed in accordance with a management plan and in fulfillment of international obligations and national commitment towards preservation of the barrier reef as a world heritage site.

The MPA has been very successful in the area of research and monitoring and there is significant community participation, particularly in enforcement matters. Core management abilities are generally speaking sufficient to meet park objectives. On the

negative side the management plan appears not to have considered development legislation so that the Reserve is not connected to any national development plan under the Town and Country Planning legislation. There are also funding concerns as park operations are funded mainly through annual government appropriations.

4.3.2 Hol Chan Marine Reserve

The Hol Chan Marine Reserve (HCMR) was established in 1987 and consists of 18.32 km(squared) of coral reefs, seagrass beds and mangrove swamps. The Reserve is unusually rich in marine life and is home to turtles, manatees, conch and lobsters. It is the most visited protected area in all of Belize.

HCMR was declared as a marine protection area by the Fisheries (Hol Chan Area Marine Reserve) Order, 1987 (S.I. No. 57 of 1987) on 20th July 1987. Pursuant to legislative fiat, zones have been established and are operated for specific purposes: recreational (non-extractive) activities such as diving and snorkeling; sports and commercial fishing; and multi-purpose areas. Management and day-to-day operations reside with the HCMR Board of Trustees, recognized in legislation, and which is made up of institutions and organizations both of the public and private sectors. Under its constituent legal document the Board should meet at least every quarter.

Management of the HCMR is classified as **high** and several factors account for this.

- The structured response to international commitments and obligations for the protection of world heritage sites.
- Existence and operation of a management plan with clearly defined and attainable objectives.
- Reserve-specific management in the form of the HCMR Board with on-site management personnel.
- The institutionalization of community participation in the HCMR Board, although there are other respects in which the relatively low incidence of grass-roots public participation requires attention.
- Public involvement of HCMR management officials in offering regular lectures in marine biology and environmental conservation to high schools in and participation in a Ministry of Education initiative to inculcate the benefits to the country of it marine resources.
- Satisfaction by the Reserve of multiple use demands in accordance with strict conservation guidelines.
- Strong legislative and policy support with respect to the establishment, management and regulation of activities within the Reserve.
- Existence of an independent line of funding through a user fee system, although financial constraints remain the major reason that technical resources requirements have not been met to the fullest extent.
- Effective enforcement procedures, including specific enforcement rangers who are strict and professional in the enforcement of rules and who respond immediately to alleged infractions, as well as an effective penalty system.

4.4 JAMAICA[12]

The approach taken by Jamaica in respect of marine protected areas management is the declaration of generic subsidiary legislation enacted pursuant to the Natural Resources Conservation Authority Act 1991 (No. 9). This Act is an umbrella type environmental legislation that focuses on an ecosystem approach to management conservation and protection of natural resources. Section 5 of the Act empowers the Minister to designate, after recommendation and consultation, any area of land or water a protected area in which may need preserved any object of the natural environment that is aesthetic, educational, historical, or scientific interest, or any area of land lying under tidal water and adjacent to such land or any area of water, as a marine park.

The Natural Resources Conservation (Marine Parks) Regulation is generic and applies to all marine protected areas once they have been designated and established. These regulations speak to a prohibition of activities such as the extraction or mining of minerals, the destruction, removal or disturbance of sand, minerals, gravel, corals, seafans, shells, shellfish or other marine invertebrates, seaweeds, seagrasses, artifacts or other materials. Fishing activities are prohibited without a license granted by the NRCA who can declare specified areas of a marine park to be fishing or no-fishing zones. Significant fines penalize littering and pollution, and vandalism and loud noises are also prohibited. Use of nets, traps, or other like objects are governed by the Regulations.

The three marine protected areas of interest to this project were designated under the 1991 Act and are governed by the Regulations. Supplementary legislation regulates the fishing industry; protection of beaches, protection of wildlife species, protection of national heritage, declaration of Jamaica as an archipelagic state and national maritime areas.

The legislative framework is supported by elaborate policy guidelines. Following extensive public consultation processes, the 'Policy for Jamaica's System of Protected Areas', formulated pursuant to section 5 of the Natural Resources Conservation Authority Act, was adopted as official government policy. Policy instruments specifically related to marine protected areas have supplemented these Regulations.

- Mangrove and Coastal Wetlands Protection – Draft Policy and Regulations, April 1996
- National Policy for the Conservation of Seagrasses, April 1996
- The Coral Reef Protection and Preservation and Regulations, October 1997.

Of general significance, also, is the development of a National Strategy on Biological Diversity in Jamaica, 2000, and the National Policy on Ocean and Coastal Zone Management in Jamaica, 2001.

This profile indicates a tentative classification of management as **high** but this classification can be displaced in specific circumstances by the way in which the area is actually managed.

[12] Rohan Richards, *supra,* n. 8. The Profile of the marine protected areas in Jamaica is drawn heavily from the findings of this research paper.

4.4.1 Negril Marine Park

The Negril Marine Park (NMP) comprises 160 km (square) of marine and terrestrial property and was the first environmental protection area to be authorized under the Natural Resources Conservation Authority Act. It was established under the Natural Resources Conservation (Negril Environmental Protection Area) (Declaration) Order, 1997 after considerable consultation with local stakeholders including scuba divers, fishers and members of the tourism and business communities. The Order outlines the terrestrial and marine areas to be protected and was the first protected area in Jamaica to include area watershed and a marine area. The actual rules operative in the park are contained in the generic Natural Resources Conservation (Marine Park) Regulations 1992.

The NMP must be considered within the context of extraordinary efforts to maintain ecological quality for the tourism product that is of paramount importance in Negril. The park is managed by NCRPS under the auspices of the NEPT with key management partners being the NRCA/NEPA, NGIALPA, FD and the Local Fisheries group. The formal signing of the instrument delegating responsibility for the park under the NRCA Act to NRCPS was done on October 9, 2002. NCRPS manages the out of its headquarters' facilities on the NGIALPA's lands near the roundabout in the town center. A management plan with specific and detailed management objectives was formulated with input from a broad cross-section of stakeholders.

Co-ordination with the Town and Country Planning regime is achieved through the Negril Environmental Protection Plan, which establishes long-term environmental goals and outlines a strategy of guiding environmental planning and decision-making in the NMP. Since the NGIALPA is primarily responsible for the implementation of the Negril Development Order, the regime facilitates ease of collaboration between planning regime and park management.

The National Water Commission trains the NCRPS staffers. Rangers and volunteers are trained in routine water quality testing and monitoring, as well as in the correct method of sampling and collection. Material and technical resources allow for effective patrolling.

No user fees are charged for use of the park and funding for management comes primarily from private contributions. Long-term financial needs are to be met through assistance from international and national donor agencies, the private sector, membership subscriptions, fund- raising activities. A user fee system is being proposed and procedures for ensuring that revenue earned from use of the park are made available for its preservation and protection.

There is some concern regarding perceived judicial insensitivity to the importance of protecting the ecology of the park. Traditionally, infractions attracted a minimum fine; only more recently has community service options have been imposed. However, in the *Half Moon Hotel* case, a prison sentence was handed down for violations of laws protective of the beach.

A clear indication of the success of the NMP is the very high level of community and stakeholder participation; the establishment of the park itself was an outstanding

example of co-management. Several project have been successfully implemented including:

1. The installation and maintenance of over 40 mooring buoys and 166 demarcation buoys with the support of the Negril community;
2. The establishment of a programme for the cultivation of sea moss (in collaboration with CANARI)
3. Coastal cleanup programmes on Negril's beaches and the installation of signage prohibiting dumping and bonfires in the park. Signs have also been placed on hotel and beach properties to explain environmental regulations and reef etiquette.
4. The production of 'Reef Rap News', a magazine focussing on care of coral reefs and distributed to 150 hotels, 12 schools, NGOs, colleges; and the production of TPDCO brochures that outline environmental and water sports regulations in the MPA and Junior Ranger training manuals.

4.4.2 Montego Bay Marine Park

The Montego Bay Marine Park (MBMP) is a 15.3 km (square) sited in the northern coastal environment and its extensive living coral reefs and mangrove islands, freshwater wetlands, are primary components of the tourism product for which the city of Montego Bay is renown. The MBMP was declared under the Natural Resources Conservation Authority Act 1991 and designated as a marine protection area under the Natural Resources Conservation (Montego Bay Marine Park) Order, 1992.

Management of the Park was the subject of a co-management memorandum of understanding between the NRCA and the MBMPT. The MOU essentially delegates management functions to the MBMPT pursuant to section 6 of the Natural Resources Conservation Authority Act. Under the terms of the agreement management by the Trust must comply with the draft management plan and financial sustainability plan submitted to the NRCA by the Trust; the Trust must report quarterly to the NRCA, and the Trust must show community participation and involvement acceptable to the NRCA. Failure to abide by the terms of the Agreement may result in the revocation of the instrument of delegation.

The Trust provides on-site management, and there is a system of internal review and monitoring, as well as a sufficient cadre of personnel to ensure adequacy of human resources. There are technical resources deficits due largely to financial constraints; subventions from the NRCA account for roughly 90% of income, whereas a primary reason for the delegation in the first place was to divert from government the main responsibility for funding.

The objectives of the MPA are summarized in its mission statement, and are further elaborated in a comprehensive five-year management plan. Basic components of the plan address marine ecosystem management, user management, administration, financial sustainability, and community relations.

In respect of enforcement, the park manager has the authority to revoke permits within the park, restrict access and to evict individuals contravening the park rules. Rangers

appointed under the NRCA are also district constables, and have powers of arrest and the authority to enforce the park regulations. The marine police assist in enforcement by patrolling with the park rangers at regular intervals. By reason of traditional insensitivity to environmental concerns, there was a long-standing reluctance to prosecute violators, but there are some recent instances where violators have prosecuted before Magistrates Courts.

Community participation is a successful feature of the park management. Community outreach programmes have succeeded in reducing the amount of conflict that became evident when the MPA was first created and zoning undertaken.

The only notable constraints relate to funding, and the fact that implementation of polices and progammes agreed by the Trust tend to be delayed by having to receive approval from the bureaucracy of government. Concern has also been expressed that assistance from the NRCA has not been as generous as desired. There are some pollution problems; a newly constructed local authority approved sewerage treatment plant, channels treated effluent into the Montego River, which empties into the marine protection area. Oil and run-off of agricultural fertilisers and pesticides continually add to the problem. Enforcement of planning and environmental restrictions is often adversely affected by political influence or institutional inertia.

In light of the fact that the highly competent management and admirable legislative framework has not yet been able to ensure full protection of the park, it would appear that the designation of **moderate-high** is the most appropriate indication of its success.

4.4.3 Ocho Rios Marine Park

The Ocho Rios Marine Park (ORMP) consists of some 13.5 km of coastline and was declared under the authority of the Natural Resources Conservation Authority Act 1991. As with all MPAs in Jamaica, the NRCA has ultimate responsibility for the management of the park, and in theory, the generic marine park regulations and policies should apply to regulate activities within it. However, there is no management plan at present and therefore no specific management objectives to guide management operations or activities within the park. There has been little to no community participation to present. There are plans in train to resuscitate the park's management with the assistance of NEPA and UWI Centre for Marine Science's Discovery Bay Marine Lab.

Despite the legal and policy framework, then, the ORMP is classified as **non-operational**.

4.5 TURKS & CAICOS ISLANDS[13]

In the Turks & Caicos Islands marine protected areas may be established under a single piece of legislation. This is the National Parks Ordinance of 1975 (as amended by Ordinance 10 of 1989 and 12 of 1992). Actual designation of the park may be made

[13] Mechelle Best, *supra*, n. 7. The Profile of the marine protected areas in Turks & Caicos Islands is drawn heavily from the findings of this research paper.

under the National Parks Order of 1992 and activities within the Park are governed by the National Parks Regulations 1992.

This system is consistent with the third and highest theoretical level of management. From this perspective the parks in the Turks and Caicos Islands prima facie may be regarded as having **high** management. However the variables connected with the actual day-to-day operation the parks, have in each of the three case studies managed to suppress this categorization. The parks which were the subject of research were the Princess Alexandra Land & Sea National Park, the Admiral Cockburn Land & Sea National Park, and Chalk Sound National Park, which were finally classified as **moderate-high**, **low-moderate**, and **low** respectively.

4.5.1 Princess Alexandra Land & Sea National Park

The Princess Alexandra Land & Sea National Park (PALSNP) is located in the north west of the Island of Providenciales in the Turks & Caicos Islands. PALSNP is a multiple use MPA providing primarily for recreation, ecosystem protection, and tourism. It was established under the National Parks Ordinance, which permits the creation of protected areas in any one of four categories: national parks, nature reserves, sanctuaries, or areas of special interest. In August of 1992, the National Parks Order was passed designating thirty-three (33) protected areas; PALSNP was one of the national parks created by this Order. The Coastal Resources Management Project (CRMP) provides institutional support and has the objective to 'protect the natural resources of Turks & Caicos Islands'. The Turks & Caicos National Trust also has specific responsibilities with regards to the park's management.

PALSNP has been classified as **moderate-high** management. On the plus side the park is operational and that there has been particular success in relation to the gathering of information, collection of data, implementation of a regulatory infrastructure, and increased public awareness. At the same time PALSNP is not meeting conservation objectives. In particular there has been an inability to curtail pollution from a known point source; carrying capacity limits have not been implemented in respect of threatened resources; and there has been a failure to effectively enforce existing regulations.

Several features of the regulatory framework may be responsible for this.

- The British Government has ratified and extended a number of relevant multilateral environmental agreements to the Turks & Caicos Islands, but local law has not implemented these agreements. In this way, CBD, LOS, RAMSAR, and HERITAGE have had no direct influence on PALSNP's establishment or operation.
- PALSNP has a management plan with specified management objectives and but the plan is not legally binding.
- The relevant regulations have not been amended in the decade since they were enacted and some revisions may be necessary.
- Enforcement powers have not been legislatively delegated to the park wardens. Adequate penalties are provided and general law enforcement officers do prosecute infringements but the lack of enforcement powers in the park management was found to be a definite handicap.

- Public participation was not used in the establishment of PALSNP, although there is now a high degree of public awareness of the park and its management.
- Park management has no input into the decision-making concerning whether development should be allowed on the fringes of the park; a matter normally within the province of planning officials.

4.5.2 Admiral Cockburn Land & Sea National Park

The Admiral Cockburn Land & Sea National Park (ACLSNP) is located on the Island of South Caicos, Turks & Caicos Islands, and comprises some 1,185 acres. It has excellent wall diving and representative coral reef ecosystems, and seagrass beds.

ACLSNP was established under the authority of the National Parks Ordinance of 1975 (as amended by Ordinance 10 of 1989 and 12 of 1992). Actual designation was made under the National Parks Order of 1992 and activities within the Park are governed by the National Parks Regulations 1992. Management of the park resides solely with the Department of Environmental and Coastal Resources (DECR), which has an office overlooking the park.

There is some evidence that this accident of proximity has assisted in the regulatory effort in that the office discourages blatant breaches of the regulation and gives a sense of on-site presence of the park management. Public participation is encouraged in the operation of the park and it is commonplace for citizens to call in infractions. Some areas have already been zoned for specific uses, i.e., swimming areas have been demarcated, and moorings have been installed for scuba diving and snorkeling.

In spite of these successes the ACLSNP receives a designation of **low-moderate** level of management. Current ability to meet the basic conservation needs are offset by several considerations that point to systemic vulnerability to deal with future more intensive usage of the park.

- As with PALSNP and CSNP, the ACLSNP was not established in response to any international environmental obligations.
- There are no ACLSNP dedicated staff; management of the park is dependent upon the pooling and sharing of human resources with other protected areas.
- Funding comes exclusively from government; and proposed revenue to be earned from the usage of the park will go into the consolidated fund.
- Enforcement powers reside with the DECR Officers. Whilst at present there is generally a quick response to enforcement calls, this is largely a result of the accident of proximity of the office to the park.
- No management plan or MPA specific objectives have been drawn up for the park.

4.5.3 Chalk Sound National Park

The Chalk Sound National Park (CSNP) is, like PALSNP, located in the Island of Providenciales in the Turks & Caicos Islands. This a low-use MPA, whose most prominent feature is the considerable residential development that has been allowed pursuant to the power given under the National Parks Ordinance of 1975 to ‘make a

grant of development permission for the erection … of buildings'. Management of the park resides with the Department of Environmental and Coastal Resources (DECR).

CSNP has been classified as **low** management. This gives no indication of whether the park is failing to meet its objectives, simply that it has a very restricted level of management. The research demonstrates that that level of management is sufficient to protect the park at this time from the minimal levels of activity taking place there. What is difficult to assess is whether the broad regulatory framework will be adequate to management functions when the levels of uses intensifies. In the long term, several factors give cause for concern and will have to be taken into account.

- As with PALSNP, international environmental obligations played no rule in the establishment of the Park.
- The express power in the Governor to allow for residential development in the Park, without, apparently, recourse to the Park management. The Director of Planning categorized the residential development within CSNP as having a low impact and therefore posing no harm to the biodiversity, ecosystems or general good health of the park. But decades earlier, scientists had warned that the flushing rate within the park was extremely poor and had strongly recommended preservation of the entire area with a narrow surrounding buffer zone in which no development should be permitted.
- There is no management plan, nor is there an on-site manager.
- Enforcement functions carried out by the DECR, which responds to calls by concerned citizens rather than engage in regular patrolling.
- Further development of the management infrastructure and involvement of the general public will clearly be needed with increased future usage of the park.

5 PART 5: CONCLUSIONS AND RECOMMENDATIONS

A sound legal and policy framework is indispensable for the successful implementation of marine protected areas. The regulatory framework may assume a variety of forms applicable to country specific legal environments. Progressive and appropriate frameworks do, however, possess some common features. By contrast, the absence or under-representation of these features constitutes constraining factors to the functionality of marine protected areas.

In summary, these are as follows:

1. Legislative response to or co-ordination with international norms for the designation and protection of marine protected areas. In particular, legislation should specifically provide for the implementation, where appropriate.

2. Generic legislative and policy formulations that allow for the designation of marine protected areas throughout the entire country, as appropriate, together with the elaboration of basic regulations that will apply within all such designated areas.

3. Design structures should ensure the protection of ecologically related watershed areas upland so to protect against the introduction of terrestrial sources of pollutants and contaminants. Consideration should be given, where appropriate, to the creation of buffer zones as is provide for in some of the international agreements to which Caribbean states are parties.

4. Flexibility in adopting and adapting the general regulatory framework to site-specific features and conditions.

5. Development of a legally binding management plan, which particularizes clear and achievable objectives, and which establishes specific rules for the guidance of administrative action.

6. Provision of adequate penalties for breach of rules and incentives for compliance; the incentive might take the form of public education and awareness of the communal benefits of a properly managed marine area.

7. Possession or access to adequate material and human resources.

8. On-site management.

9. Special enforcement agencies and the organization of regular monitoring, quick response to infractions, and the holding of offenders to account, ultimately through the criminal justice system.

10. Meaning public participation in all aspects of park management including acceptance of international convention, drafting of legislation, development of management plan, range and severity of penalties.

11. Devolution of state power in co-management arrangements involving public and private sector stakeholders. Important features of co-management arrangements may be found in Fisheries legislation throughout the OECS and in NEPA arrangements in Jamaica.

12. Adequate funding for all aspects of MPA management.

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