



BRITISH VIRGIN ISLANDS PROTECTED AREAS SYSTEM PLAN 2007-2017



APPROVED JANUARY 2008

Approval of this Document

Acceptance of this document by Cabinet was conveyed by letter on the 8th of January, 2008 where all areas proposed as shown on pages 29 – 60 were declared as Protected Areas.

The Plan was subsequently tabled at the Seventh Sitting of the First Session of the First House of Assembly of the Virgin Islands on the 6th of March 2008 at the House of Assembly Chamber, Road Town, Tortola, Virgin Islands, U.K.

Acknowledgement: This document was prepared with the assistance of the Island Resources Foundation under the Skills Enhancement and Strategic Planning “Sandy Cay III” Project. This Plan was prepared under the general guidance of the Director of the National Parks Trust, Mr. Joseph Smith-Abbott, with the able assistance of Mrs. Esther Georges and Mrs. Nancy Woodfield Pascoe.

The National Parks Trust extends its appreciation to the Conservation and Fisheries Department and the Town and Country Planning Department for their participation in this process.

For bibliographic purposes this document may be cited as:

Gardner, Lloyd. 2007. British Virgin Islands Protected Areas System Plan 2007-2017. BVI National Parks Trust. Tortola. January 4, 2007.

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ACRONYMS

BVI	British Virgin Islands
CBD	Convention on Biological Diversity
CFD	Conservation and Fisheries Department
DPU	Development Planning Unit
ECNAMP	Eastern Caribbean Natural Areas Management Programme
IRF	Island Resources Foundation
IUCN	IUCN-The World Conservation Union
MEA	Multilateral Environmental Agreement
MPA	Marine Protected Area
NGO	Non-Governmental Organisation
NIDP	National Integrated Development Plan
NIDS	National Integrated Development Strategy
NPT	National Parks Trust
OECS	Organization of Eastern Caribbean States
OTEP	Overseas Territories Environment Programme
SOP	Standard Operating Procedure
SPAW	Specially Protected Areas and Wildlife
SRO	Statutory Rules and Orders
TCPD	Town and Country Planning Department
TNC	The Nature Conservancy
UNEP	United Nations Environment Programme
USVI	U.S. Virgin Islands
WCPA	World Commission on Protected Areas

THE BRITISH VIRGIN ISLANDS PROTECTED AREAS SYSTEM PLAN 2007-2017

1. INTRODUCTION

A protected area is defined as “*an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means*” (IUCN 1994).

The first protected areas in the British Virgin Islands (BVI) were declared under the Protection of Trees and Conservation of Soil and Water Ordinance (CAP 86, 1954). However, it wasn't until the promulgation of the National Parks Ordinance (1961) and the Marine Parks and Protected Areas Ordinance (1979) that national parks and marine parks were designated.

Furthermore, the National Parks Ordinance (1961) established the National Parks Trust (NPT) for the express purpose of managing protected areas, and introduced the concept of a system of protected areas.

The first system plan for parks and protected areas in the British Virgin Islands (BVI) was prepared in 1981, with the assistance of the Eastern Caribbean Natural Areas Management Programme (ECNAMP). ECNAMP also assisted with the preparation of the second report in 1986. Subsequent work on the revision of the policy framework for protected areas management has led to the promulgation of the National Parks Act 2006.

This Protected Areas System Plan provides the policy framework for the management of protected areas in the British Virgin Islands (BVI). It provides:

- ◆ A statement of the goals for the system of protected areas;
- ◆ An articulation of the institutional arrangements to be established for protected area management;
- ◆ An articulation of the support systems needed for system development and management during the Plan Period;
- ◆ A clear statement of priorities in protected area management for the next ten (10) years; and
- ◆ A process for evaluating progress in protected area system development over the next five (5) years.

Ensuring that the system of protected areas provides the full range of benefits to the current and future generations of BVI Islanders require the cooperation and active participation of relevant institutions and groups in the public, private, and civil society sectors, as well as the general public.

1.1 Reasons for Preparation of the System Plan

Since the preparation of the first system plan in 1981, the complexity of protected area management has increased, as protected areas have become a larger part of national development, resulting in greater emphasis on system planning.

A system plan provides strategic guidance on the mechanisms and procedures for managing protected areas, including the mechanisms for coordinating protected areas planning with other development planning processes.

To facilitate the system planning process, IUCN-The World Conservation Union in 1998 produced a guide on protected area system planning. The reasons for adopting a system approach to protected area planning (Davey 1998) were given as:

- ◆ To relate protected areas to national priorities, and to prioritise different aspects of protected area development;
- ◆ To facilitate access to international and national funding, by defining priorities for investment in protected areas and increasing the level of confidence in the efficient use of funds and resources.
- ◆ To get away from a case by case, ad hoc, approach to resource management decision making;
- ◆ To target proposed additions to the protected area estate in a more rational and persuasive manner than ad hoc planning;
- ◆ To facilitate integration with other relevant planning strategies, such as those for national tourism, national biodiversity conservation, or sustainable development;
- ◆ To help resolve conflicts, assist in making decisions relating to trade-offs, clarify roles and responsibilities of different stakeholders, and facilitate diverse stakeholder involvement;
- ◆ To provide a broader perspective for addressing site-specific issues, such as tourism management;
- ◆ To enhance the effectiveness and efficiency of the way in which budgets are developed and spent;

- ◆ To assist in meeting obligations under international treaties;
- ◆ To assist countries to be more proactive in conservation management, and in developing effective protected area systems;
- ◆ To encourage consideration of a "system" which incorporates formal protected areas and areas outside of protected areas;
- ◆ To provide a structured framework for a system of protected areas, ranging from areas managed for strict conservation to areas managed for a range of conservation and appropriate ecologically-sound activities;
- ◆ To assist protected area agencies to build political support for protected areas as a worthwhile concern;
- ◆ To define a better process of decentralisation and regionalisation of protected area activities, resources and responsibilities, including the involvement of NGOs and the private sector; and
- ◆ To foster transboundary collaboration.

In the case of the BVI, system planning is required by legislation and policy, but in the past has focused on the operations of the National Parks Trust (NPT), the lead institution for protected areas system management. However, a more comprehensive approach to protected area planning is required, due to:

- ◆ The growing dependence of tourism on protected areas;
- ◆ The increased complexity of protected areas management;
- ◆ The management of protected areas by institutions other than the National Parks Trust;
- ◆ The increased linkage between the governing legislation for protected areas management and other legislation; and
- ◆ Increased focus on obligations under a number of regional agreements and multilateral environmental agreements.

Based on the above, this System Plan (2007-2017) shows a departure from the previous plans, focusing less on the operations of the National Parks Trust and the sites, and more on the strategic issues (Appendix 1), in particular the linkages with other national development strategies, as well as the institutional framework for system development and management.

1.2 Legislative and Other Authority for Plan Preparation

The preparation of a protected area system plan is mandated by Section 13 of the National Parks Act 2006 (Appendix 2).

The policy support for protected area system planning was established in 1980, when the Government of the British Virgin Islands requested the assistance of the Eastern Caribbean Natural Areas Management Programme in the identification of marine areas for inclusion in the system of national parks and protected areas. That study resulted in the preparation of the first “System of Marine Parks and Protected Areas for the British Virgin Islands” in 1981.

That policy requirement continues with the current BVI Government, which has stated that strategic planning for protected area management is a priority activity. This was confirmed by the Government placing the protected areas legislative and strategic planning items on the Legislative Agenda for 2003-2007, and following with the promulgation of the National Parks Act 2006.

1.3 Process Used for Plan Preparation

The preparation of this System Plan involved the inputs of several individuals and institutions working in a collaborative manner. The process was initiated as a review of the previous System Plan. This review, conducted by the Associates of the Island Resources Foundation (IRF) and the BVI National Parks Trust, resulted in the decision to establish the focus of the plan at the level of the broader system framework, and to restrict detailed site development issues to the site management plans.

The structure, proposed content, and objectives were then discussed during a seminar held in Tortola on May 20-21, 2004. In addition to the staff of the NPT, seventeen (17) individuals from eleven (11) institutions participated in the seminar. This system planning seminar was used primarily for obtaining agreement on the objectives of the protected areas system, as well as exploring potential institutional arrangements to support the further development and management of the system.

The agreements reached in the May 2004 seminar were used to guide the drafting of this Plan. The main elements of the first draft of the system plan were discussed during an inter-agency consultation held on March 16, 2006, in which fifteen (15) persons from six (6) institutions participated.

Following NPT internal review of the draft Plan, it was approved for public review by the Board of Directors of the NPT, and distributed to the general public in January 2007.

Four (4) public meetings, one each on Anegada, Jost van Dyke, Tortola, and Virgin Gorda, were held during the period January 16-19, 2007 to facilitate public input to the final document.

This System Plan was approved by the Board of Directors of the BVI National Parks Trust on January 24, 2007.

2. OBJECTIVES OF THE SYSTEM OF PROTECTED AREAS

The goals and objectives for the protected area system articulated in the 1981 System Plan were considered to be still relevant to the current development goals of the British Virgin Islands (BVI). As such, the overall goal for the protected areas System Plan for the period 2007-2017 is *“To manage important natural and historical resources in ways that will contribute to an improvement of the quality of life of BVI residents”*.

The specific objectives are to:

- (a) Maintain vital natural areas that are:
 - i. Important to the productivity of commercial species and other valuable wildlife.
 - ii. Essential to the protection of endangered species, such as turtles, and to the life patterns of other critical species, such as seabirds;
 - iii. Important to retaining representativeness and diversity of the Territory’s natural heritage.
- (b) Maintain areas that are physiographically, geologically or otherwise aesthetically unique as sources of attraction, recreation, education and research.
- (c) Maintain and utilize historical resources, such as wrecks, for recreation and study.
- (d) Maintain, where possible, economic uses such as fishing and tourism under the guidance of proper resource management.
- (e) Provide for the continued growth of economic and recreational opportunities in a manner that can be sustained by available resources.
- (f) Encourage public understanding and enjoyment of the resources contained within protected areas.

The above objectives support the sustainable development goals of the British Virgin Islands through the contribution of protected areas to economic, conservation, and social development strategies.

GOAL 1: CONSERVATION

To preserve the natural and historical heritage of the British Virgin Islands, as represented by its biodiversity, scenic landscapes and seascapes, historic buildings, ship wrecks, and gardens, by:

- Preserving major representative stocks or areas of biological resources, including populations of indigenous and endangered flora and fauna, and natural communities.

- Protecting and enhancing unique ecosystems that are fragile or threatened by human activities.
- Protecting natural areas that are important for the production of important species of flora and fauna.
- Preserving historical resources that are important for the continued expression of the culture of the British Virgin Islands or for educational purposes.

GOAL 2: ECONOMIC DEVELOPMENT

To expand and diversify the role of the natural resource base in the economy of the British Virgin Islands, by:

- Improving and sustaining the livelihoods of residents by protecting and increasing their earning capacity.
- Protecting the supply and quality of the natural resources that support economic activities.
- Promoting resource harvesting and land management practices that maintain the integrity of the natural resource base.
- Conducting research into improved methods of resource utilization.
- Ensuring that the protected areas system contributes to the sustainability of the other economic sectors to the greatest extent possible without degrading the resources protected by the system.

GOAL 3: SUSTAINABLE RESOURCE USE

To protect natural resources and ecosystems that provide a range of goods and services, by:

- Protecting forests, wetlands, coral reefs, and other important ecosystems that provide important commercial resources, such as fish, water, and other goods and services.
- Protecting and enhancing natural systems and resources that reduce the impact of natural disasters.
- Facilitating research in techniques for sustainable resource uses.

GOAL 4: RECREATION

To provide recreational opportunities to maintain and improve the quality of life for residents and visitors, for present and future generations, by:

- Promoting recreational opportunities for residents and visitors that are compatible with the objectives of sustainable resource use.
- Protecting natural areas to meet the public demand for recreational opportunities.

- Promoting appreciation of historical resources by providing opportunities for interpretation and enjoyment of those resources.
- Protecting outstanding scenic vistas, landscapes, and seascapes.

GOAL 5: EDUCATION AND COMMUNITY ENGAGEMENT

To improve understanding of the life-supporting processes and other benefits provided by natural ecosystems, by:

- Preserving natural ecosystems and providing opportunities for ecological and other scientific research.
- Providing opportunities for environmental education.
- Promoting appreciation of historical resources.
- Providing opportunities for research on the socio-economic impact of protected areas on local communities.
- Providing for the participation of interested groups and individuals in protected area planning and management.
- Demonstrating that protected areas generate improved livelihoods and other social benefits for local communities.

2.1 Types of Protected Areas

There are several laws in the BVI that include provisions for the protection of natural and cultural resources, as well as the designation of protected areas (Section 3.1). The variability in the management objectives for these protected areas was noted in the 1986 System Plan, and the adoption of the management categories developed by IUCN-The World Conservation Union (IUCN 1994) was recommended.

In an effort to adopt the IUCN management categories as the official framework for protected areas management in the BVI, nine (9) categories of protected areas are described in the BVI National Parks Act 2006 (Appendix 3). These 9 categories (summarized below) are added to the other categories created under other laws to form the BVI system of protected areas. This ensures that the national system is not only logical, but is also understandable by internal and external institutions, as well as being consistent with internationally accepted approaches. This consistency with international norms is important in meeting the BVI's international environmental obligations.

Strict Nature Reserve (Equivalent to IUCN Category Ia)

Shall be an area of land and/or sea of high natural quality in an unmodified or slightly modified state possessing outstanding or representative ecosystems, features or species and large enough to ensure preservation of the area's natural integrity for present and future generations, to be managed in this state in perpetuity. The conservation and

management objectives are to preserve habitats, ecosystems and wildlife species in as undisturbed state as possible while maintaining biodiversity and established ecological processes, and to secure examples of the natural environment primarily for scientific study and research, environmental monitoring, and science education.

Wilderness Area (Equivalent to IUCN Category Ib)

Shall be an area of land and/or sea of high natural quality in an unmodified or slightly modified state possessing outstanding or representative ecosystems, features or species and large enough to ensure preservation of the area's natural integrity for present and future generations, to be managed in this state in perpetuity. The primary conservation and management objectives are to protect and preserve a natural wilderness condition, maintain biological diversity and essential ecological processes, and provide for carefully managed public access consistent with maintaining the wilderness qualities of the area for present and future generations.

National Park (Equivalent to IUCN Category II)

Shall be a natural area of land and/or sea containing a representative sample of major natural regions, features, or scenery, or where wildlife, habitats, or surface features are of special significance and are not materially altered by current human occupation or exploitation, to be maintained in perpetuity with the following conservation and management objectives:

- (a) To protect natural and scenic areas of national and international significance for spiritual, scientific, educational, recreational, or tourism purposes;
- (b) To protect, in as natural a state as possible, representative samples of major physiographic regions, biotic communities, genetic resources, and species for ecological stability and diversity;
- (c) To manage visitor use for inspirational, scientific, educational, recreational, or cultural purposes at a level which will maintain the area in a natural or near natural state;
- (d) To eliminate and thereafter prevent exploitation or occupation harmful to the purposes for which the area was declared; and
- (e) To take into account the needs of indigenous people, including subsistence resource use, in so far as that use does not adversely affect the conservation objectives of the area.

Natural Monument (Equivalent to IUCN Category III)

Shall be a unique area of land and/or sea containing one or more natural, or natural and associated cultural, feature of outstanding value because of its inherent rarity, representative or aesthetic qualities, to be managed to protect or preserve in perpetuity the special feature or features, and to provide opportunities for scientific research, education and public appreciation to the extent consistent with its conservation objectives.

Habitat or Species Management Area (Equivalent to IUCN Category IV)

Shall be an area of land and/or sea that serves an important role in the protection and survival of wildlife, where the protection of wildlife habitat is essential to the well-being of nationally or locally-important wild plants or to resident or migratory wild animals, and where specific human manipulation and active intervention are required to ensure maintenance of such habitats or to meet the habitat requirements of specific species or both, and such areas may incorporate breeding and nesting areas, wetlands, coral reefs, estuaries, grasslands, forests or spawning areas including marine feeding beds.

Protected Landscape or Seascape (Equivalent to IUCN Category V)

Shall be an area of land and/or sea where the interaction of people and nature over time has produced a distinctive character with significant aesthetic, ecological or cultural heritage value and often with high biological diversity, where management aims to maintain and support this harmonious interaction of people and nature by preserving and promoting:

- (a) The diversity of the landscape, habitat and associated species;
- (b) Places of cultural heritage significance that are an integral part of the area's character;
- (c) Lifestyles and economic activities including fishing when in harmony with the character of the area; and
- (d) Opportunities for scientific research, education and public enjoyment compatible with the conservation objectives of the area.

Managed Resource Area (Equivalent to IUCN Category VI)

Shall be an area of land and/or sea large enough to absorb sustainable resource uses without detriment to its long-term natural values, to be managed to ensure long-term protection and maintenance of biological diversity while providing a sustainable flow of natural products and services to meet community needs.

Urban Park

Is a relatively small area that may be significantly altered from its natural state, where management is primarily for aesthetic, educational, scientific or recreational purposes, including the preservation, display and propagation of wild plant collections in botanical gardens or wild animal collections in zoological parks.

Historic Site

Shall be of national importance for its historic and cultural values and not otherwise associated with a natural site established under this Act, where management is primarily for the conservation of the historic and cultural features of the site and any objects located therein, and where visitor use, educational activities, and scientific research and monitoring may be authorised so long as compatible with preservation of the site's historic and cultural values.

However, the BVI National Parks Act 2006 does not extend its authority to the other legislations that authorize the establishment of protected areas, but which are not managed by the BVI National Parks Trust (NPT). As such, the work of consolidating all nationally-designated protected areas into the IUCN system of management categories will be continued during this Plan Period (2007-2017). Other types of protected areas created by BVI laws include:

- Bird Sanctuaries;
- Forest Reserves;
- Water Areas;
- Fisheries Management Areas (protected and priority areas); and
- Environmental Protection Areas.

The BVI system of protected areas contains sites of international importance, and thus may also receive international designations under relevant multilateral environmental agreements, particularly:

- Convention concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention);
- Convention on Biological Diversity (CBD);
- Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention); and
- Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (Cartagena Convention), Protocol Concerning Specially Protected Areas and Wildlife (SPA Protocol).

One site currently registered as a site of international importance is the Western Ponds of Anegada, designated as a Ramsar Site.

3. POLICY FRAMEWORK

The policy framework for protected areas management in the British Virgin Islands (BVI) is based on a number of statutes and policy directions. The policy framework can be divided into three basic categories:

- (a) Laws and policies that are developed primarily for protected area management;
- (b) Laws and policies that have indirect impacts on protected areas management (such as public health laws); and
- (c) Policies and programmes that link protected areas to the other sectors and the general BVI development process (such as land use planning and tourism).

The policy directions for protected area management in the BVI are contained in the following policy documents:

- (a) **Parks and Protected Areas System Plans, 1981 and 1986** – Presented the rationale, proposed sites, and recommended site selection criteria for the system of protected areas.
- (b) **National Integrated Development Plan (NIDP) 1999-2003** – Directs that future development must be undertaken in harmony with the environment in order to ensure sustainability of that development. In that context, the NIDP treats environmental management as part of the overall development strategy for the Territory.
- (c) **Environmental Charter of the British Virgin Islands, 2001** – The Charter is comprised of a number of Guiding Principles for action, and commitments by the Government of the United Kingdom and the Government of the British Virgin Islands. Specifically, Commitment No. 2 on the part of the Government of the BVI requires the government to *“Ensure the protection and restoration of key habitats, species and landscape features through legislation and appropriate management structures and mechanisms, including a protected area policy, and attempt the control and eradication of invasive species.”*
- (d) **Overseas Territories Environment Programme (OTEP)** – The projects implemented under this programme are designed to contribute to the implementation of the Overseas Territories Environmental Charter.

The Environmental Charter (2001) also mandates the Government of the BVI to address its obligations under multilateral environmental agreements (MEAs). MEAs of relevance to protected areas management include (Appendix 4):

- Ramsar Convention;
- Cartagena Convention, SPAW Protocol;
- World Heritage Convention;
- Bonn Convention;
- Biodiversity Convention;

- Organisation of Eastern Caribbean States (OECS) St. Georges Declaration; and
- UN Millennium Development Goals.

3.1 Legislative Basis for Protected Areas Management

The current legislation of the BVI provides for both public and private lands to be included in the system of protected areas. This allows for the inclusion of parts of the main islands or/and entire cays where necessary.

The existing legislation of the BVI has created several categories of protected areas. In addition to the 9 categories identified by the National Parks Act (2006), other categories include Bird Sanctuaries (under the Wild Birds Protection Ordinance, Cap. 98), Forestry Areas and Water Areas (under the Protection of Trees and Conservation of Soil and Water Ordinance, Cap. 86), and Fisheries Protected Areas (under the Fisheries Act, 1997).

(a) National Parks Act, 2006

This Act is the most recent and far-reaching of the legislative instruments dealing directly with protected areas, and repeals the National Parks Ordinance (Cap. 243) and the Marine Parks and Protected Areas Ordinance (Cap. 85). It introduces provisions for the management of historical sites by the National Parks Trust, provides guidance on management planning, and specifically requires the preparation of a protected areas system plan (Section 13(1)).

(b) The Marine Parks and Prohibited Areas Regulations, 1991

The Marine Parks and Prohibited Areas Regulations (1991) were enacted to ensure that marine tourism activities at and around National Parks Trust moorings are conducted accordance with the Marine Parks and Protected Areas Ordinance (Cap. 85). Though the Ordinance has been repealed, the Regulations were retained by Section 82(2) of the National Parks Act, 2006.

(c) Wild Birds Protection Ordinance, 1959

This ordinance provides protection for approximately 31 species of rare or endangered wild birds, their eggs, nests, and young, at any time and under any conditions. An exception can be authorised by the Governor for the purposes of bona fide research. **Bird Sanctuaries Orders** in 1959 and 1997 designated 20 bird sanctuaries, which provide full protection for all species of wild birds (Table 1).

Table 1: Bird Sanctuaries of the British Virgin Islands

Site	Date Declared
Cockroach Island	1959
Little Tobago Island	1959
Cooper Island	1959
Mosquito Island	1959
Deadman's Chest Island	1959
Necker Island	1959
Fallen Jerusalem Island	1959
Peter Island	1959
George Dog Island	1959
Prickly Pear Island	1959
Ginger Island	1959
Round Rock island	1959
Great Dog Island	1959
Saba Island	1959
Great Tobago Island	1959
Salt Island	1959
Little Dog Island	1959
St. Eustatia	1959
The Seal Dogs Island	1959
Flamingo Pond, Anegada	1977
<u>Source:</u> Bird Sanctuaries Order (S.R.O. 20/1959)	
<u>Source:</u> Bird Sanctuary (Flamingo Pond, Anegada) Order (S.R.O. 24/1977)	

(d) **Fisheries Act, 1997**

Under this Act, the Minister may declare a fishing priority area and protected area for the conservation of living aquatic resources. A protected area declared under this Act may contain designated fishing areas. The Fisheries Act also provides for the establishment of marine reserves. Under Section 79 of the Act, fourteen (14) fisheries protected areas (Table 2) were declared by the Fisheries Regulations, 2003 (Statutory Instrument No. 20 of 2003).

Table 2: Fisheries Protected Areas in the British Virgin Islands

Site†	Date Declared	Size (acres)‡
Horseshoe Reef	2003	10,144.8
Hans Creek, Beef Island	2003	119.4
Beef Island Channel	2003	93.9
South Sound, Virgin Gorda	2003	312.8
Taylor Bay, Virgin Gorda	2003	647.9
The Sound, Salt Island	2003	112.8
The Sound (which includes Wedgeo Bay), Ginger Island	2003	62.5
Dead Chest (falls within the Wreck of the Rhone Marine Park)	2003	326.9
Big Reef, Peter Island	2003	362.1
Green Cay, Jost Van Dyke	2003	38.4
Money Bay, Norman Island;	2003	79.8
Santa Monica Rock, South West, off Norman Island	2003	10.4
North Bay, Guana Island	2003	70.7
Frenchman's Cay	2003	23.5
† Source: Fisheries Regulations, 2003 (Statutory Instrument No. 20 of 2003)		
‡ Source: National GIS		

(e) **Protection of Trees and Conservation of Soil and Water Ordinance, 1954**

This Ordinance provides for the declaration of protected areas for the prevention of deforestation, soil erosion and for the protection of watersheds, and prohibits grazing livestock or earthmoving in such areas, including private lands, without a license.

Enforcement is the responsibility of the Chief Agricultural Officer and any others so designated by the Governor.

This Ordinance enables the Governor, in Council, to declare any tree or land to be protected for the following purposes:

- To maintain and preserve protected trees;
- In the case of a forestry area, to prevent deforestation of land on steep slopes and soil erosion; and
- In the case of a water area, to maintain water supplies and to prevent siltation and pollution of water supplies.

Statutory Rules and Orders made under this Ordinance have established seven (7) protected areas (Table 3).

Table 3: Forest and Water Protected Areas

Site	Date Declared	Size (acres)
Sage Mountain Forestry Area†	1955	N/A
Belle Vue Water Area‡	1963	N/A
Morning Rose Spring Water Area‡	1963	N/A
Purcell Water Area‡	1963	N/A
Harrigan and Long Bush Water Area‡	1963	N/A
Great Mountain and Gordon Water Area‡	1963	N/A
Joe's Hill, Albions and Nibbs's Estate, Sea Cow Bay Water Area‡	1963	N/A
† <u>Source</u> : SRO No. 8 of 1955		
‡ <u>Source</u> : SRO No. 4 of 1963		

(f) **Physical Planning Act, 2005**

This Act repeals the Land Development (Control) Ordinance (Cap. 241) and the Land Development (Control) (Validation) Act, 1992.

The Act provides for the orderly and progressive development of land, and requires review by the Planning Authority of any plans for development or subdivision. The legislation also offers protection against inappropriate development of private lands within or adjacent to designated protected areas. This Act extends protection for natural heritage beyond the provisions of the previous legislation, by making provision for the declaration of environmental protection areas to protect a range of natural features.

There are a number of sites that have dual designations under laws managed by the Conservation and Fisheries Department (CFD) and National Parks Trust (e.g. Dead Chest is both a Fisheries Protected Area and a Marine Park). Such issues, and any potential conflict, need to be resolved. Initiatives to resolve these issues and integrate the protected areas declared under the various laws include:

- (a) CFD workshop in February 2005 focused on the implementation on the Fisheries Act of 1997 and Regulations of 2003.
- (b) An agreement between the NPT and CFD to cross-reference the existing fisheries protected areas and the proposed system of marine protected areas.
- (c) The system of marine protected areas that was designed as part of the Overseas Territories Environment Programme (OTEP) project (2004-2006) seeks to integrate all marine protected areas declared under the various laws.

4. INSTITUTIONAL FRAMEWORK

The current laws of the British Virgin Islands (BVI) provide for the management of the protected areas by a number of public sector agencies (Appendix 6). These agencies are engaged in a range of functions, from policy making to day to day management of the sites, yet they function mostly independently of each other in terms of programme design. Occasional conflicts in site delineation and programmatic strategies underscore the need for increased levels of coordination between the relevant agencies.

Additionally, a number of private firms and civil society institutions use, or influence the use of, protected area resources. As such, effective management of the protected areas system requires efficient partnerships among the various institutions and sectors.

4.1 Roles and Responsibilities

National Parks Trust (NPT)

The National Parks Trust (NPT) is legally responsible for management of the protected areas system. Currently, the NPT develops policy and undertakes management activities only for the 20 sites that it directly manages (Table 4). The NPT has prepared management plans for 5 of the sites for which it has responsibility. The number of management plans available will increase during the 2007-2017 Plan Period, as the NPT is currently engaged in management planning for a number of other sites, such as the Greater Baths Management Unit and the Botanic Gardens. The Trust has also developed a standard guide for preparation of future management plans.

The NPT works with a number of other institutions in the discharge of its duties (Appendix 6). The collaborative activities range from research to public awareness and the partners are both internal and external institutions. However, based on the discussions of the May 2004 seminar on protected area system planning, the current level of collaboration needs to be improved. Additionally, there is the potential for those partnerships to be broadened and become more formalized in a number of cases.

The NPT will pursue the continued development of partnership arrangements with public, private, and civil society institutions. As part of that process, an annual Protected Areas Forum will be held, starting in 2007. The annual Protected Areas Forum will be the mechanism wherein the protected areas management institutions report to the partner institutions and stakeholders, concerning the state of protected areas in the BVI for the past year. The process will be coordinated by the NPT, who will ensure that a combined report from all the management institutions is circulated prior to the actual event. The Forum will usually take the form of a one-day conference, in which the management

institutions report to the stakeholders, as well as receive feedback on ongoing and planned initiatives. The report (proceedings) of the Forum will be circulated to the participants, and made available to the general public.

Other system development initiatives to be undertaken by the NPT during the 2007-2017 Plan Period include:

- (a) Coordination of national research priorities with respect to the protected areas system. The NPT will work with the other relevant institutions to ensure that research and monitoring conducted in, or adjacent to, protected areas contribute to the management priorities for the protected areas system.
- (b) Assessment of the degree to which the individual units in the system contribute to system objectives, including whether there are gaps in the system.
- (c) Coordination of protected areas reporting to meet national and international obligations.
- (d) Development and management of a data management system for protected areas.
- (e) Assisting other agencies with the preparation of site management plans as appropriate.

Conservation and Fisheries Department (CFD)

The Conservation and Fisheries Department (CFD) manages fourteen (14) protected areas, all fisheries reserves. Traditionally, the CFD does not require the approval or agreement of the NPT to designate protected areas under any of the laws within its control, even though the NPT is responsible for management of the system of protected areas. However, both institutions have an informal agreement, focused primarily on cross-referencing under the various legislation the protected areas designated by both agencies.

The CFD also collaborates with other institutions in discharging its duties (Appendix 6). The CFD will continue to establish protected areas in keeping with its mandate. However, for new protected areas, site assessment, planning, and management will be pursued through a coordinated effort with the NPT.

Department of Agriculture

The Department of Agriculture designates protected areas to protect watersheds, prevent deforestation, and protect water sources. There is currently no programmatic coordination between the Department of Agriculture and the NPT and CFD for protected area management. During the 2007-2017 Plan Period, the Department of Agriculture will increase its capacity for management of protected areas established under its portfolio responsibilities.

Table 4: Protected Areas Managed by the National Parks Trust

Site	Date Established	Size (Acres)	Primary Management Objective
Sage Mountain	1964	86	Sage Mountain is primarily used for tourism and recreation, and the forest is protected for soil and watershed management. The forest is representative of rainforest and Caribbean dry forests on the north and south of the ridge, respectively. The site is a popular visitor attraction, with thirteen hiking trails, lookout tower, and signage.
Spring Bay	1964	5.5	Managed as part of The Greater Baths area, the sand beach and granite boulders provide a popular recreation site for visitors and residents, from yachts and land based sources. The Crawl at Spring Bay was historically utilized as a turtle enclosure.
Devil's Bay	1964	58	Managed as part of The Greater Baths area, the sand beach and granite boulders provide a popular recreation site for visitors and residents, who access the site from The Baths via a connecting trail.
Queen Elizabeth II Park	1974	0.7	Ex-situ botanic garden collections, recreational playground for children, special functions site.
Gorda Peak	1974	260	Extensive area of Caribbean dry forest, endangered species, research, recreation. Watershed management.
West Dog Island	1974	24	Endangered seabird nesting, healthy coral reef with extensive <i>Acropora</i> re-establishment. Declared bird sanctuary.
Fallen Jerusalem	1974	48	Endangered seabird nesting, recreation, unique geological formations similar to The Baths. Declared bird sanctuary.

Site	Date Established	Size (Acres)	Primary Management Objective
Dead Chest	1974	34	Declared bird sanctuary. Managed as part of the RMS Rhone Marine Park, for recreational diving and snorkelling.
Little Fort	1978	36	Historic ruins of a fort, munitions store and gun emplacements.
Botanical Gardens	1979	2.87	Botanical collections of native and introduced species, for plant conservation, education and recreation. Special functions site.
Wreck of the Rhone Marine Park	1980	766	Historic shipwreck of a royal mail steamer. Managed for recreational diving and snorkelling. No fishing is permitted.
Mt. Healthy	1983	1	Historic ruin of a plantation era windmill, education, recreation.
Prickly Pear	1988	180	Mangrove and salt pond systems, recreational use of the beach, turtle nesting. Declared bird sanctuary.
The Baths	1990	6.91	Managed as part of The Greater Baths area, the sand beach and granite boulders are a unique geological formation that represents the most popular recreation site in the BVI for visitors.
Diamond Cay	1991	1.25	Caribbean dry forest, bird nesting, coral reefs.
Great Tobago	1995	210	Endangered seabird nesting: the largest frigate bird colony in the BVI and potentially the Eastern Caribbean. Forested area, coral reef conservation. Research.
Little Tobago	1998	55	Endangered seabird nesting, coral reef conservation.
Cam Bay	1999	19.6	Complete coastal ecosystem of salt ponds, seagrass, mangroves and coral reefs. Recreational site for sailors.
Shark Bay	1999	18.4	Coastal vegetation, unique geological formation called “The Bat Cave”, recreational site for hikers. The only

Site	Date Established	Size (Acres)	Primary Management Objective
			bay on Tortola's north shore with conservation status.
The Copper Mine	2003	31.93	Historic ruins of a 19 th century Cornish copper mine, unique to the West Indies. Recreation site for visitors. Research, education.

Ministry of Natural Resources and Labour

The Ministry of Natural Resources and Labour has oversight responsibilities for the NPT, CFD, and Department of Agriculture. As such, the Ministry determines not only the policy direction and resources allocation for those three agencies, it also determines to a significant extent their operational efficiencies (e.g. personnel matters and media relations). During the 2007-2017 Plan Period, the Ministry of Natural Resources and Labour will work with the three agencies to ensure that there is:

- (a) Greater integration of protected areas programming between the three institutions.
- (b) Increased devolution of oversight responsibility for the NPT to the NPT Board of Directors.
- (c) Continued budgetary support for protected areas management.

Development Planning Unit (DPU)

The Development Planning Unit (DPU) has responsibility for coordination of national planning, and direct responsibility for economic and social planning. The Unit also coordinates project planning through the preparation and monitoring of the Public Sector Investment Programme. The DPU is therefore an important link in the process of articulating the link between the system of protected areas and the national development planning process. More specifically, the role of the DPU in collecting statistical data and maintaining information on environmental indicators suggests that ongoing collaboration between the DPU and the protected areas management institutions is necessary.

BVI Tourist Board

The BVI Tourist Board is largely responsible for tourism product development. Though it has no structure for protected area management, the Tourist Board works with the NPT and CFD to ensure that tourism-related activities within protected areas do not impact negatively on those areas. The Tourist Board has increasingly begun to deploy staff to heavily-used sites, some of which are protected areas, to interact with visitors. The

Tourist Board has also erected signs in a number of protected areas. Other areas of collaboration under discussion include the development of carrying capacity guidelines for sites, the development of standards, and the possibility of some infrastructure development in protected areas.

Police/Customs Department

The Police and Customs Departments routinely work with the NPT and CFD on the enforcement of regulations. There are ongoing discussions concerning the formalization of the relationship between the Departments, in particular the possibility of making wardens an auxiliary unit of the Police.

Town and Country Planning Department (TCPD)

The work of the Town and Country Planning Department with the protected areas management institutions is supported by the provisions of the Physical Planning Act (2005). The Act makes provisions for protected areas development through the allocation of land in the land use planning process, through the establishment of environmental protection areas, and for the orderly development of land and the protection of critical natural and historical resources through the development control process. The preparation of the Wetlands Management Plan for the BVI in 2005 is one example of the collaborative arrangements in place. The TCPD will continue working with the protected areas management institutions to ensure effective protection of critical resources, particularly with reference to development activities adjacent to protected areas.

H. Lavity Stoutt Community College

The H. Lavity Stoutt Community College has faculty and students that routinely conduct research in the natural sciences. The College can therefore make a significant contribution to the management of protected areas through supporting research and monitoring programmes.

Support Groups for the National Parks Trust

Groups, such as the Friends of the Trust, the Copper Mine Committee, and the Flower Show Committee, support the National Parks Trust through fundraising efforts or collaboration in the implementation of specific activities. The NPT will undertake to formalize the inputs of the groups by: (i) reviewing the roles and responsibilities; (ii)

establishing guidelines for modes of collaboration; (iii) establishing priorities for joint programmes of action, and (iv) identifying opportunities for development with the protected areas network.

Civil Society Institutions

Non-governmental organizations (NGOs) currently participate in a number of initiatives focused on general environmental management, but rarely collaborate specifically on protected areas. The National Integrated Development Plan (1999-2003) articulates the need for involvement of non-governmental organisations, community-based organisations, and the general public in the national decision making process for programme formulation and implementation as an important requirement for promoting sustainability and improved governance. During the 2007-2017 Plan Period, the NPT will coordinate an initiative to build support for protected areas, which will include the organisation of the annual Protected Areas Forum.

Private Sector Organisations

Private sector institutions, firms, and individuals will be encouraged to play an increasing role in protected areas management.

The development of a Public Engagement Strategy and Plan (Section 4.2) by the NPT will clarify and focus the inputs of volunteers. For institutions, actions related to surveillance, monitoring, and financing have been identified as potential areas of collaboration. Further collaborative efforts will be explored and formalized during this Plan Period.

4.2 *Institutional Capacity*

Institutional capacity for protected areas management in the BVI should be understood within the context of:

- (a) Capacity for site design, establishment, and long-term management;
- (b) Capacity for system management – institutional coordination, policy development, sustainable financing, development of support systems, risk assessment and management, and other similar tasks; and
- (c) Capacity for system evaluation and forecasting – monitoring, research, gap analysis, data analysis, forecasting, change management, and other methods of assessment.

In the above context, the institutions, individually and collectively, do not currently possess the human resources, expertise, and financial resources to undertake all of the range of tasks necessary to adequately discharge their responsibilities.

The NPT and CFD have benefited from capacity building activities in 2004-2005, primarily training in survey of marine benthic habitats. The addition of greater responsibilities to the NPT, primarily management of the “recreational” mooring buoy system and the management of historic sites, has resulted in the need for a wider range of skill sets in the staff compliment, as well as increased staffing levels.

The Department of Agriculture currently has no staff for the parks unit, and is therefore unable to undertake even its enforcement functions. As such, capacity building support to the Department of Agriculture is also necessary.

More significantly, the proposed reduction in the budgetary support from the government will further constrain the ability of the management institutions. With the planned increase in cruise tourism, and the increasing threats from natural disasters, the vulnerability of the sites and the protected areas system will increase significantly in the medium term, unless the issue of improved institutional capacity is addressed.

Given the above considerations, priorities for institutional arrangements in the 2007-2017 Plan Period include the following:

- (a) Development of coordinating mechanisms for protected areas programming, primarily in policy development, site design, research, monitoring, and data management.
- (b) Full institutional assessment of the NPT, and the development of a more comprehensive institutional strengthening programme for the three protected areas management institutions.
- (c) Development of a Public Engagement Strategy and Plan to provide policy and operational guidance in the development of collaborative relationships with the private and civil society sectors for protected areas site and system management.

5. STATUS OF THE SYSTEM OF PROTECTED AREAS

The BVI National Parks Act 2006 requires the System Plan to “...describe conservation goals and priorities of the system...” and to determine “...how individual areas contribute to these goals and priorities...” (Section 13(2)).

An assessment of the planning and management systems at both system and site levels has not been undertaken to date. An initial assessment in 2004 resulted in the development of the project “Assessment and Improved Management of New and Existing Marine Protected Areas in the British Virgin Islands”, implemented as part of the Overseas Territories Environment Programme (OTEP) Project.

The stated objective of the project, which ran from April 2004 to March 2006, was to:

“Assess the efficacy of the BVI’s existing Marine Conservation Programme (MCP), and develop ways to improve it. The BVI NPT currently has a proposed system of Marine Protected Areas (MPAs) and aims to determine (a) whether these are representative of all marine habitats within the BVI that require protection, especially habitats of critical importance, (b) how well are the MPAs performing and their effectiveness on the marine environment and stakeholder use through the acquisition of baseline ecological data and, (c) what adaptive management practices are required to ensure the Trust’s ability to conserve, manage or restore these key marine habitats? This will also require the creation of a management plan that will integrate scientific data acquired through monitoring for long-term habitat conservation with the daily management activities required for sustainable stakeholder use.”

The OTEP project, and any subsequent related activity, will be considered within the context of the broader protected areas system development and management needs (Sections 5.3, 5.4, 7, 9, & 10).

5.1 Overview of Current Protected Areas System

There are approximately fifty one (51) designated protected areas in the current system of protected areas (Tables 1-4). This includes nineteen (19) national parks (terrestrial), one (1) marine park, fourteen (14) fisheries protected areas, 20 bird sanctuaries (5 of which are also national parks), one (1) forestry reserve (Sage Mountain National Park), and six (6) water areas (Table 1)¹. Of these, twenty (20) sites are managed by the NPT, twenty four (24) by the CFD, and seven (7) by the Department of Agriculture. At sites where there are multiple designations

¹ The numbers do not add up to 51 because some sites carry more than one designation.

the management authority is shared between the NPT and CFD. Such sites are managed on a day-to-day basis primarily by the NPT.

A review of the information gathered during the consultation process provide the following indications of the current status of protected areas in the BVI:

- (a) The health of the natural resources contained in the sites vary, with some sites having fairly healthy ecosystems (e.g. Sage Mountain, Great Tobago, West Dogs) while the resources in others are severely stressed (e.g. The Baths and Wreck of the Rhone).
- (b) The current protected areas system does not include an adequate representation of all ecosystems in the BVI. The mapping of marine benthic habitats in 2004 by the British Overseas Territories Environment Programme (OTEP) Project resulted in a recommendation from the project team that 30% of each marine habitat type be protected. A similar assessment has not been undertaken for the terrestrial environment.
- (c) All institutions with protected area management responsibilities do not currently cooperate in the development of the protected areas system. As such, information on the programmes and resources of management institutions, as well as the status of sites, is not readily available. More importantly, there is no single source of individual information on protected areas in the BVI. The National GIS Technical Steering Committee has discussed the need for the development of a Memorandum of Understanding to formalize the current inter-departmental arrangements for data sharing. Issues of standardisation of data collection and management protocols, access, and national reporting are also to be addressed.
- (d) The linkage between protected areas and other development strategies, such as land use planning and tourism, have been acknowledged, but structured programmes between the protected areas system and these other sectors have not yet been developed. Attempts were made to rationalize similar provisions in the Physical Planning Act 2005. Similarly, discussions have been initiated with institutions in the tourism sector to address issues related to site use and marketing. Those initiatives need to be strengthened and broadened to include other sectors such as agriculture.
- (e) The involvement of civil society in protected area management is limited, focusing primarily on public consultations on specific issues, such as the introduction of the user fee system. Participation in site planning, development, and management is sporadic. Yet, several institutions indicated (during the consultation process for the System Plan) a willingness and ability to participate more consistently and meaningfully. A more structured Public Engagement Strategy and Plan to support both system development and site management will be developed within the 2007-2017 Plan Period.

5.1.1 Integration of Proposed Sites into the System of Protected Areas

The development of the proposed protected area network results from the actual management of approximately 70 named dive sites and areas of environmental concern (to be referred to as marine managed areas) distributed throughout the Territory as part of the NPT Marine Conservation Programme. The management of these areas has been undertaken since 1991. The currently managed marine areas lack formal designation and therefore, the existing legal provisions of the National Parks Act No. 4 of 2006 do not currently apply.

The OTEP project (2004-2006) focused on a survey of marine benthic communities in order to ensure the inclusion and representation of key ecosystems into the Protected Area system. The identification of marine benthic communities to be protected was based on location of the following features:

- Turtle nesting beaches;
- Protected and important seagrass areas;
- Mangrove stands;
- Coral reefs – areas with *Montastrea* species and *Acropora* species; and
- Existing Fisheries Protected Areas and Marine Protected Areas.

The target cover for protection of nearshore ecosystems and habitats is at least 30%. Evidence derived from research suggests that distributed networks of protected areas of moderate size (10-100 km²) and variable spacing should adequately protect and maintain the density and biodiversity of a large proportion of benthic organisms (Halpern and Warner 2003, National Research Council 2001). The exact placement of individual reserves and protected areas accounts for:

- a. Conservation;
- b. Minimization of tourism impacts through active management; and,
- c. Fisheries management.

5.1.1.1 Outcomes of Public Consultations

- A. The options for new marine protected area boundaries were derived through a series of public consultations organized by the National Parks Trust and Conservation and Fisheries Department in 2005-2006. The final proposal for consolidation of marine protected areas is shown by Maps 1-14. The determination of activities within the proposed marine protected areas will be based on:
 1. detailed site planning work;
 2. consultations with local communities; and,
 3. declaration of each site as a particular category of protected area.

- B. The protection of all remaining mangrove stands throughout the Territory (Maps 28-39, see **Appendix 8**) through the designation as Environmental Protection Areas under the Physical Planning Act is essential.
- C. Although coastal development is being sought by local residents, the dunes north of the established Ramsar Site on Anegada (identified in Map 1 as legend number 6) have been identified as an area of environmental sensitivity and therefore, require protection. The area is critical to nesting for the endemic population of *Cyclura pinguis* (Anegada Rock Iguana). A balance between development which does not destroy the habitat of this unique animal and the aspirations of the community will be sought throughout the plan's period through further consultation. A possible tool for protection and the encouragement of controlled development is the designation of the entire area as an Environmental Protection Area under the Planning Act (which will afford opportunities for physical development in a controlled manner) with Protected Area designation being afforded to specific areas with the highest density of recurring nests.
- D. Throughout the consultative process, stakeholder groups including, but not limited to fishermen, dive operators, charter companies, governmental agencies, and tourism sector partners were invited to a series of public meetings where their input was sought on the proposed system of protected areas. Several maps of the proposed network of protected areas were presented for comment. Existing uses of the marine environment across the Territory were documented by the stakeholders on the physical maps presented at the various meetings. The input received from all stakeholders was entered in an unfiltered manner into a map which documented existing resource uses up to the year 2006. The major activities and uses of the marine environment are documented in a series of maps in **Appendix 9**.
- E. Each area within the proposed system of protected areas has been assigned a management category using the information gathered from the stakeholders and the assessment of conservation value attached to the area (Appendix 9 contains all of the maps detailing current use as outlined by stakeholders). For instance, in areas where pre-existing uses included fishing or diving, a management category of protected landscape/seascape may have been prescribed so that multiple uses may be managed along with the protection of the natural resource.
- F. The proposed system of protected areas is demarcated in a series of maps following this section (maps 1 – 14, see Section 5.1.2). Each map has a corresponding table which acts as a legend.

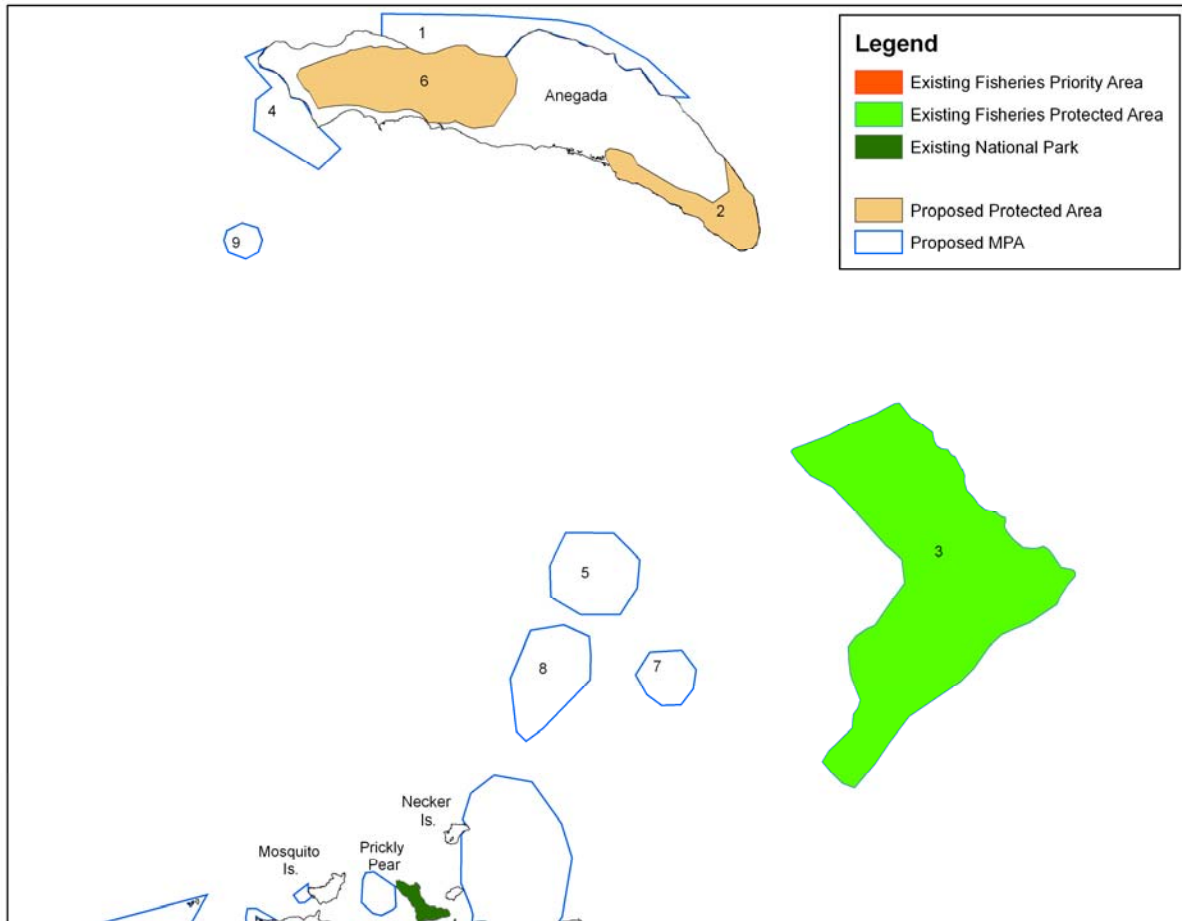
5.1.2 Existing and Proposed Protected System of Protected Areas with Management Categories

The following section represents the proposed system of Protected Areas to be declared under either the National Parks Act, 2006 or the Fisheries Act, 1997.

The proposed system of protected areas is demarcated in a series of maps (maps 1 – 14). Each map has a corresponding table which acts as a legend.

Each area within the proposed system of protected areas has been assigned a management category using the information gathered from the stakeholders and the assessment of conservation value attached to the area (Appendix 9 contains all of the maps detailing use as of 2006, as outlined by stakeholders). It should be noted that the proposal outlines areas for National Park or Fisheries Protected Area status. For instance, in areas where pre-existing uses included fishing or diving, a management category of protected landscape/seascape may have been prescribed so that multiple uses may be managed along with the protection of the natural resource.

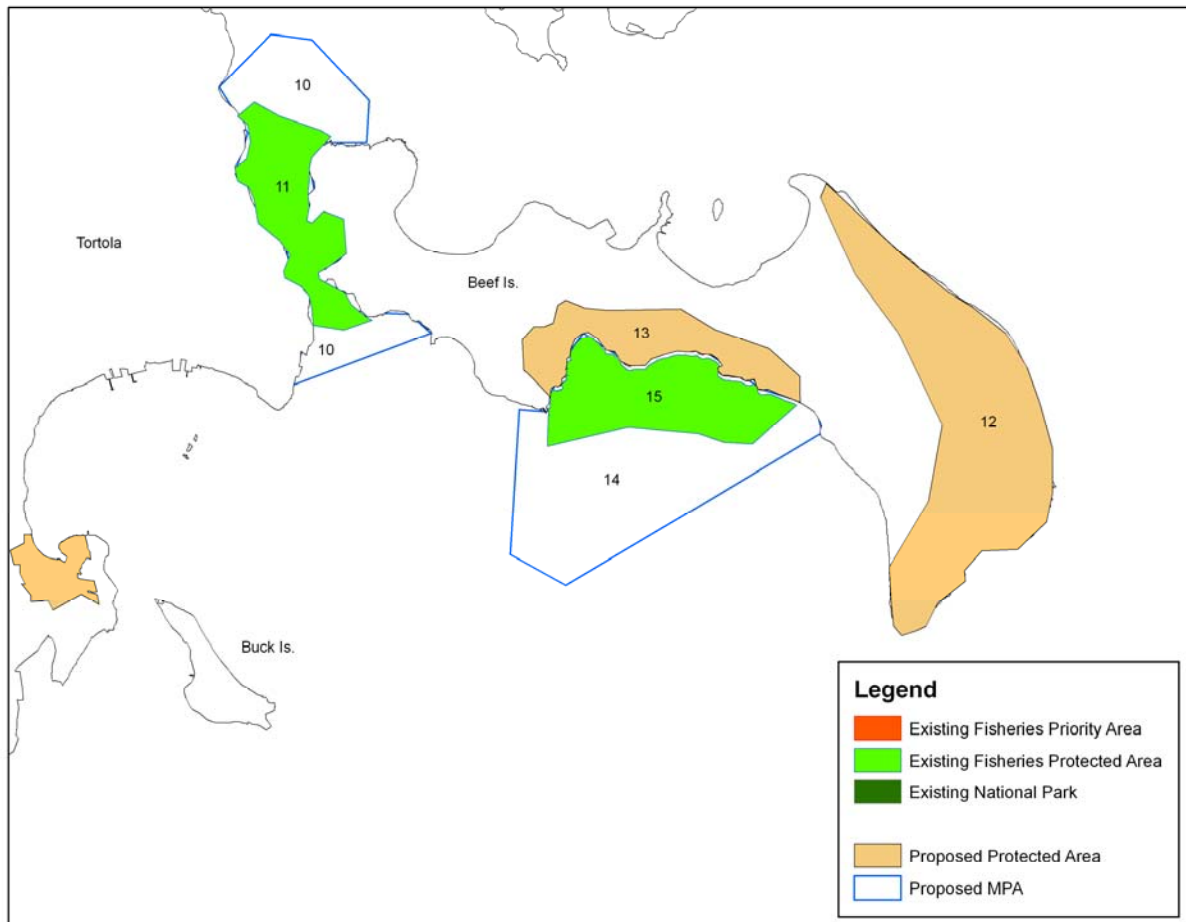
Map 1: Anegada



This table corresponds to areas outlined in Map 1: Anegada

Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
1	Bones Bight to Loblolly	Proposed Marine and Terrestrial Areas	Marine	none	15e	Protected Landscape/ Seascape
2	Eastern Ponds	Proposed Marine and Terrestrial Areas	Terrestrial	Ramsar site	15b	National Park
3	Horseshoe Reef	Fisheries Protected Area	Marine	Fisheries Protected Area		
4	Ruffling to Pomato Point	Proposed Marine Protected Area	Marine	none	15e	Protected Landscape/ Seascape
5	Virgin Gorda north	Proposed Marine Protected Area	Marine	none	15a(i)	Strict Nature Reserve
6	Western Ponds	Proposed Marine and Terrestrial Areas	Terrestrial	Ramsar site	15e	Protected Landscape/ Seascape
7	Virgin Gorda north	Proposed Marine Protected Area	Marine	none	15a(i)	Strict Nature Reserve
8	Virgin Gorda north	Proposed Marine Protected Area	Marine	none	15a(i)	Strict Nature Reserve
9	Anegada south west	Proposed Marine Protected Area	Marine	none	15a(i)	Strict Nature Reserve

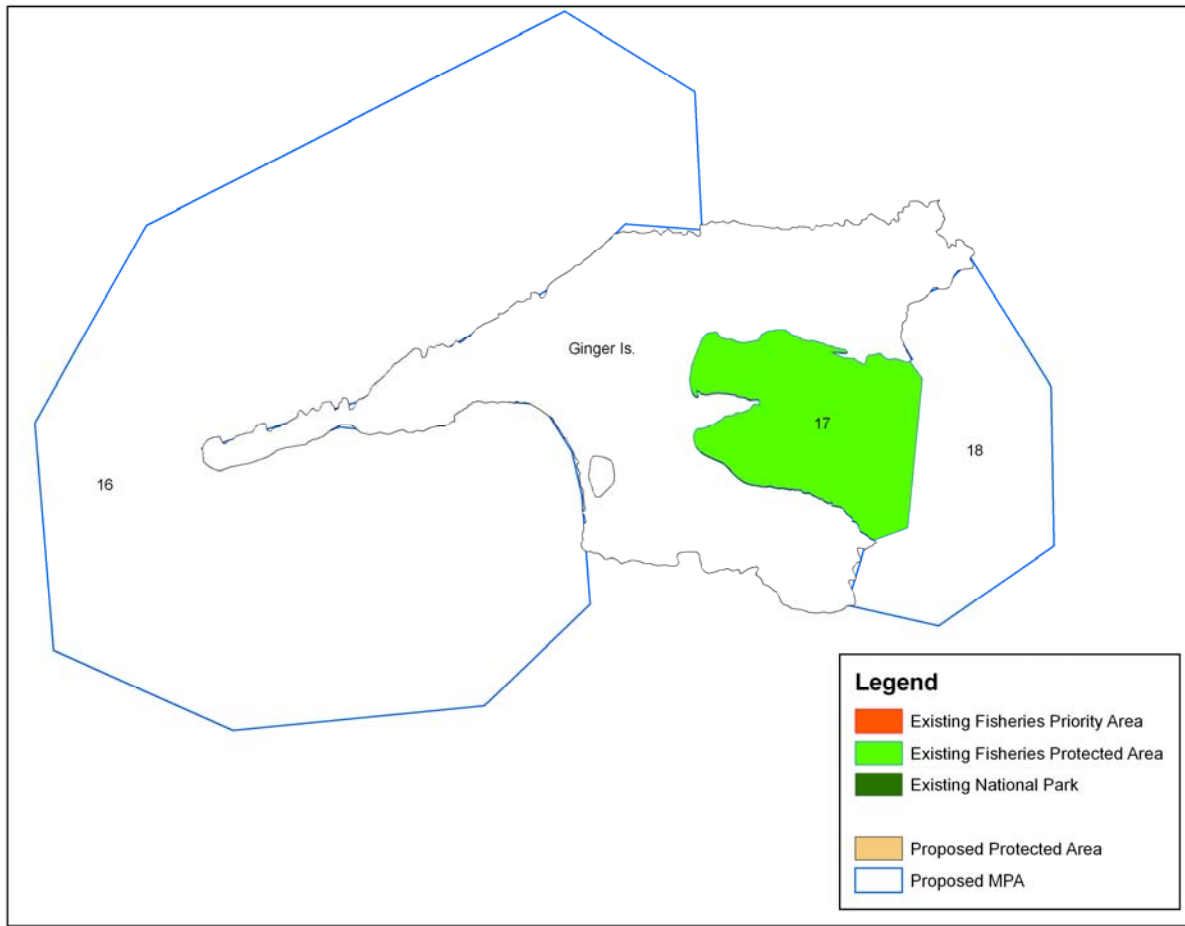
Map 2: Beef Island & Tortola (East)



This table corresponds to areas outlined in Map 2: Beef Island & Tortola (East)

Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
10	Beef Island	Proposed Marine Protected Area	Marine	Fisheries Protected Area	15d	Habitat Management Area
11	Beef Island Channel	Fisheries Protected Area	Marine	Fisheries Protected Area		
12	Great Mountain	Proposed Terrestrial Protected Area	Terrestrial	none	15b	National Park
13	Hans Creek	Proposed Marine and Terrestrial Areas	Terrestrial	none	15d	Habitat Management Area
14	Hans Creek	Proposed Marine and Terrestrial Areas	Marine	Fisheries Protected Area	15b	Marine Park
15	Hans Creek	Fisheries Protected Area	Marine	Fisheries Protected Area		

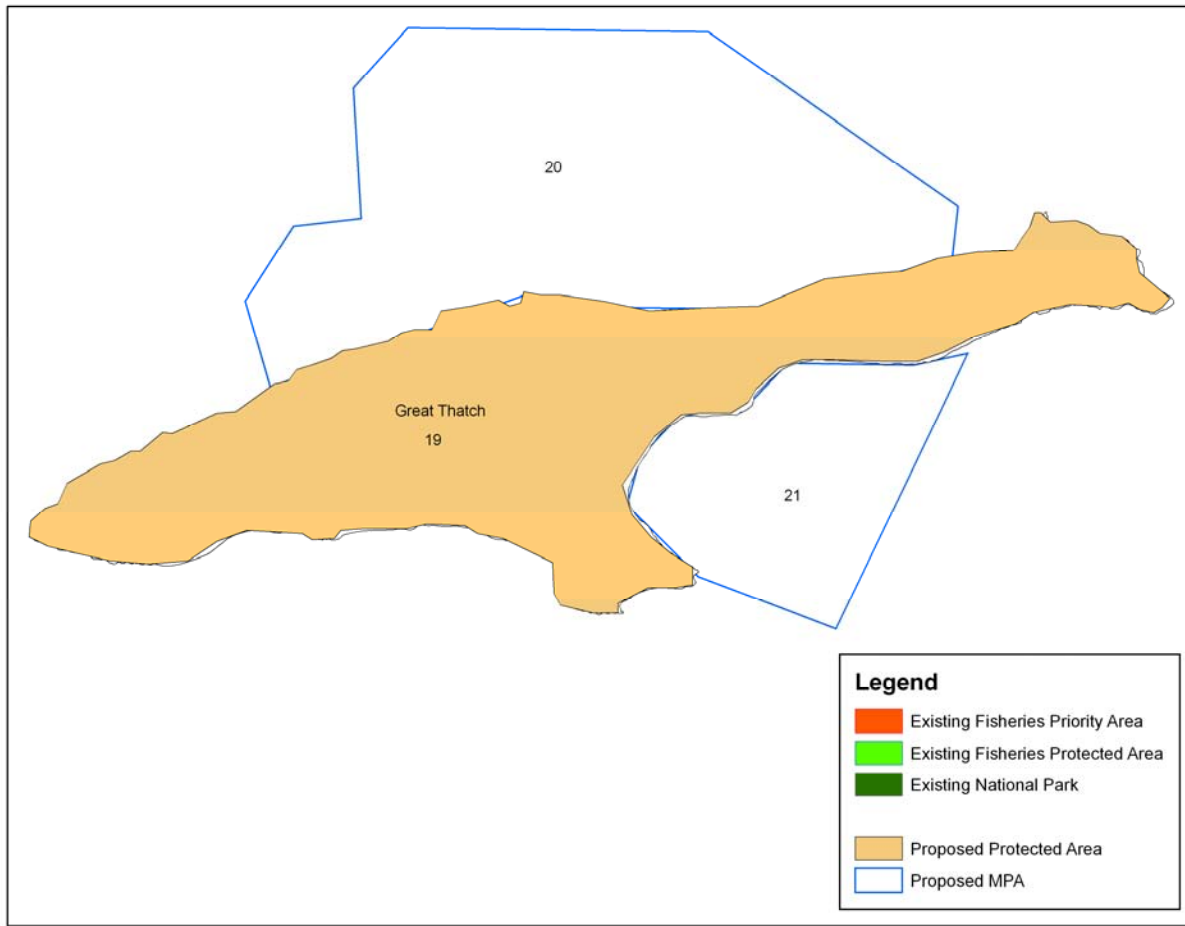
Map 3: Ginger Island



This table corresponds to areas outlined in Map 3: Ginger Island

Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
16	South Bay to Man Hole	Proposed Marine Protected Area	Marine	none	15e	Protected Landscape/ Seascape
17	The Sound (which includes Wedgeo Bay)	Fisheries Protected Area	Marine	Fisheries Protected Area		
18	The Sound, Wedgeo Bay	Proposed Marine Protected Area	Marine	Fisheries Protected Area	15b	Marine Park

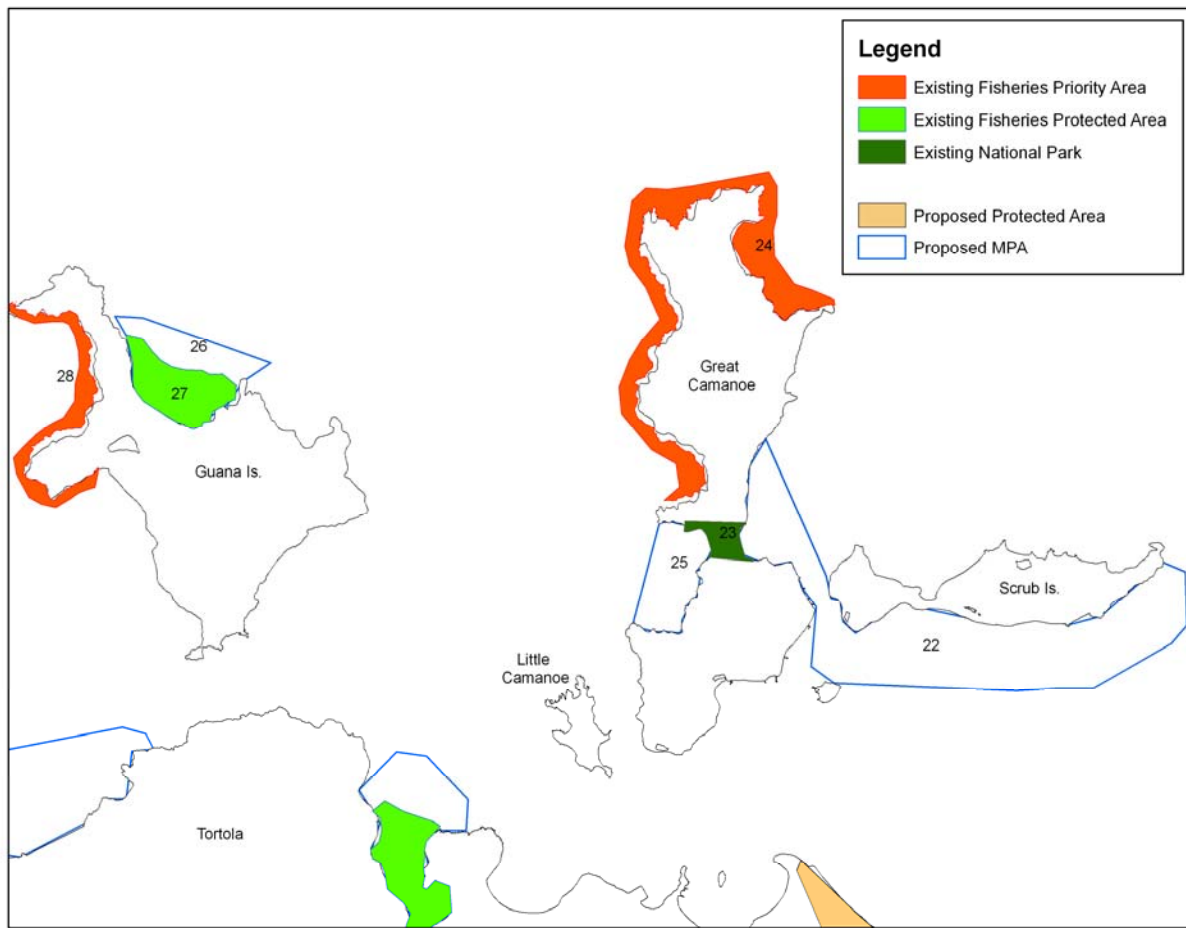
Map 4: Great Thatch



This table corresponds to areas outlined in Map 4: Great Thatch

Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
19	Great Thatch	Proposed Marine and Terrestrial Areas	Terrestrial	none	15b	National Park
20	Great Thatch north	Proposed Marine and Terrestrial Areas	Marine	none	15f	Managed Resource Area
21	Great Thatch south east	Proposed Marine and Terrestrial Areas	Marine	none	15b	Marine Park

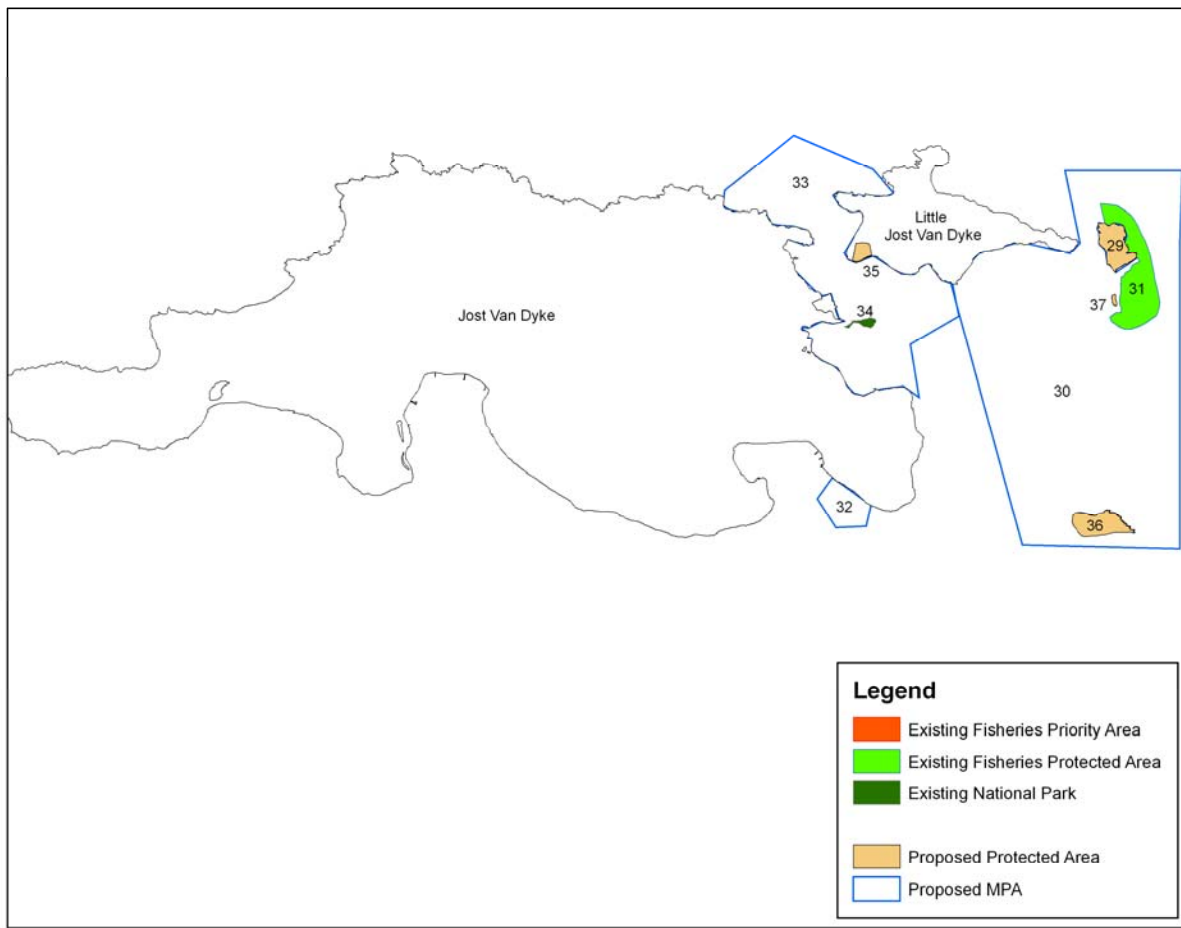
Map 5: Guana, Great Camanoe, Scrub Islands



This table corresponds to areas outlined in Map 5: Guana, Great Camanoe, Scrub Islands

Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
22	West South Bay	Proposed Marine and Terrestrial Areas	Marine	none	15e	Protected Landscape/ Seascape
23	Cam Bay	Terrestrial Protected Area	Terrestrial	National Park		
24	Great Camanoe	Fisheries Priority Area	Marine	Fisheries Priority Area		
25	Lee Bay	Proposed Marine and Terrestrial Areas	Marine	none	15f	Managed Resource Area
26	North Bay	Proposed Marine Protected Area	Marine	Fisheries Protected Area	15b	Marine Park
27	North Bay	Fisheries Protected Area	Marine	Fisheries Protected Area		
28	West Guana Island	Fisheries Priority Area	Marine	Fisheries Priority Area		

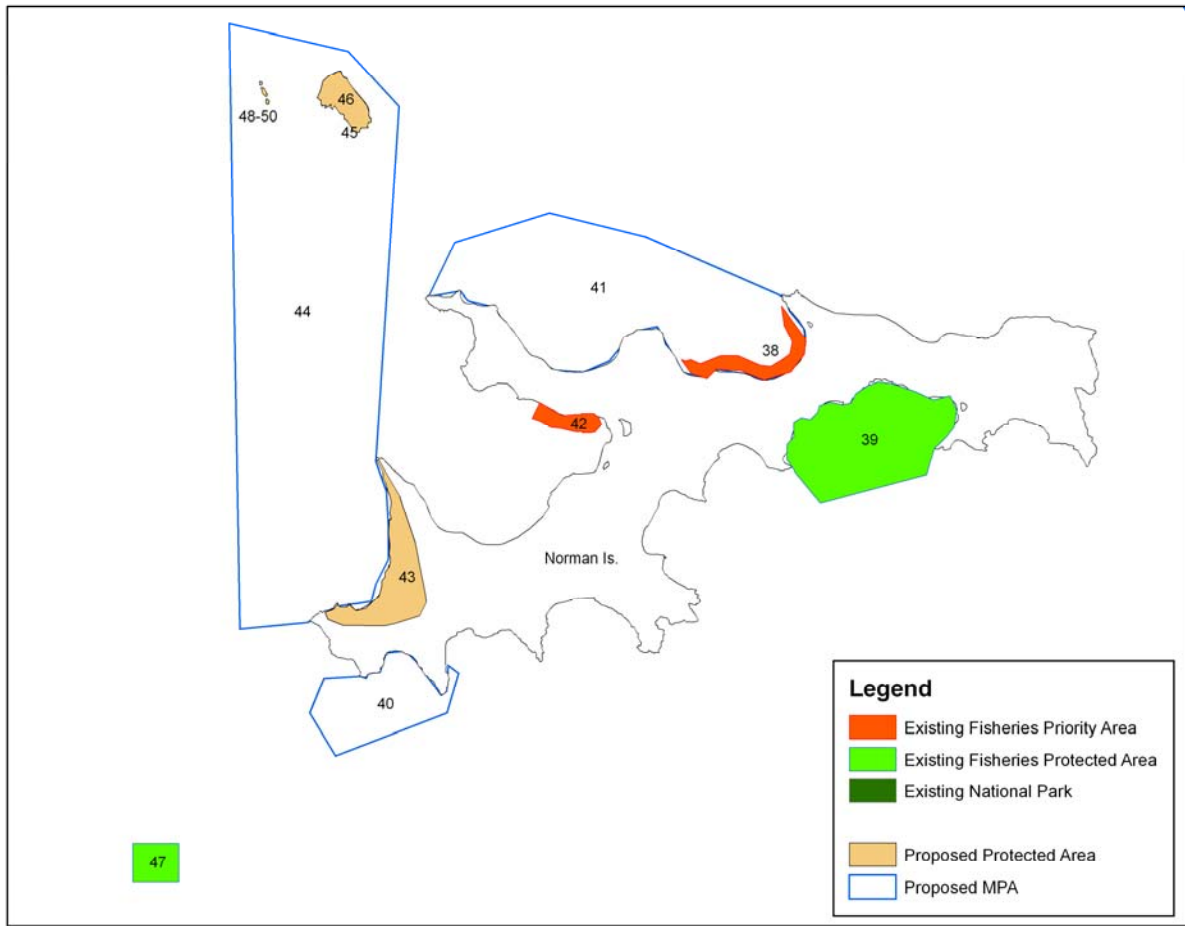
Map 6: Jost Van Dyke



This table corresponds to areas outlined in Map 6: Jost Van Dyke

Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
29	Green Cay	Proposed Marine and Terrestrial Areas	Terrestrial	none	15d	Species Management Area
30	Green Cay, Sandy Cay and Sandy Spit	Proposed Marine and Terrestrial Areas	Marine	Fisheries Protected Area	15b	Marine Park
31	Green Cay	Fisheries Protected Area	Marine	Fisheries Protected Area		
32	Thomas George Bay	Proposed Marine Protected Area	Marine	none	15b	Marine Park
33	Cape Wright, East End Harbour	Proposed Marine and Terrestrial Areas	Marine	none	15e	Protected Landscape/ Seascape
34	Diamond Cay	Terrestrial Protected Area	Terrestrial	National Park		
35	Lettsome Plantation House	Proposed Marine and Terrestrial Areas	Terrestrial	none	15h	Historic Site
36	Sandy Cay	Proposed Marine and Terrestrial Areas	Terrestrial	none	15d	Habitat Management Area
37	Sandy Spit	Proposed Marine and Terrestrial Areas	Terrestrial	none	15c	Natural Monument

Map 7: Norman Island



This table corresponds to areas outlined in Map 7: Norman Island

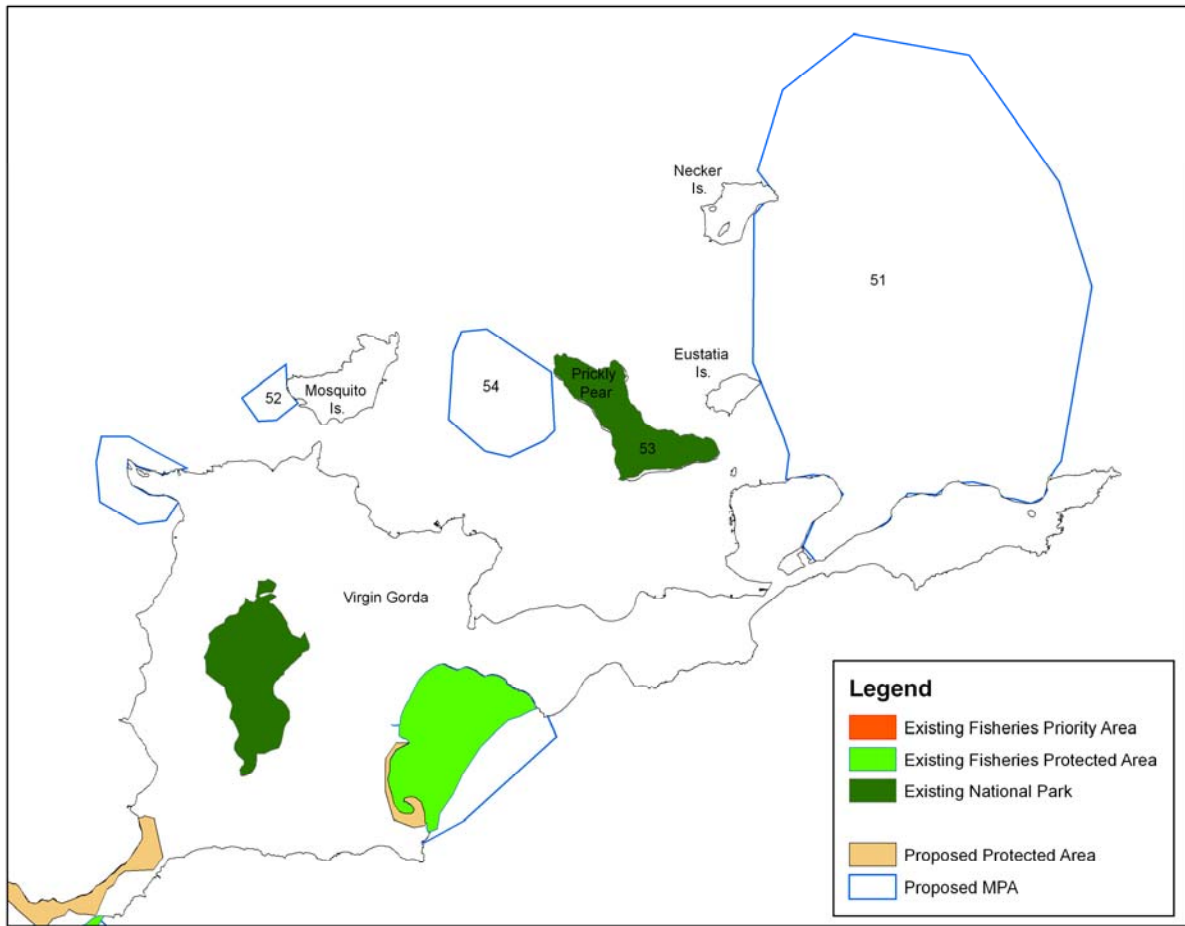
Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
38	Benures Bay	Fisheries Priority Area	Marine	Fisheries Priority Area		
39	Money Bay	Fisheries Protected Area	Marine	Fisheries Protected Area		
40	Norman Is. south west	Proposed Marine Protected Area	Marine	none	15b	Marine Park
41	Soldier Bay	Proposed Marine Protected Area	Marine	Fisheries Priority Area	15e	Protected Landscape/ Seascape
42	The Bight	Fisheries Priority Area	Marine	Fisheries Priority Area		
43	The Caves	Proposed Marine and Terrestrial Areas	Terrestrial	none	15c	Natural Monument
44	The Caves and Indians	Proposed Marine and Terrestrial Areas	Marine	none	15b	Marine Park
45	Pelican Island	Proposed Marine and Terrestrial Areas	Terrestrial	none	15b	National Park
46	Pelican Island	Proposed Marine and Terrestrial Areas	Terrestrial	none	15b	National Park
47	Santa Monica Rock, South West	Fisheries Protected Area	Marine	Fisheries Protected Area	15d	Species Management Area

Continued on Next Page

**This table corresponds to areas outlined in Map 7: Norman Island
(Continued from Previous Page)**

Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
48	The Indians	Proposed Marine and Terrestrial Areas	Terrestrial	none	15c	Natural Monument
49	The Indians	Proposed Marine and Terrestrial Areas	Terrestrial	none	15c	Natural Monument
50	The Indians	Proposed Marine and Terrestrial Areas	Terrestrial	none	15c	Natural Monument

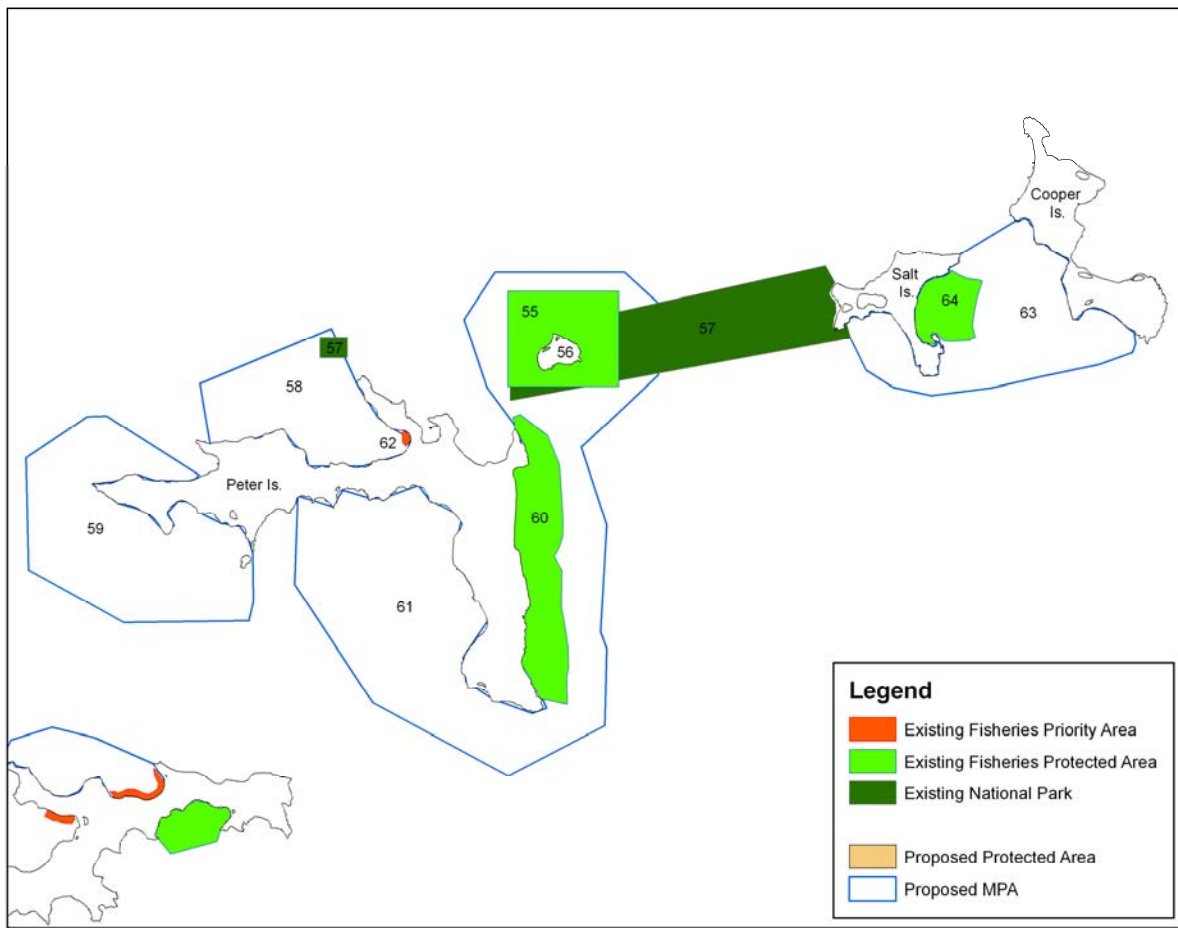
Map 8: North Sound



This table corresponds to areas outlined in Map 8: North Sound

Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
51	Eustatia Sound, Necker Is. east	Proposed Marine Protected Area	Marine	none	15e	Protected Landscape/ Seascape
52	Hay Point	Proposed Marine Protected Area	Marine	none	15d	Habitat Management Area
53	Prickly Pear	Terrestrial Protected Area	Terrestrial	National Park		
54	Cactus Point	Proposed Marine Protected Area	Marine	none	15b	Marine Park

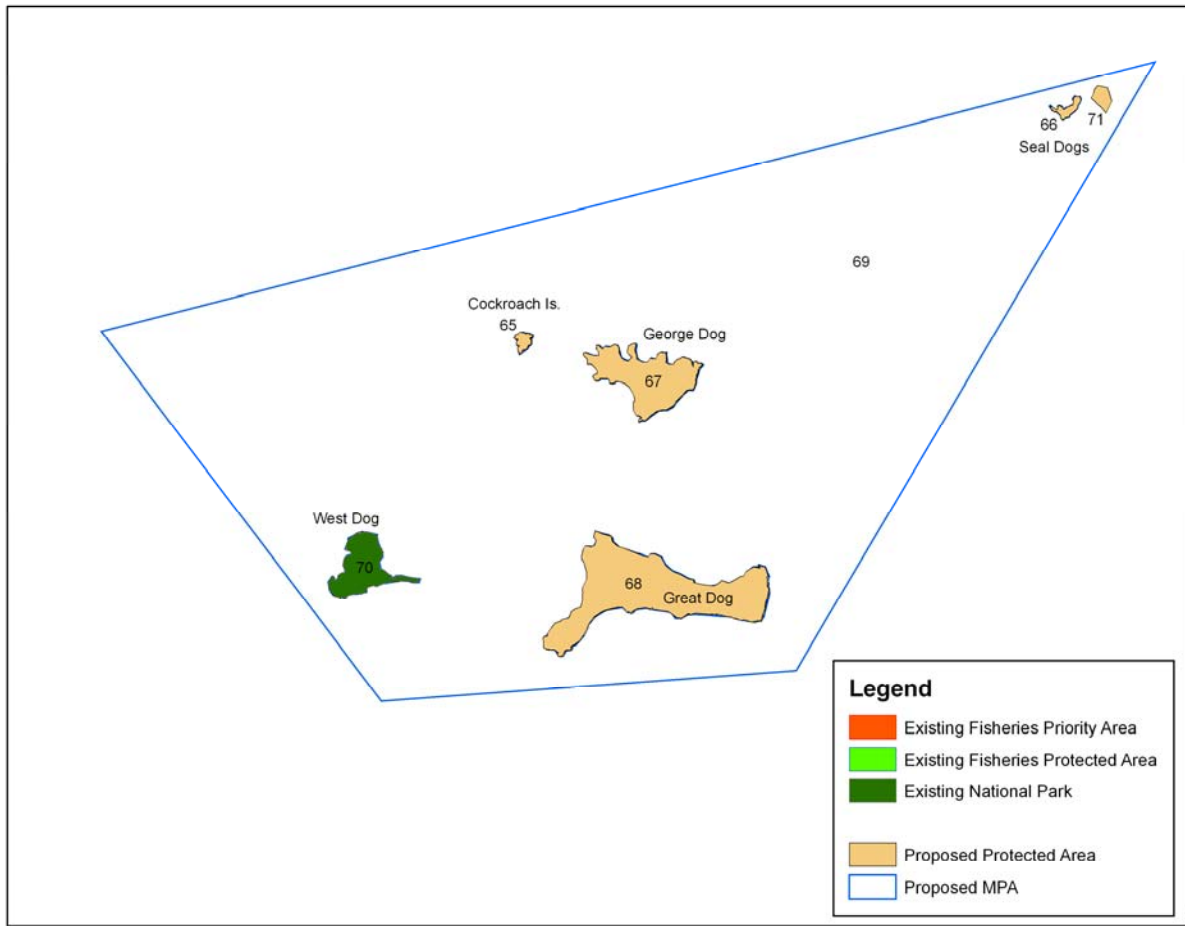
Map 9: Peter, Salt and Cooper Islands



This table corresponds to areas outlined in Map 9: Peter, Salt and Cooper Islands

Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
55	Dead Chest	Fisheries Protected Area	Marine	Marine Park	15b	Marine Park
56	Dead Chest Island	Terrestrial Protected Area	Terrestrial	National Park		
57	Wreck of the Rhone Marine Park	Terrestrial Protected Area	Marine	Marine Park		
58	Great Harbour	Proposed Marine Protected Area	Marine	Fisheries Priority Area within boundary	15e	Protected Landscape/ Seascape
59	Peter Is. west	Proposed Marine Protected Area	Marine	none	15b	Marine Park
60	Big Reef	Fisheries Protected Area	Marine	Fisheries Protected Area		
61	Dead Chest to James George Bay	Proposed Marine Protected Area	Marine	Marine Park	15e	Protected Landscape/ Seascape
62	Great Harbour	Fisheries Priority Area	Marine	Fisheries Priority Area		
63	Salt and Cooper Is	Proposed Marine Protected Area	Marine	Fisheries Protected Area	15b	Marine Park
64	The Sound	Fisheries Protected Area	Marine	Fisheries Protected Area		

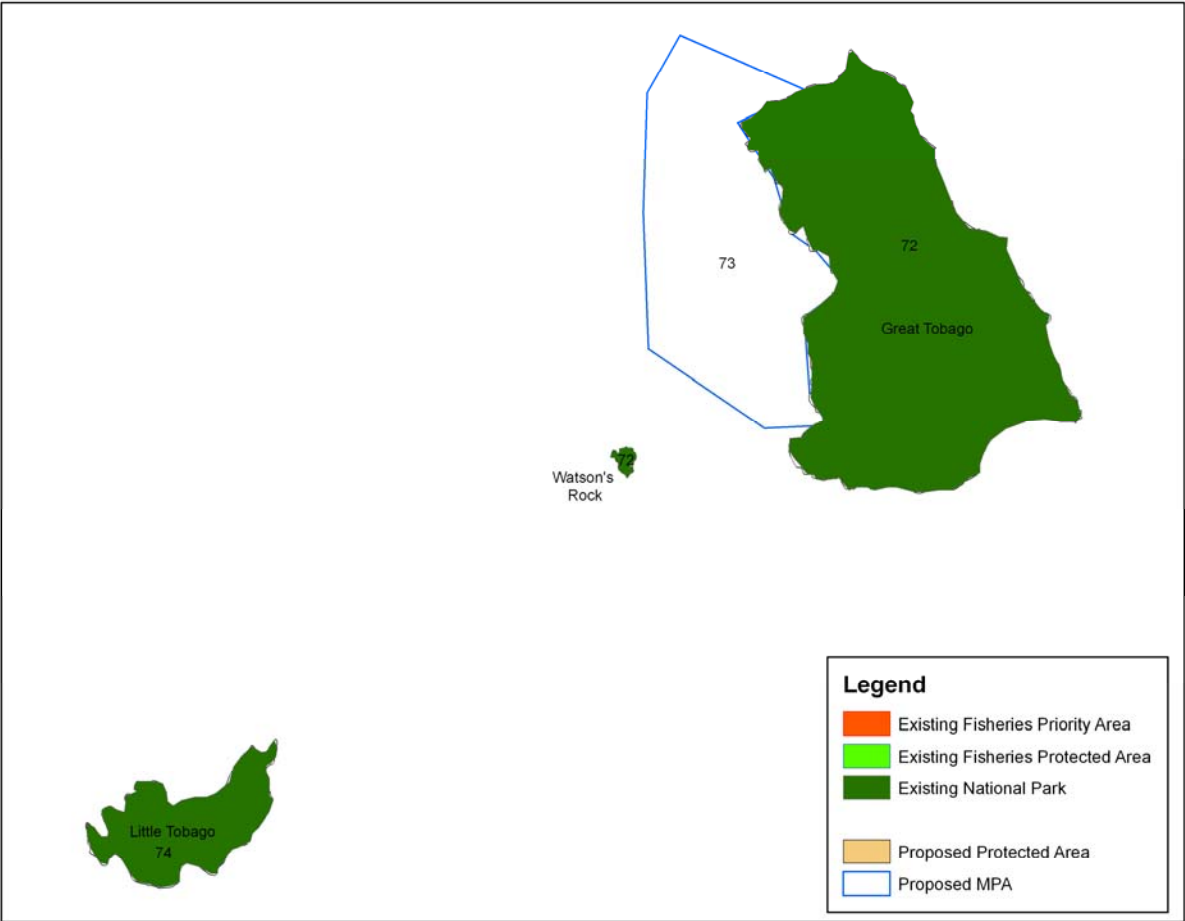
Map 10: The Dogs



This table corresponds to areas outlined in Map 10: The Dogs

Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
65	Cockroach Is.	Proposed Marine and Terrestrial Areas	Terrestrial	none	15d	Species Management Area
66	East Seal Dog	Proposed Marine and Terrestrial Areas	Terrestrial	none	15d	Species Management Area
67	George Dog	Proposed Marine and Terrestrial Areas	Terrestrial	none	15b	National Park
68	Great Dog	Proposed Marine and Terrestrial Areas	Terrestrial	none	15b	National Park
69	The Dogs	Proposed Marine and Terrestrial Areas	Marine	none	15e	Protected Landscape/ Seascape
70	West Dog Island	Terrestrial Protected Area	Terrestrial	National Park		
71	West Seal Dog	Proposed Marine and Terrestrial Areas	Terrestrial	none	15d	Species Management Area

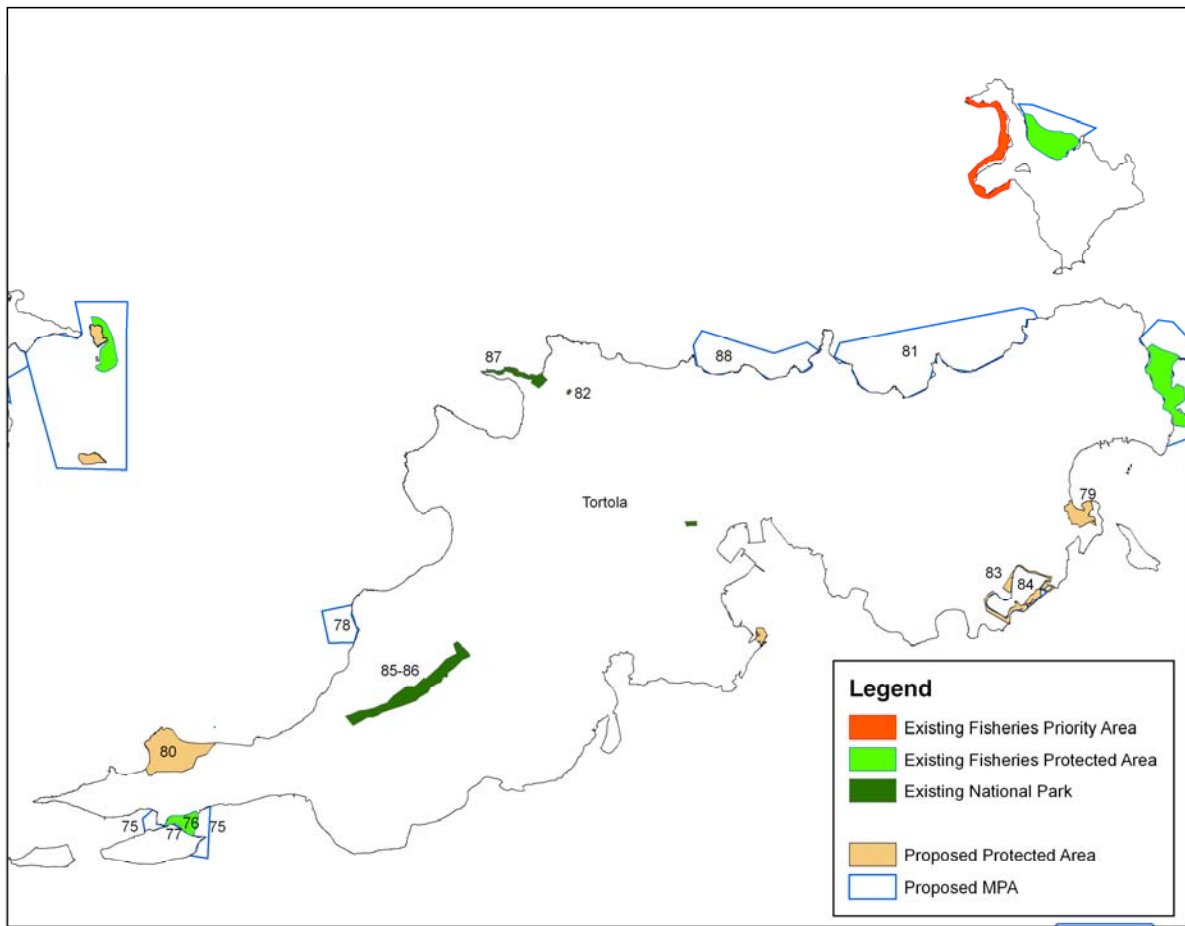
Map 11: The Tobagos



This table corresponds to areas outlined in Map 11: The Tobagos

Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
72	Great Tobago	Terrestrial Protected Area	Terrestrial	National Park		
73	Great Tobago	Proposed Marine and Terrestrial Areas	Marine	none	15e	Protected Landscape/ Seascape
74	Little Tobago	Terrestrial Protected Area	Terrestrial	National Park		

Map 12: Tortola



This table corresponds to areas outlined in Map 12: Tortola

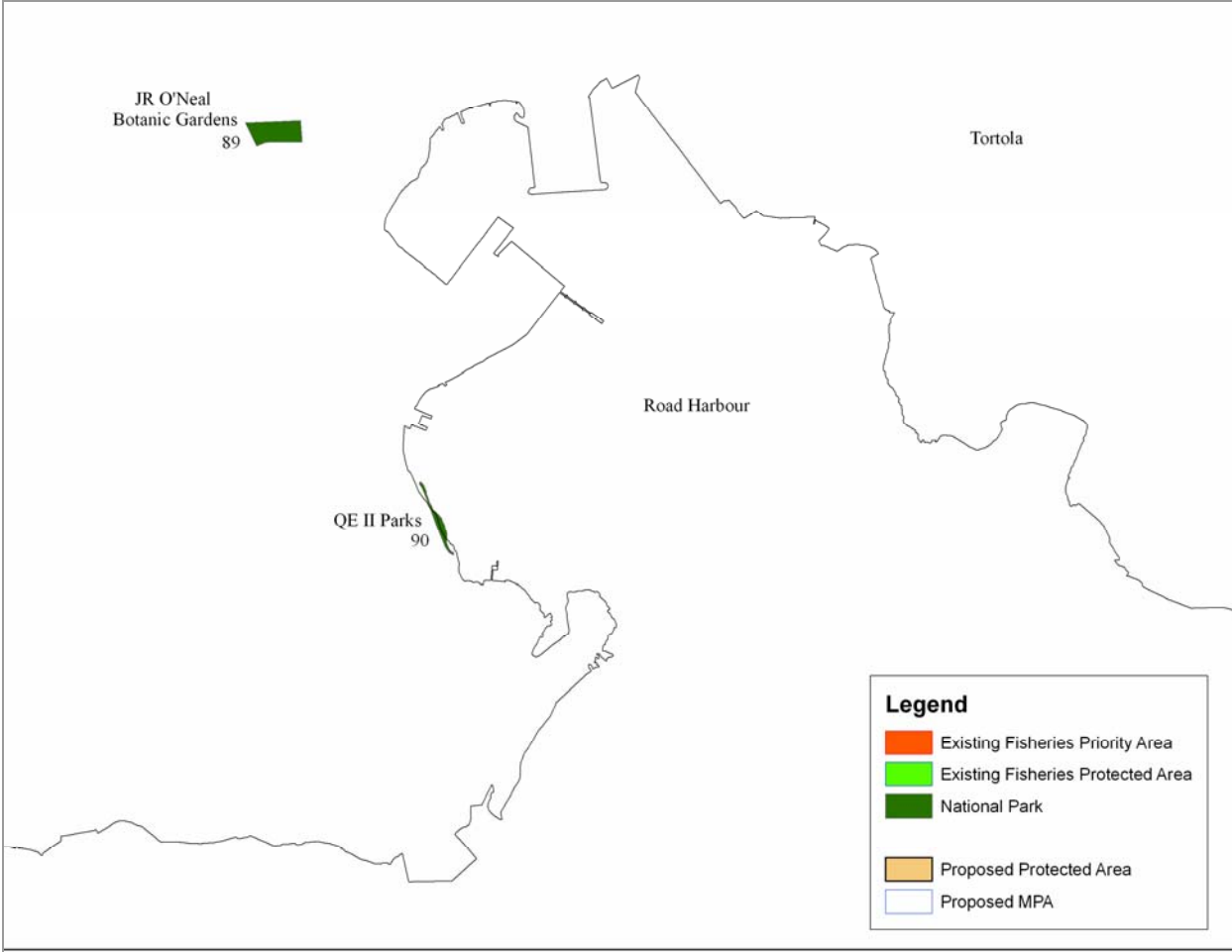
Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
75	Sopers Hole, Fisheries Area	Proposed Marine Protected Area	Marine	Fisheries Protected Area	15d	Habitat Management Area
76	Frenchman's Cay	Fisheries Protected Area	Marine	Fisheries Protected Area		
77	Frenchman's Cay	Fisheries Priority Area	Marine	Fisheries Priority Area		
78	Great Carrot Bay	Proposed Marine Protected Area	Marine	none	15d	Habitat Management Area
79	Bar Bay	Proposed Terrestrial Protected Area	Terrestrial	none	15d	Habitat Management Area
80	Belmont	Proposed Terrestrial Protected Area	Terrestrial	none	15b	National Park
81	Cooten, Josiahs, Lambert Bays	Proposed Marine Protected Area	Marine	none	15d	Species Management Area
82	Mt. Healthy	Terrestrial Protected Area	Terrestrial	National Park		
83	Paraquita Bay	Proposed Marine and Terrestrial Areas	Terrestrial	none	15d	Habitat Management Area
84	Paraquita Bay	Proposed Marine and Terrestrial Areas	Marine	none	15f	Managed Resource Area
85	Sage Mountain	Terrestrial Protected Area	Terrestrial	National Park		

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**This table corresponds to areas outlined in Map 12: Tortola
(Continued from Previous Page)**

Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
86	Sage Mountain (Addition)	Terrestrial Protected Area	Terrestrial	National Park		
87	Shark Bay	Terrestrial Protected Area	Terrestrial	National Park		
88	Trunk Bay, Rogues Bay	Proposed Marine Protected Area	Marine	none	15d	Species Management Area

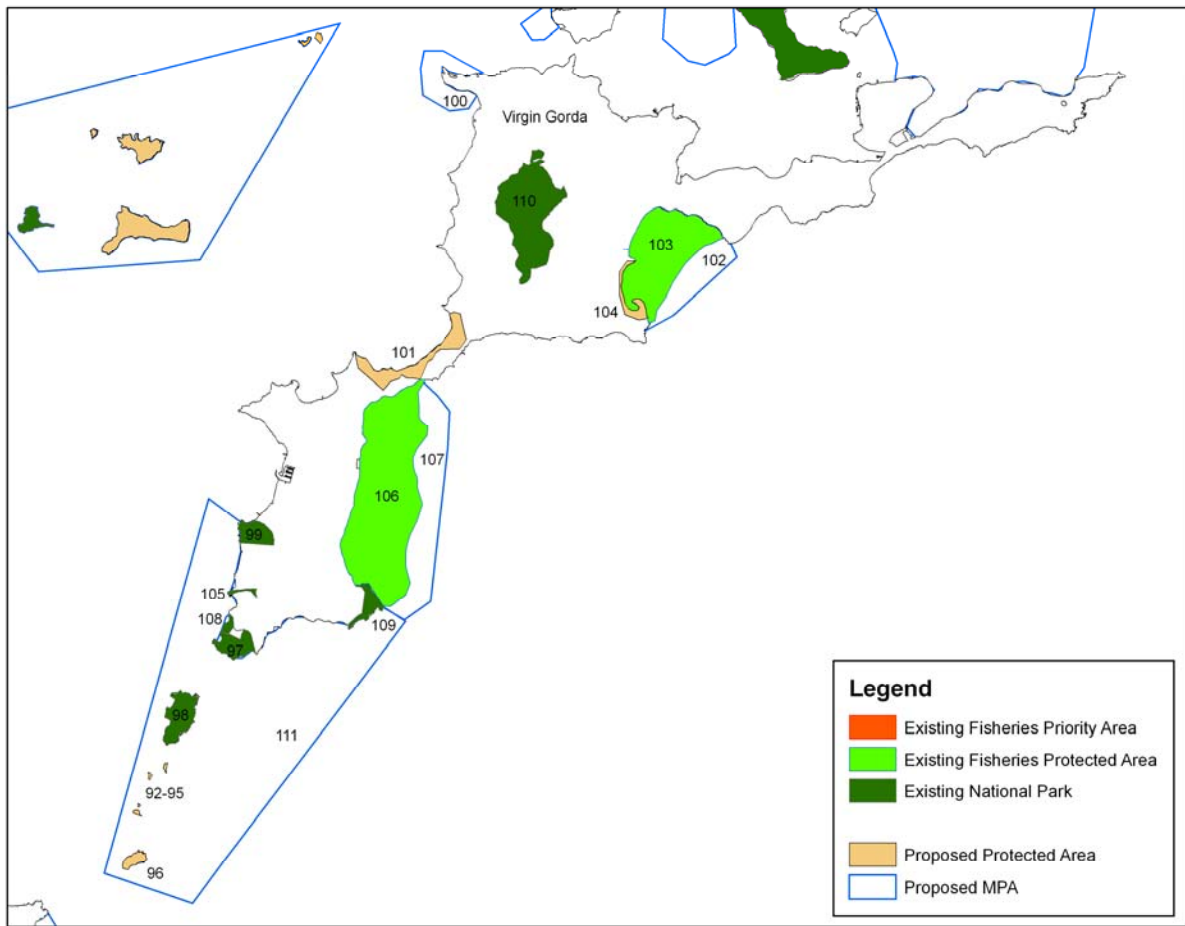
Map 13: Road Town, Tortola



**This table corresponds to areas outlined in Map 13: Road Town,
Tortola**

Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
89	Botanic Gardens	Terrestrial Protected Area	Terrestrial	National Park		
90	QEII Park	Terrestrial Protected Area	Terrestrial	National Park		

Map 14: Virgin Gorda



This table corresponds to areas outlined in Map 14: Virgin Gorda

Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
92	Broken Jerusalem	Proposed Marine and Terrestrial Areas	Terrestrial	none	15b	National Park
93	Broken Jerusalem	Proposed Marine and Terrestrial Areas	Terrestrial	none	15b	National Park
94	Broken Jerusalem	Proposed Marine and Terrestrial Areas	Terrestrial	none	15b	National Park
95	Broken Jerusalem	Proposed Marine and Terrestrial Areas	Terrestrial	none	15b	National Park
96	Round Rock	Proposed Marine and Terrestrial Areas	Terrestrial	none	15d	Habitat Management Area
97	Devil's Bay	Terrestrial Protected Area	Terrestrial	National Park		
98	Fallen Jerusalem	Terrestrial Protected Area	Terrestrial	National Park		
99	Little Fort	Terrestrial Protected Area	Terrestrial	National Park		
100	Mountain Point	Proposed Marine Protected Area	Marine	none	15b	Marine Park
101	Savannah Bay	Proposed Terrestrial Protected Area	Terrestrial	none	15e	Protected Landscape/ Seascape

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**This table corresponds to areas outlined in Map 14: Virgin Gorda
(Continued from Previous Page)**

Legend No.	Name	Proposed or Existing	Type of Site	Existing Status	Proposed Management Category in NPT Act 2006	Management Description
102	South Sound	Proposed Marine and Terrestrial Areas	Marine	Fisheries Protected Area	15b	Marine Park
103	South Sound	Fisheries Protected Area	Marine	Fisheries Protected Area		
104	South Sound west	Proposed Marine and Terrestrial Areas	Terrestrial	none	15d	Habitat Management Area
105	Spring Bay	Terrestrial Protected Area	Terrestrial	National Park		
106	Taylor Bay	Fisheries Protected Area	Marine	Fisheries Protected Area		
107	Taylor's Bay, Handsome Bay	Proposed Marine Protected Area	Marine	Fisheries Protected Area	15e	Protected Landscape/ Seascape
108	The Baths	Terrestrial Protected Area	Terrestrial	National Park		
109	The Copper Mine	Terrestrial Protected Area	Terrestrial	National Park		
110	Gorda Peak	Terrestrial Protected Area	Terrestrial	National Park		
111	Greater Baths area	Proposed Marine and Terrestrial Areas	Marine	none	15e	Protected Landscape/ Seascape

5.2 Protected Areas and National Development Planning

The National Integrated Development Strategy (NIDS) 1999-2003 states in its policy framework for environmental management that *“There is no doubt that if our future development is to be sustainable in the long term it must be in harmony with the environment. An effective and efficient environmental management strategy is an integral part of the overall development strategy.”*

Given that policy direction, it becomes more important for the linkages between protected areas planning and the national development planning processes to be clearly articulated. While the National Integrated Development Strategy/Plan is clearly an attempt to provide an overall policy framework to the development planning process, the “Development Agenda” is in reality set by the following:

- Legislative Agenda – set by the Government for the four years of its political term;
- Medium Term Economic Strategy; and
- Public Sector Investment Programme.

Tourism and Protected Areas

Tourism has become a major sector in the economy of the British Virgin Islands (BVI). Data provided by the Development Planning Unit estimates that tourism’s contribution to Gross Domestic Product (GDP) increased from \$25.8 million in 1991 to \$140 million in 2004, contributing an estimated 15.93% of GDP in 2004.

Tourism arrivals grew from 329,740 in 1990 to 599,102 in 2003, with the fastest growing segment being cruise tourism. This increase in cruise tourism has generated concerns about the impact on other segments of the industry, as well as the capacity of the BVI to provide a quality product with the current infrastructure and systems. Based on the fact that tourism is focused primarily on the use of environmental resources, these concerns are relevant to the management of protected areas.

Strategies for public use of protected areas will have significant impact on tourism growth strategies. First, the mix of recreational uses, and the dispersion of those uses throughout the system of protected areas, will determine the impact on the natural resource base. However, beyond that consideration, the visitor use strategy can help to reduce the current antagonisms felt towards cruise tourism, while improving the quality of the experience for both types of visitor, as well as the interactions and experiences of the resident population.

In this regard, tourism planning and protected areas visitor strategy need to achieve increased coherence at both the strategic and programmatic levels.

Specific issues that have arisen, and which are to be addressed in the Plan Period, include:

- (a) **Tourism promotion of sites** – A small number of protected areas (such as The Baths) receive a significant degree of focus, while other available sites receive little or no attention. Additionally, promotional materials should indicate the need to be mindful of visitor use guidelines. Similarly, site management strategies and plans need to pay greater attention to visitor use management. This issue involves not only promotions but also permitting and management of ad shoots and other tourism-related activities.
- (b) **Determination of Carrying Capacity** – Carrying capacity issues range from the perception of overcrowding and the quality of the tourism experience for visitors and residents, to concerns of impacts on the social services and natural resource base. The Tourist Board and the National Parks Trust have indicated an interest in serious examination of this issue.
- (c) **Infrastructure requirements for the protected areas** – the most heavily-used areas require additional infrastructure to support the range of visitor uses, especially water-based uses. It has therefore been suggested that part of tourism infrastructure development should be focused within the relevant protected areas. There is the related issue of direct and indirect support by the tourism sector to the financing strategies for the system of protected areas.
- (d) **Data collection** – The Tourist Board and National Parks Trust do not routinely exchange data regarding visitor numbers and resource uses. Due to the significant level of reliance of the tourism industry on protected areas, data collection protocols and management systems will be developed between the two institutions, and will include the other relevant industry and protected areas institutions.

Agriculture and Protected Areas

There are a number of linkages between agriculture and protected areas. First, the Department of Agriculture is responsible for the implementation of a number of laws dealing with protected areas (Section 3.1), and has actually declared a number of sites as forestry reserves and water areas (Table 3). Additionally, the Department of Agriculture deals with issues such as watershed management, plant protection, and loose livestock, all of which are directly relevant to protected areas. However, there is currently no focused protected areas programme within the Department of Agriculture. Neither is

there any programming linkage between the Department of Agriculture and the other protected areas management institutions.

Issues to be addressed within the Plan Period include:

- (a) **Improved linkages between watershed management and protected areas** – This has relevance to issues of buffer zones for protected areas, landscape management (also relevant to the land use planning and development control process), and flood prevention and disaster management.
- (b) **Application of plant protection laws within protected areas** – The current laws authorise the Department of Agriculture to enter any property to deal with outbreaks of pests and plant diseases. However, there is no agreed mechanism for discovery or application of such laws within protected areas managed by other institutions. There is also no articulation of the possible linkages between that issue and biodiversity issues, both within and outside protected areas.
- (c) **Management of forested areas within protected areas** – The protected areas management institutions are responsible for areas designated under the specific legislation they manage. However, some resource management issues have to be treated as cross-cutting issues relevant to several sectors. One such issue is forestry management, and the role of forest resources in conservation, economic development, community development, disaster management, and other development processes. As such, forests in protected areas should be addressed not only within the context of the management needs of a specific site, but also within the context of a wider forestry policy and management strategy for the entire Territory.

Environmental Management and Protected Areas

Though there is a significant level of collaboration between the Conservation and Fisheries Department (which is the lead environmental management agency) and the National Parks Trust (which is the lead protected areas management agency), there are ongoing issues concerning the policy and programmatic linkages between the two agencies. Those concerns have been addressed at a policy level through the strategies articulated in the National Integrated Development Strategy and the National Environmental Action Plan.

The National Integrated Development Strategy (1999-2003) sets the policy framework for environmental management in the Territory. The Strategy notes that environmental sustainability is an integral part of its development process, and identifies the following elements of its environmental strategy:

- Institutional reforms and improvements;

- Rationalization and strengthening of the legislative and regulatory frameworks;
- Development of appropriate policies; and
- Improving environmental awareness.

In order to facilitate the process of reform proposed under the NIDS, the Strategy articulated the intent of the Government of the British to use an approach in which “...*all aspects of the environment function shall be coordinated by a single agency appropriately staffed, financed, equipped, and provided with the legal authority to discharge its responsibilities*”.

The NIDS identified the first steps in this process as the preparation of a National Environmental Policy, followed by a National Environmental Action Plan (NEAP). The Draft NEAP was prepared by the Conservation and Fisheries Department in May 2004. The NEAP notes that the environmental responsibilities in the BVI are spread across nine departments in five Ministries. And recommends that “...*a separate environment authority, namely, the Environmental Protection Board (EPB), be established under a proposed Environmental Protection Act to coordinate and manage issues and matters related to the environment and natural resources and link all government agencies dealing with the environment. Specifically, this board would:*

1. *Promote the development of policies, legislation and enforcement mechanisms needed for sound environmental management, including the establishment of standards and guidelines related to pollution of the air, water and land.*
2. *Coordinate the activities of all bodies concerned with environmental matters and serve as liaison for national and international organizations on environmental matters.*
3. *Monitor trends in the state of the environment. This includes monitoring the environment, instituting measures for environmental protection and improvement, and administering a system for environmental impact assessment and auditing.*
4. *Conduct and promote research on environmental matters, and promote environmental training and education to increase public awareness and participation”* (Chapter 6, Page 138).

It seems therefore that the resolution of the institutional arrangements for general environmental management will impact on management of the system of protected areas. The legislative drafting to give effect to those policy and institutional reforms has commenced. Until the specifics of those reforms have been finalised, the focus during the Plan Period will be the following:

- (a) **Standardisation of procedural guidelines** – Operating procedures for a range of activities, such as research, permitting, and water quality monitoring, will be standardized to the extent possible to ensure a cohesive approach to resource management in the Territory.

- (b) **Data management** – Agreed procedures and standards for data collection, management, and sharing will be developed and implemented.

Land Use Planning and Protected Areas

The NEAP states that the “*The Virgin Islands has no clear land use policy. The requirement for a national land use policy that addresses land management, administration, and legislation issues is essential. The Government of the Virgin Islands is committed to drafting a National Physical Development Plan by October 2004*” (Chapter 6, Page 139).

The NPT and other protected areas management institutions will participate in the preparation of the National Physical Development Plan to ensure that issues concerning buffer zones, maintenance of landscape and seascape values, mitigation of development impacts on protected areas, and other relevant issues are adequately addressed.

As shown above, many of the development planning initiatives have significant implications for the management of protected areas at both system and site levels. Protected areas management institutions, in particular the NPT, will ensure that preparation for, and input into, the development planning process is undertaken in a very proactive manner. In this respect, actions for the Plan Period (2007-2017) as they relate to the development planning process include:

- (a) **A systematic review of the protected area system** – A policy and sector needs analysis will be conducted, and will involve the relevant institutions and stakeholders. The sector review should ensure that the linkages with the other development sectors are clearly defined, that the appropriate policy mix is developed, and that the appropriate support systems are developed in the lead sector agencies.
- (b) **Inter-agency planning consultation** – A coordination meeting will be convened with sector planners to discuss long-term strategic issues (such as tourism, carrying capacity, and land use issues).
- (c) **Data management** – As previously mentioned, mechanisms for data collection, management, and sharing will be developed. As part of this process, the accessibility by stakeholders to relevant data will be reviewed, and appropriate facilitating measures will be developed.
- (d) **Evaluation mechanisms** – A protocol (indicators and process) for measuring the level of protected areas integration into the national development process will be developed.

5.3 Achieving Targets

There has been no assessment of the extent to which the protected areas in the BVI fulfil the system objectives or support the relevant international obligations.

The available information indicates that of the six multilateral environmental agreements to which the BVI is party, and which are relevant to protected areas, only under the Ramsar Convention has a site of international importance been declared. That site, the Western Ponds of Anegada, was declared a Ramsar Site in 1999, but has no national designation.

Unresolved gaps in the network of marine protected areas include:

- (a) Finalisation of the management option for the Horseshoe Reef Fisheries Protected Area (Anegada). The site is currently used for fishing and diving, both of which are prohibited activities in the protected area. Consideration is being given to changing the designation of the site from a Fisheries Protected Area to a Marine Management Area.
- (b) The deep reefs are still to be surveyed, particularly those off the north side of Anegada.

In addition to the future work to be undertaken for the marine protected areas, a comprehensive gap analysis is needed for the terrestrial ecosystems. Priority actions to be undertaken during the Plan Period include:

- (a) Assessing the contribution of existing protected areas to national development.
- (b) Completing the identification and characterization of important marine and terrestrial habitats and resources that may be included in the system of protected areas.
- (c) Evaluating existing and emerging threats to the long-term viability of sites and particular resources.

5.4 Future Directions for Protected Areas in the BVI

As stated earlier in this document (Section 1.1), the complexity of protected areas management has increased significantly in the past decade. This is particularly true of small Caribbean economies where development activities are either directly dependent on the natural resource base, or where those activities have significant long-term impact on environmental resources. As such, there are a number of conceptual and management approaches that have been discussed that are pertinent to the further development of the system of protected areas in the BVI, including:

- (a) **Consolidation of protected area units** – Many of the sites are too small to offer adequate protection to the resources contained therein, particularly the marine protected areas. In order to improve this situation, the NPT has identified a number of sites that are to be grouped into one larger management unit. An example is the Greater Bath Management Unit, in which six small sites carrying different designations will be combined into one management unit. Future consideration of size in protected areas must also address the issues of minimum size required to protect important resources, the linkages between resource conservation and development objectives, and the linkages between individual units.
- (b) **Increased scope of civil society participation** – The protected areas management institutions have a legacy of public consultation when undertaking new initiatives. There are examples, and varying levels of success, of collaborative arrangements involving civil society groups. The staff and Board of Directors of the NPT have embraced the concept of public participation in programme implementation, and the NPT is considering the issue of collaboration in actual site management. This process of review would benefit from a more structured approach, hence the plan to develop a Public Engagement Strategy and Plan within the first five years of this Plan Period.
- (c) **Carrying capacity assessments** – There are concerns that some sites are being overused, while others are adversely impacted from activities taking place outside the boundaries of the sites. The need to undertake carrying capacity assessments of the sites and the protected area system, particularly in respect of tourism, has been articulated. However, there has been no agreement on methodology to be used, scope of the assessment, or timetable for implementation. The NPT and Tourist Board will work together to develop a programme, and select appropriate methodologies, for carrying capacity assessments in the most heavily used protected areas.
- (d) **Development of resource-specific management plans** – Management plans do not currently exist to deal with the management of the thematic elements of the system of protected areas; that is, specific resources such as mangroves, coral reefs, and migratory species of birds. Such plans are necessary to ensure that specific resources are afforded adequate protection at each site and across the system as a whole (see also Chapter 7 on the issue of system guidelines). A draft Wetlands Policy and Plan was prepared by the Town and Country Planning Department (in 2005). The document states the intention of the Town and Country Planning Department to declare all wetlands in the British Virgin Islands to be environmental protection areas. The management guidelines, systems, and institutional arrangements for these sites will be determined during this Plan Period.
- (e) **Transboundary protected areas** – Section 29 of the National Parks Act (2006) provides for the establishment of transboundary protected areas. The possibility of designating the channel between the BVI and the U.S. Virgin Islands has been raised by some stakeholders, and will be explored further. Similarly, concerns related to management of

migratory species of birds and fish stocks have underscored the need for serious consideration to be given to this issue in the near future.

- (f) **Private lands** – There may be instances where private lands are included within proposed protected areas, or where use of land abutting a site may be subjected to restrictions in land use. Part VI of the National Parks Act (2006) provides a mechanism wherein an owner of private lands can voluntarily agree with the government to apply conservation measures on that land or property. However, the law does not address the issue of acquisition of such lands in the event the land owner is not interested in the application of conservation measures on the property.
- (g) **Supporting sustainable development** – Section 13(2)(d) of the National Parks Act (2006) requires the protected areas system to support “... *sustainable economic and social development in the Territory*”. Current concerns about the nature and extent of commercial activities at some sites underscore the need for increased articulation of the link between protected areas and the development process, particularly impacts on the key economic sectors and community development.
- (h) **Environmental Protection Areas and Buffer Zones** – The Physical Planning Act (2005) contains provisions for the establishment of environmental protection areas (EPAs). The Town and Country Planning Department is in the process of determining the appropriate application of EPAs. The Department proposes to use EPAs in areas where a more rigorous environmental management regime is required, but where said areas occur outside protected areas. Similarly, the Department is in the process of conceptualizing the design and application of buffer zones for protected areas and other natural and cultural heritage resources.
- (i) **Marine Managed Areas** – There are a number of bays and associated beaches that, because of use and user impacts and conflicts, require more active management. The associated issues include:
 - a. resource protection,
 - b. conflict resolution, and
 - c. improvement in safety for users.

The management approach is not necessarily to bring those areas under a protected areas regime, as collaborative action from several institutions is required to address these issues. Based on input from the public consultative process, the areas to receive attention under this initiative are White Bay (Jost Van Dyke) and Savannah/Pond Bay (Virgin Gorda). Various bays included in the approved moorings sites for the British Virgin Islands (Appendix 7) may require additional management in the future. The appropriate management approaches for these areas will be determined during this Plan Period.

Addition of any of these sites to the Protected Area network will be evaluated using the approved site selection process detailed in Section 7.

6. FINANCING PROTECTED AREAS

Financing for protected areas management in the British Virgin Islands (BVI) is derived from a number of sources:

- Government budgetary support;
- Project financing from bilateral and multilateral funding agencies;
- Grants; and,
- User fees and licenses.

Traditionally, the largest source of financing is the government budgetary support to the main management agencies.

The Government in 2004 signalled its intention to reduce direct budgetary support to the NPT, so the other revenue streams had to be expanded (Table 5). Two initiatives in this regard were established. The first is the establishment in April 2004 of a user fee system, approved for the Baths, Sage Mountain, and the Botanic Gardens. The second initiative was the revision of moorings fees for the use of NPT buoys at dive sites and marine recreational areas. Under consideration is the transfer of management responsibility for all recreational mooring buoys in the BVI to the NPT.

Table 5: Revenue Streams for the BVI National Parks Trust

Revenue Source	2000	2001	2002	2003	2004	2005
Concession Fees	6,000	5,900	5,650	47,682	24,184	33,353
Donations and other grants	59,805	39,650	18,681	37,066	14,224	14,744
Government Subvention	458,000	500,000	500,000	899,400	817,700	585,000
Membership dues	1,781	8,159	1,613	0	0	0
Miscellaneous sales	15,636	1,052	3,084	5,784	13,376	0
Mooring programme	202,953	234,786	207,023	208,164	362,069	537,241
Terrestrial Fees	0	0	0	0	145,333	292,668
Other income	6,173	411	207	3,410	36,364	19,699
Total	\$750,348	\$789,958	\$736,258	\$1,201,506	\$1,413,250	1,482,705
<u>Source:</u> BVI National Parks Trust						

Data from the National Parks Trust shows that the expenditures to manage the sites within their control increased from \$790,212.00 in 2000 to \$1,206,962.00 in 2005. The annual governmental budget contributions for collaborating institutions are provided in Table 6. The relative proportion allocated for protected area management is not detailed.

Table 6: Recurrent Expenditure of Collaborating Governmental Departments²

Government Department	2000 \$	2001 \$	2002 \$	2003 \$	2004 \$	2005 \$
Conservation & Fisheries Department	913,000	931,400	1,236,500	1,271,700	1,485,500	1,713,200
Town & Country Planning	571,100	649,900	657,800	728,800	726,600	721,100
Department of Agriculture	2,004,200	2,066,000	2,209,400	2,102,400	2,525,000	2,535,000

However, the full cost of building out and managing the system of protected areas is unknown, as the necessary financial projections have not been done. Any such analysis is necessarily complicated, given the need to incorporate the budgets of several institutions, anticipate the infrastructure and management needs for each site, and incorporate the estimated cost of system support functions (such as fundraising). Given the increasing demand for protected areas resources, the growing concerns about the impact of increasing numbers of visitors, and the proposed reduction in the budgetary support from central government, it becomes necessary to undertake the necessary financial analysis as a precursor to the development of a financial sustainability plan.

Obviously the financing arrangements for the establishment and management of the protected areas system have to be overhauled, and the revision of the financial management systems within the NPT during 2004 is an important first step in this regard. However, financial planning differs from budgeting in a number of significant ways. First, the amount of funds needed has to be matched with the time within which it is required. Secondly, different funding sources have different characteristics, require different levels of effort and resources, and are available over different time periods (WCPA 2000, UNEP & TNC 2001). This is even more critical for a system of protected areas, for which there are multiple institutions, often utilizing different functional modalities.

The primary sources of funding to be pursued in the 2007-2017 Plan Period are:

1. Broadening of site-based revenue streams:
 - Concessions,
 - User fees.

² Derived from the Virgin Islands Recurrent Budget Estimates or Revenue and Expenditure 2000-2005, Capital Budget Estimates of Receipts and Expenditure of the Ministry of Finance. Total figures per department and year are found in the "Total Head" row of each corresponding department of Government.

2. Establishment of an endowment;
3. Government budgetary support;
4. Merchandising (branding and merchandise);
5. Management of the mooring system for the BVI;
6. Grant writing to external donor institutions; and
7. Continued development of Support Groups.

In order to properly design the financing mechanisms for the system of protected areas, the National Parks Trust will carry out the following activities during the 2007-2017 Plan Period:

- (a) **Preparation of a Protected Area System Budget Estimate** – A budget for the build-out and management of the system up to 2027 will be developed. This will establish the parameters for the recurrent and capital expenditure needs for the period, and hence provide a guide for the development of the Financing Strategy and Plan.
- (b) **Development of a Financing Strategy and Plan 2007-2027** – The pursuit of financial sustainability for protected areas involves long-term commitment, pursuit of multiple strategies, and, ironically, financial resources. Additionally, external technical expertise is usually required to develop such strategies. Such expertise may also be required in implementation, and certainly in fund management.

It is intended that the development and implementation of the above actions will be based on the following principles and factors:

- Government budgetary support to the protected areas management agencies will be continued.
- A more comprehensive range of site income sources will be developed (user fees, concessions, merchandising, services, etc.).
- Other sectors that benefit from protected areas, such as tourism and water, will make annual direct contributions to a protected areas trust fund, or other appropriate form of endowment.
- The engagement of the support groups will include mechanisms for the groups to provide financial support for the management of the protected area system.
- The NPT will coordinate the establishment of an endowment for protected areas management, under the management of a separate Board of Trustees.
- Current mechanisms used to encourage and handle gifts, including land, will be reviewed and expanded as necessary. Where appropriate, a system of tax incentives or duty concessions will be established to encourage donations of equipment, materials, land, and other forms of gifts from local residents, groups, or companies.

- The building of a local support base for protected areas will also provide an opportunity for local residents to provide in-kind and financial support.
- Local and international fundraising campaigns will be coordinated to avoid duplication of effort and waste of resources.
- Attempts to generate revenue or funds from any source should not be pursued in a manner that reduces the integrity of any site or the protected area system as a whole.

Development and implementation of a budget and financing strategy for the system requires coordination among the management agencies, and the inputs of the supporting institutions.

7. PROTECTED AREAS PLANNING

The development and management of a system of protected areas require the efficient coordination of planning and management processes at both site and system levels. However, little attention was paid to system-level planning during the period 1986-2004. As previously stated, the system contained only the sites managed by the National Parks Trust (NPT), and as such, programming was developed for only the NPT sites. More recent attempts at system-level planning include:

- Promulgation of legislation for the establishment of a Fees and Permits System in 2004;
- Drafting of a Mooring Policy for the British Virgin Islands (BVI); and
- Drafting of a Terrestrial Parks Disaster Plan.

7.1 Protected Areas System Planning

System planning guidelines produced by IUCN-The World Conservation Union identifies necessary system strategies to include national-level coordination with other planning systems, guidelines for management planning at the site level, framework for planning between the various units in the system, and fundraising and investment strategies (Davey, 1998). A protected area planning initiative undertaken in the neighbouring United States Virgin Islands (USVI) during the period 2000-2002 further identified the system strategies, as well as the link between site and system planning strategies (Figure 1). The USVI report suggested the development of two sets of system-level planning, system development strategies and site development guidelines (Gardner, 2002). System development strategies provide detailed strategies and plans for conducting the main system level supporting activities, such as:

- Financial Sustainability Plan;
- System Monitoring and Evaluation;
- Information Management; and
- Communication Strategy.

System guidelines are guidelines for management of sites, developed to ensure the maintenance of standard operating procedures and practices throughout the system, and include:

- Feasibility Assessment for Sites;
- Management Plans;
- Operations Plans;
- Commercial Services Plan;
- Monitoring and Evaluation;
- Research;
- Listing and De-listing of Sites;
- Species Management (protected species, invasive species);
- Disaster Management;
- Interpretation;
- Health and Safety/Visitor Management;
- Surveillance and Enforcement;
- Community Engagement;
- Dispute Resolution; and
- Financial Management.

Using either of the afore-mentioned references as guidance shows that system-level planning and management systems are not fully developed in the BVI. However, that gap has been recognized, hence the increased focus on system issues during the 2007-2017 Plan Period (Section 1.1).

7.2 Site Management Planning

The site planning process in the BVI is articulated to a greater degree. Within the NPT, the site designation process involves a number of other agencies and public groups (Figure 2). However, those planning processes do not always lead to the production of site management plans.

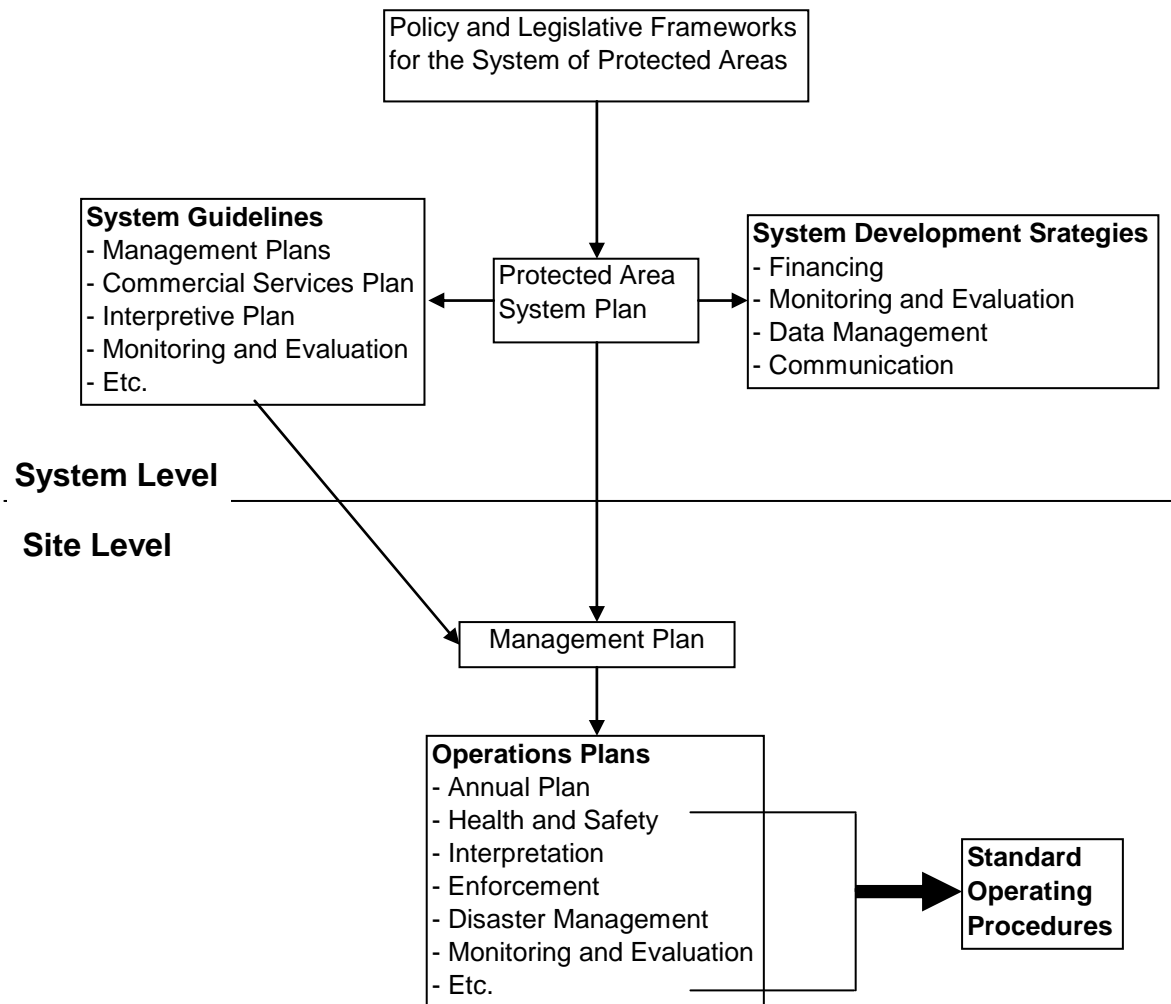
Management plans are the major tools for guiding management activities at the level of the individual protected area. The management plan outlines the policies and procedures that guide management actions, describes the natural resources to be managed, evaluates the major issues to be addressed during the plan period, describes the programmes and strategies to be undertaken in the plan period, the targets to be achieved, and the resources required to undertake the programmes.

The preparation of management plans for protected areas under the management of the NPT is mandated by the National Parks Act (2006). The NPT is currently assessing two approaches to the preparation of management plans (Figure 3):

- (a) Geographically-driven management planning – management plans are prepared for large single sites or clusters of small sites.
- (b) Ecosystem-driven management planning – management plans focus on defined ecosystems, regardless of its spatial location in the system.

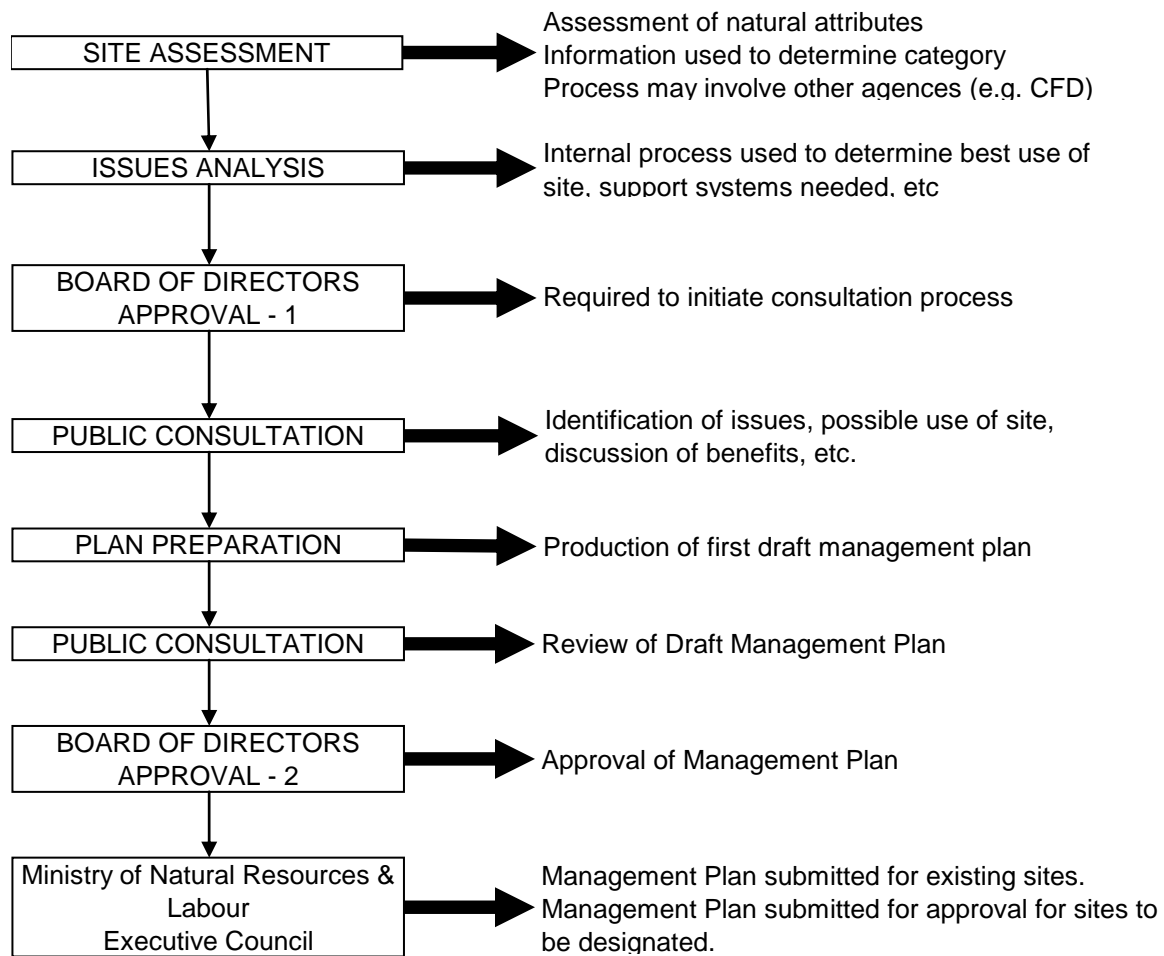
Under either approach, operational planning will still be site specific. The selection of one approach versus the other will determine the resource requirements for the NPT. The viability of both approaches to management planning will be assessed during 2007, and a determination will subsequently be made about the practicality of extending the selected approach to all protected areas in the BVI.

Figure 1: Relationship between Site and System Strategies



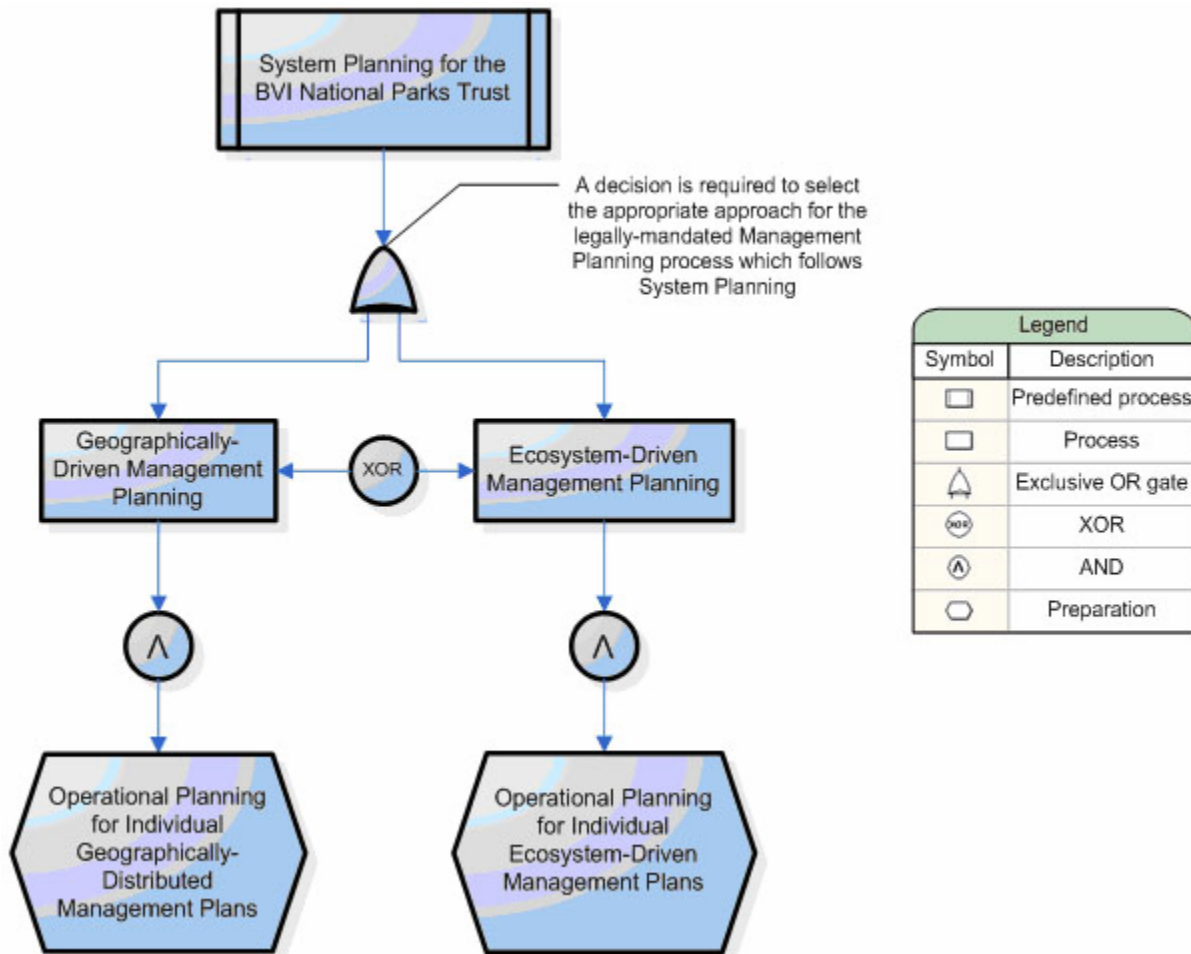
Source: Modified from Gardner, 2002

Figure 2: Site Designation Process



Source: National Parks Trust, 2005

Figure 3: Approaches to Management Planning within National Parks Trust



Operations Plans are of two types. The first is the **Annual Plan**, which sets out how the management plan will be implemented on an annual basis. Issues of budgeting and activity scheduling will be dealt with in much more detail in annual plans.

Annual planning is carried out by the NPT for the most heavily used sites, though in most cases, the budgets, activities, and other operational issues are not articulated in an Annual Plan. Instead, the NPT organizes its annual work plan along seven broad programme areas:

- Biodiversity conservation;
- Education and public awareness;
- Marine Conservation;
- Reforestation;

- Species recovery;
- Historical preservation; and
- Moorings management.

The second type of operational plan is the detailed plan that is theme specific, commonly referred to as Standing Operating Procedures. **Standard Operating Procedures** are written instructions that define an operational action in a fair level of detail. Operational procedures therefore form one of the most basic and important tools at the site level for ensuring consistency of action and the achievement of agreed standards. Within the context of a protected areas system, standard operating procedures facilitate the assessment of achievement of site and system objectives. Standard operating procedures to be developed for protected areas management in the BVI will include:

- Health and Safety/Visitor Management;
- Interpretation/Signage;
- Surveillance and Enforcement;
- Disaster/Emergency Management;
- Monitoring and Research;
- Concessions Management/Commercial Services Planning;
- Maintenance; and
- Site and System Evaluation.

7.3 Site Selection

The process of selecting sites to build-out the system of protected areas is usually driven by many factors, the major ones being; programme development within the main management agency, political pressure (including public pressure), and pressure and/or support from an external institution (usually from a donor agency or colonial authority).

The 1981 study/report (ECNAMP 1981) identified eleven (11) sites within the management control of the NPT, and recommended a further eight (8) sites. The site selection criteria used by that study team, and maintained in the 1986 system plan, is shown by the Box below.

The number of sites recommended for inclusion in the system of protected areas has increased significantly since 1981. Given the range of sites being considered, and the linkages to the BVI economy, it is important that the site selection criteria be revised and applied to the assessment of each proposed site. The latest guidance on site selection criteria (e.g. Salm, Clark, & Siirila, 2000) will be reviewed, and modified as necessary, to ensure applicability to BVI system plan objectives. Additionally, a linear process of site designation, from identification through to preparation of the management plan, will be clearly articulated for public dissemination.

Biological Value	<ul style="list-style-type: none"> • Important to commercial species • Important to endangered species/wildlife • Important to seabird nesting • Diversity of habitats • Uniqueness in BVI • Representativeness • Naturalness
Economic Value	<ul style="list-style-type: none"> • Fishery site • Snorkel/dive site • Charter boat anchorage • Hurricane shelter • Tourism attraction • Watershed management
Social Value	<ul style="list-style-type: none"> • Cultural significance • Recreation • Aesthetics • Education value • Research value
Critical Stress Value	<ul style="list-style-type: none"> • Vulnerability • Threat
Critical Support Value	<ul style="list-style-type: none"> • Safety • Accessibility

Source: ECNAMP 1986

Given the above context, it is clear that the development and operationalisation of system planning, management strategies, and procedures need to be vigorously pursued during the 2007-2017 Plan Period. The National Parks Act 2006 provides some guidance on site planning, but gives no direction on priorities or supporting management systems. Priorities for system and site planning for the 2007-2017 Plan Period are:

- (a) Updating of the site selection criteria and process.
- (b) Assessment of existing sites.
- (c) Undertaking a gap analysis.
- (d) Development of system strategies.

Further development of the system planning process will incorporate the following considerations:

- System-wide planning will be undertaken in collaboration with other relevant government agencies to ensure that development and management of the system is fully integrated with other national planning strategies.
- Site planning and establishment will be undertaken in such a manner as to ensure integration with the land use planning and development control process, in order to reduce the negative impact of development activity on the sites.
- Management plans will be the primary tool for guiding programming for protecting critical protected area resources at the site level.
- Resource-specific management plans will be prepared for management of selected critical resources throughout the entire system of protected areas, including; wetlands, endangered species of national, regional, or international importance; and migratory species of birds.
- System level evaluation will be undertaken once every five (5) years, and will involve the participation of the civil society partner institutions and relevant stakeholders.
- The current practice of consulting the public during the site planning process will be expanded to ensure greater levels of public participation in site and system planning and management.

8. SYSTEM VULNERABILITY

A vulnerability assessment of the protected area system has not yet been undertaken. To date, the consideration of risk has been largely focused on public liability, natural hazards (mainly storms), and anchor damage.

Public Liability

The issue of public liability was identified in the 1986 system plan, where it was noted that the National Parks Trust (NPT), being a corporate entity, could be sued by users of the protected areas under their control. The 1986 plan recommended that the NPT secure insurance coverage. Currently, the NPT manages its own insurance portfolio, which includes Fires and Special Perils, public liability, motor vehicles, boats, accident and death for employees while on duty. There is also special coverage for divers and special short-term coverage for guests and staff of other government agencies while engaged in official duties aboard the Trust's boats.

The Conservation and Fisheries Department and the Department of Agriculture, as central government agencies, are covered by the insurance scheme of the central government.

It should be noted that Government does not carry insurance coverage on its properties. Additionally, the management institutions need to develop health and safety plans for users of the sites.

Natural Hazards

The NPT recognizes the potential threat from natural hazards, and consequently prepared a draft disaster response plan, focused on hurricanes and the site shut-down procedures prior to such events. The NPT disaster management plans are included in the National Disaster Plans for the Territory, and the NPT functions as a member of the National Disaster Management Committee.

The current plans (site and system-wide) will be updated, as well as customized to prepare site-specific, multi-hazard disaster plans. Additionally, the disaster management process will be expanded from just response to include site design, planning and mitigation, damage assessment, and clean-up. The forecast for an increase in the frequency and intensity of storms, and multiple earthquakes in late 2004, confirm the need for this wider approach.

Anchor Damage to Benthic Habitats

A system of moorings was established in 1991 to reduce the impact of anchor damage on benthic communities. Currently, the number of mooring buoys available for day-time use is inadequate, and an undetermined level of damage of benthic habitats continues. However, the NPT will increase the number of moorings during the 2007-2017 Plan Period.

The areas of focus listed above do not suggest the existence of any strategy to gauge or address the issue of the wider vulnerability of the system. A review exercise to determine the scope of a vulnerability assessment will be conducted during this Plan Period (2007-2017). Relevant issues include:

- (a) **Expansion of the focus on natural hazards** – It is clear that a review should pay attention to multiple hazards, as well as expanding the disaster management process to encompass all steps in the process, not just response. What may be less obvious is the need to establish protocols to address concerns about the integrity of the resources and ecosystems contained within protected areas after a major disaster.
- (b) **Addressing man-made threats** – In addition to anchor damage, over-use of the sites and resources also need to be considered. The possibility of undertaking carrying capacity assessment of sites has been suggested, and options are currently being explored. Other anthropogenic sources of threats should also be addressed, particularly development pressure, and the potential for ship groundings and oil spills.
- (c) **Insufficient Capacity** – Inadequate capacity in the management institutions affect planning, monitoring, enforcement, and maintenance functions. This in turn increases the potential for loss of species, as well as damage to infrastructure and resources.
- (d) **Inadequate Financing** – Inadequate financing decreases the capability of the management institutions. It also prevents the establishment and management of new sites to protect valuable ecosystems. In addition to the proposed sites not yet designated, the gap analysis will determine whether there are resources/sites not yet proposed that should be included in the system of protected areas.
- (e) **Climate Change and Sea Level Rise** – It is generally agreed that climate change and sea level rise will have significant impact on tropical/Caribbean ecosystems (UNEP 2005). The sites and system should be designed with the flexibility to respond to the potential changes associated with this particular source of stress.

9. MONITORING AND EVALUATION

Protected areas management objectives have been defined in terms of provision of a range of environmental, economic, and social benefits. Additionally, the establishment and management of protected areas must respond to a range of changes in the society itself, at several levels. Poverty alleviation, conflict resolution, democratization of public policy decision making, transboundary resource management, and support to global environmental strategies are some of the broader and more complicated demands being placed on protected areas.

With this increasingly complicated matrix of local, national, and international demands, protected area management must become more professional, more applicable to the changing demands, and more effective. In order to support decision makers and protected area managers in meeting these challenges and needs, a number of institutions have supported the development of guidelines, case studies, and best practices in protected area management at both site and system levels.

In this demanding, and constantly changing environment, the capture and analysis of ecological and socio-economic data becomes critically important. As such, systems of monitoring, research, and evaluation are integral components of protected areas system management.

9.1 Monitoring

Monitoring is an integral component of any management regime. Typically, monitoring is carried out at the site level to detect changes in particular environmental variables, focusing on both the factors affecting the environmental variables and the changes in the resources themselves. Each protected area will continue to be monitored in accordance with the protocol established in its management plan. The various management institutions will collaborate in the development of the Standard Operating Procedures (SOPs) for monitoring at the site level during this Plan Period (2007-2017). These SOPs will also include a focus on reactive monitoring of sites, particularly damage assessments following natural disasters.

However, system management requires that monitoring at the system level is also undertaken. This will be done in two ways. First, monitoring protocols will be developed within each system development strategy (see Section 7 and Figure 1), facilitating the tracking and evaluation of the effectiveness in implementation of system strategies and system management. Secondly, monitoring protocols will be developed for tracking the status of particular resources (such as mangroves or threatened species of wildlife) across the entire system of protected areas.

System monitoring protocols will be developed through a consultative process with stakeholders, social and natural scientists, and staff from relevant government agencies. In addition to tracking

management effectiveness, progress in the implementation of the various strategies, and protection of natural and heritage resources; system monitoring will also assess the developmental and social aspects of system management. This latter focus will include parameters concerning public participation, access to information, and integration of protected areas management into the national development process.

9.2 Research

Research is another essential component of good management, providing relevant information for site and system design, selection of management strategies, setting standards, and designing monitoring programmes. Research in the BVI protected areas system will provide an understanding of the natural and historical resources, the critical issues to be addressed in the protection of those resources, the public use patterns of the sites and resources, and the contribution of the protected areas to the local communities and national development.

Research in the BVI protected areas system will focus primarily on applied research designed to address management needs. Research of a “pure” nature will be accommodated insofar as it does not present conflicts with management goals and/or operations.

To ensure efficient and timely initiation of research activities, the research needs of the sites and system will be determined in the first 2-3 years of the Plan Period, and articulated in a Research Policy and Plan for the national system of protected areas. The existing research permits systems operated by the Conservation and Fisheries Department and the National Parks Trust will be integrated into this new Research Policy and Plan.

9.3 Reporting

The main protected areas management agencies routinely prepare annual reports as part of the budgetary process. Project reports are also prepared for external donors. However, future reporting has to address a wider range of national and international obligations. Reporting formats and mechanisms will be developed to fulfil the following obligations:

- Annual reports to the NPT Board of Trustees and Ministry of Natural Resources and Labour;
- Reporting to the Secretariats of multilateral environmental agreements, such as SPAW, Biodiversity Convention, World Heritage Convention, and Ramsar Convention;
- Reporting under relevant regional arrangements, such as the St. Georges Declaration;
- Project reporting to funding institutions;
- Annual reporting to corporate and other donors; and

- Annual reporting to collaborating institutions and the general BVI public.

Reporting to regional and international arrangements will be coordinated with the UK Overseas Department where appropriate.

9.4 Evaluation

Evaluation is a critical element of the management cycle, used to determine the effectiveness of particular strategies, and to determine the long-term results of programmes. Evaluation processes should be designed as part of the site and system planning processes, and should include:

- Process Evaluation – focused on the procedures and processes (such as public participation);
- Impact Evaluation – focused on the long-term results of strategies and programmes; and
- Outcome Evaluation – focused on assessment to document short-term results.

At both site and system levels, the evaluation process will be linked to the monitoring and reporting processes, and will be carried out within different timeframes. Some assessment will be required within the annual reporting process, while evaluation at the strategic (system) level will take place over longer periods. Evaluation at the system level will include both Process and Impact Evaluation procedures, focusing on the extent to which the five goals articulated (section 2) for the protected areas system have been met. Site evaluation will focus on outcomes, but will include the extent to which site objectives and outcomes support system goals. As such, ongoing site assessments will be linked to the system evaluation, which is to be undertaken every five (5) years.

The National Parks Trust will coordinate the development of an Evaluation Protocol to be used to evaluate the state of the BVI System of Protected Areas in 2012. The process will commence with benchmarking the status of existing protected areas in 2008.

10. IMPLEMENTATION PRIORITIES

This Protected Areas System Plan 2007-2017 shifts the emphasis from site-based management to system management. This shift requires a re-orientation of both conceptual underpinnings and operational modalities. Key questions have to be asked about how the protected areas fit into the development process, what is the most appropriate institutional framework and set of cooperative arrangements required for system development and management as well as site management, what support systems need to be in place, and how will the financial sustainability of the system be achieved. The priorities and associated support systems are identified below.

The Plan Period is 10 years, 2007-2017, with a mid-term evaluation to be conducted in 2012. The National Parks Trust, as the agency charged with responsibility for protected areas system management, is responsible for coordination of the implementation programme.

Priorities and Targets

- (a) **Gap Assessment** – The OTEP project team has suggested that there should be an increase in the coverage of marine ecosystem under protected area status. That work still leaves gaps in the ecosystems represented, for example, deep reefs. Additionally, a similar assessment of terrestrial ecosystems has not been undertaken. The gap assessment will also include an assessment of the sites declared under the various laws, and managed by the different institutions, in order to ensure that the management objectives of each site are clearly defined and are defensible. This will ensure that all sites can be placed cleanly within the framework established for management of the system, and that the sites still meet their conservation objectives.
- (b) **Strengthening of Management Institutions Responsible for Protected Areas** – Management of the protected areas system as envisioned by this System Plan requires the establishment of new procedures, additional resources, and the acquisition of new skill sets within all institutions. A full capacity assessment of the institutions will be undertaken as a prelude to the development and implementation of the capacity building initiative.
- (c) **Improved Data Management** – Development of monitoring and evaluation protocols and reporting mechanisms require that data collection, management, and dissemination be integrated across the relevant agencies. This will include not only the main management institutions, but also relevant agencies such as the Tourist Board and the Town and Country Planning Department. Expansion of the National GIS to allow access to protected areas stakeholders will be explored.

- (d) **Public Engagement Strategy** – A more structured public engagement policy and plan to support both system development and site management will be developed within this Plan Period. This will include mechanisms for consistent two-way flow of information between the management institutions and the stakeholders. The hosting of an Annual Protected Areas Forum will be initiated in 2007.
- (e) **Financing Strategy and Plan** – Protected areas management cannot achieve its many goals without sustained financing. As such, the development of the Financing Strategy and Plan for the full system of protected areas will be a critical activity at the beginning of the Plan Period. This Plan will include the budget estimate for system development and management (Section 6).
- (f) **Standard Operating Procedures** – The development and operationalisation of site and system planning and management strategies, and standard operating procedures, underpin the rational development of a system of protected areas. As such, the development of standard operating procedures at site and system level will be a critical first activity during the Plan Period.
- (g) **Monitoring and Evaluation Protocols** – The integrity of the sites and system cannot be maintained without a system of setting standards and tracking changes to the resources being managed. The revision and standardization of monitoring and evaluation protocols will be completed by the end of 2008.
- (h) **Economic Analysis** – The stated need for the protected areas to support sustainable development in the BVI requires that the economic imperatives of the sites and system be periodically assessed. During the first five years of this Plan Period (2007-2017), studies will be conducted on the five (5) most heavily used sites to determine their economic impacts on the BVI community.
- (i) **Integrating Proposed Protected Areas** – The areas identified in Section 5.1.2 should be integrated into the system of protected areas by formal declaration. Once the priorities have been established, agencies responsible for protected area management will coordinate the detailed site planning process for each protected area and the formulation of the respective management plans.

In order to undertake the priority activities identified above, various resources and support systems will be provided, primarily:

- **Technical Assistance** – to the NPT to support planning, design, implementation, and evaluation of all programme elements.

- **Financing** – to underwrite the costs of the technical assistance, gap assessment, site assessments, financial analyses, legal drafting and support, acquisition of relevant tools (site, computer hardware and software, etc.).
- **A Structured Consultation Process** – involving both the public and civil society sectors.
- **New Regulations** – to support the system planning and management processes, such as inter-agency planning and reporting, national trust fund/endowment for protected areas, and data management and public access.

PART II: PROTECTED AREAS OF THE BRITISH VIRGIN ISLANDS

This section provides summaries of the designated protected areas managed by the British Virgin Islands National Parks Trust. Information on the sites managed by the other agencies will be compiled early during this Plan Period (2007-2017).

EXISTING PROTECTED AREAS (Map 1)

Anegada

- Western Ponds (Ramsar Site)

Jost Van Dyke

- Diamond Cay National Park

Tortola

- Joseph Reynold O'Neal Botanical Gardens National Park
- Mount Healthy National Park
- Sage Mountain National Park
- Shark Bay National Park
- Queen Elizabeth II National Park

Virgin Gorda

- Copper Mine Point
- Devil's Bay National Park
- Gorda Peak National Park
- Little Fort National Park
- Spring Bay National Park
- The Baths National Park

Other Islands

- Cam Bay National Park
- Dead Chest National Park
- Fallen Jerusalem National Park
- Great Tobago National Park
- Little Tobago National Park
- Prickly Pear National Park
- West Dog National Park
- Wreck of the RMS Rhone Marine Park

Anegada Western Ponds

- a. Date Declared: 1999
- b. Category of Designation: Ramsar Site
- c. IUCN Equivalent: N/A

Description Summary

- e. Location: The Western Ponds are located in the west central section of Anegada, with the road acting as a man made boundary for the Ramsar site.
- f. Size: 2569.9 acres (1040 hectares)
- g. Primary Reason for Designation: Wetlands of international significance.
- h. Name of Management Institution: Conservation and Fisheries Department, Ministry of Natural Resources & Labour
- i. Resource Protected by the Site:
 - Marine – extensive network of salt ponds
 - Terrestrial – limestone cays containing endemic species of flora and fauna; important stopover site for migratory birds
 - Historical – traditional curry mole fisheries and salt production
 - Other (functional ecosystems)
- j. Relevance to BVI Environmental/Conservation Strategies:

Use of 1981 site selection criteria showed site to be important for its naturalness, protection of endangered species/wildlife, and extensive network of ponds and associated habitats.
- k. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation – biodiversity management, fisheries
 - Watershed management
 - National Development – Tourism and Recreation
 - Education and Training
 - Ecosystem Integrity (scale?) – extensive network of inland mangrove systems and ponds

Major Management Issues

l. Internal and External Threats:

- Risks – habitat fragmentation as a result of development along the Ramsar Site

m. Challenges:

- Use Levels and Unacceptable Changes
- Invasives
- Hurricanes and Storms
- Management Resources

Current Initiatives

-

Information Sources:

Western Ponds-Anegada

Diamond Cay National Park

- a. Date Declared: 1991
- b. Category of Designation: National Park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location: Diamond Cay National Park is located off of Long Bay, Jost Van Dyke, occurring as the terminus of a small split peninsula. Map coordinates are given as: Northeastern corner 18° 27' 4"N, 64° 43' 27"W; Southeastern 18° 27' 00", 64° 43' 28"W; Westernmost point 18° 27' 00" N, 64° 43' 33" W.
- e. Size: 1.25 acres
- f. Primary Reason for Designation:
Contains good example of a Caribbean dry forest, provides a habitat for nesting species of wildlife (leatherback turtle and birds), contains a coral reef, and provides recreational opportunities.
- g. Name of Management Institution: BVI National Parks Trust
- h. Resources Protected by the Site:
 - Marine – extensive reef system dominated by Elkhorn coral
 - Terrestrial – 23 species of birds roost on cay.
 - Heritage – none identified
 - Other (functional ecosystems) – dry scrub vegetation.
- i. Relevance to BVI Environmental/Conservation Strategies:
Use of 1981 site selection criteria showed site to be important for its naturalness, protection of endangered species/wildlife, and exhibiting some levels of vulnerability.
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation – protection of wildlife species.
 - National Development – forms part of the tourism product.
 - Ecosystem Integrity (scale?) - unknown

Major Management Issues

k. Internal and External Threats:

- Environmental stress to reef from pollution and anchoring.
- High sediment loading from dredging activities.

l. Challenges:

-

Current Initiatives

- Marine habitat assessment conducted in November 2004, as part of the OTEP Project.

Information Sources

Joseph Reynold O’Neal Botanical Gardens National Park

- a. Date Declared: 1979
- b. Category of Designation: Botanic Garden
- c. IUCN Equivalent: None

Description Summary

- d. Location: Road Town, Tortola. Relative location is: 18° 25’ 44” N, 64° 39’ 18”W
- e. Size: 3 acres
- f. Primary Reason for Designation:
Protection of protected plant species, propagation of commercial plant species, and support to recreation, tourism, and research.
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine - none
 - Terrestrial – Repository for endangered species
 - Historical - none
 - Other (functional ecosystems) - none
- i. Relevance to BVI Environmental/Conservation Strategies:
Protection of endangered species, ex-situ conservation.
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation – biodiversity management, training
 - National Development – Recreation and tourism

Major Management Issues

- k. Internal and External Threats:
 - None
 -
- l. Challenges:
 - Management of collections
 - High use levels by visitors

Current Initiatives

- None

Information Sources

- Herbarium collection.

Mount Healthy National Park

- a. Date Declared: 1983
- b. Category of Designation: National Park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
Located at the head of Mount Healthy Ghut, on the south side of Mount Healthy in Tortola. Relative location: 64° 38' 27" W, 18° 26' 52"N.
- e. Size: 1 acre
- f. Primary Reason for Designation:
The windmill is the only remaining sugar mill in the BVI.
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine - none
 - Terrestrial - none
 - Historical – Remains of sugar mill from the 18th century.
 - Other (functional ecosystems) - none
- i. Relevance to BVI Environmental/Conservation Strategies:
Protection of historic resources.
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation – protection of historic resources
 - National Development – low intensity recreation
 - Ecosystem Integrity (scale?) - none

Major Management Issues

- k. Internal and External Threats:
 - Risks - earthquake
- l. Challenges:
 - None

Current Initiatives

- Maintenance at the park occurs every two weeks.
- The park has been adopted by the Rotary Club of Road Town for at least eight years and special projects are completed as requested by the Trust.
- In May 2005, the Department of Disaster Management set up seismic monitoring equipment at the site as part of a two day territory wide survey.

Information Sources

-

Mount Healthy National Park

Sage Mountain National Park

- a. Date Declared: 1964
- b. Category of Designation: National Park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
Along the top of the ridge from Mount Sage to Coxheath. Relative location: Most westerly point N 18° 24' 26" N, 64° 39' 59" W; S 18° 24' 13", 64° 39' 59" W; 18° 24' 7" N, 64° 40' 19" W; most easterly point E 18° 24' 41" N, 64° 39' 16" W.
- e. Size: 86 acres
- f. Primary Reason for Designation:
Forestry protection, watershed management, recreation, and tourism.
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine - none
 - Terrestrial – Rare and endangered plant species, small tracts of primary forest
 - Historical - none
 - Other (functional ecosystems) – Rain forest
- i. Relevance to BVI Environmental/Conservation Strategies:
Forestry protection, watershed management, wildlife protection, and biodiversity conservation.
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation – Biodiversity conservation
 - National Development – Water provision, watershed management, tourism support, recreation
 - Ecosystem Integrity (scale?) – One of the few remaining rain forests in the BVI

Major Management Issues

- k. Internal and External Threats:
 - Diseased trees in the mahogany plantation

- Some plant species, particularly orchids, being depleted by collectors.

1. Challenges:

- Trail erosion from visitor use

Current Initiatives

- Pruning takes place along trails at the start of the hurricane season.
- The trail network, look-out platform, benches, and tables are in good condition.
- Garbage bins are emptied weekly.
- Steps through the rainforest section are undergoing maintenance, with assistance from the US-based Visions International Volunteers.

Information Sources

Shark Bay National Park

- a. Date Declared: 1999
- b. Category of Designation: National Park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
Shark Bay National Park is located between Rough Point and Anderson Point, on the north coast of Tortola below the Mount Healthy Ghut. Relative location is given by the coordinates: Most westerly point: 18° 27' 2"N; 64° 39' 43"W, most easterly point 18° 27' 3"N, 64° 39' 18" W.
- e. Size: 18.4 acres
- f. Primary Reason for Designation:
Donated to the NPT by Mr. & Mrs. Alexander Nitkin as a nature reserve
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine – Coral reef in nearshore area.
 - Terrestrial – Nesting population of Brown Boobies and Magnificent Frigatebird
 - Historical - none
 - Other (functional ecosystems) – Dry scrub
- i. Relevance to BVI Environmental/Conservation Strategies:
 - Wildlife protection
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation – Wildlife protection
 - National Development – Eco-tourism
 - Ecosystem Integrity (scale?) -

Major Management Issues

- k. Internal and External Threats:
 -

1. Challenges:

-

Current Initiatives

- Regular maintenance is conducted at the park to ensure the trails are clear, the steps and look-out are in safe condition.
- A site visit was conducted in July 2005 by staff from the NPT, Survey Department, and an adjacent landowner.

Information Sources

Shark Bay National Park

Queen Elizabeth II National Park

- a. Date Declared: 1974
- b. Category of Designation: National Park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
Seaward side of the road leading into Road Town (western side). Coordinates: 18° 25' 8"N, 64 37' 4"W; 18° 24' 59"N, 64° 37' 00"W
- e. Size: 0.7 acres
- f. Primary Reason for Designation:
Recreational playground for children, special functions site.
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine - none
 - Terrestrial - none
 - Historical - none
 - Other (functional ecosystems) - none
- i. Relevance to BVI Environmental/Conservation Strategies: None
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation - none
 - National Development – public use
 - Ecosystem Integrity (scale?) - none

Major Management Issues

- k. Internal and External Threats:
 -
- l. Challenges:
 - Use Levels and Unacceptable Changes

Current Initiatives

- Weekly maintenance occurs at the children's park, as the main park has remained closed since December 2004, due to landfill activities on the adjacent property.

Information Sources

Queen Elizabeth II National Park

Copper Mine Point

- a. Date Declared: 2003
- b. Category of Designation: Historic Site
- c. IUCN Equivalent: None

Description Summary

- d. Location:
Southwestern tip of Virgin Gorda. Preliminary boundaries: 18°26.16''N, 64°25.39''W; 18°26.15''N, 64°25.43''W; 18°26'.07''N, 64°25' 42''W; 18°26'.4''N, 64°25'38''W; 18° 25' 56''N, 64° 25' 36''W.
- e. Size: 18.36 acres
- f. Primary Reason for Designation:
Historic ruins of a 19th century Cornish copper mine, unique to the West Indies. Recreation site for visitors. Research, education.
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
- Marine - none
 - Terrestrial – Xeric vegetation, nesting populations of the White-tailed Tropic Bird.
 - Historical – Remains of a 19th century Cornish copper mine.
 - Other (functional ecosystems) – Site dominated by xerophytic vegetation.
- i. Relevance to BVI Environmental/Conservation Strategies:
- Protection of historical resources.
 - Maintenance of biological diversity.
- j. Relevance to National/International Agreements/Initiatives:
- Resource Conservation – protection of historical resources
 - National Development – maintenance of cultural and historic resources, recreation, education, and tourism.
 - Ecosystem Integrity (scale?) – none.

Major Management Issues

k. Internal and External Threats:

- Visitor safety from openness of the site.
- Potential damage to the structures by visitors.

l. Challenges:

- Deterioration of the structures.
- Encroachment by vegetation.

Current Initiatives

- Weekly maintenance is conducted at the site, to collect garbage and clear vegetation that is encroaching upon the ruins.
- A two month project to stabilize the chimney stack was completed in July 2005.

Information Sources

Copper Mine Point

Devil's Bay National Park

- a. Date Declared: 1964
- b. Category of Designation: National Park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
Southwestern tip of Virgin Gorda. Relative Coordinates are: Eastern-most point: 18° 25' 42"N, 64° 26' 27"W; northeastern-most point: 18° 25' 55"N, 64° 26' 32"W; northwestern boundary: 18° 25' 56"N, 64° 26' 46"W; southwestern boundary: 18° 25' 41"N, 64° 26' 46"W; southeastern boundary 18° 25' 40", 64° 26' 29"W; southern-most point: 18° 25' 38"N, 64° 26' 39"W.
- e. Size: 58 acres
- f. Primary Reason for Designation:
 - Recreational use opportunities
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine - none
 - Terrestrial – nesting populations of seabirds
 - Historical - none
 - Other (functional ecosystems) – area is primarily cactus scrub, with dry woodland at higher elevations.
- i. Relevance to BVI Environmental/Conservation Strategies:
 - None
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation - none
 - National Development – protection of recreational resources, tourism opportunities
 - Ecosystem Integrity (scale?) - none

Major Management Issues

k. Internal and External Threats:

- Negative environmental impact from trail use and anchoring.
-

l. Challenges:

- High use levels, congestion, and solid waste management

Current Initiatives

- Site is managed as part of the Greater Baths Management Unit.
- Weekly maintenance occurs, including trail clearance and garbage disposal.
- Implementation of a flag system will take place in late 2005 at The Baths and Devil's Bay to alert vessels on the weather conditions at the site.

Information Sources

Devil's Bay National Park

Gorda Peak National Park

- a. Date Declared: 1974
- b. Category of Designation: National Park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
Gorda Peak is the highest peak on Virgin Gorda, and is located on the northwestern ridge, south of North Sound and north of Solder Bay. Relative Coordinates are: Eastern-most boundary - 18° 29' 21"N, 64° 23' 54"W; northern-most - point 18° 29' 47"N, 64° 24' 9"W; western-most point - 18° 29' 19"N, 64° 24' 30"W; Southern-most point - 18° 28' 37"N, 64° 24' 15"W.
- e. Size: 260 acres
- f. Primary Reason for Designation:
 - Protection of the last remaining example of Caribbean dry forest in the region.
 - Protection of endangered plant species.
 - Watershed management.
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine – none.
 - Terrestrial – Distinct and rare forest types; five species of rare and endangered plant species (*Calypttranthes thomasi*, *Zanthoxylum thomasi*, *Calypttranthes kiaerskovii*, *Maytenus cymosa*), land and sea birds.
 - Historical – none.
 - Other (functional ecosystems) – Forest ecosystem encompassing several forest types, including the rare dry forest.
- i. Relevance to BVI Environmental/Conservation Strategies:
 - Protection of rare habitat type.
 - Protection of rare and endangered species of wildlife.
 - Watershed management.
 - Education and training.

- j. Relevance to National/International Agreements/Initiatives:
- Resource Conservation – Wildlife management and watershed management
 - National Development – Recreation and tourism
 - Ecosystem Integrity (scale?) – conservation of rare ecotype.

Major Management Issues

- k. Internal and External Threats:
- Limited cattle grazing and associated land disturbances.
 - Forest fires.
 - Small-scale agricultural activity.
 - Collection of wild plants, especially orchids.
 - Invasive species (primarily *Azadirachta indica* and *Leucaena leucophala*).
- l. Challenges:
-

Current Initiatives

- Weekly maintenance, including trail clearance, garbage disposal, removal of overhanging branches.
- A survey of the endangered plant species was conducted in April 2005 as part of the Trust's Biodiversity Programme.

Information Sources

Gorda Peak National Park

Little Fort National Park

- a. Date Declared: 1978
- b. Category of Designation: National Park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
Southwestern point of Virgin Gorda, between Spanish Town and Big Trunk Bay.
Boundary Coordinates: Southeast - 18° 26' 33"N, 64° 26' 18"W; southwest - 18° 26' 36"N, 64° 26' 36"W; northeast - 18° 26' 47" N, 64° 26' 27"W, 18° 26' 45"N, 64° 26' 35"W; western-most boundary - 18° 25' 41" N, 64° 26' 38"W; eastern-most boundary - 18° 26' 47" N, 64° 26' 20"W.
- e. Size: 36 acres
- f. Primary Reason for Designation:
 - Protection of historical resources (fortifications)
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine - none
 - Terrestrial - none
 - Historical – remains of fortifications
 - Other (functional ecosystems) - none
- i. Relevance to BVI Environmental/Conservation Strategies:
 - Protection of historical resources
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation - none
 - National Development – recreational use discouraged
 - Ecosystem Integrity (scale?) - none

Major Management Issues

- k. Internal and External Threats:

- None

1. Challenges:

- None

Current Initiatives

- A comprehensive historical site survey was conducted in November 2003, as part of a Historical Sites Census of the BVI conducted by NPT, CFD and the Rotary Club. The ruins were measured, photographed and then mapped using GPS and GIS. The condition of the site was assessed using the historical sites census form.
- It was observed that there were low walls, the façade and floor was in poor condition, the site was overgrown with vegetation
- Recreation is not encouraged at this site as access is difficult across the rocky shoreline, there are no trails provided and no signage.
- A site survey was conducted in June 2005 by Athley Stevens (Senior Warden) and a local entrepreneur to assess the possibility of establishing a floating dock in front of the boulder coastline in order to access the park from the sea. The outcome is still pending.

Information Sources

Little Fort National Park

Spring Bay National Park

- a. Date Declared: 1964
- b. Category of Designation: National Park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
Located on the south-eastern coast of Virgin Gorda, north of The Baths. Boundary coordinates are: Eastern boundary - 18° 26' 11" N, 64° 26' 27" W; northern-most boundary - 18° 26' 12"N, 64° 26' 32"W; southern boundary - 18° 26' 9"N, 64° 26' 28"W; western-most boundary - 18° 26' 10"N, 64° 26' 39"W.
- e. Size: 5.5 acres
- f. Primary Reason for Designation:
Recreation and tourism potential.
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine - none
 - Terrestrial - none
 - Historical - none
 - Other (functional ecosystems) - none
- i. Relevance to BVI Environmental/Conservation Strategies:
 - Education
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation - none
 - National Development – recreation and tourism
 - Ecosystem Integrity (scale?) - none

Major Management Issues

- k. Internal and External Threats:
 - None

1. Challenges:

- Reduction of visitor impacts

Current Initiatives

- The site is managed as part of The Greater Baths Management Unit.
- Weekly maintenance occurs, including trail clearance, garbage disposal, beach raking, mowing the grass.

Information Sources

Spring Bay National Park

The Baths National Park

- a. Date Declared: 1990
- b. Category of Designation: National Park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
The Baths National Park is located on the southwestern coast of Virgin Gorda, between Spring Bay and Devil's Bay. Boundary coordinates are: northwest - 18° 26' 93"N, 64° 26' 41"W; northeast - 18° 25' 59"N, 64° 26' 37"W; southeast - 18° 25' 52", 64° 26' 38"W; southwest - 18° 25' 54"N, 64° 26' 45"W.
- e. Size: 7 acres
- f. Primary Reason for Designation:
Selected for its unique geological formation to function as a recreational site.
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine – coral reefs and seagrass beds
 - Terrestrial - beach
 - Historical - none
 - Other (functional ecosystems) - none
- i. Relevance to BVI Environmental/Conservation Strategies:
 - Recreation and environmental education
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation - none
 - National Development - tourism
 - Ecosystem Integrity (scale?) - none

Major Management Issues

- k. Internal and External Threats:

- Strong ocean swells during months limit access from the sea and increase danger to swimmers.
- High sedimentation in coastal water from runoff during rainfall events.
- Degradation of vegetation from grazing by livestock.
- Anchor damage to seagrass beds.

1. Challenges:

- Overcrowding during peak tourism season.
-

Current Initiatives

- Maintenance of the trails and facilities occurs daily, with repairs to the wooden steps and platforms along the boulder trail.
- A flag pole has been installed at the top of the Baths to alert park users accessing the site from the sea on the weather conditions.
- There is a proposal to manage the site as part of a larger Bath Management Unit.

Information Sources

The Baths National Park

Cam Bay National Park

- a. Date Declared: 1999
- b. Category of Designation: National Park
- c. IUCN Equivalent: National park

Description Summary

- d. Location:
Eastern side of Great Camanoe.
- e. Size: 19.6 acres
- f. Primary Reason for Designation:
Complete coastal ecosystem of salt ponds, seagrass, mangroves and coral reefs.
Recreational site for sailors.
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine – coral reefs, seagrass beds, several species of commercial fish, hawksbill and green turtles, and migratory birds.
 - Terrestrial – intact forest types
 - Historical – Remnants of a pre-Columbian settlement (carbon-dated at 800 A.D.)
 - Other (functional ecosystems) – mangrove forest, salt pond
- i. Relevance to BVI Environmental/Conservation Strategies:
 - Wildlife management
 - Coral reef protection
 - Historic preservation
 - Fisheries management
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation – management of migratory species of birds, management of heritage resources.
 - National Development - tourism
 - Ecosystem Integrity (scale?) – Protection of salt ponds, seagrass bed, mangroves

Major Management Issues

k. Internal and External Threats:

- None

l. Challenges:

- None

Current Initiatives

- A habitat classification map of the marine environment was conducted in November 2004.
- A seabird survey was conducted in May 2005, as part of a Darwin Initiative Biodiversity Project.

Information Sources

Cam Bay National Park

Dead Chest National Park

- a. Date Declared: 1974
- b. Category of Designation: National Park and Bird Sanctuary
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
Northeast of Peter Island.
- e. Size: 34 acres
- f. Primary Reason for Designation:
 - Wildlife conservation and recreation.
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine
 - Terrestrial
 - Cultural
 - Other (functional ecosystems)
- i. Relevance to BVI Environmental/Conservation Strategies:
 - Managed as part of the RMS Rhone Marine Park, for recreational diving and snorkelling.
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation – wildlife conservation
 - National Development – tourism
 - Ecosystem Integrity (scale?) - none

Major Management Issues

- k. Internal and External Threats:
 - None
 -
- l. Challenges:

- None

Current Initiatives

- A habitat classification map of the marine environment was conducted in September 2004, as part of the OTEP Marine Project.
- A seabird survey of the Dead Chest cliffs was conducted in May 2005 as part of a Darwin Initiative Biodiversity Project.

Information Sources

Dead Chest National Park

Fallen Jerusalem National Park

- a. Date Declared: 1974
- b. Category of Designation: National Park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
South of Virgin Gorda. Boundary coordinates are: northeast - 18° 25' 2"N, 64° 26' 56"W; northwest - 18° 25' 24"N, 64° 27' 11"W; southeast - 18° 24' 58"N, 64° 27' 10"W; southwest - 18° 24' 59"N, 64° 27' 14"W; west - 18° 24' 11"N, 64° 27' 13"W, and east 18° 25' 12"N, 64° 27' 00"W.
- e. Size: 48 acres
- f. Primary Reason for Designation:
 - Sanctuary for endangered seabird nesting, recreation, and unique geological formations, similar to The Baths.
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine – coral reef
 - Terrestrial – nesting site for several species of seabirds.
 - Historical - none
 - Other (functional ecosystems) - none
- i. Relevance to BVI Environmental/Conservation Strategies:
 - Wildlife management
 - Coral reef protection
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation – Protection of endangered species (the Sandwich Tern is considered to be of international significance, and the BVI is one of small number of large-scale nesting sites in the Caribbean).
 - National Development - tourism
 - Ecosystem Integrity (scale?) – coral reef

Major Management Issues

k. Internal and External Threats:

- None

l. Challenges:

- High levels of user impact (litter and reduced coral growth).

Current Initiatives

- A survey of the laughing gull (*Larus atricilla*) colony on the island was conducted in May 2005, as part of a Darwin Initiative Biodiversity Project, revealing nesting activity throughout the southern grassy plains.
- The NPT mooring at the site is maintained as part of the Marine Conservation Programme as needed.

Information Sources

Fallen Jerusalem National Park

Great Tobago National Park

- a. Date Declared: 1995
- b. Category of Designation: National Park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
Approximately 3.5 Km west of Jost Van Dyke. Boundary coordinates: northeastern-most point - 18° 27' 12"N, 64° 49' 31"W; northwest - 18° 27' 4" N, 64° 49' 48" W; southeast - 18° 26' 37"N, 64° 49' 12"W; southwest - 18° 26' 33"N, 64° 49' 45"W; southern-most boundary - 18° 26' 28"N, 64° 49' 28"W; northern-most boundary - 18° 27' 15"N, 64° 49' 37"W.
- e. Size: 210 acres
- f. Primary Reason for Designation:
 - Endangered seabird nesting – the largest frigatebird colony in the BVI and potentially the Eastern Caribbean.
 - Forested area
 - Coral reef conservation.
 - Research.
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine – coral reefs
 - Terrestrial – nesting site for birds, forests
 - Historical - none
 - Other (functional ecosystems) - none
- i. Relevance to BVI Environmental/Conservation Strategies:
 - Wildlife protection
 - Coral reef conservation
 - Research.
- j. Relevance to National/International Agreements/Initiatives:

- Resource Conservation – wildlife protection
- National Development - tourism
- Ecosystem Integrity (scale?) – coral reef conservation

Major Management Issues

k. Internal and External Threats:

- Foraging goats have negative impact on habitat needed for seabird nesting.
- Coral disease.

l. Challenges:

- Disturbances to nesting populations of the Magnificent Frigate Bird.

Current Initiatives

- A habitat classification of the marine environment was conducted in May 2005, as part of an OTEP Marine Project.
- An assessment of the frigatebird colony was conducted in May 2005.
- Great Tobago will be managed with Little Tobago as part of a proposed larger management unit.

Information Sources

Great Tobago National Park

Little Tobago National Park

- a. Date Declared: 1998
- b. Category of Designation: National park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
Approximately 3.5 Km west of Jost Van Dyke. Boundary coordinates: northeastern-most point - 18° 26' 4"N, 64° 50' 38"W; southeast - 18° 25' 49"N, 64° 59' 54"W; northwest - W 18° 25' 58"N, 64° 51' 00"W; southwest - 18° 25' 51"N, 64° 51' 3"W, northern-most point - 18° 26' 6" N, 64° 50' 42"W; southern-most point - 18° 25' 47"N, 64° 50' 53"W.
- e. Size: 55 acres
- f. Primary Reason for Designation:
Endangered seabird nesting, coral reef conservation.
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine – coral reefs
 - Terrestrial – scrub vegetation and nesting habitat for seabirds
 - Historical - none
 - Other (functional ecosystems) - none
- i. Relevance to BVI Environmental/Conservation Strategies:
 - Wildlife protection
 - Coral reef conservation
 - Research.
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation – wildlife protection
 - National Development - tourism
 - Ecosystem Integrity (scale?) – coral reef conservation

Major Management Issues

k. Internal and External Threats:

- Foraging goats
- Coral disease

l. Challenges:

- High use levels producing negative impacts

Current Initiatives

- A habitat classification mapping exercise of the marine environment was conducted in May 2005, as part of an OTEP Marine Project.
- A seabird survey of the cliffs was also conducted, revealing nesting activity.
- Little Tobago National Park is being managed with Great Tobago National Park, and the NPT proposes to expand the marine space around both to create one large management unit.

Information Sources

Little Tobago National Park

Prickly Pear National Park

- a. Date Declared: 1988
- b. Category of Designation: National Park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
Immediately north of Virgin Gorda, within the North Sound. Boundary coordinates: southeastern-most point (Asbestos Point) - 18° 30' 26"N, 64° 21' 30"W; 18° 30' 55"N, 64° 22' 09"W; northwestern-most point (Opuntia Point) - 18° 31' 00"N- 64° 22' 32" W; Cactus Point - 18° 30' 21"N, 64° 22' 10"W.
- e. Size: 180 acres
- f. Primary Reason for Designation:
Existence of mangrove and salt pond systems, potential for recreational use of the beach, existence of turtle nesting activity, and the fact that the site is a declared bird sanctuary (1959).
- g. Name of Management Institution: National Park Trust
- h. Resource Protected by the Site:
 - Marine – seagrass beds, beaches, mangrove stands, coral reefs
 - Terrestrial – several species of birds
 - Historical - none
 - Other (functional ecosystems) – fish nursery, bird nesting habitat, turtle nesting grounds
- i. Relevance to BVI Environmental/Conservation Strategies:
 - Marine resources conservation
 - Fisheries management
 - Wildlife management
 - Research
 - Environmental education
- j. Relevance to National/International Agreements/Initiatives:

- Resource Conservation – wildlife conservation
- National Development - tourism
- Ecosystem Integrity (scale?) – coral reef conservation

Major Management Issues

k. Internal and External Threats:

- Damage to bird nesting habitat from foraging goats
- Damage to marine resources from anchors and snorkelling/diving activities.

l. Challenges:

- Visitor use management
- Containment of foraging livestock.

Current Initiatives

- A comprehensive assessment of the concession facility and the surrounding grounds was conducted in December 2004. This included a detailed inventory of the facilities.
- A visit to the park was conducted in June 2005 by members of the Board of Directors of the National Parks Trust, in order to assess the status of the concession facility.

Information Sources

Prickly Pear National Park

West Dog National Park

- a. Date Declared: 1974
- b. Category of Designation: National Park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
West Dog Island is located west of Great Dog Island, southwest of George Dog, and west of Virgin Gorda. It lies near Cockroach Island and the submerged pinnacles of Tow Rock and Van Ryan's Rock. Boundary coordinates: northeast - 18° 29' 17"N, 64° 28' 18"W; northwest - 18° 29' 14"N, 64° 28' 24"W; southeast - 18° 29' 03"N, 64° 28' 15"W; southwest - 18° 29' 00"N, 64° 28' 27"W, east - 18° 29' 03"N, 64° 28' 15"W; west - 18° 29' 04"N, 64° 28' 30"W.
- e. Size: 24 acres
- f. Primary Reason for Designation:
Endangered seabird nesting, healthy coral reef, and a declared bird sanctuary.
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine – coral reefs
 - Terrestrial – various species of seabirds
 - Historical - none
 - Other (functional ecosystems) – turtle nesting sites, seabird nesting habitat
- i. Relevance to BVI Environmental/Conservation Strategies:
 - Coral reef conservation
 - Wildlife protection
 - Environmental education
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation – wildlife protection, sea turtle conservation
 - National Development – recreation and tourism
 - Ecosystem Integrity (scale?) – coral reef conservation

Major Management Issues

k. Internal and External Threats:

- Anchor damage

l. Challenges:

- Reduction of user impacts from diving and snorkelling
- Reduction of impacts from anchoring

Current Initiatives

- A seabird survey was conducted in May 2005 as part of a Darwin Initiative Biodiversity Project. A survey of the reefs was also conducted.

Information Sources

West Dog National Park

Wreck of the RMS Rhone Marine Park

- a. Date Declared: 1980
- b. Category of Designation: Marine Park
- c. IUCN Equivalent: National Park

Description Summary

- d. Location:
The park stretches from Lee Bay on Salt Island westward to include Dead Chest Island. Boundary coordinates: northwest - 18° 22' 15"N, 64° 34' 01"W; northeast - 18° 22' 26"N, 64° 32' 05"W; southeast - 18° 21' 04"N, 64° 31' 58"W; southwest - 18° 21' 38" N, 64° 34' 01"W. (including Dead Chest).
- e. Size: 766 acres
- f. Primary Reason for Designation:
 - Historic shipwreck of a royal mail steamer. Managed for recreational diving and snorkelling.
- g. Name of Management Institution: National Parks Trust
- h. Resource Protected by the Site:
 - Marine – seagrass beds, coral reefs, pelagic and reef fishes
 - Terrestrial – none (except on Dead Chest Island)
 - Historical – Wreck of the Rhone
 - Other (functional ecosystems) – fish sanctuary
- i. Relevance to BVI Environmental/Conservation Strategies:
 - Fisheries management
 - Marine resources conservation
- j. Relevance to National/International Agreements/Initiatives:
 - Resource Conservation – coral reef conservation
 - National Development – recreation and tourism
 - Ecosystem Integrity (scale?) - none

Major Management Issues

k. Internal and External Threats:

- Safety hazards resulting from congestion of the marine space

l. Challenges:

- Visitor use management
- Prevention of anchor damage

Current Initiatives

- Weekly patrols to the site are conducted by the NPT Marine Wardens in order to assess the condition of the mooring buoys.
- A thorough marine survey of the substrate was conducted in September 2004, as part of an OTEP Marine Project.

Information Sources

Wreck of the RMS Rhone Marine Park

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APPENDIX 1: Essential Elements of a National System Plan for Protected Areas

- ◆ Clear statements of objectives, rationale, categories, definitions and future directions for protected areas in the country;
- ◆ Assessment of conservation status, condition and management viability of the various units;
- ◆ Review of how well the system samples the biodiversity and other natural and associated cultural heritage of the country;
- ◆ Procedures for selecting and designing additional protected areas so that the system as a whole has better characteristics;
- ◆ Identification of the ways in which activities undertaken at national, regional and local levels interact to fulfil national and regional objectives for a system of protected areas;
- ◆ A clear basis for integration and coordination of protected areas with other aspects of national planning (e.g. with national biodiversity strategies and so forth, but also with land use, economic and social planning);
- ◆ Assessment of the existing institutional framework for protected areas (relationships, linkages and responsibilities) and identification of priorities for capacity building;
- ◆ Priorities for further evolution of the protected area system;
- ◆ Procedures for deciding the management category most appropriate to each existing and proposed unit, to make best use of the full range of available protected area categories, and to promote identification of the ways in which the different system categories support each other;
- ◆ Identification of investment needs and priorities for protected areas;
- ◆ Identification of training and human resource development needs for protected area management; and
- ◆ Guidelines for preparation and implementation of management policies and site-level management plans.

Source: Davey, A.G. (1998). *National System Planning for Protected Areas*. IUCN, Gland, Switzerland and Cambridge, UK.

APPENDIX 2: Legislative Authority for System Planning – National Parks Act, 2006

Section 13. Protected Areas System Plan

- (1) Parks and other protected areas established under this Act comprise a protected areas system and to guide development and management of the system and specific areas within the system in furtherance of the objects of this Act, the Trust shall prepare and periodically update, as needed, a protected areas system plan.
- (2) The protected areas system plan required in subsection (1) shall, among other things, describe conservation goals and priorities of the system, how individual areas contribute to these goals and priorities, and criteria for adding new protected areas, from time to time, to maintain and strengthen the system taking into account the following key elements:
 - (a) representativeness and adequacy for supporting and maintaining ecological processes, biological diversity, and important natural and cultural heritage features such as landform types, landscapes, and historic sites;
 - (b) integration with other related initiatives and protected areas systems at international, transboundary, regional and local levels;
 - (c) compliance with obligations, commitments, or expected responsibilities under international and regional conventions, agreements, or programmes, including those related to designation of specially protected areas and wildlife on land or in the sea, conservation of migratory species, protection of wetlands for endangered waterfowl, conservation of biological diversity, protection of wildlife controlled in international trade, and preservation of world heritage sites; and
 - (d) supporting sustainable economic and social development in the Territory.

APPENDIX 3: Classification of Protected Areas by the National Parks Act, 2006

Section 18. Classification of parks and other protected areas

For the purpose of classifying parks and other protected areas established, from time to time, under this Act and listed in Schedule 2, the following classifications shall apply with their associated conservation and management objectives:

- (1) An area classified as a **Strict Nature Reserves/Wilderness Area** shall be an area of land and/or sea of high natural quality in an unmodified or slightly modified state possessing outstanding or representative ecosystems, features or species and large enough to ensure preservation of the area's natural integrity for present and future generations, to be managed in this state in perpetuity, and such an area may be classified --
 - (a) as a **Strict Nature Reserve**, where the conservation and management objectives are to preserve habitats, ecosystems and wildlife species in as undisturbed state as possible while maintaining biodiversity and established ecological processes, and to secure examples of the natural environment primarily for scientific study and research, environmental monitoring, and science education; or
 - (b) as a **Wilderness Area**, where the primary conservation and management objectives are to protect and preserve a natural wilderness condition, maintain biological diversity and essential ecological processes, and provide for carefully managed public access consistent with maintaining the wilderness qualities of the area for present and future generations.
- (2) An area classified as a **National Park** shall be a natural area of land and/or sea containing a representative sample of major natural regions, features, or scenery, or where wildlife, habitats, or surface features are of special significance and are not materially altered by current human occupation or exploitation, to be maintained in perpetuity with the following conservation and management objectives --
 - (a) to protect natural and scenic areas of national and international significance for spiritual, scientific, educational, recreational, or tourism purposes,
 - (b) to protect, in as natural a state as possible, representative samples of major physiographic regions, biotic communities, genetic resources, and species for ecological stability and diversity,
 - (c) to manage visitor use for inspirational, scientific, educational, recreational, or cultural purposes at a level which will maintain the area in a natural or near natural state,

- (d) to eliminate and thereafter prevent exploitation or occupation harmful to the purposes for which the area was declared, and
 - (e) to take into account the needs of indigenous people, including subsistence resource use, in so far as that use does not adversely affect the conservation objectives of the area.
- (3) An area classified as a **Natural Monument** shall be a unique area of land and/or sea containing one or more natural, or natural and associated cultural, feature of outstanding value because of its inherent rarity, representative or aesthetic qualities, to be managed to protect or preserve in perpetuity the special feature or features, and to provide opportunities for scientific research, education and public appreciation to the extent consistent with its conservation objectives.
- (4) An area classified as a **Habitat or Species Management Area** shall be an area of land and/or sea that serves an important role in the protection and survival of wildlife, where the protection of wildlife habitat is essential to the well-being of nationally or locally-important wild plants or to resident or migratory wild animals, and where specific human manipulation and active intervention are required to ensure maintenance of such habitats or to meet the habitat requirements of specific species or both, and such areas may incorporate breeding and nesting areas, wetlands, coral reefs, estuaries, grasslands, forests or spawning areas including marine feeding beds.
- (5) An area classified as a **Protected Landscape or Seascape** shall be an area of land and/or sea where the interaction of people and nature over time has produced a distinctive character with significant aesthetic, ecological or cultural heritage value and often with high biological diversity, where management aims to maintain and support this harmonious interaction of people and nature by preserving and promoting:
- (a) the diversity of the landscape, habitat and associated species,
 - (b) places of cultural heritage significance that are an integral part of the area's character,
 - (c) lifestyles and economic activities including fishing when in harmony with the character of the area, and
 - (d) opportunities for scientific research, education and public enjoyment compatible with the conservation objectives of the area.
- (6) An area classified as a **Managed Resource Area** shall be an area of land and/or sea large enough to absorb sustainable resource uses without detriment to its long-term natural values, to be managed to ensure long-term protection and maintenance of biological diversity while providing a sustainable flow of natural products and services to meet community needs.

- (7) An area classified as an **Urban Park** is a relatively small area that may be significantly altered from its natural state, where management is primarily for aesthetic, educational, scientific or recreational purposes, including the preservation, display and propagation of wild plant collections in botanical gardens or wild animal collections in zoological parks.
- (8) An area classified as an **Historic Site** shall be of national importance for its historic and cultural values and not otherwise associated with a natural site established under this Part, where management is primarily for the conservation of the historic and cultural features of the site and any objects located therein, and where visitor use, educational activities, and scientific research and monitoring may be authorised so long as compatible with preservation of the site's historic and cultural values.

Section 19. Conservation agreements and protected areas

Land or other property under a conservation agreement in force pursuant to Part VI of this Act may be included in or associated with a national park or other protected area established under this Act so long as the management objectives and terms of the agreement are compatible with the purposes of the park or other protected area.

APPENDIX 4: Multilateral Environmental Agreements Relevant to Protected Areas Management in the BVI

Regional Agreements

- St. George's Declaration of Principles for Environmental Sustainability in the OECS – BVI signed in July 2001
- Convention for the Protection and Development of the Marine Environment of the Wider Caribbean (Cartagena Convention)
- Protocol Concerning Specially Protected Areas and Wildlife in the Wider Caribbean Region (SPA Protocol) – ratified by the BVI in 1990
- Protocol Concerning Pollution from Land-Based Sources and Activities (LBS Protocol)

International Agreements

- UN Millennium Development Goals
- Convention concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention).
- United Nations Convention on Law of the Sea.
- The Convention on Biological Diversity (CBD).
- The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention).
- The Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention).

APPENDIX 5: Legislation Relevant to Protected Areas Management in the BVI

A range of legislative instruments impact on protected area management in the British Virgin Islands (BVI). While many deal specifically with protected areas, some address general conservation or land management issues. These legislative instruments fall within the management responsibilities of several agencies, which themselves are in different sectors of the development process.

PROTECTED AREA MANAGEMENT

1. National Parks Act, 2006

This Act is the most recent and far-reaching of the legislative instruments dealing directly with protected areas, and repeals the National Parks Ordinance (Cap. 243) and the Marine Parks and Protected Areas Ordinance (Cap. 85). It introduces provisions for the management of historical sites by the National Parks Trust, provides guidance on management planning, and specifically requires the preparation of a protected areas system plan (Section 13(1)).

2. The Marine Parks and Protected Areas Regulations (CAP. 85) (1991)

The Marine Parks and Protected Areas Regulations (1991) were enacted to ensure that marine tourism activity at and around National Parks Trust moorings be carried out in accordance to the Marine Parks and Protected Areas Ordinance (1979). The Regulations allow an “authorized” National Parks Trust Officer, in addition to police officers and immigration officers, to enforce a range of prescriptions, primarily mooring and recreational uses. Under these Regulations, the National Parks Trust may also regulate the issuance, suspension, and revocation of permits for mooring within Marine Parks.

WILDLIFE CONSERVATION

3. Wild Birds Protection Ordinance (1959) (CAP. 98 amended 1980 and 1982)

This ordinance provides protection for approximately 31 species of rare or endangered wild birds, their eggs, nests, and young, except as authorised by the Governor for the purposes of bona fide research, at any time and under any conditions. The **Bird Sanctuaries Order** fully protects all species of wild birds in 20 designated bird sanctuaries. Enforcement is by the Police Force and any others so designated by the Governor. The Marine Parks and Protected Areas Ordinance applies the status of Bird Sanctuary to all marine parks and protected areas created under the ordinance (see section 9, of CAP. 85). The Ordinance authorises the Governor in Council to

establish Bird Sanctuaries in which all wild birds, their nests and eggs are fully protected, and sets penalties for offences within Bird Sanctuaries. It also authorizes the Governor to permit killing and taking of protected birds, their nests, and young for scientific, educational, or conservation purposes.

4. The Turtles Ordinance, (1986) and the Turtles Act (1992) (CAP. 87)

Prior to 1992, the Turtle Ordinance (1986) provided protection for four species of turtle: the loggerhead (*Caretta caretta*) green (*Chelonia mydas*), hawksbill (*Erectmochelys imbricata*), and leatherback (*Dermochelys coriacea*). Turtle eggs and all turtle species were only afforded protected during an annual closed season lasting from the 1st of April to the 30th of November. In 1992, the Turtle Ordinance was replaced with the Turtles Act (1992). The Act protects Leatherback, Green and Hawksbill Turtles (those with a shell length greater than 24 inches) and their eggs at all time. The capture of turtles is prohibited on onshore areas and 100 yards thereof at all times.

5. Plant Protection Ordinance (1941) (CAP. 85)

This Ordinance empowers the Governor to make proclamations to control the transport and cultivation of any plant likely to be carrying any pest or disease. He may direct the quarantine of infected areas and specify precautions to prevent the spread of diseases. He may direct the inspection and issuing of a certificate for import or export of any class of plants. The occupier of any land is required by the Ordinance to report noticeable diseases or pests to the Plant Protection Officer or be liable to a fine. The Plant Protection officer is given power of entry on private land without notice to carry out inspections.

The occupier of any land, upon which any recognizable disease or pest resides, must as soon as possible report the finding to a plant Protection Officer. If locally diseased flora and pests are not reported to an Officer, an occupier may be liable to summary conviction and fined.

Furthermore, any person who: (a) in any manner obstructs or impedes an individual to carry out the regulations in the Ordinance, or (b) knowingly introduces any diseases or pests into lands or to any plant, or (c) fails to comply with or contravenes with the Ordinance's stipulations will be liable of a fine.

FISHERIES CONSERVATION

6. The Fisheries Act, 1997

Under this Act, the Minister may declare a fishing priority area and protected area for the conservation of living aquatic resources. A protected area declared under this Act may contain designated fishing areas. The Fisheries Act may also establish marine reserves.

LAND USE PLANNING AND HABITAT CONSERVATION

7. Protection of Trees and Conservation of Soil and Water Ordinance (1954) (CAP 86)

This Ordinance provides for the declaration of protected areas for the prevention of deforestation, soil erosion and for the protection of watersheds, and prohibits grazing livestock or earthmoving in such areas, including private lands, without a license. Enforcement is the responsibility of the Chief Agricultural Officer and any others so designated by the Governor. If these protected areas are adjacent to marine parks, this ordinance may supplement and enhance the Marine Parks and Protected Areas Ordinance.

This Ordinance enables the Governor in Council to declare any tree or land to be protected for the following purposes:

- To maintain and preserve protected trees;
- In the case of a forestry area, to prevent deforestation of land on steep slopes and soil erosion;
- In the case of a water area, to maintain water supplies and to prevent siltation and pollution of water supplies.

8. Physical Planning Act, 2005

This Act repeals the Land Development (Control) Ordinance (Cap. 241) and the Land Development (Control) (Validation) Act, 1992.

This Act provides for the orderly and progressive development of land, and requires review by the Development Control Authority of any plans for development or subdivision. The legislation also offers protection against inappropriate development of private lands within or adjacent to designated protected areas. This Act extends protection for natural heritage beyond the provisions of the previous legislation, by making provision for the declaration of environmental protection areas to protect a range of natural features.

9. Beach Protection Ordinance (CAP. 233) (1985)

This Ordinance provides for the preservation and protection of beaches. It prohibits the removal of natural sea barriers or sand, stone, or gravel foreshore except through the permission of the Minister, made by application. The Ordinance permits the carrying away of quantities of sand small enough to be removed without an animal or a wheeled vehicle (including wheelbarrows).

It prohibits under any circumstance removal that is likely to result in shoreline erosion. It also prohibits the fouling of the foreshore with garbage or any other debris.

HISTORICAL RESOURCES

10. Receivers of Wreck (CAP. 126)

This Ordinance empowers the Governor to designate an official Receiver to deal with ships in distress and wrecks. Any articles washed ashore from shipwrecks are to be turned over to the Receiver, who has the power to suppress plunder and disorder by force. Notice must be given to the Receiver when a wreck is found.

SALT POND PROTECTION AND MINERAL EXPLORATION

11. Government Salt Ponds (1959) (CAP. 218)

This Ordinance prohibits the taking of salt from ponds on government property without a permit. It also protects parks and protected areas from indiscriminate salt mining.

12. Mining Ordinance (1972) (CAP. 150)

This ordinance restricts prospecting or mining in, under, or upon any lands or under any waters within the Territory. It provides for the protection from mining in or upon areas held sacred, and prohibits mining causing the destruction of trees and objects of veneration. It specifically excludes from mining or prospecting land that is set apart or dedicated to a public purpose and one hundred yards of a building. Mining and prospecting are also prohibited at the limits of any reservoir or catchment, any road or land which forms a thoroughfare, or on any land under cultivation, or at the coastline of the Territory.

POLLUTION CONT ROL

13. Marine Pollution Environment Protection Order (1988) (CAP. 48)

This Ordinance restricts the pollution of the territorial seas through the dumping of wastes and creates penalties for the commission of such offences. A license is required for any substances or articles to be deposited within the Territorial waters of the Territory (either in the sea or under the seabed). It is prohibited, unless a license is obtained, to deposit waste in a fisheries area. The dumping of wastes in the waters of a marine park is prohibited.

14. **Merchant Shipping Act (1995) (CAP. 216)**

Under the Merchant Shipping Act no ship may discharge or allow oil to escape into the Territorial waters of the British Virgin Islands. Ship owners are held liable for the clean up and damage costs associated with oil discharges.

Other marine pollution legislation of relevance includes:

- Dumping at Sea Act (U.K.), 1974 (provides recourse for acts causing marine pollution);
- Merchant Shipping (Oil Pollution) (Virgin islands) order of 1975;
- Prevention of Oil Pollution Act (U.K.), 1971; and
- Ports and Marine Services Ordinance, 1986 (establishes liability of boat owners for damage and pollution caused by vessel or person).

APPENDIX 6: Institutions Collaborating in Protected Areas Management in the BVI

Management Institutions

Ministry of Natural Resources and Labour

National Parks Trust

Conservation and Fisheries Department

Department of Agriculture

Supporting Institutions

Ministry of Finance

Development Planning Unit

Town and Country Planning Department

Customs Department

Royal V.I. Police Force

BVI Tourist Board

Association of Reef Keepers

BVI Scuba Association

Charter Yacht Society

Marine Association of the BVI

Copper Mine Committee

Trustees of the National Parks Trust, USA

Royal Botanic Gardens - Kew

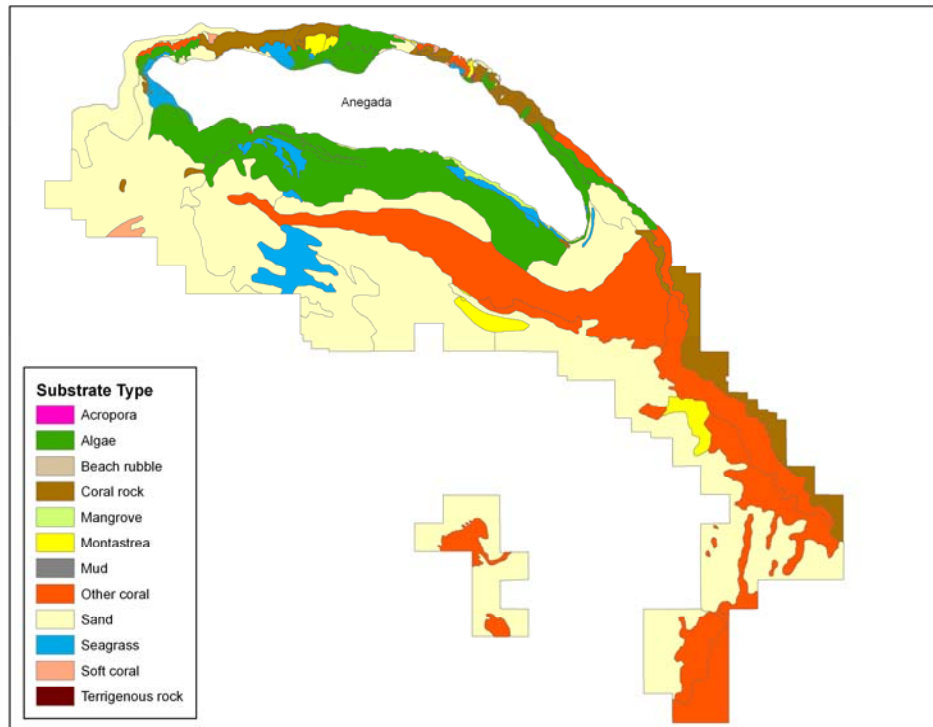
Jost van Dyke Preservation Society

The Nature Conservancy

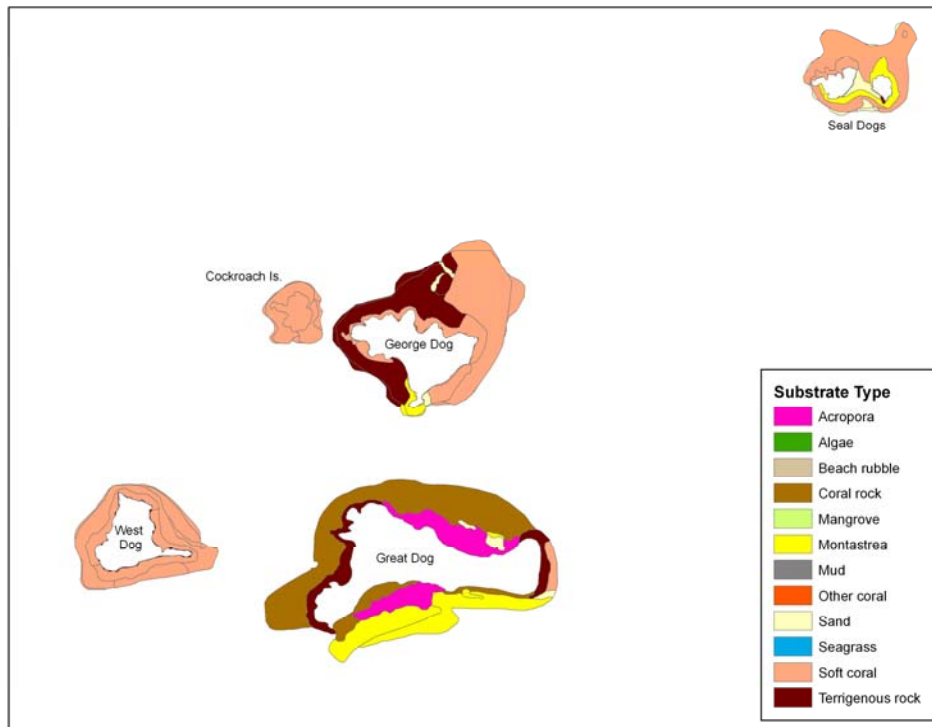
APPENDIX 7: Approved Moorings Sites for the British Virgin Islands

Biras Creek	Buck Island
Brandywine Bay	Cane Garden Bay
Cooper Island	East End
Fish Bay	Great Camanoe
Frenchman's Cay	Hodge's Creek
Leverick Bay	Little Dix Bay – Virgin Gorda
Little Harbour, White Bay, East, West, Central – Jost Van Dyke	Mahoe Bay – Virgin Gorda
Marina Cay	Necker Island
North Sound	Parham Town
Pockwood Pond	Saba Rock
Salt Island	Scrub Island
Soper's Hole	Sprat Bay, White Bay, Great Harbour – Peter Island
St. Thomas Bay – Virgin Gorda	The Bight, Privateer's Bay and Soldier's Bay - Norman Island
Trellis Bay	Trunk Bay – Virgin Gorda
Source: Ministry of Natural Resources & Labour	

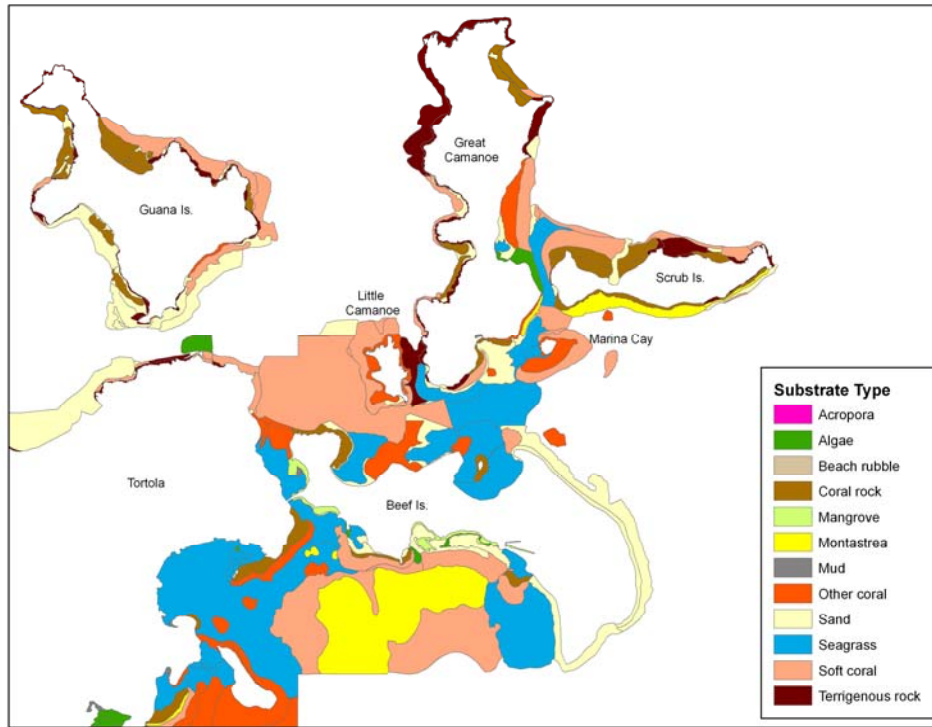
APPENDIX 8: Marine & Coastal Resource Maps for the British Virgin Islands
MARINE RESOURCES OF THE BRITISH VIRGIN ISLANDS



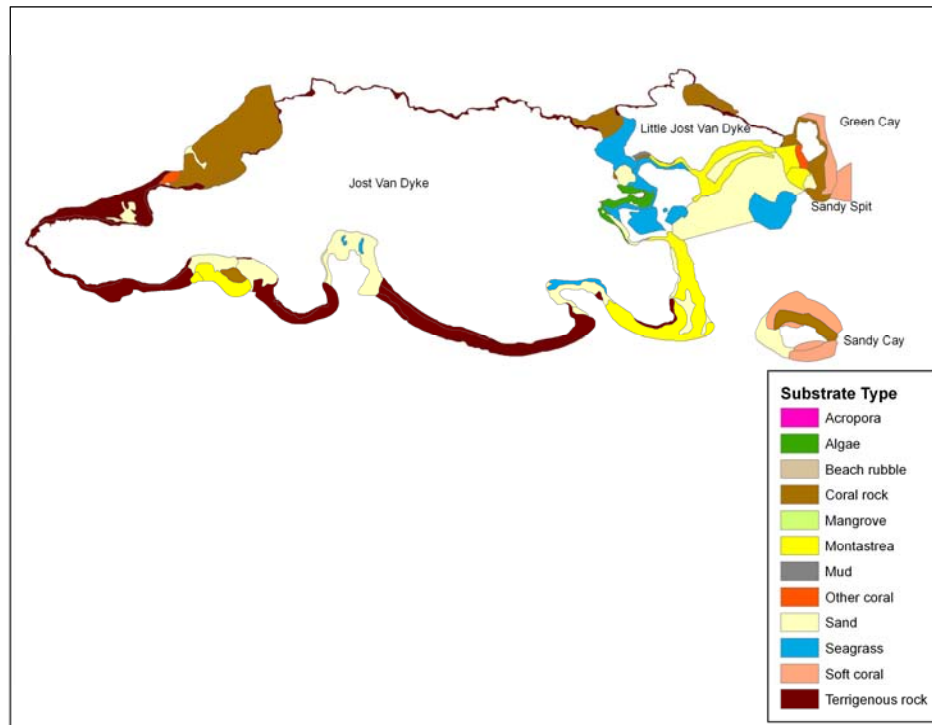
Map 15: Anegada & the Horse Shoe Reef



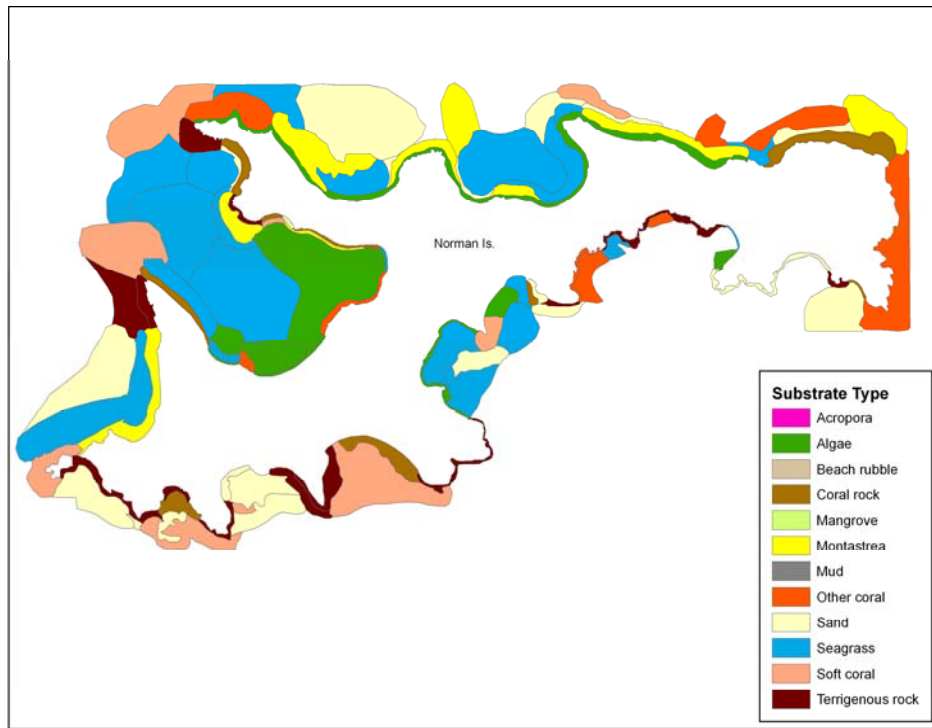
Map 16: The Dogs



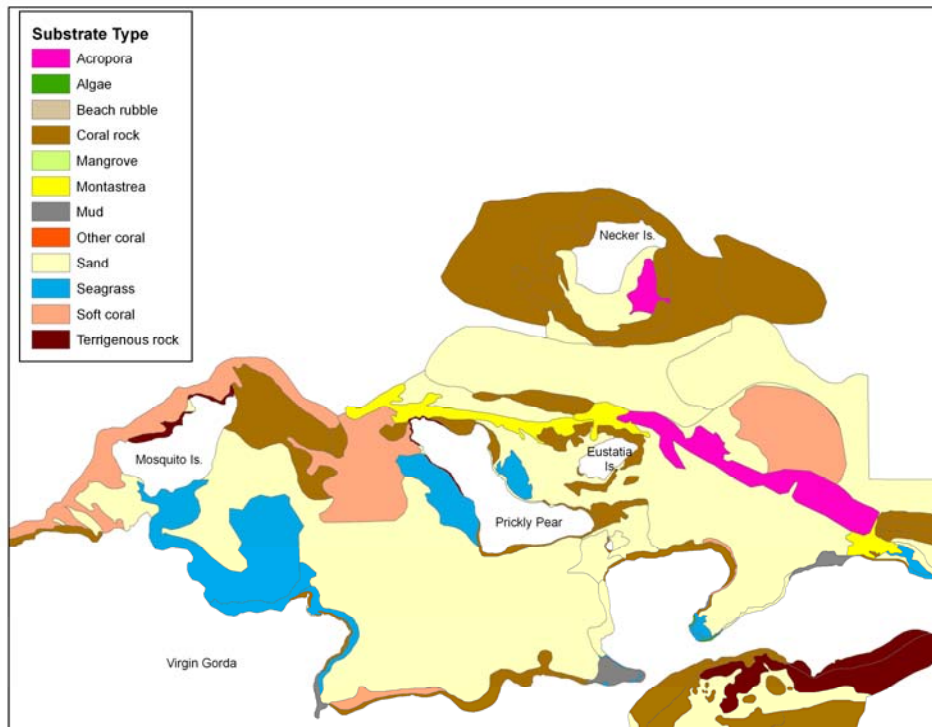
Map 17: Guana, Great & Little Camanoe, Beef and Scrub Islands



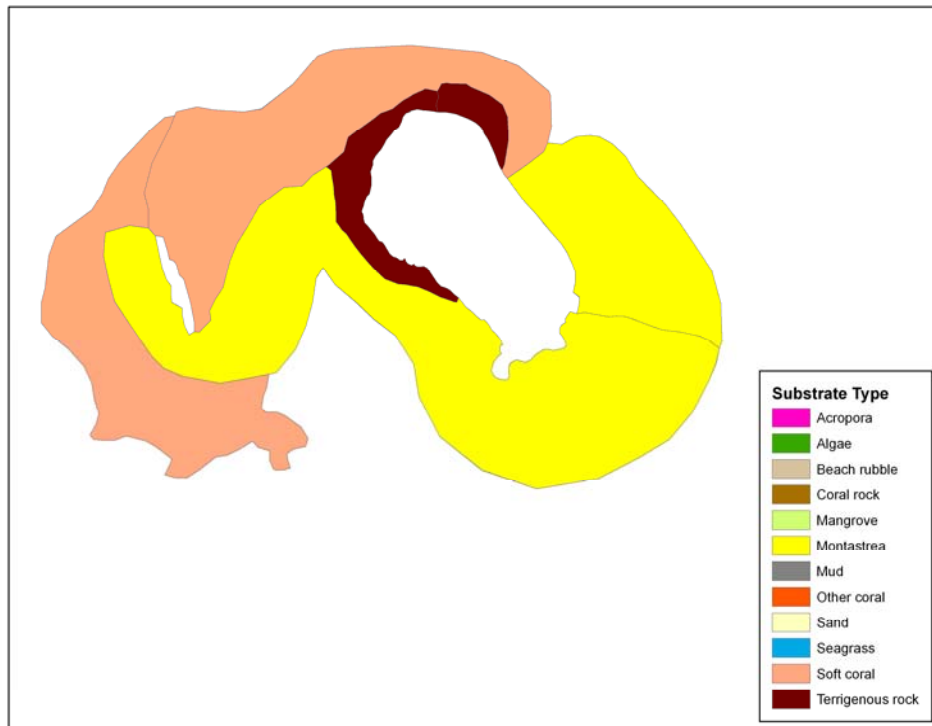
Map 18: Jost Van Dyke



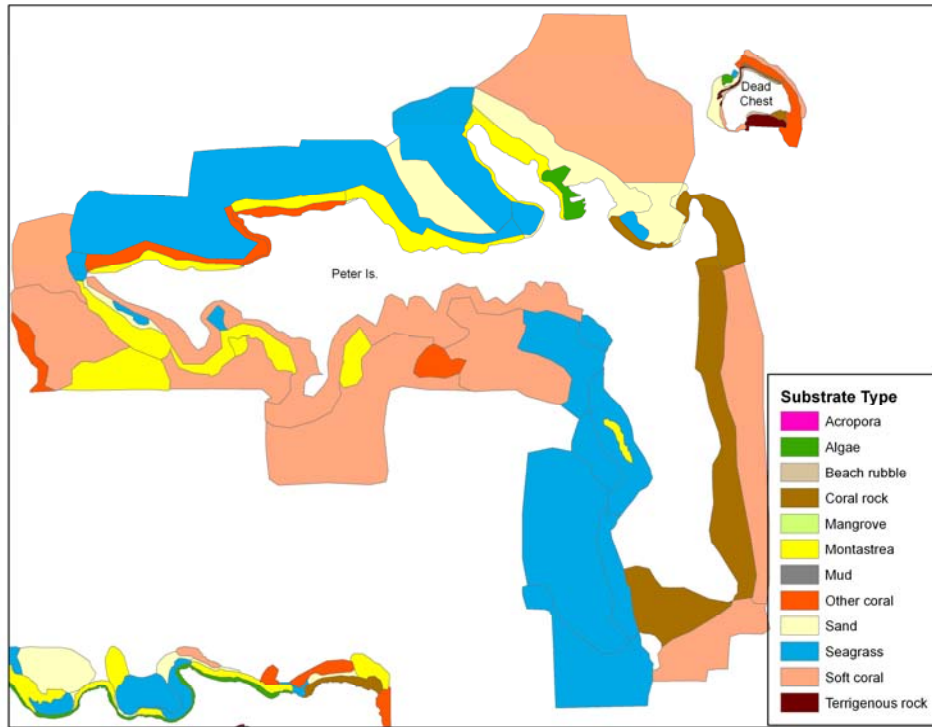
Map 19: Norman Island



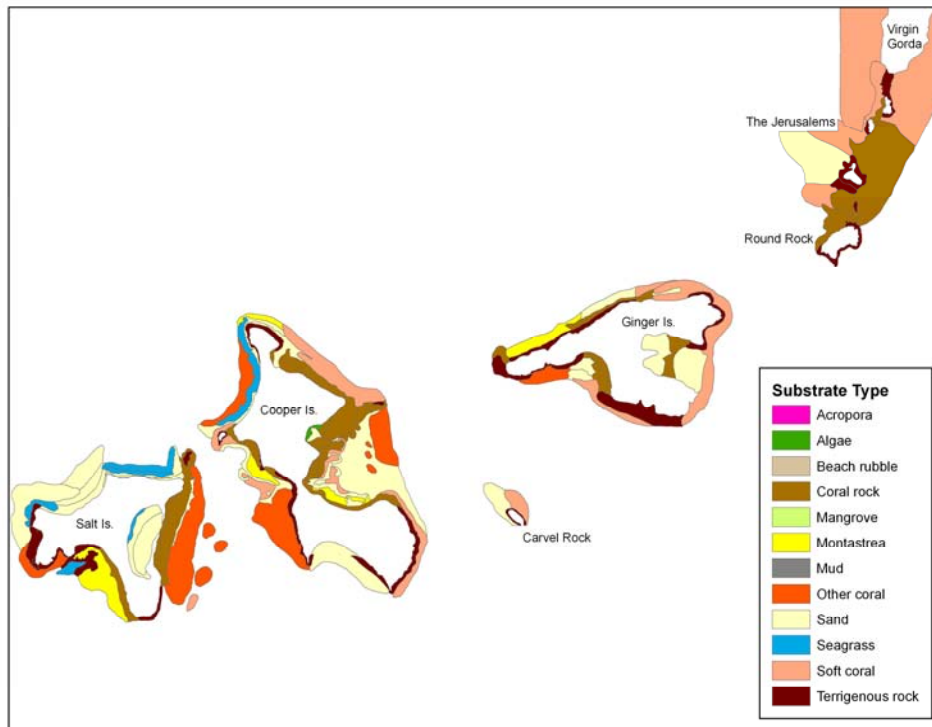
Map 20: North Sound



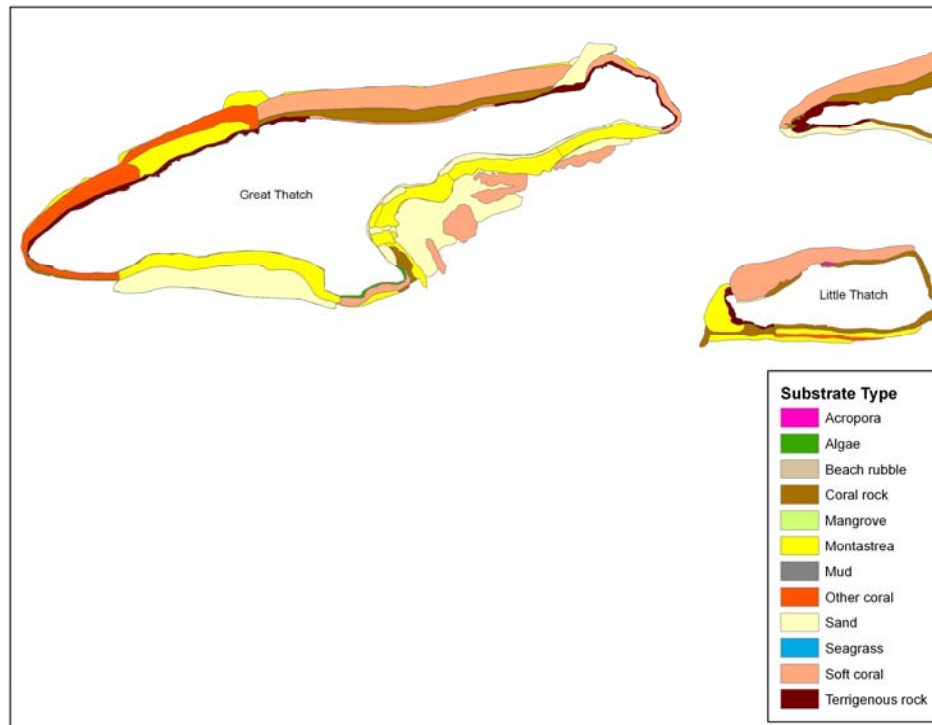
Map 21: Indians and Pelican Islands



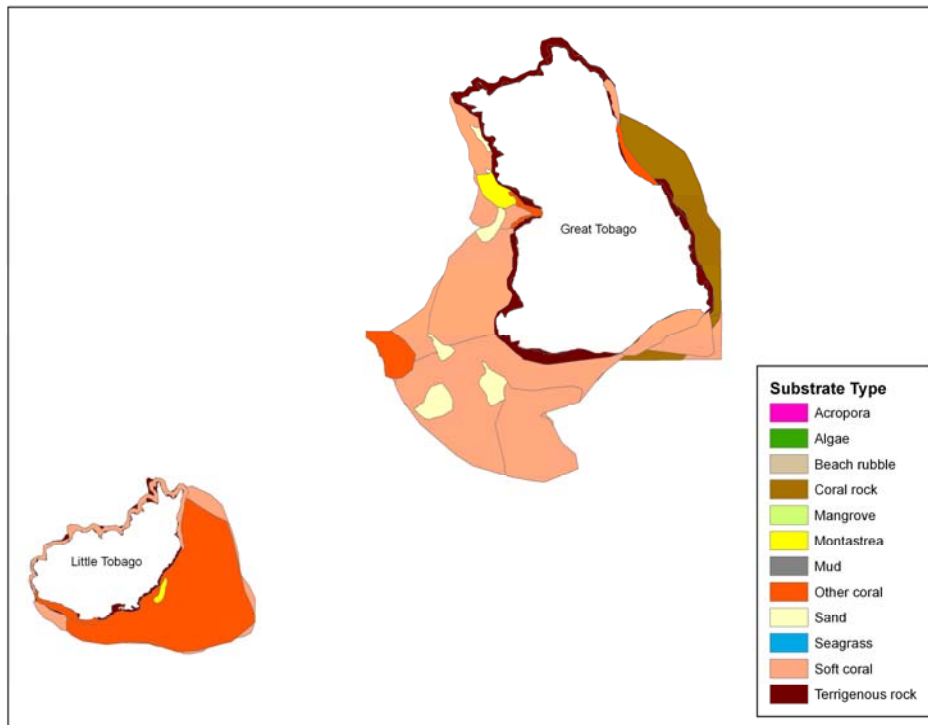
Map 22: Peter Island



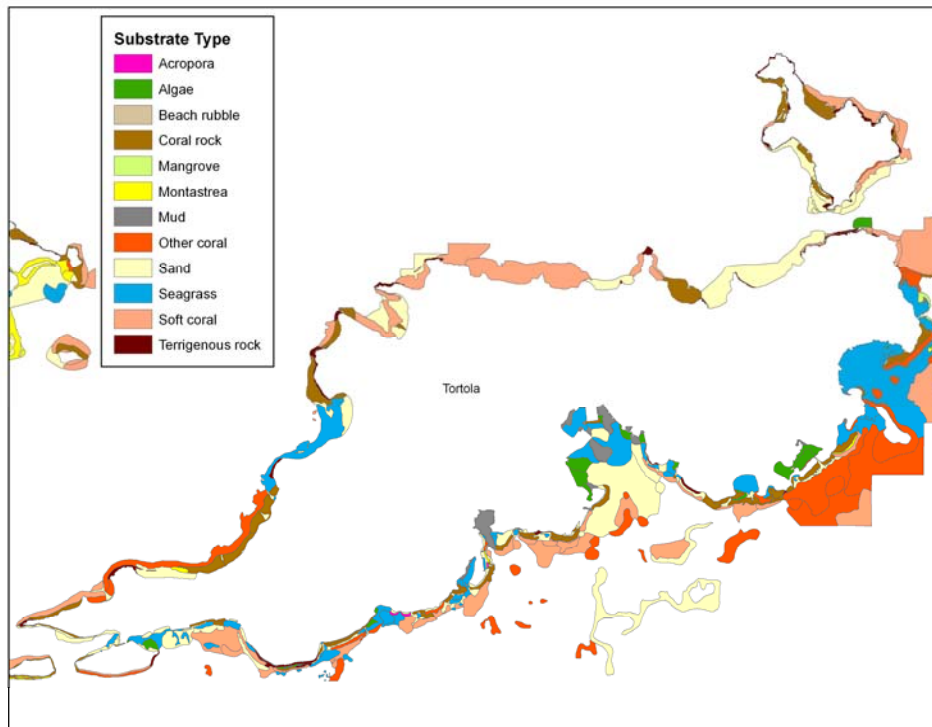
Map 23: Salt, Cooper, Ginger Islands, the Jerusalems, Carvel Rock



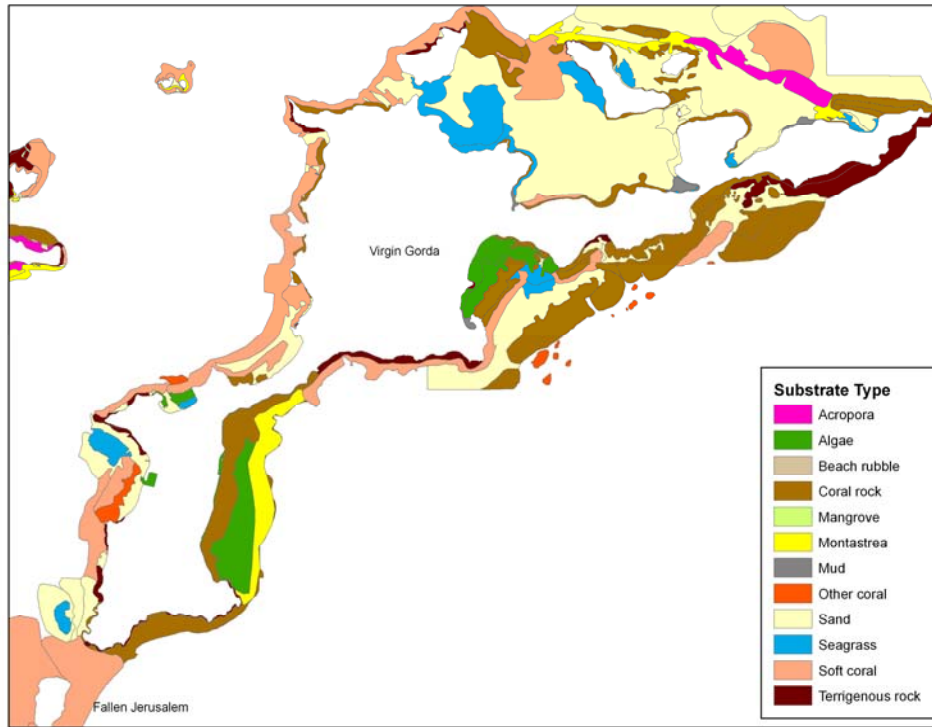
Map 24: Thatch Islands



Map 25: Great Tobagos

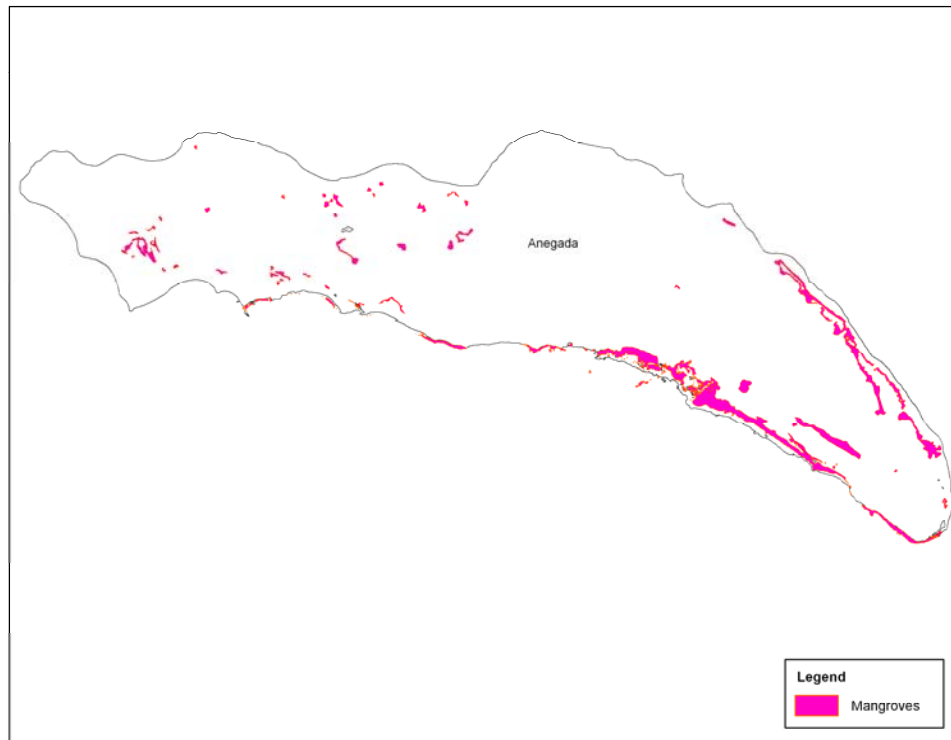


Map 26: Tortola

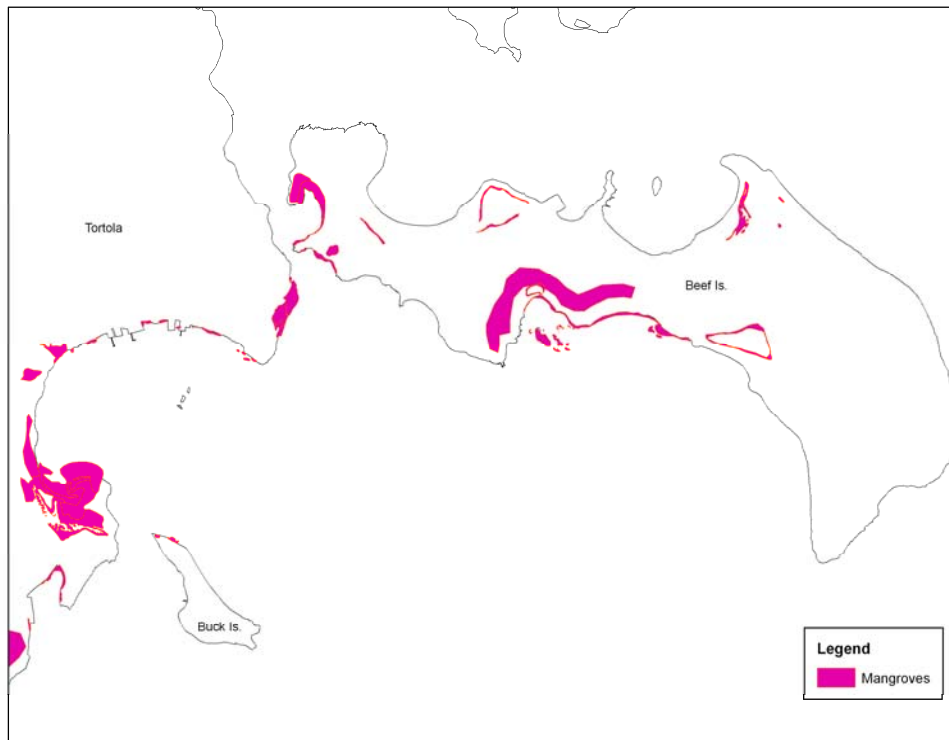


Map 27: Virgin Gorda

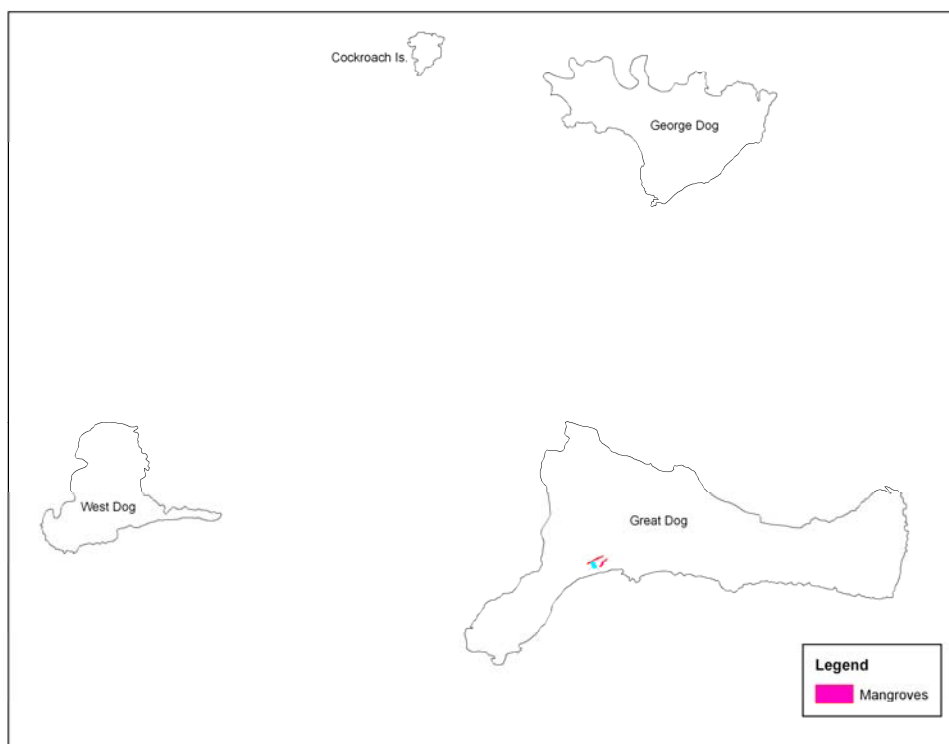
MANGROVE AREAS OF THE BRITISH VIRGIN ISLANDS



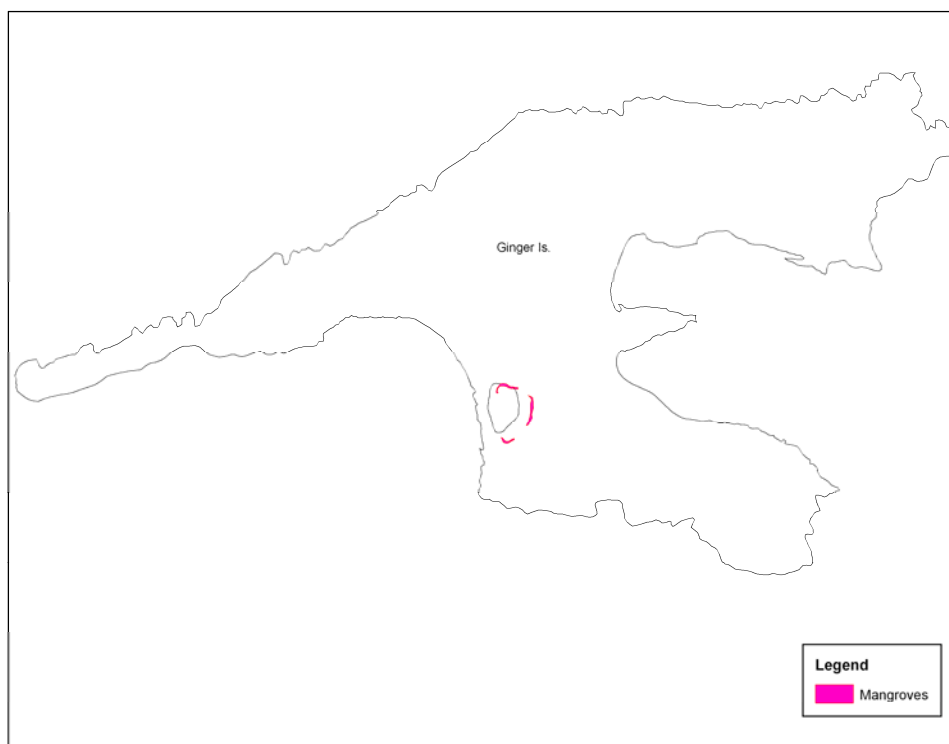
Map 28: Anegada



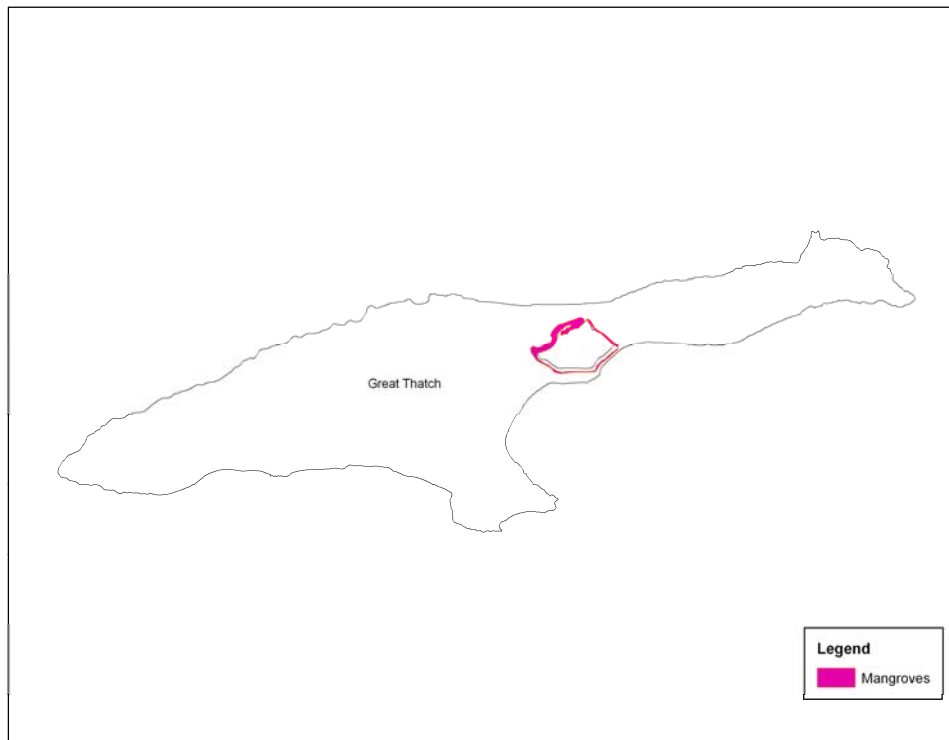
Map 29: Beef Island



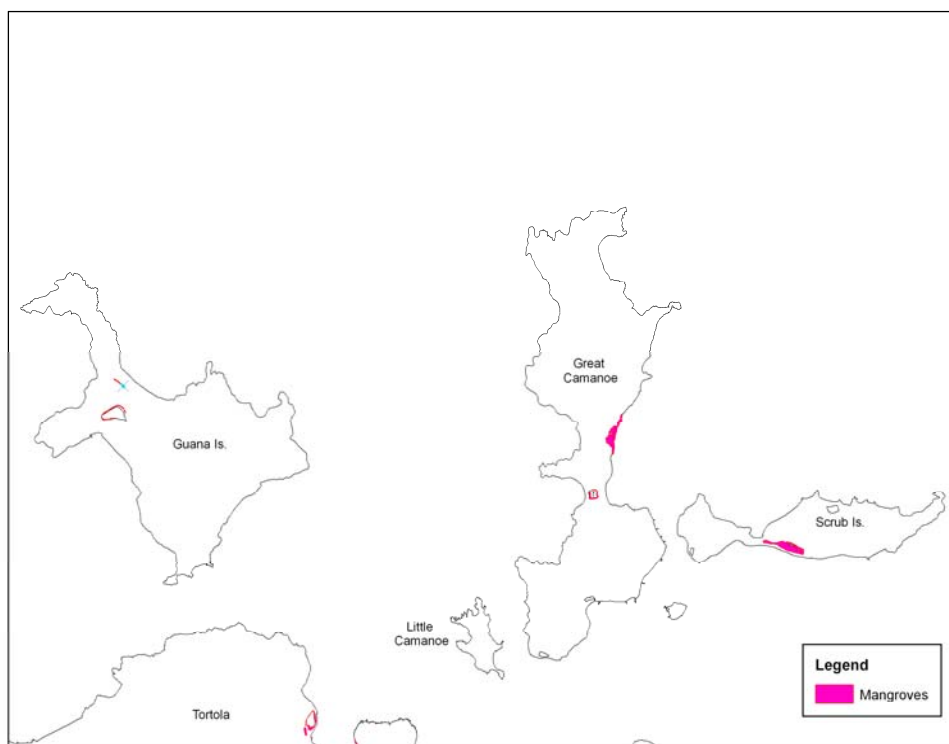
Map 30: The Dogs



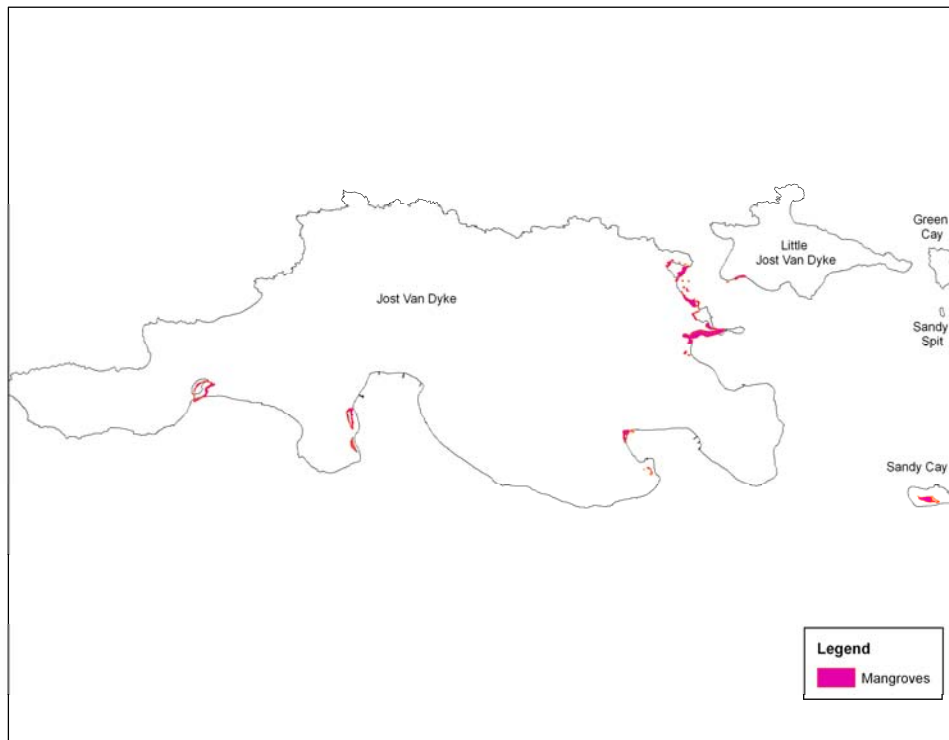
Map 31: Ginger Island



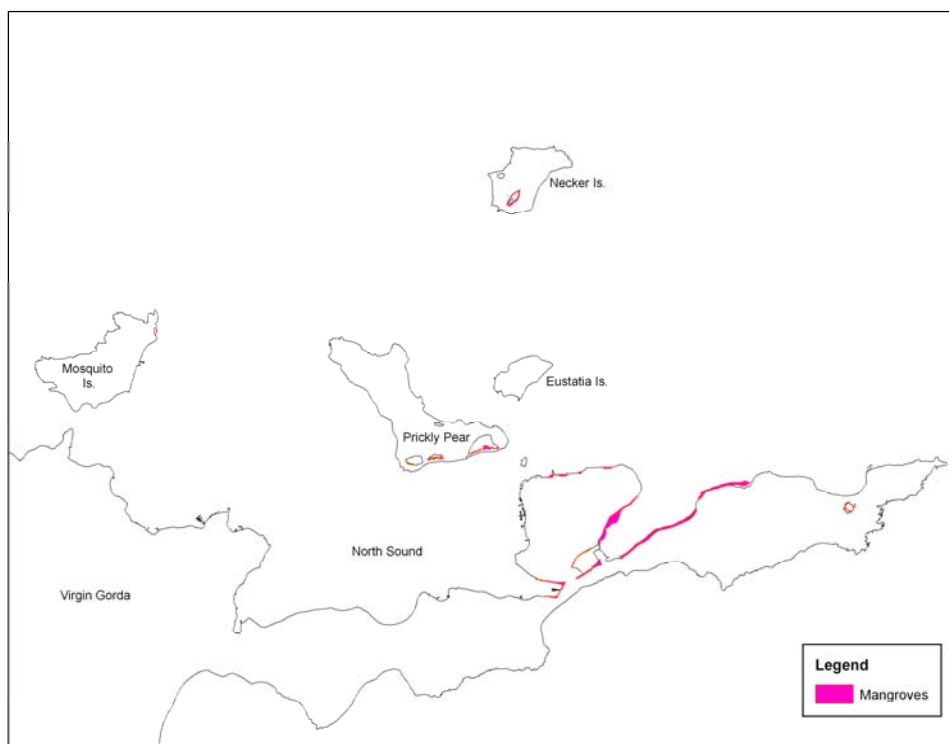
Map 32: Great Thatch



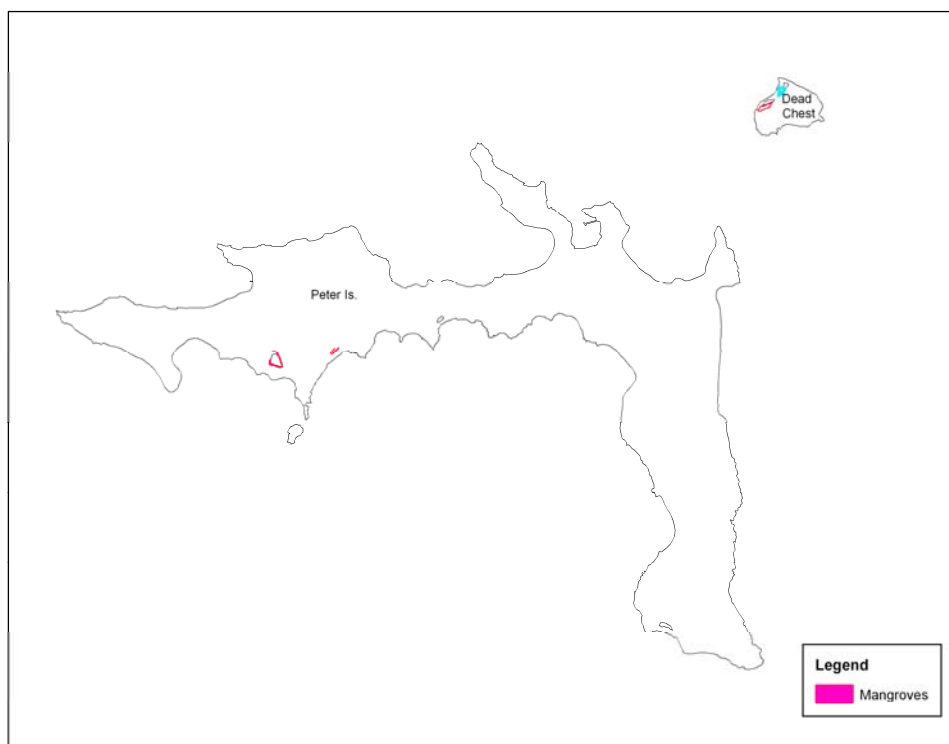
Map 33: Guana, Great Camanoe, Scrub Islands



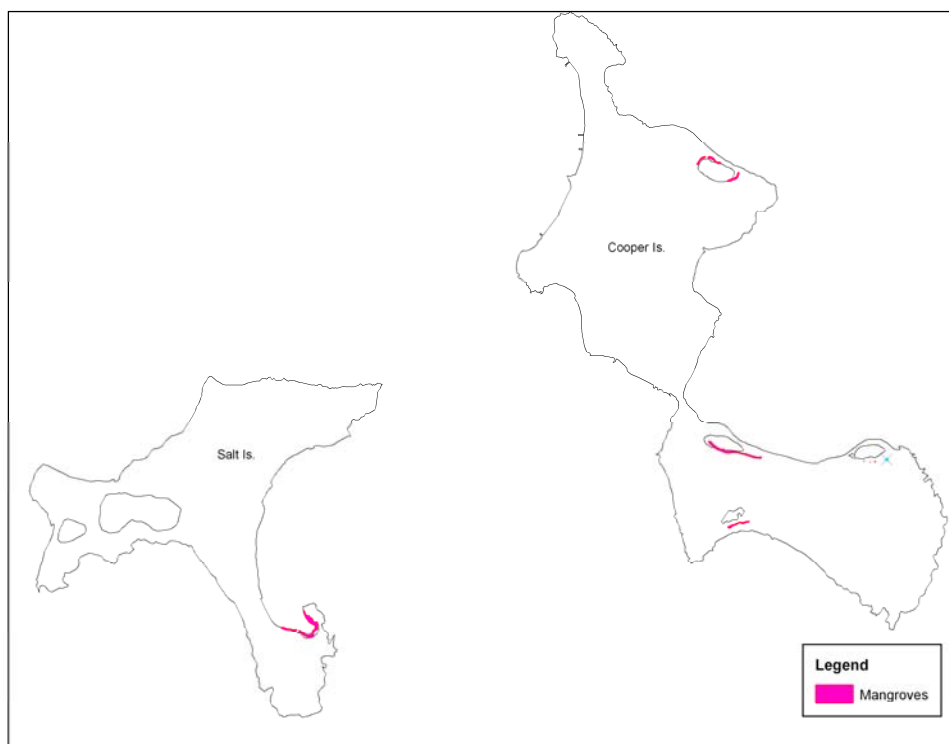
Map 34: Jost Van Dyke



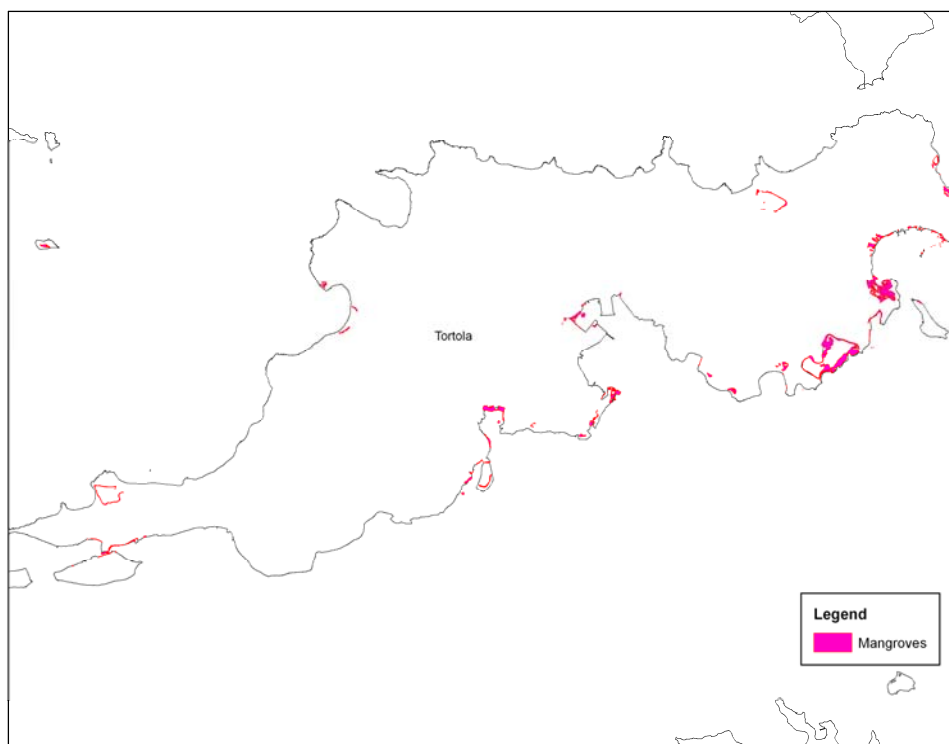
Map 35: North Sound



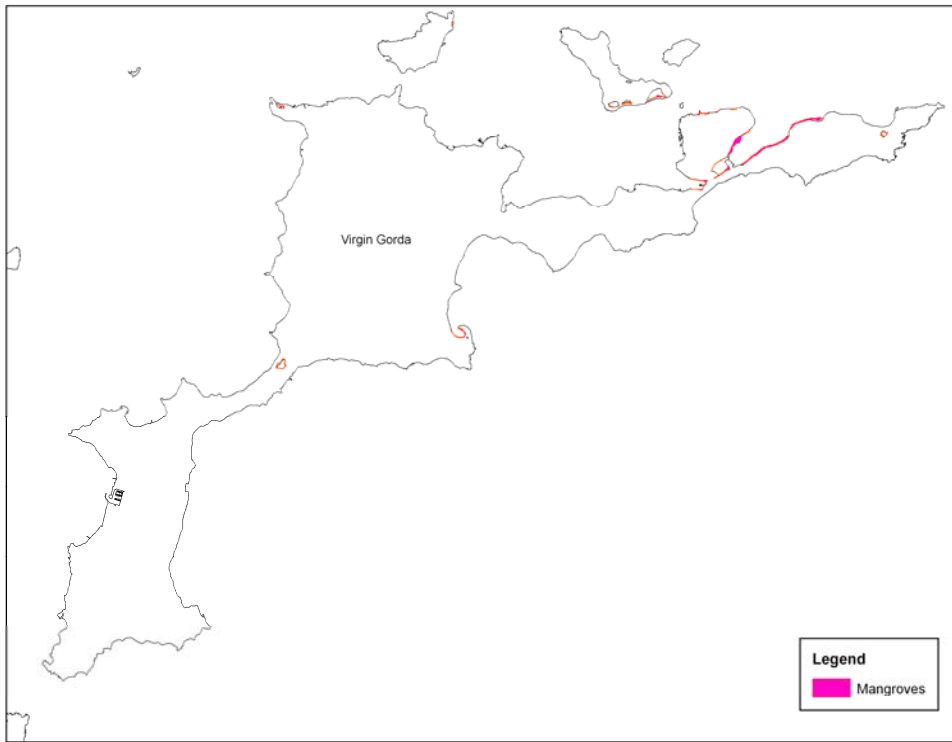
Map 36: Peter Island



Map 37: Salt and Cooper Islands

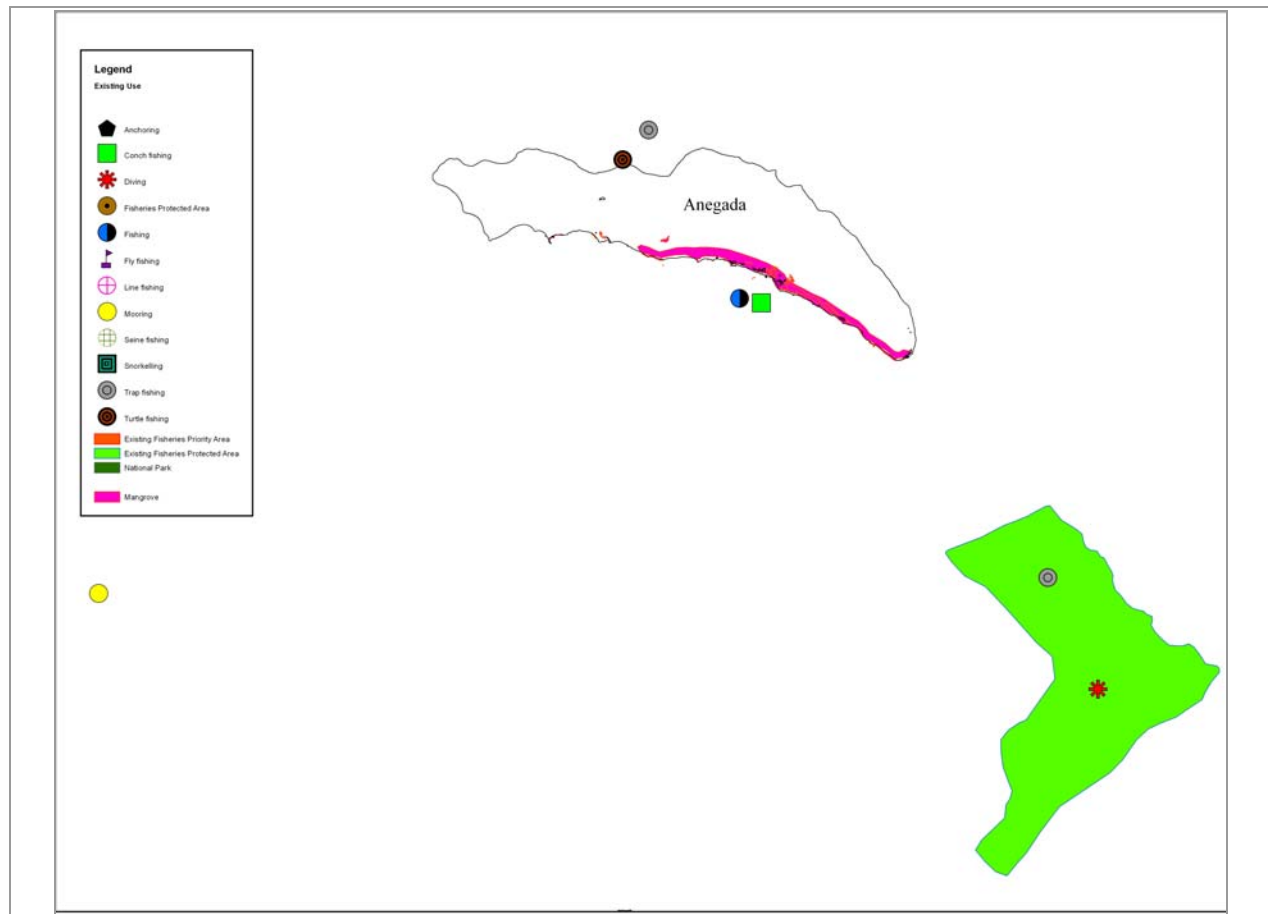


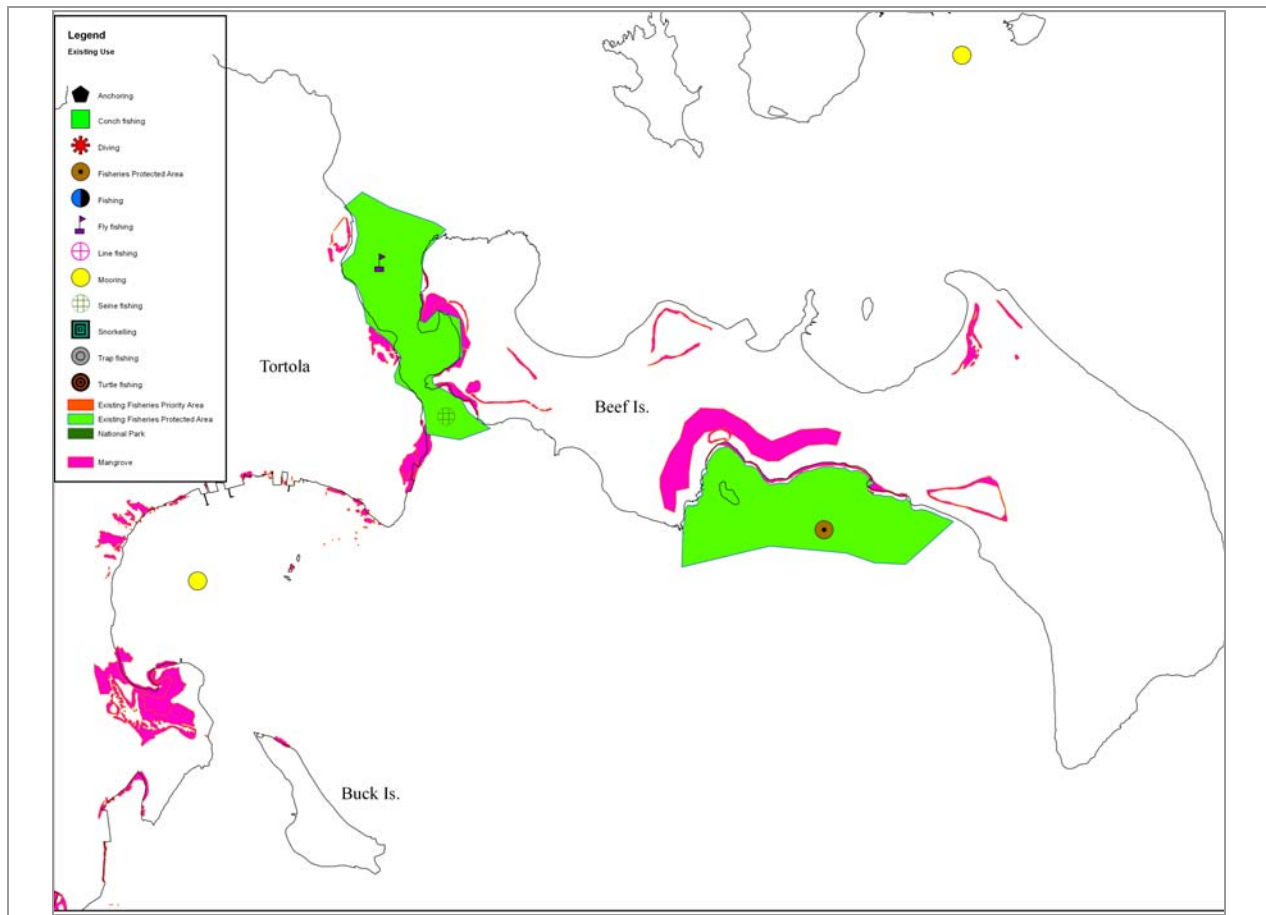
Map 38: Tortola



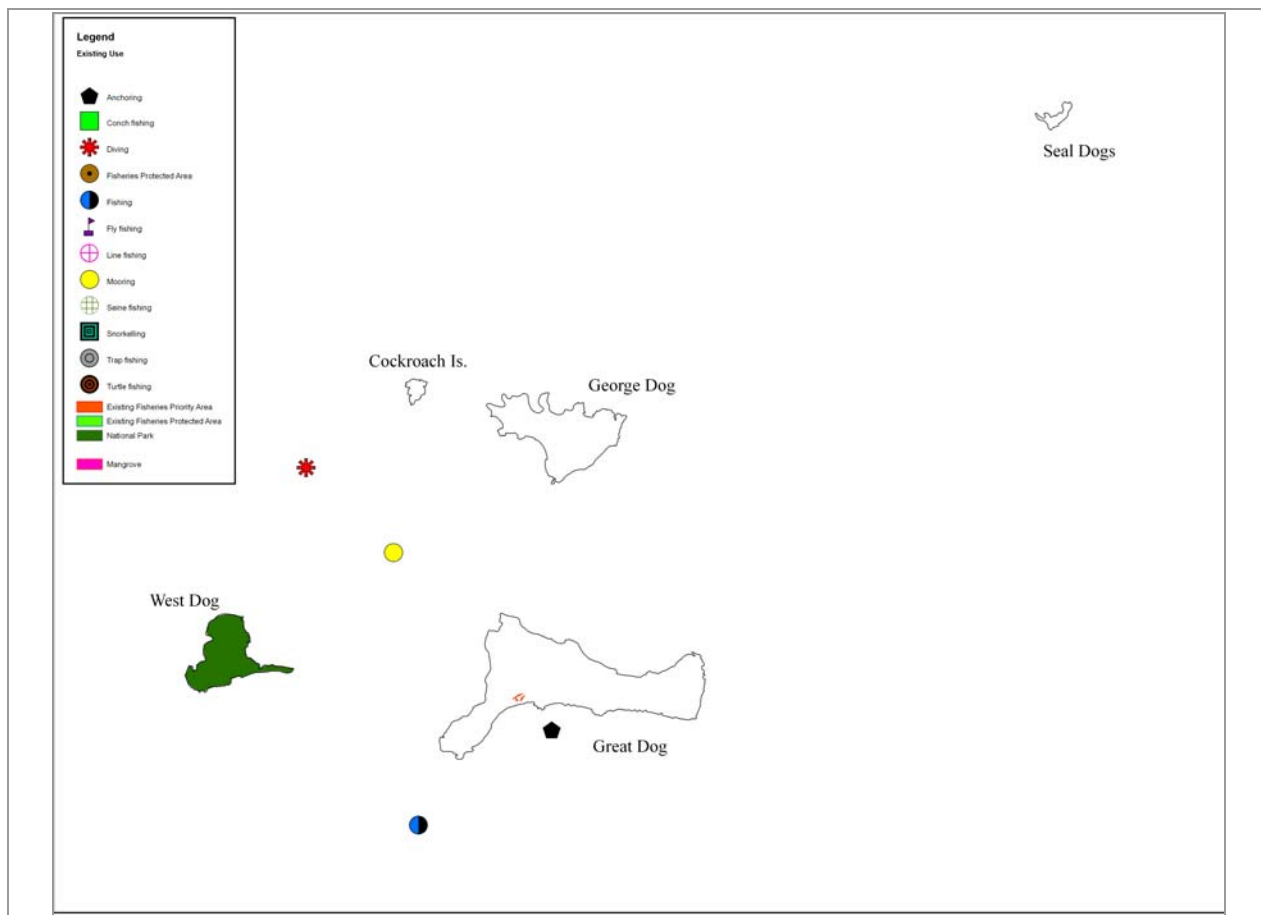
Map 39: Virgin Gorda

APPENDIX 9: Major Activities and Uses of Marine Areas for the British Virgin Islands (2006)

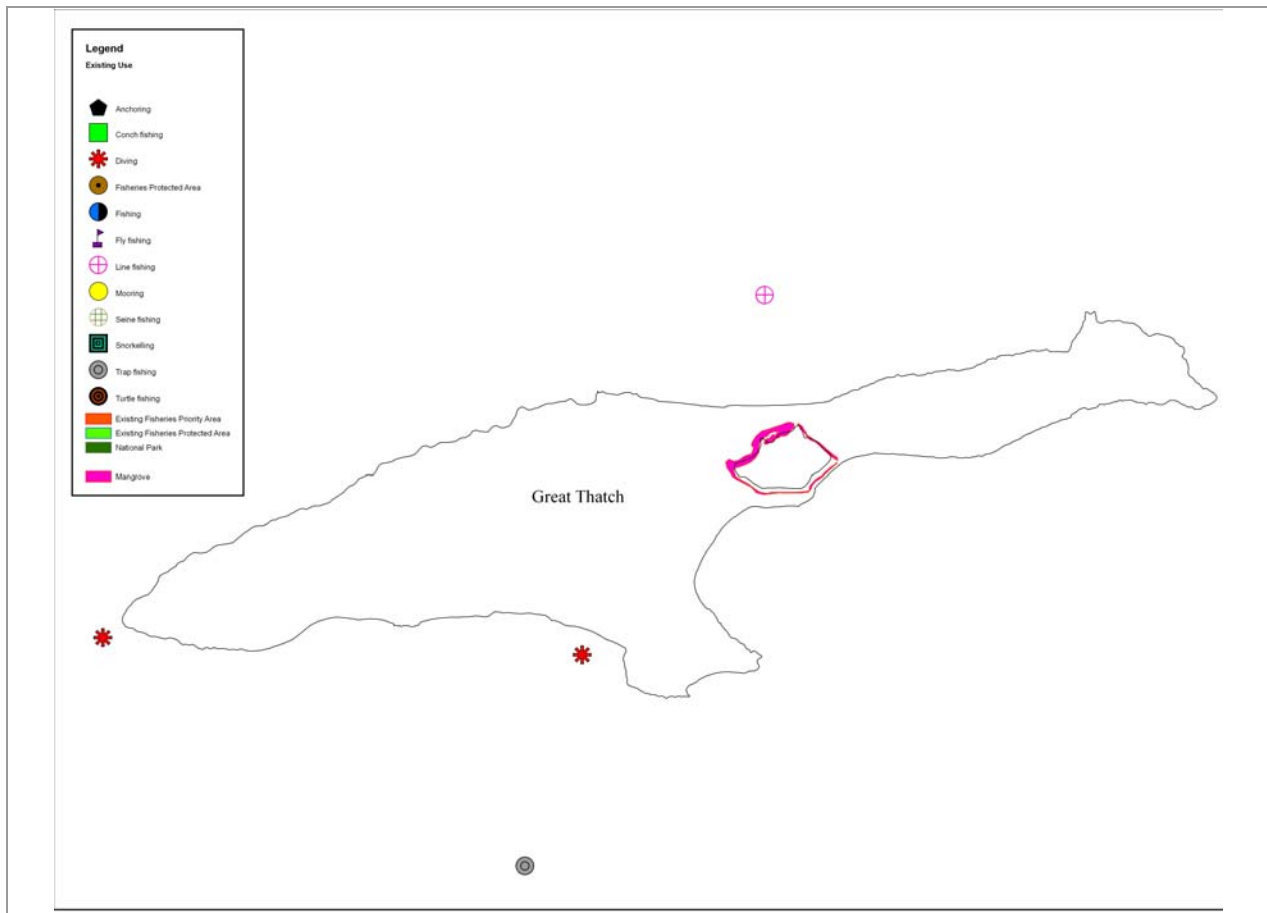




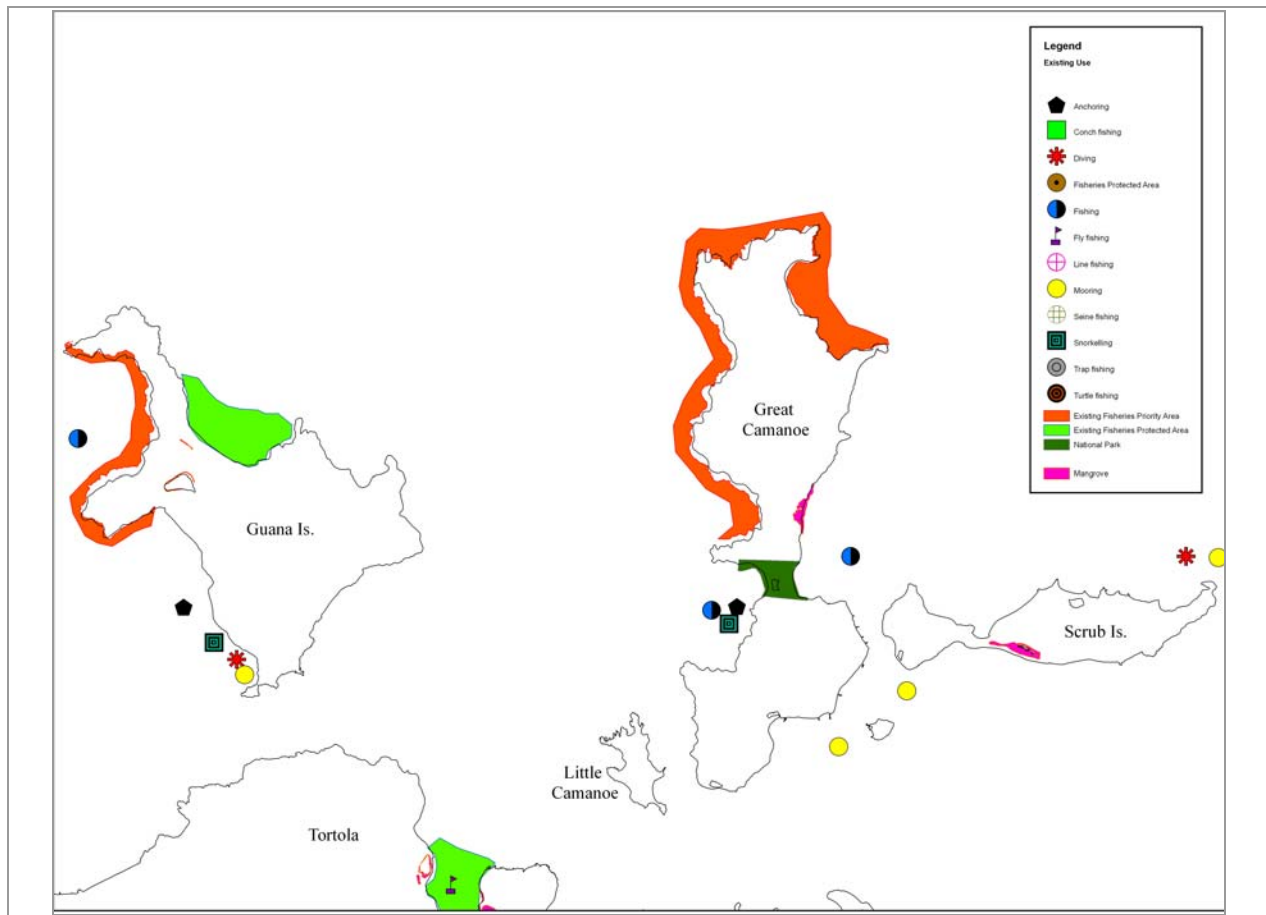
Map 41: Beef Island



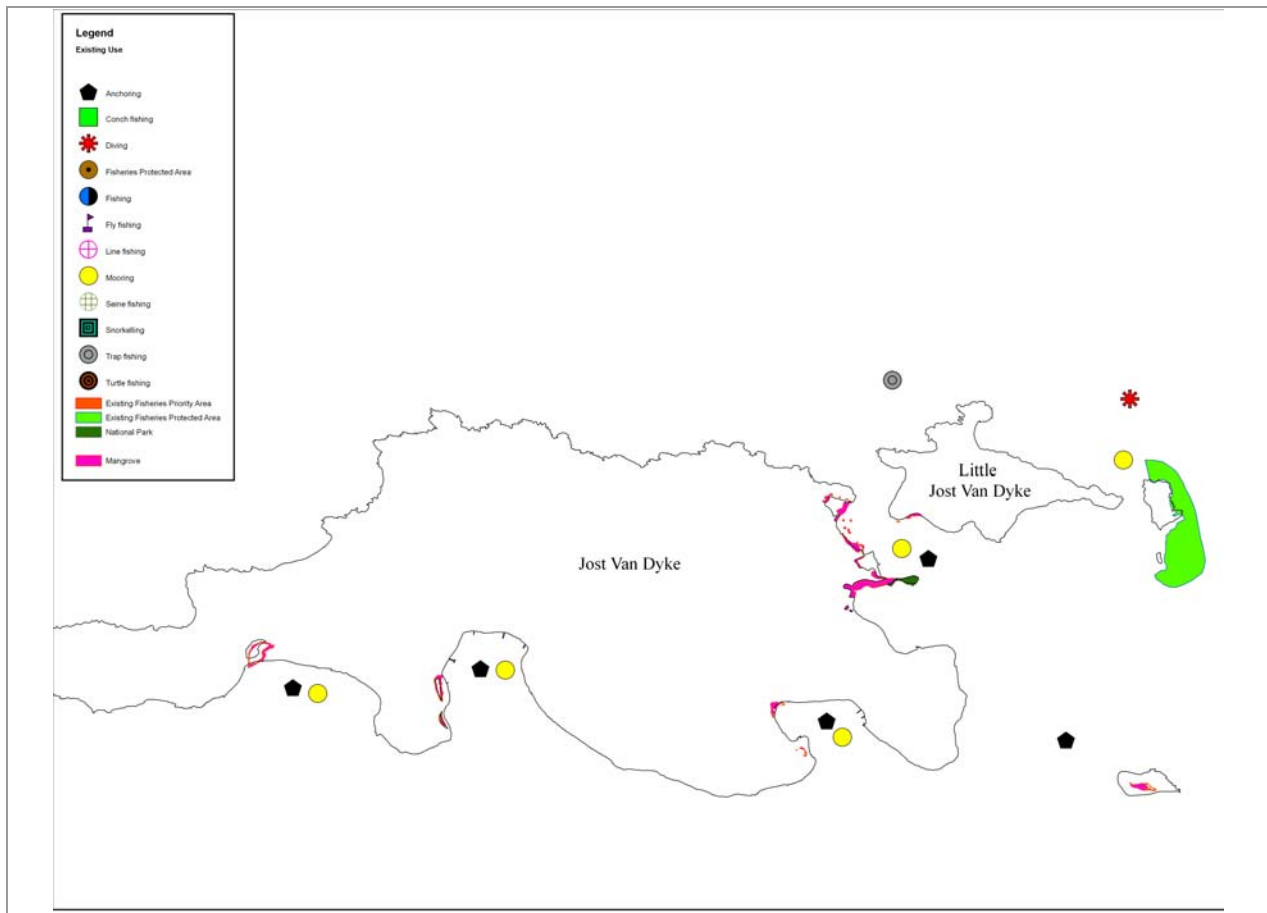
Map 42: The Dogs



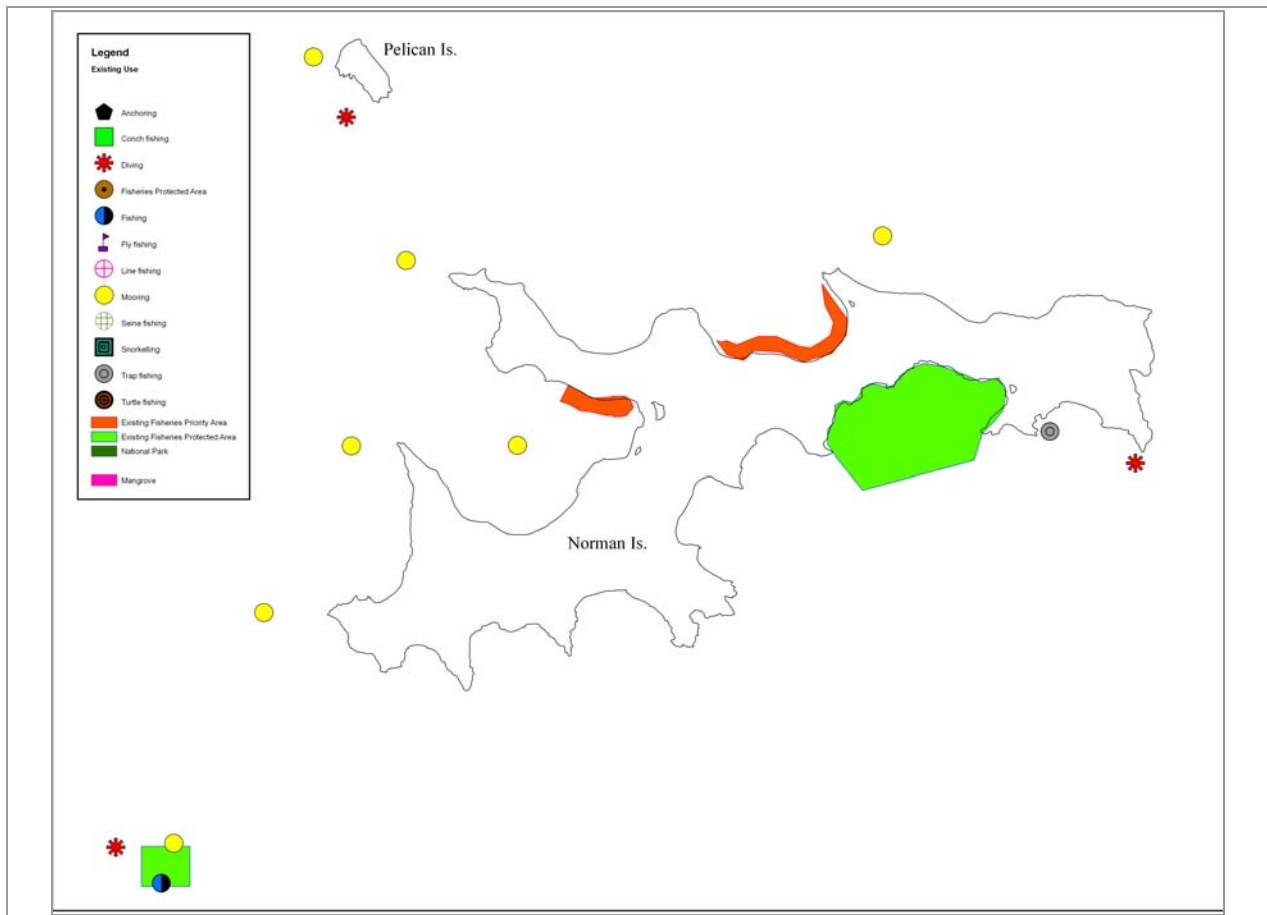
Map 44: Great Thatch



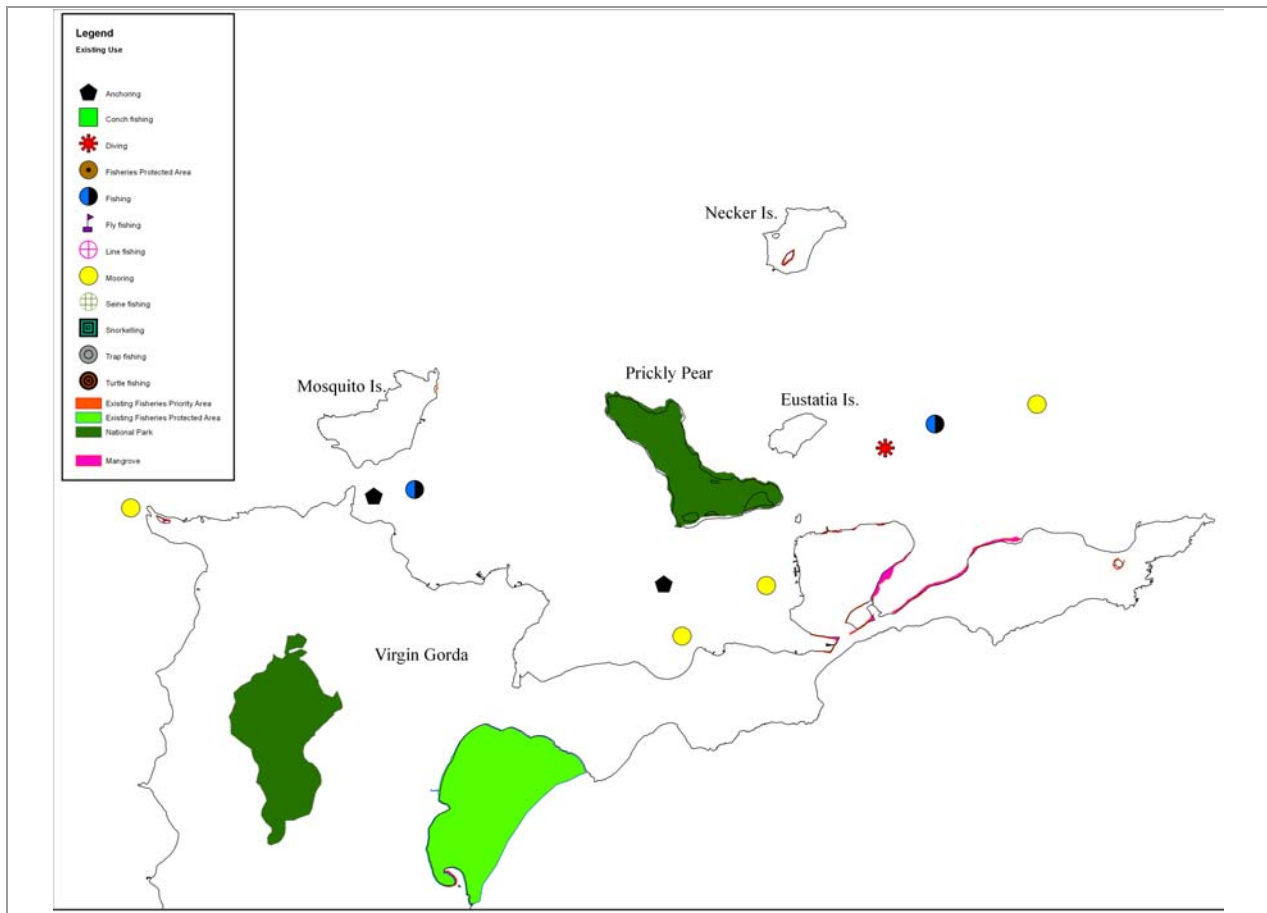
Map 45: Guana, Great Camanoe, Scrub Islands



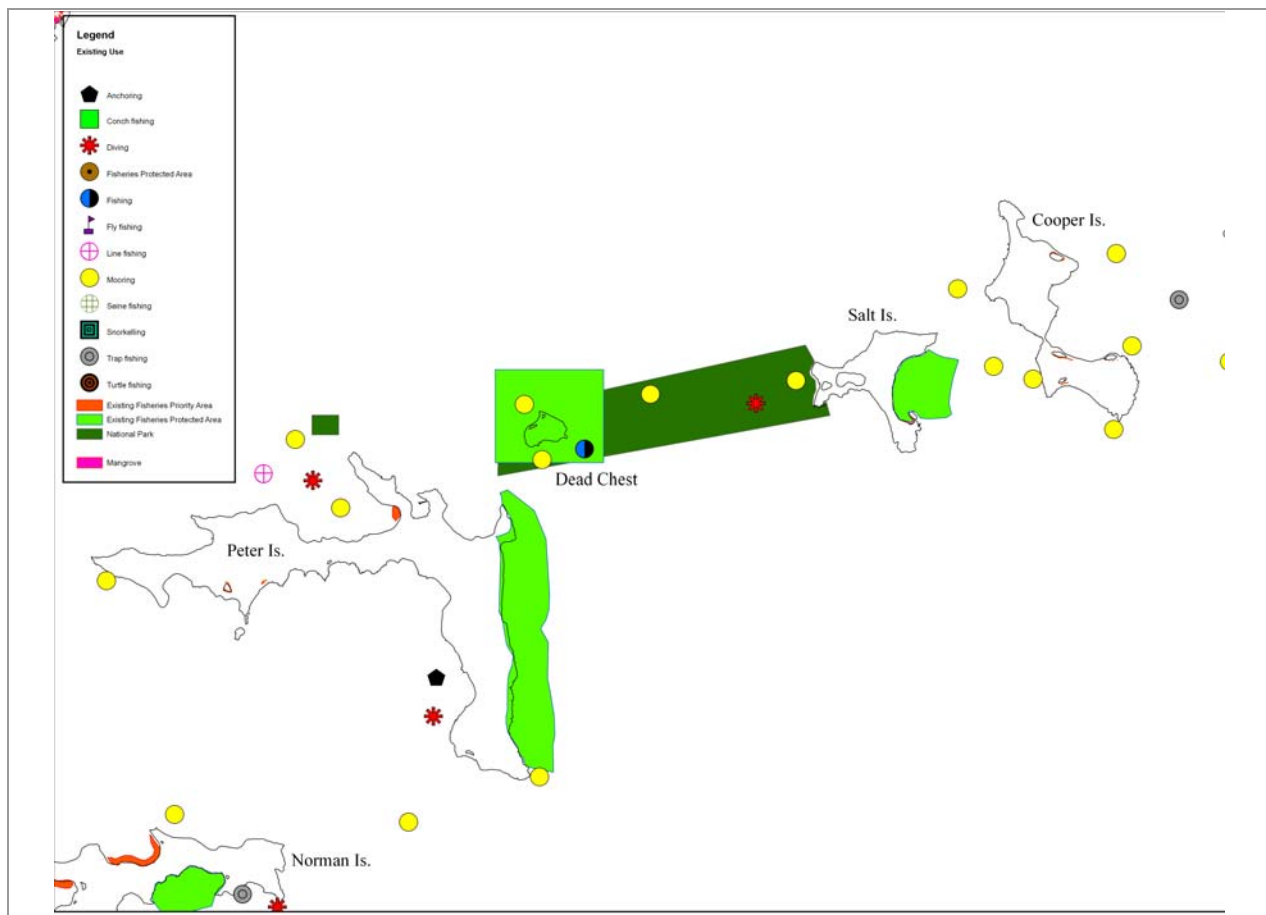
Map 46: Jost Van Dyke



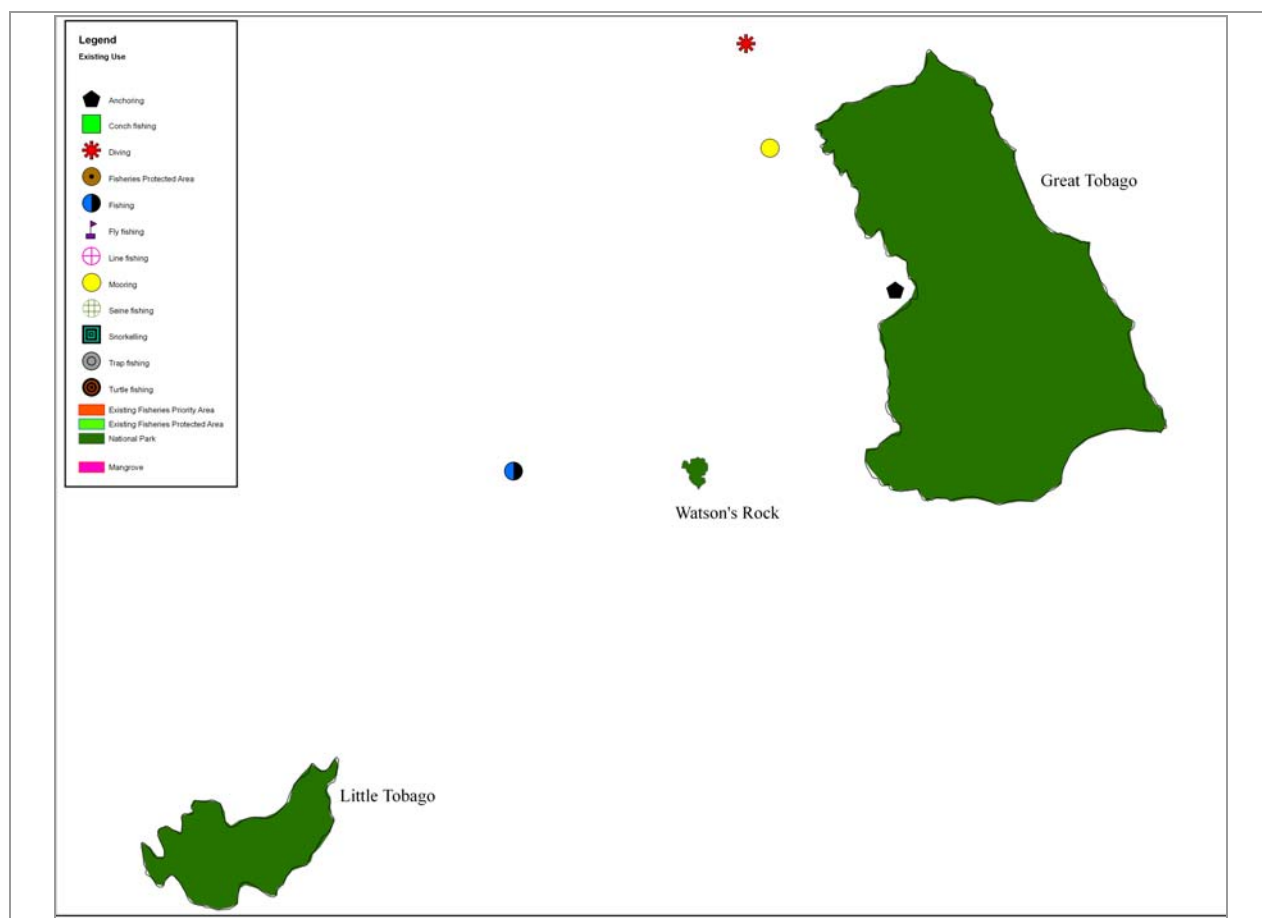
Map 47: Norman Island



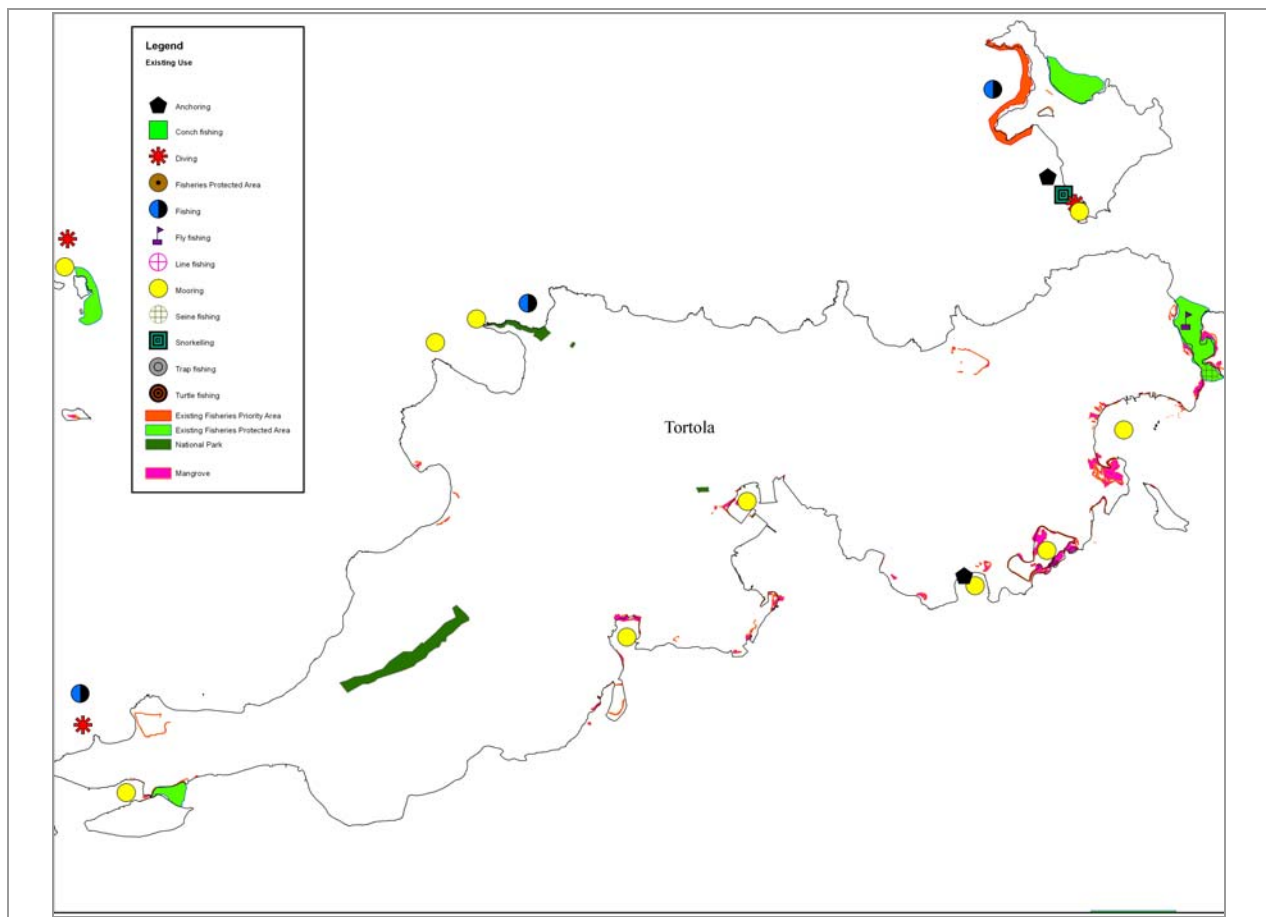
Map 48: North Sound



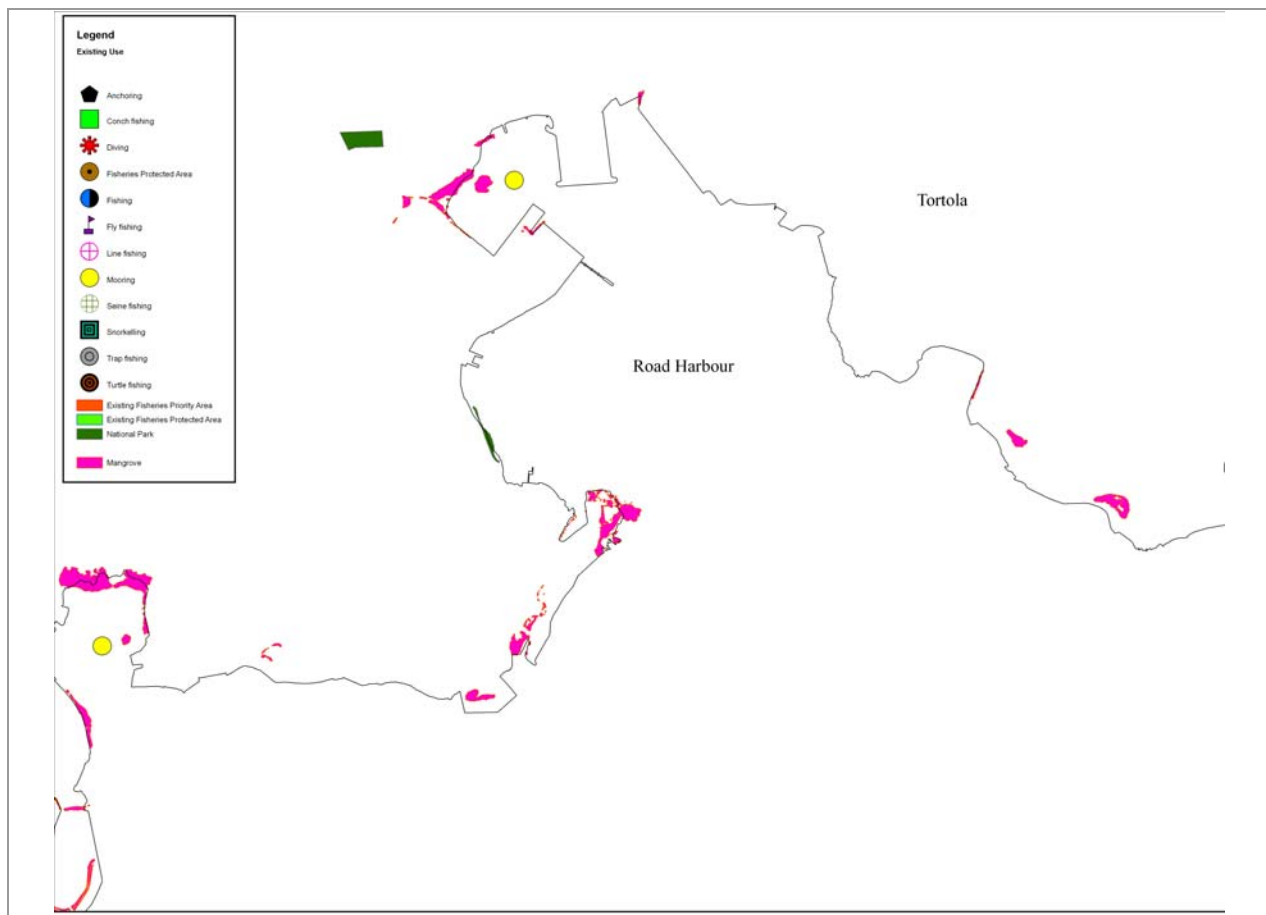
Map 49: Peter Island, Salt and Cooper Islands



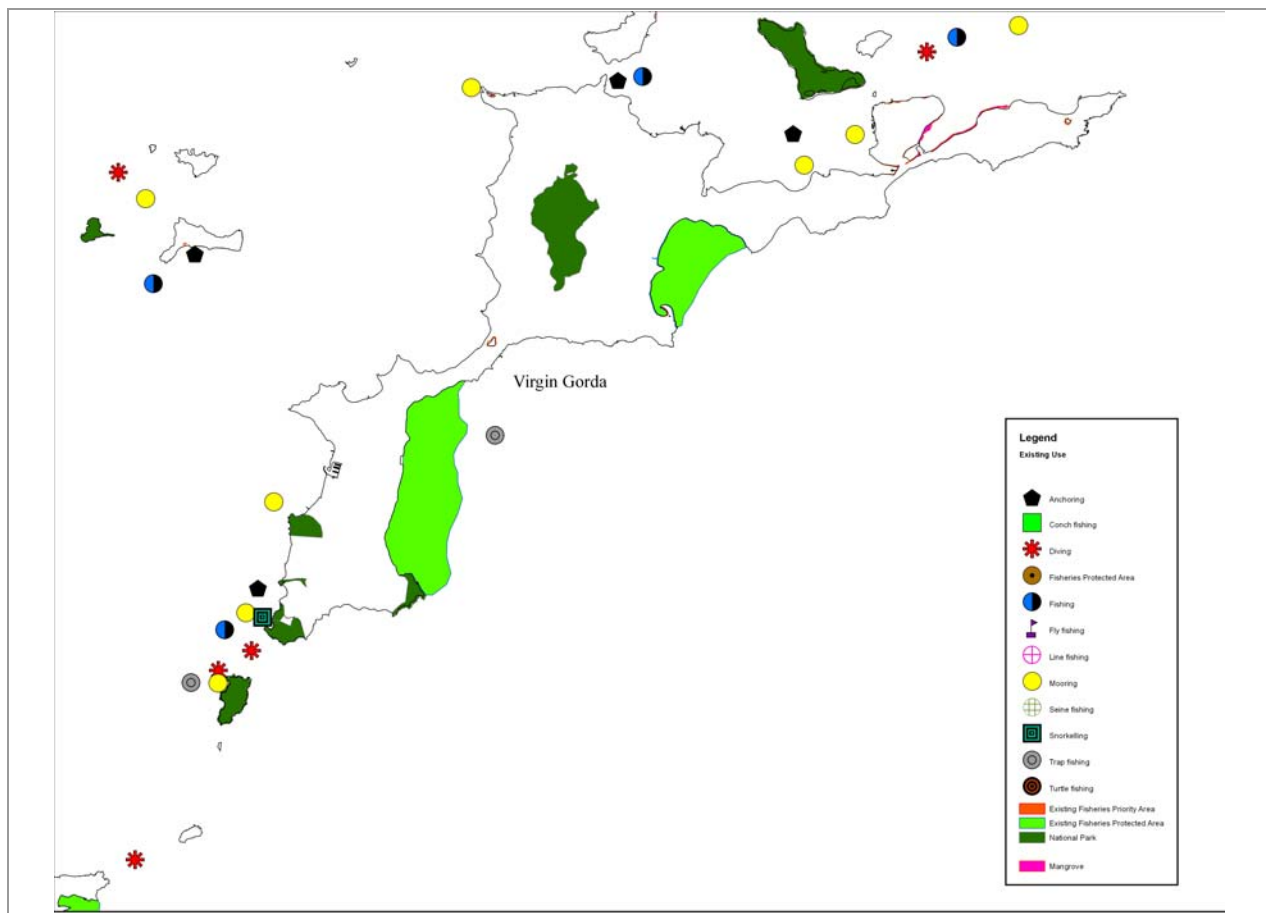
Map 50: The Tobagos



Map 51: Tortola



Map 52: Tortola



Map 53: Virgin Gorda

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