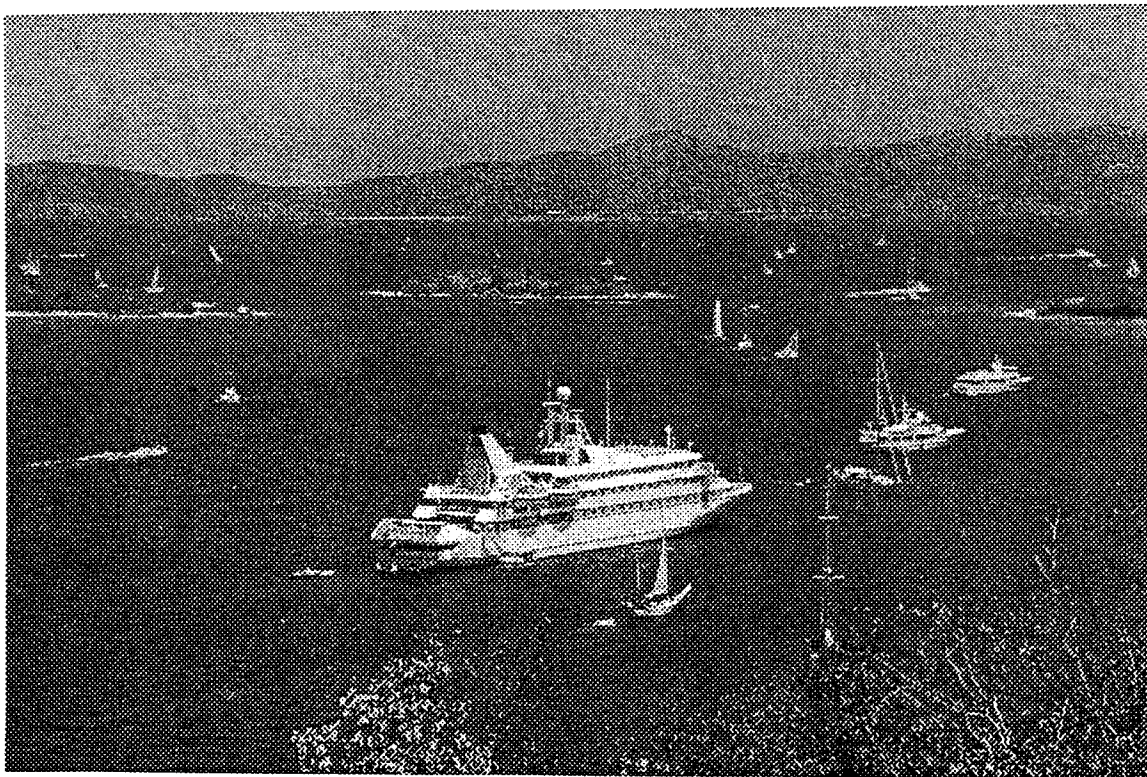


VIRGIN ISLANDS NATIONAL PARK

FINAL COMMERCIAL SERVICES PLAN ENVIRONMENTAL ASSESSMENT

**DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
SOUTHEAST REGION**

JUNE 2001



This is a final Environmental Assessment (EA) for the proposed management of commercial services within the Virgin Islands National Park (VINP). It provides important information and direction for existing businesses and future commercial operations by establishing long-term management policy. The general public can use this document to become more informed about authorized commercial services and management philosophy related to the commercial services program at VINP.

Availability

The Final EA is available for public review at the following locations:

Elaine I. Sprauve Public Library
St. John, VI

Enid M. Baa Public Library
St. Thomas, VI

VINP Visitor Contact Station
Cruz Bay, St. John, VI

National Park Service Headquarters
Christiansted, St. Croix, VI

The Final EA may also be viewed at www.nps.gov/viis or www.friendsvinp.org. Printed or electronic copies of the Final Plan/EA can be requested from the National Park Service at the following address:

Planning Office
National Park Service
Virgin Islands National Park
P.O. Box 710
St. John, Virgin Islands 00831
npplanning@islands.vi
340/776-6201x247

As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historic places, and providing for enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to assure that their development is in the best interests of all. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

ACRONYMS AND TERMS

<i>6-pac vessel</i>	Vessel limited by Coast Guard regulations and NPS permit to six passengers.
<i>Action Alternatives</i>	Alternatives other than Alternative 1, the No Action Alternative.
<i>Bareboat Charter</i>	Rented charter vessel without a hired captain or crew.
<i>CFR</i>	Code of Federal Regulations.
<i>Commercial Vessel</i>	Includes both "six-pac" and multi-passenger day sailboats, SCUBA vessels, kayaks, crewed charter sailboats and powerboats, and vessels associated with water sports operations. Bareboat charter vessels are not included and not subject to permit.
<i>Concession</i>	Concession contracts are required for commercial operations occurring within the park. Concession contracts require concessionaires to provide and operate specified facilities and services in the park. Concessionaires may be required or authorized to acquire, construct or install permanent facilities or improvements. Financial transactions and advertising can occur both inside and outside the park. Concessions pay a franchise fee, which is a percentage of gross receipts.
<i>Commercial Services</i>	Activities or services conducted in a park by private parties for which a fee is charged.
<i>CUA</i>	Commercial Use Authorization (formerly Incidental Business Permit). Commercial use authorizations regulate commercial activities that are typically initiated and terminate outside the park. All financial transactions and advertising must occur outside the park. Commercial users are not permitted to construct or use structures in the park, except those available for general public use. CUAs are issued on an annual or biannual basis based upon cost recovery.
<i>CSP</i>	Commercial Services Plan
<i>DN</i>	Decision Notice
<i>EA</i>	Environmental Assessment
<i>FONSI</i>	Finding of No Significant Impact
<i>GMP</i>	1983 Virgin Islands National Park General Management Plan
<i>IBP</i>	Incidental Business Permit
<i>Commercial Group</i>	For VINP permit purposes, any for-fee tour group of 10 or more persons.
<i>LOA</i>	Length Overall
<i>NEPA</i>	National Environmental Policy Act
<i>NPS</i>	National Park Service
<i>Concession Permit</i>	Concession permits, issued by competitive bid, are used for operations smaller and less complex than those permitted under concession contracts. Permits are issued for a term of five years or less for concession operations that are not expected to gross more than \$100,000 annually
<i>Multi-passenger vessel</i>	Vessel authorized by Coast Guard regulations and NPS permit to carry more than six passengers
<i>Plan</i>	Commercial Services Plan
<i>Proposed Action</i>	Alternative 2, NPS's proposed management program for commercial services.
<i>SUP</i>	Special Use Permit. Issued primarily for short-term use (not to exceed one year) of NPS facilities for filming or events such as weddings, parties, and races. Long-term permits (not to exceed 5 years) are issued for use of a continuous nature such as grazing, dock use, or use of moorings.
<i>PAOT</i>	Persons At One Time
<i>VINP</i>	Virgin Islands National Park

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CHAPTER I: PURPOSE AND NEED

A. INTRODUCTION

The National Park Service (NPS) balances the public need for visitor services within national parks with the mandate to preserve and interpret the significant resources for which individual parks have been established. Like most national parks, the Virgin Islands National Park (VINP) is challenged by this dual mission to protect the scenic, natural and cultural resources for which the national park was established and to provide a quality and enjoyable experience for visitors. Because of changing conditions and current trends toward increased visitation, there is concern about the future quality of visitor experiences, the types and levels of commercial services to be provided for visitors, and the preservation of the park's scenic, natural and cultural resources. The NPS has prepared this Commercial Services Plan (CSP) to determine the level and types of commercial visitor services necessary and appropriate in the park over the next 10-15 years.

By law (36 CFR 5.3), all commercial activities that occur within the park must be authorized by some written agreement. *Commercial services are defined as activities or services to enhance the visitor experience conducted in a park by private parties for which a fee is charged.* Commercial activities in the park that will be managed under this Plan include concessions and incidental business permits (IBPs), which have been replaced by commercial use authorizations (CUAs) under the 1998 National Parks Concessions Management Improvement Act. Other types of commercial uses that may occur within the park but which are not addressed in this Plan are described below in Section III.B.3.

Pursuant to NPS Director's Order 2, this Commercial Services Plan is an Implementation Plan that defines specific actions and projects to implement the general management direction provided in the 1983 General Management Plan (GMP) for VINP. Implementation planning focuses on how to implement a program or actions to achieve long-term goals established by the GMP.

Implementation of this Plan could affect park visitors, commercial operators, and island residents. Therefore, public participation has been a critical element in plan preparation. The Plan and its accompanying Environmental Assessment (EA) have been prepared in accordance with the National Environmental Policy Act (NEPA) and NPS policy and guidelines. The Proposed Action and alternatives assessed in this document are based on issues raised in scoping and the VINP's purpose and significance. The document discloses the potential environmental consequences that may result from implementation of various alternative management strategies. Comments received during public review of the Draft Plan/EA have been considered in preparation of this Final Plan. The NPS decision is provided in a separate Finding of No Significant Impact (FONSI)/Decision Notice (DN) document.

Certain aspects of the management direction established by this Plan will take effect immediately, other elements will be implemented over time as the necessary regulations and procedures are developed and as budget and personnel limitations permit. NPS is currently developing regulations for CUAs based upon the 1998 National Parks Concessions Management Improvement Act. This Plan may need to be amended to comply with those regulations when adopted.

The management direction established by this Plan is not intended to be static. The services authorized by this Plan will be periodically reviewed and updated as necessary to address changes in visitor needs, site conditions, management goals, etc.. New types of commercial services not addressed in this plan or additional levels of commercial services can be considered for authorization based upon appropriate

NEPA analysis and public process to determine whether they are "necessary and appropriate" and in conformance with applicable management direction. Unless specifically noted, existing VINP management direction and regulations, e.g. Superintendent's Compendium, remain in effect.

B. PURPOSE AND NEED

The purpose of this Commercial Services Plan is to provide a mechanism for establishing the types and levels of commercial activities that are necessary and appropriate for the VINP and the most effective and efficient method for the NPS to manage those activities. The CSP identifies commercial services, activities or conditions that are or are not appropriate for VINP and provides the basis for the development of prospectuses and contracts and other authorizations for new commercial services. It is being prepared to implement the park's 1983 General Management Plan (GMP) and to provide long-term (10-15 year) management direction for the use of park land and waters. The GMP provides little specific direction on appropriate and necessary commercial uses in the park. It also did not anticipate any significant increase or change in Park uses.

The use of VINP has grown dramatically over the last two decades and is expected to continue to increase. While hurricanes during this period depressed the marine industry and general tourism, the current economic recovery is bringing increasing numbers and changing uses. A demand for new and expanded visitor venues is being witnessed. Increasing use levels, including more commercial uses, may result in conflicts, crowding and congestion, adversely affecting the visitor experience. Increasing use levels also affect scenic, natural and cultural resources. The quality of the natural environment, the caliber of the visitor experience, and the livability of the island are all dependent upon the management of this growth. As tourism growth escalates, allowing unlimited visitor use can destroy the very qualities of the national park that attracts visitors and residents alike.

While all types of uses are expected to increase, growth in cruise ship passenger visitation to the park is of particular note, with a 20% increase over 2000 levels in the number of cruise ships visiting St. Thomas planned for 2001. "Mega class" cruise ships currently carry as many as 3,000 passengers at one time. The newer "eagle class" vessels can carry up to 4,000 passengers, which is equivalent to the entire population of St. John. The capacity of the Havensight cruise ship dock on St. Thomas is being expanded to offload 20,000 visitors, again increasing potential visitation to the park. A one-day record for cruise ship visitation to St. Thomas of 17,157 passengers was set on December 20, 2000. For 2001, St. Thomas is expected to host more than 1.7 million cruise ship passengers, another record. With the national park being one of the most popular tour venues, this growth in cruise ship passenger visitation translates into increased demand for commercial services.

Both a literature review and interviews with local scientists indicate that the marine resources within VINP are not as healthy as expected given 45 years of NPS protection; the abundance, the diversity and size of marine resources have been drastically reduced. Given past trends and current types and levels of park use, future projections for marine resources within VINP are for a continuing slow to moderate decline. The need to protect the park's resources, particularly its marine resources, is even more compelling when the increasing deterioration of marine areas throughout the Caribbean is considered. The NPS probably has a better chance to protect marine resources than any other agency or government.

For the past 18 years, the regulatory system that has protected the VINP has relied upon a combination of zoning controls, concession contracts and a permitting process. That system currently suffers from inconsistent application and enforcement, with a number of commercial uses occurring within the Park

without specific authorization. While the regulatory system has historically worked well, as visitation has increased, the sustainability of that system is increasingly in doubt. Although the regulatory system provides a mechanism for evaluating individual activities, it does not address the issue of cumulative effects. Additionally, there has been no mechanism for mitigating negative impacts resulting from authorized uses. Finally, there has been no limitation on the number of authorized commercial uses occurring within the park and thus no mechanism to limit unwanted impacts.

Long-range planning and guidance is needed to assure the complementary role of commercial services in helping the park provide quality services to the visiting public. The natural resources and scenic features of VINP are key components of the Territory's tourism and recreation industry. Commercial services provide a vital partnership in helping NPS carry out its mission. By welcoming the private sector as a partner in park operations, VINP broadens the economic base of the Virgin Islands. However, promoting tourism for the sake of the economy is not the primary role of the Park and the NPS is concerned with what has been described as the increasing commercialization of the park. Commercial uses and the public activities that they provide need to be managed so that they leave the park's terrestrial and marine resources, scenery and cultural resources unimpaired for the enjoyment of future generations.

The 1998 National Parks Concessions Management Improvement Act requires a range of revisions to the park's commercial services program. The existing concessions in the Park expired in 1991 and have been operating through letters of authorization that expire on December 31, 2001. Additionally, pursuant to the 1998 Act, Incidental Business Permits are to be replaced by Commercial Use Authorizations. Under the new law, NPS may limit the total number of IBPs/CUAs for any activity if limitations are determined to be necessary for resource protection and/or to improve or maintain the quality of the visitor experience. A Commercial Services Plan provides the basis for implementing this new policy direction.

NPS is required by law to address carrying capacity in planning for park management. Carrying capacities were established in the 1983 GMP for park facilities, beach areas and Biosphere Reserve core areas. For example, the GMP established capacities of 500 persons at one time at Trunk Bay, with 30 persons on the underwater trail at one time. This plan builds upon and expands the carrying capacities in the GMP to establish specific capacities for the number of permits issued and the amount of commercial activity occurring at any one time in specific areas of the park. These limitations are needed because of resource protection needs, infrastructure limitations, and visitor experience and safety. They have been defined based upon the carrying capacities identified in the GMP, current scientific information, trends in visitation, daily operational knowledge, and public input (see Section III.E).

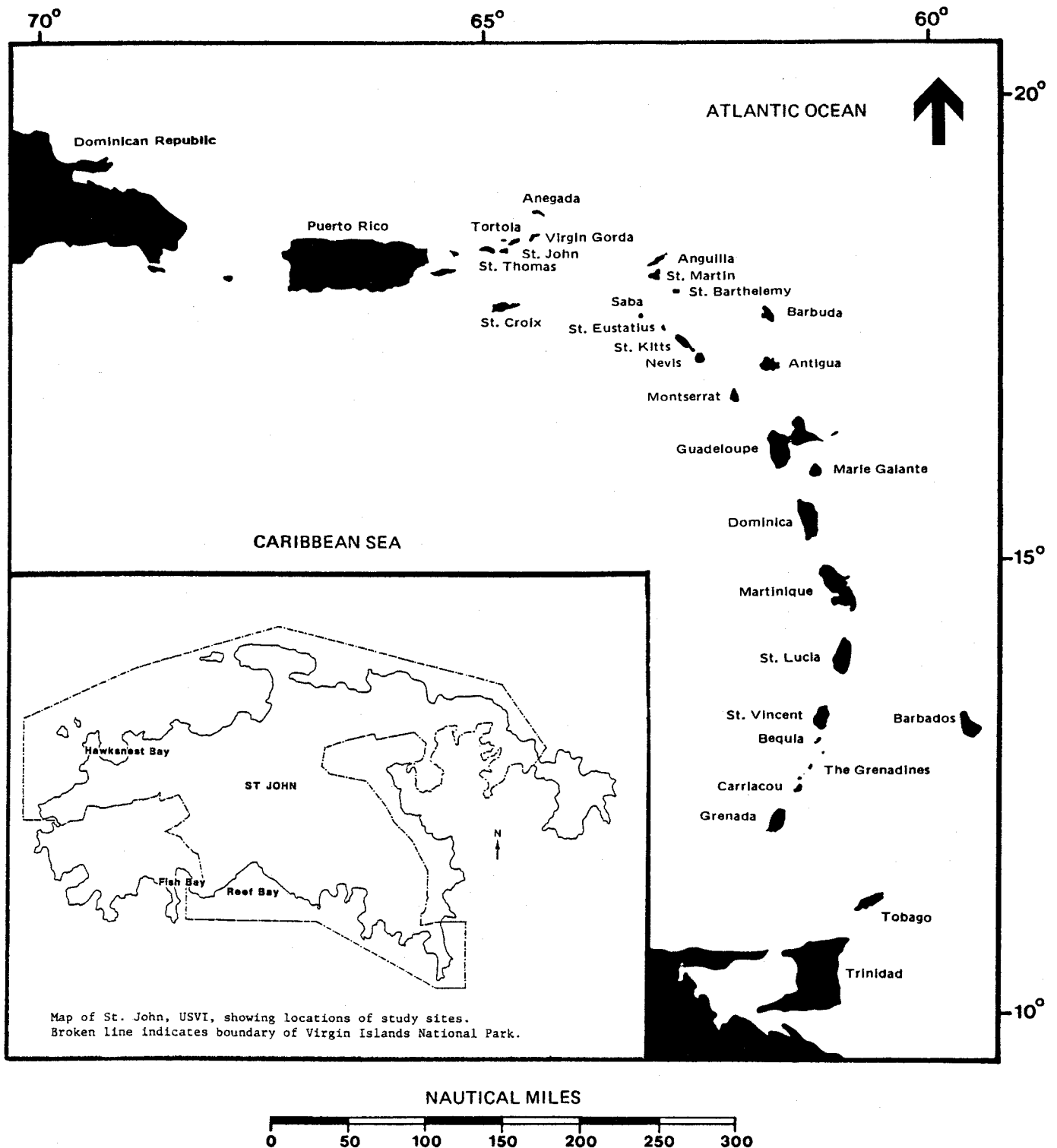
Additional discussion of purpose and need is provided in Chapter II for each of the significant issues that serve as the basis for developing and analyzing alternatives.

C. LOCATION AND SETTING

1. PARK LOCATION AND SETTING

VINP is located near the Tropic of Cancer in the northeast corner at the end of the Greater Antilles that separate the Caribbean Sea from the Atlantic Ocean. The most northwesterly of this clustered island chain are the Virgin Islands of the United States and Great Britain, and approximately 113 kilometers (70 miles) to the west, the U.S. Commonwealth of Puerto Rico. The U.S. Virgin Islands, made up of three main islands and 57 smaller, mostly uninhabited islands and cays, are found near the crossing of 18

Figure 1: Location of St. John, U.S. Virgin Islands
From: Putney (1982)



degrees north latitude and 64.5 degrees west longitude. The island of St. John (52 square kilometers or 20 square miles) is the smallest and least developed of the three main U.S. owned Virgin Islands. St. Croix (218 square kilometers or 84 square miles) lies approximately 64 kilometers (40 miles) to the south of St. John, and St. Thomas (83 square kilometers or 32 square miles), lies about 4 kilometers (2.5 miles) to the west. In 2000, the population of St. John was estimated to be slightly less than 5,000 persons (Tis 2001).

VINP comprises a little over half (2,816 ha or approximately 10 square miles) of the island of St. John. Established in 1956, the park was expanded in 1962 to encompass 2,287 ha (8.7 square miles) of the surrounding waters. Within the authorized boundaries of VINP, three square miles are owned by either private interests or the Virgin Islands government. In 1978, Congress authorized the addition of approximately 135 acres on Hassel Island in the Charlotte Amalie harbor, St. Thomas to the park. The NPS has acquired most of the land on Hassel Island and has a limited first right to match any offers on most of the remaining private properties. The Virgin Islands government also owns lands on Hassel Island. Also on St. Thomas, approximately 15 acres in the Red Hook area are under park jurisdiction and, until recently, served as the park's administrative headquarters.

Because of its internationally significant natural resources, VINP was designated an international Biosphere Reserve in 1976 and is one of the few biosphere reserves that has both marine and terrestrial resources. The park was included in the United Nation's Biosphere Reserve System as a representative example of Lesser Antillean cultural and natural ecosystems.

VINP contains examples of most tropical Atlantic terrestrial, coastal and marine ecosystems. These include various types of subtropical dry to moist forest, salt ponds, beaches, mangroves, seagrass beds, coral reefs and algal plains. Terrestrial topography is quite dramatic with average slopes being 30 percent. The highest mountain peak plunges sharply to the sea over a distance of three quarters of a mile. Rock petroglyphs, middens and three settlements are several of the remains of prehistoric cultures found to date. European settlement patterns and plantation systems significantly altered St. John's biology and ecology by removing native forests, building structures, terraces, rock walls and roads, and importing vegetation and mammals. The plantation settlements took advantage of the labor of African slaves. The last four decades have brought considerable change on St. John through the development of vehicular transportation and roads, resorts and other tourist facilities.

In terms of visitor attractions, scenery and beaches are probably the most significant features of VINP. However, there are about 250 historic structures within the park, most of them remnants of the Danish sugar plantation era, which are increasingly popular with tourists. Over the past ten years, visitation to VINP has averaged approximately 942,800 persons annually.

2. COMMERCIAL SERVICES SETTING

The commercial sector on St. John is dominated by three visitor-oriented services – retail goods and services, transportation services, and water sport activities. Cruz Bay, at the island's west end, is the commercial center of St. John, with the vast majority of commercial business within walking distance of the passenger and car ferry docks in Cruz Bay Harbor. Coral Bay, on the island's southeast side, serves as a secondary, albeit significantly smaller, commercial center. Several small commercial businesses are located on private land in-holdings within national park boundaries, e.g., restaurant and gift shop at the intersection of Centerline and Bordeaux Mountain roads and a yogurt stand at the intersection of Centerline and Kings Hill roads.

Cruz Bay serves as the "Gateway Community" to VINP, being located on the periphery of the park and housing the majority of commercial visitor services. Cruz Bay is also the transportation hub, providing access to/from St. Thomas via a 20-minute (Red Hook) or 45-minute (Charlotte Amalie) ferry ride and to almost all on-island transportation services (taxis, safari buses, rental cars and public transit). There is no air service on St. John, with access limited to passenger and car ferries, water taxis, and other commercial or private vessels. The vast majority of visitors to VINP pass through Cruz Bay to access the park.

With the exception of two concession operations providing on-site visitor-oriented services to resort guests, commercial activities occurring within VINP all originate and terminate outside the park. The majority of these commercial services are geared toward cruise ship passengers. Tour operators provide transportation to/from Charlotte Amalie Harbor, Crown Bay or from waters adjacent to the park (cruise ships are not permitted to anchor within park waters) either to water-based day excursions to the park's north shore or to land-based tour operations. Scenic around-the-island tours and snorkeling/swimming tours to Trunk Bay are the most popular cruise ship passenger venues. Annaberg Historic Site is another popular tour destination.

Commercial water sport operations cater to both the one-day cruise ship passengers and to the longer-term St. John guests and residents. Popular water sport activities include crewed full-day, half-day and sunset sails to north shore beaches. An increasing number of crewed and bareboat powerboat rental operations provide access to park waters. Charter boats (both crewed and bareboat) typically use park waters for overnight mooring or anchoring as part of a multi-island cruise itinerary. Other commercial water sports available to park users include SCUBA, SNUBA, and guided kayak excursions. The majority of water sport operations are based out of St. Thomas marinas and resorts.

Other commercial services available to park visitors include guided bicycle excursions, guided hiking excursions, and wedding/event organizers.

D. MANAGEMENT DIRECTION

1. OVERALL PARK MANAGEMENT

a. Enabling Legislation and Park Purpose

On August 2, 1956, Congress established a portion of the U.S. Virgin Islands "containing outstanding scenic and other features of national significance" as the Virgin Islands National Park, to be "administered and preserved...in its natural condition for the public benefit and inspiration..." (70 Stat. 940). In October 1962, Congress expanded the park's boundaries to include offshore areas "in order to preserve for the benefit of the public significant coral gardens, marine life, and seascapes..." (76 Stat. 746). This act also specified that there was no intent to limit customary uses of or access to offshore areas "for bathing and fishing, subject to regulations as the Secretary of Interior may find reasonable and necessary for protection of natural conditions and prevention of damage to marine life and formations". In 1978, Hassel Island, which is located in St. Thomas harbor, was added to the Park and not more than \$1 million was authorized to be spent to restore and rehabilitate historic structures and develop public facilities on the island.

All activities at VINP are governed by the 1916 Organic Act that created the NPS and congressional and presidential directives. Congress's mandate to the Park Service has been expressed as conserving resources while providing for their enjoyment by today's citizens in a manner that will leave them

unimpaired for future generations. Specifically, in 1916, Congress created the National Park Service in the Department of the Interior to:

Promote and regulate the use of the Federal areas known as national parks, monuments, and reservations by such means and measures as conform to the fundamental purpose of said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations. (NPS Organic Act, 16 USC 1)

Congress supplemented and clarified these provisions through enactment of the General Authorities Act in 1970 and an amendment to that Act in 1978 that expanded Redwood National Park:

The authorization of activities shall be construed and the protection, management and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which the various areas have been established, except as may have been or shall be directly and specifically provided by Congress. (16 USC 1a-1)

NPS policy is to encourage recreational activities within national parks that are consistent with applicable legislation, that promote visitor enjoyment of park resources through a direct association or relation to those resources, that are also consistent with the protection of resources, and that are compatible with other visitor uses. Any activity may be regulated by special regulation or by restrictions imposed under the Superintendent's discretionary authority (36 CFR 1.5).

In providing for the enjoyment of park resources and values, NPS is required to consider the "enjoyment" of all people of the United States. This includes people who visit parks as well as those who appreciate them from afar. Congress, recognizing that the enjoyment by future generations of national parks can be assured only if the superb quality of park resources and values is left unimpaired, has provided that when there is a conflict between conserving resources and values and providing for the enjoyment of them, conservation is to be predominant.

b. Park Mission and Significance

The VINP mission statement is based upon the park's enabling legislation and the 1998 Strategic Management Plan, which was required of all federal agencies by the Government Performance and Results Act (GPRA):

The mission of the Virgin Islands National Park is to preserve and interpret the significant natural and cultural resources and scenery for public benefit and inspiration.

The park's mission goals describe the desired future conditions for resource protection and the visitor experience. Goals with a direct impact on commercial services include:

- Scenic, natural and cultural resources and associated values are protected, restored and maintained in good condition and managed within their broad ecosystem and cultural context.
- Visitors safely enjoy and are satisfied with the availability, accessibility, diversity and quality of facilities, services and appropriate recreational opportunities.
- Park visitors and the general public understand and appreciate the preservation of parks and their resources for this and future generations.

VINP's significance is based upon its scenic, natural and cultural resources and values that must be preserved to accomplish the park's purpose. In terms of visitor attractions, scenery is the park's most significant feature. However, the park's natural resources are national and internationally significant in

that they provide an example of a tropical environment where the processes of nature can be observed, studied and used as a base for comparing natural ecosystems in similar areas. The park's cultural resources are significant in the settlement and colonization of the New World and in maritime history and commerce. VINP is a distinctive combination of natural, cultural, and recreational features that collectively offer outstanding opportunities for public use and enjoyment. A detailed description of the significance of these resources is provided in Chapter III.

c. General Management Plan

General Management Plans (GMPs) are required for each unit of the national park system. These plans provide direction for visitor use and resource preservation and provide a basic foundation for decision-making and management of the park. To this end, the 1983 General Management Plan for VINP identifies the park's significant resources; existing patterns of visitor use; improved opportunities for visitors to directly experience the park; management strategies to perpetuate and enhance significant resources and environmental systems; and developments to facilitate use, offset visitor impacts and meet NPS operational requirements.

The GMP divides the park into three types of management zones (Figure 2): natural, historic and development. Most of the park is managed as a natural area including the protected area subzone which contains the largest acreage and consists of terrestrial and aquatic features such as native tropical forests, salt ponds, fringing mangroves, coral reefs and seagrass beds. These areas have a heavy emphasis on protection of the resources with minimal human intrusion. The recreational natural area subzone includes the north shore beaches, hiking trails and reef areas where snorkeling is encouraged.

The seven historic zones contain remnants and ruins of historic plantation structures, a school and pre-historic Indian village sites. These areas reflect the events that shaped the lives of people and the culture of St. John. Historic Zones include Annaberg Plantation, Cinnamon Plantation, Catherineberg Plantation, Trunk Bay Plantation, Lameshur Plantation, L'Esperance and Par Force/Reef Bay Plantation.

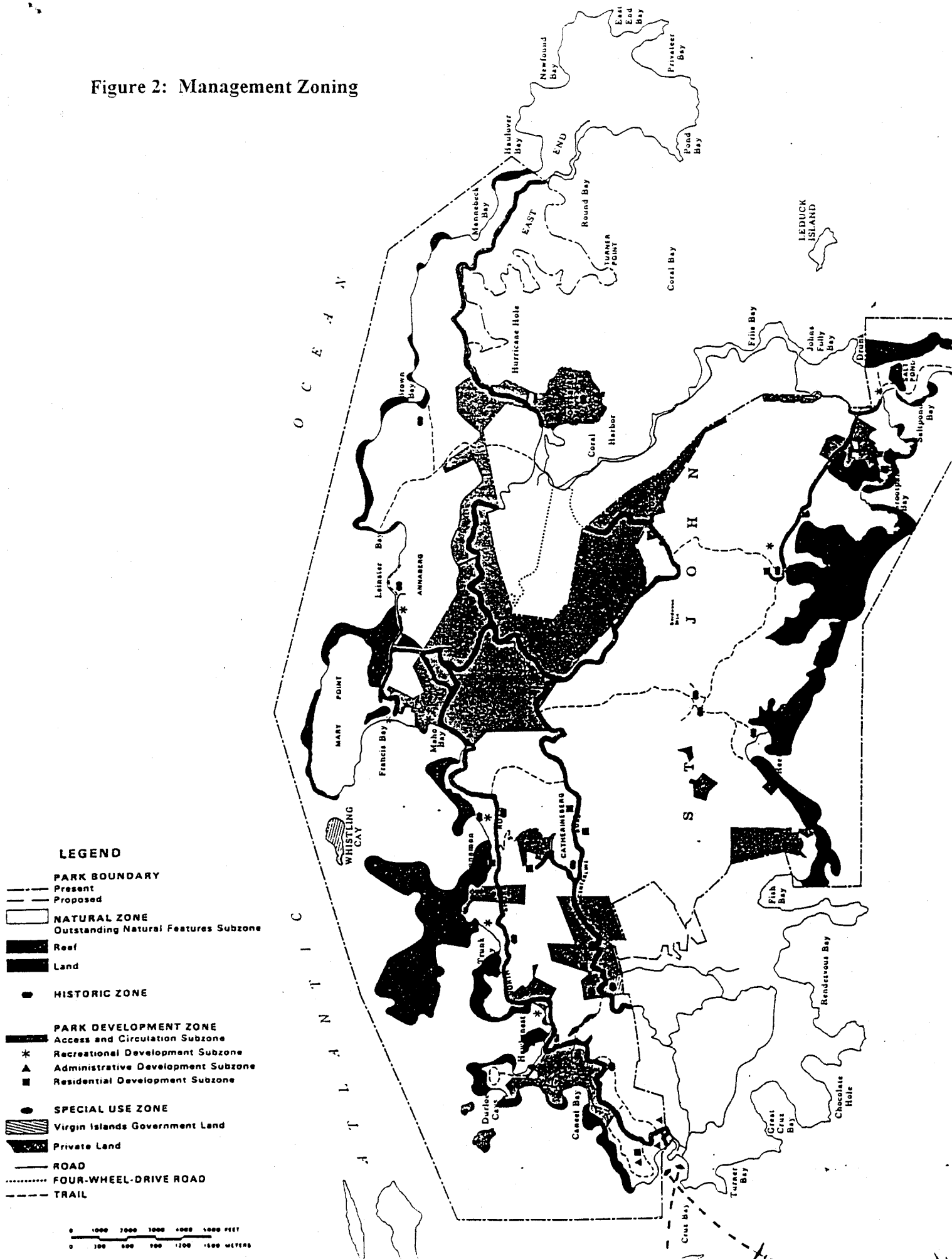
The park development zone includes: 1) the road, parking lot, dock, and office building at Red Hook on St. Thomas, 2) the maintenance yard and offices on St. John, 3) the Biosphere Reserve complex and residential housing at Lind Point, 4) the Visitor Center area, offices and dock in the Creek on St. John. The park development zone also includes all other residential housing, infrastructure at the north shore beaches (picnic shelters and restrooms) and the concessions activities at Trunk Bay and campground at Cinnamon Bay. The GMP included a detailed development concept for Hassel Island that called for providing boat access to and developing docking facilities; constructing a trail system to connect the docks with selected historic features, the island spine and the northwest beach; and providing facilities for handicapped persons where feasible.

On St. John and St. Thomas, development plans included installing information and interpretation kiosks at principal beaches, public ferry docks, and visitor contact areas; enlarging headquarters to provide additional office space; providing or improving handicapped accessibility; providing limited off-road parking in a number of locations; installing upgraded toilet facilities; improving the maintenance area; and improving interpretive trails and wayside exhibits.

Specific GMP provisions affecting commercial services include:

- Visitors will be informed of NPS programs and activities at Hassel Island and St. John through a system of unmanned orientation kiosks, park brochures, and an orientation film.
- At Hassel Island, outdoor recreation based on the scenic and natural qualities of the island will be provided.

Figure 2: Management Zoning



- Boat access will be provided to Hassel Island by one or more permittees from a central point on the Charlotte Amalie waterfront. Additional access can also be provided directly from cruise ships.
- General upgrading of existing beach facilities on St. John will improve the visitor experience and accommodate the slight increase in park use envisioned for the future.
- Existing patterns of visitor use will continue; however, some facilities and services will be improved. The present variety of resource-related activities and social interactions will be maintained.
- Access to St. John will continue to be by public and private means; transportation within the park will continue to be provided through permit arrangements with commercial tour and other providers. Cooperation will be continued with commercial tour and transportation providers to arrange schedules so that park use is fairly evenly distributed.
- Redhook on St. Thomas will continue to be the primary departure point for visitors to St. John. Cruz Bay will remain the arrival point.
- The Caneel Bay private resort will continue to operate compatibly with park objectives.
- At Hawksnest Bay, facilities will continue to be provided for uses other than tour groups and new showers and changing facilities will be provided.
- Trunk Bay will continue to be the principal beach access and day use area serving tour groups and other visitors. Concessioner-operated equipment rental and snack services will continue. The underwater trail will be improved and use monitored. If unacceptable impacts occur, management actions will be taken.
- Cinnamon Bay will be retained as a principal developed area for day use and overnight accommodations. The concessioner-operated campground, cafeteria, campstore and equipment rental will continue.
- At Maho Bay ...the private campground provides accommodations compatible with park objectives so beach and water use permits will be continued.
- Francis Bay will continue to be a principal anchorage and beach area for boaters and land-based facilities will be improved.
- Annaberg will continue to be the focal point for historical interpretation on St. John.
- In the rural unit, facilities at East End, Bordeaux Mountain, Saltpond Bay and Lameshur will be improved but the character of the area will be maintained and use levels will not change.
- In the roadless unit, access will continue to be by trail or by boat to selected features and the minimal facilities will be improved; however, the primitive character and low density use of the unit will be maintained.
- The marine unit will be managed to protect water quality and marine life and to enhance safety. At sites frequented by boaters, resource protection information will be provided and in some areas mooring buoys will be provided.

On Hassel Island, none of the planned developments have been completed. On St. John, a number of planned development items have been completed including installation of kiosks, upgrading of toilet facilities, maintenance area improvements and improvements to handicapped accessibility, trails and off-road parking. A new headquarters building has been constructed to provide additional office space and an improved visitor contact station.

The GMP established the following priorities for allocating staff and financial resources:

- Maintain habitat for endangered species and preserve selected cultural resources that are imminently threatened.
- Perpetuate intact marine and terrestrial ecosystems.
- Provide for visitor use.
- Stabilize disturbed ecosystems.

d. Biosphere Reserve

In 1976, the park was designated as a Biosphere Reserve by the United Nations Educational, Scientific and Cultural Organization (UNESCO) through its Man and the Biosphere (MAB) program. It is the first biosphere reserve in the Lesser Antilles, a region of many developing countries. The concept of a Biosphere Reserve emphasizes the interrelationship of humans and the natural world, embracing both the park and the surrounding areas and communities. It illustrates the careful balance between conservation and development.

The park is recognized as internationally significant. It was selected because it represents the Lesser Antillean biogeographic province, because it contains a national park which provides long-term legal protection from inappropriate development and rapid change, and because it has an extensive dry subtropical forest. These natural resources provide a relatively undisturbed example of tropical ecosystems where the processes of nature can be observed, studied and used as a basis for comparison to similar ecosystems elsewhere that are undergoing rapid development and alteration.

e. Coral Reef Initiative

On June 11, 1998, President Clinton signed Executive Order 13089 directing all federal agencies to increase their efforts to protect the nation's coral reef resources. The Order created the U.S. Coral Reef Task Force, charged with developing a comprehensive program of inventorying, monitoring, and research to map and identify the major causes and consequences of degradation of coral reef ecosystems. The Order directs Federal agencies to use their authorities to protect coral reef ecosystems and, to the extent permitted by law, prohibits them from authorizing funding or carrying out any actions that will degrade these ecosystems. The Task Force has produced *The National Action Plan to Conserve Coral Reefs* as a cohesive national strategy to implement the President's Executive Order. The Action Plan was developed in consultation with various stakeholders and covers the spectrum of coral reef conservation from mapping, monitoring, management, and research to education and international cooperation. The plan calls for designating 20% of all U.S. coral reefs as no-take ecological reserves by 2010, mapping all coral reefs by 2009, and building an integrated national reef monitoring system that profiles and tracks the health of U.S. coral reefs. Collectively, these actions are intended to provide a comprehensive road map for federal, state, territorial, and local actions to reverse the worldwide decline and loss of coral reefs.

f. Other Direction

Park resources and values are also protected by a variety of other statutory authorities. Key authorities to be considered in the authorization and management of commercial services within VINP include: Territorial Submerged Lands Act of 1974 (48 USC 1705); Antiquities Act (16 USC 432 and 43 CFR 3); Archeological Resources Protection Act (16 USC 470aa et seq.); National Historic Preservation Act as amended (16 USC 470 et seq.); Abandoned Shipwreck Act (102 Stat. 432) and guidelines (55 CFR 50116); Clean Air Act as amended (42 USC 7401 et seq.); Endangered Species Act (16 USC 1531 et seq.); Marine Mammal Protection Act (16 USC 1361 et seq.); Ocean Dumping Act (16 USC 1361 et seq.); Noise Control Act (42 USC 4901 et seq.); Coastal Zone Management Act (16 USC 1451 et seq.); Protection of Wetlands (Executive Order 11990); Floodplain Management (Executive Order 11988); and Estuary Protection Act (16 USC 1221).

Other authorities involved with enforcing laws relating to park resources include the U.S. Coast Guard and the Virgin Islands Department of Planning and Natural Resources. Territorial rules and regulations of particular relevance include the Coastal Zone Management Act of 1978 (Title 12, Chapter 21 VI Code) and the Mooring and Anchoring of Vessels and Houseboats Act of 1990 (Title 25, Chapter 16 VIRR).

Title 12 also confirms "the right of the public to use and enjoy all beaches and shorelines of the Virgin Islands..."

2. MANAGEMENT OF COMMERCIAL SERVICES

Commercial service needs within national parks are identified through General Management Plans, development concept plans and commercial services plans such as this. NPS policy allows commercial uses in park areas under carefully controlled safeguards. Permissible activities are those that are *necessary and appropriate* for public use and enjoyment of park areas in which they are located and that are fully consistent with the preservation and conservation of the park areas. Commercial uses may be authorized that are not in derogation of park purposes or values and that provide recreational opportunities for visitors, contribute to visitor enjoyment of park resources, and support or achieve applicable management objectives.

A cornerstone of the agency's management of commercial services is a preference for out-of-park private enterprise. It is NPS policy that if adequate commercial facilities are available to serve visitors outside of park boundaries, new facilities will not be developed nor will existing facilities be expanded within parks.

There are two primary types of authorizations or permits for commercial activities within national parks: concession contracts and commercial use authorizations (CUAs), formerly known as Incidental Business Permits (IBPs). Other types of authorizations that could be considered as commercial but are not addressed in this plan include cooperating associations, utility rights-of-way and easements, and commercial filming permits. Commercial air uses are also not addressed as they are under the jurisdiction of the Federal Aviation Administration.

a. Concessions

Concession operations are subject to the provisions of the Omnibus National Park Management Act of 1998 (with the National Park Service Concessions Management Improvement Act being the short title of Section IV of the Omnibus Act that deals directly with concessions); National Park Service regulations published at 36 CFR Part 51; Chapter 10 of National Park Service Management Policies; and NPS Director's Order #48A. The 1998 Concessions Management Improvement Act supercedes the Concessions Policy Act of 1965, which guided NPS management of concessions for the past 30 years.

Concession services are authorized under concession contracts, unless otherwise authorized by law. Concession contracts are legal agreements between the Secretary of Interior (or authorized agent) and a concessioner that requires the concessioner to provide certain visitor accommodations, facilities or services. Concession contracts are usually used for large complex operations and are issued by competitive bid. Concessioners may be required or authorized to acquire, construct or install permanent facilities or improvements. Concession contracts may be modified only by written amendment. Additional visitor services may be provided only if the services are minor and a reasonable extension of the existing services. Concession contracts include an operations plan, risk management program, environmental management program, a maintenance plan and, in many cases, a building improvement plan.

The 1998 National Parks Omnibus Management Act incorporates much of the philosophy of the 1965 Concession Policy Act, including "...development shall be limited to those accommodations, facilities and services that are necessary and appropriate for public use and enjoyment of the unit of the National

Park System in which they are located and are consistent to the highest practicable degree with the preservation and conservation of the resources and values of the unit." In addition, the Secretary of the Interior should "...exercise his authority in a manner consistent with a reasonable opportunity for the concessioner to realize a profit."

Under the 1998 Act, the term of new concession contracts will generally be 10 years or less. However, the NPS Director may award a contract for a term of up to 20 years if the Director determines that the contract terms and conditions, including the required construction of capital improvements, warrant a longer term. The Act discontinues concession permits; short-form contracts are used in their place. Large concessioners (over \$500,000 annual revenues) are no longer given a right of preference in renewal of contracts. Possessory interest has been renamed leasehold surrender interest and redefined. A franchise fee based upon a percentage of gross receipts is paid by the concessioner for the privilege of doing business in the park. Under the old law, all franchise fees paid by a concessioner were sent to the general treasury. Now, franchise fees stay with the NPS to be used for concession-related or resource protection projects, with 80% of the fees retained by the park in which they are collected and 20% used servicewide.

It is important to note that *proposed concession operations must be economically feasible and generally supported by a feasibility study prepared by a qualified individual*. Authorization of new or expanded concessions is a multi-step process. First, potential concession opportunities are conceptually identified in this CSP based upon a determination that the proposed facility or service:

- Is necessary and appropriate for the public use and enjoyment of the park and identified needs are not, nor can they be, met outside park boundaries;
- Will be provided in a manner that furthers the protection, conservation, and preservation of the environment and park resources and values;
- Incorporates sustainable principles and practices in planning, siting, construction, utility systems, selection and recycling of building materials, and waste management; and
- Will enhance visitor use and enjoyment of the park without causing unacceptable impacts to park resources or values.

Following this determination, a feasibility study is conducted to determine if the proposed concession facility or service is economically viable. Only after the economic feasibility has been determined can a concession be authorized and the prospectus and contracting process initiated. Competition is encouraged in the awarding of contracts in order to obtain the best service provider and maximize benefits to the government.

Unless specified in the concession contract, subconcession or other third-party agreements, including management agreements, for the provision of visitor services that are required and/or authorized under concession contracts are not permitted.

b. Commercial Use Authorizations

Commercial use authorizations (CUAs) are used for incidental commercial activities and are authorized under special use permit authorities (16 USC 1-4 and 36 CFR 1.6(a) and 5.3). The commercial use authorization is intended as a mechanism to authorize and monitor selective commercial uses and activities for which concession contracts are not appropriate. Commercial use authorizations regulate commercial activities that are typically initiated and terminate outside the park but use park resources, such as day sails, SCUBA diving, vehicle transportation, hiking, weddings and other commercial activities. CUA operators do not enjoy the same privileges, terms and conditions as concessioners. Commercial users are not permitted to construct or use structures in the park, except those available for

general public use. The term of a CUA can be for up to two years, although one-year permits are common. CUA fees are based upon recovery of NPS application, administrative and monitoring costs.

Among the criteria that must be met for an activity to be permitted via a CUA are:

- The activity must be appropriate to the mission of the park, particularly in regard to resource protection, visitor protection and interpretation. In addition, the use will not be a derogation of the values and purposes for which the park was established.
- The commercial aspects of the services, except for the service itself, must occur outside of the park, including marketing, advertising, use or construction of temporary or permanent structures, the negotiation of compensation with the customer, or the solicitation or receipt of money or other compensation.
- The services provided must not conflict with the preferential rights provided under any concessions contract.

The 1998 National Parks Omnibus Management Act changes how Incidental Business Permits (IBPs), renamed commercial use authorizations (CUAs), are managed. Under the old law, parks could not limit the number of permits issued for any activity deemed appropriate. Under the new law, the type and number of CUAs may be limited for resource protection and to improve or maintain the quality of the visitor experience.

c. General Commercial Services

NPS Guidelines, along with NPS policies, Director Orders, standard contract language, and operating practices, are used in managing commercial activities in the park. Key Guidelines include:

- NPS-48: Concessions Management Guideline
- NPS-50: Loss Control Management Program Guideline
- NPS-53: Special Park Use
- NPS-83: Public Health Management Guideline

In addition to these policy directives, NPS commercial services are subject to specific regulations published in Title 36, Code of Federal Regulations, along with policies enacted by the Secretary of the Interior and/or Director of the National Park Service. Permittees are subject to other Federal statutes as well as applicable Territorial laws, rules, regulations and codes. Concession contracts and CUAs are not subject to Federal Acquisitions Regulations nor typical government contracting requirements. The Superintendent is the administering official for all contracts and permits.

The Cost Recovery Act (16 USC 3a) requires NPS to recover the cost of providing services to commercial permittees. The cost is defined as the amount expended by NPS to accommodate the commercial use and includes application, administration and monitoring costs.

E. SCOPING AND SIGNIFICANT ISSUES

1. SCOPING PROCESS

Scoping is the process used to determine the scope of the analysis to be conducted in preparing the Commercial Services Plan and its accompanying Environmental Assessment (EA). It is used early in the NEPA process to identify: (1) the issues to be addressed, (2) the depth of the analysis, (3) alternatives to assess, and (4) potential environmental and socioeconomic impacts of the various alternative management

actions. The minimum public involvement requirements of NEPA (40 CFR 1501.7) were far exceeded in order to develop a plan with no surprises for the public.

The scoping process has had four distinct stages: (1) scoping for issues to be addressed in the plan, (2) scoping for the Significant Issues to be analyzed in detail in the plan, (3) scoping for a draft range of alternatives, and (4) scoping for a Preliminary Draft Preferred Alternative.

Informal scoping began with announcement of the intent to undertake a planning process in April 1999, although the formal public review process was not initiated until November 1999. At that time, a community open house was held and a scoping questionnaire was distributed. Press releases were widely distributed during the first week in December and a press briefing was conducted on December 10, 1999. Wide press coverage resulted. Scoping activities included:

- Four public open houses in December, 1999 and January, 2000 on St. John and St. Thomas.
- Briefings/interviews with NPS staff; staff of the Congressional Delegate's Office; the St. John Administrator; Territorial Senator; USVI Department of Planning and Natural Resources; marine industry representatives; concessionaires and IBP holders; and other key community leaders and interest groups.
- Presentations and/or workshops with interest groups.
- Distribution of over 700 project newsletters with scoping questionnaires.
- Posting of press releases and the project newsletter/questionnaires on the web sites for VINP and the Friends of the VINP.

Almost 200 persons attended the open houses and an equal number participated in presentations or workshops. More than 65 scoping questionnaires were submitted. A *Scoping Report* summarizes the issues raised during this first phase.

Through an April, 2000 newsletter, presentations to interest groups, and media coverage, public input was then solicited on the "Significant Issues" to be addressed in the plan. In June 2000, public and agency input was solicited through a project newsletter, media coverage, and interest group presentations on a preliminary range of three alternatives proposed for detailed assessment in the plan. A *Range of Alternatives* report was widely disseminated. In July 2000, a *Preliminary Draft Preferred Alternative* report was circulated for public review. Based upon input received, the Proposed Action was modified and identified as the Preferred Alternative in a Draft Plan/EA.

The Draft EA/Plan was released for 30 days of public review on February 19, 2001, with a press briefing conducted in conjunction with its release. Public review opportunities included:

- Distribution of over 200 copies of the Draft Plan/EA and 250 copies of a newsletter summary.
- Three public open houses in March, 2001 on St. John and St. Thomas attended by almost 100 persons.
- Briefings with NPS staff, Friends of VINP, staff of the Congressional Delegate's Office, the St. John Administrator, Territorial Senator, USVI Department of Planning and Natural Resources, marine industry representatives, concessioner, and other key community leaders and interest groups.
- Posting of the Draft Plan/EA and newsletter summary on the web sites for VINP and the Friends of the VINP.

2. SCOPING ISSUES

Based upon public and agency comments received during the scoping process, 19 different issue statements addressing 8 topic areas were identified. These issue statements have been paraphrased as planning questions to be addressed in the plan. They are not intended to be all inclusive of the comments received during scoping, as it is recognized that there are numerous sub-issues associated with the issue statements, as well as suggestions for approaches to addressing the issues (e.g., research needs and mitigation). There will also be overlap with scoping issues identified for the Vessel Management Plan (a separate implementation plan being prepared by VINP) related to commercial use permits, fees and other topics.

a. Issues To Be Addressed In The Plan

Compliance with Applicable Regulations

1. What measures should be instituted to ensure conformance with the purpose/need for the park and Biosphere and compliance with current law and regulations?
2. What changes in contracting for commercial services will be required to comply with new Congressional and agency direction on contracting with the private sector?
3. How does park management of commercial services compare with other national parks with similar commercial services?

Visitation Demands

4. What is the current and projected future visitation to the park and what changes in the types and areas of use of the park can be expected?
5. What potential impacts to park resources are associated with commercial uses?

Carrying Capacity Limitations

6. What limitations should be placed on commercial use authorizations and concession permits/contracts to protect the park's resources and to ensure a quality recreational experience?
7. What areas should be designated as venues for group tours?
8. What are the impacts of establishing carrying capacity limitations?

Existing Commercial Services

9. Should the existing single concession for Trunk Bay and Cinnamon Bay be split into separate concessions?
10. Should the existing water sports operations at Caneel, Trunk, Cinnamon and Little Maho bays be separate, stand-alone concessions?
11. What physical improvements are needed to ensure a high quality visitor experience at Trunk Bay and Cinnamon Bay?

New Commercial Services

12. What new and/or expanded commercial services are needed to ensure a quality visitor experience?
13. What types of small business opportunities could be provided?
14. What potential impacts to the local economy are associated with providing new and/or expanded commercial services within the park?

Transportation Services

15. Should the park enter into a concession agreement for the provision of transportation services within the park, with specific provisions for service levels, parking, use of pullouts, dispatch, etc.?

Commercial Use Permits

16. What modifications are needed to the commercial use authorization program, including application requirements, permit conditions, fee levels and the cycle for permit issuance?

Plan Implementation

17. How will implementation of plan provisions be phased?
18. What are the costs of implementation and sources of financing?
19. What is the process and schedule for plan updates/revisions?

b. Issues Beyond Plan's Scope

The following issues raised during scoping are not assessed in the plan for the reasons cited:

- *Expansion of the fee demonstration program to include Cinnamon Bay or other locations.*

The fee demonstration program is a separate, mutually exclusive program from the agency's commercial services programs and, as such, is not within the scope of this plan.

- *"Grandfathering" existing commercial operations if limitations on the number of commercial use authorizations or if carrying capacity limitations are established.*

The 1998 National Parks Concessions Management Improvement Act generally requires competitive awards of concession contracts. Large concessioners (over \$500,000 annual revenues) are no longer given a right of preference in renewal of contracts. CUAs are issued on an annual or semi-annual basis based upon specific evaluation criteria and the management direction established in this Plan. As part of the CUA permitting process, NPS will give great emphasis to the experience of the operator in providing the commercial service and experience providing commercial services to National Park visitors.

- *Contracting services currently provided by park staff, e.g. interpretive tours, to the private sector.*

VINP believes that it would be inappropriate to contract out key services such as interpretive tours that are an integral part of the agency's mission. Under NPS supervision, groups such as Volunteers in Parks, cooperating associations and friends groups provide natural and cultural history seminars, field trips and other visitor services.

- *Provision of additional parking.*

The various transportation alternatives currently available adequately meet the demand for public access to the park. Consequently, the adverse environmental effects associated with the construction of additional parking areas are not justified from a public need perspective. Additionally, the current system of mass transit provides a major source of income to island residents.

- *Additional public transportation services on North Shore Road, Centerline Road and elsewhere on St. John.*

This issue will be addressed in future transportation system planning to be undertaken by the park. The potential for public transportation services within the park would be restricted to that portion of the North Shore Road between Cruz Bay and Trunk Bay. Beyond Trunk Bay, the terrain would not be conducive to standard public transportation vehicles.

- *Regulation of commercial air services.*

Both commercial and non-commercial air traffic is regulated by the Federal Aviation Administration (FAA), which requires a minimum altitude of 2,000 feet above the highest landform to reduce potential interference or impact on wildlife, visitor uses and sensitive natural or archaeological sites (FAA Advisory Circular 91-36C). VINP has contacted the regional FAA office regarding an increasing number of low-flying aircraft.

- *Requiring commercial use permits for scientific research groups and non-profit groups*

Scientific research groups obtain research permits, not usually associated with commercial use, and non-profit groups are regularly given authorization for non-commercial activities in the park.

3. SIGNIFICANT ISSUES

NEPA requires federal agencies to focus analysis and documentation on the significant issues related to a proposed action. The following have been identified as the significant issues to serve as the basis for developing and comparing alternatives. These significant issues provide the key options for decision-making, i.e., the plan assesses various alternative "choices" that respond to each of these issues. While the Plan/EA focuses on these significant issues, all issues identified through scoping are addressed. For example, issues identified under Compliance with Applicable Regulations and Visitation Demands are addressed as part of the description of the "Affected Environment". For each significant issue, a range of alternative management strategies has been developed that address each of the sub-issues that have been identified.

Issue: *Carrying Capacity Limitations*

1. What limitations should be placed on commercial use authorizations to protect the park's resources and to ensure a quality recreational experience?
2. What areas should be designated as venues for group tours?

Issue: *Existing Commercial Services*

3. Should the existing single concession for Trunk Bay and Cinnamon Bay be split into separate concessions?
4. Should the existing water sports operations at Caneel Bay Resort, Trunk Bay, Cinnamon Bay Campground and Maho Bay Camps be separate, stand-alone concessions?

Issue: *New Commercial Services*

5. What new and/or expanded commercial services are needed to ensure a quality visitor experience?
6. What types of small business opportunities for Virgin Islanders could be provided?

Issue: *Transportation Services*

7. Should the park enter into a concession agreement for the provision of transportation services within the park, with specific provisions for service levels, parking, use of pullouts, dispatch, etc.?

Future commercial services on Hassel Island were identified as a significant issue through the *Vessel Management Plan* scoping process and addressed in that plan's Range of Alternatives and Preliminary Draft Preferred Alternative. Because this issue is more appropriately addressed in a Commercial Services Plan, it has been added to this plan.

F. COORDINATION AND CONSULTATION

An Interdisciplinary Team (IDT) was established at the initiation of the planning process to assist in identifying significant issues and a range of alternatives to assess in the EA. The IDT consists of representatives of each Park Division and the Biological Resources Division, USGS (see Chapter VI: List of Preparers). In addition, a Sounding Board, composed of volunteer representatives of Park user groups, community organizations, and the Territorial government, provided input on issues related to commercial uses within the Park.

Section 7 of the Endangered Species Act (ESA) requires that a federal agency consult with the U.S. Fish and Wildlife Service (USFWS) or U.S. National Marine Fisheries Service (NMFS) on any action that may affect endangered or threatened species, candidate species or result in adverse modification of

critical habitat. NPS initiated consultation with USFWS and NMFS in April 2000 and was provided by NMFS with an updated list of threatened and endangered species that may occur within the park (Appendix B). In February 2001, NPS requested continuing consultation and concurrence with its determinations that no species or critical habitat would be likely to be adversely affected. NMFS concurred with the determination and concluded consultation on May 17, 2001 (Appendix C).

Consultation was also initiated with the State Historic Preservation Office regarding effects on archaeological and cultural resources, including submerged resources, in accordance with the National Historic Preservation Act, Archaeological Resources Protection Act, and NPS policy. Similarly, consultation was initiated with the Territory's Department of Planning and Natural Resources in conformance with the Coastal Zone Management Act.

Coordination with the Territorial government has been ongoing since initiation of the planning process through briefings, distribution of draft documents, and representation on the Sounding Board.

CHAPTER II: RANGE OF ALTERNATIVES

A. DEVELOPMENT OF ALTERNATIVES

The National Environmental Policy Act (NEPA) requires that a reasonable range of alternatives be developed to provide decision-makers and the public with a clear basis for choice (40 CFR 1502.14). Case law has determined that reasonable alternatives include those that are technically and economically practical and feasible, using common sense, rather than those that are simply desirable (46 CFR 18027, *Forty Most Asked Questions Concerning CEQ's NEPA Regulations*).

Based upon the issues identified through scoping, the project's Interdisciplinary Team (IDT) preliminarily identified a range of three alternatives for detailed assessment in the Plan/EA. Public comment was solicited through distribution of a *Range of Alternatives* report, a June 2000 newsletter, and group presentations. Based upon that input, a Preliminary Draft Preferred Alternative (PA) was identified in early July 2000 and circulated for public review. That Preliminary Draft Preferred Alternative, in turn, was revised in response to public and agency comment and analyzed as the Proposed Action in both the Draft Plan/EA and this Final Plan/EA. Through these public input opportunities, while several additional elements, e.g. provision of a seaplane landing area, were raised for consideration, no additional alternatives were identified for analysis. Rather, public comment focused on support for or opposition to specific elements proposed in the range of alternatives.

B. ALTERNATIVES CONSIDERED IN DETAIL

Responses to agency and public comments on the Draft Plan/EA and resultant modifications to the Proposed Action will be included in the Finding of No Significant Impact (FONSI)/Decision Notice (DN). The Proposed Action in this Final Plan/EA is identical to that in the Draft Plan/EA.

A range of three alternatives, including a No Action alternative and the agency's Proposed Action, is analyzed in this Plan/EA. This range of alternatives is intended to provide clear choices for the decision-maker and to respond to public comment, particularly significant issues raised in scoping.

As required by NEPA, Alternative 1 is included as a "No Action" alternative, serving as a benchmark against which other action alternatives can be compared. This alternative represents the state of management of commercial services within VINP at this point in time, with some exceptions.

Alternative 2, the agency's Proposed Action, identifies those management strategies that the NPS believes best fulfill its statutory mission and responsibilities, best meet the Purpose and Need and respond to the Significant Issues, and balance environmental, visitor experience, economic, and other factors. This alternative has been designed to provide for the continuation of the types and level of commercial services currently provided for visitors to the park, as well as a moderate level in growth in most types of commercial services. At the same time, the Proposed Action provides a higher level of resource protection for sensitive Park resources, particularly federally-listed threatened and endangered species and habitats, than is available under current NPS management. It is also designed to ensure a quality visitor experience by responding to anticipated increases in Park visitation and associated demands for new and expanded recreational venues through limitations on the number of authorized commercial uses, visitor capacities, and use restrictions. It is designed to provide a range of visitor experiences while avoiding

"tourism by the numbers", recognizing that NPS's overriding mandate is to conserve the park's resources in such manner that they are left unimpaired for the enjoyment of future generations.

Alternative 3 is designed to accomplish essentially the same goals as Alternative 2 but with a stronger focus on expanded visitor opportunities provided by the private sector and with a lower level of regulatory oversight. It accommodates a higher level of growth in commercial services than does Alternative 2.

As discussed under *Purpose and Need*, NPS is required by law to address carrying capacity in planning for park management. Accordingly, the two action alternatives establish specific capacities for the number of permits issued and the amount of commercial activity occurring at any one time in specific areas of the park. These limitations are needed because of resource protection needs, infrastructure limitations, and visitor safety and experience. They have been defined based upon carrying capacities identified in the GMP, current scientific information, daily operational knowledge, and public input. Carrying capacities were established in the 1983 GMP for park facilities, beach areas and Biosphere Reserve core areas. For example, the GMP established capacities of 500 persons at one time at Trunk Bay, with 30 persons on the underwater trail at one time. These carrying capacities are reevaluated in this plan in light of the trends in visitation since 1983. (See Section III.E for additional discussion.)

The analysis of alternatives is organized to respond to the significant issues identified through scoping. A discussion of the purpose and need related to each significant issue is included to supplement that in Section I.B.

1. AUTHORITY TO OPERATE

a. Elements Common to All Alternatives

In all alternatives, authorized commercial uses would be those that are necessary and appropriate for public use and enjoyment of the park and that are consistent to the highest practicable degree with the preservation and conservation of the park's resources and values. Commercial services:

- Will be operated only under concession contracts, commercial use authorizations, or other appropriate instrument;
- Prevent adverse effects on natural, cultural and aesthetic resources;
- Minimize crowding, congestion and conflicts among visitors;
- Can be supported using existing NPS facilities such as parking areas, restrooms, buildings and roads; and
- Provide for needed visitor services that cannot be adequately met outside park boundaries.

To comply with existing commercial use regulations, any business conducting an organized and advertised visitor service for profit within the boundaries of the National Park would be required to obtain a CUA, concession contract, or other appropriate authorization.

New or changing patterns of use or trends in commercial activities will be monitored. New forms of commercial use will not be authorized until after environmental analysis has determined that they will not result in unacceptable impacts on park resources. The process to be used by VINP to evaluate proposed commercial activities is detailed in Appendix A.

b. Alternative 1: No Action

Other than as described above in *Elements Common to All Alternatives*, in this alternative there would be no change in the types of commercial uses authorized. There are, however, additional commercial operations that are currently operating within the park and that would need to be brought under authorization. Consequently, the number of authorized commercial services in Alternative 1 would be expected to increase. There also would be no specific limitations on new commercial services, although NPS would retain the ability to reject any application for reasons of resource protection, visitor experience, or infrastructure limitations. Appropriate and inappropriate commercial uses would be as follows:

Table 1: Appropriate and Inappropriate Commercial Activities, Alternative 1(1)

Appropriate Uses	Inappropriate Uses
Lodging facilities and services at Cinnamon Bay Campground only	Retail sales except in conjunction with authorized concessions or by cooperating associations
Food services at Trunk Bay and Cinnamon Bay Campground only	Personal watercraft rental and use
Merchandise sales at Trunk Bay and Cinnamon Bay Campground only	Waterskiing, parasailing, or towing of any person or recreational device, including dive gliding (2)
Scenic tours, both land and water-based	Repair and maintenance
Swimming/snorkeling day excursions, both land and water-based	Commercial air tours services, including seaplanes and helicopters
Jeep rally tours	Submersible or amphibious vessels
Guided hiking excursions	Commercial sport fishing
Guided bicycling excursions	Horseback riding and packing
Guided sea kayaking tours	Mountain and rock climbing
SCUBA excursions	Hanggliding
SNUBA at Trunk Bay only	Commercial vessels greater than 210' LOA
Reef Bay Trail hiker pickup	
Water sports equipment rentals and instruction	
Wedding/event organizers	
Water taxi services	
Kite surfing in association with watersports operations at Caneel Bay Resort, Cinnamon Bay Campground, and Maho Bay Resort only	
Overnight anchoring by commercial vessels between 125-210' in Francis Bay only	

(1) Includes uses subject to concession contracts or commercial use authorizations; does not include other commercial activities authorized through special use permits, right-of-way permits, cooperating association agreements or other authorities.

(2) Towing a device used by snorkelers and divers underwater at slow speeds by dinghys or other small vessels.

Appropriate Uses

With the exception of kite surfing, all of the commercial uses listed in Table 1 are currently authorized by concession contract/permit or by CUA. While kite surfing is growing in popularity internationally, it is not currently available at the park's water sport concessioners. Participation is limited to a few individuals, typically utilizing Francis Bay or Cinnamon Bay.

Inappropriate Uses

Merchandise sales are highly regulated in national parks in order to preserve the dignity and environmental quality of parks. NPS policy is to limit the sale of merchandise within parks to concessioners and cooperating associations.

Personal watercraft use; waterskiing, parasailing and towing of any person or recreational device; and horseback riding on trails and beaches within the park are specifically prohibited by CFR or the Superintendent's Compendium. Similarly, while vessels greater than 210 feet LOA (aka cruise ships) are permitted to transit through park waters, they are prohibited from anchoring or mooring within the park.

Commercial repair and maintenance operations are both inappropriate activities within a park setting and can readily be conducted on private lands outside the park.

Commercial air tours must meet criteria in 36 CFR 2.17 and can be authorized only if it is determined that public health and safety, environmental and scenic values, etc. would not be adversely affected. Although at one time seaplane service was permitted from the NPS ramp in Cruz Bay, it was discontinued based upon a determination that vessel traffic, other water-related activities, park operations at the ramp, and environmental values would be adversely affected. The rationale for denying this use remains valid.

Submersible or amphibious vessels would not be considered to be appropriate uses within a national park setting, particularly given ample opportunities to provide this service outside the park. Commercial fishing is prohibited in national parks, except where specifically authorized by federal statute (36 CFR 2.3). 36 CFR 7.74 specifically prohibits fishing in Trunk Bay; elsewhere in the park, the taking of any marine life is prohibited except for bait fish, or with hand-held rod or line, or with conventional Virgin Islands pots or traps. These exceptions are intended to provide for traditional fishing; commercial sport fishing would not be a statutorily authorized use.

Opportunities for commercial mountain and rock climbing or hanggliding operations within the park would be limited and there would be a high likelihood of conflicts with other visitor uses. Given the number and location of private land in-holdings within park boundaries, there would also likely be conflicts with private properties. These uses would not be necessary for public use and enjoyment of the park.

c. Alternative 2: Proposed Action

In this alternative, the scope of the park's commercial services program would be expanded to accommodate several potential new commercial uses and to provide for a moderate level of market growth. At the same time, limitations on the number of some types of commercial use authorized would be established as detailed below under *Concession, Commercial Use Authorizations, and Group Venues*. Appropriate and inappropriate commercial uses would be as follows:

Table 2: Appropriate and Inappropriate Commercial Activities, Alternative 2(1)

Appropriate Uses	Inappropriate Uses
Lodging facilities and services at Cinnamon Bay Campground only	Retail sales except in conjunction with authorized concessions or by cooperating associations
Food services at Trunk Bay and Cinnamon Bay Campground	Personal watercraft rental and use
Mobile food services at authorized locations	Waterskiing, parasailing, or towing of any person

	or recreational device, including dive gliding (2)
Merchandise sales at Trunk Bay and Cinnamon Bay Campground only	Mini-cruise ship overnight anchoring
Scenic tours, both land and water-based	Repair and maintenance
Swimming/snorkeling day excursions, both land and water-based	Commercial air tours, including seaplanes and helicopters
Guided hiking excursions	Submersible or amphibious vessels
Guided bicycling excursions	Horseback riding and packing
Guided sea kayaking tours	Mountain and rock climbing
SCUBA excursions	Hanggliding
SNUBA at Trunk Bay only	Jeep or motorbike rally tours
Reef Bay Trail hiker pickup	Commercial sport fishing, including guided fishing excursions
Water sports equipment rentals and instruction	Overnight anchoring by commercial vessels between 125-210'
Wedding/event organizers	Commercial vessels greater than 210' LOA
Water taxi services	Kite surfing
Collection of mooring/anchoring fees	
Operation of Red Hook dock facilities	
Operation of vessel pumpout facilities	

- (1) Includes uses subject to concession contracts or commercial use authorizations; does not include other commercial activities authorized through special use permits, right-of-way permits, cooperating association agreements or other authorities.
- (2) Towing a device used by snorkelers and divers underwater at slow speeds by dinghys or other small vessels.

Appropriate Uses

In addition to the appropriate uses identified in Alternative 1, several new commercial uses would be authorized through concession contracts or CUAs in this alternative. These new uses are discussed in the sections that follow and include:

- Mobile food services;
- Collection of mooring/anchoring fees;
- Operation of NPS dock facilities at Red Hook as a commercial activity; and
- Operation of vessel pumpout facilities.

Inappropriate Uses

In addition to the inappropriate uses identified in Alternative 1, two types of commercial uses that are currently permitted would not be authorized in this alternative:

- "Mini"-cruise ships (125-210' LOA) use of park waters for overnight anchoring and swimming/snorkeling stops; and
- Rally tours.

Historically, mini-cruise ships anchored throughout park waters. Based upon observed damage to seagrass beds and coral communities (Rogers et al 1988; Rogers and Garrison 1998), these vessels were restricted several years ago to anchoring in Francis Bay at depths of 50 feet or greater. With the closure of Francis Bay beach to commercial tour group use, Maho Bay or Cinnamon Bay would serve as surrogate swimming/snorkeling destinations. Directing large groups (100+ persons) to these beaches would negatively impact the experience for other park visitors, particularly if the beaches are being used at the time by smaller commercial vessels. At Maho Bay, both adequate beach area and infrastructure are lacking to serve large groups. At Cinnamon Bay, large commercial groups would negatively impact the campground user experience. Also, the cumulative damage of mini-cruise ship anchors, which typically

weigh one ton each, may be greater than numerous small anchors (Rogers et al 1988). Given the speed and maneuverability of these vessels, there would be numerous alternative locations for this use outside park waters. This use would not be necessary for public use and enjoyment of the park. These vessels would continue to be able to transit through park waters, but would no longer be authorized to anchor in Francis Bay or elsewhere in the park. This restriction would apply only to commercial vessels; private vessels between 125-210' would continue to be able to anchor in designated areas (currently only Francis Bay).

Rally tours introduce additional vehicles to already congested roads and parking lots within the park and have the potential to adversely impact the safety and experience of other visitors. Although currently authorized as part of land-based tour operations, beginning September 1, 2001, such uses would be terminated. This implementation timeframe would provide adequate notice to tour operators to revise their tour programs.

c. Alternative 3

The commercial uses considered appropriate and inappropriate in this alternative would be the same as in Alternative 2. The difference between Alternatives 2 and 3 is in the number of commercial uses that would be accommodated and the use limitations established for specific locations (see *Concessions, Commercial Use Authorization, and Group Venues* below).

2. CONCESSIONS

The National Parks Concessions Management Improvement Act of 1998 requires a range of revisions to the concessions process, most notably the repeal of any "preference in renewal" rights for contracts over \$500,000 in annual revenues, a limit of 10 years or less for most concession contracts, and the elimination of limited concession permits. The existing concession contract and permits in the park expired in 1991 and were extended through letters of authorization until December 31, 2001.

a. Elements Common to All Alternatives

The following elements would be common to all alternatives:

- As discussed in Section I.D.2.a, before any of the proposed concessions in the range of alternatives could be authorized, a feasibility analysis would be required to determine if the proposed concession facility or service is economically viable. Only after the economic feasibility has been determined can a concession be authorized and the prospectus and contracting process initiated. For each authorized concession, a prospectus will define the type and quantity of services to be provided, the nature of improvements required, environmental requirements, the franchise fee, and the criteria upon which selection will be based. Concession contracts would be issued for 5-10 years, with 20-year contracts issued only in special circumstances with approval from the NPS Director.
- Improvements to the concession operations at Trunk Bay and Cinnamon Bay would be required in the awarding of new concession contracts. For example, replacement of the existing snack bar and gift shop facilities at Trunk Bay and water sports facilities at Cinnamon Bay Campground would be anticipated. The nature of these improvements and services would be determined during preparation of the required economic feasibility analyses and concession prospectuses.

b. Alternative 1: No Action

In Alternative 1, there would be a single concession contract, although additional concessions could be considered (per the process detailed in Appendix A) if necessary and appropriate for public use and enjoyment of the park, if consistent with the protection and conservation of park resources, and if determined to be economically feasible.

Trunk Bay/Cinnamon Bay Campground Concession

The following existing commercial services would continue to be authorized through a single concession contract:

- Food service, rental equipment, storage lockers and merchandising at Trunk Bay; and
- Lodging, food service, merchandising and water sports at Cinnamon Bay.

The existing concession contract for these services has expired but has been extended to no later than December 31, 2001 through a letter of authorization. This extension was not specific to the park's concession contracts; rather, it was part of an across-the-board action taken by NPS pending adoption of concession contracting regulations and standard concession contract language implementing the 1998 National Parks Concessions Management Improvement Act. A prospectus for continuation of these operations would be issued pursuant to requirements of the 1998 Act. As noted above, improvements to the concession operations at Trunk Bay and Cinnamon Bay would be required in the awarding of a new concession contract.

Water Sports

Similarly, the existing limited concession permits for water sports at Caneel Bay Resort and Maho Bay Camps have expired but been extended to December 31, 2001. The authorized water sport services at these resorts are provided through subcontractors. Given that no land-based park resources are associated with the associated water sports operations and that subconcessions are prohibited by the 1998 Act, the existing subconcessions at Caneel Bay Resort and Maho Bay Camps would be converted to Commercial Use Authorizations (CUAs). Through Special Use Permits (SUPs), NPS moorages would be assigned to the resorts for exclusive use by these CUAs. In turn, these permittees would be required to ensure the availability of services to their respective resorts, although they could obtain customers elsewhere to augment their resort-generated business.

The desired future condition at Maho Bay Camps would be to maintain the current mix of commercial operations, i.e., two six-pack day sail operators, a multi-passenger day sail operator, and a SCUBA/snorkeling excursion operator. The desired future condition at Caneel Bay Resort would be to maintain a mix of available commercial services while minimizing the number of commercial vessels permanently moored there, given the ready access to nearby private moorings in Cruz Bay and Great Cruz Bay.

c. Alternative 2: Proposed Action

In Alternative 2, there would be the potential for 11-15 separate concessions, contingent upon their economic feasibility and market interest.

Trunk Bay/Cinnamon Bay Campground Concession

Separate, new concessions would be considered for land-based operations at Trunk Bay (food service, rental equipment, storage lockers and merchandising) and at Cinnamon Bay (lodging, food service, and merchandising). Following analysis of their economic feasibility, prospectuses for these operations would be issued pursuant to requirements of the 1998 Act. Based upon the feasibility analysis and

response to the prospectuses, either separate or combined concession contracts could be awarded, i.e. economic feasibility and market interest would determine whether the Trunk Bay/Cinnamon Bay Campground operations would be split apart or kept combined.

At Trunk Bay, the option would be assessed to operate gift shop and snack bar services either as separate concessions or as a single concession. Rental of swimming/snorkeling gear would be considered only as part of the gift shop operations (versus the two separate operations currently). No water sports activities would be considered as part of the concession contract; rather, SNUBA operations and swimming/snorkeling instruction would be considered as individual CUAs.

Water Sports

As in Alternative 1, the existing limited concession permits for water sports activities at Caneel Bay Resort and Maho Bay Camps would be converted to CUAs.

At Cinnamon Bay, the water sports operations could be offered through prospectus as a separate concession from the land-based campground concession. Again, economic feasibility and market interest would determine whether the water sports are separate or remain combined with the land-based operation. In either case, the existing water sports facilities would be moved inland to avoid cultural resource impacts, improve public access, and reduce visual impacts. The operator would also be required to construct new storage facilities to replace the existing facilities and the storage of equipment from operations conducted elsewhere would be prohibited.

Other Potential Concessions

New concession contracts that could be considered, based upon economic feasibility, include:

- Collection of mooring and anchoring fees.

VINP intends to initiate a fee for the overnight use of park moorings or for overnight anchoring in park waters. While it is anticipated that several contracts (3-4, based upon geographic zones) would be awarded, the specific nature, i.e., one or multiple contracts, and scope of this service will be defined in consultation with the marine community and other interested parties. If determined to be economically feasible and if there is market interest, garbage pickup and delivery of food, ice and other products for boats could be authorized in conjunction with mooring/anchoring fee collection.

- Reef Bay trail hiker pickup.

For the past several years, this service has been provided by a single business operating with VINP authorization but without a specific concession contract/permit or IBP. For the Year 2001, this service has been authorized as part of a CUA for day use excursions. However, a concession contract awarded through a competitive process would be more appropriate for this service, as the use initiates inside the park and certain privileges and conditions are entailed. Potential services could include pickup for both NPS organized excursions and for non-NPS excursion hikers on a scheduled basis.

- Operation of NPS Dock at Red Hook.

Through a competitive prospectus, a single entity would be selected to operate the NPS dock at Red Hook as a concession with the following provisions:

- The concessioner would be responsible for undertaking a structural engineering analysis of the dock facilities and completing repairs required to bring the facilities up to engineering standards approved by NPS.

- The concessioner would be responsible for providing and maintaining restroom facilities and for establishing and maintaining other visitor welcome area improvements.
 - The concessioner would be responsible for grounds maintenance and security.
 - Subject to structural limitations such as a vessel tonnage and size that could be safely accommodated, use of the dock facilities would be available for fee (at rates approved by NPS) to all commercial vessels authorized to operate within park waters.
 - Unrestricted use of the dock facilities by NPS and emergency vessels (e.g., St. John "hospital boat") would be provided at no charge.
- Pumpout facility operation.

As will be detailed in the park's *Vessel Management Plan*, VINP intends to authorize a pumpout facility for use for a fee by vessels visiting park waters. If located on NPS property, the construction and operation of this facility may be competitively contracted out as a concession.

- Mobile unit food service operations at Hawksnest Bay, Maho Bay and Salt Pond Bay.

Detailed economic feasibility, site and operations analyses would be undertaken prior to authorization to assess the desirability and suitability of this commercial use. If authorized, an annual review would assess the appropriateness of continuing this service.

- Transport for hire within the park (see below under *Transportation Services*).

Other new concessions could be considered pursuant to the process and limitations described for Alternative 1.

d. Alternative 3

In Alternative 3, the concession program would be similar to that in Alternative 2, with the potential for 18-20 separate concessions. Concession opportunities for the Trunk Bay/Cinnamon Bay Campground operation, water sports operations, and transportation services would differ between the two alternatives.

Trunk Bay/Cinnamon Bay Campground Concession

As described for Alternative 1, the continuation of existing commercial services at Trunk Bay and Cinnamon Bay Campground would be authorized through a single concession contract.

Water Sports Concessions

Water sports activities would be authorized, beginning no later than January 2002, as follows:

- At both Caneel Bay and Maho Bay Camp, the nature of the existing concession operations would be changed from a single concession contract issued to the land-side resort to individual concession contracts for each water-based business operating in conjunction with the resort. At both resorts, this would result in four separate concessioners if current commercial operations were continued.
- At Trunk Bay, the concession could either be a component of a land-based concession or a separate concession, depending upon economic feasibility and market interest. Authorized activities would be limited to swimming/snorkel gear rental, SNUBA, and swimming/snorkeling instruction.
- At Cinnamon Bay, water sports would be included as part of the campground concession.

Other Potential Concessions

With the exception of visitor transport for hire within the park (see below under *Transportation Services*), new concession opportunities would be as in Alternative 2.

3. COMMERCIAL USE AUTHORIZATIONS

One of the greatest challenges facing the park is deciding how to provide for quality enjoyment of growing numbers of visitors while preserving the fragile ecosystems in the park. As discussed under *Purpose and Need*, there is a growing demand for new and expanded venues for park visitors, triggered in large part by an anticipated increase in cruise ship passengers desiring to visit VINP. The majority of these venues begin and terminate outside the park and would be subject to commercial use authorization. Limiting the number of permits, as well as the numbers of visitors within an area at a given time as proposed below under *Group Venues*, is necessary to preserve the park's natural and cultural resources and to ensure a quality visitor experience. At the same time, there is a need to consider an increase in the number of authorized commercial services to address all the known types of commercial activities occurring within the park that by law are subject to permit, to accommodate several potential new uses, and to provide for a moderate level of market growth.

a. Elements Common to All Alternatives

- CUAs would be issued on an annual basis for at least five years after plan adoption, at which time a biannual permitting process could be initiated at the discretion of VINP. All CUAs would be subject to a fee based upon recovery of NPS application, administration and monitoring costs. Application forms/permitting information would be provided to current permittees and other interested parties and through the local media and trade associations. CUA applications would be reviewed against specific criteria, including but not limited to, the following:
 - The activity must be appropriate to the mission of the VINP, particularly in regard to resource protection, visitor protection and interpretation. In addition, the use will not be a derogation of the values and purposes for which the VINP was established.
 - The commercial aspects of the services, except for the service itself, must occur outside of the VINP, including marketing, advertising, use or construction of temporary or permanent structures, the negotiation of compensation with the customer, or the solicitation or receipt of money or other compensation.
 - The services provided must not conflict with the preferential rights provided under any concessions contract.
 - The activity must provide necessary and appropriate visitor services.
 - The operator must have experience, expertise, and financial capability to provide the type of commercial service proposed.
- Any commercial vessel accessing Trunk Bay would be subject to a per passenger fee as part of the park's Recreational Fee Demonstration Program.

b. Alternative 1: No Action

The currently authorized commercial services listed below would continue to be authorized via an annual or semi-annual permitting process. In Alternative 1, it is assumed that there would be no limitations on the number of CUA applications, but that current use restrictions would remain in effect. However, NPS always has the authority to impose limitations on commercial uses if needed for resource protection

reasons. Any limitations on CUA approvals would be determined on a case-by-case basis subject to appropriate NEPA and public involvement processes.

Table 3: CUA Types and Limitations/Use Restrictions, Alternative 1

TYPE	LIMITATIONS/USE RESTRICTIONS(2)
<i>Water-Based Activities</i>	
Day use excursions (crewed)(1)	
1-6 passenger vessels	
7-24 passenger vessels	
25-50 passenger vessels	
50+ passenger vessels	One CUA for cruise ship passenger transport to Trunk Bay. Mini-cruise ships limited to anchoring in Francis Bay.
Henley Cay use	Subject to site-specific use restrictions.
Day use rental operations (crewed)	
SCUBA operations	
Guided kayak excursion operations	
Water taxi services	
Caneel Bay Resort water sports operations	
Maho Bay Camps water sports operations	
<i>Land-Based Activities</i>	
Land-based tour operations	Passenger discharge limited to Trunk Bay and Annaberg Historic Site. Permittee responsible for compliance of drivers under its employ.
Wedding/Event organizers	Site approval required for groups in excess of 10 persons.
Hiking outfitter guide operations	Maximum of 30 persons per outing. Limited to authorized trails.
Bicycle outfitter guide operations	Maximum of 8 bicycles plus 2 guides per outing. Limited to authorized routes.

(1) Vessel capacities are based on the number of passengers to be transported within Park waters; Coast Guard-approved capacities could be greater.

(2) Only key limitations and restrictions are cited; interested parties should also consult CFR and the Superintendent's Compendium.

Water-Based Activities

Day Use Crewed Excursions

For day use excursions by both sailboats and motor vessels, CUAs would be issued based upon vessel size. Included in the category of day use excursions are crewed sailboats and powerboats that transport guests on a regular basis. Any business advertising crewed excursions to the national park would be required to obtain a CUA. Excluded are bareboat (non-crewed) rental or charter vessels or term charter vessels. Unlike the crewed day excursions, the focus of these businesses is on individual trips on an unscheduled basis where VINP is an incidental, rather than a scheduled, stop. Similar to rental cars, the specific itinerary of rental boats is not under the control of the rental company. As long as they are operated by the renter (versus crewed), they are considered a private vessel and not subject to permit.

In the 50+ passenger category, one CUA would be available for a vessel no greater than 110 feet LOA for the purpose of transporting cruise ship visitors to Trunk Bay. This vessel would be restricted to Trunk

Bay and assigned a reserved mooring. Other commercial vessels would be permitted to access Trunk Bay but would be required to use an unreserved, public mooring. A per passenger fee is required for any passengers discharged by commercial vessels at Trunk Bay (for either swimming/snorkeling or beach access). "Mini" cruise ships (125-210' LOA) would be authorized to use park waters for overnight anchoring and swimming/snorkeling stops, but could no longer access Francis Bay beach.

Access to Henley Cay for day use excursions would be considered on a case-by-case basis and would be subject to a variety of use limitations and environmental restrictions.

Day Use Rental Operations

While sailboat and powerboat rental companies would not be subject to permit for the rental of vessels for operation by individuals, they would be required to obtain CUAs for their day use crewed excursions. VINP is currently developing a CUA program for this use; the CUAs will authorize use of park waters by all vessels associated with each authorized operation, rather than permitting individual vessels.

SCUBA Operations

In this alternative, there would be no limit on the number of CUAs available for day use SCUBA excursions and instruction within park waters. Use of SCUBA moorings would be required on the south shore and, if installed, at Mary's Creek.

Guided Kayak Excursion Operations

In this alternative, there would be no limit on the number of guided kayak excursion operations authorized.

Water Taxi Operations

In this alternative, there would be no limit on the number of water taxi operations authorized.

Caneel Bay Resort/Maho Bay Camps Watersports Operations

As discussed above under *Concessions*, the existing water sports concessions at Caneel Bay Resort and Maho Bay Camps would be converted to CUAs upon expiration of the existing limited concession permits on December 31, 2001. In the interim, these subconcession operations would have the option to also obtain CUAs allowing them to obtain customers elsewhere to augment their resort-generated business.

In this alternative, additional operations could be authorized if requested by the resorts and determined to be necessary and appropriate to the public use and enjoyment of park waters.

Land-Based Activities

Land-Based Tour Operations

In this alternative, there would be no limitation on the number of existing CUAs available for land-based tour excursion operators. Tour operations include scenic island tours, swimming/snorkeling tours, and jeep rallies. While the tour services provided are land-based, transportation via vessel to the park from St. Thomas or other destinations is considered part of the authorized commercial tour activity (rather than as a separate commercial use). Excluded are guided kayak, hiking and bicycle excursions which may be provided in conjunction with tour services; such services must be specifically authorized through separate CUAs. Limitations on designated venues are discussed below under *Group Venues*. Transportation service requirements are detailed below under *Transportation Services*.

Wedding/Event Organizers

There would be limit on the number of CUAs available to wedding/event organizers. Site approval would continue to be required for groups in excess of 10 persons.

Hiking Outfitter Guide Operations

There would be no limit on the number of CUAs available for guided hiking excursions, although access to specific trails would be specified in the CUAs, based upon consultation with the park's Interpretation and Resource Management divisions. To ensure a quality visitor experience and to reduce potential conflicts with other trail users, a maximum of 30 persons per outing would be instituted beginning September 1, 2001. Private (non-NPS) guided hiking excursions on the Reef Bay Trail would not be authorized by this plan.

Bicycle Outfitter Guide Operations

There would be no limit on the number of CUAs available for guided bicycle excursions, although access to specific roads and trails would be specified in the CUAs. A limitation of 8 riders plus 2 guides would be established for at least the first year of operation to allow the park to assess safety and operational issues.

c. **Alternative 2: Proposed Action**

In Alternative 2, limitations on the numbers of CUAs to be authorized for certain types of uses would be established either at current levels or to allow a moderate amount of market growth (Table 4). These limitations are intended to limit the growth in commercial services within the park in order to preserve the scenic, natural and cultural resources for which the park was established and to ensure a quality visitor experience. The basis for these limitations is explained below and in Section III.E, Carrying Capacity. Additional limitations on available venues and capacity are also detailed below under *Group Venues*.

Table 4: CUA Types and Limitations/Use Restrictions, Alternative 2

TYPE	LIMITATIONS/USE RESTRICTIONS(2)
<i>Water-Based Activities</i>	
Day use excursions (crewed)(1)	
1-6 passenger vessels	No limit. Annual review.
7-24 passenger vessels	12 vessels
25-50 passenger vessels	18 vessels
50+ passenger vessels	1 vessel (3)
Henley Cay use	1 CUA. Subject to site-specific use restrictions.
Day use rental operations	8 CUAs
SCUBA operations	6 CUAs. Maximum of 18 passengers per vessel.
SNUBA operations	1 CUA, limited to Trunk Bay.
Guided kayak excursion operations	No limit. A review to determine the need for limitations would be conducted on an annual basis beginning two years after plan adoption. Maximum of 8 kayaks per guide.
Water taxi services	2 CUAs
Caneel Bay Resort water sport operations	4 CUAs
Maho Bay Camps water sport operations	4 CUAs
Swimming/snorkeling instruction	2 CUAs
<i>Land-Based Activities</i>	

Land-based tour operations	8 CUAs. Limited to designated venues and subject to PAOT limitations and to transportation service requirements. Passenger discharge limited to Trunk Bay and Annaberg Historic Site.
5 or more vehicles	6 CUAs.
Less than 5 vehicles	12 CUAs.
Wedding/Event organizers	8 CUAs. Site approval required for groups in excess of 10 persons.
Hiking outfitter guide operations	4 CUAs. Maximum of 30 persons per excursion. Limited to authorized trails.
Bicycle outfitter guide operations	2 CUAs. Maximum of 15 persons per excursion. Limited to authorized routes.

- (1) Vessel capacities are based on the number of passengers to be transported within Park waters; Coast Guard-approved capacities could be greater.
- (2) Only key limitations and restrictions are cited; interested parties should also consult CFR and the Superintendent's Compendium.
- (3) Cruise ship passenger transport vessel.

Water-Based Activities

Day Use Excursions

LIMITATIONS ON NUMBERS OF AVAILABLE CUAS

For day use excursions by both crewed sailboats and motor vessels, CUAs would be issued based upon vessel size. For 6-passenger vessels, there would be no limitation on the number of CUAs available. However, a review to determine the need for limitations would be conducted on an annual basis beginning two years after plan adoption or upon enactment of any legislative changes to current "6-pack" Coast Guard regulations.

Limitations on the number of CUAs available to multi-passenger vessels would be instituted to ensure both the protection of sensitive marine resources and the quality of the visitor experience. Vessels of this size, particularly the 49-passenger vessels, discharge large numbers of visitors at one time into reef areas and onto beaches, affecting the quality of the visitor experience both for their guests and other users. When several of these larger vessels access the same area at the same time, there is the potential for overcrowding and attendant resource and visitor experience impacts. The number of CUAs available would be based upon vessel size, with 12 CUAs available for 7-24 passenger vessels and 18 CUAs for 25-50 passenger vessels. These limitations are based upon the numbers of vessels of these sizes currently authorized to operate within park waters and reflect the significant increase in the numbers of authorized vessels in these size groups from 2000 to 2001 (4 to 11 and 8 to 18, respectively).

One CUA would be available for a 50+-passenger vessel no greater than 110 feet LOA for the sole purpose of transporting cruise ship visitors to Trunk Bay. This vessel would be restricted to Trunk Bay and assigned a reserved mooring. Use of other venues would not be authorized.

One CUA would be available for Henley Cay day use, subject to a variety of use limitations and environmental restrictions. Given the small beach area and sensitive seabird nesting habitat in the northern part of the cay, the number and type of commercial uses would be strictly limited. An annual review of impacts would be conducted to determine the appropriateness of continuing this use.

LIMITATIONS ON CUAS PER BUSINESS

To provide for market competition, a limitation of three CUAs (i.e., three vessels of any size) per business would be established beginning January 1, 2002. Exempted would be any business currently authorized for more than three (3) 6-passenger vessels in association with resort operations.

RESTRICTIONS ON NUMBER OF PASSENGERS

Beginning January 1, 2002, except for one cruise ship visitor transport vessel assigned to Trunk Bay, a permit capacity of 50 passengers would be instituted for any commercial vessel providing visitor services within Park waters. (This capacity limitation would apply only to the number of passengers to be transported within Park waters; Coast Guard-approved capacity could be greater.) This limitation is based upon the severity of potential resource damage associated with larger vessels, a lack of supportive infrastructure, and conflicts between the nature of such use and a national park setting and values. Vessels that are currently authorized at a greater capacity would be required to reduce the size of their tour groups.

CARRYING CAPACITY LIMITATIONS

To ensure both the protection of sensitive marine resources and the quality of the visitor experience, a capacity limitation of 175 PAOT (persons-at-one-time) at any one time at any bay or beach area would be established for multi-passenger commercial vessels. Designated venues and carrying capacity limitations are described below under *Group Venues*.

Day Use Rental Operations

Up to eight (8) CUAs would be available to accommodate day use crewed excursions by sailboat and powerboat rental companies. As noted under Alternative 1, VINP is currently developing a CUA program for this use; the number of available CUAs may need to be adjusted based upon that program. The CUAs would authorize use of park waters by all vessels associated with each authorized operation, rather than permitting individual vessels.

SCUBA Operations

Up to six CUAs would be available to accommodate existing authorized operations, those businesses currently operating without authorization, and to provide for market growth. At any SCUBA site, the number of commercial vessels at any one time would be limited to three, with a maximum of 18 passengers each (or 54 PAOT). Use of SCUBA moorings on the south shore would be required.

SNUBA Operations

One CUA would be available for SNUBA operations at Trunk Bay only. This operation would be independent of Trunk Bay concession operations.

Guided Kayak Excursion Operations

There would be no limit on the number of operations authorized. However, a review to determine whether any limits are needed would be conducted annually beginning in 2002. A requirement for a minimum of one guide for every eight (8) kayaks would be established.

Water Taxi Operations

Currently, only one water taxi service is authorized within park waters. To accommodate both market growth and competition, two (2) CUAs would be available in this alternative.

Water Sports Operations

As discussed above under *Concessions*, the existing water sports subconcessions at Caneel Bay Resort and Maho Bay Camps would be converted to CUAs. A maximum of four (4) CUAs each would be available for commercial services provided to the resorts. This limitation would accommodate the number of subconcessioners currently associated with each resort.

Swimming/Snorkeling Instruction

Two (2) CUAs would be available for swimming/snorkeling instruction at park beaches. If provided at Trunk Bay, this operation would be independent of Trunk Bay concession operations. Swimming/snorkeling instruction has been requested by a number of tour operators and school groups, with several qualified individuals indicating their interest in offering such instruction as a commercial enterprise.

Land-Based Activities

Land-Based Tour Operations

In this alternative, limitations on the number of CUAs available for land-based tour excursion operations would be established to ensure both the protection of sensitive resources and the quality of the visitor experience. These limitations also recognize infrastructure capacity limitations for beach facilities (e.g., restrooms and showers), on roads, and at staging areas, parking areas, and overlooks. While the tour services provided are land-based, transportation via vessel to the park from St. Thomas or other destinations is considered part of the authorized commercial activity (rather than as a separate commercial use). Restrictions on available venues and limitations on PAOT are discussed below under *Group Venues*. Transportation service requirements are detailed below under *Transportation Services*.

Wedding/Event Organizers

The number of CUAs available to wedding/event organizers would be set at eight (8) to accommodate current permittees, those businesses currently operating without authorization, and some market growth. Site approval would continue to be required for groups in excess of 10 persons.

Hiking Outfitter Guide Operations

In recognition of the increasing demand for guided hiking trips, up to four (4) CUAs would be available for individual guide businesses. Restrictions would be as detailed for Alternative 1.

Bicycle Outfitter Guide Operations

Due to concerns regarding safety and resource protection, the number of CUAs available for commercial bicycle outfitter guide operations would be limited to two (2). Restrictions would be as detailed for Alternative 1.

d. Alternative 3

In Alternative 3, the types of CUAs to be issued for commercial services within the park would be as in Alternative 2, but with an increase in the available number of some authorizations to provide for a higher level of growth in commercial services (Table 5). Use limitations would be as described in Alternative 2. A primary difference between the two alternatives would be the requirement that, beginning in January 2002, the provision for transportation services for hire within the park, whether by transportation companies or individual operators, would require a CUA.

Table 5: CUA Types and Limitations/Use Restrictions, Alternative 3

TYPE	LIMITATIONS/USE RESTRICTIONS ⁽²⁾
<i>Water-Based Activities</i>	
Day use excursions (crewed) ⁽¹⁾	
1-6 passenger vessels	No limit. Annual review.
7-24 passenger vessels	16 vessels
25-50 passenger vessels	20 vessels
50+ passenger vessels	1 vessel (3)
Henley Cay use	1 CUA. Subject to site-specific use restrictions.
Day use rental operations	10 CUAs
SCUBA operations	8 CUAs. Maximum of 18 passengers per vessel.
SNUBA operations	None (concession activity).
Guided kayak excursion operations	No limit. A review to determine the need for limitations would be conducted on an annual basis beginning two years after plan adoption. Maximum of 8 kayaks per guide.
Water taxi services	3 CUAs.
Caneel Bay Resort watersport operations	None (concessions).
Maho Bay Camps watersport operations	None (concessions).
Swimming/snorkeling instruction	None (concession activity).
<i>Land-Based Activities</i>	
Land-based tour operations	25 CUAs. Limited to designated venues and subject to PAOT limitations and to transportation service requirements. Passenger discharge limited to Trunk Bay and Annaberg Historic Site.
Wedding/Event organizers	10 CUAs. Site approval required for groups in excess of 10 persons.
Hiking outfitter guide operations	4 CUAs. Maximum of 30 persons per excursion. Limited to authorized trails.
Bicycle outfitter guide operations	2 CUAs. Maximum of 15 persons per excursion. Limited to authorized routes.
Transportation services	No limit. Performance standards included as CUA terms of approval. Land-based tour operators would be required to utilize only services provided by CUA holders.

- (1) Vessel capacities are based on the number of passengers to be transported within Park waters; Coast Guard-approved capacities could be greater.
- (2) Only key limitations and restrictions are cited; interested parties should also consult CFR and the Superintendent's Compendium.
- (3) Cruise ship passenger transport vessel.

Limitations and use restrictions would be as described for Alternative 2 except as follows:

Increase in Available CUAs

The number of CUAs available for multi-passenger vessels would be increased from 12 to 16 for 7-24 passenger vessels and from 18 to 20 for 25-50 passenger vessels. This level of growth in this market sector would be the maximum that could be sustained and ensure the protection of sensitive resources and a quality visitor experience. A maximum of 10 CUAs would be available for day use rental operations to accommodate growth in this market sector. Similarly, growth in scuba operations would be

accommodated by increasing the number of available CUAs from six (6) to eight (8). In addition, the opportunity would be provided for one additional water taxi operation in this alternative.

The number of CUAs for land-based tour operations and wedding/event organizers would both be increased from eight (8) to 10, providing for moderate growth in these market sectors.

Concessions versus CUAs

In this alternative, SNUBA and swimming/snorkeling instruction would be activities authorized as part of a Trunk Bay water sports concession. Water sport operations at Caneel Bay Resort and Maho Bay Camps would be provided through individual concession contracts (see *Concessions* above).

Transportation Services

As discussed below under *Transportation Services*, the transport of visitors for hire within the park would require a CUA in this alternative. With CUAs available to taxi associations, other transportation companies, and individual operators, this requirement would be expected to result in approximately 25 new CUAs.

4. GROUP VENUES

The use of VINP has grown dramatically over the last two decades and is expected to continue to increase. While all types of uses are expected to increase, growth in cruise ship passenger visitation to the park is of particular note. Already, the park is experiencing a demand for new and expanded visitor venues to accommodate the growth in visitation and an increase in the number and size of commercial tour groups. There is also an increasing demand for venues for large groups (120-150 persons) emanating from hotels and transported via multiple multi-passenger commercial vessels to park beaches.

However, allowing unlimited visitor use, particularly large group use, can destroy the very qualities of the national park that attracts visitors and residents alike. Consequently, to protect the park's water and land resources and to ensure a quality visitor experience, specific capacities are established for the amount of visitor activity occurring at any one time in specific areas of the park. These capacities acknowledge the strong relationship among the number of visitors, timing of visitation (pulses), the quality of the visitor experience, and impacts to the park's resources. They also recognize the need to be able to accommodate visitors to the park without undue focus on any specific audience, most notably cruise ship passengers.

a. Elements Common to All Alternatives

- In all alternatives, the termination of commercial group use of Francis Bay beach initiated as of January 2001 would remain in effect due to sensitive resource values (concentration of threatened and endangered species) and a lack of supporting infrastructure. This action would terminate continued use of the Francis Bay beach by "mini" cruise ships (125-210' LOA), by Caneel Bay Resort for weekly picnics, and by other commercial users. Gating of the road to the small parking area at Francis Bay may occur if needed to limit access during sea turtle and brown pelican nesting seasons.
- Trunk Bay and Annaberg Historic Site would continue to be the only designated venues where commercial land-based tour group passengers could be discharged from tour vehicles for swimming, snorkeling or site-seeing. Passengers could also be discharged at Cinnamon Bay Campground to use the restaurant, store and restroom facilities but not for purposes of access to the beach or ruins.

- Any commercial group exceeding 75 persons accessing park waters in one or more vessels would be required to use Trunk Bay, unless specific authorization has been obtained to access another location.

b. Alternative 1: No Action

There would be no changes to the current authorized uses of park lands and waters by commercial groups. Trunk Bay and Annaberg Historic Site would continue to be the designated venues for land-based tour groups. Honeymoon Beach and Little Cinnamon Bay would continue to serve as the primary but not exclusive venues for multi-passenger day use commercial vessels. No capacity limitations would be established for visitation to specific areas of the park.

c. Alternative 2: Proposed Action

In Alternative 2, limitations would be established for both land-based and water-based tour groups in order to protect sensitive park resources and to ensure a quality visitor experience. Figure 3 identifies areas available and closed to commercial tour group use.

Land-Based Commercial Tour Group Venues

Designated venues and capacity limitations for land-based commercial tour groups would be as follows:

- At Trunk Bay, a maximum of 300 PAOT from all tour groups combined would be established. Tour providers would develop a schedule that equitably accommodates all authorized providers based upon up to 4 "pulses" of cruise ship visitors per day. If agreement could not be reached among the parties, NPS could establish capacity limitations for each CUA.
- At Annaberg Historic Site, no capacity limitation would be established at this time. A review to determine the need for limitations would be conducted on a bi-annual basis beginning two years after plan adoption.
- At Cinnamon Bay Campground, a maximum of 60 PAOT from all tour groups combined would be authorized in the restaurant area (includes store, restrooms and reception area). Campground facilities and the Cinnamon Bay beach area would be closed to commercial tour groups due to infrastructure limitations and to preserve the campground ambience and reduce conflicts with campground and local users.
- At Hassel Island on St. Thomas, capacity limitations would be as outlined in the GMP, with revisions to these limitations potentially resulting from detailed site-planning (see *Hassel Island* below).

All other areas within the park would be closed to land-based commercial tour group use, with the following exceptions:

- Authorized tour excursion vehicles could stop at established scenic vistas, historic sites, and other key locations. However, discharging passengers to tour sites, e.g. ruins at Cinnamon Bay, would be prohibited unless specifically authorized.
- In accordance with the terms of their lease agreement, Caneel Bay Resort use of Honeymoon Beach for picnics or other group events would be unrestricted.
- Special commercial tour group events may be authorized via SUP.

Water-Based Commercial Tour Group Venues

Designated venues and capacity limitations for water-based commercial tour groups would be as follows:

- To ensure both the protection of sensitive marine resources and the quality of the visitor experience, a maximum capacity for multi-passenger vessels of 175 PAOT at one time would be established for any area open to commercial vessels (except for Trunk Bay). Additionally, to ensure access by smaller multi-passenger vessels, the number of 25-50 passenger vessels at any area at one time would be limited to five (5) vessels, irrespective of the number of passengers they are actually transporting. Commercial operators would be expected to voluntarily develop a schedule that equitably accommodates all authorized vessels based upon several "pulses" of visitation per day. If a voluntary system proves inoperable, NPS could institute a lottery system or other allocation mechanism to resolve overcrowding at a specific site. These limitations would exclude 6-pac vessels, SCUBA vessels, rental powerboats and sailboats, and vessels associated with water sports concessions.
- Except for the areas identified below, all areas within park waters would be open to group access from commercial vessels, except that any area may be closed for protection of federally-listed species or for other appropriate reasons. Due to sensitive natural resources and/or insufficient infrastructure, the following areas would be closed to group access from any type of commercial vessel:
 - That portion of Hawksnest Bay off the NPS beach; other portions of the bay to the west (Caneel/Hawksnest area) and to the east (Gibney/Oppenheimer beach area) would be open;
 - Denis Bay;
 - Jumbie Bay;
 - Francis Bay beach; Francis Bay outside the boat exclusion area would be open;
 - Mary's Creek except for authorized SCUBA operations and hurricane mooring;
 - NPS portion of Haulover Bay, except for authorized SCUBA operations; and
 - All bays on the south shore without moorings, including Europa Bay, Grootpan Bay, Kiddel Bay and Drunk Bay.
- Special commercial tour group events could be authorized via SUP.

d. **Alternative 3**

Land-based and water-based commercial tour group venues would be as described for Alternative 2, except that PAOT capacity limitations would be increased by approximately 15% as follows to accommodate additional growth in visitation:

- At Trunk Bay, a maximum of 350 PAOT from all land-based tour groups combined would be established.
- Also at Trunk Bay, a maximum of 200 PAOT would be established for commercial vessels.

5. TRANSPORTATION SERVICES

In assessing what types of commercial activities are necessary and appropriate, the NPS needs to identify mechanisms to ensure that the increasing numbers of visitors do not diminish the overall quality of the visitor experience. A key element of that experience is the provision of transportation services. This plan represents an opportunity to improve both the provision of those services and the economic health of the service providers to ensure that the visitor receives the highest quality service available. It is also the

service providers to ensure that the visitor receives the highest quality service available. It is also the park's goal to provide certainty to both visitors and the tourism industry, e.g., cruise ship lines, that adequate services will be available to accommodate visitation needs. The NPS can best effect improvements in transportation services through provisions in concession contracts and commercial use authorizations.

a. Elements Common to All Alternatives

- In all alternatives, the termination of commercial vessel use of the NPS dock at Red Hook, except through specific authorization by the Superintendent, initiated as of January 1, 2001 would remain in effect due to safety reasons (potential structural instability and lack of on-site security).
- Irrespective of the authorization instrument (i.e., concession or CUA), all vehicles owned, contracted by or otherwise used by an authorized operator shall be operated at all times in a safe and legal manner. For example, stopping in the roadway rather than at viewpoints and parking other than in designated areas would be prohibited. Authorized tour operators would be held responsible for compliance of drivers that they use.
- All businesses currently providing tour services for hire would be required to obtain the appropriate authorization. An unknown number of resort, hotel and taxi tour services would be subject to this requirement.
- For safety purposes (narrow roadways, winding/curving roads, etc.), all tour vehicles for hire operating within the park would be limited to a passenger capacity of 26 persons.

b. Alternative 1: No Action

NPS regulation of commercial transportation services within VINP is currently limited to cruise ship passenger tour group access via CUAs for land-based and water-based tour operations. There would be no change nor expansion in this NPS role.

c. Alternative 2: Proposed Action

In this alternative, all land-based commercial transportation services within the park would be provided by a single service provider through a concession contract or other appropriate authorization. Unless otherwise specifically authorized, all land-based tour operators would be required to utilize the services provided by this concessioner/contractor. Rental cars used for personal transport and public buses operating on a fixed route with a published schedule (e.g., VITRAN) would not be subject to this requirement.

Because the awarding of such a concession contract would not be expected to occur in the short term, this goal would be accomplished through a two-phased program. The first phase, to be implemented by January 1, 2002, would include the following elements:

- Approximately 18 CUAs would be available to land-based tour operators who would provide or contract for their respective transportation services. This would include 6 CUAs for larger tour operations that typically utilize more than five vehicles in their tours. Twelve (12) CUAs would be available to smaller tour operators with less than five vehicles. Details on service provision would be required as part of CUA applications.

- For each CUA, at least 50% of the vehicles transporting commercial groups would be owned by medallion holders licensed by the Virgin Islands Taxicab Division for organized group transport.
- Performance standards would be established by the NPS and included as CUA terms of approval. Included could be requirements for dispatch services at Cruz Bay and Trunk Bay, uniforms, training, and a standardized presentation for island tours approved by NPS, as well as designated parking at Trunk Bay for tour vehicles versus taxis.

In a second phase, a concession contract or other appropriate authorization would be awarded to a single entity to provide all commercial land-based transportation services within the park. Contract terms would include:

- The contractor would provide the opportunity to all members of the two taxi associations and to licensed independent taxi/jitney owners operating on St. John to participate in providing transportation services.
- At least 50% of the vehicles transporting commercial groups would be owned by medallion holders licensed by the Virgin Islands Taxicab Division for organized group transport.
- All vehicle operators would be required to provide evidence of an annual vehicle safety inspection and a certificate of liability insurance.
- NPS would exercise oversight of rates and other aspects of service.
- Performance standards would be established as detailed above.

Initiation of the second phase would be contingent upon completion of a feasibility analysis assessing the economic feasibility of a single-provider system.

d. Alternative 3

Beginning January 1, 2002, the transport of visitors for hire within the Park would require a CUA. Rental cars used for personal transport and public buses operating on a fixed route with a published schedule would be exempt. Land-based tour operators would be required to utilize only services provided by CUA holders. CUAs would be available to any qualified service provider, including transportation companies, taxi associations and individual operators. There would be no limit on the number of CUAs. Performance standards established by the NPS, as outlined for Alternative 2, would be included as CUA terms of approval. A per-vehicle fee would be assessed.

6. HASSEL ISLAND

The GMP provides detailed direction for management of Hassel Island, including the following related to commercial services:

- Convenient boat access is to be provided for visitors by one or more permittees from a central point on the nearby Charlotte Amalie waterfront.
- Additional access may be provided directly from cruise ships in the Charlotte Amalie harbor.

- Rehabilitated docks or existing bulkheads at Creque's Marine Railway, Careening Cove, and Garrison House may be used for docking facilities. They would include limited space for passengers to debark from private boats.

There is currently limited visitation to Hassel Island and no park facilities. Strong local interest has been expressed to establish it as a tourist destination that could serve as a "relief valve" for visitation to St. John. It is located within a few minutes journey of the cruise ship docks and tourist attractions in Charlotte Amalie. In 1999, Hassel Island was approved as a Recreational Fee Demonstration Program site.

a. Alternative 1: No Action

In the no action alternative, development of visitor services and associated commercial services would continue to be dependent upon Congressional budget appropriations and would not be expected within the foreseeable future.

b. Alternative 2: Proposed Action

In this alternative, a non-profit organization would be selected through a competitive process as a friends of the park organization, cooperating association, or other appropriate entity to assist the NPS in securing funding to develop and implement visitor service programs at Hassel Island. Through the Recreational Fee Demonstration Program, a recreational use fee would be assessed to help upgrade and restore facilities and provide historic and cultural resource interpretation programs.

The nature of the commercial services to be provided and associated permitting requirements would be evaluated prior to the completion of the first phase of visitor services through consultation with prospective non-profit partners, tourism industry representatives and the public.

c. Alternative 3

In this alternative, a non-profit organization would be selected as a concessioner to finance and manage construction of dock facilities and provision of visitor services identified in the GMP. Contingent upon a favorable economic feasibility analysis, a prospectus would be issued pursuant to requirements of the 1998 National Parks Concessions Management Improvement Act. The nature of the commercial services to be provided and contract terms would be developed in consultation with prospective concessioners, tourism industry representatives and the public.

C. COMPARISON OF ALTERNATIVES

1. COMPARISON OF PLAN ELEMENTS

ALTERNATIVE 1: No Action	ALTERNATIVE 2: Proposed Action	ALTERNATIVE 3
<i>Authority to Operate</i>		
No change in the types of commercial uses authorized.	Scope of commercial services program would be expanded to accommodate several new commercial uses and to provide for a moderate level of market growth.	Scope expanded somewhat over Alternative 2 to accommodate a greater number of commercial uses.

Appropriate uses would be those that are currently authorized by concession contract/permit or CUA.	Uses that are currently permitted that would not be appropriate include: ▪ Mini-cruise ships ▪ Rally tours.	Same as Alternative 2.
No specific limitations on new commercial services.	Limitations would be established on the number of some types of commercial uses.	Same as Alternative 2 except that limitation levels would be about 15% higher.
Number of authorized commercial businesses increase as unauthorized operators are brought under permit.	Significant increase in the number of authorized businesses as unauthorized businesses are brought under permit and with expansion of scope to provide moderate level of market growth.	Highest increase in the number of authorized commercial businesses.
Concessions		
One concession operation.	Potential for 11-15 concession operations, contingent upon economic feasibility and market interest.	Potential for 18-20 concession operations, contingent upon economic feasibility and market interest.
At Trunk Bay and Cinnamon Bay Campground, existing land-based and water sports services would continue to be authorized through a single concession contract. Facility improvements would be required	Depending upon economic feasibility, separate, new concessions would be considered for land-based operations at Trunk Bay and at Cinnamon Bay. Facility improvements required. At Trunk Bay, the gift shop and snack bar services could be operated either as separate concessions or as a single concession.	As Alternative 1, a single concession contract would be awarded for Trunk Bay and Cinnamon Bay Campground land-based operations. Facility improvements would be required.
	At Trunk Bay, water sports activities would be converted to CUAs.	At Trunk Bay, water sports operations could be a separate concession.
	At Cinnamon Bay, a separate, new concession would be considered for the water sports operation.	At Cinnamon Bay, water sports would continue as part of the campground concession.
Upon expiration, water sports concession permits at Caneel Bay Resort and Maho Bay Camps would be converted to CUAs.	Same as Alternative 1.	At Caneel Bay and Maho Bay Camp, the single concession contract issued to the land-based resort would be converted to individual concession contracts for each water-based business operating in conjunction with the resort.
Other new concessions could be considered if necessary and appropriate and subject to economic feasibility.	New concessions that could be considered include: ▪ Collection of mooring and anchoring fees. ▪ Reef Bay trail hiker pickup. ▪ Operation of NPS dock at Red Hook. ▪ Operation of pumpout facility ▪ Mobile unit food service operations at Hawksnest Bay, Maho Bay and Salt Pond.	Same as Alternative 2, with the exception of visitor transport for hire.

	▪ Visitor transport for hire within the park.	
Commercial Use Authorizations		
Currently, approximately 70 CUAs; potential for an unlimited number.	Potential for slightly more than 110 CUAs.	Potential for almost 150 CUAs.
The following authorized commercial services that initiate and terminate outside the park would continue to be authorized via an annual or semi-annual permitting process. Any limitations on CUA approvals would be determined on a case-by-case basis, except as noted: <u>Water-based activities (current # in parentheses)</u> ▪ Day use excursions (crewed) - 1-6 passengers: (16) - 7-24 passengers: (11) - 25-50 passengers: (16) - 50+ passengers: 1 CUA for cruise ship passenger transport to Trunk Bay (2) - Henley Cay use: (1) ▪ Day use rental operations: (Permitting underway) ▪ SCUBA operations: (4) ▪ SNUBA operations: (0) ▪ Guided kayak excursions: (1) ▪ Water taxi services: (1) ▪ Caneel Bay water sports: 4 CUAs to be available (0) ▪ Maho Bay water sports: 4 CUAs to be available (0) ▪ Swimming/snorkeling instruction: (0) <u>Land-based activities</u> ▪ Tour operations: (8) ▪ Wedding/Event organizers: (6) ▪ Guided hiking outfitters: (1) ▪ Guided bicycle outfitters: (1)	Limitations on the numbers of CUAs for certain types of uses would be established either at current levels or to provide for a moderate level of market growth as follows: <u>Water-based activities</u> ▪ Day use excursions (crewed) - 1-6 passengers: No limit; annual review. - 7-24 passengers: 12 vessels - 25-50 passengers: 18 vessels - 50+ passenger vessels: 1 CUA for cruise ship passenger transport to Trunk Bay - Henley Cay use: 1 CUA ▪ Day use rental operations: 10 CUAs ▪ SCUBA operations: 6 CUAs ▪ SNUBA operations: 1 CUA ▪ Guided kayak excursions: No limit; annual review. ▪ Water taxi services: 2 CUAs ▪ Caneel Bay watersports: 4 CUAs ▪ Maho Bay water sports: 4 CUAs ▪ Swimming/snorkeling instruction: 2 CUAs <u>Land-based activities</u> ▪ Tour operations: 18 CUAs ▪ Wedding/Event organizers: 8 CUAs ▪ Guided hiking outfitters: 4 CUAs ▪ Guided bicycle outfitters: 2 CUAs	The types of CUAs would be as in Alternative 2, but with an increase in the number of authorizations available to provide for a higher level of growth in commercial services as follows: <u>Water-based activities</u> ▪ Day use excursions (crewed) - 1-6 passengers: No limit; annual review. - 7-24 passengers: 16 vessels - 25-50 passengers: 20 vessels - 50+ passenger vessels: 1 CUA for cruise ship passenger transport to Trunk Bay - Henley Cay use: 1 CUA ▪ Day use rental operations: 10 CUAs ▪ SCUBA operations: 8 CUAs ▪ SNUBA operations: 0, concession activity ▪ Guided kayak excursions: No limit; annual review. ▪ Water taxi services: 3 CUAs ▪ Caneel Bay water sports: 0, concessions ▪ Maho Bay water sports: 0, concessions ▪ Swimming/snorkeling instruction: 0, concession activity <u>Land-based activities</u> ▪ Tour operations: 25 CUAs ▪ Wedding/Event organizers: 10 CUAs ▪ Guided hiking outfitters: 4 CUAs ▪ Guided bicycle outfitters: 2 CUAs
No limitations on the number of CUAs per business.	Limitation of 3 CUAs per business.	Same as Alternative 2.
No limitation on the number of passengers on commercial vessels.	Limitation of 50 passengers per commercial vessel, except for Trunk Bay cruise ship passenger transport vessel.	Same as Alternative 2.

<i>Group Venues</i>		
Trunk Bay and Annaberg Historic Site would continue to be the designated venues for land-based tour groups. No capacity limitations would be established for visitation to specific areas of the park.	Designated venues and capacity limitations for land-based commercial tour groups would be as follows: ▪ Trunk Bay; maximum of 300 PAOT at from all tour groups combined. ▪ Annaberg Historic Site; no capacity limitation established at this time. Bi-annual review. ▪ Restaurant at Cinnamon Bay Campground; maximum of 60 PAOT from all tour groups combined. Other campground facilities and the Cinnamon Bay beach area would be closed to commercial tour groups. ▪ Hassel Island on St. Thomas, as outlined in the GMP. All other areas within the park would be closed to land-based commercial tour group use, with some exceptions.	Land-based tour group venues would be as described for Alternative 2, except that PAOT capacity limitations would be increased to accommodate additional growth in visitation. ▪ Trunk Bay; maximum of 350 PAOT from all tour groups combined.
Honeymoon Beach and Little Cinnamon Bay would continue to serve as the primary venues for multi-passenger day use commercial vessels. No capacity limitations would be established for visitation to specific areas of the park.	Designated venues and capacity limitations for water-based commercial tour groups would be as follows: ▪ For multi-passenger vessels, a maximum of 175 PAOT and five 25-50 passenger vessels at any area at any one time would be established. Due to sensitive natural resources and/or insufficient infrastructure, the following areas would be closed to group access from any type of commercial vessel: - That portion of Hawksnest Bay off the NPS beach. - Denis Bay. - Jumbie Bay. - Francis Bay beach; Francis Bay outside the boat exclusion area would be open. - Mary Creek except for authorized SCUBA operations. - NPS portion of Haulover Bay, except for authorized SCUBA operations; - All bays on the south shore without moorings.	Water-based tour group venues would be as described for Alternative 2, except that PAOT capacity limitations would be increased to accommodate additional growth in visitation.

<i>Transportation Services</i>		
NPS regulation of commercial transportation services within VINP is currently limited to cruise ship passenger tour group access via CUAs for land-based and water-based operations. There would be no change nor expansion of this role.	A two-phased program would be implemented, with the eventual goal to contract with a single service provider for all land-based commercial tour group transport for hire within the park. <u>First Phase</u> ▪ A maximum of 18 CUAs would be available to land-based tour operators who would provide or contract for their respective transportation services. ▪ For each CUA, at least 50% of the vehicles transporting commercial groups would be owned by medallion holders. ▪ Performance standards would be established by the NPS and included as CUA terms of approval. <u>Second Phase</u> ▪ The opportunity to provide services would be available to all members of the two taxi associations and to licensed independent taxi/jitney owners. ▪ At least 50% of the vehicles transporting commercial groups would be owned by medallion holders. ▪ Evidence of an annual safety inspection and liability insurance would be required of all vehicle operators. ▪ NPS would exercise oversight of rates and other aspects of service.	Beginning in January 2002, the transport of visitors for hire within the Park would require a CUA. CUAs would be available to any qualified service provider, including transportation companies, taxi associations and individual operators. There would be no limit on the number of CUAs. Land-based tour operators would be required to utilize only services provided by CUA holders.
<i>Hassel Island</i>		
Development of visitor services and associated commercial services would continue to be dependent upon Congressional budget appropriations and would not be expected within the foreseeable future.	A non-profit organization would be selected to assist in securing funding to develop and implement visitor services at Hassel Island. A recreational use fee would be assessed to help upgrade and restore facilities and provide historic and cultural resource interpretation programs. Commercial services to be provided would be evaluated prior to the completion of the first phase of development.	A non-profit organization would be selected as a concessioner to finance and manage construction of dock facilities and provision of visitor services identified in the GMP. The nature of the commercial services to be provided and contract terms would be developed at that time.

2. COMPARISON OF IMPACTS

ALTERNATIVE 1: No Action	ALTERNATIVE 2: Proposed Action	ALTERNATIVE 3
Endangered/Threatened Species		
Highest potential for adverse impacts due to few restrictions on the number of commercial uses and the volume of visitation.	Low potential for adverse impacts, given restrictions on the number of commercial uses and visitation limitations and closure of sensitive areas to access.	Potential for impacts slightly greater than in Alternative 2 due to the greater number of commercial activities authorized.
No species or critical habitat would be likely to be adversely affected.	Same as Alternative 1.	Same as Alternative 1.
Marine Resources		
Highest potential for adverse impacts due to few restrictions on the number of commercial uses and the volume of visitation.	Low potential for adverse impacts due to: ▪ Excluding mini-cruise ships from anchoring in park waters; ▪ Establishing a limitation on the number of passengers (50) on commercial vessels; ▪ Limiting the number of commercial group visitors at one time at Trunk Bay; ▪ Limiting the number of CUAs available to some types of vessels, most notably multi-passenger vessels; ▪ Limiting the number of multi-passenger boats and their passengers at any area at any one time; and ▪ Designating areas open and closed to water-based commercial tour group venues.	Potential for impacts somewhat greater than in Alternative 2 due to the greater number of water-based commercial activities authorized.
No significant adverse impacts.	Same as Alternative 1.	Same as Alternative 1.
Terrestrial Resources		
Concentrating tour group activities at Trunk Bay and Annaberg Historic Site would reduce the potential for adverse effects to terrestrial resources elsewhere in the park.	Low potential for adverse impacts. Same concentration of tour groups as in Alternative 1, but more regulation of tour excursion vehicles.	Same as Alternative 2.
No significant adverse impacts.	Same as Alternative 1.	Same as Alternative 1.
Watershed Values		
Effects would be indirect and minor from increased sedimentation, petroleum pollution and trash, and potential for more vehicle and vessel fuel spills.	Slightly lower level of potential effects than in Alternative 1 due to limitations and restrictions on commercial uses.	Slightly higher level of potential effects than in Alternative 2 due to higher number of authorized uses.
No effects on floodplains or wetlands.	Same as Alternative 1.	Same as Alternative 1.

No significant adverse impacts.	Same as Alternative 1.	Same as Alternative 1.
Cultural Resources		
Increased visitation would result in general degrading of readily accessible structures.	Slightly lower level of potential effects than in Alternative 1 due to limitations and restrictions on commercial uses. An increase in guided hiking excursions would provide additional cultural resource interpretation opportunities.	Slightly higher level of potential effects than in Alternative 2 due to higher number of authorized uses.
Both land-based and submerged cultural resources would be protected and preserved in accordance with applicable federal and state laws and NPS policies and regulations. No significant adverse effects to any cultural resource would be expected.	Same as Alternative 1.	Same as Alternative 1.
Scenic Values		
With a lack of limitations on commercial uses, the scenic values at Trunk Bay, Honeymoon Beach, and potentially other locations in the park would be expected to deteriorate.	With the limitations proposed on the number of PAOT at the park's most popular locations, no significant adverse effects on scenic values would be expected. Proposed commercial vessel closures would protect the scenic values of the most sensitive bays and beaches.	Same as Alternative 2.
There would be no significant adverse impacts to scenic values from the expansion of existing concession operations.	As in Alternative 1, except that proposed new mobile unit food service concessions would be visual intrusions that could be mitigated through siting requirements. No significant adverse effects.	Same as Alternative 2.
Soundscape		
Noise levels would increase with growth in commercial visitation, most notably at Trunk Bay, Cinnamon Bay Campground, and Honeymoon Beach.	Noise levels would be lower than in Alternative 1 through limitations on PAOT, the number of some types of commercial uses, and the number of commercial vessel passengers at vessels at one time in certain bays.	Noise levels would be lower than in Alternative 1 but higher than in Alternative 2 due to the increase in the number of authorized commercial activities, most notably tour groups
No noticeable increase in noise levels would be expected from new or expanded concession operations as the nature of the existing activities would not be significantly modified.	As in Alternative 1, except that noise levels in areas of proposed new mobile unit food service concessions would increase slightly.	Same as Alternative 2.
Visitor Experience		
NPS has little control over the safety of visitors using commercial services in the park.	Limitations on PAOT at specific sites and performance standards for transportation service providers would improve visitor experience.	Same as Alternative 2.

Crowding, congestion and user conflicts would increase in conjunction with growth in visitation.	Limitations on the number of commercial uses and the number of visitors in specific areas at one time, combined with transportation service improvements, would reduce the potential for crowding, congestion and user conflicts.	Same as Alternative 2.
Recreational opportunities would change little from those currently available.	Expansion in the scope of available recreational opportunities through additional commercial services would be balanced with maintaining the quality of the recreational experience through permit and visitation limitations.	The number and mix of recreational opportunities would be somewhat greater than in Alternative 2, primarily through additional opportunities for commercial use authorizations.
No significant adverse effects to the visitor experience.	Same as Alternative 1.	Same as Alternative 1.
<i>Socioeconomic Impacts</i>		
Current concessioners would be affected by issuance of new concession contracts.	Current concessioners would be affected by issuance of new concession contracts, by restructuring of concession operations, and by conversion of water sports permits to CUAs.	Same as Alternative 2 except that water sports would be maintained as concessions.
All currently authorized incidental commercial uses would continue to be authorized via a CUA process.	Same as Alternative 1, except that mini cruise ship operation in park waters and rally tours would be terminated. Most types of commercial services would be expanded.	Same as Alternative 2.
Given the elimination of preference rights, NPS could not guarantee the continuation of existing businesses.	Same as Alternative 1.	Same as Alternative 1.
Business competition would increase for concession contracts but not for CUAs as there would be no limitation on available permits.	Issuance of a concession contract for transportation services would significantly impact the economics of existing commercial tour group operations. With restructuring of concession operations and new concession opportunities, there would be greater competition for concession contracts than in Alternative 1. Limitations on the number of some types of CUAs would create competition for those permits.	Requiring commercial tour group operators to utilize CUA permitted service providers would have minimal economic impact. Same as Alternative 2, except less competition for CUAs given greater number of available permits.
Positive benefits to local businesses with increased visitation.	Same as Alternative 1. Expanded commercial services program also	Same as Alternative 2.

Minimal impacts from increased visitation to popular sites on park neighbors.	provides local economic benefits. Same as Alternative 1.	Same as Alternative 1.
No significant adverse economic impacts.	Same as Alternative 1.	Same as Alternative 1.
Park Operations		
NPS costs for administration of commercial use program would increase by about 30-40% over the next three years, reducing to 15-20% after that.	Lower increase in costs at about 25-30% initially, reducing to 10-15%, due to limitations on the number of concessions and CUAs.	Same as Alternative 2.
Increased revenues would partially offset increased costs.	Same as Alternative 1, except that higher receipts would be generated by an increase in the number of both concessions and CUAs.	Same as Alternative 2, except that even higher receipts would be generated by the greater number of CUAs.
Development and interpretation of visitor facilities on Hassel Island would have greatest effect.	Operation via a concession contract would reduce Hassel Island costs to NPS.	Same as Alternative 1.
Cumulative Effects		
Some currently authorized commercial uses, e.g., SCUBA, could be affected by the National Monument designation.	Same as Alternative 1.	Same as Alternative 1.
Increasing visitation would continue to exceed infrastructure capacities and outstrip NPS's ability to provide a quality recreational experience.	Management strategies would help achieve a balance between ensuring resource protection and providing a quality recreational experience.	Same as Alternative 2.
In response to trends in visitation, commercial operations would be expected to continue to upsize their operations.	The ability to continue to upsize would be limited.	Same as Alternative 2.
If resources continue to decline, commercial businesses would suffer.	Same as Alternative 1.	Same as Alternative 1.
Additional conflicts with non-commercial uses would be expected.	Conflicts with non-commercial users would be largely mitigated.	Same as Alternative 2.
Limited contributions to the St. John economy; no adverse economic effects.	Same as Alternative 1.	Same as Alternative 1.
Other planning efforts would	Same as Alternative 1.	Same as Alternative 1.

provide additional management direction. Effects of changing regulations unknown.		
No significant adverse effects.	Same as Alternative 1.	Same as Alternative 1.

CHAPTER III: AFFECTED ENVIRONMENT

A. INTRODUCTION

Marine and terrestrial ecosystems within VINP are described in detail in *Marine and Terrestrial Ecosystems of the Virgin Islands National Park and Biosphere Reserve* (USDI, National Park Service and Virgin Islands Resource Management Cooperative 1988). This information is updated and expanded to address cultural resources and the Park's current program for resource management and research in the 1999 *Resource Management Plan* (USDI, National Park Service, Virgin Islands National Park). The 1997 *Implementation Plan: Virgin Islands/Florida Inventory and Monitoring Program* (USGS, Biological Resources Division) describes the status of resource inventories and monitoring programs. The 1983 *General Management Plan* also provides a detailed description of the affected environment. This document incorporates by reference that information and does not repeat it here.

B. COMMERCIAL SERVICES PROGRAM

Commercial services in VINP are managed by the park's Concessions Office (concessions, Commercial Use Authorizations, and other commercial activities, excepting Special Use Permits) and Protection Division (Special Use Permits). Services provided by VINP related to commercial services include:

- Long-range planning for appropriate and necessary commercial services in the park;
- Preparing and issuing concession prospectuses, evaluating concession proposals, and negotiating and awarding concession contracts;
- Processing and evaluating CUA applications and issuing permits;
- Evaluating concessioner and CUA permittees performance;
- Approving rates charged by concessioners based upon analysis of comparable rates in the private sector;
- Safety inspections;
- Public health oversight;
- Responding to inquiries and concerns from the public and businesses;
- Monitoring commercial activities to ensure compliance; and
- Responding to public and agency inquiries for information about commercial services within the park.

1. Concessions

Currently, there are one concession contract and two limited concession permits in effect in VINP. Caneel Bay, Inc. holds the only concession contract, providing visitor services at the park's two most popular beaches, Trunk Bay and Cinnamon Bay. This concession contract was initially authorized in 1970. The contract expired in 1991 and has been extended through various letters of authorization, the latest expiring on December 31, 2001. This extension was not specific to this concession contract; rather, it was part of an across-the-board action taken by NPS pending adoption of concession contracting regulations and standard concession contract language implementing the 1998 National Parks Concessions Management Improvement Act.

Concessioner-operated facilities at Cinnamon Bay Campground include: 40 primitive beach cottages, 60 tents on elevated wooden platforms, 26 bare sites suitable for erecting one large tent or two small tents are offered to campers bringing their own equipment, four bathhouses, a commissary store, rental facilities,

cafeteria-style food service with a 175-seat open air restaurant offering breakfast, lunch and dinner. With the exception of a government-owned warehouse and a Danish warehouse located on the beach, the concessioner has constructed all the facilities. Included as part of the concession operation are water sports activities consisting of rentals of snorkeling gear, windsurfing equipment, sea kayaks, and sunfish sailboats and bookings for scuba trips, sailing, sunset cruises, island tours and charters. Day sail charter excursions are available through a subconcessioner. The concessioner is provided two reserved NPS moorings.

At Trunk Bay, Caneel Bay, Inc. operates a grill-type food service and, in a separate gift shop, snorkel rentals and a limited line of souvenirs, beach ware, sundries, and souvenirs. Locker rental is also provided. SNUBA and snorkeling gear rentals targeted to cruise ship passengers are provided through subconcessioners.

Caneel Bay, Inc. also holds a limited concession permit for water sports at Caneel Bay Resort. A second limited concession permit held by Maho Bay Camps, Inc. authorizes water sports activities for guests of the Maho Bay campground facilities. Until discontinued by the 1998 Act, concession permits (to be replaced by short-form contracts) were used for operations that are smaller (grossing less than \$100,000 annually) and less complex than those permitted under concession contracts. The term of the permit is for five years or less and no possessory or preferential right to additional services is granted. As with Caneel Bay, Inc.'s concession contract, these two limited concession permits expire on December 31, 2001.

Concessioners are required to pay a fee of 1.5% of the annual gross receipts, 50% of the gross receipts from subconcessioners, and an annual fee for the use of the storage warehouses at Cinnamon Bay. Rates and charges for services are approved by the Superintendent.

An operating plan details the aspects of operating practices (e.g., hours of operation, rates, safety, sanitation, hazardous waste management) necessary for the concessionaire and NPS to operate smoothly together. The concessioners are responsible for maintaining all assigned areas consistent with a NPS-approved maintenance plan. Property and liability insurance, as well as an annual financial report, are required. Concessioners are also required to develop and maintain a Loss (Safety) Control Program that describes procedures, policies and the process to minimize incidents and accidents that can affect visitors, concession employees and facilities.

The United States Public Health Service (USPHS) conducts health inspections of food services and supervises the water supply and sewage disposal systems. Although the operations are conducted on federal property, the concessionaires are subject to local laws and ordinances, business permits and taxes.

2. Commercial Use Authorizations

The Incidental Business Permit (IBP) replaced the Commercial Use License (CUL) in 1995 and, in turn, has been replaced by the Commercial Use Authorization (CUA) pursuant to the 1998 Omnibus National Parks Management Act.

In Year 2000, 36 commercial businesses were authorized to operate within the park pursuant to one-year Incidental Business Permits (IBPs). Due to the CSP planning process, IBPs set to expire on September 30 were all extended by the Superintendent to December 31, 2000, with the Year 2001 permitting process initiated in December 2000. In Year 2001 to date, 66 authorizations have been issued. A comparison of Year 2000 IBPs to Year 2001 CUAs follows:

Table 6: Comparison of Incidental Commercial Uses, 2000 and 2001

Type of Use	2000	2001
<i>Water-Based Activities</i>		
1-6 passenger vessels	13	16
7-24 passenger vessels	4	11
25-49 passenger vessels	8	17
50+ passenger vessels	5	1
Water taxis	0	1
SCUBA tours	1	4
Guided kayak tours	1	1
<i>Land-Based Activities</i>		
Tour operations	5	7
Guided hiking tours	1	1
Guided bicycle eco-tours	0	1
Wedding/Event organizers	3	6
TOTAL	41(1)	66

(1) Because multiple vessels were authorized by single permits, the number of uses exceeds the number of IBPs issued.

In addition to the name change from IBP to CUA, the authorization process for incidental commercial uses has been revised in a number of areas, including:

- The permit cycle is for one calendar year, beginning January 1 and ending December 31. No partial year authorizations are available.
- Each commercial use of park land or waters requires an individual CUA. Businesses operating more than one vessel or businesses providing multiple services, e.g. day sails and weddings, must obtain a permit for each vessel or each commercial activity.
- Pursuant to the Cost Recovery Act (16 USC 3a) and NPS policy, fees are increased to more fully recover NPS's application, administration and monitoring costs.

NPS is now writing regulations to implement the 1998 National Park Service Concessions Management Improvement Act. Changes in the CUA permitting program instituted for 2001 may be required to bring VINP into compliance with those regulations when promulgated.

3. Other Commercial Services

There are several other commercial services that occur within the park and that are not addressed in this plan.

Special Park Uses are short-term (not to exceed five years) activities that provide a benefit to an individual, group or organization rather than the public at large; require written authorization and some degree of management control from the NPS to protect park resources and the public interest; are not prohibited by law or regulation; are neither initiated, sponsored or conducted by the NPS; and do not include any activity managed under the National Parks Concessions Management Act or other authority. Special Use Permits (SUPs) are issued by the Superintendent primarily for short-term use of NPS facilities for one-time events such as weddings, parties, and races. Long-term SUPs (not to exceed 5 years) are issued for use of a continuous nature such as operation of public telephones, dock use, or use of moorings. Sale of products or services is not permitted. In 2000, 238 SUPs were issued by VINP, an increase of about 20% over 1999 (196 permits).

The VINP's scenic vistas and white sand beaches make it a popular site for filming and photography. A Special Use Permit is required for *Commercial Filming*, defined as any filming or photography that involves the use of a model, set or prop; or requires entry into a closed area; or requires access to the park before or after normal working hours. Approximately 7-10 commercial filming permits are issued annually. NPS is currently preparing regulations to implement Public Law 106-206, which allows the agency to establish a fee system for commercial filming activities on park lands.

Right-of-Way Permits are issued by the Regional Director to authorize any new utilities on NPS lands. This includes those utilities not owned by NPS but serving NPS and/or NPS concession facilities. Permits may be issued only for those uses or activities specifically authorized by Congress and only if there is no practicable alternative to such use of NPS lands. Among current right-of-way permits are those issued to Virgin Islands Water and Power Authority to operate and maintain overhead transmission and distribution lines and to install and operate a water distribution system within park boundaries.

Cooperating Associations are private non-profit corporations established under state law. They support NPS educational, scientific, historical, and interpretive activities in a variety of ways, under the provisions of formal agreements with the agency. Eastern National Park and Monument Association is the only cooperating association operating within VINP through a cooperating association agreement with NPS. NPS-approved publications, maps, videos and other merchandise are offered for sale at the Cruz Bay Visitor Contact Station and the Trunk Bay kiosk.

Natural and social science research and related collecting activities are governed by *Scientific Research and Collecting Permits*.

The Virgin Islands Environmental Resource Station (*VIERS*) in the Lameshur Bay area operates 14 cabins for public rent independent of the educational and research activities for which it is permitted.

C. AFFECTED RESOURCES

1. Endangered/Threatened Species

The Endangered Species Act (PL 93-205) requires that federal agencies protect all listed species and habitats. Twelve federally listed endangered and threatened species have been observed in the park. A listing of federally-listed Endangered and Threatened Species and Critical Habitat for both marine and terrestrial species, which include six marine mammals, five birds, three reptiles (sea turtles) and two plants, is provided in Appendix B.

Five species of whales, as well as several porpoise species, may migrate through the park. The endangered West Indian manatee had been recorded as being very rare around St. John, although it has been recently recorded (ca. 1990) from West End, Tortola. Three federally-listed sea turtles are found in park waters. The hawksbill sea turtle requires coral reefs for food and refuge. Peak nesting season on park beaches is from July through November, although nesting activity may take place any month of the year. While leatherback and green sea turtles feed in seagrass beds in park waters, they are infrequent nesters on St. John beaches.

Five federally-listed threatened or endangered bird species have been identified. The federally endangered brown pelican nests, feeds and roosts both adjacent to and within National Park boundaries. The U.S. Fish and Wildlife Service is evaluating nesting success in considering this species for delisting.

The federally endangered peregrine falcon is a rare winter migrant. The federally threatened roseate tern and endangered least tern are summer residents that have both been observed nesting within the park in recent years (1997 and 1999, respectively). Piping plover are a very rare summer migrant.

The federally endangered Epicrates Virgin Islands tree Boa has never been observed on St. John although it occurs on the east end of St. Thomas and on Tortola, BVI. This species could conceivably exist on St. John.

All of the Federally and Territorially listed species require some level of protection and monitoring. Direct impacts on federal endangered species by exotic species include the rooting of *C. thomasi* by feral pigs and depredation of sea turtle nests and eggs by the small Indian mongoose (*Herpestes auropunctatus*). Feral goats and donkeys may be having an impact on many territorial endangered species of plants. Sea turtles are frequently struck and killed by boats speeding through park waters. Nesting frequencies have decreased on many beaches due to adjacent upland development that results in people, lights and dogs, all of which deter turtles from using particular beaches.

Turtle mortality due to boat strikes has significantly increased over the last fifteen years (Boulon 1998). In some years, over half of all reported turtle strandings involved damage to the carapace from boat propellers or hulls. Increasing populations of juvenile green turtles and increasing numbers of high speed powerboats results in increased numbers of incidental mortalities. The numbers of high speed boats travelling along the north shore of St. John en route to the BVI continues to increase.

Endangered and threatened seabirds (Brown Pelican, Roseate and Least Tern) are most commonly affected by predation on eggs and young by rats and mongoose. Humans are also potential poachers of eggs in remote areas. Disturbance by human visitation to offshore cays results in low egg production, death of chicks to sun exposure or even abandonment of the whole nesting colony. Decreases in baitfish populations may limit nesting populations and affect the breeding and fledging success of these birds.

While the distribution of endangered plants is relatively well known, the extent of threats to terrestrial species is speculative.

2. Marine Resources

Given that the majority of commercial activities occur within park waters, protection of the marine environment is a critical consideration in planning for commercial services. VINP is perhaps best known for its coral reefs and associated seagrass and mangrove habitats, which are among the most diverse and valuable ecosystems on earth. Reef systems are storehouses of immense biological wealth and provide economic and environmental services to millions of people as shoreline protection, areas of natural beauty, recreation and tourism, and sources of food, pharmaceuticals, jobs and revenues. According to one estimate, these "rainforests of the sea" provide services worth about \$375 billion each year, a staggering figure for an ecosystem that covers less than one percent of the earth's surface (United States Coral Reef Task Force 2000).

While coral reefs may be economically and environmentally invaluable, they are also vulnerable to harmful environmental changes, particularly those resulting from human activities. Over the last two decades, coral reefs have experienced an unprecedented loss of live coral cover due to human-caused and natural threats. Present estimates are that 10% of all coral reefs are degraded beyond recovery; 30% are in critical condition and may die within 10-20 years; and, if current pressures continue unabated, another 30% will perish completely by 2050 (United States Coral Reef Task Force 2000).

A recent World Resources Institute report states that about 9% of the world's mapped coral reefs are found in the Caribbean. Of these reefs, almost 2/3's are at risk, with 1/3 at high risk (WRI 1998). Several Caribbean species have declined to the point that they are candidates for listing under the Endangered Species Act. Conditions contributing to the degradation and decline of reefs worldwide will be difficult to control under scenarios of growing demand for reef products and habitat loss, fueled by increasing population growth, development in coastal areas and rapid expansion of tourism (Hatzioios 1997).

The status of corals and coral reef ecosystems is highly variable throughout the Caribbean. Coral health is generally best on deeper reefs, around low islands, and away from centers of population and tourism. In recent years, there has been a marked trend toward increasing degradation throughout the region. This degradation is the result of both direct and indirect impacts. Direct impacts include: hurricanes, coral diseases, anchoring, littering, trampling, diver damage, collection of corals and other reef organisms, and overfishing and destructive fishing practices. Indirect impacts include those factors contributing to the widespread decline in coastal environments in the Caribbean, such as: mangrove depletion; increased turbidity due to coastal development, deforestation and poor agricultural practices; land-based pollution loading from industrial wastes, fertilizers, pesticides and other agricultural products; and eutrophication from sewage and other domestic waste, as well as marine-based pollution from oil refineries, oil tanker traffic and offshore oil reserves (Wilkinson 1998; Jameson et al. 1995).

Based on a review of literature and research published on the state of the coral resources in the Virgin Islands, which happens to be some of the longest data sets available in the Caribbean, as well as interviews with local scientists and NPS and U.S. Geological Survey staff, the coral resources within the VINP are in decline and not as healthy as could be expected given 45 years of NPS protection. Ongoing scientific research indicates that the abundance and diversity of reef fish, live coral and seagrasses have all been drastically depleted.

Since about 1980, the amount of live coral cover has noticeably declined both in VINP and in outlying Caribbean waters (Rogers 1998). One of the major culprits is white band disease. Over the years, this disease, in addition to major tropical storms and hurricanes, has wiped out massive amounts of elkhorn coral (*Acropora palmata*), which is one of the primary reef-building corals in the Caribbean (Rogers 1998). At Buck Island (St. Croix), elkhorn coral cover fell from approximately 85% of total coral cover in 1976 to 5% in 1988 (Rogers et al 1982; Gladfelter 1991). Another devastating coral disease is plague type II disease. This disease was first recorded in 1997 and is currently observed to be severe around St. John (Rogers and Beets 2000). Coral bleaching has also had a detrimental impact on the area's coral reefs, with the worse epidemics occurring in 1987, 1990 and 1998 (Rogers and Beets 2000). Recent monitoring data indicates that the percent of live coral in Newfound Bay on St. John's northeast shore decreased from 18% in 1999 to 13.9% in 2000, a 22% loss (Rogers, Miller, and Waara 2000). This result is especially disconcerting, as Newfound Bay is one of St. John's least disturbed bays.

One of the most serious potential threats from human activities to reefs within the park is the increased sedimentation from runoff associated with careless development of private inholdings and of land adjacent to or near park boundaries. The island's exceptionally steep hillsides lead to significant amounts of runoff. Sediments can smother coral colonies, reduce light needed for photosynthesis by corals and other reef organisms, and make the bottom unsuitable for settlement and growth of new corals (Rogers 1990).

Algae (seaweeds) grow on the portions of corals killed by sediments, disease, storms, and other stresses. If the algae-eating (herbivorous) fishes and urchins cannot keep this algal growth under control, reefs will be unable to recover because corals cannot settle and grow on surfaces covered with excessive algal

growth. One concern is that fishing around St. John may have significantly decreased the number of herbivorous fishes, hindering reef recovery.

Fishing in the USVI, including within VINP, has led to a decrease in the larger predatory species such as groupers and snappers and a decrease in the average size of many fishes. Although the legislation that established the marine portions of VINP allowed only traditional fishing with traps of "conventional design", illegal commercial trap fishing is occurring inside the park. The park is not serving as a refuge for reef fishes. Visual censuses of fishes indicate no significant differences in the number of species, biomass of fishes, nor mean size of fishes observed inside vs. outside park boundaries. Similarly, the number of fishes per trap is similar inside and outside park waters.

A monitoring program was established in 1988 for water quality around the island of St. John, in waters both within and outside of VINP. Marine water quality in park waters is excellent with the exception of Cruz Bay. However, turbidity has been increasing, with turbidity values in waters outside the park being consistently higher than in park waters, probably reflecting sediment erosion from development of in-holdings and land outside the park. Clean, clear water is critical to maintaining healthy coral communities and seagrass beds. The excellent water clarity is also one of the island's main tourist attractions.

The key problems affecting the park's marine resources include sedimentation from coastal development, coral diseases, heavy fishing pressure, and damage from vessels and other human impacts. The impact of vessels over time has undeniably degraded park marine resources. The number and concentration of boats has increased substantially since park establishment, mainly because the VINP is such an attraction (Boulon 2000). Direct vessel impacts include anchor damage and groundings which have been significantly reduced through moorings, closed areas, limits on the size of vessels allowed in park waters, and other regulations. Inexperienced snorkelers or scuba divers damage coral colonies by standing on them or breaking off branches. Boats unknowingly passing over endangered sea turtles can cause severe injury or death. Indirect vessel impacts include sewage and garbage discharges, petroleum discharges, boat wakes which stir up sand and suffocate coral, and noise pollution which places stress on the underwater marine inhabitants. Significant destruction from boat anchors on seagrass beds and from boats running aground on reefs has been documented within the park over the years. One prime example is the cruise ship "Windspirit" that ran aground in 1988 and destroyed a 283m² section of reef within the park. Monitoring at this site reveals no significant recovery of hard coral after 10 years (Rogers and Garrison 1999). In 1987, a survey was conducted of 186 boats in bays around St. John. Fourteen percent were anchored in coral communities and 32% were anchored in seagrasses (that is, 46% were anchoring improperly). Approximately 40% of the anchors in coral and 58% of the anchors in seagrass beds caused damage (Rogers et al 1988).

A number of bays, most notably on the park's north shore, that were historically dominated by seagrass or corals have not recovered from past damage and are now primarily sandy bottoms. Seagrass beds play a pivotal role in modifying the physical, chemical and geological properties of coastal areas. They provide a foraging ground for endangered species, enhance biological diversity and productivity, and provide nutrients, primary energy and habitats to sustain coastal fishery resources (Mac et al 1998). Seagrass beds are slow to recover from damage though, requiring decades to resemble their original state. Corals are also very slow to recover, with dominant species growing less than 1 cm a year.

Beginning in 1995, the VINP established moorings for boats to attach to instead of dropping anchors. Currently, 215 moorings have been established, significantly reducing damage to coral and seagrass resources. The addition of marker buoys which mark shallow areas of the reef and boat exclusion buoys

have also greatly reduced boat impacts. Before these buoys were installed, an average of at least four groundings per week were observed (Boulon 2000).

Considerable research has been conducted over the years, including the effects of hurricanes on reefs and seagrass beds, changes in reef assemblages, and the status of the trap fishery in the USVI (Rogers and Beets 2000), as well as the ecological history for the VINP through the late 1980's (Rogers and Teytaud 1988). Additional research includes average seagrass densities (Muehlstein, L.K., and J. Beets 1999), research on resultant sediment flow from development of private land inside and adjacent to park boundaries (Rogers and Beets 1998), as well as a three-year study to assess the effects of fishing and to determine trends in species composition, abundance and size of fishes (Garrison 1998). Given past trends and currents levels and types of park use, a slow to moderate decline in the health of the park's marine resources is projected.

3. Terrestrial Resources

The terrestrial vegetation within the park is almost entirely second growth, a result of the long history of human occupation in the Virgin Islands. The only sites that escaped major disruption were those unsuitable for agriculture or development, such as mangroves, salt ponds, beach strands and rock outcrops. These sites support distinctive vegetation types today. Recovery of the original vegetation is virtually impossible because of the extirpation of some native species, the tenacity of many exotic plants, grazing pressure from feral animals, and extensive soil erosion from historic land uses. Despite the high degree of disturbance, undeveloped areas of the park are slowly succeeding toward mature communities, some of which may resemble pristine habitats. For this reason, VINP has been recognized as an international biosphere reserve under UNESCO's Man and the Biosphere Program. The biological value of the park's lands lies not only in their function as a refuge for remnant native species, but also in the opportunity for long-range management to restore a stable vegetation and soil cover as a semblance of the original island ecosystems.

Presently, the greatest threats to forest regeneration are land clearing and disturbance associated with development and growing populations of feral pigs, goats and donkeys. Despite these threats, park lands continue to be a valuable refuge for native plant species. To date, 747 species of vascular plants have been identified from St. John, of which 642 (86%) are native to the island (Acevedo-Rodriguez 1996). VINP has probably the best baseline set of data for dry tropical forest in the Caribbean.

The only mammal native to St. John is the bat. Three of the six native species of bats are protected under the V.I. Endangered and Indigenous Species Act of 1990 (Act No. 5665). Avifauna are abundant and varied. The latest *National Park Checklist of Birds* for St. John includes 170 species in 17 families (Norton 1989). St. John is a major overwintering area for migratory warblers using the eastern flyway. Birds are probably the best studied group of animals in the park. Terrestrial reptile and amphibian species on St. John are quite varied. More than 250 species of insects have been identified.

With the exception of bats, the VIIS is presently inhabited by numerous species of exotic mammals that have produced severe impacts on many indigenous species of plants and animals and threats to visitor safety. Exotic mammals include the white-tail deer, donkey, pigs, goats, cows, European boar, Indian mongoose, rats and cats. With the possible exception of the deer, increasing populations of these species are seriously affecting native species of plants and animals. Some of these species also threaten visitor experience and safety. At Cinnamon Bay Campground in particular, donkeys enter campsites and destroy tents and camping equipment in their efforts to locate food items. Visitors throughout the park have been bitten and threatened by some donkeys. Traffic safety becomes an issue when visitors stop to look at or photograph donkeys on the road, thus impeding traffic and causing accidents. Numerous visitors have

recently been affected by diseases ("creeping eruption") that have been transmitted by fecal matter from cats and dogs.

4. Cultural Resources

Thirteen prehistoric sites have been recorded within VINP, consisting of petroglyphs, ceremonial sites, agricultural areas, burials, habitations and temporary use sites. Two of these sites are included on the National Register of Historic Sites – the Reef Bay petroglyphs and the Cinnamon Bay site.

There are 236 historic structures on the 1989 List of Classified Structures for St. John. Sixteen historic districts within the park, containing 180 individual structures, are recorded on the National Register. An additional four individual structures within the park are recorded on the National Register. Structures range in function from a Danish plantation great house to a colonial fort and battery, as well as from a school to a custom house. No National Landmarks have yet been designated, although two sites have been nominated.

The entire island of Hassel Island is a historic district on the National Register. It contains ten sites ranging in function from a marine railway/boat repair complex to docks and warehouses used by early commercial ventures to a home. Even though the most numerous structures pertain to military fortifications and infrastructure including a guardhouse, hospital, barracks and officers homes, the island is significant for its maritime support role in the Caribbean.

Submerged cultural resources have received cursory investigation. A list of 28 shipwrecks recorded in the vicinity of St. John from 1713 to 1916 has been compiled.

Detailed information on cultural resources is provided in the 1999 *Resource Management Plan*.

5. Scenic Values

VINP's purpose and significance are based in large part on "...outstanding scenic...features of national significance...". This is confirmed in the park's mission "to preserve and interpret the significant natural and cultural resources and scenery for public benefit and inspiration." In terms of visitor attractions, scenery is probably the most significant feature of the park. Visitors enjoy the scenic overlooks, other scenic vistas and beaches for views of sparkling blue water, white beaches, verdant vegetation, and sparse-to-no development. Numerous cultural resources, e.g., Annaberg Historic Site, add to the park's scenic values. No other park in the National Park System has the combination of developing tropical forests, white sand beaches, and coral reefs that are found in VINP, making it truly a scenic "gem" in the National Park System.

Many of the park's viewsheds, however, have been seriously altered by private development since the park was established in 1956. The large number of in-holdings within park boundaries have allowed significant residential development to occur, seriously compromising the park's scenic values, e.g., Peter Bay, Dreckets Bay, Susanaberg. Additionally, many of the residences constructed within park boundaries tend to be grossly disproportionate in size with the scale of St. John and thus have even greater visual impact. Priorities for land acquisition identified in the 1997 *Land Protection Plan* reflect NPS's concern about preserving strategically located private lands for their scenic and other environmental values. For example, the plan's highest priorities for acquisition reflect the need to protect the park's shores from incompatible development that could have devastating, permanent and far-reaching effects on significant scenic, natural and cultural resources.

6. Soundscape

Soundscape refers to the total ambient acoustic environment or sound level associated with a given environment. In a national park setting, the soundscape is composed of both natural ambient sounds and a variety of human-made sounds. NPS Director's Order #47: Soundscape Preservation and Noise Management requires "to the fullest extent practicable, the protection, maintenance or restoration of the natural soundscape resource in a condition unimpaired by inappropriate or excessive noise sources."

The fundamental principle underlying the establishment of soundscape preservation objectives is the obligation to protect or restore the natural soundscape to the level consistent with park purposes, taking into consideration other applicable laws. Where natural soundscape conditions are currently not impacted by inappropriate noise sources, the objective must be to maintain those conditions. Where the soundscape is found to be degraded, the objective is to facilitate and promote progress toward the restoration of the natural soundscape. This basic principle is modified by noise-generating activities that are appropriate to the park under the NPS Organic Act and other relevant legislation related to natural and cultural resource management or the provision of visitor services. This includes appropriate commercial activities. In these situations, soundscape management goals are to reduce noise to minimum levels consistent with the appropriate service or activity, as long as that service or activity continues to be needed.

Primary generators of noise within VINP include visitor activities at beaches; commercial and private vehicles, particularly at parking areas; commercial and private vessels, most notably high speed powerboats ("cigarette boats"); amplified sound from jitneys and commercial vessels; aircraft flyovers; park operation and maintenance activities, particularly generators; and special events, such as parties. Within the park, noise levels are typically greatest at the Trunk Bay parking lot and at Honeymoon Beach. Noise levels outside VINP, particularly at the commercial ferry dock and visitor staging area in Cruz Bay, greatly exceed those within the park.

36 CFR 2.12 prohibits noise levels within national parks that exceed 60 decibels measured on an A-weighted scale at 50 feet or that is otherwise unreasonable. The park's *Vessel Management Plan* is evaluating the need for noise regulations specific to vessels operating within park waters.

D. VISITOR USE/EXPERIENCE

Since GMP adoption in 1983, VINP has averaged over 1,002,750 visitors per year. Over the past decade, visitation has declined slightly (about 6%) to an average of over 942,000 visitors per year (Table 7). While visitation noticeably declined in 1998 and 1999, due primarily to negative hurricane publicity, visitation in 2000 was the highest since 1993 and the second highest in the decade. Unlike most parks in the national park system, the heaviest visitation occurs in the first four months of the year, January through April.

Visitation at Trunk Bay, the most popular destination in the park, has averaged about 212,000 visitors annually over the past five years. Since the inception of the Recreational Fee Demonstration Program in June 1998, land-based commercial tour group visitation to Trunk Bay and Annaberg Historic Site has been steadily increasing (Table 8).

Table 7: 1990-2000 Visitation, Virgin Islands National Park

YEAR/ MONTH	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
JANUARY	81,643	94,706	108,382	109,360	85,452	89,123	72,635	120,636	101,711	92,271	100,233
FEBRUARY	80,741	91,932	117,532	100,846	94,839	90,082	87,262	115,969	92,179	80,399	105,218
MARCH	93,078	104,278	118,245	114,277	100,790	114,761	89,575	130,135	97,131	85,969	114,919
APRIL	81,705	85,376	90,255	118,621	90,180	87,478	88,674	102,873	91,232	82,128	114,495
MAY	90,436	78,541	100,189	97,635	77,546	75,526	74,715	81,159	75,004	65,310	91,519
JUNE	85,462	75,612	91,059	86,463	74,024	75,513	72,241	82,667	71,173	55,970	88,278
JULY	95,847	91,338	79,644	79,867	76,491	76,702	46,971	77,929	65,486	59,230	88,193
AUGUST	73,577	85,288	69,707	82,894	76,953	67,620	63,761	72,268	52,722	40,044	61,079
SEPTEMBER	61,958	58,102	47,895	68,029	57,901	42,976	44,406	52,888	41,768	30,317	54,639
OCTOBER	52,384	62,669	53,798	76,113	64,584	36,451	50,110	49,962	48,573	37,554	58,665
NOVEMBER	76,293	80,385	64,267	82,032	74,900	53,036	78,039	59,668	67,219	56,508	83,471
DECEMBER	78,083	88,063	69,791	93,134	85,729	57,107	98,036	82,099	89,951	60,250	96,139
TOTAL	951,207	996,290	1,010,764	1,109,271	959,389	866,375	866,425	1,028,253	894,149	745,950	1,056,848

Source: National Park Service Public Use Statistics Office, Denver Service Center

Table 8: Fee Demonstration Program Visitation, Trunk Bay and Annaberg

Location	1998 (1)	1999	2000	TOTAL (2)
Trunk Bay	74,773	173,853	210,104	458,730
Annaberg	18,701	39,626	45,616	103,943

(1) June-December

(2) June 1998-December 2000

Source: Recreational Fee Demonstration Program Office, Virgin Islands National Park

Approximately 25,500 boats per year currently anchor in park bays for overnight stays and day use, accounting for approximately 132,400 visitors annually. Almost 95% of this visitation is to north shore bays and beaches. Detailed boating visitation data is being assembled for inclusion in VINP's *Vessel Management Plan*.

Over the past ten years, cruise ship passengers have accounted for 22-27% of total park visitation. Cruise ship schedules for winter 2000/2001 indicate a 20% increase over 1999 levels in the number of cruise ship visiting St. Thomas. A one-day record for cruise ship visitation to St. Thomas of 17,157 passengers was set on December 20, 2000. For 2000, St. Thomas is expected to host more than 1.7 million cruise ship passengers, another record (Larson 2000b). The previous high was about 1.5 million in 1998. From October 1 through April 30, 2001, 849 ships are scheduled to call in the St. Thomas-St. John district. This compares to 703 ships for the same period in 1999/2000. Several new ships will be operating, including Disney's *Magic*, Caribbean's *Explorer*, Carnival's *Victory*, Holland America's *Amsterdam*, and Costa Cruise's *Millenium*. At the end of this winter season, the *Norway* is scheduled to no longer call in the district. The cruise lines and the Territorial government have developed an agreement guaranteeing the Virgin Islands steady growth in cruise ship traffic over the next five years in exchange for the government not increasing its "head tax" (Larson 2000a).

St. Thomas airline arrivals and departures are also expected to increase, growing from approximately 716,200 in FY 1997 to 841,000 in FY 2001, an increase of 17% (Henighan 2000).

Visitation to the park by individuals is usually of a short-term nature. Heaviest visitor use occurs between November and May, and Wednesday through Friday, reflecting cruise ship arrivals. Most visitors spend their time on, in or near the water. Beach use and boating are the most popular activities. The beaches along the northwest shore between Cruz Bay and Cinnamon Bay receive the highest concentration of use, with Trunk Bay being the designated swimming/snorkeling venue for commercial tour groups. Many tours are also taken to the cultural site, Annaberg Sugar Mill Plantation.

In March 1997, the Visitor Services Project (VSP) completed a one-week study of VINP visitors. Over 1,300 questionnaires were distributed and over 1,000 were returned for a response rate of 78%. The results of this study give a snapshot of the demographics of the park's visitors for the study period, but the results may not as accurately reflect visitor characteristics for other times of the year.

The VSP study found that most (79%) visitors were over 30 years old and from the Continental United States (92%). Very few (4%) came to the park alone, they most often came in groups of two (40%) and nearly a third (27%) came in groups of 5 or larger. Almost half (49%) of the groups were family groups, 23% were groups of friends, and 15% were mixed groups of family and friends.

While 52% reported this was their first time visiting Virgin Islands National Park, a substantial 21% had visited the park 5 or more times. Only 19% came on cruise ships and only 14% were with an organized tour. 44% of visitors said their stay would be a week or longer. The top three reasons given for visiting the park were to enjoy recreation (85%), view scenery (73%), and seek quiet/solitude (55%). The most visited places were Trunk Bay (69%), Cinnamon Bay (56%), Annaberg Sugar Mill (51%), and Maho Bay (48%). The top five activities visitors reported participating in were snorkeling (81%), sunbathing (80%), swimming (76%), photography (60%), and hiking/walking (52%). Rental vehicles, taxis and boats were the most used forms of transportation.

The most commonly used visitor services were the park brochure/map (62%), Trunk Bay restroom/change area (47%), and trails (46%). According to visitors, the most important services were the Cinnamon Bay Campground, mooring buoys, and trails.

On St. John, the average visitor group expenditure was \$1,506. The average per capita expenditure was \$495. The median visitor group expenditure was \$400.

On a future visit, 75% of the respondents would prefer printed materials to learn about the park. The top subjects visitors are interested in are marine ecology (77%) and island history (74%). Most visitors (87%) rated the overall quality of services in the park as "good" or "very good".

Park interpretation is conducted through contacts at the Visitor Contact Station in Cruz Bay, ranger-led walks and evening programs, wayside exhibits, youth education and community outreach, cultural demonstrations and park brochures. A special effort is made to introduce visitors to the culture of St. John through cooking and basket making demonstrations at the Annaberg Historic Site. Support for park programs comes from the Eastern National Parks and Monuments Association and the Friends of Virgin Islands National Park. The children's environmental education program is key to teaching island youth about their natural environment, cultural heritage, conservation, and the value of protecting natural and cultural resources.

In May 1998, VINP became the 100th park to be included in the Recreational Fee Demonstration Program established by Congress in 1996. Participation in the Program allows the park to keep up to 80% of new revenues on site to fund critical backlog repair and maintenance projects as well as visitor education programs and resource protection efforts. At VINP, recreational fees are assessed at two locations – Trunk Bay and Annaberg Historic Site. To date, public acceptance of the Fee Demonstration Program has been high, with the majority of visitors supporting the fee for use in improving visitor facilities and protecting resources. The number of visitors has also held steady since the program's inception.

E. CARRYING CAPACITIES

NPS is required by law to address carrying capacity in planning for park management. Simply stated, carrying capacity is a measure of sustainability. In terms of commercial services, carrying capacity is defined as the type and level of commercial use that can be accommodated while sustaining the desired resource protection and visitor use experience in the park. Through carrying capacities, commercial activities can be monitored or controlled to avoid unacceptable impacts to the scenic, natural and cultural resources and values for which the park was established.

The Visitor Experience and Resource Protection (VERP) framework was designed by NPS for use in conducting carrying capacity analyses as part of the GMP process. The VERP planning process may be

applied outside of the GMP process, however. The nine elements integral to the VERP framework and the response of this planning process to them are summarized below:

Table 9: Plan Response to VERP Framework

VERP Element	CSP Response
1. Assemble an Interdisciplinary Project Team (IDT)	Assembled at beginning of planning process (see Section VI).
2. Develop a public involvement strategy	Developed in consultation with IDT at beginning of planning process (see Section E.1 for a description of the public process to date).
3. Develop park purpose, significance, and primary interpretive statements; identify planning constraints	Park mission, significance and primary interpretive statements developed as part of GMP, 1998 Strategic Management Plan, and Comprehensive Interpretative Plan. Planning constraints identified throughout CSP.
4. Analyze resources and visitor use	See Chapter III and below.
5. Describe a range of management zones	Developed as part of GMP; summarized in Section I.D.
6. Prescribe management zones to specific locations	Prescribed by GMP. (See Figure 2.)
7. Select indicators and specify standards for each zone	See discussion below.
8. Monitor resources and social indicators	30 years of data has been collected by NPS, USGS/BRD, and Territory; ongoing monitoring programs to be developed in coordination with these parties.
9. Take management actions	See Proposed Action.

Carrying capacities were established in the 1983 GMP for park facilities, beach areas, anchorages and Biosphere Reserve core areas. These capacities were established based upon peak visitation in 1982 (84,615) plus a 10-20% increase to accommodate the additional facilities and improvements authorized by the GMP. For example, the GMP established capacities of 500 persons at one time at Trunk Bay, with 30 persons on the underwater trail at one time. Many sites in VINP exceed those carrying capacities. Congestion and potential crowding threaten to impact not only the quality of the visitor experience but also the integrity of scenic, natural and cultural resources. Allowing unlimited visitor use can destroy the very qualities of the national park that attracts visitors and residents alike. This problem is not unique to VINP, rather research on crowding and carrying capacity strongly suggests the need for visitor management in most parks (Lime 1996). Approximately 95% of Americans support limitations by NPS on the number of visitors, especially if the number is harming resources or if there is overcrowding (Colorado State University 1998).

Using the VERP framework, levels of use, current resource and social conditions, and other indicators are compared in Table 10 for various areas within VINP. The areas selected are those in which commercial uses, either land-based or water-based, currently occur or could potentially occur. All areas are zoned by the GMP as Recreation Natural, with the exception of Annaberg Historic Site and small portions of some areas that are zoned Historic.

Table 10: Carrying Capacity Indicators, Selected Areas

Area	Primary Visitor Uses	Level of Visitor Use/Commercial Use	Relative Importance of Area to Park Purpose, Significance and Interpretive Themes	Availability of Visitor Services	Social Value of Area (1)	Features or Values of Critical Importance	State of Resources	Ability of Resources to Withstand Use	Comments
Salomon Beach	Swimming, snorkeling	Moderate/Low	Moderate	None	High	Solitude, scenic values, coral reef	Solitude-Moderate Scenic - High Coral - Moderate	Moderate	High social value due to proximity to Coral Bay
Honeymoon Beach	Commercial vessel excursions, swimming, snorkeling	Moderate/High	High	None	High	Scenic values, coral reef	Scenic – Degraded by volume of use. Coral – Deteriorating due to overuse.	Moderate	High social value as primary multi-passenger commercial vessel destination. NPS jurisdiction terminates at shore; Cannel Bay resort has jurisdiction of upland area
Caneel Bay	Resort	High/High	Moderate	Full range	High	Cultural resources, recreation values	Cultural – High Recreation – High	High	High social value due to historic role. Operated as a private resort with water sports concession
Henley Cay	Swimming, snorkeling	Low/Low	Moderate	None	High	Solitude, Coral reef, seabird nesting habitat	Solitude – High Coral – Moderate Seabird nesting habitat - High	Low	Current recreational uses are concentrated on the southern portion; the northern portion is sensitive seabird nesting habitat.
Hawksnest Bay	Commercial vessel excursions, swimming, snorkeling, special events	High/Moderate	High	Limited, some in disrepair	High	Scenic values, T&E species, coral reef, research values	Scenic – High T&E – Moderate Coral – In recovery	Scenic – High Coral - Low	High social value due to proximity to Cruz Bay and group use facilities. Due to shallowness, coral is readily susceptible to damage.

Area	Primary Visitor Uses	Level of Visitor Use/Commercial Use	Relative Importance of Area to Park Purpose, Significance and Interpretive Themes	Availability of Visitor Services	Social Value of Area (1)	Features or Values of Critical Importance	State of Resources	Ability of Resources to Withstand Use	Comments
Denis Bay	Minimal use	None/None	Low	None	High	Solitude, scenic values, Cultural resources	Solitude – High Scenic – High Cultural – High	Low	High social value due to cultural resources. Area receives minimal use.
Jumbie Bay	Swimming, Snorkeling	Low/Low	Moderate	None	High	Solitude, scenic values, Coral reef	Solitude-High Scenic – High Coral – Low/Moderate	Low	Due to shallowness, coral is readily susceptible to damage.
Trunk Bay	Commercial vessel and land-based excursions, swimming, snorkeling, SNUBA	High/High	High	Full range	High	Scenic values, T&E species, Coral reef, underwater snorkeling trail, research	Scenic – Degraded during high use periods, high at other times. T&E – Low/Moderate Coral – Degraded due to visitor damage	High	Most popular visitor destination, receives highest volume of commercial use. Operated as a concession. Although degraded from visitor damage, coral resource has better ability than other sites to withstand high volume of use.
Cinnamon Bay	Commercial vessel excursions, swimming, snorkeling	High/Moderate	High	Full range	High	Scenic values, T&E species, Coral reef, recreation values, research	Scenic – High T&E – Moderate Coral – Low Recreation – High	Moderate	Second most popular north shore destination. Operated as a campground concession with a water sports center.
Maho Bay	Commercial vessel excursions, swimming, snorkeling	Moderate/Moderate	High	Limited	High	Solitude, Scenic values, T&E species, Coral reef, seagrass, research	Solitude– Moderate Scenic – High T&E - High Coral – Low/Moderate Seagrass – High	Moderate	High social value as family beach. Important water quality monitoring site.

Area	Primary Visitor Uses	Level of Visitor Use/Commercial Use	Relative Importance of Area to Park Purpose, Significance and Interpretive Themes	Availability of Visitor Services	Social Value of Area (1)	Features or Values of Critical Importance	State of Resources	Ability of Resources to Withstand Use	Comments
Francis Bay	Swimming, snorkeling	Moderate/None	High	Rest-rooms only	High	Solitude, scenic values, coral reef, seagrass, T&E species	Solitude – High Scenic – High Coral – High Seagrass – High T&E – High	Moderate	High social value for solitude. High concentration of T&E species. Closed to commercial group use.
Whistling Cay	Snorkeling, SCUBA	Low/Low	High	None	Moderate	Coral reef, T&E species	Coral – High T&E – High	Moderate	High concentration of T&E species.
Mary's Creek	Snorkeling/ SCUBA	Low/Low	High	None	High	Solitude, Scenic values, coral reef, mangroves, T&E species	Solitude – High Scenic – High Coral – High Mangroves – High T&E – High	Low	Important fish nursery and bird nesting habitat. High social value as a hurricane shelter.
Leinster Bay	Commercial vessel excursions, swimming, snorkeling	High/Moderate	High	None	High	Solitude, Scenic values, coral reef, seagrass, T&E species	Solitude – High Scenic – High Coral – High Seagrass – Moderate Habitat – High T&E – High	Moderate	High social value for solitude which is degraded during high use periods. Waterlemon Cay is one of the park's most popular snorkeling sites.
Brown Bay	Swimming, snorkeling	Low/Low	High	None	High	Solitude, scenic values, coral reef, seagrass, T&E species	Solitude – High Scenic – High Coral – Moderate Seagrass – High T&E – High	Low	High value as habitat due to low usage.
Other North Shore bays	Swimming, snorkeling	Low/Low	High	None	Moderate	Solitude, scenic values, coral reef, seagrass, T&E species	Solitude – High Scenic – High Coral – High Seagrass – High Habitat – High	Low	High value as habitat due to low usage.

Area	Primary Visitor Uses	Level of Visitor Use/Commercial Use	Relative Importance of Area to Park Purpose, Significance and Interpretive Themes	Availability of Visitor Services	Social Value of Area (1)	Features or Values of Critical Importance	State of Resources	Ability of Resources to Withstand Use	Comments
Salt Pond Bay	Swimming, snorkeling	Moderate/Low	High	Limited	High	Solitude, Scenic values, coral reef, seagrass, T&E species	Solitude- Moderate Scenic - Moderate Coral - Moderate Seagrass - High T&E - High	Moderate	High social and resource values as Biosphere Reserve. Most popular south shore destination. Limited amount of unauthorized commercial tour group use is occurring.
Lameshur Bay	Swimming, snorkeling	Low/Low	High	Limited	High	Solitude, Scenic values, coral reef, cultural resources, T&E species, research	Solitude - High Scenic - Moderate Coral - Moderate Cultural - Moderate T&E - High	Moderate	High social and resource values as core of Biosphere Reserve.
Reef Bay	Swimming, snorkeling, hiking	Moderate/Low	High	Limited	High	Solitude, Scenic values, coral reef, cultural resources, T&E species	Solitude - High Scenic - Moderate Coral - Moderate Cultural - High T&E - High	Low	High social and resource values as core of Biosphere Reserve and as park's most popular hiking destination.
Other South Shore bays	Swimming, snorkeling, SCUBA	Low/Low	High	None	High	Scenic values, coral reef, seagrass, T&E habitat, research	Scenic - High Coral - High Seagrass - High Habitat - High	Low	High social and resource values as Biosphere Reserve.
Annaberg Historic Site	Land-based excursions	Moderate/Moderate	High	Limited	High	Scenic values, cultural resources	Scenic - High Cultural - High	Moderate	Most popular cultural site.

Area	Primary Visitor Uses	Level of Visitor Use/Commercial Use	Relative Importance of Area to Park Purpose, Significance and Interpretive Themes	Availability of Visitor Services	Social Value of Area (1)	Features or Values of Critical Importance	State of Resources	Ability of Resources to Withstand Use	Comments
Cinnamon Bay Ruins	Self-guided tours	Moderate/Low	High	At adjacent camp-ground	High	Cultural values	High	Moderate	High social value due to ease of access. Unauthorized commercial tour group use is occurring.
Catherinberg Ruins	Self-guided exploration	Low/None	High	None	High	Cultural values	Moderate	Moderate	
Other Cultural Sites	Self-guided exploration	Low/None	Moderate	None	Moderate	Cultural values	Moderate	Low	
Lind Point Trail	Guided and unguided hiking	Moderate/High	Low	None	High	Recreation values	Degraded during high use periods, high at other times.	Moderate	High use from commercial guided trips.
Caneel Hill Spur Trail	Guided and unguided hiking	Moderate/High	Low	None	High	Recreation values	Degraded during high use periods, high at other times.	Moderate	High use from commercial guided trips.
Reef Bay Trail	Guided and unguided hiking	Moderate/None	High	None	High	Recreation values	Degraded during high use periods, high at other times.	Moderate	High social value due to popularity. NPS-led tours, no commercial use authorized.
Other Trails	Unguided hiking	Low/None	Low	None	Moderate	Scenic values, recreation values	Scenic – Moderate Recreation - Moderate	Moderate	No commercial use authorized
Hassel Island	Closed to visitor use except by special permit	Low/None	High	None	Moderate	Scenic values, cultural values, recreation values	Scenic – High Cultural – Deteriorating due to neglect Recreation - Undeveloped	Moderate	Strong interest has been expressed to develop Hassel Island as a tourist destination.

(1) Importance of area for recreation, solitude, cultural values, economic values or other uses.

Based upon the indicators in Table 10, desired future condition and maximum sustainable capacities are established for both water-based and land-based commercial uses in Table 11. These are compared to GMP carrying capacities, where identified, which are capacities for all users irrespective of origin. To arrive at the total carrying capacity for a specific location, non-commercial uses would need to be added to the desired future conditions/maximum sustainable capacities in Table 11.

The desired future condition represents that commercial use capacity which best balances resource protection with a quality visitor experience. The maximum carrying capacity (or limit of acceptable change) represents a level of commercial use that would be the maximum that could be sustained and ensure the protection of sensitive resources and a quality visitor experience. The desired future condition and maximum sustainable capacities are qualitatively derived based upon current scientific information, empirical observation, daily operational knowledge, and public input. These capacities acknowledge the strong relationship among the number of visitors, timing of visitation (pulses), the quality of the visitor experience, and impacts to the park's resources. They also recognize the need to be able to accommodate visitors to the park without undue focus on any specific audience, most notably cruise ship passengers. In establishing these capacities, it is recognized that there is no magic number that identifies the optimal quantity of visitors to the Park or the number of commercial uses that should be authorized. There are simply too many variables that form part of the equation. Many of these variables are not only subjective, but vary from individual to individual. The inability to predict with any scientific certainty where the critical thresholds of resilience to stress lie along the continuum of human-induced and natural disturbances makes it inherently difficult to establish carrying capacities. This calls for a conservative approach in developing carrying capacities and other management strategies.

F. TRANSPORTATION SERVICES

The majority of visitors to VINP arrive at park bays and beaches after having been transported from cruise ships or from St. Thomas and St. John resorts by either commercial vessel or commercial vehicle. The majority of cruise ship passengers access St. John either via tour-operated owned vessels (e.g., *Island Girl* owned by Cruise Ship Excursions) or passenger ferries contracted through Transportation Services of St. John or Varlack Ventures. *Island Girl* can accommodate approximately 300 PAOT, while Transportation Services' ferries accommodate approximately 250 PAOT. On peak days (normally Wednesdays), there will typically be three "pulses" of cruise ship passenger visitation. Each pulse of visitors is met by a fleet of contracted safari buses that transport the visitors to and from the park. The safari buses are either contracted by tour operators directly through the owners or through transportation service companies, i.e., Transportation Services of St. John and Varlack Ventures.

Scenic tours to Trunk Bay and Annaberg and "Island" tours are popular visitor activities and tours are an important source of income for local taxi and tour operators. A commercial tour operator provides a way for visitors to see the park in 2 1/2 to 5 hours. Taxis circulate regularly but few are on fixed schedules. There are approximately 200 taxis operating on St. John, with about 120 owned by medallion holders licensed by the Virgin Islands Taxicab Division for organized group transport.

Currently, individual taxi and safari bus operators who use the park extensively on a daily basis are not licensed nor regulated by the park. Improvements in transportation services can best be effected through provisions in concession contracts and commercial use authorizations. Consequently, operating conditions for Year 2001 CUAs for land-based tour operations hold the tour operators responsible for the compliance of their contracted taxi and safari bus operators with regulations and for safe driver behavior. Through this planning process, park management has been working with the St. John and Virgin Islands

Table 11: GMP Carrying Capacities and Desired Future Conditions and Maximum Sustainable Capacities for Commercial Uses, Selected Areas (PAOT)(1)

Area	GMP Carrying Capacity (2)(3)	Desired Future Condition (4)	Maximum Carrying Capacity (4)	Explanation
Salomon Beach	NA	Land-based: 30 Water-based: 40	Land-based: 30 Water-based: 50	Due to its small size, this beach area can accommodate only limited commercial visitation without overcrowding. It is readily accessible for guided hiking trips from the Lind Point Trail. It currently receives little commercial vessel use due to a lack of moorings.
Honeymoon Beach	NA	Land-based: 50 Water-based: 150	Land-based: 75 Water-based: 175	This is the most popular commercial multi-passenger vessel destination in the park and suffers from overcrowding during peak periods. It also receives significant visitation from guided hiking trips on the Lind Point Trail. Its reef is in decline due, in part, to damage from swimmers and snorkelers. Limitations are needed on PAOT and the number of multi-passenger vessels at one time to reduce impacts to coral resources and to the quality of the visitor experience, particularly for non-commercial landside visitors. Its upland portion is under Caneel management and is used for large-scale corporate picnics and other events serviced by larger multi-passenger vessels. A visible enforcement presence is needed to reduce regular violations of resource protection and safety regulations.
Caneel Bay	NA	NA (5)	NA (5)	Commercial activities are regulated and monitored through a limited concession permit.
Hawksnest Bay	135	Land-based: 50 Water-based: 125	Land-based: 50 Water-based: 175	Comprised of several sub-bays, this area can accommodate a moderate amount of commercial vessel use, including larger multi-passenger vessels. The reef area off the NPS beach, however, is very shallow and easily subject to damage; this portion of the bay should be closed to vessel use to protect the coral resource. Given limited infrastructure, large land-based tour groups cannot be accommodated. The use of group areas is very popular with "locals"; commercial use of these areas would conflict with this "local" use.
Denis Bay	NA	Land-based: NA (5) Water-based: 0	Land-based: NA (5) Water-based: 0	Due to the danger of decaying pier remnants, exposure (i.e., frequent rough seas), and trespass issues, this area is inappropriate for commercial vessel use.
Jumbie Bay	NA	Land-based: 15 Water-based: 0	Land-based: 15 Water-based: 0	This small bay can accommodate a very limited number of land-based commercial visitors. Commercial vessel use is inappropriate due to the location and vulnerability of its reefs to vessel damage. Commercial use conflicts with its value as an area for solitude.

Area	GMP Carrying Capacity (2)(3)	Desired Future Condition (4)	Maximum Carrying Capacity (4)	Explanation
Trunk Bay	500	Land-based: 350 Water-based: 175	Land-based: 400 Water-based: 200	The single-most popular land-based commercial visitor destination in the park, this area suffers from significant overcrowding during peak periods, both on the beach and at facilities, most notably the parking area. Most commercial visitation comes in "pulses" of large numbers of visitors; up to 4 pulses per day could be accommodated. Limitations on both land-based and water-based commercial visitation are needed to ensure a quality and safe recreational experience, especially for non-commercial visitors; to control resource damage; and due to infrastructure limitations. These limitations need to recognize the considerable volume of non-commercial visitation to the area (30-40% of peak day visitation). As a Recreation Fee Demonstration Program and a concession contract site, investment has and can be made to maintain and improve visitor facilities; thus, this area should continue to serve as the park's primary commercial visitor destination.
Cinnamon Bay	Beach: 350 Cafeteria: 150	Land-based: 75 Water-based: 100	Land-based: 100 Water-based: 125	Commercial visitation to this area needs to be managed to reduce conflicts with concession campground uses. Land-based tour use of the restaurant facilities should be limited and monitored to avoid adverse impacts to campground guests. A moderate level of commercial vessel use can be accommodated.
Maho Bay	NA	Land-based: 30 Water-based: 100	Land-based: 50 Water-based: 125	A lack of facilities, particularly parking, and conflicts with non-commercial uses limit the amount of land-based commercial visitation this area can accommodate. A moderate amount of commercial vessel use can be accommodated.
Francis Bay	250	Land-based: 0 Water-based: 0	Land-based: 0 Water-based: 0	Closure of Francis Bay beach to commercial group use as of January 1, 2001 eliminates the potential of this area to accommodate either land-based or water-based commercial uses. Commercial vessel mooring/anchoring can still occur in Francis Bay.
Whistling Cay	NA	Water-based: 30	Water-based: 50	Commercial use is limited to SCUBA excursions.
Mary's Creek	NA	Land-based: 0 Water-based: 30	Land-based: 0 Water-based: 50	Due to sensitive resource values, commercial access should be limited to snorkeling and SCUBA at the creek's mouth. Commercial use moorings should be installed to reduce impacts to coral.
Leinster Bay	NA	Land-based: 30 Water-based: 150	Land-based: 30 Water-based: 175	Waterlemon Cay is a very popular area for snorkeling excursions and the area can accommodate a moderate amount of commercial vessel use. However, limitations are needed on PAOT and the number of multi-passenger vessels at one time to reduce impacts to coral resources and to the quality of the visitor experience, particularly for non-commercial visitors. Land-based visitation is limited by a lack of facilities and conflicts with non-commercial users and should be limited to hiking excursions. A visible enforcement presence is needed to reduce regular violations of resource protection and safety regulations.

Area	GMP Carrying Capacity (2)(3)	Desired Future Condition (4)	Maximum Carrying Capacity (4)	Explanation
Brown Bay	NA	Land-based: 20 Water-based: 0	Land-based: 30 Water-based: 0	The existing trail system would accommodate land-based access by guided hiking excursions to Brown Bay. No moorings are present and water-based access could adversely affect seagrass.
Other North Shore Bays	NA	Land-based: 0 Water-based: 0	Land-based: 0 Water-based: 0	Commercial visitation to other North Shore bays would be inappropriate due to adverse impacts to sensitive resources, solitude and other values and lack of infrastructure.
Saltpond Bay	65	Land-based: 50 Water-based: 50	Land-based: 75 Water-based: 75	A lack of infrastructure, potential resource impacts, and effects on the area's solitude values limit the amount of commercial visitation this area can accommodate.
Lameshur Bay	150	Land-based: 30 Water-based: 75	Land-based: 55 Water-based: 100	Although this area could accommodate a moderate amount of commercial vessel visitation, conflicts with non-commercial users and adverse effects on resources and solitude could be expected if GMP capacity was attained.
Reef Bay	20	Land-based: 30 Water-based: 30	Land-based: 50 Water-based: 50	A lack of infrastructure, potential resource impacts, and effects on the area's solitude values limit the amount of commercial visitation this area can accommodate.
Other South Shore bays	NA	Land-based: 0 Water-based: 0	Land-based: 0 Water-based: 0	Commercial visitation to other South Shore bays would be inappropriate due to a lack of moorings and other infrastructure and adverse impacts to sensitive resources, solitude and other values.
Annaberg Historic Site	100	Land-based: 100 Water-based: 0	Land-based: 150 Water-based: 0	The ability to accommodate an increase in commercial visitation at this site is a function of both staffing and infrastructure (e.g., bathrooms). Water-based commercial use would not be appropriate given the lack of suitable access.
Cinnamon Bay Ruins	NA	Land-based: 20 Water-based: 0	Land-based: 30 Water-based: 0	This area has limited ability to accommodate commercial visitation without adversely affecting the recreation/cultural experience for commercial and non-commercial users alike. Water-based access is a function of commercial vessel use of Cinnamon Bay.
Catherineberg Ruins	15	Land-based: 15 Water-based: 0	Land-based: 20 Water-based: 0	This area has limited ability to accommodate commercial visitation without adversely affecting the recreation/cultural experience for commercial and non-commercial users alike. Commercial vessel access is impracticable.
Other Cultural Sites	NA	Land-based: 0 Water-based: 0	Land-based: 0 Water-based: 0	Commercial visitation to other cultural sites would be inappropriate due to adverse impacts to sensitive resources, solitude and other values and lack of infrastructure.
Lind Point Trail	NA	Land-based: 30	Land-based: 40	To ensure the quality of the recreational experience for commercial guided tour participants and to reduce conflicts with non-commercial hikers, limitations are needed on the number of participants in commercial tour groups. During peak periods, tour groups can exceed 75 PAOT which creates a situation of overcrowding on the trail and at Honeymoon Beach and results in sanitation impacts due to a lack of facilities.
Caneel Hill Spur Trail	NA	Land-based: 30	Land-based: 40	As with the Lind Point Trail, PAOT limitations are needed to ensure the quality of the recreational experience for commercial guided tour participants and to reduce conflicts with non-commercial hikers.

Area	GMP Carrying Capacity (2)(3)	Desired Future Condition (4)	Maximum Carrying Capacity (4)	Explanation
Reef Bay Trail	NA	Land-based: 30 Water-based: 10	Land-based: 30 Water-based: 10	Guided hiking is currently limited to NPS-led excursions, although the potential exists for commercial excursions. To minimize conflicts and resource impacts, PAOT limitations should be instituted and commercial excursions authorized only if they would not conflict with NPS excursions. Minimal water-based access is assumed.
Other Trails	NA	Land-based: 30 Water-based: 0	Land-based: 30 Water-based: 0	Commercial use of other park trails would need to be considered on a case-by-case basis, although a PAOT capacity should be instituted for any trail to ensure a quality visitor experience and to minimize conflicts with non-commercial users.
Hassel Island	100 (6)	Land-based: 0 Water-based: 150	Land-based: 0 Water-based: 200	All commercial access would be via vessel. In the long-term, with site improvements and adequate resource protection measures, the desired future and maximum sustainable capacities could be increased over the GMP threshold. In the short-term, the ability to achieve GMP capacity would be limited by the nature of the improvements.

- (1) Capacity expressed as persons-at-one-time (PAOT).
- (2) NA = no capacity established by GMP.
- (3) Beach areas unless noted; includes all users (commercial and non-commercial), both land and water. GMP also established facility capacities, e.g., parking areas.
- (4) Represents commercial visitation only; total carrying capacity would be a combination of land-based and water-based commercial uses plus all non-commercial uses.
- (5) Given its status as private land, no capacities are established.
- (6) Trail capacity; lower capacities are established by the GMP for specific historic sites and western beaches.

taxi associations to develop performance standards and to assess the viability of a concession-style approach to transportation services within the park.

G. SOCIOECONOMICS

Tourism is the dominant economic activity in the U.S. Virgin Islands (almost 80% of the Territory's gross revenues) and VINP is an icon that is on the "must see" list for many travelers to the islands. Tourism provides a substantial net benefit to local residents. Key U.S. Virgin Islands annual tourism indicators (1999) include: 1.96 million total visitors; \$954.9 million in total expenditures; and 8,370 in tourism-related employment. The economic activity generated by the park helps support the local economy and provides employment opportunities for local residents. However, very little quantitative information specific to the park's economic influence is available. According to a 1981 Study on the Economic Impact of VINP on the St. Thomas/St. John Economy (Island Resources Foundation 1981), 78% of the average daily expenditure of visitors to St. John is attributable to VINP.

The presence of the national park provides both direct and indirect benefits to the local economy. Even in 1980 dollars (the last available park-specific economic data available), direct benefits amounted to over \$3.3 million, while indirect benefits exceeded \$20 million. Direct benefits are derived from VINP expenditures in the local economy for payrolls and goods and services. Outlays by park concessioners are also direct benefits. Indirect benefits include visitor expenditures and expenditures by IBP holders on chartering provisions, boat maintenance, fuel, and incidentals. Finally, VINP has an indirect impact on increased land values on St. John, which, in turn, serves as an indicator of the island's economic growth.

Daily access to park lands and waters is essential to the economic success of most of the commercial service providers currently under permit, although a number of the day sail businesses operating out of St. Thomas access park waters on an incidental basis. The specific financial contribution of these businesses to the local economy has not been calculated. Current concession franchise fees and CUA cost recovery fees do not appear to impose any financial hardships on concessioners or permittees.

CHAPTER V: ENVIRONMENTAL CONSEQUENCES

A. INTRODUCTION

While almost 30 years of data has been collected on the condition of marine resources within the park, there is very little quantifiable data available about the effects of maintaining, decreasing or expanding the commercial services program in the park. Quantifying the potential effects of commercial uses over the long term is complicated by the vagaries and unpredictability of individual business decisions; forces affecting the local, Caribbean and world markets; and changes in Territorial and federal policies and programs, e.g. promotion of tourism; and other factors. Similarly, quantifiable data are lacking on the effects of commercial services versus non-commercial uses on park resources, visitor experience, and the socioeconomic environment. Consequently, this analysis of environmental consequences is largely a qualitative assessment of the effects of the alternatives on scenic, natural and cultural resources; the visitor experience; the socioeconomic environment; and park operations.

B. EFFECTS ON NATURAL AND CULTURAL RESOURCES

1. Endangered/Threatened Species

In all alternatives, there would be ongoing disturbance to sensitive wildlife and vegetation species and their habitats by increased human presence, with harassment of wildlife and noise being the most significant impacts. Most directly affected would be threatened and endangered species of sea turtles and seabirds. Indirectly affected would be endangered whales.

While migration through park waters is very infrequent, whales could be affected in all alternatives through exposure to underwater noise, vessel disturbance, and petroleum pollution. Noise and vessel disturbance (harassment through approaching too close) could cause decreased respiratory intervals, increased dive times, and moving away from the noise and disturbance sources. Increased commercial vessel use of park waters would be accompanied by an increased risk of collisions and other accidents with associated fuel spills. As commercial vessel uses are generally concentrated outside of migratory areas, minimal direct impacts would be expected in all alternatives. Indirectly, increased commercial vessel use in park waters would be expected to result in additional incidences of disturbance as operators strive to "get up close and personal" for their customers when whales are sighted. Long-term effects on migratory patterns would not be expected.

As the numbers of commercial boats increase, the potential for sea turtles to be struck and killed, particularly by high speed vessels, would increase. Occasional unintentional injuries would also be expected in high use areas from dinghies shuttling passengers to/from shore. Experience at VINP and other marine parks and reserves indicates that sea turtle accidents are higher with rental powerboat operators than with other user groups. Requiring powerboat rental companies to obtain CUAs provides additional opportunities for education of operators, monitoring of activities, and enforcement of speed limits, area closures and other regulations. Nesting frequencies may continue to decrease on many beaches due to the indirect effects of beach use and adjacent upland development that results in people, lights and dogs, all of which deter turtles from using particular beaches. Alternative 1 would be expected to have the greatest potential for effects on sea turtles due to few restrictions on the number and types of commercial uses. Potential effects are reduced in Alternatives 2 and 3 with the proposed restrictions on the number of commercial uses, visitation limitations, and the closure of sensitive areas to access.

With increased numbers of commercial vessels in park waters in all alternatives, disturbance by human visitation to offshore cays would be expected to adversely affect endangered and threatened seabirds. However, as use of these cays has historically been limited, these impacts would not be expected to be significant. Monitoring of use patterns will occur as part of the CUA permitting process and additional areas could be closed to commercial vessel access if warranted. CUA conditions for the use of Henley Cay include closure of the north part of the cay to visitor access to protect seabird nesting habitat. The effectiveness of this closure will be monitored on an annual basis.

The Mary's Point/Francis Bay area has a high concentration of sensitive species and is susceptible to adverse impacts due to its ready accessibility and volume of visitation. Closure of Francis Bay beach to commercial group use would be expected to significantly reduce the level of impacts in all alternatives.

In all alternatives, land-based commercial tour group use would be confined to areas of high volume human activity with minimal to no value as sensitive habitats. In Alternatives 2 and 3, areas on the north and south shores with sensitive natural resources would be closed to water-based commercial tour groups.

While the distribution of endangered plants is relatively well known, the extent of threats to the species is speculative. No known endangered plant species would be directly affected in any of the alternatives.

With few restrictions on the number of commercial uses and the volume of visitation, Alternative 1 would have the highest potential for adverse impacts to threatened and endangered species. Alternative 2 would have the lowest potential, given its restrictions on the number of commercial uses and visitation limitations. Impacts in Alternative 3 would be only slightly greater than those in Alternative 2 due to the greater number of commercial activities that would be authorized. In all alternatives, no species or critical habitat would be likely to be adversely affected pursuant to Section 7 of the Endangered Species Act.

2. Marine Resources

Among the park's natural resource assets, marine resources would have the greatest potential in all alternatives to be adversely affected by proposed commercial services, given that the majority of the commercial activities occur within park waters. Beginning in 1995, the VINP established moorings for boats to attach to instead of dropping anchors. Currently, 215 moorings have been established. In all alternatives, use of these moorings by commercial vessels would be expected to significantly reduce damage to coral and seagrass resources. At the same time, there has been a marked trend toward increasing degradation of the park's marine resources resulting from both direct and indirect human impacts and natural stresses such as hurricanes and global warming. In all alternatives, there would be ongoing impacts associated with proposed commercial uses, including: anchor damage (there is no prohibition on anchoring on the north shore), boat groundings, littering, trampling, diver damage, collection of corals and other reef organisms, and marine pollution. Requiring all commercial operators to obtain CUAs provides opportunities for education, monitoring of activities, and enforcement resource protection regulations. As part of their CUA applications, all operators are required to indicate the type of environmental education information provided to customers.

All alternatives continue to concentrate large tour group activities at Trunk Bay, reducing the potential for adverse effects to marine resources elsewhere in the park. While the small reef community at Trunk Bay has been impacted by visitation, it would be expected to continue to provide the average visitor with a satisfying underwater experience. Past proposals to relocate the underwater trail to a "better" site have been discarded as it is better to contain the visitor impacts to only one site.

Both Alternatives 2 and 3 would take a much more aggressive approach to marine protection than is proposed in Alternative 1 in a number of ways:

- Excluding mini-cruise ships (125-210' LOA) from overnight anchoring in park waters, which would reduce the potential for large anchor/chain damage to coral and seagrass;
- Establishing a limitation on the number of passengers (50) on commercial vessels, which would reduce the potential for resource damage associated with large groups of visitors within a concentrated area;
- Limiting the number of commercial group visitors at one time at Trunk Bay;
- Limiting the number of CUAs available to some types of vessels, most notably multi-passenger vessels;
- Limiting the number of multi-passenger boats and their passengers at any area at any one time; and
- Designating areas open and closed as commercial tour group venues.

No direct effects on marine resources would be associated with changes in water sports concessions in Alternatives 2 and 3, as the uses would remain essentially the same.

While limiting the number of CUAs, Alternative 2, and to a greater extent Alternative 3, would provide for market growth, thus encouraging more activities in park waters that could affect marine resources.

As with Threatened and Endangered Species, Alternative 1 would have the highest potential for adverse impacts to marine resources due to its lack of restrictions on the number of commercial uses and the volume of visitation. Impacts in Alternative 3 would be slightly greater than those in Alternative 2 due to the greater number of commercial activities that would be authorized. In all alternatives, no significant adverse impacts to marine resources from proposed commercial services would be expected.

3. Terrestrial Resources

Ongoing disturbance to terrestrial wildlife and vegetation would be expected in all alternatives through trampling, noise, vehicle exhaust, litter, introduction of exotic species, feeding of feral animals, development of informal pathways and associated soil compaction (particularly at Honeymoon Beach, Hawksnest Bay, and Trunk Bay), and other human behavior. Minimal impacts to terrestrial resources would be associated with visitor facility development resulting from new or expanded concession operations in any of the alternatives. Trampling and soil compaction would be expected in the vicinity of new mobile unit food concessions.

All alternatives continue to concentrate tour group activities at Trunk Bay and Annaberg Historic Site, reducing the potential for adverse effects to terrestrial resources elsewhere in the park. Tour excursion vehicles would be more strictly regulated in Alternatives 2 and 3 than in Alternative 1, including regulating the discharge of visitors at areas such as the Cinnamon Bay ruins. Limiting the locations where tour groups can congregate would reduce impacts to terrestrial resources.

There would be minimal difference between Alternatives 2 and 3 in terms of potential effects on terrestrial resources and, in both alternatives, a moderate improvement in resource protection over that provided in Alternative 1. No significant adverse impacts to terrestrial resources would be expected in any alternative.

4. Watershed Values

Effects on watershed values associated with commercial uses would be indirect and include minor amounts of increased sedimentation resulting from trampling and soil compaction in high use areas (all

alternatives), in the vicinity of new mobile unit food concessions (Alternatives 2 and 3), and from visitor facility development associated with new or expanded concession operations (all alternatives). There would also be a minor increase in sedimentation associated with new or expanded concession facilities from runoff from construction in the short term and from additional impervious surfaces in the long term. In all alternatives, expanded commercial vessel activity in park waters would result in a proportionate increase trash in the waters and on beaches and a minor increase in petroleum pollution. Expanded commercial vessel activity would also increase the potential for more catastrophic vessel collisions and groundings and significant fuel spills with attendant adverse effects on marine-related watershed values. Similarly, additional commercial vehicle trips would increase the potential for fuel spills that would adversely affect landside watershed values. No effects on floodplains or wetlands would be expected in any alternative. No significant adverse impacts to watershed values would be expected in any alternative.

5. Cultural Resources

As with terrestrial resources, cultural resources would be most affected by concentrations of visitors. In all alternatives, Annaberg Historic Site would be a designated land-based tour group venue and could expect to receive increased visitation. With almost 40,000 visitors in 1999, up to a 25% increase in commercial tour group visitors within five years could be expected, given the projected growth in cruise ship visitation to St. Thomas. The "wear and tear" of this increased visitation could be expected to necessitate additional maintenance and restoration of the Annaberg facilities. Similar maintenance and rehabilitation needs would be anticipated for the Cinnamon Bay ruins, even though they are not a designated commercial group venue. A general degrading of structures from increased touching, climbing on, and souvenir collection could be expected elsewhere in the park where cultural sites are readily accessible from roads or hiking trails. In Alternatives 2 and 3, an increase in guided hiking excursions would provide additional opportunities for cultural resource interpretation and protection, as well as a greater potential for resource impacts.

In all alternatives, there would be no anticipated impacts to submerged cultural resources, as these resources are not generally accessible and commercial SCUBA operations are generally committed to strict resource protection.

Under all alternatives, the park's cultural resources, both land-based and submerged, would be protected and preserved in accordance with applicable federal and state laws and NPS policies and regulations related to cultural resources. No significant adverse effects to any cultural resources would be expected in any of the alternatives.

6. Scenic Values

In all alternatives, the park's scenic values would be negatively impacted by commercial activities, with the scenic viewsheds at Trunk Bay and Honeymoon Beach and North Shore Road scenic overlooks being the most affected. Even with the PAOT limitations proposed in Alternatives 2 and 3, the scenic vistas at Trunk Bay would continue to be impacted for a major portion of the day by significant numbers of visitors to that beach. While this "pulsing" of visitation would adversely impact non-commercial visitors, it provides an opportunity for the largest number of possible visitors to experience the exceptional scenery of Trunk Bay. During public scoping, a number of commentors identified the presence of large cruise ship passenger transport vessels in Trunk Bay as a visual "eyesore". All alternatives would authorize continued use of Trunk Bay by this and other commercial vessels. While being a visual intrusion in the Trunk Bay viewshed for some persons, visual impacts would be short-term (approximately 90 minutes twice per day) and positive effects would result from a reduction in the number of commercial vehicles accessing Trunk Bay. Vistas from land to sea at Honeymoon Beach would be impacted daily during

"season" by the volume of commercial vessels anchoring on or just off the beach. Similarly, land to sea vistas would be impacted in a number of other bays by commercial vessels at anchor or on moorings. Proposed commercial vessel closures in Alternatives 2 and 3 would protect the scenic values of the most sensitive (not previously impacted) bays and beaches on both the north and south shores.

Restricting land-based tour group venues to Trunk Bay and Annaberg Historic Site in all alternatives would reduce the potential for adverse impacts to scenic values at other locations in the park. Some non-commercial visitors would be precluded from enjoying the viewing opportunities by commercial taxis and safari buses at overlooks and stopped in roadways. In all alternatives, no adverse impacts to scenic values from the expansion of existing concession operations would be expected as improvements would occur in areas currently committed to facility development. Proposed new mobile unit food service concessions in Alternatives 2 and 3 would be perceived by some users as visual intrusions. Siting and design requirements could mitigate such impacts.

With the limitations proposed in Alternatives 2 and 3 on the number of PAOT at the park's most popular locations, no significant adverse effects on scenic values would be expected. With the lack of limitations on commercial uses in Alternative 1, the scenic values at Trunk Bay, Honeymoon, and potentially other locations in the park would be expected to deteriorate.

7. Soundscape

All commercial activities authorized within VINP would be noise-generating to some degree. Both equipment and human noise would be associated with authorized activities in all alternatives, with land-based tours arriving and departing from Trunk Bay having the greatest noise impacts due to the concentration of vehicles and large numbers of visitors in a small area. At the same time, continuing to concentrate tour group activities at Trunk Bay and Annaberg Historic Site would reduce the potential for adverse noise effects elsewhere in the park. Noise levels would also be regularly elevated at Cinnamon Bay Campground and Honeymoon Beach from commercial vehicles and commercial vessel passengers, respectively. Restrictions on amplified sound would be expected to mitigate some noise impacts associated with both commercial vessels and vehicles. Non-commercial visitors would be most affected in all cases.

Although improvements to existing concession operations are proposed in all alternatives, no noticeable increase in noise levels would be expected in any alternative as the nature of the existing activities would not be significantly modified. Noise levels in areas of proposed new mobile unit food service concessions in Alternatives 2 and 3 would increase slightly. While noise levels would increase with growth in commercial visitation in all alternatives, they would be mitigated in Alternatives 2 and 3 to lower levels than in Alternative 1 through limitations on PAOT, the number of some types of commercial uses, and the number of commercial vessel passengers most notably at Trunk Bay, Cinnamon Bay Campground, and Honeymoon Beach.

C. EFFECTS ON VISITOR EXPERIENCE

1. Safety

NPS has little information on the safety of visitors using commercial services in the park. Health and safety inspections of concession operations are conducted annually and these would continue in all alternatives. Periodic monitoring of the services provided by commercial use operators also occurs.

Absent a feral animal control program, threats to visitor safety from feral animals would continue in all alternatives. Performance standards proposed in Alternatives 2 and 3 for transportation service providers would prohibit visitor-feral animal interactions. These performance standards would also improve traffic safety by prohibiting stopping on roadways and limiting parking to designated spaces.

Alternatives 2 and 3 would impose limitations on the number of persons at Trunk Bay at one time, in part to address safety issues associated with parking lot and beach crowding. Limiting the number of vessels at one site at one time, as well as establishing capacity limitations, would be expected to reduce safety issues in Alternatives 2 and 3.

2. Crowding, Congestion and User Conflicts

Crowding, congestion and user conflicts are becoming growing problems at VINP and, with the potential for significant increases in visitation in all alternatives, the quality of the visitor experience could be adversely affected. Commercial uses would continue to compete with non-commercial users for limited facilities and resources. Commercial activities would continue to regularly dominate use of park attractions and support facilities at Trunk Bay, Annaberg Historic Site, and Honeymoon Beach. Crowding at these popular areas would continue to worsen in Alternative 1. Limitations on the number of commercial uses and the number of visitors in specific areas at one time, combined with proposed changes to transportation services, would be expected to minimize the potential for these problems in Alternatives 2 and 3.

3. Opportunity for Recreation

The use of VINP has grown dramatically over the last two decades and is expected to continue to increase. Irrespective of alternative, a demand for new and expanded visitor venues would be expected. Each of the alternatives would provide a somewhat different balance between the demand for recreational opportunities and a policy of non-commercialism of parks, with a primary goal to ensure a national park-style setting and the preservation of the park's significant resources for future generations.

In Alternative 1, the nature of the recreational opportunities provided through commercial service providers would be expected to change little from those currently available. However, the number of commercial businesses seeking to provide these services would be expected to increase as visitation increases, providing visitors a wider choice of vendors.

In Alternatives 2 and 3, the scope of the available visitor opportunities would be expanded to accommodate new commercial uses and concession opportunities and to provide for a moderate level of market growth. At the same time, limitations on the number of commercial uses authorized would be established to ensure that the quality of the visitor experience would be maintained. The only changes in the types of commercial uses currently authorized would be termination of mini cruise ship overnight and swimming/snorkeling stops in park waters and rally tours. A very small percentage of park visitors would be engaged in these recreational activities and the overall recreational experience for these visitors would not be adversely affected given the availability and variety of alternative recreational venues. The elimination of rally tours would reduce the number of vehicles on park roads and at parking areas and overlooks, thereby improving the overall recreational experience for other visitors.

Trunk Bay and Annaberg Historic Site would continue to be the most popular sites in terms of numbers of visitors, in part because of their role as designated commercial tour group venues. These are the only two locations designed or intended to provide adequate facilities for large tour groups. Trunk Bay facilities are staffed to ensure that the restrooms are clean and open for the peak periods. Lifeguarded beaches,

food service, gift shop, snorkel locker rentals, and pay phones are all available. Based upon the capacity limitations proposed in Alternative 2, up to 460 land-based and water-based tour group visitors could be accommodated at one time. Coupled with hotel/guest house visitors and local residents, over 600 visitors could be expected to be on the beach at one time, exceeding the 500 PAOT carrying capacity established by the GMP. Based upon up to four pulses of land-based commercial tour group visitation per day, upwards of 2,000 visitors per day could be expected at Trunk Bay. These capacities would be slightly more than 15% higher in Alternative 3.

The establishment of visitation limitations at Trunk Bay and for multi-passenger vessels would result in some visitors selecting other recreational venues within the park or being unable to visit VINP at all due to a lack of available commercial venues. These potential visitors would be restricted in their ability to enjoy their national park. However, the use of limitations is commonplace in national parks and many other popular tourist venues and enjoys wide social acceptance. Use limitations would be expected to help ensure the quality of the recreational experience for those persons who are able to enjoy the park's recreational venues. They are used to avoid overtaxing infrastructure with limited capacity. They also help protect the quality of life on St. John for island residents. Without use limitations, the quality of the recreational experience would be expected to continue to deteriorate for everyone.

At Annaberg, considerable time, effort and expense have been expended to provide comfort stations and to restore and rehabilitate this historic site. To accommodate increased visitation, additional craft shows and interactive opportunities would be needed, particularly for afternoon visitors. No capacity limitations would appear to be warranted at this time, however in Alternatives 2 and 3, review of the need for such would occur on a bi-annual basis.

Cinnamon Bay Campground is a concession-operated campground designed to provide facilities for lodging and associated services. Walk-in visitors are permitted, but large groups would adversely affect the campground ambiance. The ruins across from Cinnamon Bay are not stabilized to withstand the impacts of foot traffic from large groups. Consequently, Alternatives 2 and 3 would restrict commercial tour group use to the cafeteria area and establish a 60 PAOT limitation. These limitations would limit the ability of a large number of visitors to enjoy these recreational venues while helping to ensure the quality of the recreational experience for campground guests.

Other beaches along the north and south shores do not have the facilities to accommodate more than casual day use. In Alternatives 2 and 3, these areas would be closed to land-based commercial tours to protect their resource values and the nature of the visitor experience and because of their lack of infrastructure. These closures would limit the ability of commercial tour groups to access some of the more pristine beaches in the park. At the same time, they would help to ensure the quality of the recreational experience for non-commercial users, as well as protect the sensitive resource values of these areas.

If determined to be economically feasible and if there is market interest, proposed new concessions in Alternatives 2 and 3 would expand the available visitor services, including increasing the availability of food services through mobile operations at Hawksnest Bay, Maho Bay and Salt Pond in Alternatives 2 and 3. Improvements to Cinnamon Bay Campground and Trunk Bay concession facilities would improve the visitor experience at those sites. New or expanded commercial services to be authorized through CUAs would provide new visitor opportunities, including swimming/snorkeling instruction and additional guided kayaking, hiking and bicycling opportunities.

In both Alternatives 2 and 3, proposed changes to the provision of transportation services for hire within the park would be expected to improve the visitor experience. There would be better control over the services provided and visitor safety would be expected to considerably improve.

Development of visitor services and associated commercial services at Hassel Island would provide a wide range of new visitor opportunities focused around the islands' maritime history, as well as serve as a "relief valve" for the anticipated increase in cruise ship visitation to St. Thomas/St. John. A several-hour visit to a natural setting dotted with magnificent cultural resources would enhance visits to St. Thomas and provide a contrast to the urban shopping opportunities.

Alternative 3 would expand the number and mix of visitor opportunities somewhat more than in Alternative 2, primarily through additional opportunities for commercial use authorizations. Both Alternatives 2 and 3 significantly expand the number and scope of opportunities over those in Alternative 1. No significant adverse effects to the visitor experience would be expected in any alternative.

D. SOCIOECONOMIC EFFECTS

1. Effects on Current Operators

The park's primary concessioner, Caneel Bay Resort, Inc., would be affected in all alternatives by the issuance of new concession contracts to replace those that expire on December 31, 2001. While Caneel Bay Resort, Inc. would be invited and expected to bid on new concession prospectuses, they would have no "preference in renewal" rights and a different concessioner(s) could be selected to operate the facilities at Trunk Bay and Cinnamon Bay Campground. In Alternative 2, Caneel Bay Resort, Inc. could further be affected by the potential to restructure the nature of the combined Trunk Bay/Cinnamon Bay Campground concession into separate concessions to provide more opportunities for individuals and businesses to economically benefit from the park's presence. Capital investment in new/refurbished facilities at both Trunk Bay and Cinnamon Bay Campground would be required in either the single concession (Alternatives 1 and 3) or dual concession (Alternative 2) scenarios.

In Alternatives 1 and 2, the existing limited concession permits for water sports operations at Caneel Bay Resort and Maho Bay Camps would be converted to CUAs upon their expiration on December 31, 2001. Impacts on the current subconcession operators would be expected to be beneficial given a more simplified permitting process and a reduction in fees (single annual payment versus franchise fee based upon percentage of gross receipts). This arrangement, however, would provide less certainty to the resort operators as the water sports vendors (CUA holders) could change annually. VINP would work with the resorts to develop adequate provisions for continuity in service. The change from a single concession contract to multiple concession contracts in Alternative 3 could result in a change or reduction in operators if the demands of applying for and managing a concession contract are deemed excessive by these small business operators.

In Alternative 2, the existing subconcession operation at Trunk Bay for snorkel rental to cruise ship passengers would be eliminated and incorporated into the gift shop's rental operations, resulting in the loss of 3-4 part-time jobs. Currently, two operations distribute snorkeling equipment at Trunk Bay. Allowing any other entity to provide snorkeling equipment conflicts with the park's contractual obligation to the Trunk Bay concessioner, which provides the concessioner exclusive authorization to provide visitor services.

In Alternative 2, the potential separation of water sports at Cinnamon Bay as its own concession would be expected to provide more flexibility to the new concessioner in terms of services offered and marketing. New storage facilities would be required, necessitating some capital investment. In Alternatives 1 and 3, the continuation of water sports activities as part of a campground concession would necessitate a change in status from subconcessioner to employee or other relationship, as the 1998 National Parks Concessions Management Improvement Act eliminates subconcessions. The existing subconcessioner would have no "preference in renewal" rights in either scenario.

In Alternative 1, all commercial services that are currently authorized through CUAs would continue to be authorized via an annual or semi-annual CUA process. Other than periodic increases in fees to recover additional application, administration and monitoring costs, no other direct effects on current operators would be expected in this alternative. In Alternatives 2 and 3, the authorization to operate in park waters would be rescinded for mini cruise ships, although these operators would retain the same ability to visit the park via transportation services provided out of Cruz Bay as do the larger cruise ships. All other current types of commercial services would be continued and most would be expanded. No significant adverse effects to the two mini-cruise ship lines that have historically used park waters would be expected as their use has typically averaged less than 8 visits per year, an overnight VINP stop is not included in their 2000/2001 itineraries, and there are readily available alternatives. Rally tours are a new commercial activity undertaken by at least one commercial tour operator without analysis by NPS. Given that tour operations have operated successfully for years without this venue, no significant adverse effect would be expected to result from the termination of this use.

Periodic fee increases to recover NPS application, administration and monitoring costs would affect all CUA permittees but would be expected to be a minor burden. In all alternatives, authorized commercial uses could be affected in an unknown manner by regulations currently being promulgated by NPS to implement the 1998 Act.

Requiring all businesses providing commercial services within the park to obtain permits may increase the competition for available authorizations; given the elimination of preference rights in the permitting process, NPS could not guarantee the continuation of specific businesses.

Changes proposed in the delivery of transportation services in Alternatives 2 and 3 would affect existing commercial tour group operators. Currently, regulation of commercial transportation services within VINP is limited to cruise ship passenger tour group access via CUAs for commercial tour operations. There would be no change nor expansion in this NPS role in Alternative 1 and thus no effect on current operators. Alternative 2 proposes a two-phased program for providing commercial transportation services, with commercial tour group operators affected by both phases. With issuance of a concession contract for a single service provider for all land-based commercial tour group transport, tour operators would be required to utilize only services provided by the concessioner. At least 50% of the vehicles transporting commercial groups would need to be owned by medallion holders. That requirement would directly affect the various contracts that the tour operators have with local transportation companies, e.g. Transportation Services and Varlack Enterprises, and individual taxi/jitney owners. The transportation companies would be expected to lose a share of their current business to medallion holders who are either members of taxi associations or independent drivers. The requirement for use of medallion holders would also affect the ability of tour operators to select specific taxi/jitney operators. In turn, medallion holders would be expected to be able to negotiate for higher rates with the tour operators.

Alternative 2's interim program for providing commercial transportation services would limit the number of authorized tour operators but accommodate all current operators. It would also institute the same 50% medallion holder requirement. Tour operators would have a much greater degree of control over the

selection of transportation providers in this case but would still be subject to the market limitations represented by the 50% medallion holder requirement.

In Alternative 3, land-based tour operators would be required to utilize only services provided by CUA holders. However, CUAs would be unlimited and available to all current transportation service providers. The effect on tour group operators would be expected to be minimal in this alternative.

2. Business Competition

In Alternative 1, there would be no limitation on the number of concessions or CUAs and thus much less business competition than in Alternatives 2 and 3, which would limit the number of authorizations available for some types of commercial services.

An open, competitive market would exist in all alternatives for concession contracts, given the elimination of preference rights and the expiration of existing contracts on December 31, 2001. The restructuring of the existing concession operations in Alternatives 2 and 3 would be expected to increase the competition for new concession operations at Trunk Bay and Cinnamon Bay Campground. The level of interest expressed in proposed new concession operations, most notably the collection of mooring/anchoring fees, suggests that there would be a high degree of competition for the new concession opportunities proposed in Alternatives 2 and 3. The number of concession opportunities potentially available, contingent upon economic feasibility and market interest, are compared by alternative in Table 12.

Table 12: Maximum Potential Concession Opportunities by Alternative

Concession	Alternative		
	1	2	3
Trunk Bay/Cinnamon Bay		-	
Combined land-based services	1	-	1
Separated land-based services	-	2-3 (1)	-
Trunk Bay water sports	-	-	1
Cinnamon Bay water sports	-	1	-
Caneel Bay water sports	-	-	4
Maho Bay water sports	-	-	4
Mooring/anchoring fee collection	-	3-4	3-4
Reef Bay trail hiker pickup	-	1	1
Red Hook dock operation	-	1	1
Pumpout facility operation	-	1	1
Mobile unit food services	-	3	3
Visitor transport	-	1	-
TOTAL	1	11-15	18-20

(1) Reflects the potential for separate gift shop and snack bar concessions.

In Alternative 1, the types of commercial services currently authorized via CUAs would continue to be authorized. However, there would be no limitation on CUA applications and thus no competition for permits. In Alternatives 2 and 3, the scope of the existing CUA program would be expanded to provide for a moderate level of market growth. At the same time, the number of CUAs available would be limited for a number of commercial services, which would be expected to create a highly competitive environment for those permits. The greatest competition would likely be for CUAs for 25-49 passenger day sail vessels and for land-based commercial tour group operations. The numbers of CUAs projected to be available are compared by alternative in Table 13.

Table 13: CUAs By Alternative

Type of Use	Alternative		
	1	2	3
<i>Commercial Uses With Specific Limitations Established</i>			
7-24 passenger day sail vessels	11	14	16
25-50 passenger day sail vessels	18	18	20
50+ passenger vessels	2	1	1
Day use rental operations	(1)	8	10
Water taxis	1	2	3
SCUBA	4	6	8
SNUBA	0	1	0
Water sports			
Caneel Bay Resort	0	4	0
Maho Bay Camp	0	4	0
Swimming/snorkeling instruction	0	2	0
Land-based tour operations	8	18	10
Wedding/Event organizers	6	8	10
Guided hiking outfitters	2	4	4
Guided bicycling outfitters	1	2	2
SUBTOTAL	53	82	84
<i>Commercial Uses With No Limitations; Assumptions on # of CUAs</i>			
6-pack day sail vessels	15	18	18
Guided kayak excursions	1	2	2
Transportation services	0	(2)	30(3)
SUBTOTAL	16	20	63
TOTAL	69	110	147

(1) Permitting process underway (2) Provided through tour operators (3) Individual operators

With the PAOT capacity limitations proposed for commercial tour group visitation to Trunk Bay and for commercial vessel use of park bays and beaches in Alternatives 2 and 3, there could be competition to secure specific arrival times. NPS is committed to working with the tour operators and commercial vessel operators to develop schedules that equitably accommodate all authorized service providers. If agreement could not be reached among the parties, capacity limitations could be established for each CUA, a lottery system could be instituted, or other allocation measures taken that would likely increase the competitive nature of these operations.

In terms of transportation services, although there would be increased competition among potential commercial tour operators for a limited number of permits in Alternative 2, the number of available permits would accommodate all current operators.

3. Effects on Local Businesses and Park Neighbors

In all alternatives, increased visitation associated with expanded commercial services would provide positive financial benefits to local businesses. The type of commercial services to be authorized would not generally compete with local businesses. Local businesses that are currently operating within the park without authorization would be required to obtain the appropriate permit. With limitations on the number

of available permits in Alternatives 2 and 3, there would be the potential that these businesses would be precluded from doing business in the park.

Private landowners with in-holdings adjacent to popular scenic vistas or snorkeling/swimming stops could be affected by increased volumes of visitation and associated traffic, noise and trespassing in all alternatives. However, these impacts would be intermittent and minimal. No other effects on park neighbors would be expected.

E. EFFECTS ON PARK OPERATIONS

Administrative, maintenance, interpretative, monitoring and enforcement demands on the VINP would increase in all alternatives. In Alternative 1, the combination of increased visitation, the expiration of existing concession contracts/permits, and no limitation on the number of concessions or CUAs (except if necessary for resource protection) would be expected to increase the costs of park operations. VINP's costs for administration, maintenance, interpretation, monitoring and enforcement of commercial uses (rather than total park operational costs) would be expected to increase by approximately 30-40% over the next three years, reducing to a 15-20% increase over year 2000 costs for the remainder of the planning period. In Alternatives 2 and 3, the increase in costs would be somewhat lower at approximately 25-30% initially, reducing to 10-15% after the first 2-3 years, as a limitation on the number of concessions and CUAs would be established. NPS costs would be highest in the first several years as the commercial use authorization process is modified to comply with requirements of the 1998 National Parks Concessions Management Improvement Act and to institute new or revised application requirements, permit conditions, fees, and other procedural elements. Also, new concession prospectuses would need to be developed and contracts negotiated within the first several years.

Increased costs would be partially offset by increased revenues associated with higher permit fees, an increase in the number of concession contracts and CUAs, and increased visitation to Recreation Fee Demonstration Program sites (Trunk Bay and Annaberg Historic Site). In Alternatives 2 and 3, additional revenues would be derived from an increase in the number of concessions and CUAs. In Alternative 2, conversion of concession contracts to CUAs for the water sports operations at Caneel Bay Resort and Maho Bay Camp would represent a reduction in receipts that would be offset by an increase in the number of potential concession opportunities.

The most significant effect on park operations would be expected to be the development and implementation of visitor service programs at Hassel Island. In Alternatives 1 and 3, financial and personnel demands upon VINP could be significant, especially in the initial stages of designing and developing visitor services. These costs would be reduced in Alternative 2 with management of the site conducted by a private party(s) through a concession contract. The park's administration, resource management, interpretation, law enforcement and maintenance costs could be expected to substantially increase in all alternatives, regardless of the management entity (NPS, non-profit or private concessioner). In the long term, these costs could be partially offset through Recreation Fee Demonstration Program receipts in all alternatives and, to an additional extent, by concession franchise fees in Alternative 3.

F. CUMULATIVE EFFECTS

Cumulative effects include the impacts of past, current and reasonably foreseeable actions that would potentially affect the park's commercial services program. Key among these would be the recent

National Monument designation, trends in visitation, trends in resource health and abundance, non-commercial uses of the park, economic factors, other planning efforts, and changing government policies and regulations.

In January 2001, the Virgin Islands Coral Reef National Monument was established. Consisting of 12,708 marine acres of federal submerged lands off of St. John and adjacent to VINP, the Monument is to be managed by VINP to protect its tropical marine ecosystem values. The Presidential Proclamation establishing the Monument requires VINP to develop a General Management Plan for the Monument within three years. Included will be management zoning and regulations governing commercial uses. Proclamation direction prohibits extractive uses, including fishing with some exceptions, and anchoring within the monument. Commercial fishing, SCUBA and other commercial operations could be adversely affected by yet-to-be-developed regulations.

The use of VINP has grown dramatically over the last two decades and is expected to continue to increase. Assuming "healthy" scenic, natural and cultural resources, VINP will continue to be a prime Caribbean attraction, irrespective of the management direction established for commercial uses within the park. While all types of uses are expected to increase, growth in cruise ship passenger visitation to the park is of particular note. Recent agreements between the Territory and the Florida-Caribbean Cruise Ship Association promise annual growth in cruise ship visitation through the next decade. A continuing demand for new and expanded commercial venues would be expected in conjunction with this visitation growth. Increasing visitation could exceed the park's infrastructure capacity and outstrip its ability to provide a quality visitor experience. User conflicts, crowding and congestion could become commonplace. The management strategies in Alternatives 2 and 3 would be expected to help VINP achieve a balance between ensuring resource protection and providing a quality recreational experience, recognizing that the resources for which the park was established must remain unimpaired for the enjoyment and interpretation of future generations. Absent limitations on commercial authorizations and venues (as in Alternative 1), both the quality of the visitor experience and the health and abundance of the park's scenic, natural and cultural resources would be expected to decline.

Trends in visitation, most notably shorter trips and the aging of "baby boomers", would be expected to affect the nature of the commercial services that businesses seek to offer in the future. Visitation demand in general and at VINP in particular is a function of the area's attractions such as scenic vistas, white sand beaches and coral reefs, and an individual's socioeconomic characteristics, such as disposable income and availability of leisure time.

The effects of disposable income on visitation and commercial use demand are highly speculative. Generally speaking, as the amount of disposable income increases the nature of commercial use ventures can be expected to become more personal-service and eco-tourism oriented, with smaller group excursions. As the amount of available income declines, tour groups can be expected to become more mass-oriented in order to reduce costs. These variables translate into bigger or smaller commercial vessels and vehicles plying the park's waters and roadways.

In part because of the recent growth in disposable income, the value of St. John real estate has escalated at a rate higher than most areas in the country. One-acre north shore parcels have recently sold for as much as \$1.6 million. Given these highly inflated sale prices, there is a very strong incentive to sell private in-holdings within the park boundary. The effects of either full or partial development of these in-holdings on terrestrial, marine and cultural resources could be devastating, permanent and far-reaching. The park's underlying purpose and significance could be compromised if significant scenic, marine, terrestrial and cultural resources are either lost or seriously degraded and if public use and interpretation of these resources is lost or limited. These resources are the basis both for the park's significance and for its

attraction to visitors. If the park's "attractions" become less attractive, visitation could begin to decline in the long term, with attendant adverse effects on the commercial sector.

The availability of leisure time is, and will continue to be, an important socioeconomic factor in recreation demand. Recent evidence suggests that leisure time is declining somewhat. This may be attributed to the increase of women in the workforce, where the reduced time outside of work is taken up with the day-to-day business of living. With reduced leisure time, some data suggest people are taking shorter, but more frequent trips. At the same time, the baby boomer generation is moving into retirement age, and with more discretionary time available to this group, the potential exists for using more time for leisure activities. Industry accounts indicate that the recent aggressive cruise ship industry growth has been designed to respond to these trends. Existing commercial operations within VINP would appear to be well situated to respond to these market vagaries, with the flexibility to "upscale" or "downsize" as needed to respond to market demand. Management strategies in Alternatives 2 and 3 would limit the ability of the commercial sector to continue to "upscale".

As discussed in Section III.C.3, a slow to moderate decline in the health of the park's marine resources is projected due to a variety of natural and human causes. Similarly, the scenic values for which the park was originally established are being adversely affected by private development of in-holdings and lands adjacent to the park. While a management priority, the protection and restoration of cultural resources have and can be expected to continue to suffer from inadequate funding and staffing. As noted above, if the resources that attract visitors to the park are lost or seriously degraded, the attractiveness of the park would be expected to decline. Commercial businesses that rely upon the park for their livelihood would suffer accordingly.

Non-commercial uses account for a significant percentage of park visitation. This visitation would be expected to increase in proportion to new resort and housing development on St. John. As it increases, additional conflicts with commercial uses would be expected, as these visitors and residents encounter crowded beaches, restaurants, roadways and parking lots. These conflicts would be mitigated, in large part, by the designation of a limited number of tour group venues in all alternatives, restrictions on PAOT for some commercial uses in Alternatives 2 and 3, and by the limited nature (2-3 daytime hours within the park) of most commercial tours.

All alternatives would generate direct and indirect economic benefits to the local economy through additional income, employment, fees, and visitor spending. While these benefits represent an important contribution to a Virgin Islands economy dominated by and dependent upon tourism, factors such as the health of the national and global economies, available disposable income, Territorial tax policies, the costs of airline travel, and tourism promotion programs more substantively affect the local economy than would VINP's commercial services program. Because the majority of commercial businesses operating within the park are based out of St. Thomas and because cruise ship passenger tour itineraries provide limited opportunities for shopping, the park's commercial services program directs more money off-island than on-island. However, the program generates significant local employment, which would be expected to increase in all alternatives. While management strategies proposed in Alternatives 2 and 3 would limit the growth of commercial services within the park, no significant long-term adverse effects on the economy would be expected given the more substantive economic drivers mentioned. With limitations on the number of commercial uses authorized within VINP, concession contracts and CUAs would be expected to increase in value.

Other planning efforts currently underway would be expected to affect the park's commercial services program. A draft *Vessel Management Plan* will be completed over the next several months by VINP and provide long-term management direction for the use of park waters. Included will be management

direction on anchoring, beach access, vessel speed and noise, and other uses that could affect commercial vessel use of park waters. VINP is cooperating with the St. John Gateway Committee in planning for the Cruz Bay "gateway" into the park. This Gateway Planning represents an opportunity to address the increasing congestion and poor traffic circulation at the park's primary entrance.

Changing regulations would be another factor that could affect commercial businesses operating within the park. Chief among these would be regulations promulgated to implement the 1998 National Park Service Concessions Management Improvement Act, changes in Territorial business regulations and taxation, and changes in Coast Guard regulations, including the "6-pack" rules relating to vessel inspections. While the 1998 Act requires a range of revisions to the commercial use authorization process, including the repeal of any "preference in renewal" rights for larger concessioners such as Caneel Bay, Inc., none of the commercial services programs proposed in the alternatives would significantly adversely affect current commercial service providers. Current concessioners have been operating on contract extensions and have known for some time of the need to compete in the open marketplace for new concession contracts. In all alternatives, an adequate number of CUA opportunities would be provided to ensure the continuity of current CUA holders that have been operating to NPS satisfaction.

In all alternatives, partnerships with the commercial sector would enable VINP to provide the type and quantity of visitor services necessary and appropriate to its mission. Growing visitation would be expected to translate into demand for additional commercial opportunities and larger venues. Resource protection and quality visitor mandates would continue to compete with and suppress this demand. In Alternatives 2 and 3, some commercial businesses would not be able to operate in the park and limitations would restrict the amount of activity that some businesses may desire to provide. No significant adverse cumulative effects would be expected in any alternative.

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CHAPTER VI: LIST OF PREPARERS

NAME	POSITION	EDUCATION/EXPERIENCE	CONTRIBUTION
Russell Berry(1)	Superintendent, VINP	B.A., History. 32 years with NPS, including 3 years as VINP Superintendent	IDT Member
Rafe Boulon	Chief, Resource Management Division, VINP	B.A., Marine Environmental Science; M.S., Biological Oceanography. 18 years with DPNR, Division of Fish and Wildlife; 2 years with VINP.	IDT Member
Ginger Garrison	USGS - BRD	B.S./M.S. Chemistry. 12 years experience with private sector, 2 years with NPS, and 7 years with USGS-BRD.	IDT Member
Don Catanzaro	Chief, Inventory & Monitoring, VINP	B.A., Geography; PhD, Biological Sciences. 5 years experience with NPS.	IDT Member
John H. King	Superintendent, VINP	B.S., Business Administration. 30 years experience with NPS in progressively responsible administrative, operational, and managerial positions.	Recommends Decision to Regional Director
Jim Owens	VIP; Acting Park Planner, VINP	B.A., Political Science. 25 years experience in public involvement, land use planning, and environmental analysis. Specialize in managing NEPA projects for federal agencies. Partner in Portland, OR consulting firm of Cogan Owens Cogan.	Project Manager
Elba Richardson	Concessions Management Specialist	11 years with NPS.	IDT Member
Judy Shafer	Acting Superintendent, June-December 2000; Deputy Superintendent, VINP	M.A., Anthropology/Archaeology. 25 years of NPS experience focused in natural and cultural resources management, environmental planning and compliance, facility design and development, and park management.	Reviewer
Paul Thomas	Chief, Interpretation Division, VINP	B.S. Psychology. 29 years experience with NPS.	IDT Member

Troy Williams	Protection Division, VINP	B.S., Criminal Justice; graduate of Federal Law Enforcement Training Program. 7 years experience in law enforcement with NPS.	IDT Member
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(1) Through June 2000; replaced first by Judy Shafer, later by John H. King

VIP = Volunteer in Park

IDT = Interdisciplinary Team

DPNR = Virgin Islands Department of Planning & Natural Resources

APPENDICES

APPENDIX A: COMMERCIAL SERVICES EVALUATION PROCESS

EVALUATION PROCESS

This section of the *Commercial Services Plan* identifies the four procedural steps that Virgin Islands National Park will use in thoroughly reviewing and analyzing prospective commercial activities and proposals. Requests will come from individuals and organizations who want an authorization to use the park in a commercial aspect of their business. The National Park Service could also analyze requests from other agencies, special use groups, or NPS employees for proposed commercial activities. These procedures are designed to provide a consistent and fair evaluation of all requests. Primary in this evaluation process is the focus on effects the proposed activities will have on park resources and non-commercial visitor activities.

The four steps in the evaluation process are:

1. Initial Screening

A cursory review by park managers will take place upon receipt of any proposal, and a determination made on whether the application is for a commercial service or a special park use. A special park use is a specific activity that uses NPS land or facilities, generally for one-time events that do not involve commercial services. If determined to be a special park use, a Special Use Permit application will be forwarded to the applicant.

If the request is for a commercial service (except requests for a concession authorization), this Commercial Services Plan will be referenced to determine if the activity has been identified as appropriate in the park. If listed as an appropriate activity, a copy of the Commercial Services Plan, an application form, and associated documents will be sent to the applicant. If the activity is listed as an inappropriate use, the applicant would be notified and the reason for denying the request explained.

2. Application Evaluation

After the application, required documentation and application fees are returned, a multi-disciplinary evaluation process will begin. The application will be evaluated using a form similar to the sample presented in Figure A-1. Following the sample form is a point-by-point explanatory breakdown of the various sections of the form so that the reader or evaluation panel can interpret its intent.

Commercial use authorizations (CUAs) that are being renewed or applications for new CUAs that are identical or nearly so to an approved activity do not go through the evaluation process. However, if there are notable changes to an activity previously approved in the Commercial Services Plan, or if some aspects of a proposed activity have not previously been evaluated, some level of additional review and NEPA compliance may be required.

4. Decision

Upon evaluation of the completed application and supporting documents, a decision will be made as to whether or not to authorize the activity. The decision to approve or reject a proposal will be based on the

evaluation process, with the final determination made by the Park Superintendent. If additional environmental clearance is required, costs for compliance with the National Environmental Policy Act (NEPA) will be borne by the applicant.

4. Applicant Notification

Commercial Use Authorizations: An acceptance letter and completed commercial use authorization will be sent to successful applicants for signature. The application process will be completed when the applicant returns the signed permit, submits all required documentation, shows proof of liability insurance with the National Park Service listed as an additional insured party, and remits the required fees. Applicants denied permits will receive written notification. Such responses will identify specific reasons for the denial.

Concessions Contracts: Concession contracts will be issued for commercial activities that are determined to be necessary and appropriate. Concession contracts are only issued in accord with NPS regulations and policies and will typically be subject to a competitive bidding process.

**FIGURE A-1. SAMPLE EVALUATION FORM
COMMERCIAL SERVICES EVALUATION RATING FORM**

Type of Service _____

Name of Applicant _____ Date _____

CRITERIA	EVALUATION	COMMENTS
LEGAL / POLICY ISSUES		
Land use zoning		
Violation of law or policy		
Park mission		
Concession contract		
VISITOR USE / EXPERIENCE ISSUES		
Public safety		
Education		
Crowding / congestion / conflicts		
RESOURCE ISSUES		
Cultural resources		
Natural resources		
Aesthetic resources		
MANAGEMENT ISSUES		

Land requirements		
Staffing needs		
Management plans		
Support facilities / services		
OTHER ISSUES		
Effects on neighbors		
New activities		
Effects		

Recommendation		Additional Comments and Recommendations
Approved		
Disapproved		
Resubmit		
NEPA		
Other issues		

EVALUATION CRITERIA

All proposed new commercial activities at Virgin Islands National Park will be evaluated to determine if they are appropriate and necessary. Individual applications to provide commercial services will be evaluated to identify conditions or stipulations to be added to a contract or commercial use authorization. An evaluation form will be used to ensure a consistent review of all activities and applications. The criteria used in the evaluation will include legal, recreation, resource, management, and other components. These criteria will be derived from the park purpose, significance, and desired future conditions. The evaluation will also be used to identify which type of authorization will be appropriate for new commercial use proposals.

Legal / Policy Mandates

Federal, state, and local laws, rules, codes, and regulations will be reviewed to determine if the activity will comply with law and NPS policies related to that activity. Any violation or conflict with a law or regulation will result in rejection of the proposal or application.

The regulations, guidelines, and laws used to evaluate new proposals for compliance with concessions policies will include but not be limited to:

- CFR 36 - §2.22, Property
- CFR 36 - §2.52, Sale or Distribution of Printed Material
- CFR 36 - §2.61, Residing on Federal Lands

CFR 36 - Part 5, Commercial and Private Operations
CFR 36 - Part 51, Concessions Contracts and Permits
U.S. Public Health Service, FDA Food Code, 1993
NPS-48 *Concessions Guideline*
NPS-50 *Loss Control Management Program Guideline*
NPS-53 *Special Park Use*
SD-95-10 Commercial use authorization
Virgin Islands National Park *General Management Plan*
Virgin Islands National Park *Compendium*
Virgin Islands National Park *Commercial Services Plan*
Various Virgin Islands National Park management plans

❑ **Land Use Zoning**

The *General Management Plan* divided the park into three land use zones with subzones. A summary of these zones is provided in Section I.D.1.c of this plan. Each of these zones has criteria and guidelines that define the land use activities allowed. These guidelines are used to determine if a proposed action is consistent with authorized uses in the zone, if it will be consistent with development constraints, and if it will complement the management strategy for the particular zone(s) involved. A map of management zoning is located on page 53 of the *General Management Plan*.

Rights-of-way and special use permits are all land assignments that authorize various uses of public land. It is NPS policy that rights-of-way across land administered by the National Park Service may be issued only pursuant to specific statutory authority and only if there is no practical alternative to such use. The proposed activity will be reviewed to ensure that it will not conflict with legislation or park values.

❑ **Park Mission**

If a proposed activity is in conflict with the stated mission of the park as outlined in the *General Management Plan* and other documents it will not be authorized until changes are made to mitigate the conflict. The park's mission can be found in Section I.D.1.b of this plan.

❑ **Concession Contracts**

The evaluation will be used to identify proposals that may conflict with an authorized service already being provided by a concessioner under a concession contract.

Visitor Use / Experience

These criteria help with the measurement of impacts on the visitor experience and ensure compliance with NPS goals and objectives for suitable visitor activities.

❑ **Public Safety**

Promoting safety is a very high priority, and all proposals should incorporate safety measures to assure safe visitor experiences.

❑ **Education**

Education is a high priority. CUA proposals and concession bids should address the educational activities the operator is proposing to provide. Staff training, to assure quality educational services, will be required.

❑ **Crowding / Congestion / Conflict**

Some locations and activities in VINP are extremely popular. Some use is commercial, and it is probable that conflicts among users and localized crowding and congestion will occur. This detracts from visitor

experiences and increase impacts on associated resources. When crowding, congestion, or conflicts occur, use limits will be established to protect both visitor experiences and park resources. Authorizations of new commercial activities may be denied to prevent crowding, congestion, and conflicts among visitors.

Resources

☐ **Cultural Resources**

Cultural resources are defined as the remains of past human activity (NPS-28). The presence of numerous cultural resources lends significance to VINP and its management for the public trust. There are cultural resources in all of the designated zones; therefore, all proposed commercial activities will be evaluated for potential impacts on these fragile, nonrenewable resources.

☐ **Natural Resources**

Current resource surveys will be consulted, or a survey will be conducted as part of any proposal review when needed. The information will assist in the determination of potential effects of the proposed activity on vegetation. Plant community characteristics will be reviewed to determine compatibility with the proposed use(s) and to ascertain the vegetation type, its health, and its potential to sustain use.

☐ **Aesthetic Resources**

Impacts on aesthetic resources can have a significant impact on the experiences of commercial clients and other visitors. Such resources include quiet, solitude, scenery, space, a sense of history, sounds of nature, and clear night skies. Commercial activity requests will be evaluated for impacts on aesthetic resources. If such impacts appear likely, the proposal will be adjusted to mitigate those impacts or not approved.

Management Issues

The NPS has responsibility for assuring commercial services are of high quality and appropriate to the park area. Because of this responsibility, commercial activities of all types require National Park Service oversight. Time and effort are required to issue various authorizations, monitor activities for compliance with permit restrictions, collect fees, assign and maintain support facilities, etc. These management activities require the attention and commitment of park staff; the expense of these activities will be borne by commercial operators.

☐ **Land Requirements**

Facilities, including all developments, are not dedicated by commercial use authorizations. They are, however, typically authorized for exclusive use by concession contracts and special use permits. If facilities are needed for the business to operate, a determination will be made about which type of concessions authorization will be applicable. Final approval will depend on an assessment of benefits to the park and appropriateness of the proposed activity.

☐ **Staffing Needs**

The process of monitoring individual commercial use authorizations and concession contracts will be examined to determine NPS staff requirements. The amount of staff time required is often dictated by the complexity of the operation. To assess the amount of staff time for processing an application, the approval/rejection and evaluation process, and subsequent authorization and monitoring requirements, the following definitions of complexity will apply:

1. High — Successful monitoring of the activity will include administrative review annually, and compliance and onsite contact with the operation on a biweekly to monthly basis.
2. Medium — Successful monitoring will include administrative, compliance, and onsite contact on a monthly to quarterly basis.

3. Low — Successful monitoring will include administrative review annually, and compliance and onsite contact with the operation on a quarterly to annual basis.

☐ **Management Plans**

Land management plans will be reviewed to assist in the determination of whether an operation will be allowed in a particular area and under what conditions. Examples of such plans include the *General Management Plan*, this *Commercial Services Plan*, *Vessel Management Plan*, *Resource Management Plan*, *Land Protection Plan*, and other plans or studies.

☐ **Support Facilities / Services**

Many commercial activities require support facilities and/or services, such as parking spaces, restrooms, changing rooms, and picnic areas, to be provided by the National Park Service. Such support activities have an impact on park budgets, staff, and facilities. When the demand for commercial services exceeds the supply of support facilities and services, the proposed commercial activity might be modified or denied.

Other Issues

Local situations and conditions that are not anticipated will be identified on a case-by-case basis. A brief definition of the situation will be written and attached to the evaluation form as necessary. Among issues to be considered:

☐ **Effects on Neighbors**

The National Park Service will accomplish its mission at VINP partly through partnerships with the Territorial Government, agencies, organizations, and individuals. Activities and proposals will be evaluated not only for their effects on the park but for effects on neighbors, especially when issues are the subject of cooperative arrangements.

☐ **New Activities**

Proposals for activities not currently available at VINP could create new and different effects on resources and visitor experiences. New activities will be critically evaluated. New uses generally will not be permitted.

☐ **Cumulative Effects**

Activities and proposals will be evaluated to determine if they could contribute to adverse effects when added to other commercial services in the U.S. Virgin Islands.

APPENDIX B: THREATENED AND ENDANGERED SPECIES

Endangered and Threatened Species and Critical Habitats Under the Jurisdiction of the National Marine Fisheries Service

U.S. Virgin Islands

Listed Species	Scientific Name	Status	Date Listed
Marine Mammals			
blue whale	<i>Balaenoptera musculus</i>	Endangered	12/02/70
finback whale	<i>Balaenoptera physalus</i>	Endangered	12/02/70
humpback whale	<i>Megaptera novaeangliae</i>	Endangered	12/02/70
sei whale	<i>Balaenoptera borealis</i>	Endangered	12/02/70
sperm whale	<i>Physeter macrocephalus</i>	Endangered	12/02/70
Caribbean monk seal	<i>Monachus tropicalis</i>	Endangered	03/11/67
Turtles			
green sea turtle	<i>Chelonia mydas</i>	Threatened ¹	07/28/78
hawksbill sea turtle	<i>Eretmochelys imbricata</i>	Endangered	06/02/70
leatherback sea turtle	<i>Dermochelys coriacea</i>	Endangered	06/02/70
loggerhead sea turtle	<i>Caretta caretta</i>	Threatened	07/28/78

Species Proposed for Listing

None

Designated Critical Habitat

Leatherback sea turtle: The waters adjacent to Sandy Point, U.S. Virgin Islands, up to and inclusive of the waters from the hundred fathom curve shoreward to the level of mean high tide with boundaries at 17° 42'12"N and 64° 50'00"W.

Proposed Critical Habitat

None

Candidate Species ²	Scientific Name
Fish	
jewfish	<i>Epinephelus itajara</i>
Nassau grouper	<i>Epinephelus striatus</i>

1. Green turtles are listed as threatened, except for breeding populations of green turtles in Florida and on the Pacific Coast of Mexico, which are listed as endangered.

2. Candidate species are not protected under the Endangered Species Act, but concerns about their status indicate that they may warrant listing in the future. Federal agencies and the public are encouraged to consider these species during project planning so that future listings may be avoided.

ENDANGERED PLANTS AND ANIMALS OF THE U.S. VIRGIN ISLANDS

Compiled by the Division of Fish and Wildlife (DPNR), the UVI Cooperative Extension Service, Eleanor Gibney (Caneel Bay), Gary Ray (U. of Wisconsin) and William Mclean (UVI).

Scientific Name

Common Name

Distribution/Remarks

PLANTS

Federal List

Buxaceae

Buxus vahlii

Vahl's boxwood

Endangered, St.X. - May be extinct

Rutaceae

Zanthoxylum thomsonianum

Prickly Ash

Endangered, St.T., St.J.

Myrtaceae

Calyptanthus thomsonianus

St. Thomas Lidflower

Endangered, St. T., St. J.

Virgin Islands List

Agavaceae

Agave eggersiana

Egger's agave

St.X.

Aizoaceae

Cypselia humifusa

St.T., St.J.

Aquifoliaceae

Ilex urbanii

Urban's holly

St.J., Tortola

I. sideroxyloides

Central Amer. oak

St.J.

Bromeliaceae

Tillandsia lineatispica

Pinon

Rare bromeliad, St.J., St.T.

Cactaceae

Mammillaria nivosa

Woolly nipple

St.X., St.J., St.T., offshore cays

Opuntia triacantha

Buck Is. (St.X.), St.T.

Celastraceae

Maytenus cymosa

St.X., St.T.

Convolvulaceae

Opeculina triquetra

St.X., St.T. endemic

Euphorbiaceae

Croton fishlockii

Recent St.J. sightings

Fabaceae

Erythrina eggersii

Egger's Cockspur

St.T., St.J., St.X.

Galactia eggersii

Egger's galactia

St.T., St.J.

Malpighiaceae

Malpighia woodburyana

Cowage cherry

St.T., St.J., offshore cays

M. infestissima (=pallens)

Stinging bush

St.X.

M. linearis

All VI

Malpighia sp.

Similar to *M. coccigera*, St.J.

Byrsonima sp.

New species?, St.J.

Malvaceae

Psidium amplexicaule

St.J.

Psidium sp.

St.J., new species?

Sida eggersii

N. offshore cays?

Myrtaceae

Eugenia sp.

Recent St.J. sightings

Endangered Plants and Animals of the U.S. Virgin Islands (Cont.)

Virgin Islands List

Mabuya mabouia	Slipperyback skink	Resident, breeding
Otus nudipes newtoni	VI Screech owl	Resident, breeding
Chordeiles gundlachii	West Indian nighthawk	Resident, breeding?
Anthracothonax dominicus	Antillean mango	Resident, breeding?
Podiceps dominicus	Least grebe	Resident, breeding?
Sterna antillarum	Least tern	Migrant, breeding
Phaethon lepturus	White-tailed tropicbird	Resident, breeding
Ardea herodias	Gt. blue heron	Resident, breeding
Casmerodius albus	Great (common) egret	Resident, breeding
Egretta thula	Snowy egret	Resident, breeding
Nycticorax nycticorax	Black-cr. night heron	Resident, breeding
Ixobrychus exilis	Least bittern	Resident, breeding?
Anas bahamensis	Bahama duck	Resident, breeding
Oxyura jamaicensis	Ruddy duck	Peripheral resident
Rallus longirostris	Clapper rail	Resident, breeding
Fulica caribea	Caribbean coot	Resident, breeding
Charadrius alexandrinus	Snowy plover	Resident, breeding?
Catoptrophorus semipalmatus	Willet	Resident, breeding
Puffinus lherminieri	Audubon shearwater	Migrant, breeding
Aratinga pertinax	Brown-throated parakeet	Resident, breeding
Columba leucocephala	White-crowned pigeon	Resident, breeding
Geotrygon mystacea	Bridled Quail dove	Resident, breeding
Myiarchus stolidus	Stolid flycatcher	Resident, breeding
Noctilio leporinus	Fisherman bat	Resident, breeding
Stenoderma rufum	Red fruit bat	Resident, breeding
Brachyphylla cavernarum	Cave bat	Resident, breeding
Order Antipatharia	Black coral	Marine benthic, high demand
Epinephelus itajara	Jewfish	Marine

The above list represents plants and animals occurring in the US Virgin Islands which are protected by either the US Endangered Species Act of 1973 or the VI Endangered and Indigenous Species Act of 1990 (Act No. 5665). This list is promulgated under Act 5665, Section 104(g) and may be revised as new information becomes available.


 Roy E. Adams, Commissioner, DPNR

5 June 1991
 Date

APPENDIX C



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office
9721 Executive Center Drive North
St. Petersburg, FL 33702
(727) 570-5312; FAX 570-5517
<http://caldera.sero.nmfs.gov>

MAY 17 2001

F/SER3:EGH:mdh

Mr. Jim Owens, Superintendent
Virgins Islands National Park
National Park Service
P.O. Box 710 - Cruz Bay
St. John, Virgin Islands 00831

Dear Mr. Owens:

This responds to your April 16, 2001, faxed request, and April 23, 2001, e-mail concerning the February 2001 Draft Commercial Services Plan/Environmental Assessment, prepared by the National Park Service (NPS) for the long-range management of the Virgin Islands National Park (VINP). The National Marine Fisheries Service (NMFS) initially consulted on this subject, pursuant to the section 7 requirements of the Endangered Species Act of 1973, as amended (ESA), on April 11, 2000, in response to NPS's April 3, 2000, letter. You are requesting continuing consultation for this Federal activity and our concurrence with your determination that the Draft Commercial Services Plan, if implemented, would not likely adversely affect Federally-listed species protected by the ESA under NMFS purview. We have assigned consultation number I/SER/2001/00530 to this project; please refer to this number in future correspondence on this activity.

Of the listed species under NMFS purview, five species of whales may migrate through the Park, and two sea turtle species are commonly found in Park waters. The hawksbill sea turtle, *Eretmochelys imbricata*, requires coral reefs for food and refuge. Peak nesting season on Park beaches is from July through November, although nesting activity may take place any month of the year. While green sea turtles, *Chelonia mydas*, feed in seagrass beds in Park waters, they are infrequent nesters on St. John beaches.

The Draft Commercial Services Plan determines the types and levels of commercial services that are necessary and appropriate within the Park and the most effective and efficient way to deliver and manage those services, and is incorporated herein by reference. The Proposed Action includes, *inter alia*, the following measures: only eight Commercial Use Authorizations (CUAs) (CUAs regulate commercial activities that are typically initiated and terminate outside the Park) available to land-based tour operators; performance standards included as CUA terms of approval; non-profit organization selected through competitive process will assist the NPS to fund and implement visitor service programs at Hassel Island; mini-cruise ships and rally tours would no longer be permitted.



The Proposed Action identifies those management strategies that the NPS believes best fulfill its statutory mission and responsibilities, and balance environmental, visitor experience, economic, and other factors. This "preferred alternative" has been designed to provide for the continuation of the types and level of commercial services currently provided for visitors to the Park, as well as a moderate level in growth in most types of commercial services. At the same time, the Proposed Action provides a higher level of resource protection for sensitive Park resources, particularly Federally-listed threatened and endangered species, than is available under current NPS management. It is also designed to ensure a quality visitor experience by responding to anticipated increases in Park visitation and associated demands for new and expanded recreational venues through limitations on the number of authorized commercial uses, visitor capacities, and use restrictions. It is further designed to provide a range of visitor experiences while avoiding "tourism by the numbers," recognizing that NPS's overriding mandate is to conserve the Park's resources in such manner that they are left unimpaired for the enjoyment of future generations.

NMFS agrees with NPS's conclusion that the no-action alternative (i.e., the status quo commercial-use management system currently in effect at VINP) poses the highest potential for adverse impacts on threatened and endangered species, and marine resources, of the considered alternatives due to fewer restrictions on the number of commercial uses and the volume of visitation.

NMFS agrees that of the alternatives analyzed, the preferred alternative (Proposed Action) has a lower potential for adverse impacts, given the new, additional restrictions on the number of commercial uses and visitation limitations, and closure of sensitive areas to access, including excluding mini-cruise ships from anchoring in Park waters; establishing a limitation on the number of passengers (50) on commercial vessels; limiting the number of commercial group visitors at one time at Trunk Bay; limiting the number of CUAs available to some types of vessels, most notably multi-passenger vessels; limiting the number of multi-passenger boats and their passengers at any area at any one time; and, designating areas open and closed to water-based commercial tour group venues.

In all alternatives analyzed (the no-action alternative "1," the preferred alternative "2," and the less-preferred alternative "3"), there would be ongoing disturbance to sensitive wildlife and their habitats by increased human presence, with harassment of wildlife and noise being the most significant impacts. Most directly affected would be threatened and endangered species of sea turtles. Indirectly affected would be endangered whales. Whales that migrate through Park waters could be affected in all alternatives through exposure to underwater noise, vessel disturbance, and petroleum pollution. Noise and vessel disturbance (harassment through approaching too close) could cause decreased respiratory intervals, increased dive times, and moving away from the noise and disturbance sources. Increased commercial vessel use of Park waters would be accompanied by an increased risk of collisions and other accidents with associated fuel spills. As commercial vessel uses are generally concentrated outside of migratory areas, minimal direct impacts would be expected in all alternatives. Indirectly, increased commercial vessel use in Park waters would be expected to result in additional incidences of disturbance as operators strive to "get up close and personal" for their customers when whales are sighted. Long-term effects on migratory patterns would not be expected. As the numbers of commercial boats increase, the frequency of sea turtles being struck and killed, particularly by high speed boats, would be expected to increase. (These

potential impacts will be addressed when NMFS consults with NPS on the draft Vessel Management Plan (VMP)). Occasional unintentional injuries would also be expected in high use areas from dinghies shuttling passengers to/from shore.

Experience at VINP and other marine parks and reserves indicates that sea turtle accidents are higher with rental powerboat operators than with other user groups. Therefore, requiring powerboat rental companies to obtain CUAs provides additional opportunities for education of operators, for monitoring of activities, and for enforcement of speed limits, area closures and other regulations, with concomitant benefits to sea turtles. Nesting frequencies may continue to decrease on many beaches due to the indirect effects of beach use and adjacent upland development that results in people, lights and dogs, all of which deter turtles from using particular beaches; however, these effects are beyond the purview of NMFS and are being consulted on independently by NPS and the U.S. Fish and Wildlife Service.

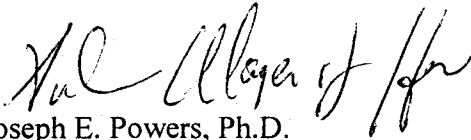
NMFS believes that in all alternatives of the draft Commercial Services Plan, no threatened or endangered species or critical habitat are likely to be adversely affected; i.e., the chance of adverse effects to listed species is small enough to be considered discountable. However, with the fewest restrictions on the number of commercial uses and the volume of visitation, the no-action alternative (i.e., the status quo) would have the highest potential for adverse impacts to threatened and endangered species. The Proposed Action (preferred alternative) would have the lowest potential for adverse impacts to threatened and endangered species, given its restrictions on the number of commercial uses and visitation limitations.

NMFS will comment on the draft VMP in the future when it is finalized by NPS. The VMP will provide management direction for the use of Park waters by all types of vessels, from cruise ships to dinghies. NPS should consult with NMFS on the effects of high-speed boat traffic through Park waters, which may potentially adversely affect listed species under NMFS purview. NMFS suspects that stringent vessel operating speed restrictions may be necessary in Park waters to prevent potential collisions with listed species, and ideally, these should be incorporated into the draft VMP, along with statistics of known sea turtle injuries or mortalities related to vessel collisions with vessels in Park waters.

This concludes NPS's consultation responsibilities under section 7 of the ESA for the proposed activity. Be advised that 50 CFR 402.16 requires that consultation be reinitiated if new information reveals effects of the action, or the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat in a manner or to an extent not previously considered, or if a new species is listed or critical habitat designated that may be affected by the identified action.

If you have any questions, please call Eric Hawk, fishery biologist, at the telephone number listed above.

Sincerely,

A handwritten signature in cursive script, appearing to read "Joe Powers", written in dark ink.

Joseph E. Powers, Ph.D.
Acting Regional Administrator

cc: F/PR3
F/SER4
FWS - Boquerón, PR
o:\section7\informal\VMP-nps2
File: 1514-22 O.4.a. NPS - USVI