

A Proposal for the Expansion of Peterson Cay National Park

Grand Bahama Island, The Bahamas



Organization of
American States



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Persons and Organizations Consulted

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Executive Summary

Peterson Cay is 1.5 acres in size. It is the only cay on the south side of Grand Bahama Island, lying 0.7 mile (1.1 km) from shore and 7 miles (11.2 km) east of Lucaya. The island has been recognized as an Important Bird Area because it supports a globally significant nesting colony of Bridled Terns. The Park is actively used by visitors for snorkeling, picnicking and enjoying the beach. It is often overcrowded. The Park is located within the fringing coral reef that extends along the south coast of Grand Bahama Island. A 2008 study was conducted that detailed geographic and ecological information of the reef. The ecosystems identified in the study are currently underrepresented in the National Protected Area System as identified in the Master Plan for the Bahamas National System of Protected Areas. Through this Master Plan the Government of The Bahamas has identified targets for expanding protected areas for terrestrial and marine ecosystems in order to meet its obligations under the Convention on Biological Diversity. This proposal provides two options for contributing to the targets by creating a marine protected area as an expansion of Peterson Cay National Park. Option 1 proposes to extend the Park boundary on the north to within 500 feet (152 metres) of shore, to the south approximately 1.5 miles (2.4 km) from shore, and approximately 0.5 mile (0.8 km) to the east and west of the cay. This expansion would add approximately 1.9 mi² (4.9 km²) of marine protected area. Option 2 would further extend the Park to the west to encompass more of the fringing reef and would expand total Park area to approximately 4.0 mi² (10.3 km²). This proposal also points out additional expansion opportunities that would provide protection to

the South Shore Important Bird Area and for linking Peterson Cay and Lucayan National Parks together.



Figure 1: The Bahamas Archipelago as seen from the International Space Station. The 80 kilometre-wide Strait of Florida separates Grand Bahama Island from Florida.



Peterson Cay is the only cay on the south shore of Grand Bahama Island. Being only 7 miles from Lucaya and Freeport, it is very popular with the boating community.

=1.0 Introduction

Clearly visible from space, the archipelago is encompassed by so much treasure of local, regional and international importance. The archipelago in the tropical Atlantic coastline, The Bahamas



Figure 1: The Bahamas Archipelago as seen from the International Space Station. The 50 mile (80 km) wide Strait of Florida separates Grand Bahama Island from Florida.

Figure 2: The Bahamas Archipelago as seen from the International Space Station. The 80 kilometre-wide Strait of Florida separates Grand Bahama Island from Florida.

greatest marine estuary for the entire Western Atlantic. On a global scale, the coral reefs of the Bahamas comprise about 5% of the world's total coral reef systems, surpassing even that of Australia's Great Barrier Reef.

The relative insularity of Bahamian waters and an extensive shelf with productive coral reefs and other habitats, augmented by a large area of coastal wetlands and mangrove forests,

shore banks, surpassed marine largest small island (3,542 kilometers) of approximately 89,960 mi² within the 12 territorial sea. Of approximately 5,380 mi² (13,940 km²), only 5%, is land and 16,500 km², or 50%, shallow bank. The about 39,600 mi² (102,600 km²), or 44%, is deep in the three major channels that separate the islands. The outside depths of the islands' flanking

reef systems. These islands and adjacent marine waters encompass a unique confluence of landform types, including both saline and freshwater wetlands, mangroves, blue holes, creek systems, shallow water banks, deep ocean trenches and marine estuaries that host a range of terrestrial and marine resources important to the country, the Caribbean region and beyond. For example, it is thought that the west coast of Andros may serve as the

contribute to the considerable abundance and diversity of fish. In this regard, The Bahamas has greater biodiversity abundance and diversity than the entire insular Caribbean (UNEP-GEF, 2010).

The islands themselves are generally of low relief, with a maximum elevation above sea level of 206 feet (63 metres). They are composed primarily of limestone derived from the deposition of calcareous sand and marine shells since the Jurassic period (208 - 144 million years ago) and are over 5 kilometers thick (Moses, 2008). During the Pleistocene (1.2 million - 10,000 years ago) the sea level fluctuated considerably, from being as much as 390-460 feet (120-140 metres) lower than today, to being 82 feet (25 metres) higher than today following the last ice age, as evidenced by wave-cut notches found in limestone cliffs in several locations in the islands, including in Lucayan National Park.

While the Bahama Banks were dry land, they were exposed to the atmosphere where the limestones were subjected to chemical weathering that created the karst topography that the islands are famous for today (Wikipedia, 2013). The now largely submerged limestone banks that comprise the archipelago of the Bahamas are riddled with karst features such as sinks, blue holes, fracture caves and solution caves known as among the most extensive in the world, and hold hydrological, archaeological, paleontological and biological treasures found nowhere else on earth.

2.0 Purpose of this Report

In recognition of this abundant biodiversity and the international significance of both terrestrial and marine environments, the Government of the Bahamas is committed to the establishment and effective management of a comprehensive and ecologically representative system of terrestrial and marine protected areas. The Master Plan released by the Bahamas National Trust in 2012 guides the expansion of the National System of Protected Areas to meet its international obligations under the Convention on Biological Diversity (CBD) and the subsequent Programme of Work on Protected Areas (PoWPA) for the Bahamas (Moultrie, 2012).

The Bahamas has shown leadership in the implementation of the PoWPA, both globally and in the Caribbean region, through the Bahamas 2020 Declaration and the promotion of the Caribbean Challenge, launched in 2008. In so doing, the Bahamas has confirmed its intent to meet and even exceed the CBD goals by setting aside at least 20% of its coastal marine waters as marine protected areas (MPAs) and 10% of its terrestrial area in national parks by 2020.

As the statutory body established by the Government of The Bahamas to establish and manage its system of national parks, the Bahamas National Trust (BNT) has entered into an agreement

with Global Parks, supported by funding from the Organization of American States (OAS), to undertake the development of specific proposals for national park expansion and establishment on and adjacent to Grand Bahama Island. This project is comprised of two distinct components:

- Develop proposals for the expansion of two existing national parks, Lucayan National Park and Peterson Cay National Park; and
- Develop a proposal for establishing a new terrestrial and marine national park on the north shore of Grand Bahama Island.

The Government of The Bahamas has also committed to other components of the Caribbean Challenge, including the development and implementation of ecosystem-based projects aimed at adapting to climate change and the development of sustainable finance mechanisms to fund protected areas. While not implicitly integral to this project, these factors will also be given consideration in the development of recommendations for park expansion and establishment.

3.0 The Status of Terrestrial and Marine Protected Areas in The Bahamas

The Bahamas National System of Protected Areas is currently comprised of 27 national parks, four Marine Reserves managed by the Department of Marine Resources and a number of Bird Reserves managed by the Ministry of the Environment, all of which contribute to the 20% goal (for a complete listing of these areas see Moultrie, 2012).

According to the Protected Planet Report (PPR) 2012, the most up to date assessment of the global coverage of all types of protected areas, it is apparent that The Bahamas has made considerable progress in protected area establishment during the PPR's review period 2002-2010 (Bertzky et al, 2012). Prior to 2002, The Bahamas recorded a total of 7.36% protected in its terrestrial environments, but only 0.22% protected in the adjacent marine waters. In 2002, an unprecedented event took place when the Government of The Bahamas created 10 new national parks, effectively doubling the area within the national park system (primarily with the creation of The West Side of Andros National Park). Further expansions in 2011 of West Side Andros National Park and of Conception Island National Park, and the establishment of the new Fowl Cays Land and Sea Park in Abaco, marked significant progress in terrestrial protection where the amount of terrestrial protected area jumped to 13.66% (709 mi² or 1,836.85 km²). In continued contrast, however, the amount of marine environment protected increased only modestly to 0.41% (443 mi² or 1,149.45 km²). The combined total in 2010 for both terrestrial and marine environments amounted to 1,153 mi² (2,986.3 km²) or 1.01% of Bahamian territory out to the 12 nautical mile limit (Bertzky et al, 2012).

In comparison to the rest of the Caribbean, The Bahamas has performed well terrestrially, exceeding the rate of growth in the Caribbean where the total terrestrial area protected across

the region grew to 11.2% in 2010 (from 9.9% in 2000). In the marine environment, however, The Bahamas lies considerably behind the Caribbean region where the level of protection is 2.2%, more than five times the level of protection in Bahamian waters. When comparing total levels of protection, combining marine and terrestrial, the total for the Caribbean region is 4.6%, whereas The Bahamas is a quarter of that at 1.01% (Bertszy et al, 2012). For further comparison, a total of 7.2% of the coastal marine waters of the world have been protected (UN, 2012).

This data clearly indicates that to meet the goals of the CBD, the Caribbean Challenge and the 2020 Declaration, The Bahamas will need to focus primarily on increasing the level of protection in the marine environment. According to the UNEP-GEF project to assist The Bahamas in achieving the Caribbean Challenge goals, an *interim* national target of a network of MPAs comprising 10% of representative marine ecosystems is about 8,500 - 9,600 mi² (22,000 -



Figure 2: Little Bahama Bank and Grand Bahama Island.

25,000 km²), with the 20% target comprising about 17,000 - 19,200 mi² (44,000 - 49,700 km²) (UNEP-GEF, 2010).

The project described in this report provides recommendations as to how this target can be approached on a regional basis on the Little Bahama Bank and Grand Bahama Island.

4.0 Little Bahama Bank and Grand Bahama Island

The Little Bahama Bank is the northern most of three extensive shallow sand banks that make up the Bahamian Archipelago (Figure 2). These banks

are separated from each other by deep, steeply-sloped ocean trenches, known to be among the deepest submarine canyons in the world. The Little Bahama Bank encompasses Grand Bahama Island and Abaco Island in an area of approximately 6,560 mi² (17,000 km²) of which about 65% or 4,250 mi² (11,000 km²) is covered by water (Fearnbach et al 2011). Most of the marine bank lies north of Grand Bahama Island in a well-defined basin that is physically isolated from similar coastal habitats by the deep oceanic waters of North West Providence Channel to the south, the Florida Gap to the west and the Atlantic Ocean to the east. The Bank is bounded to the north and east by a chain of cays extending west from Abaco Island as far west as Walker Cay National Park and another series of cays and submerged sand bars to the south. The Bank also includes a narrow fringe about 1.5 miles (2.4 kms) wide along the south shore of Grand Bahama Island which descends steeply into the depths (>500 meters) of North West Providence

Figure 3: A satellite image of Little Bahama Bank with Grand Bahama Island and Abaco Island.

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Channel. As shown on the map in Appendix A, Little Bahama Bank is virtually surrounded by either fringing, patch or barrier reefs. This project is concerned with only the Grand Bahama “portion” of Little Bahama Bank, or approximately half of the marine area of the bank or about 3,280 mi² (5,500 km²).

The waters of the Little Bahama Bank are very shallow, averaging less than 23 feet (7 meters) in depth. Oceanographically, water movement is generally to the north, being influenced by the flow of the Florida Current and the Gulf Stream. Seasonal variability in surface water temperature on Little Bahama Bank is limited, but temperatures are moderately elevated in summer, peaking at 88°F (31°C), compared to winter when temperatures moderate to about 72-75°F (22-24°C) (Fearnbach et al 2011). These waters are well recognized for their rich biodiversity including a wide variety of fishes, most notably several species of sharks, bonefish, grouper and snapper, conch, spiny lobster and a resident population of approximately 1,000 bottle nosed dolphins that have not been observed in the surrounding pelagic waters, appearing to be restricted to this shallow bank ecosystem (Fearnbach et al 2011).

The Bank is also well recognized for its sea bird populations. The chain of cays extending west from Abaco Island forming the northern extent of the Bank is proposed as an Important Bird Area (IBA) for its breeding populations of Bridled Terns, Least Terns and Roseate Terns (Birdlife International, 2013). In addition, Sale Cay and Little Sale Cay in the north-central Bank area is recognized as a high priority for conservation and protection in the BNT’s Master Plan for the National Protected Areas System, most likely for its high value for breeding seabirds (Moultrie, 2012). The Bank is also an important staging area for migrating populations of a variety of seabirds, including species of herons, egrets, ibis’ and spoonbills.

In contrast to the broad shallow banks to the north of Grand Bahama Island, the south shore of the island is characterized by its relatively narrow coastal shelf with its fringing reef and a steep drop-off into the considerable depths of the North West Providence Channel. This channel is an extension of the Great Bahama Canyon which also includes the Tongue of the Ocean located between Andros and New Providence islands. North West Providence Channel reaches depths approaching 6,500 feet (2000 meters) and is considered important habitat for a number of cetacean species including bottle nosed dolphins, beaked whales and other deep-diving cetaceans, especially sperm whales. Considering that deep waters constitute 44% of the marine area within the 12 nautical mile territorial sea in the Little Bahama Bank area, the BNT or the Department of Marine Resources may wish to consider the establishment of marine protected areas in these deep water environments as well as in the shallow coastal waters. Accordingly, the expansion proposals for both LNP and PCNP suggest extensions into the channel to the 200 fathom (600 meters) depth contour, which is apparently becoming or is the standard for the seaward boundary for The Bahamas’ land and sea parks (Lindy Knowles, pers. com, 2013).

5.0 Terrestrial and Marine Protection Targets

The Master Plan for the Bahamas National System of Protected Areas is based on the identification of a number of terrestrial and marine targets, an Ecological Gap Analysis and a MARXAN analysis leading to the identification of high priority sites for conservation and protection to meet those targets (Moultrie, 2012). This project has endeavored to design the protected area expansion and establishment proposals to contribute to those targets as much as possible. Rather than repeat the targets here, they are easily referenced in the Master Plan document (Moultrie, 2012), and briefly referenced for Peterson Cay in Section 6.4.

Also worthy of note in this regard is the identification, both through the Master Plan process (Moultrie, 2012) and at least one other ecoregional conservation planning process (Sealey et al, 2002), of specific areas throughout the Bahamian archipelago that warrant protection, three of which relate to the Little Bahama Bank-Grand Bahama Island region. To the authors' knowledge, these areas have not been specifically mapped and may or may not have been captured in the proposals herein:

- Grand Bahama (eastern cays and offshore marine area extending towards Abaco) (Moultrie, 2012, page 38);
- Marine Area surrounding Great Sale Cay, Pigeon, Gully Cays, and Cross Cays to the South (cays off the western tip of Little Abaco) (Moultrie, 2012, pages 40 and 60); and
- Western Little Bahama Bank (Grand Bahama) (Sealey et al, 2002, page iv).

It is recommended that, at some point, the analyses that led to these protection recommendations be reviewed and considered in the final protected area designs emerging from this project or in future proposals that go forward to the Government for approval.

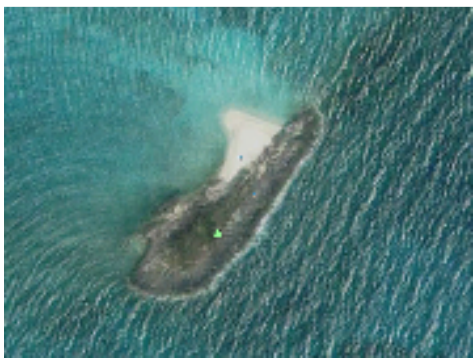


Figure 3: Satellite view of Peterson Cay National Park.

Also, in addition to Important Bird Areas (IBAs) being a specific target in the Master Plan, the BNT Strategic Plan makes specific reference to supporting “...the further protection of existing Important Bird Areas”. There are three existing IBAs on Grand Bahama, all in the vicinity of Lucayan National Park and Peterson Cay National Park, only one of which still lies outside a protected area: BS003 Grand Bahama South

Shore. The proposals for park expansion herein address the protection of these IBAs.

6.0 Expansion Proposals for Peterson Cay National Park

6.1 Park Description

At 1.5 acres (0.6 ha) in size, Peterson Cay is the smallest national park in The Bahamas. It is Crown owned and thus does not fall under the jurisdiction of the Grand Bahama Port Authority nor the Grand Bahama Development Company. The Park is just 7 miles (11.2 km) East of Lucaya and is the only cay on the south side of Grand Bahama Island (Figure 3).

It is a windswept and sparsely vegetated limestone island (Figure 4). As it currently stands, the protected park area, which was established in 1968, encompasses the entire cay itself. In 1971, the Park was leased by the Government of The Bahamas to the Bahamas National Trust, and the Trust is responsible for its management.



Figure 4: Windswept vegetation on Peterson Cay.



Figure 5: Sign on Peterson Cay indicating the site is a nesting bird colony and that the birds and their nests and eggs are not to be disturbed.

Currently, the entire Peterson Cay is under protection. Despite its small size, the value of the habitats currently under protection are immeasurable. The sparse vegetation and low scrub provide a much sought after medium for nesting birds to assemble and raise their young, thus making this site an important nesting area for seabirds. Results from recent scientific studies revealed that birds such as the Bridled Tern (*Sterna anaethetus*) visit and establish territories on the Cay year after year. In addition, Peterson Cay National Park has been recognized as an Important Bird Area (BS 002) as it supports this globally significant nesting colony of Bridled Terns (with 160 pairs found in 2005) (Moore and Gape). The Wild Bird Protection Act (1952) and The Bahamas National Trust Act (1959) prohibit the disturbance of birds, their nests or eggs (Figure 5). As

such, a significant portion of the island has been isolated, hence preventing visitors from disturbing the active nesting sites.

The Peterson Cay IBA is in relatively close proximity to the Grand Bahama South Shore IBA BS003 which was designated such because it is a wintering area for the Near Threatened Piping Plover *Charadrius melodus* and a variety of other shore birds. This IBA extends from the south entrance of the Grand Lucayan Waterway along the undeveloped sandy beach, beach flats, and dunes through the site of the former settlement of Old Freetown to the western boundary of Lucayan National Park. This coastal IBA is less than one mile from Peterson Cay. None of this IBA is in a protected status (Moore and Gape).

Peterson Cay is uninhabited but it is actively used for ecotourism by resident kayak tour guides and boaters. Park users enjoy snorkeling over the adjacent coral reef, picnicking on the beach, and otherwise hanging out in the beautiful ocean setting. BNT park wardens report that at times the island is severely overcrowded with people. Trash and abandoned structures are issues that park managers are addressing.

6.2 The Adjacent Marine Environment and Fringing Coral Reefs

The Park is located within the fringing coral reef that extends almost continuously along the south coast of Grand Bahama Island for a total distance of 84 miles (135 kms) from West End to East End Point (Figure 6). Fringing reefs and their associated ecosystems are currently underrepresented within the National Protected Area System (see below) and this ecosystem is targeted for expansion of its area of protection (Moultrie 2012). A recent coral reef mapping expedition, conducted by the Explorers Club and through collaborations with The Grand Bahama Development Company, detailed geographical and ecological information of the surrounding reef (Appendix A.) (Harzen and Brunnick, 2008).

Comment [M1]: Add habitat map

The coral reef habitat maps produced by the expedition provided detailed information on the distribution of main substrates and benthic community types for the reefs surrounding Peterson Cay. Over the study area of 688 acres (278 hectares), the study found three benthic substrates:

- White sand that promotes the growth of turtle grass meadows (*Thalassia sp*);
- Non-reefal hardbottom, a flat and very hard bottom that supports various species of red and brown algae; and
- Reefal hardbottom, a rocky hardpan that supports reefal communities of corals and sponges that grow and expand creating reefs.

Overall, the study found 17 community types, as demonstrated in the reef map shown in Appendix B. In summary, coral reefs in various expressions of density covered 208 acres (84 ha) or 30%, sand bottoms with varying degrees of sea grass growth covered 263 acres (106 ha) or 38%, and hard bottom with varying degrees of red and brown algae covered 209 acres (84 ha) or 30%.



Figure 6 The fringing reef along the southern shore of Grand Bahama Island between the Grand Lucayan Waterway and Lucayan National Park

Coral reefs are among the most complex and diverse ecosystems in the world and their health and survival is critical for the coastal environment, local fisheries and tourism. From a management perspective, the information derived from this study will be used to identify sites best suited to conduct additional research, set up monitoring stations or establish new sites for SCUBA enthusiasts. In addition, knowing the locations of sensitive habitats or species, such as the protected Elkhorn coral (an IUCN Red-listed species), would help in establishing no-boating and no-anchor zones and areas in which fishing may be limited or excluded. Currently, the existing park boundaries exclude the ecologically important reef systems identified during the coral reef mapping expedition.

Comment [KH2]: We should also mention seagrasses as being important ecosystems

6.3 Potential Threats

- Australian Pine (*Casuarina equisetifolia*) is a rapidly spreading invasive species that has already established a foothold on the island (Figure 7).
- The introduction of rats and other nonnative predators can harm native species occupying the island, especially nesting seabirds.
- There is a significant potential for damage to the coral reef surrounding the park from boat anchors and careless or uninformed SCUBA divers and snorkelers.
- Overuse by recreationists of the small island currently occurs and can result in trash accumulations, damage to signs and other facilities, and disturbance to nesting birds.



Figure 7: The picture on the left, taken in 2008, shows no live Australian Pine on the island, whereas the photo on the right from 2013 shows vigorous growth of several new trees in only 5 years.

6.4 Park Expansion Proposals

The following proposals for expanding the boundaries of Peterson Cay National Park are designed to extend protection status to the fringing reef and associated marine ecosystems that surround the Park. The results of the above mentioned expedition and the BNT's previous expansion proposal have been considered. Further, all of the ecosystems or habitats identified during the expedition are currently underrepresented in the National Protected Area System as determined through the Ecological Gap Analysis and MARXAN analysis undertaken for the

Figure x: The fringing reef along the southern shore of Grand Bahama Island between the Grand Lucayan Waterway and Lucayan National Park

BNT's master planning process (Moultrie 2010). The Master Plan lists protection targets for a number of habitats found in the proposed expansion areas for Peterson Cay including:

- Sparse seagrass (20% target; 2% protected)
- Medium Seagrass (20% target; 2% protected)
- Reef Flat (25% target; 4% protected)
- Non-reef Flat (25% target; 4% protected)
- Coral walls (30-200m) (20% target; 1% protected)
- Coral walls (200-1000m) (20% target; 2% protected)
- Sand (20% target; 4% protected)

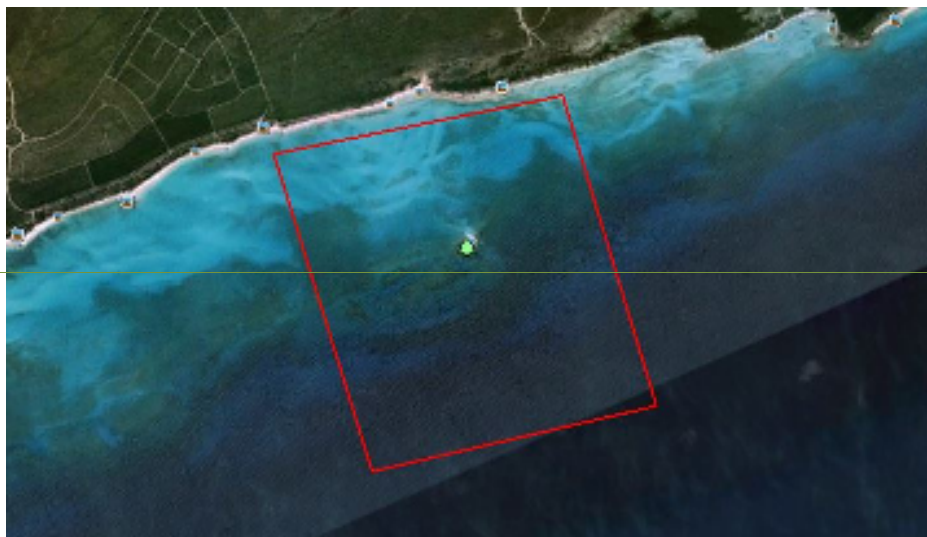
If extended, the park would encompass a greater wealth of developed ecosystems, one of the prized being the fringing coral reef systems, which are known to support a variety of marine organisms, and some of which are economically significant to the Bahamian community. In addition, expanding the network of coral reef areas to be protected will conserve a larger surface area of ecologically and economically significant organisms and areas. In doing so, enforced protection of the existing and expanded area will support fish populations, thus serving as a reservoir that can provide substantial and sustainable benefits for the fishing industry around the island and, to a larger extent, throughout The Bahamas.

In addition, this area can act as a potential replenishment site for the dwindling grouper and crawfish populations. Moreover, there is considerable educational potential bottled in this National Park, being less than 30 minutes from Freeport by boat. Due to the abundance of marine ecosystems around Peterson Cay, marine biologists and other scientists have the option to conduct research on and around the island as it relates to birds and their nesting sites as well as a wide range of marine investigations and studies. Armed with such amenities and features, the Peterson Cay National Park has the potential to be a haven for nesting birds, a reservoir for economically important marine life, a location for research and educational outreach, not to mention a place to relax and enjoy the beach. Those existing characteristics in addition to the added potential brought about by expansion should be taken into serious consideration and vigorously and expeditiously implemented so that Bahamians can reap the benefits of conservation in the future.

6.4.1 Park Boundary Expansion Proposal—Option 1

The Peterson Cay National Park expansion proposal Option 1 would increase the Park's area from the current 1.5 acres (0.6 ha) to approximately 1.9 mi² (5.0 km²). All of this expanded area would be in the adjacent marine environment capturing the habitats mentioned above. Included in this expanded area are 1.3 miles (2.1 km) of fringing coral reef.

The Option 1 expansion consists of the following (see Figure 8):



- Establish the boundary to the east and west of the current park at the approximate locations proposed in the draft BNT expansion proposal (about one half mile on each side of the current park). These boundary lines would extend southeast perpendicular to the orientation of the coastline.
- Establish the north boundary to be a line 500 feet (152 metres) seaward from the coastal high water line.
- Establish the southern boundary approximately 1.5 miles (2.4 km) out from shore to the “drop off” and beyond to wherever the 200 fathom depth contour occurs where the reef and shallow bank transition into deep water.

6.4.2 Park Boundary Expansion Proposal—Option 2

Option 2 would encompass all of the Option 1 components and further expand the Park to the west to encompass more of the marine ecosystem and fringing reef. The Park expansion would result in a total of approximately 4.0 mi² (10.4 km²) of marine and fringing reef ecosystems, including a total of 2.7 miles (4.3 km) of fringing reef.

The Option 2 expansion consists of the following (Figure 9):



- Extend the Option 1 northern boundary further west but no closer than 500 feet (152 metres) from the coastal high water line.
- Extend the end of the Option 1 southern boundary west but continue to remain approximately about 1.5 miles (2.4 km) out from shore to the “drop off” and beyond to wherever the 200 fathom depth contour occurs where the reef and shallow bank transition into deep water.
- Move the western boundary proposed in Option 1 to within 500 feet(152 metres) of the Grand Bahama Waterway.

7.0 Application of Selection Criteria to Proposed Expansion of Peterson Cay National Park

Criteria	High Value	Medium Value	Low Value
Biogeographic importance	X		
Ecological importance	X		
Biodiversity importance	X		
Naturalness/habitat structure	X		
Economic importance		X	
Social importance	X		
Scientific importance	X		
International/national importance	X		
Practicality/feasibility	X		
Biogeographic sub-criteria	High Value	Medium Value	Low Value
Presence of rare biogeographic qualities or representativeness of a biogeographic type	X		
Unique or unusual geographic features		X	
Characteristic of the biogeographic province or region	X		
Ecological sub-criteria	High Value	Medium Value	Low Value
Essential part of ecological process or life-support systems	X		
Area's integrity encompasses a complete ecosystem		X	
Variety of ecosystem	X		
Habitat for rare or endangered species	X		
Nursery or juvenile area	X		
Feeding or courtship breeding rest or migration areas		X	

8.0 Additional Opportunities

The northern boundary for both Option 1 and Option 2 remains 500' feet (152 metres) from the shore. A significant opportunity exists to increase the protection of the Grand Bahama South Shore IBA (currently none of which falls under a protected status) by bringing this boundary all the way to the coastline including the beach area up to high water mark thus protecting needed winter habitat for the Piping Plover and other shore birds.

The proposed Peterson Cay National Park expansion will be only about six miles from the proposed expanded Lucayan National Park (See Figure 10). An opportunity exists to connect these two parks into one and bring the entire southern boundary to the shore. This would potentially increase the protection of the Grand Bahama South Shore IBA to a total of approximately 11 miles (17.7 km), bring nearly 15 miles (24 km) of fringing reef under protection, and result in a total of approximately seven square miles (18.1 km²) of marine ecosystem into protected status.



Peterson Cay NP

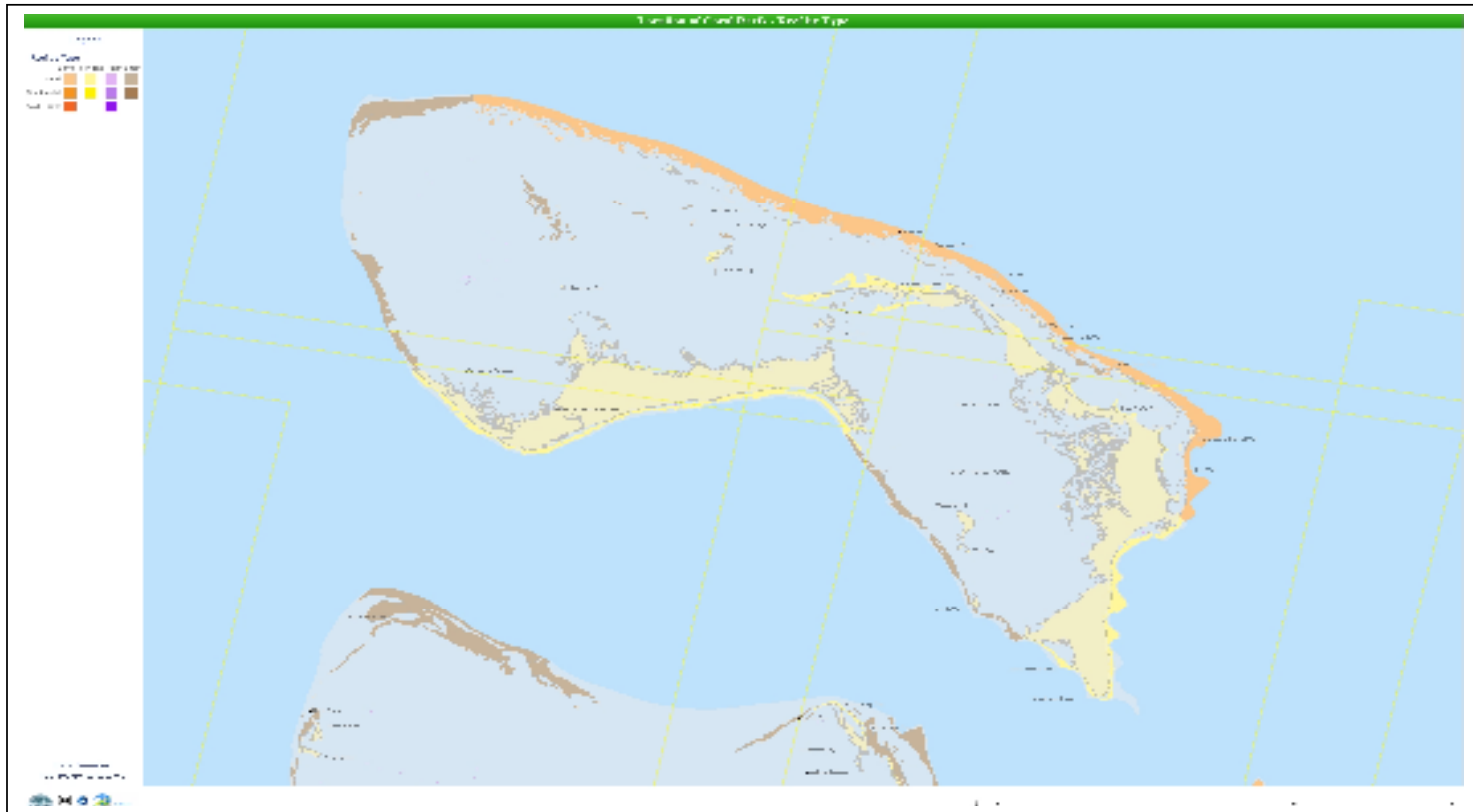
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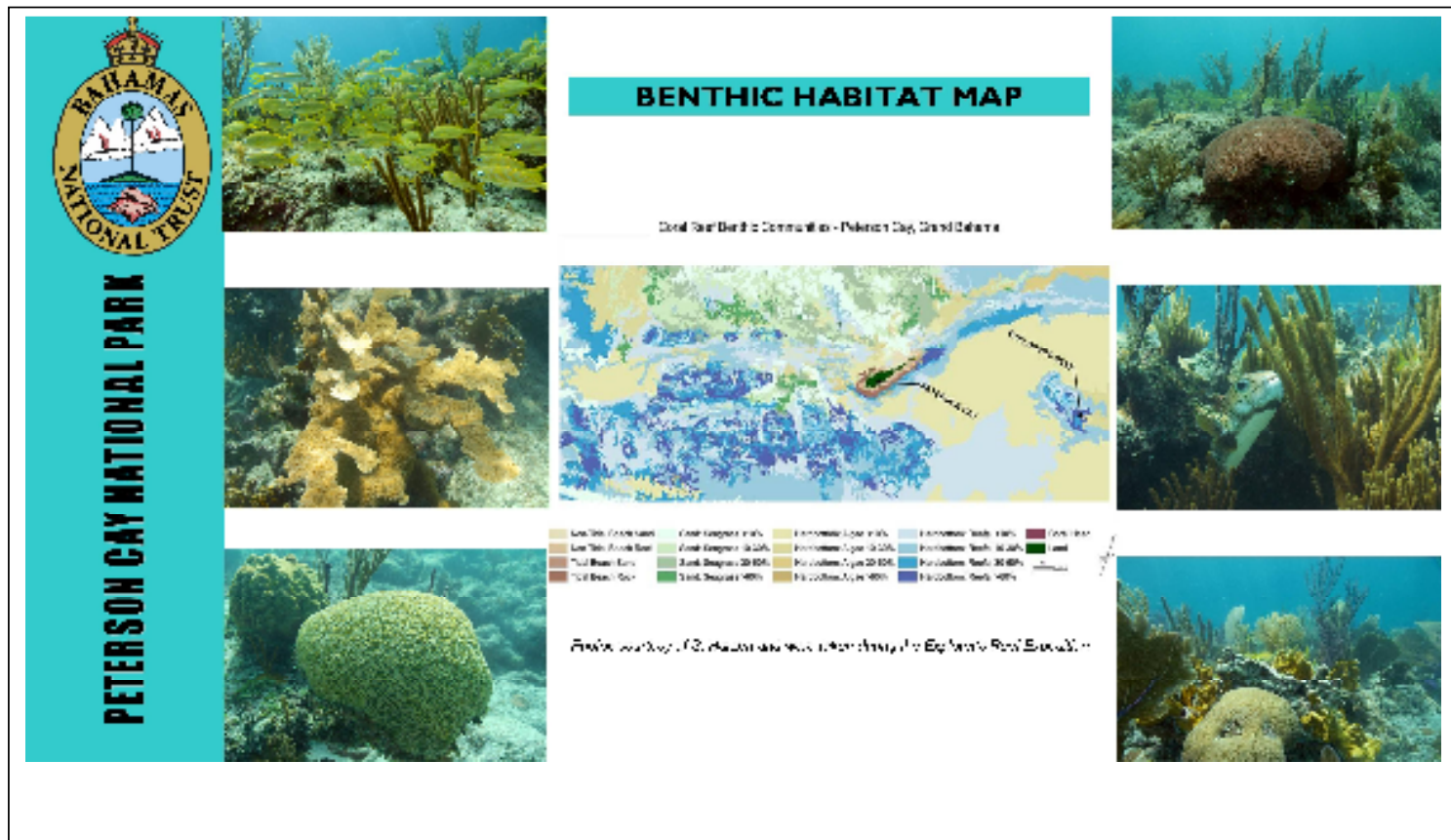
Appendix A

The Reef Systems of Little Bahama Bank, Grand Bahama Island and Abaco Island



Source: <http://reefgis.reefbase.org>

Appendix B Benthic Habitat Map for area surrounding Peterson Cay.



Appendix C — Persons and Organizations Consulted

Bahamas National Trust Staff:

- Lakeshia Anderson, Parks Planner
- Lindy Knowles, Science Officer
- Krista Sherman, GEF Full Size Project Coordinator
- Ellsworth Weir, Deputy Park Warden (Grand Bahama)

Stakeholders:

- Cheri Wood, Volunteer for the Environment/Presto Recycling/Keep Grand Bahama Clean
- Daniel Murray , Boat Operator
- Robin , Tour Operator and Member, BNT Grand Bahama Committee
- Randy E. Taylor, Assistant Manager, Geographic Information Systems, The Grand Bahama Port Authority
- Nakira Wilchcombe, Environmental Manager, Building and Development, The Grand Bahama Port Authority